

c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0123031\FB-CB-1550-L2.dgn 12/10/2013 8:45:18 AM eron.sudhausen



LEGEND

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

2000 0 2000 4000
1"=2000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

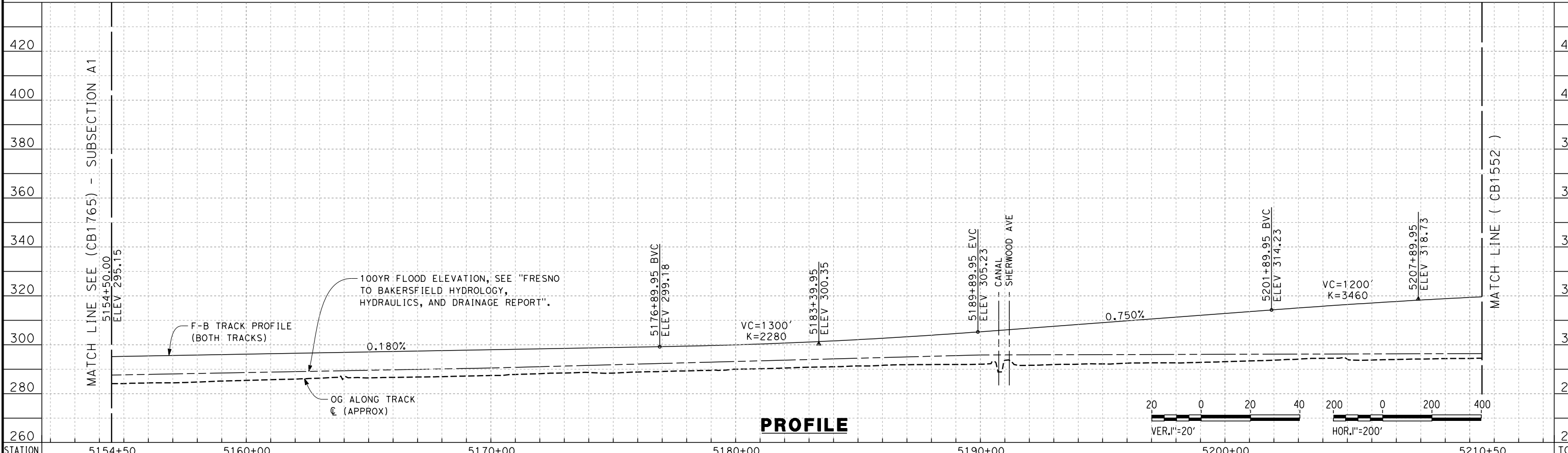
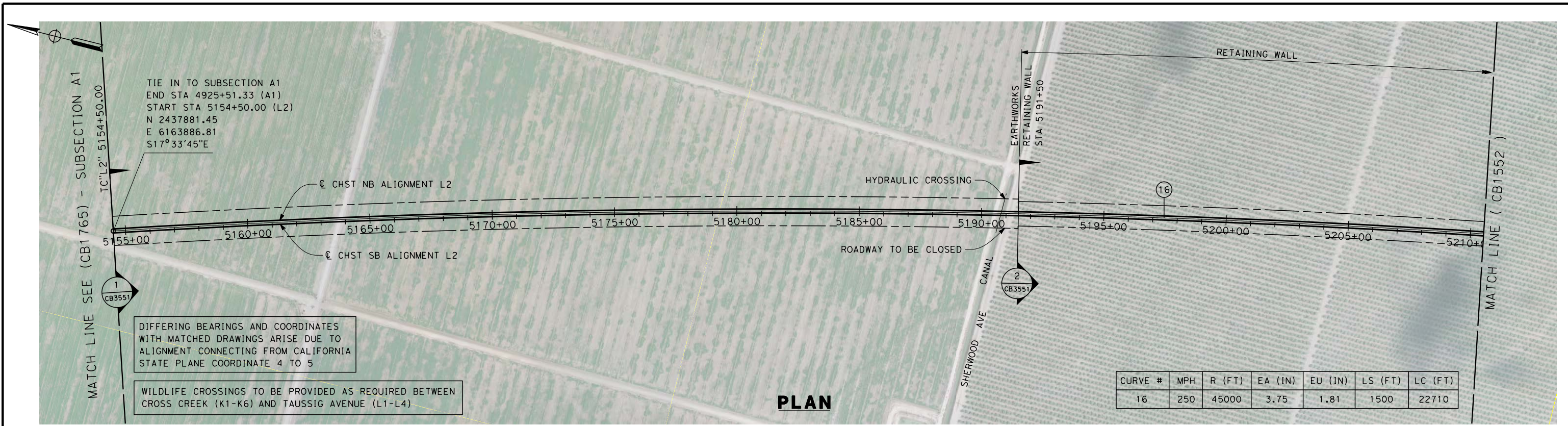


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5154+50 TO 5598+43
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1550
SCALE
AS SHOWN
SHEET NO.
1 OF 13

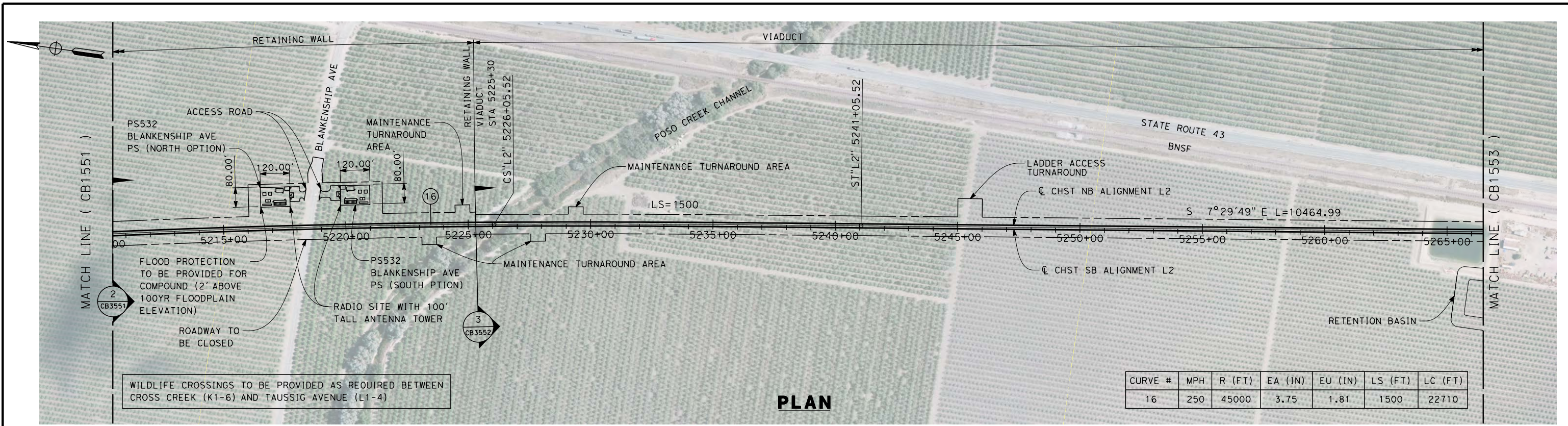
c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0123031\FB-CB-1551-L2.dgn 12/12/2013 8:57:52 PM eron.sudhausen



DESIGNED BY S. LITSAS	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION			CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD POSO CREEK SUBSECTION ALIGNMENT L2 STA. 5154+50 TO 5210+50 PLAN AND PROFILE	CONTRACT NO. HSR 06-0003
DRAWN BY J. BORGHESI					DRAWING NO. CB1551
CHECKED BY G. MEJIA					SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO. 2 OF 13
DATE 12/31/13					

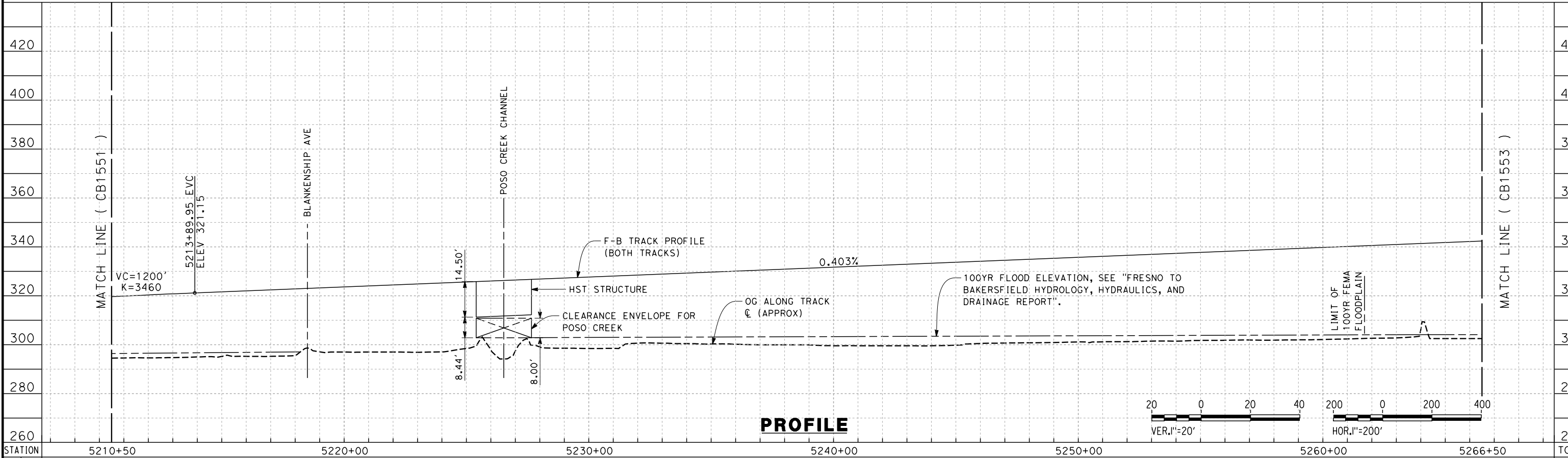
REV	DATE	BY	CHK	APP	DESCRIPTION

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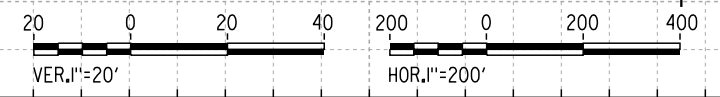


PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	22710



PROFILE



STATION	5210+50	5220+00	5230+00	5240+00	5250+00	5260+00	5266+50	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

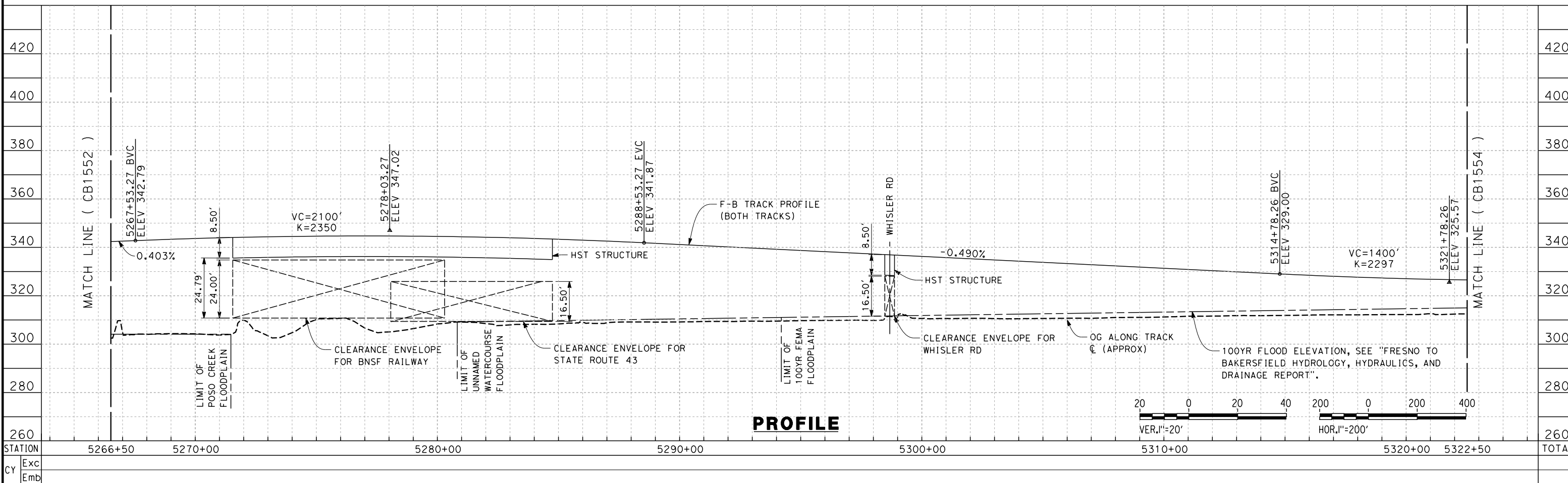
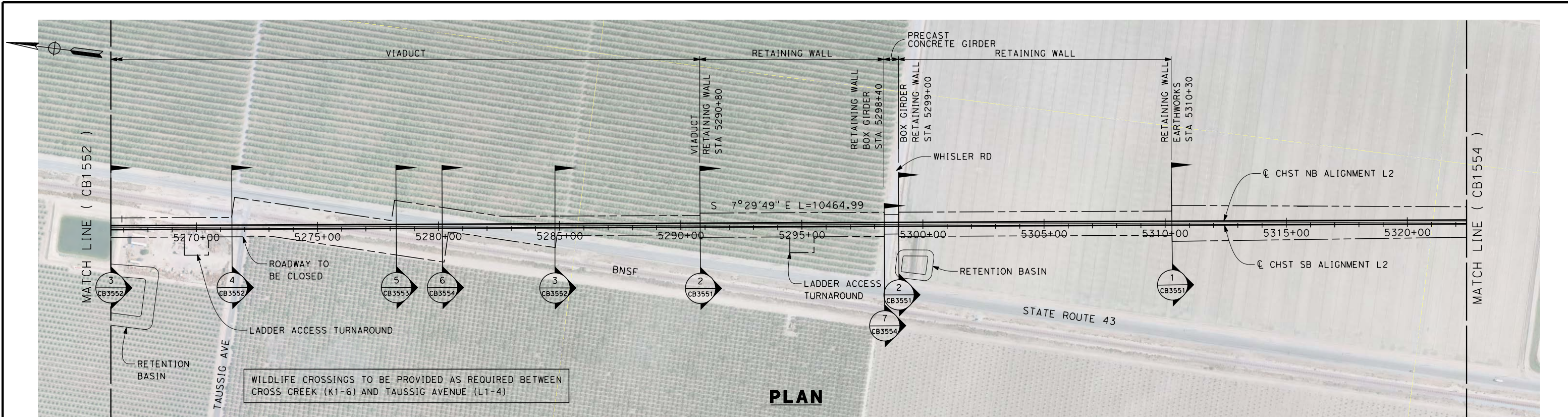
**NOT FOR
CONSTRUCTION**



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

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5210+50 TO 5266+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1552
SCALE
AS SHOWN
SHEET NO.
3 OF 13



DESIGNED BY S. LITSAS	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION
DRAWN BY J. BORGHESI	
CHECKED BY G. MEJIA	
IN CHARGE R. COFFIN	
DATE 12/31/13	

REV	DATE	BY	CHK	APP	DESCRIPTION

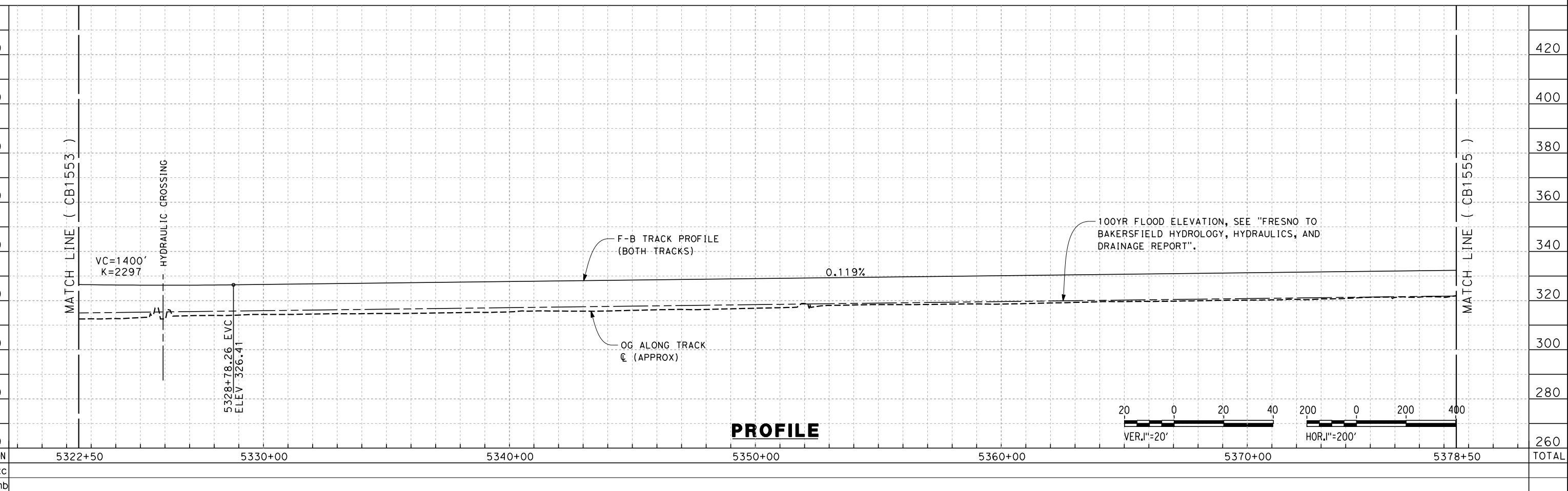
CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5266+50 TO 5322+50
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1553
SCALE AS SHOWN
SHEET NO. 4 OF 13

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

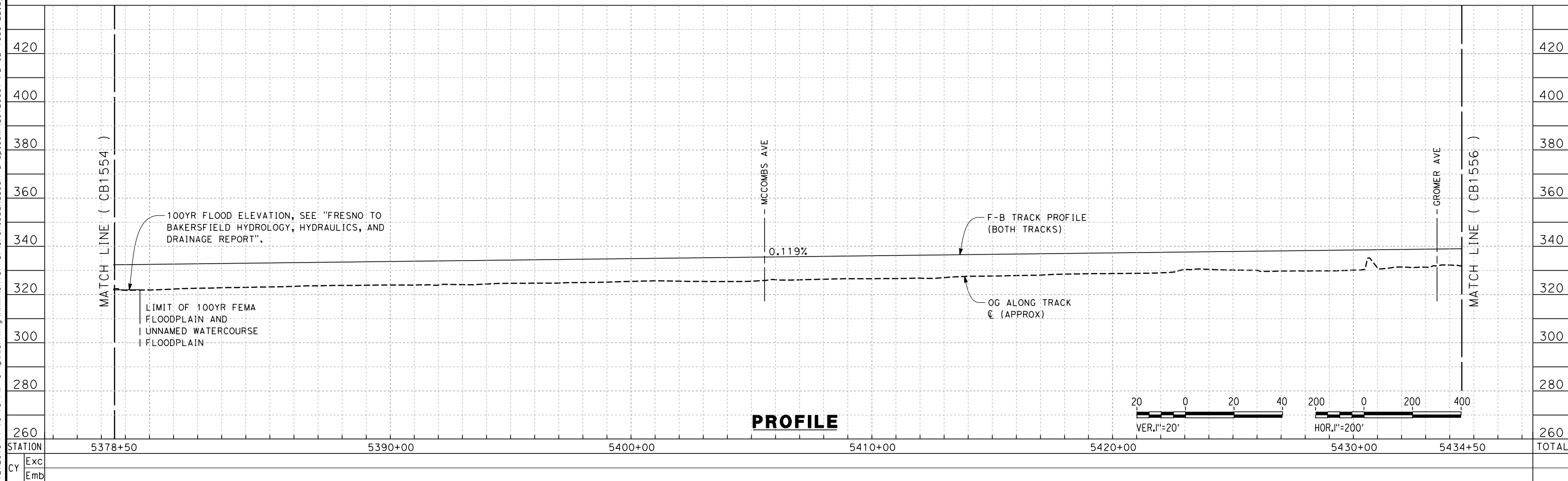
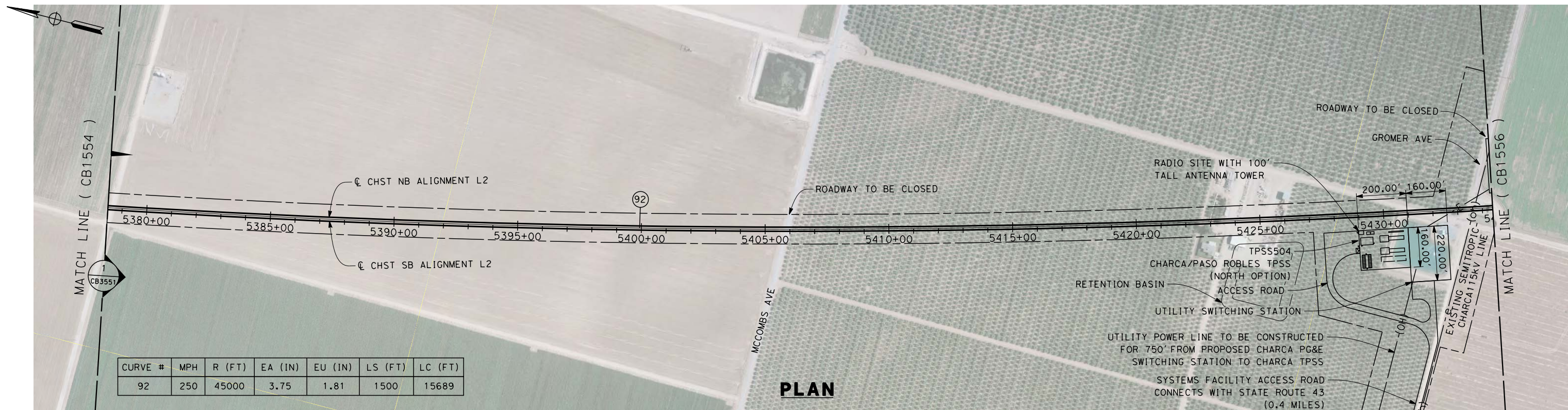
**NOT FOR
CONSTRUCTION**



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

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5322+50 TO 5378+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1554
SCALE
AS SHOWN
SHEET NO.
5 OF 13



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS

DRAWN BY
J. BORGHESI

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**

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5378+50 TO 5434+50
PLAN AND PROFILE

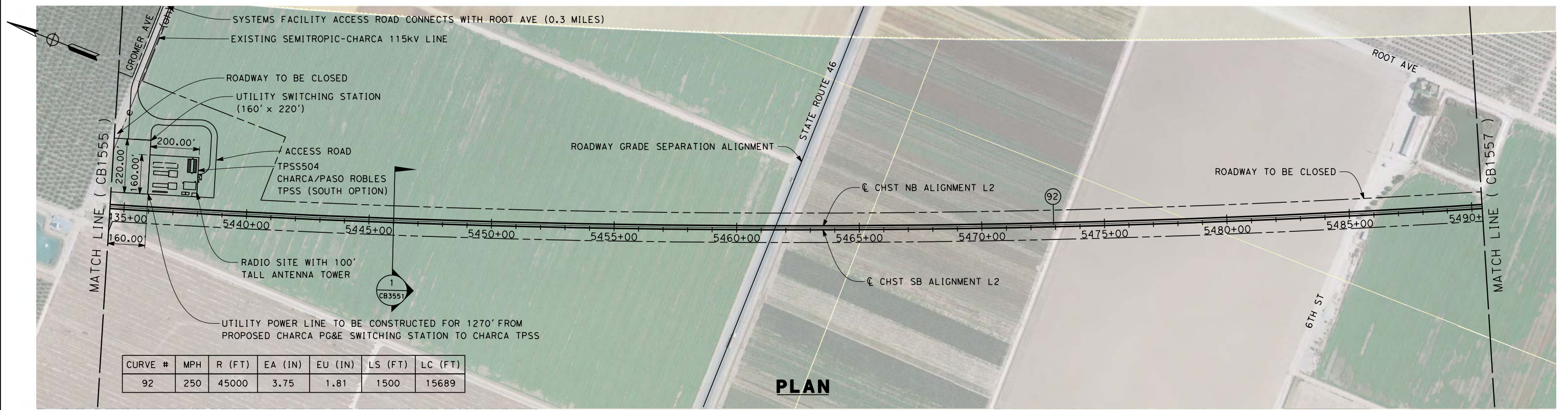
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB1555

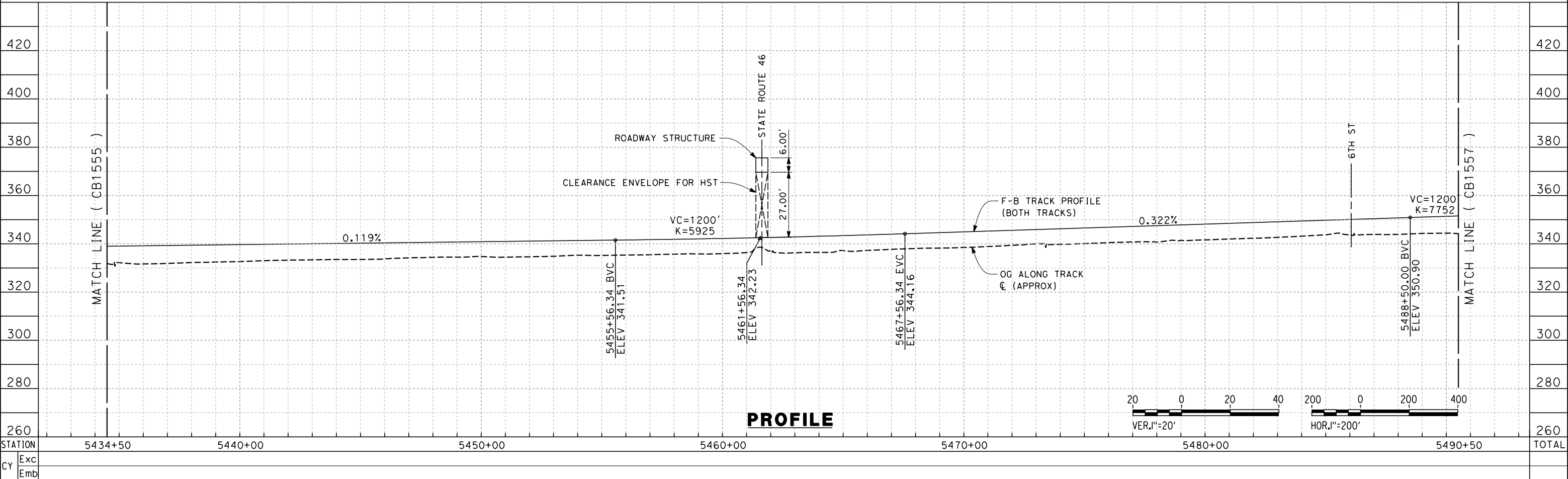
SCALE
AS SHOWN

SHEET NO.
6 OF 13

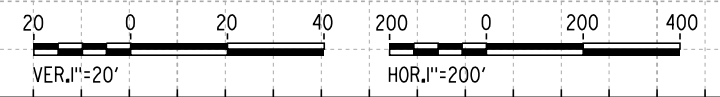
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PLAN



PROFILE



REV	DATE	BY	CHK	APP	DESCRIPTION

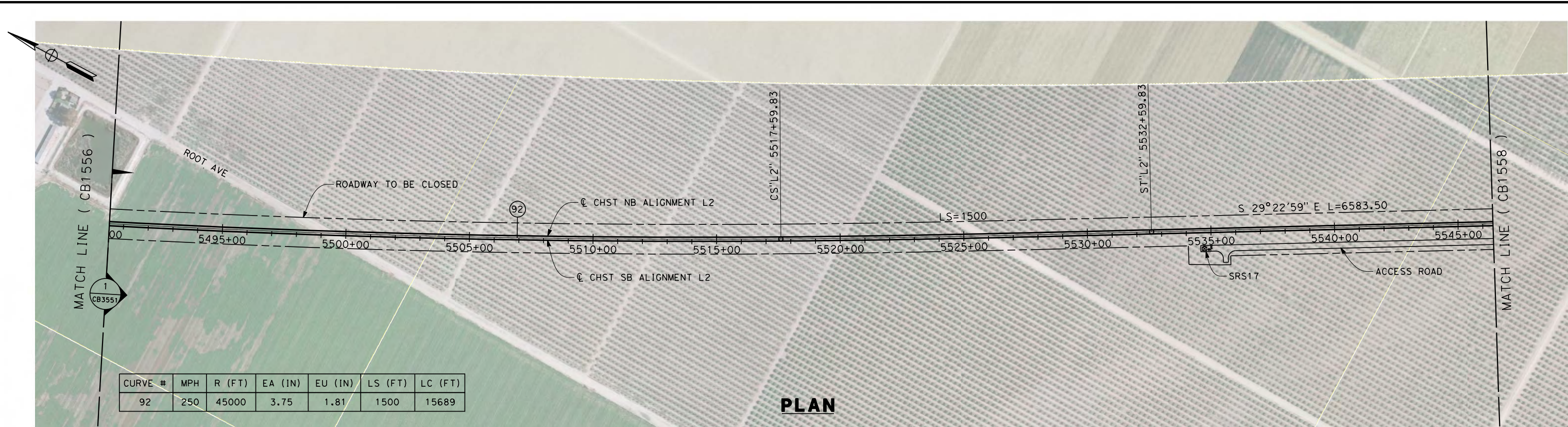
DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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

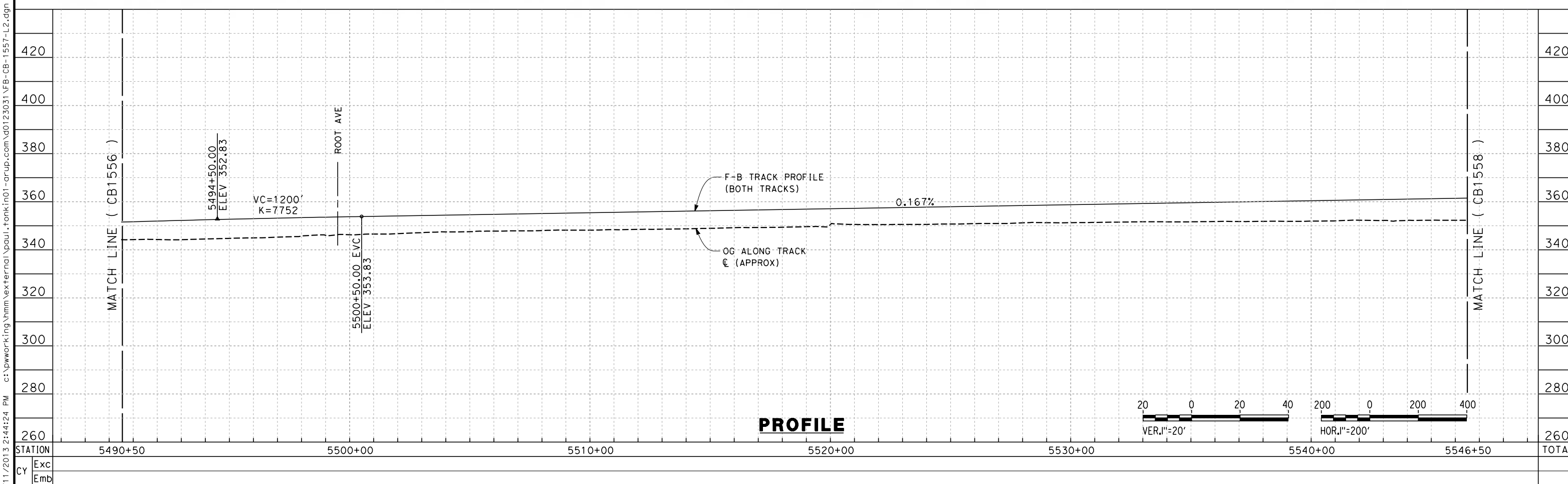


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L2
 STA. 5434+50 TO 5490+50
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1556
 SCALE
AS SHOWN
 SHEET NO.
7 OF 13



PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

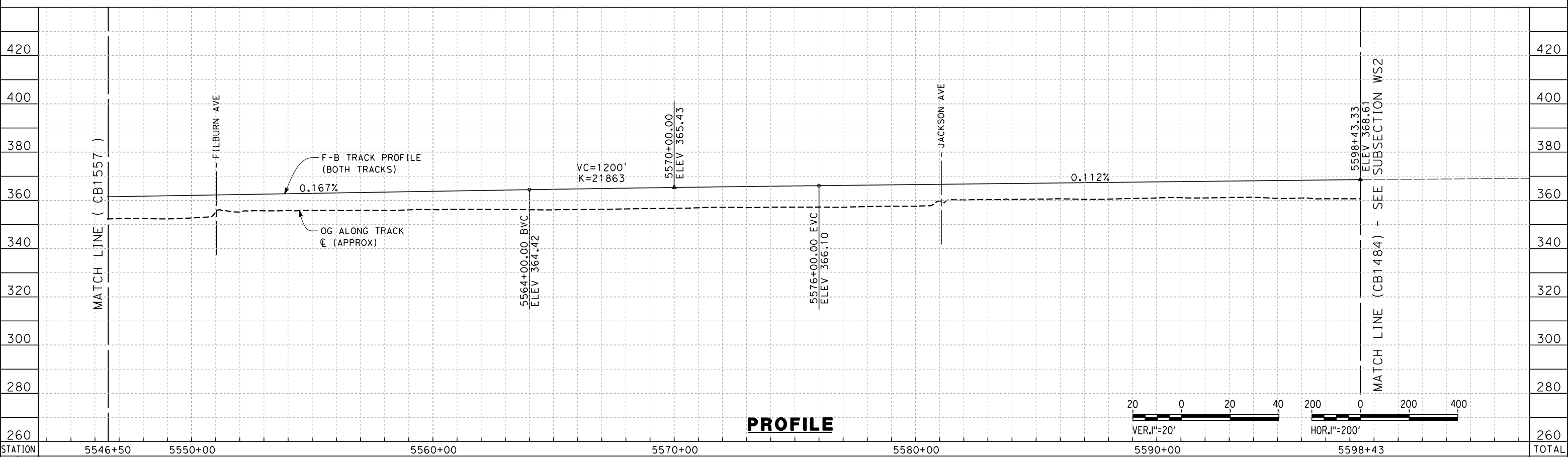
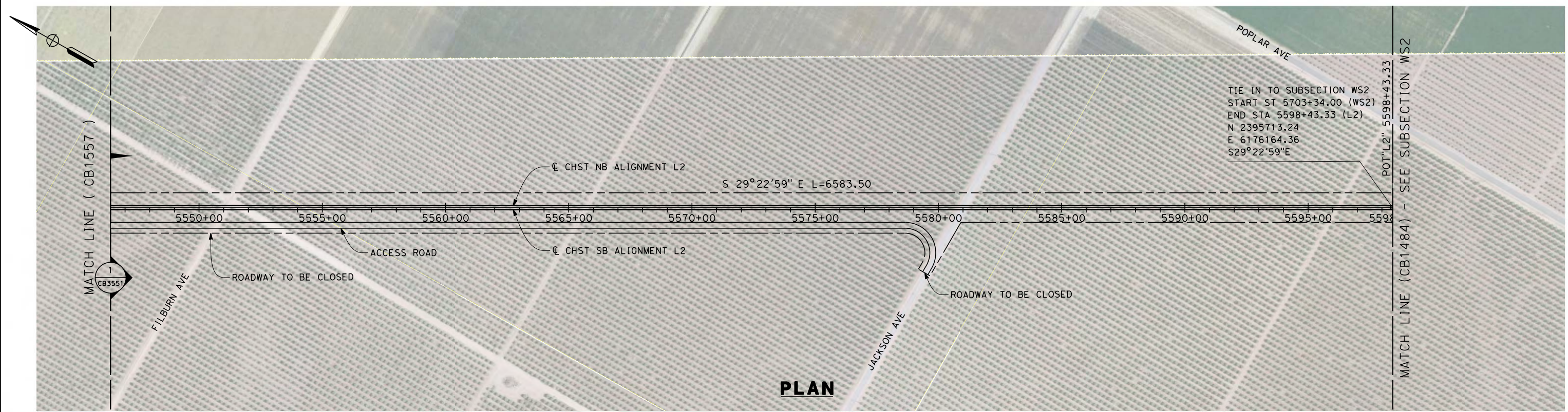


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5490+50 TO 5546+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1557
SCALE
AS SHOWN
SHEET NO.
8 OF 13

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STATION	5546+50	5550+00	5560+00	5570+00	5580+00	5590+00	5598+43	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
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**

POSO CREEK SUBSECTION
ALIGNMENT L2
STA. 5546+50 TO 5598+43
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003

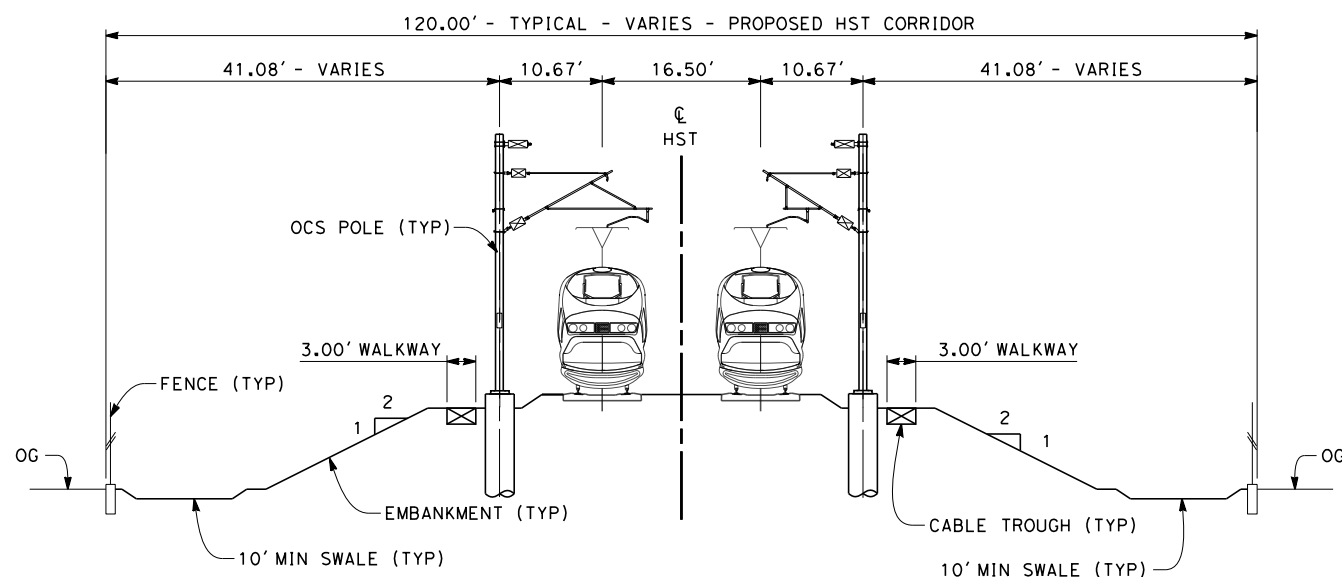
DRAWING NO.
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SCALE
AS SHOWN

SHEET NO.
9 OF 13

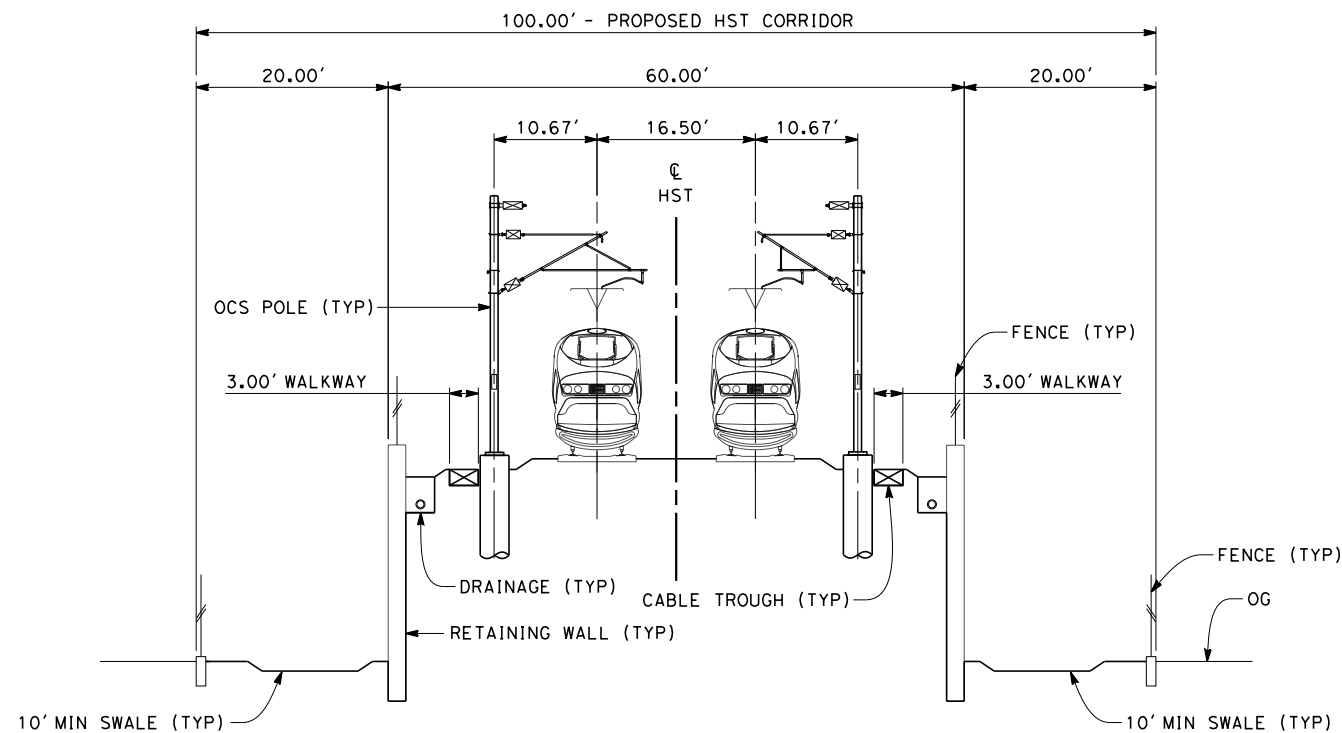
NOTES:

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



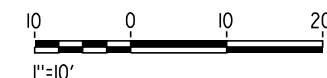
SECTION 1

TWIN TRACK - AT-GRADE WITH OPEN DRAINAGE
 STA 5154+50 THROUGH STA 5191+50
 STA 5310+30 THROUGH STA 5598+43



SECTION 2

TWIN TRACK - RETAINED EMBANKMENT
 STA 5191+50 THROUGH STA 5225+30
 STA 5290+80 THROUGH STA 5298+40
 STA 5299+00 THROUGH STA 5310+30



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

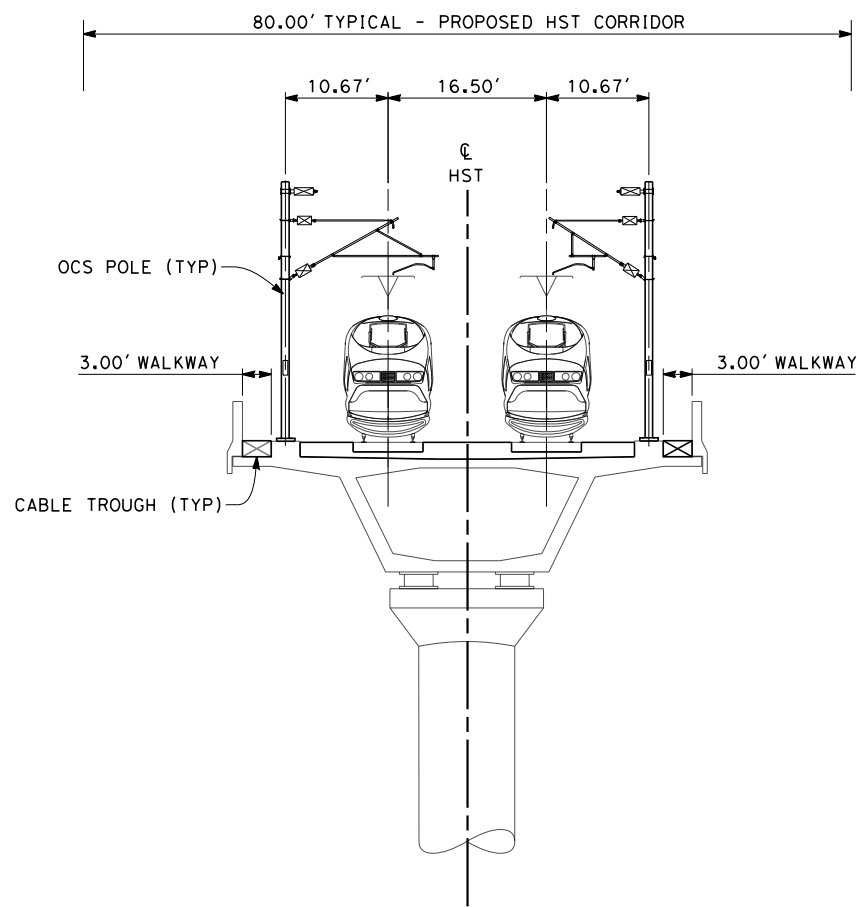


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L2
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3551
 SCALE
AS SHOWN
 SHEET NO.
10 OF 13

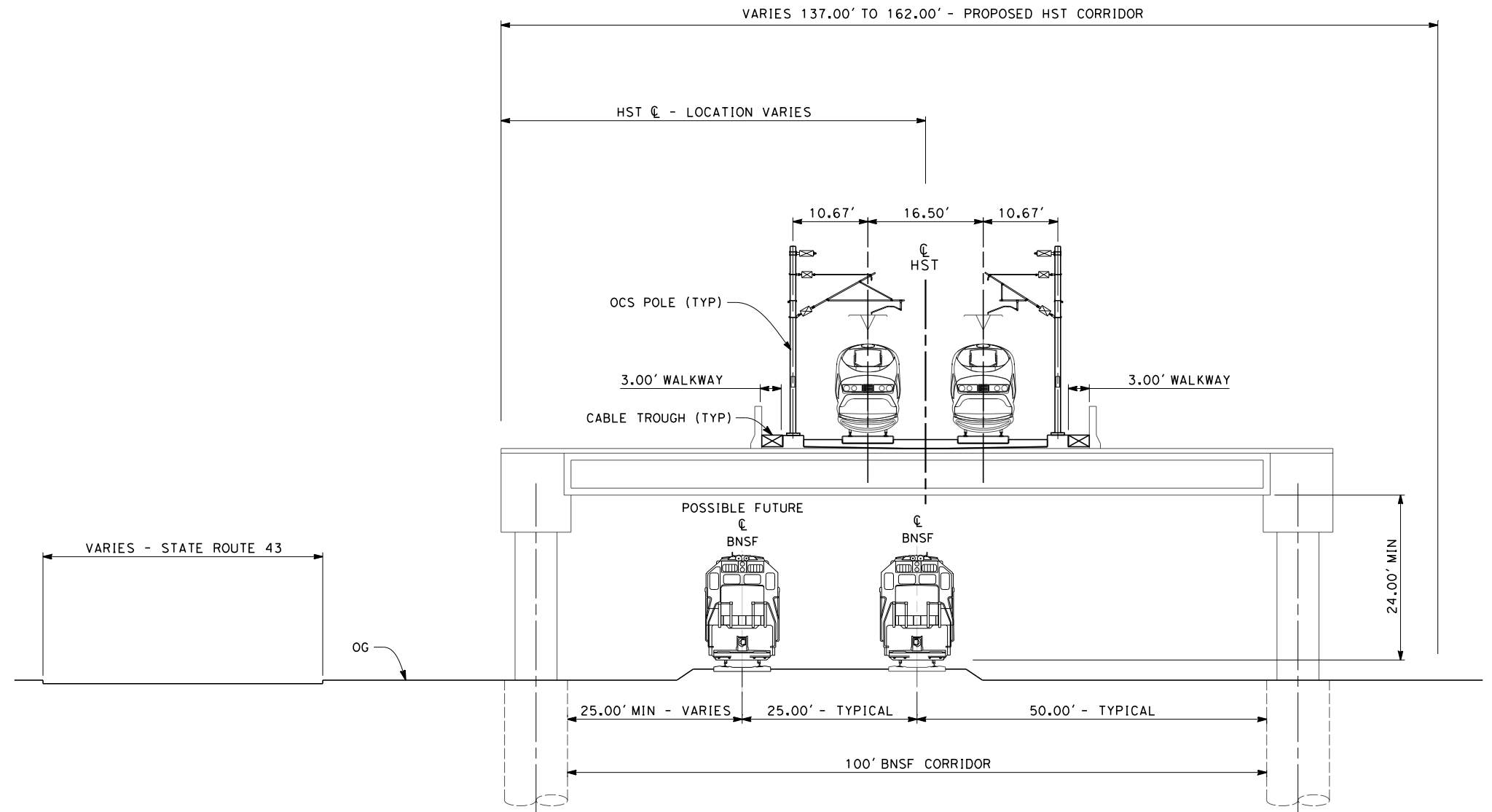
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.
4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST COLUMN IS NOT MET, STA 5271+55 TO 5284+80



SECTION 3

TWIN TRACK - AERIAL VIADUCT
 STA 5225+30 THROUGH STA 5271+55
 STA 5284+80 THROUGH STA 5290+80



SECTION 4

TWIN TRACK - ELEVATED SLAB OVER BNSF ADJACENT HIGHWAY
 STA 5271+55 THROUGH STA 5278+20



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

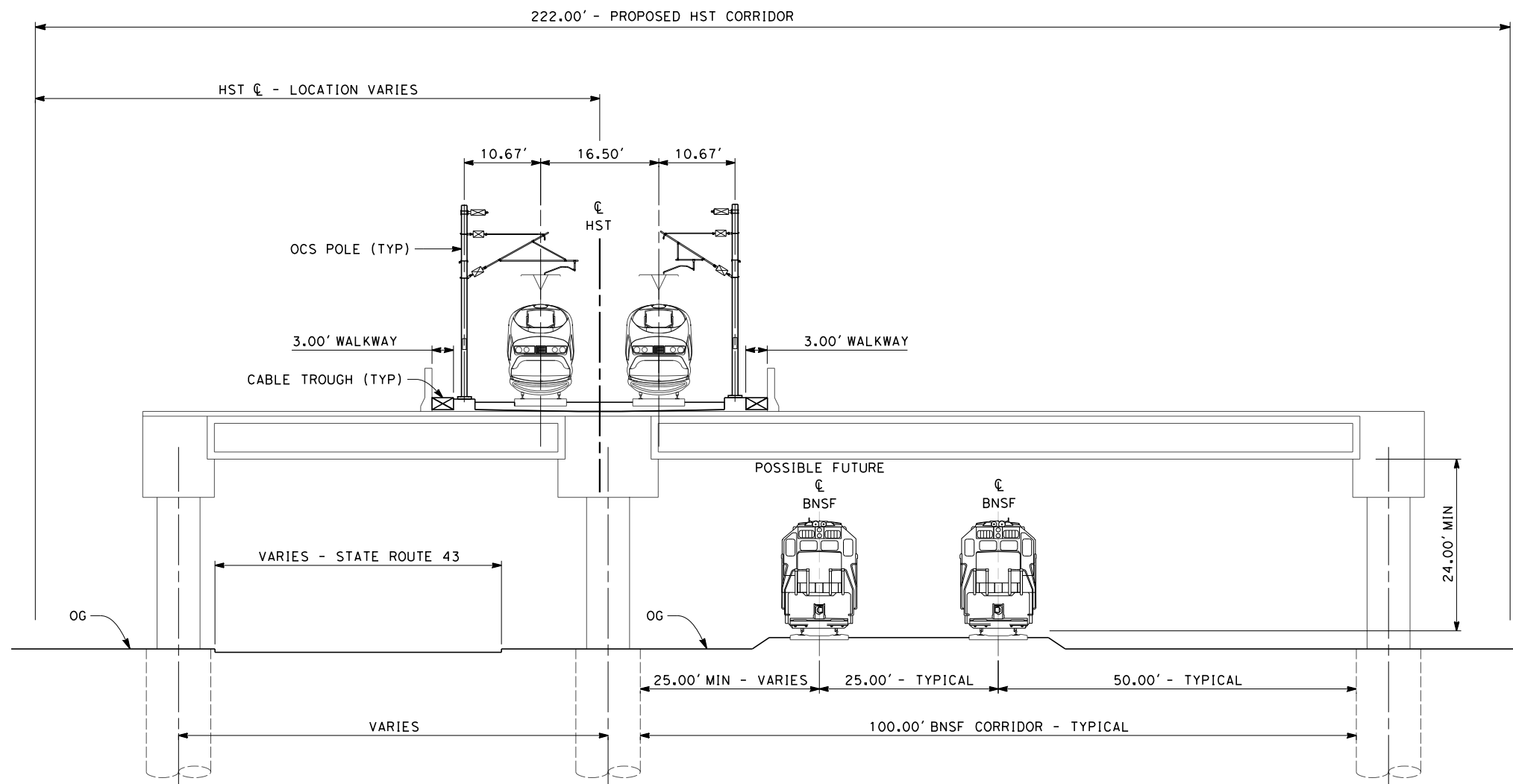
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L2
 TYPICAL SECTIONS

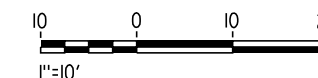
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3552
 SCALE
AS SHOWN
 SHEET NO.
11 OF 13

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES
 4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST COLUMN IS NOT MET, STA 5271+55 TO 5284+80



SECTION 5

TWIN TRACK - ELEVATED SLAB OVER HIGHWAY AND BNSF
STA 5278+20 THROUGH STA 5280+30



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

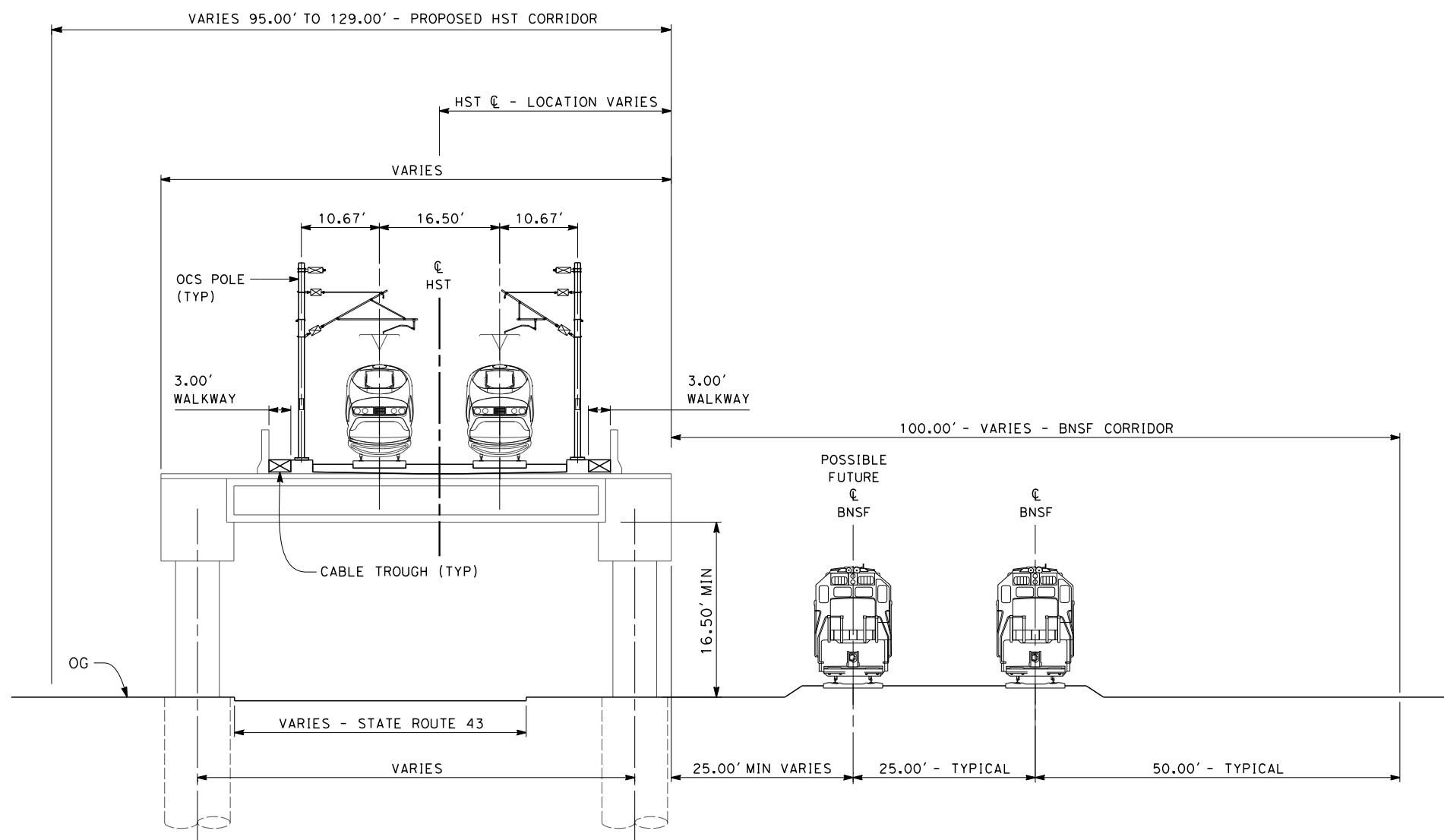


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L2
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3553
SCALE
AS SHOWN
SHEET NO.
12 OF 13

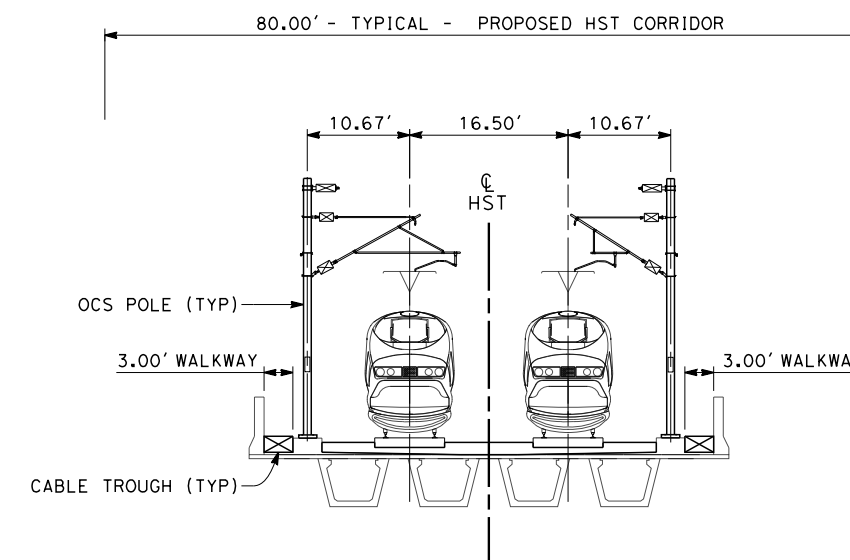
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.
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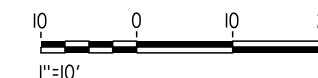
SECTION 6

TWIN TRACK - ELEVATED SLAB OVER HIGHWAY ADJACENT TO BNSF
STA 5280+30 THROUGH STA 5284+80



SECTION 7

TWIN TRACK - ELEVATED PRECAST CONCRETE GIRDER STRUCTURE
STA 5298+40 THROUGH STA 5299+00



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

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

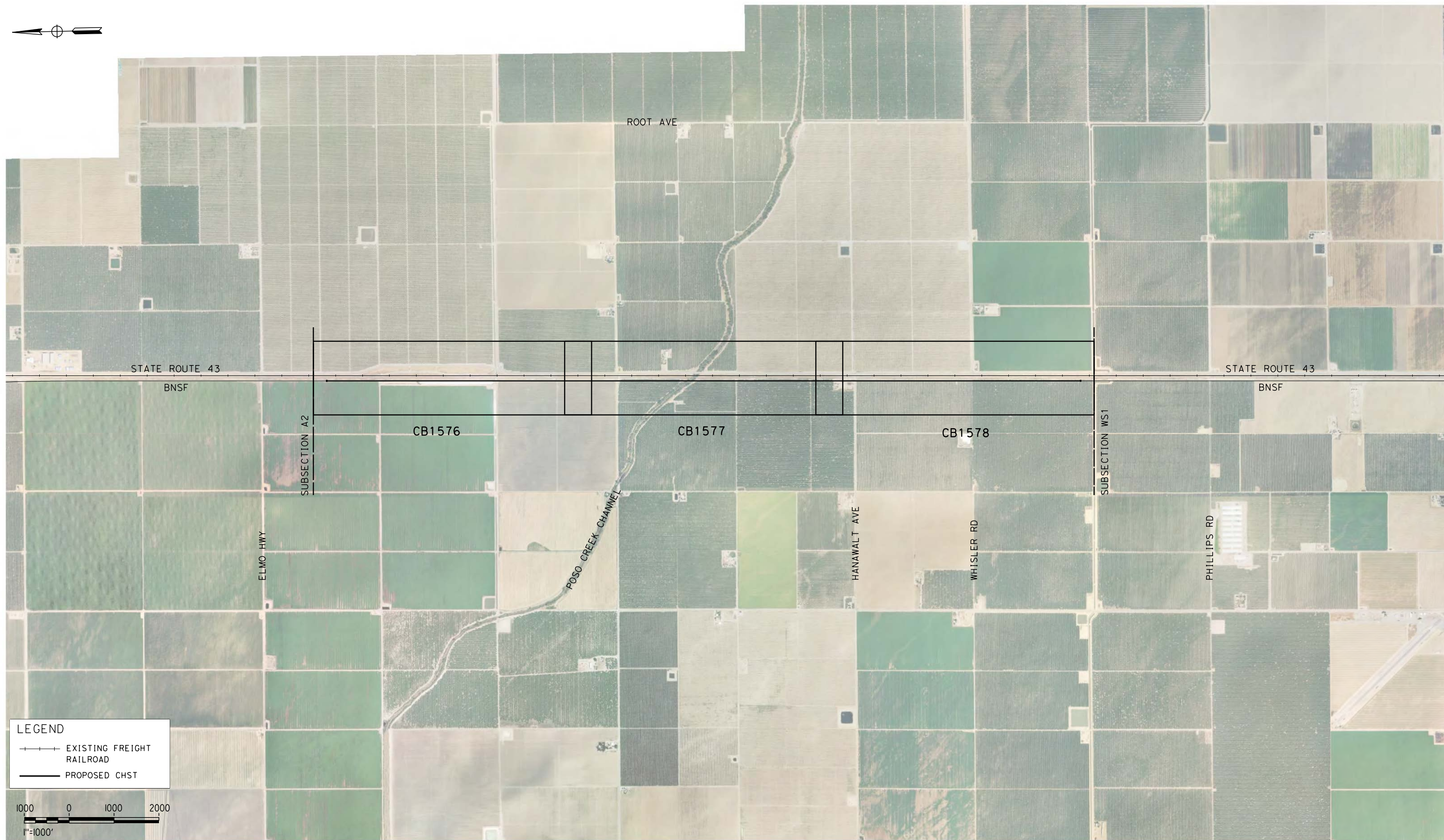
**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

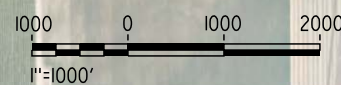


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L2
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3554
SCALE
AS SHOWN
SHEET NO.
13 OF 13



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



eron_sudhausen 12/10/2013 8:52:23 AM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0123053\FB-CB-1575-L3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

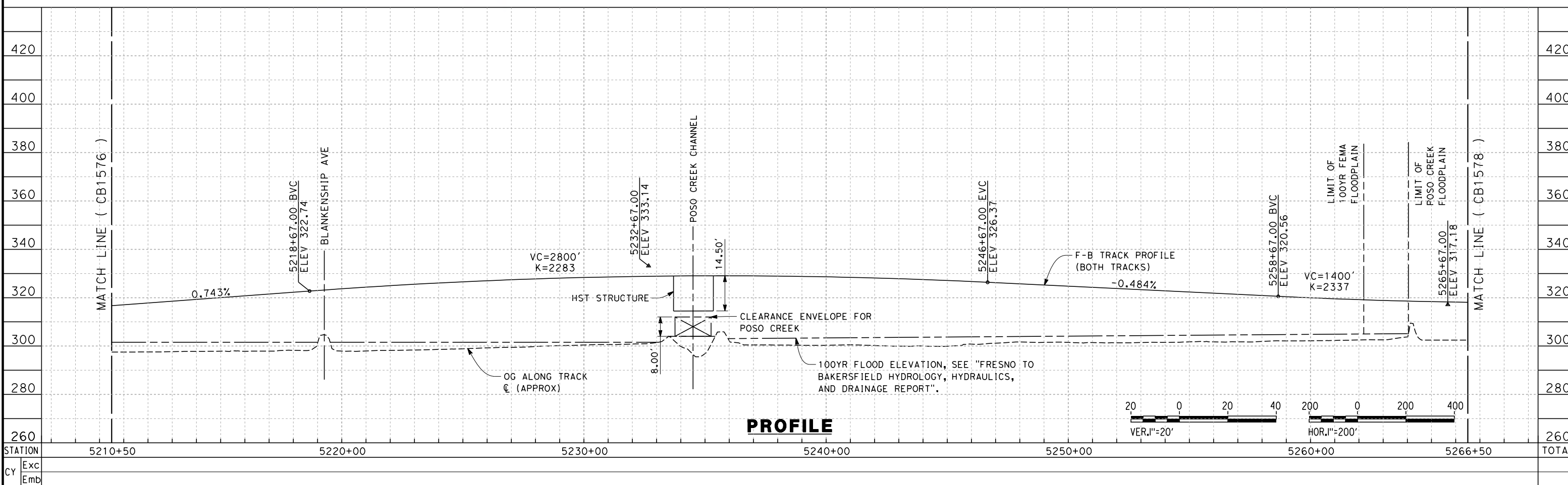
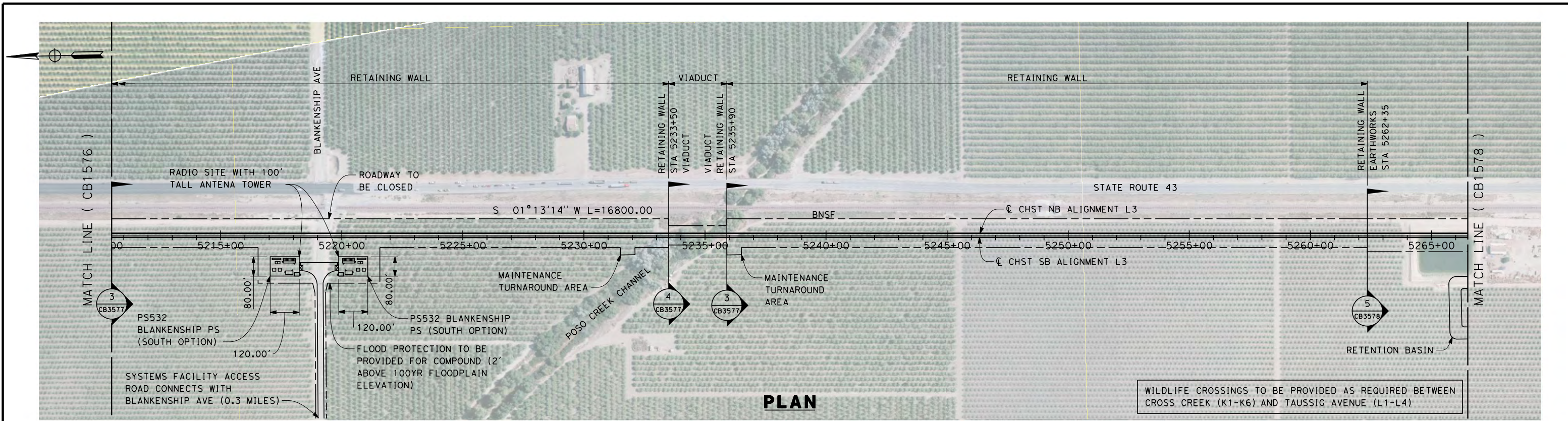
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L3
 STA. 5154+50 TO 5322+50
 KEY MAP

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB1575
 SCALE
 AS SHOWN
 SHEET NO.
 1 OF 7

12/11/2013 2:55:25 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123053\FB-CB-1577-L3.dgn paul.tonkin



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

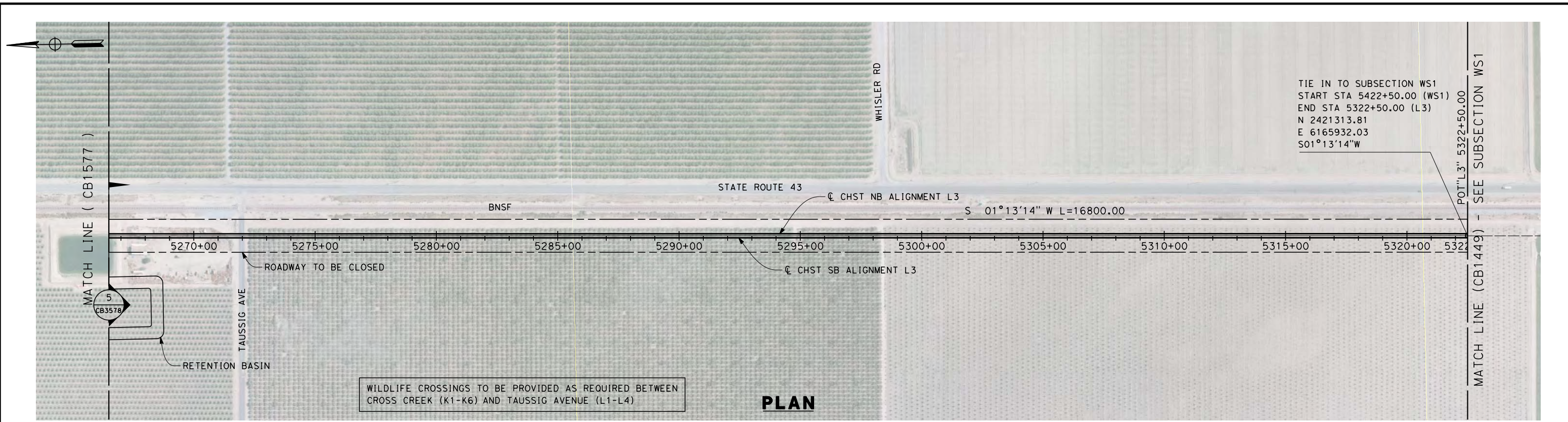


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L3
STA. 5210+50 TO 5266+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1577
SCALE
AS SHOWN
SHEET NO.
3 OF 7

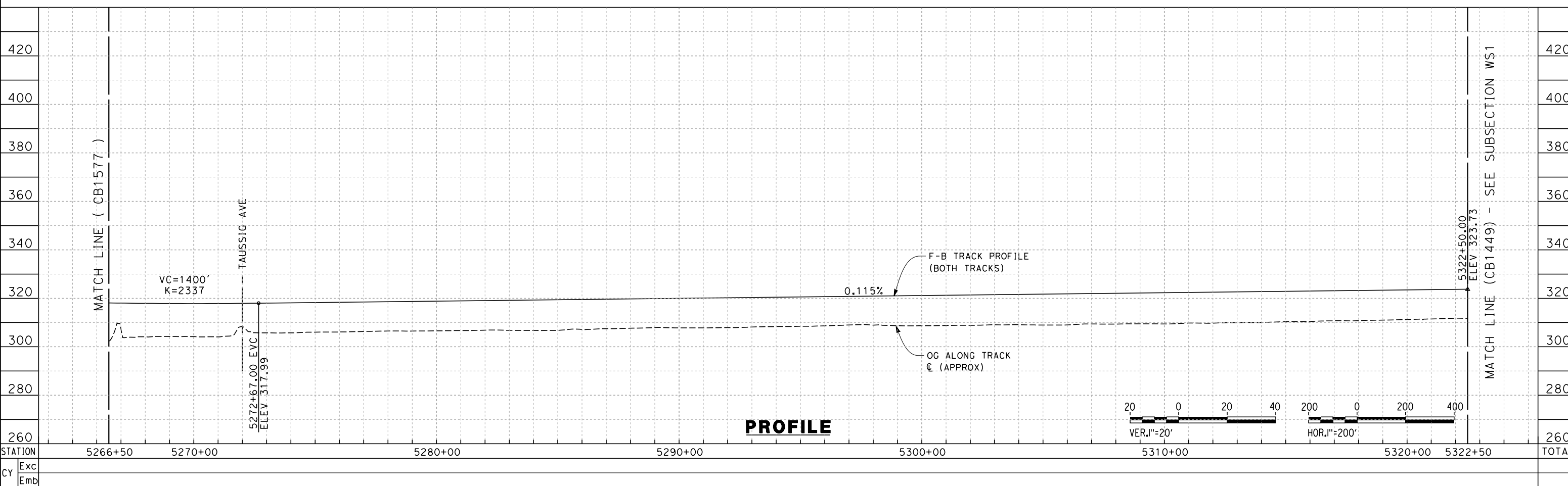
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TIE IN TO SUBSECTION WS1
 START STA 5422+50.00 (WS1)
 END STA 5322+50.00 (L3)
 N 2421313.81
 E 6165932.03
 S01°13'14"W

WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN
 CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-L4)

PLAN



PROFILE

STATION	5266+50	5270+00	5280+00	5290+00	5300+00	5310+00	5320+00	5322+50	TOTAL
Exc									
Emb									

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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

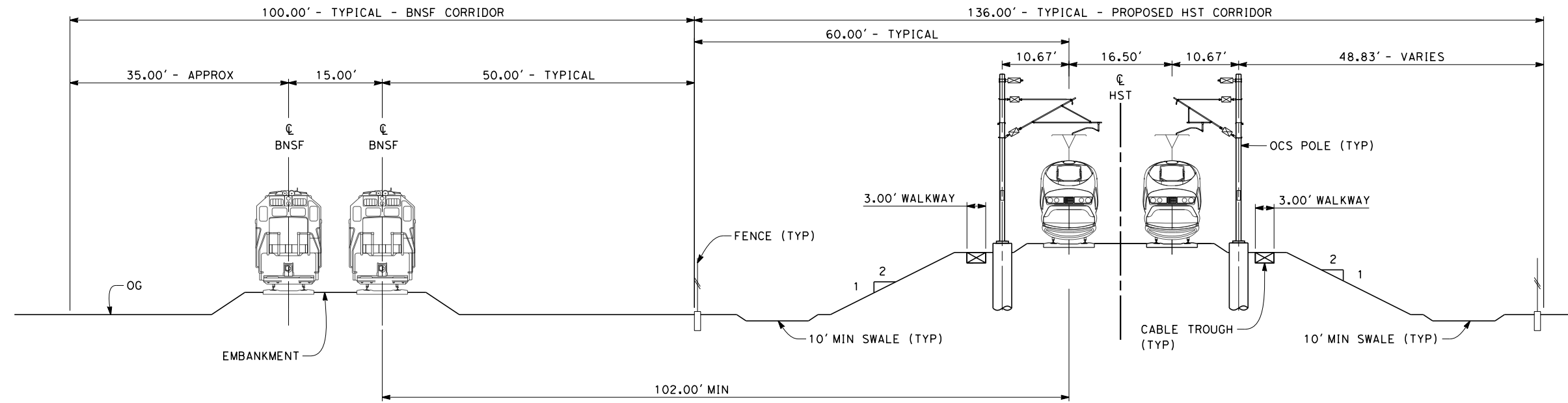


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L3
 STA. 5266+50 TO 5322+50
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1578
 SCALE
AS SHOWN
 SHEET NO.
4 OF 7

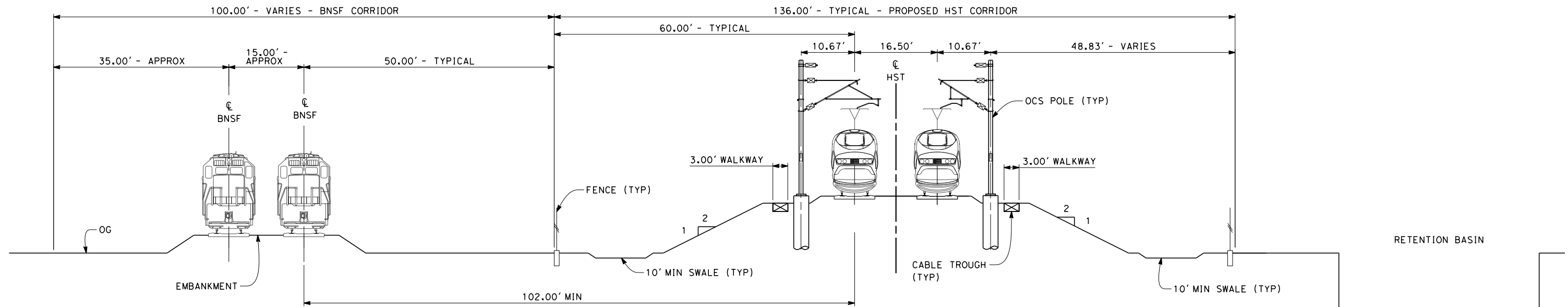
NOTES:

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 THE CURVE DATA TABLES



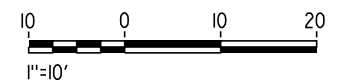
SECTION 1

TWIN TRACK - ADJACENT TO TWIN TRACK BNSF
 STA 5154+50 THROUGH STA 5165+70
 STA 5191+50 THROUGH STA 5206+00



SECTION 2

TWIN TRACK - BETWEEN BNSF AND REALIGNED RETENTION BASIN
 STA 5165+70 THROUGH STA 5191+50



12/11/2013 2:59:05 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123053\FB-CB-3576-L3.dgn paul.tonkin

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

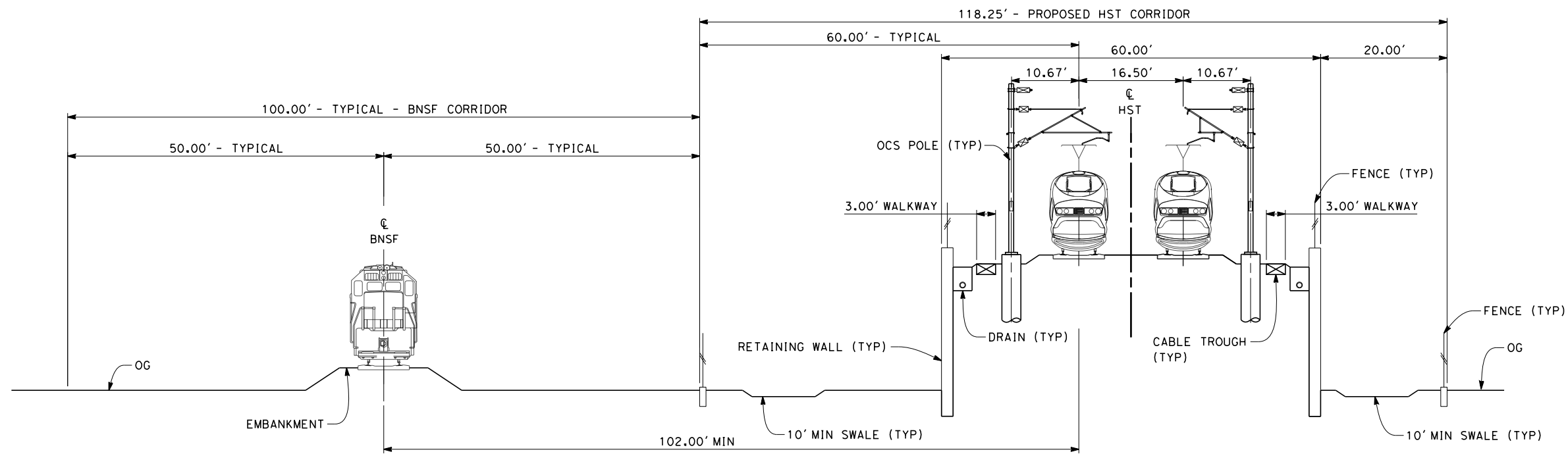
**RECORD SET 15%
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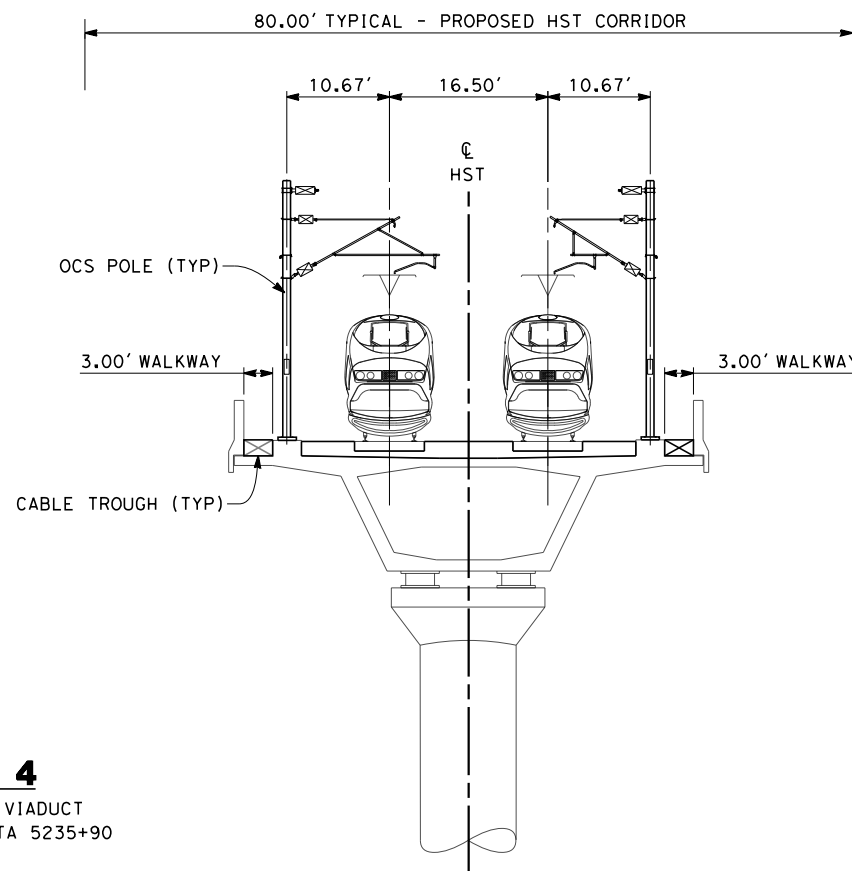
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L3
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3576
 SCALE
AS SHOWN
 SHEET NO.
5 OF 7



SECTION 3

TWIN TRACK ADJACENT TO BNSF - RETAINED EMBANKMENT
 STA 5206+00 THROUGH STA 5233+50
 STA 5235+90 THROUGH STA 5262+35

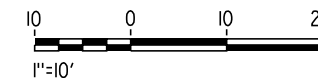


SECTION 4

TWIN TRACK - AERIAL VIADUCT
 STA 5233+50 THROUGH STA 5235+90

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 THE CURVE DATA TABLES



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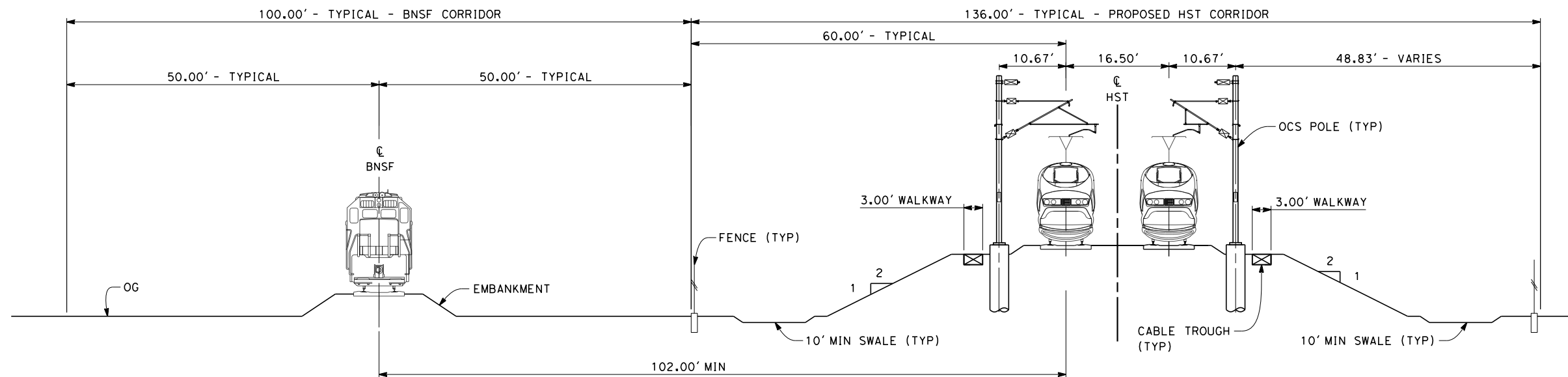


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L3
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3577
 SCALE
AS SHOWN
 SHEET NO.
6 OF 7

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 THE CURVE DATA TABLES



SECTION 5

TWIN TRACK - ADJACENT TO BNSF
 STA 5262+35 THROUGH STA 5322+50



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G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L3
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3578
 SCALE
AS SHOWN
 SHEET NO.
7 OF 7

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LEGEND

- EXISTING FREIGHT RAILROAD
- PROPOSED CHST

2000 0 2000 4000
1"=2000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

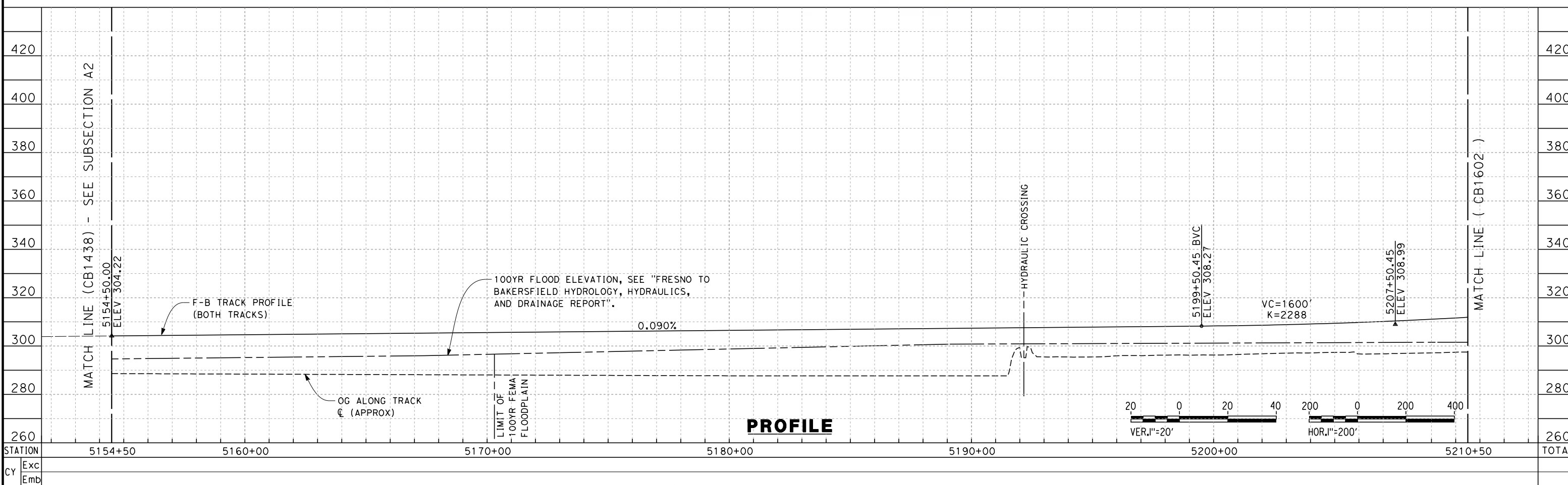
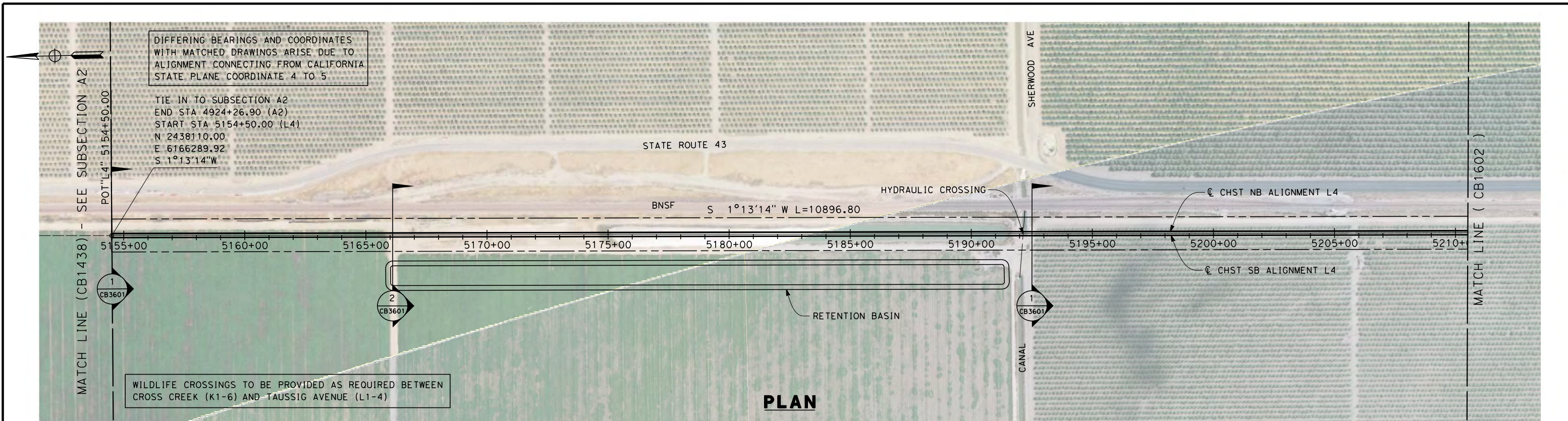


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5154+50 TO 5599+86
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1600
SCALE
AS SHOWN
SHEET NO.
1 OF 16

12/11/2013 3:06:49 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-1601-L4.dgn paul.tonkin



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DESIGNED BY
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R. COFFIN

DATE
12/31/13

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

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5154+50 TO 5210+50
PLAN AND PROFILE

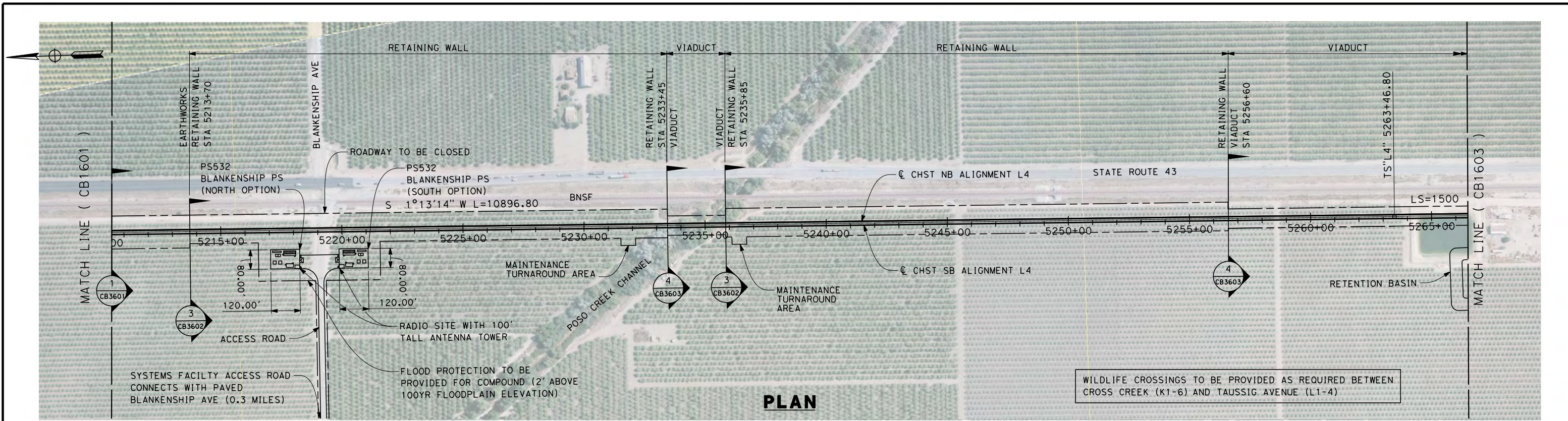
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB1601

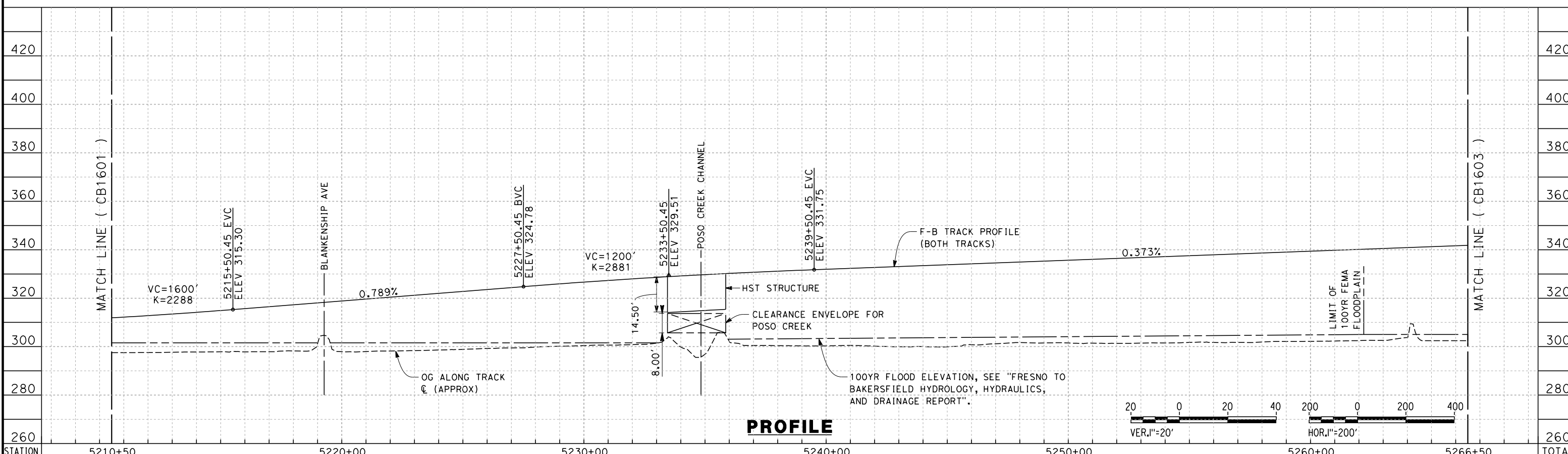
SCALE
AS SHOWN

SHEET NO.
2 OF 16

12/11/2013 3:08:03 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-1602-L4.dgn



PLAN



PROFILE

STATION	5210+50	5220+00	5230+00	5240+00	5250+00	5260+00	5266+50	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

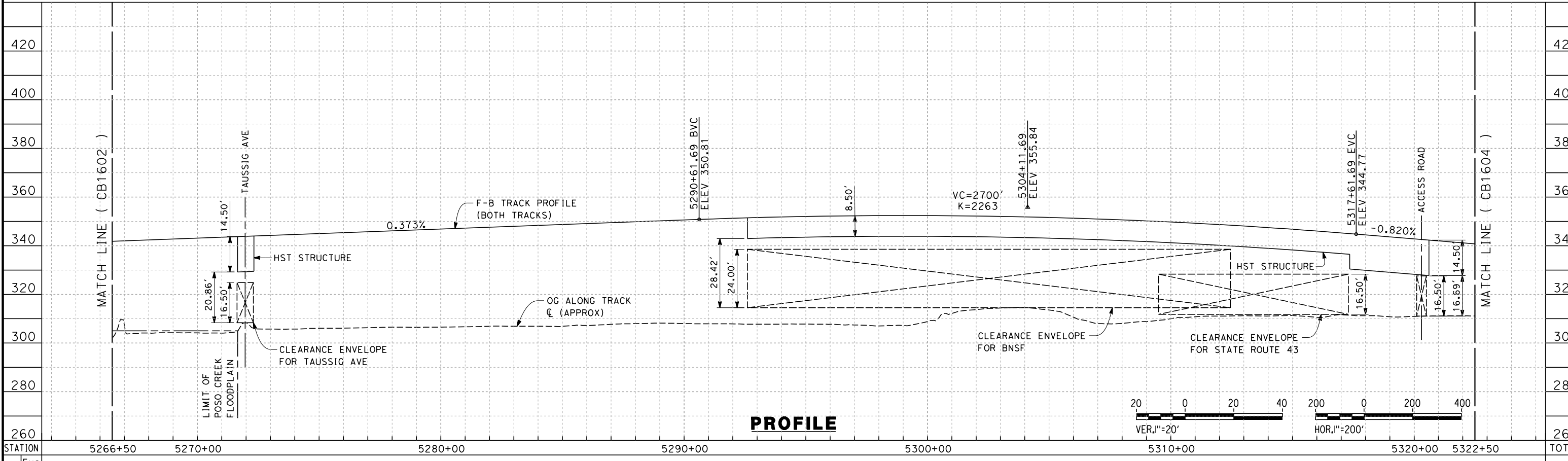
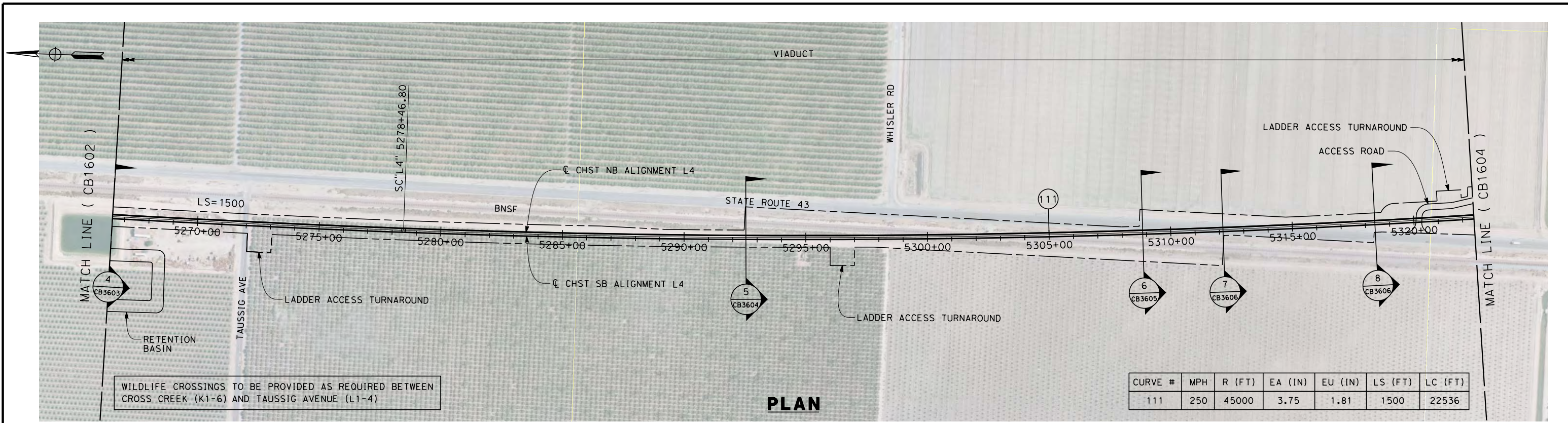


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5210+50 TO 5266+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1602
SCALE
AS SHOWN
SHEET NO.
3 OF 16

12/11/2013 3:11:05 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-1603-L4.dgn paul.tonkin



STATION	5266+50	5270+00	5280+00	5290+00	5300+00	5310+00	5320+00	5322+50	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

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J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

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DESIGN SUBMISSION**

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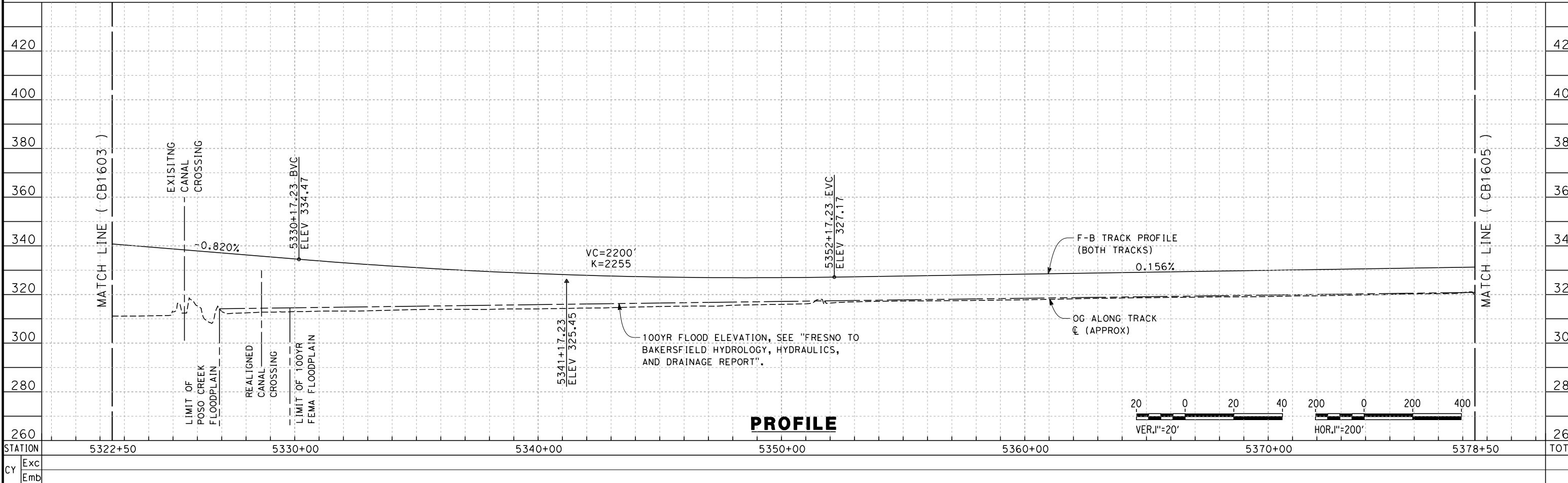
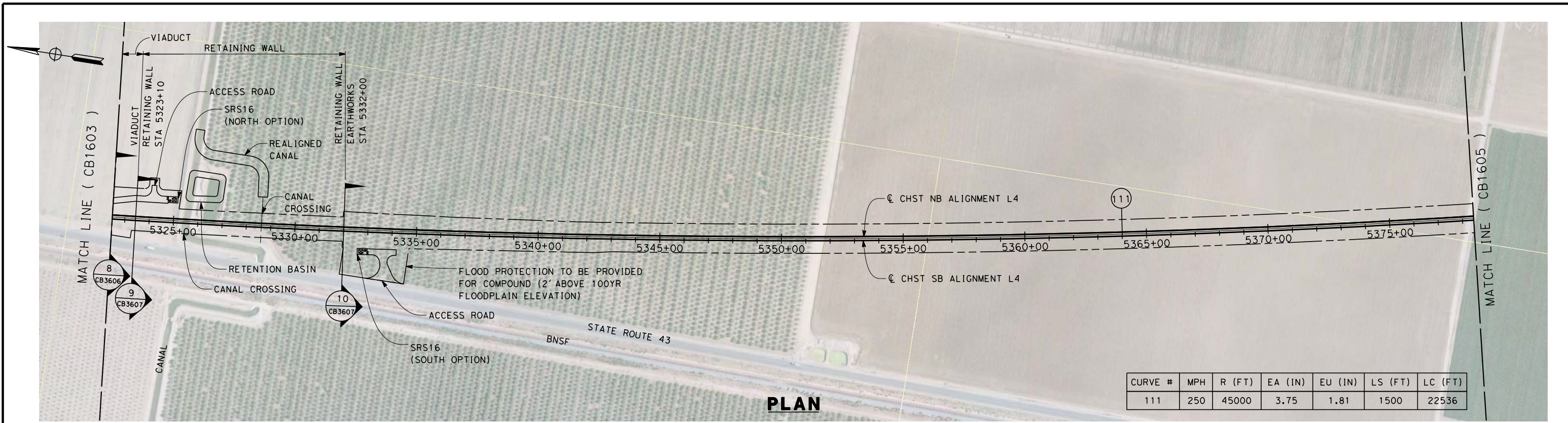


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5266+50 TO 5322+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1603
SCALE
AS SHOWN
SHEET NO.
4 OF 16

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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G. MEJIA

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
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CONSTRUCTION**



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

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5322+50 TO 5378+50
PLAN AND PROFILE

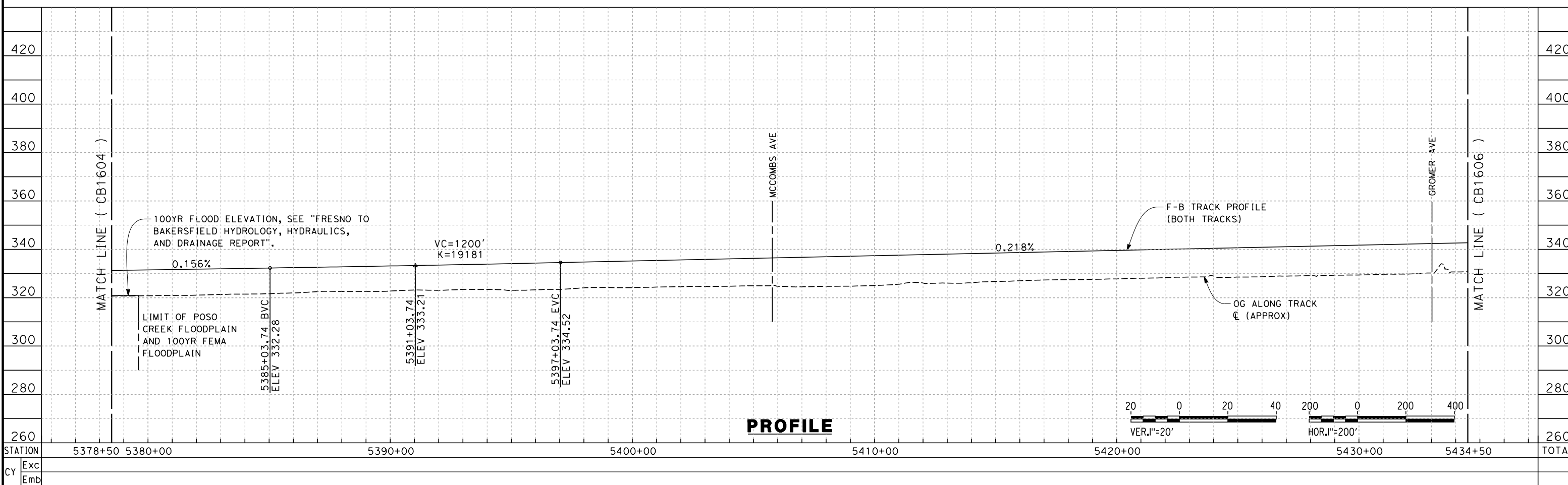
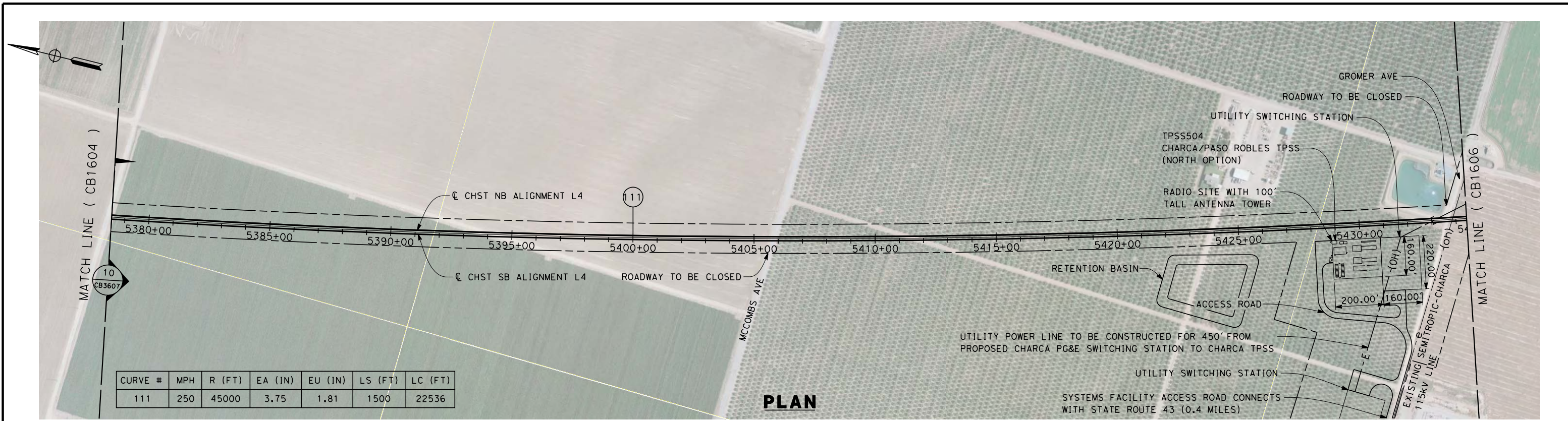
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB1604

SCALE
AS SHOWN

SHEET NO.
5 OF 16

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DESIGNED BY
S. LITSAS
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J. BORGHESI
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G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

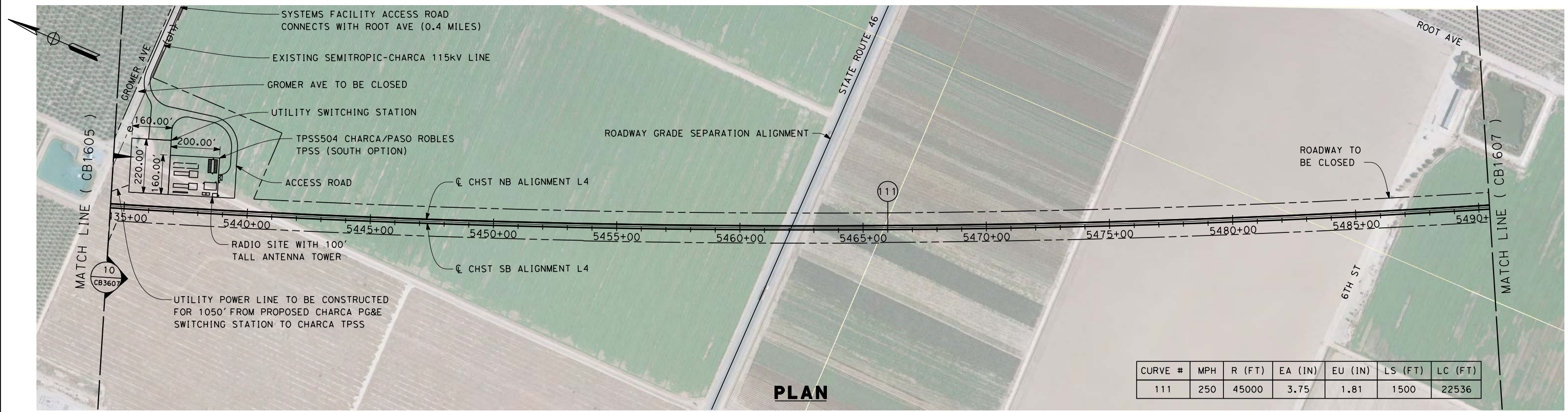


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

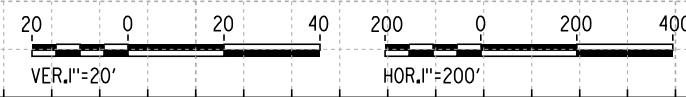
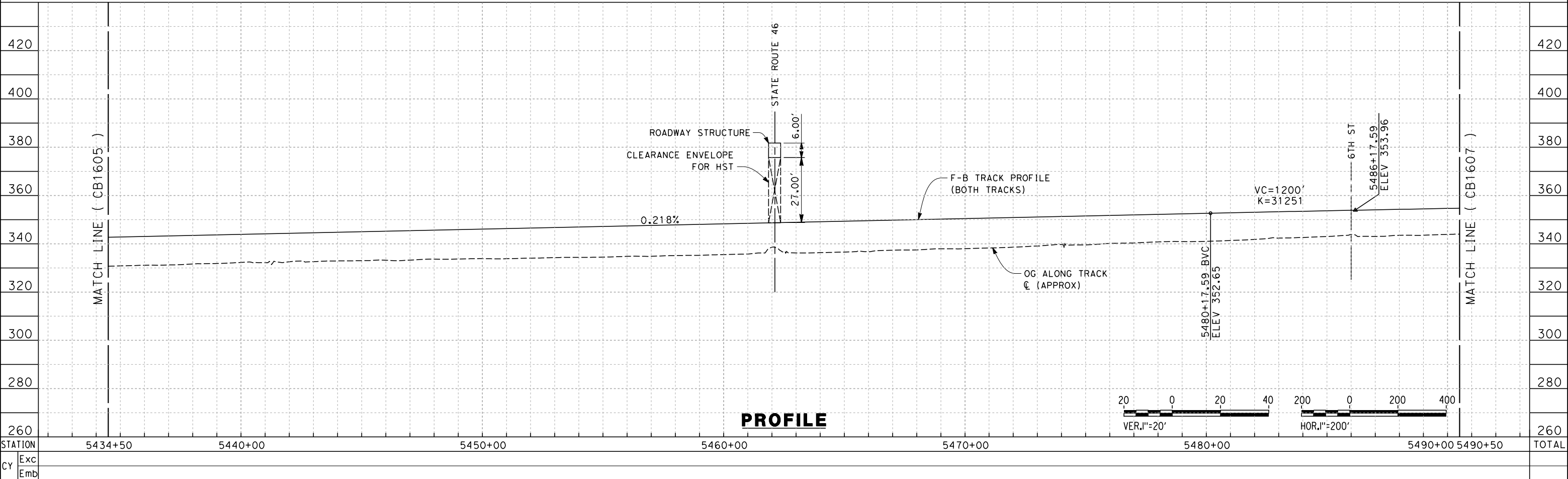
POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5378+50 TO 5434+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1605
SCALE
AS SHOWN
SHEET NO.
6 OF 16

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CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
111	250	45000	3.75	1.81	1500	22536



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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J. BORGHESI
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G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

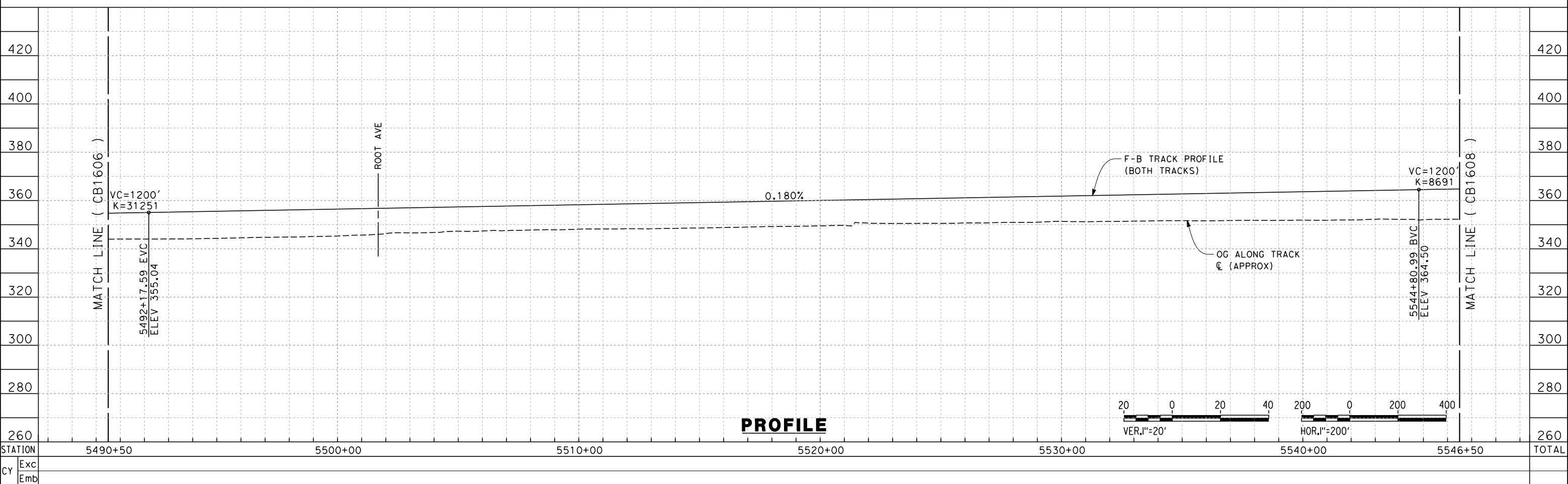
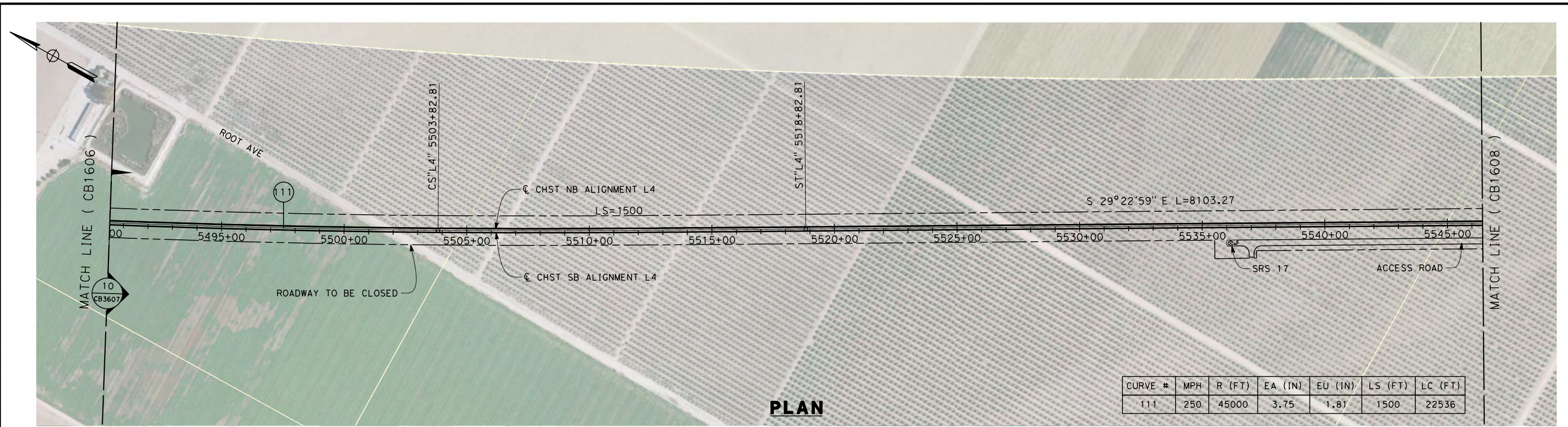


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5434+50 TO 5490+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1606
SCALE
AS SHOWN
SHEET NO.
7 OF 16

12/11/2013 3:21:58 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-1607-L4.dgn paul.tonkin



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J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

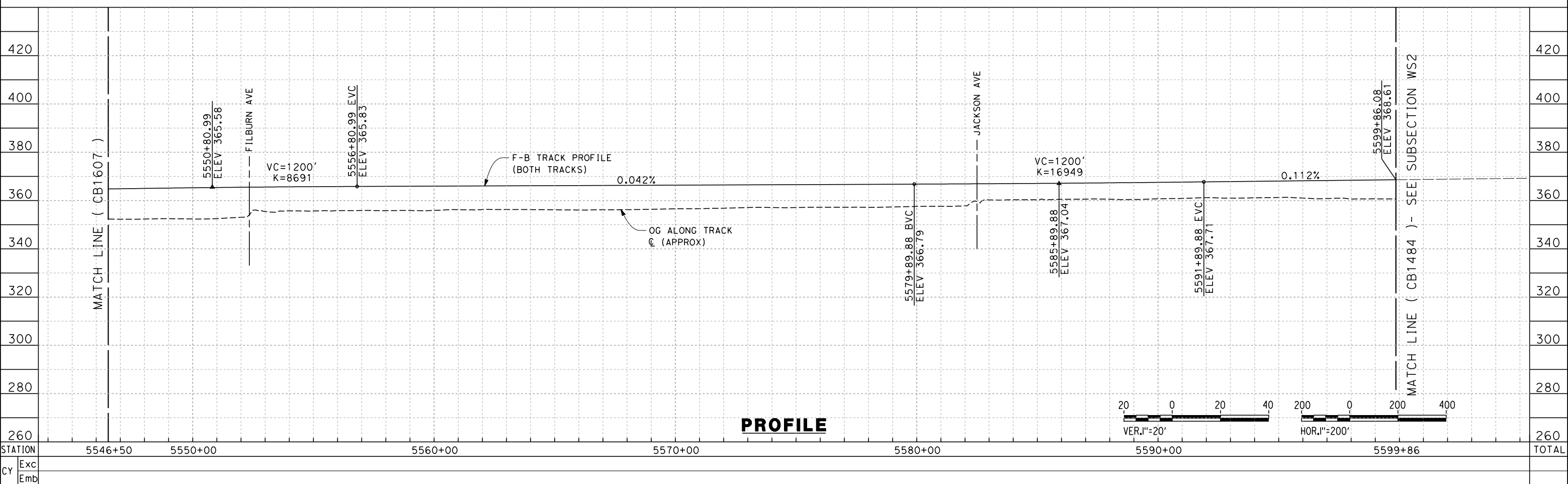
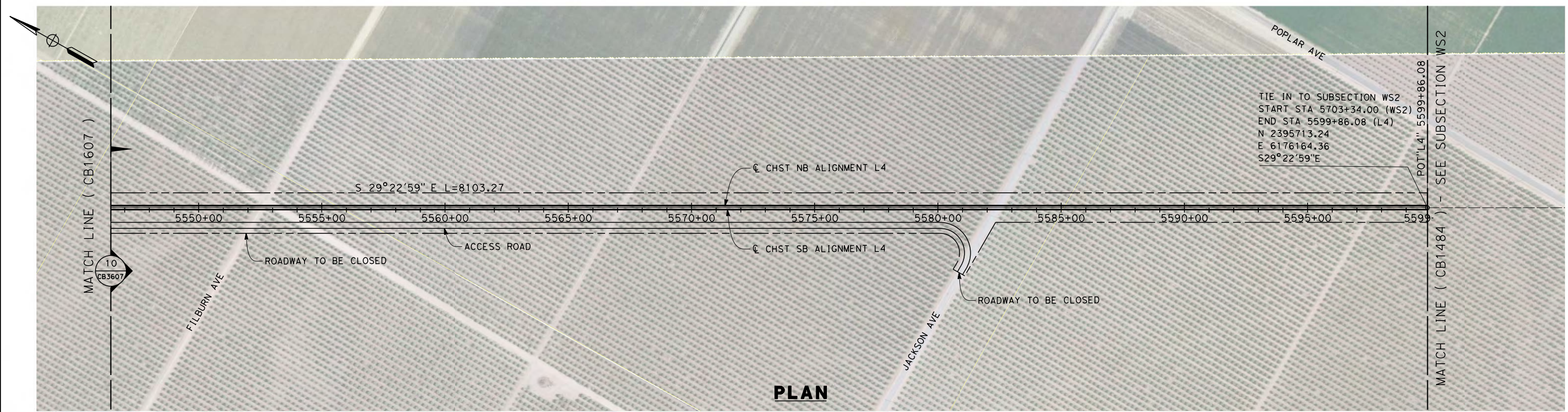


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5490+50 TO 5546+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1607
SCALE
AS SHOWN
SHEET NO.
8 OF 16

12/11/2013 3:23:32 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-1608-L4.dgn paul.tonkin



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CHECKED BY
G. MEJIA

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**



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

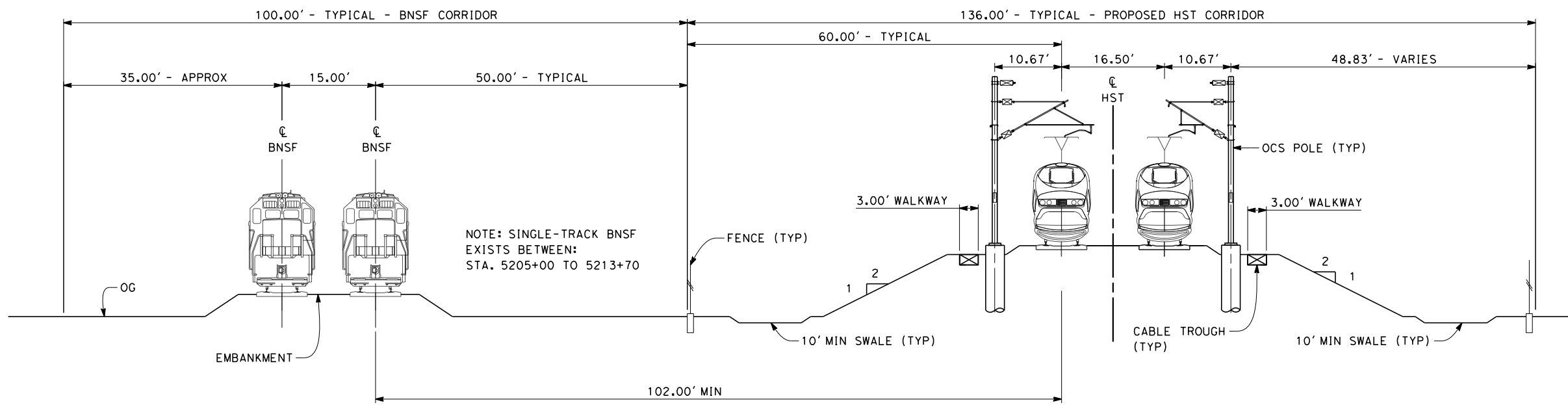
POSO CREEK SUBSECTION
ALIGNMENT L4
STA. 5546+50 TO 5599+86
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
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SCALE
AS SHOWN

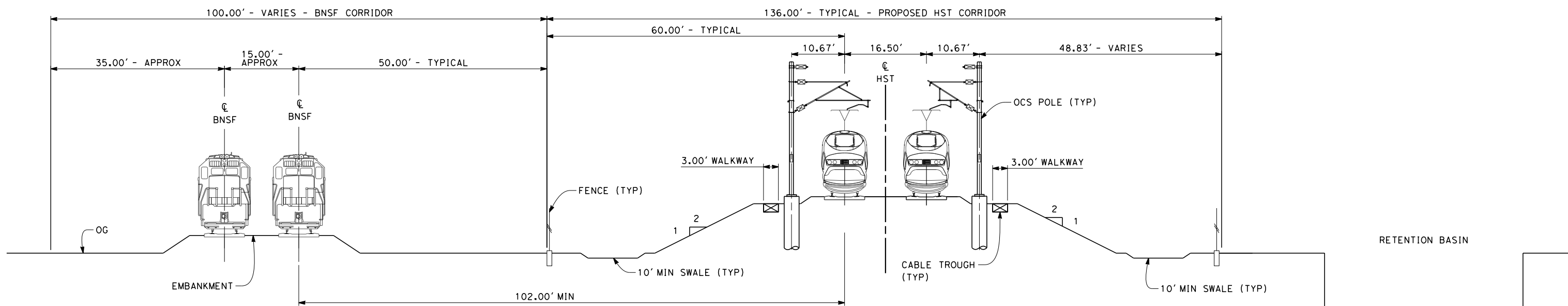
SHEET NO.
9 OF 16



SECTION 1

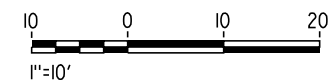
TWIN TRACK ADJACENT TO BNSF
 STA 5154+50 THROUGH STA 5166+10
 STA 5192+50 THROUGH STA 5213+70

- 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 THE CURVE DATA TABLES.



SECTION 2

TWIN TRACK ADJACENT TO BNSF AND REALIGNED RETENTION BASIN
 STA 5166+10 THROUGH STA 5192+50



12/11/2013 3:24:45 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-3601-L4.dgn paul.tonkin

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J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

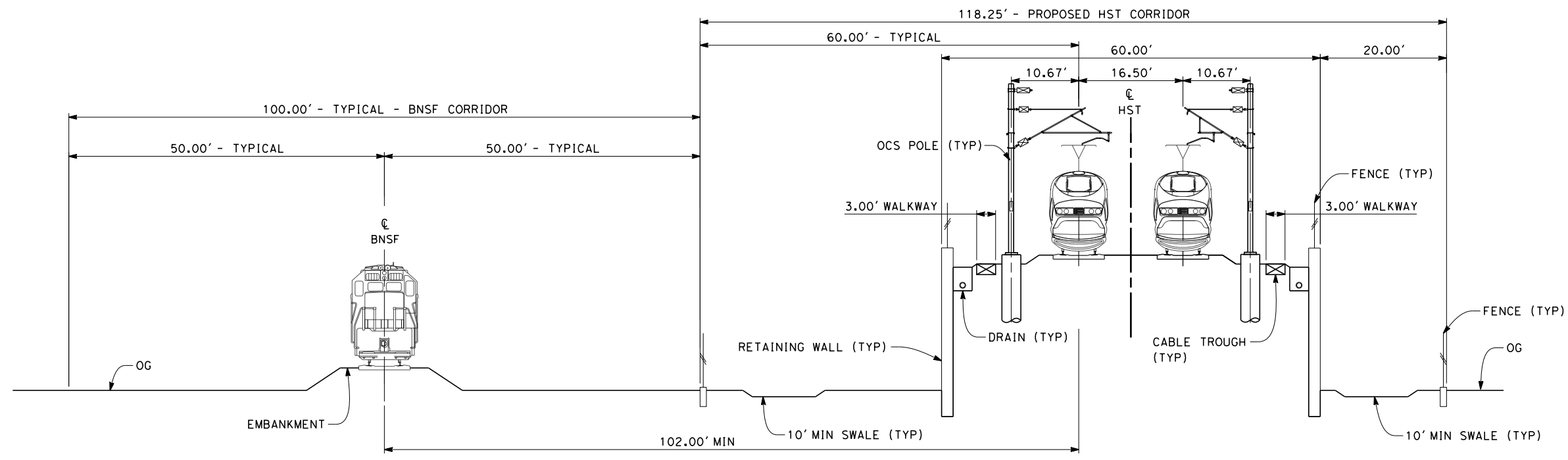
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 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L4
 TYPICAL SECTIONS

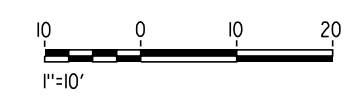
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3601
 SCALE
AS SHOWN
 SHEET NO.
10 OF 16

- 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 THE CURVE DATA TABLES.



SECTION 3

TWIN TRACKS ADJACENT TO BNSF - RETAINED EMBANKMENT
 STA 5213+70 THROUGH STA 5233+45
 STA 5235+85 THROUGH STA 5256+60



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J. BORGHESI
 CHECKED BY
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R. COFFIN
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12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

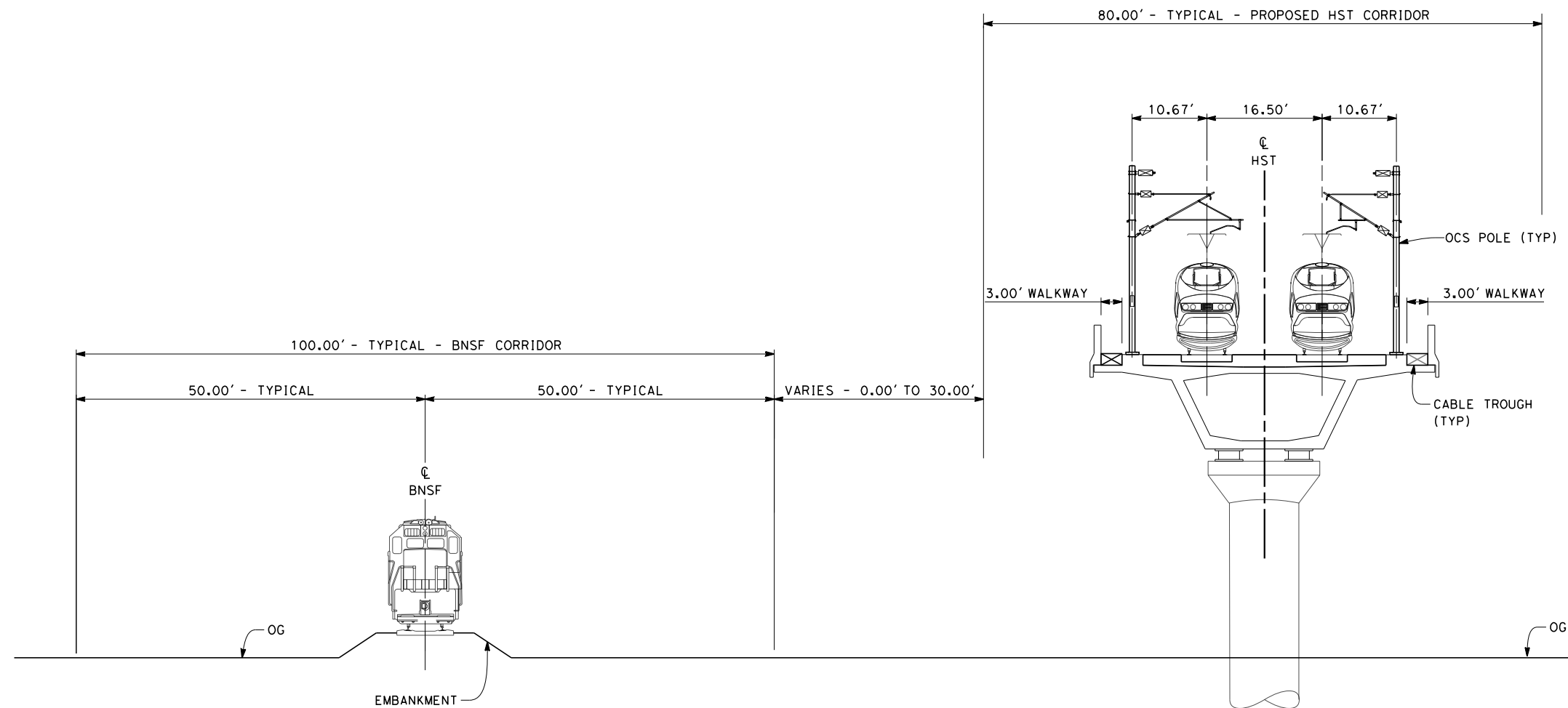
**NOT FOR
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L4
 TYPICAL SECTIONS

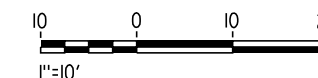
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3602
 SCALE
AS SHOWN
 SHEET NO.
11 OF 16

- 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 THE CURVE DATA TABLES.



SECTION 4

TWIN TRACK - AERIAL VIADUCT ADJACENT TO BNSF
 STA 5233+45 THROUGH STA 5235+85
 STA 5256+60 THROUGH STA 5292+60



12/11/2013 3:26:02 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0123054\FB-CB-3603-L4.dgn paul.tonkin

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DESIGNED BY
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 DRAWN BY
J. BORGHESI
 CHECKED BY
G. MEJIA
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

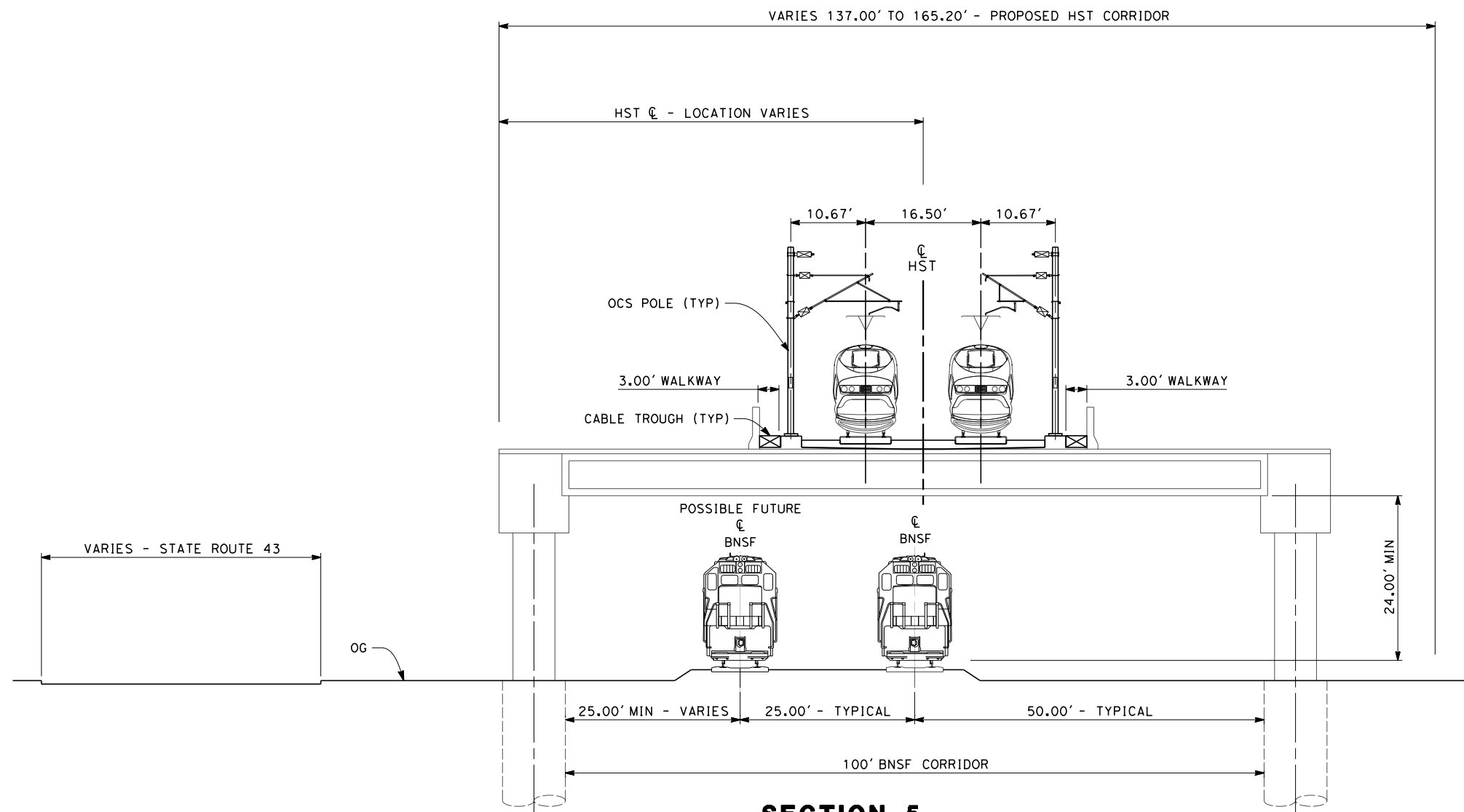


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 POSO CREEK SUBSECTION
 ALIGNMENT L4
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3603
 SCALE
AS SHOWN
 SHEET NO.
12 OF 16

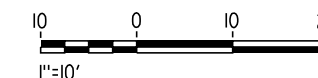
NOTES:

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 THE CURVE DATA TABLES.
4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST COLUMN IS NOT MET, STA 5292+60 TO 5320+30



SECTION 5

TWIN TRACK - ELEVATED SLAB OVER BNSF ADJACENT TO HIGHWAY
STA 5292+60 THROUGH STA 5308+85



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DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

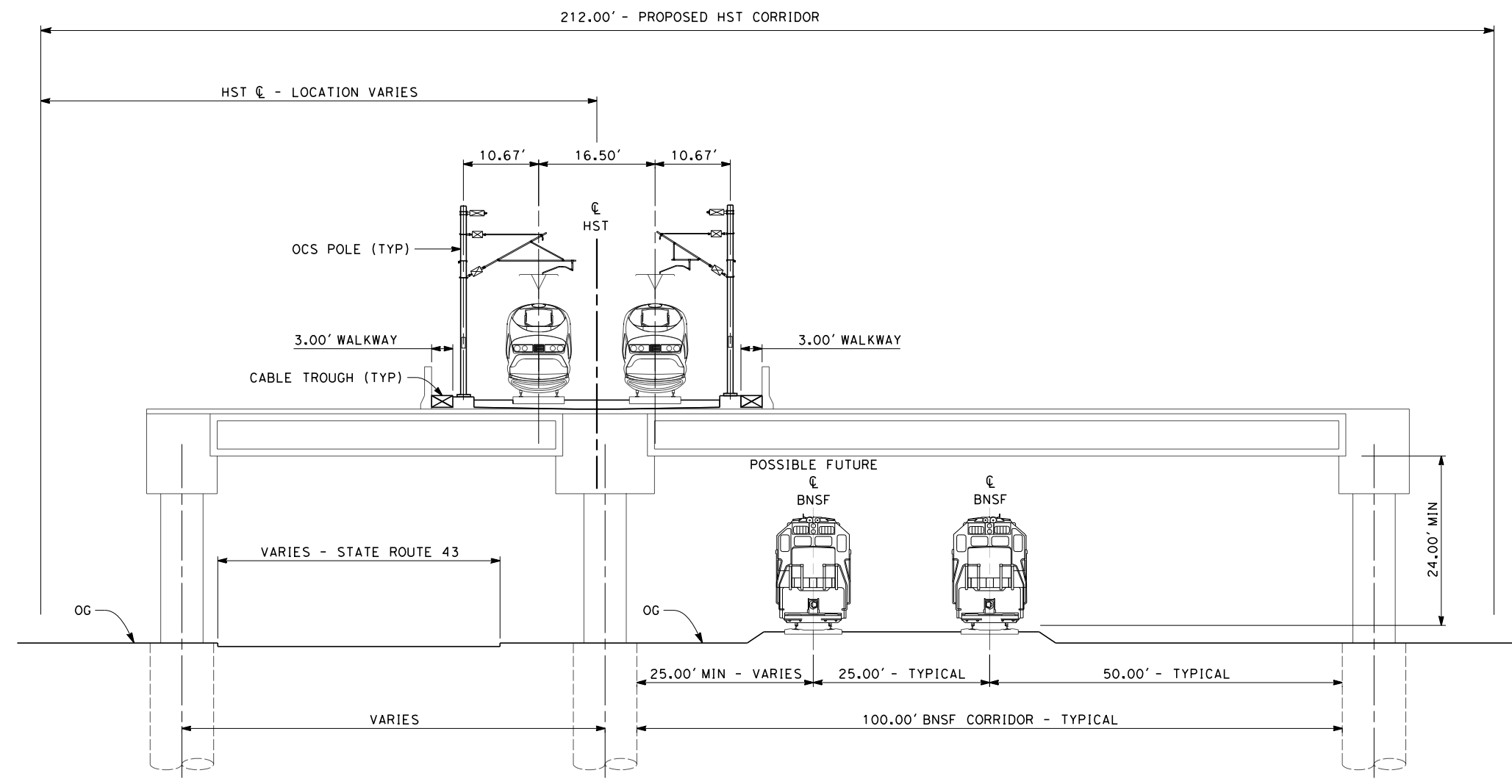
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L4
TYPICAL SECTIONS

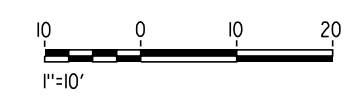
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3604
SCALE
AS SHOWN
SHEET NO.
13 OF 16

- 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 THE CURVE DATA TABLES.
 4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST COLUMN IS NOT MET, STA 5292+60 TO 5320+30



SECTION 6

TWIN TRACK - ELEVATED SLAB OVER HIGHWAY AND BNSF
STA 5308+85 THROUGH STA 5312+15



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IN CHARGE
R. COFFIN
DATE
12/31/13

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DESIGN SUBMISSION**

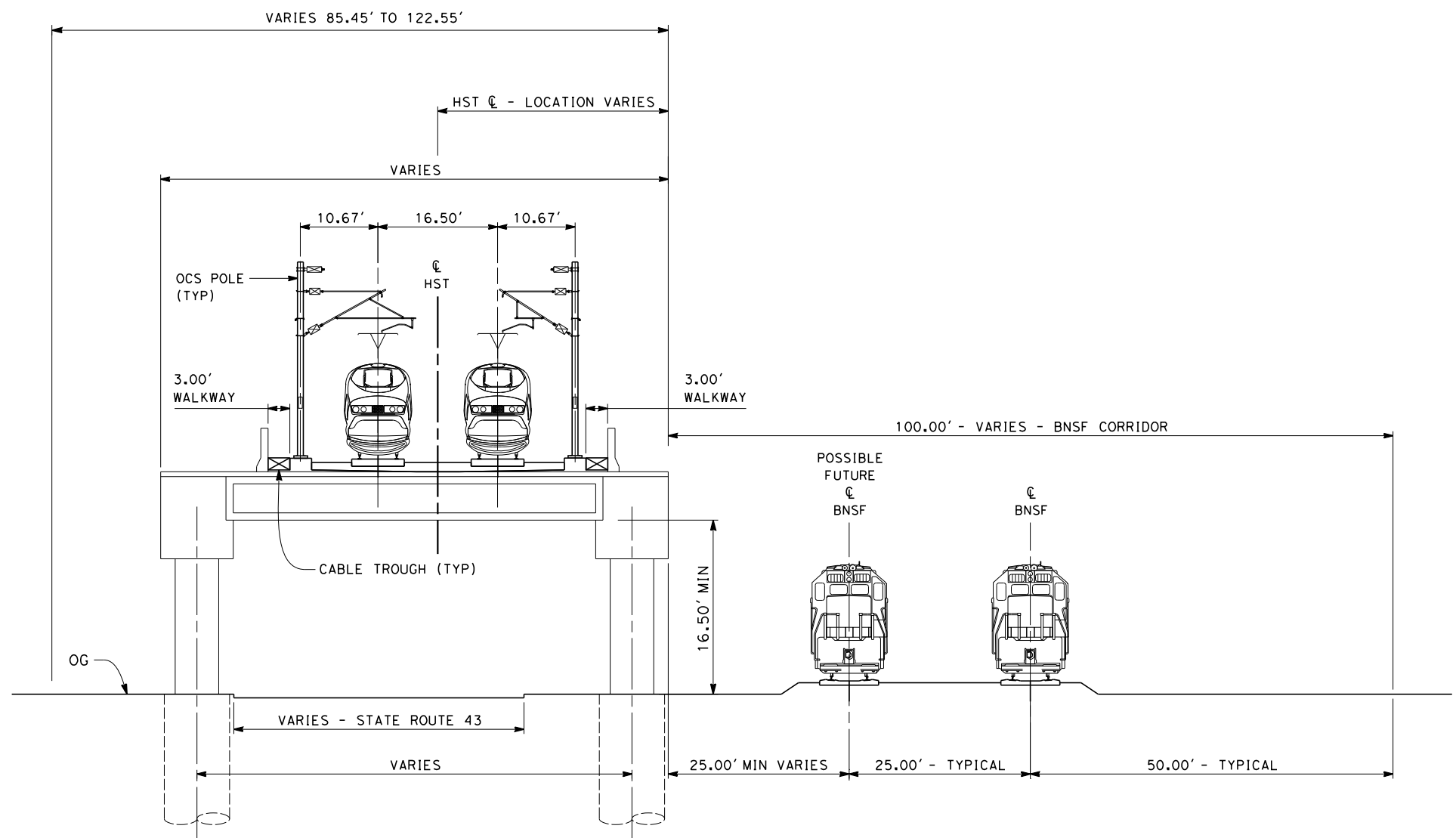
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L4
TYPICAL SECTIONS

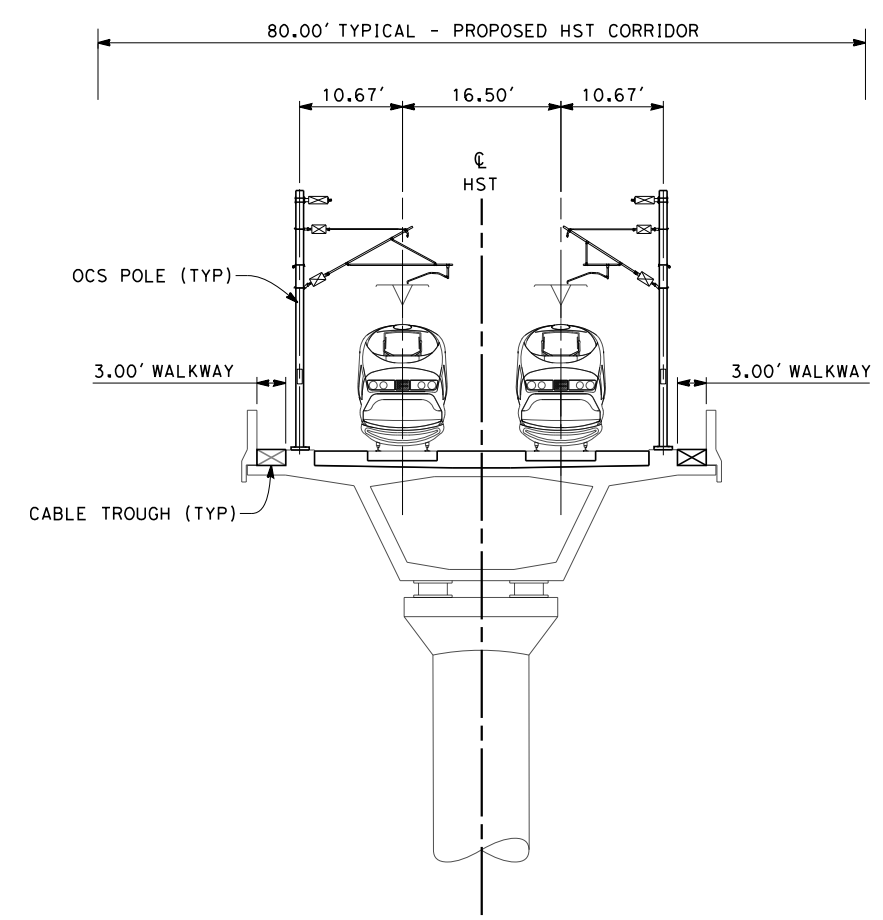
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3605
SCALE
AS SHOWN
SHEET NO.
14 OF 16

- 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 THE CURVE DATA TABLES.
 4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST COLUMN IS NOT MET, STA 5292+60 TO 5320+30



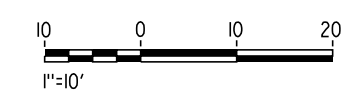
SECTION 7

TWIN TRACK - ELEVATED SLAB OVER HIGHWAY ADJACENT TO BNSF
STA 5312+15 THROUGH STA 5318+25



SECTION 8

TWIN TRACK - AERIAL VIADUCT
STA 5318+25 THROUGH STA 5323+10



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IN CHARGE
R. COFFIN
DATE
12/31/13

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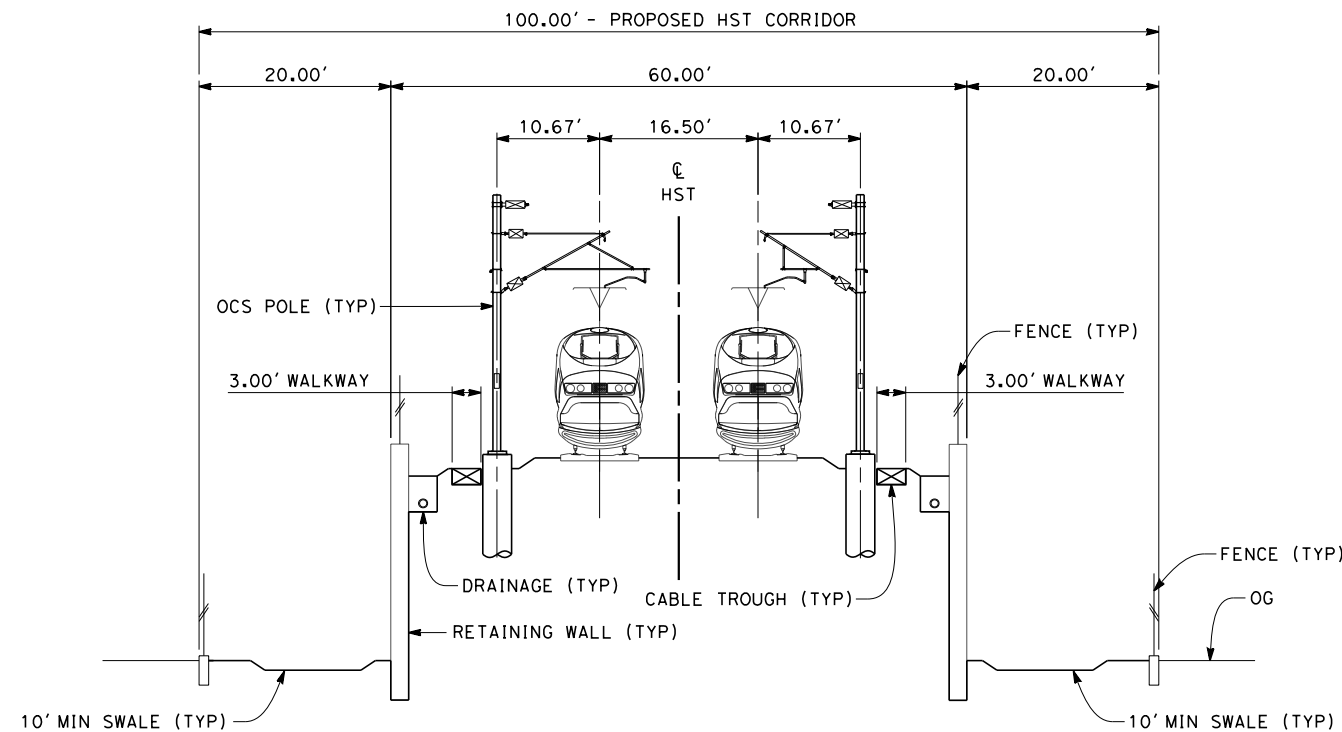
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

POSO CREEK SUBSECTION
ALIGNMENT L4
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3606
SCALE
AS SHOWN
SHEET NO.
15 OF 16

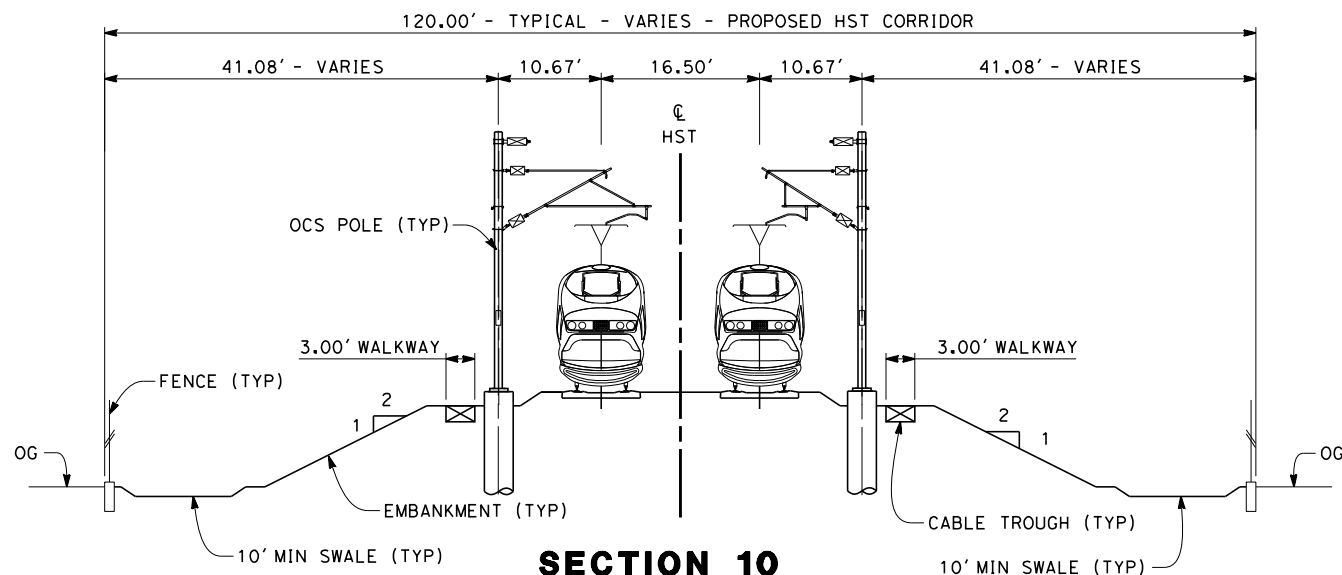
NOTES:

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 THE CURVE DATA TABLES.



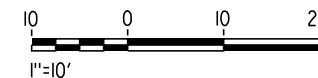
SECTION 9

TWIN TRACK - RETAINED EMBANKMENT WITH OPEN DRAINAGE
STA 5323+10 THROUGH STA 5332+00



SECTION 10

TWIN TRACK - EMBANKMENT WITH OPEN DRAINAGE
STA 5332+00 THROUGH STA 5599+86



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DESIGNED BY
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IN CHARGE
R. COFFIN
DATE
12/31/13

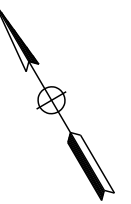
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DESIGN SUBMISSION**

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CONSTRUCTION**



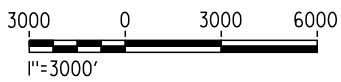
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
POSO CREEK SUBSECTION
ALIGNMENT L4
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3607
SCALE
AS SHOWN
SHEET NO.
16 OF 16



LEGEND

- EXISTING FREIGHT RAILROAD
- PROPOSED CHST



eron_sudhausen 12/10/2013 9:29:29 AM c:\pwworking\hmm\external\eron_sudhausen-arup.com\dms69051\FB-CB-1448-WS1.dgn

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G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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DESIGN SUBMISSION**

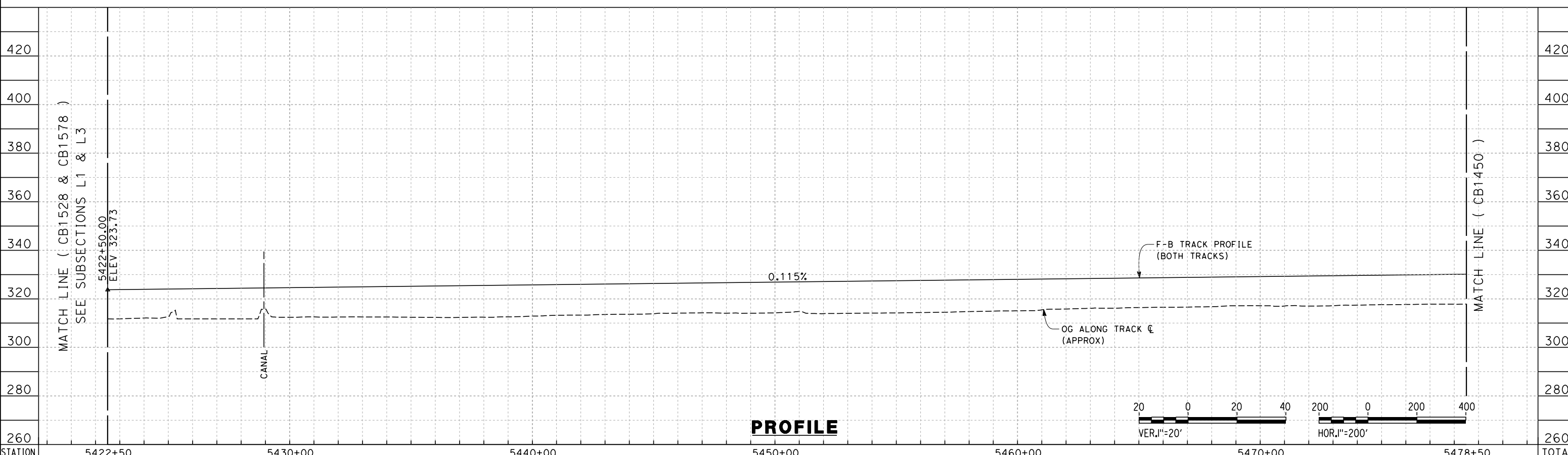
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 5422+50 TO 6511+99
 KEYPLAN

CONTRACT NO.
HSR-06-0003
 DRAWING NO.
CB1448
 SCALE
AS SHOWN
 SHEET NO.
1 OF 35

stephen.litsas 12/12/2013 2:24:29 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms69051\FB-CB-1449-WS1.dgn



STATION	5422+50	5430+00	5440+00	5450+00	5460+00	5470+00	5478+50	TOTAL
CY	Exc							
	Emb							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

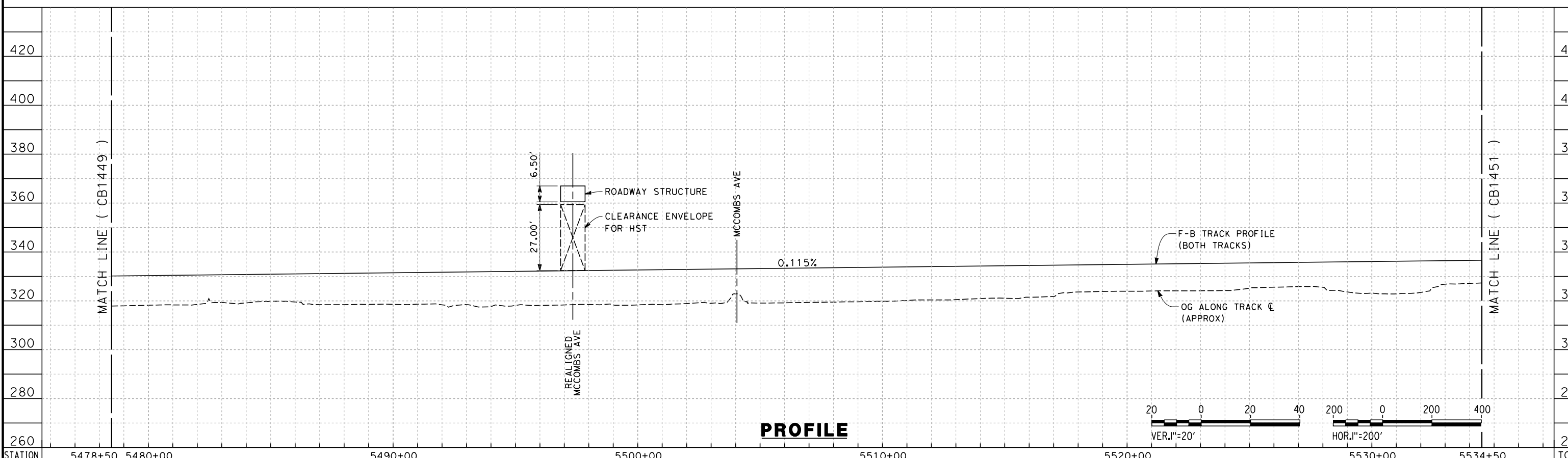
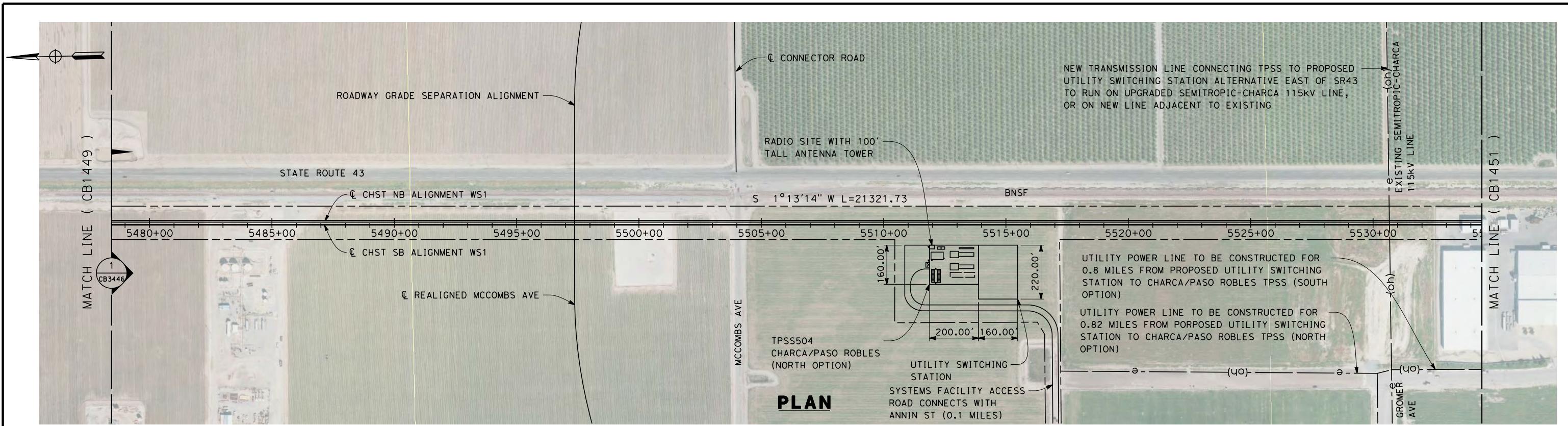


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5422+50 TO 5478+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1449
SCALE
AS SHOWN
SHEET NO.
2 OF 35

stephen.litsas 12/12/2013 2:25:42 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms69051\FB-CB-1450-WS1.dgn



STATION	5478+50	5480+00	5490+00	5500+00	5510+00	5520+00	5530+00	5534+50	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS

DRAWN BY
J. BORGHESI

CHECKED BY
G. WALKER

IN CHARGE
R. COFFIN

DATE
12/31/13

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DESIGN SUBMISSION**

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CONSTRUCTION**



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

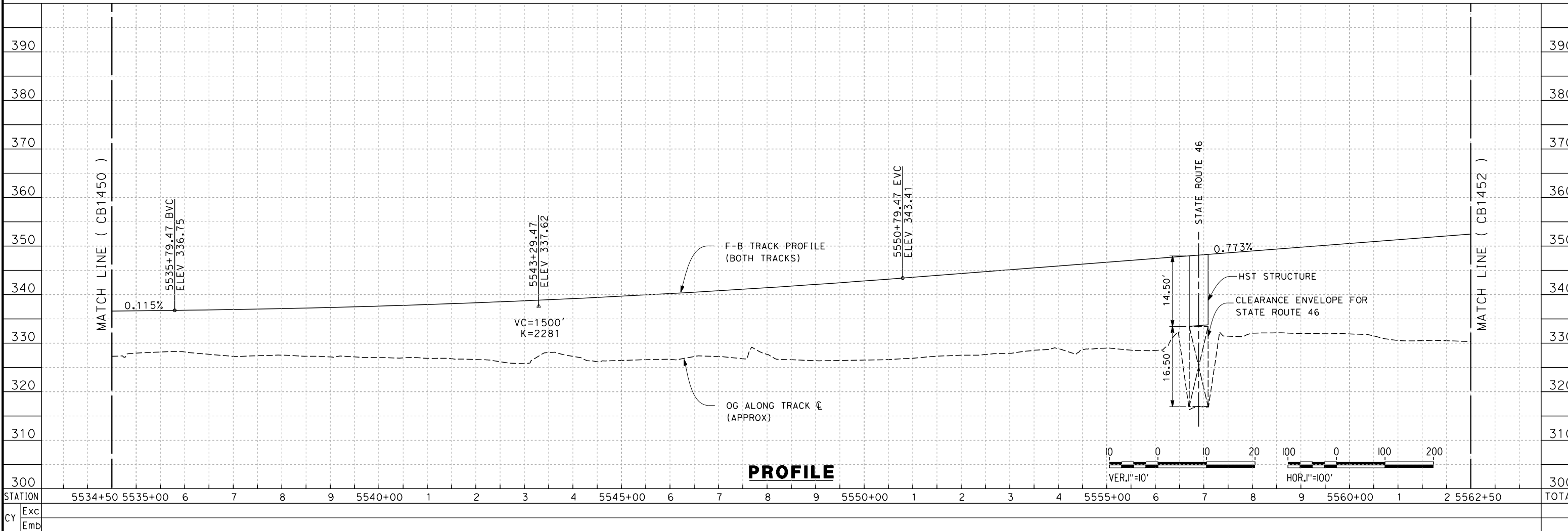
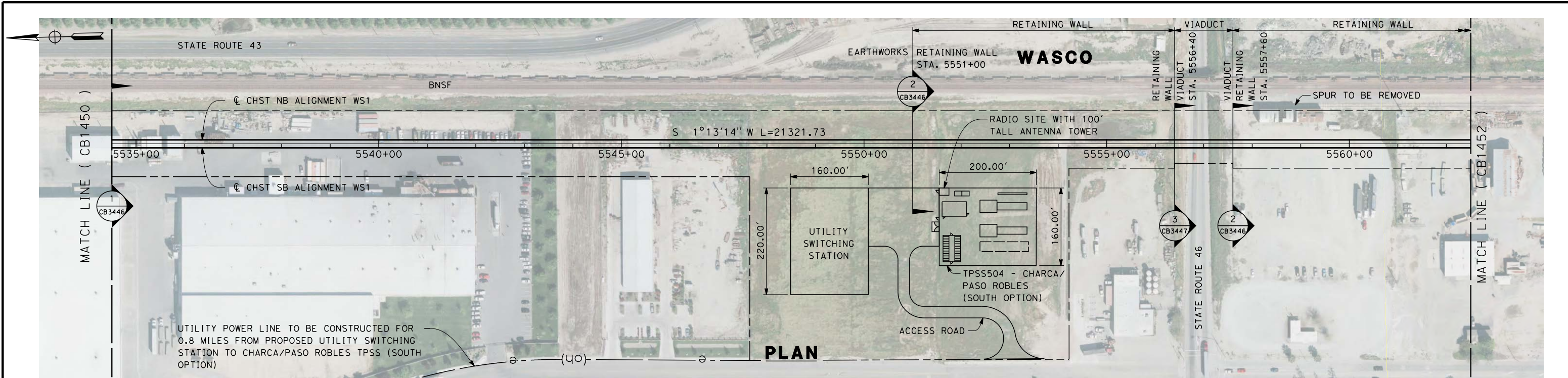
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5478+50 TO 5534+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB1450

SCALE
AS SHOWN

SHEET NO.
3 OF 35



REV	DATE	BY	CHK	APP	DESCRIPTION

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G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

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CONSTRUCTION**

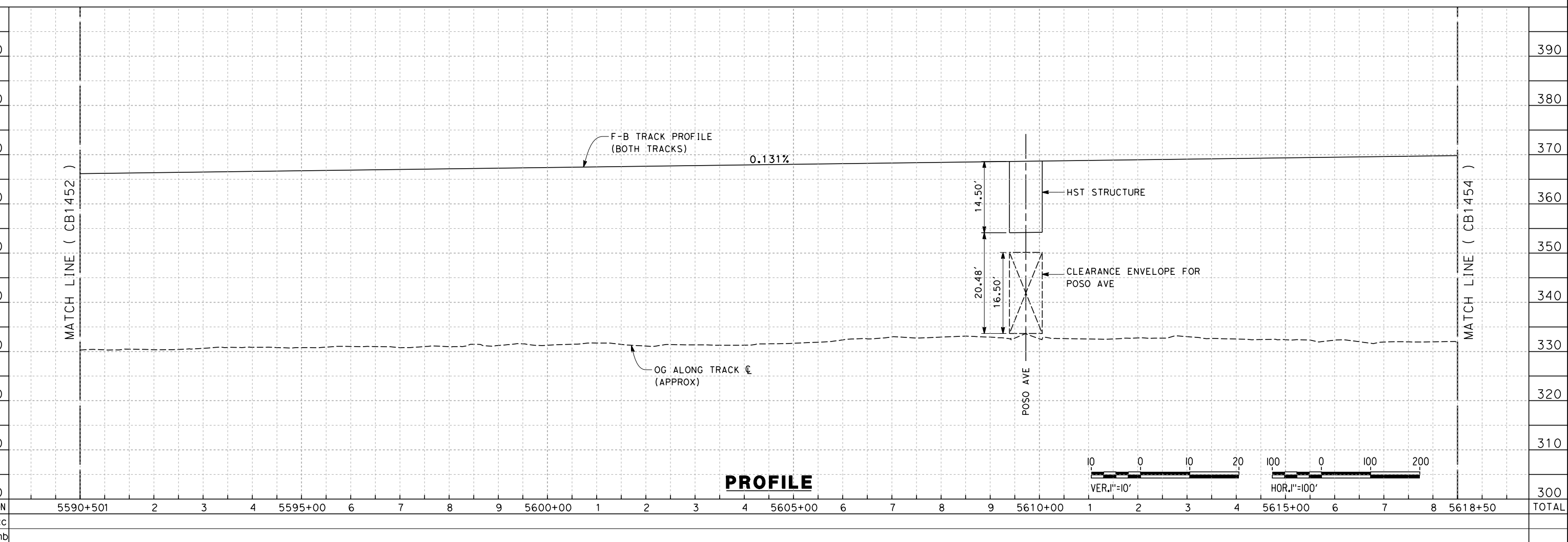
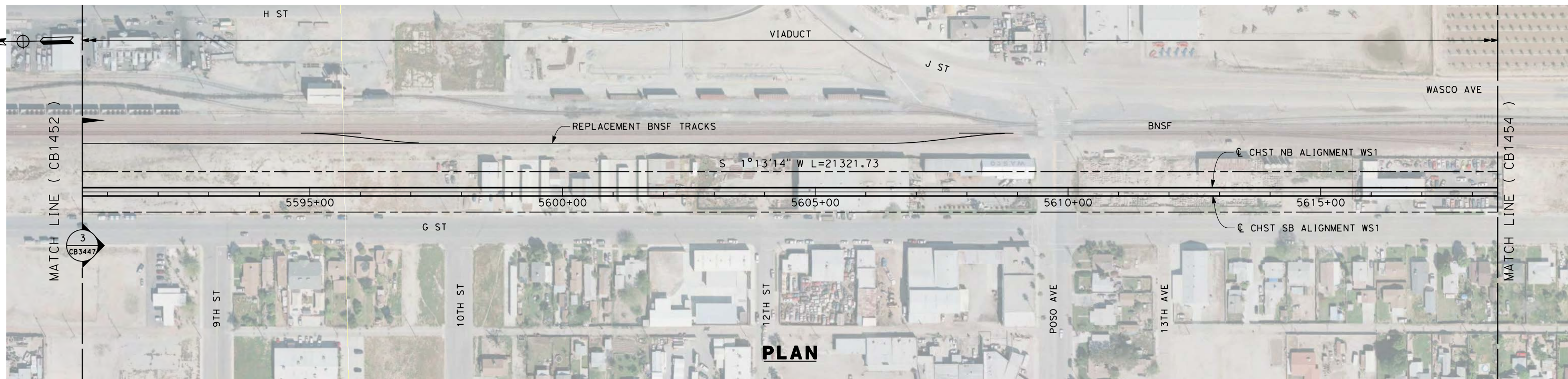


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5534+50 TO 5562+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1451
SCALE
AS SHOWN
SHEET NO.
4 OF 35

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stephen.litsas 12/12/2013 2:28:27 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms69051\FB-CB-1453-WS1.dgn



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J. BORGESI
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G. WALKER
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R. COFFIN
DATE
12/31/13

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DESIGN SUBMISSION**

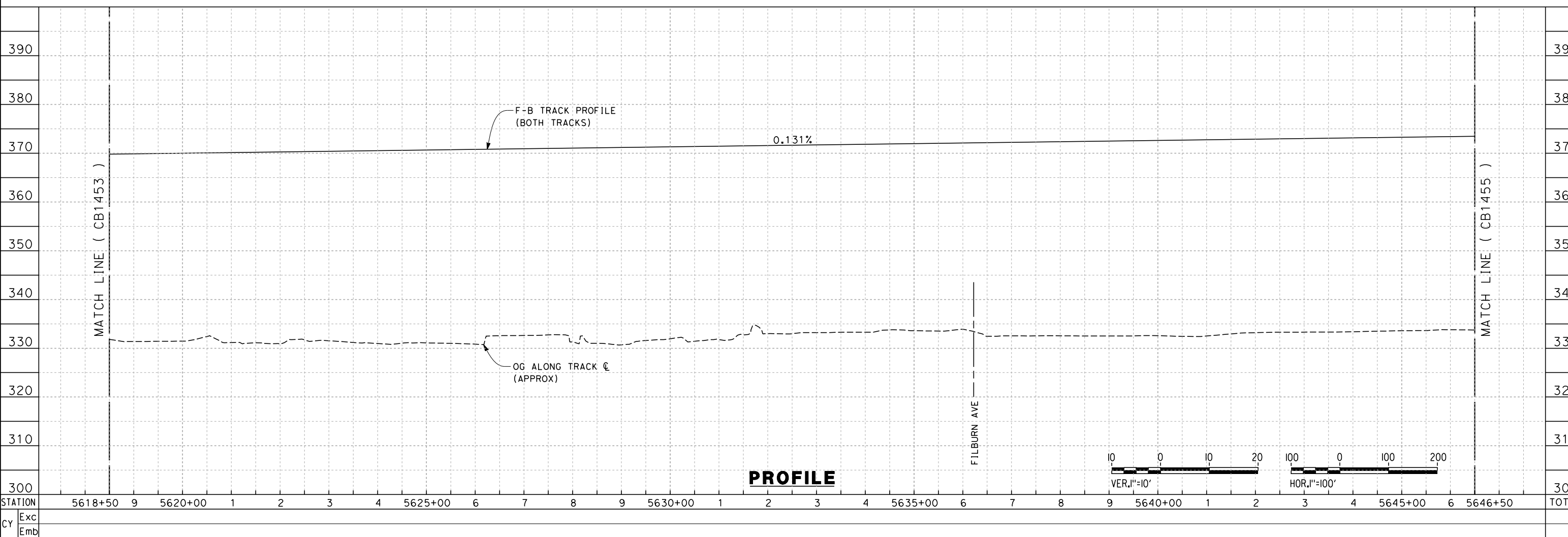
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5590+50 TO 5618+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1453
SCALE
AS SHOWN
SHEET NO.
6 OF 35

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REV	DATE	BY	CHK	APP	DESCRIPTION

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R. COFFIN
DATE
12/31/13

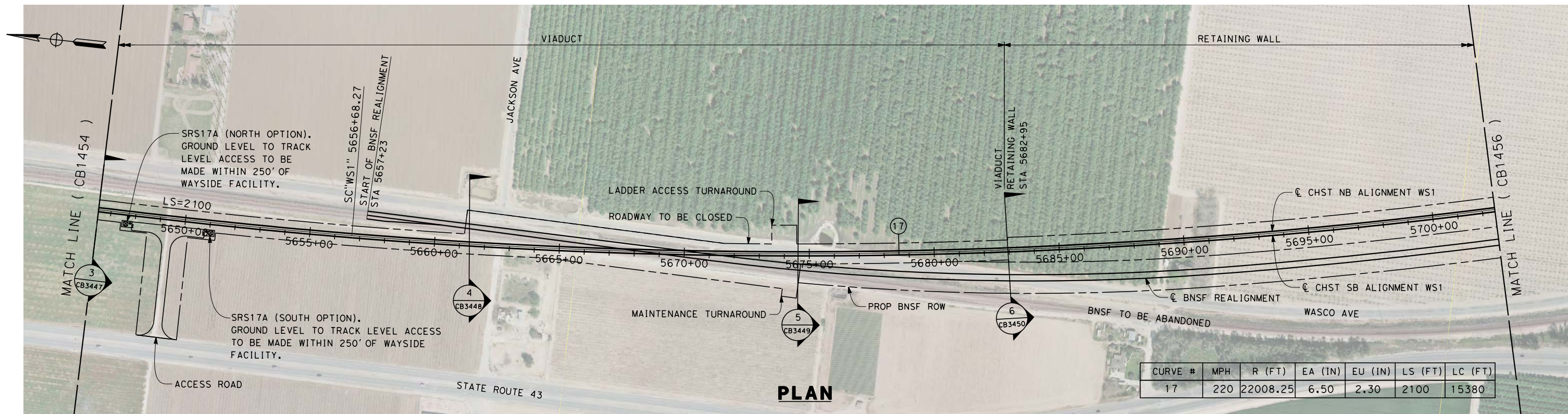
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**NOT FOR
CONSTRUCTION**



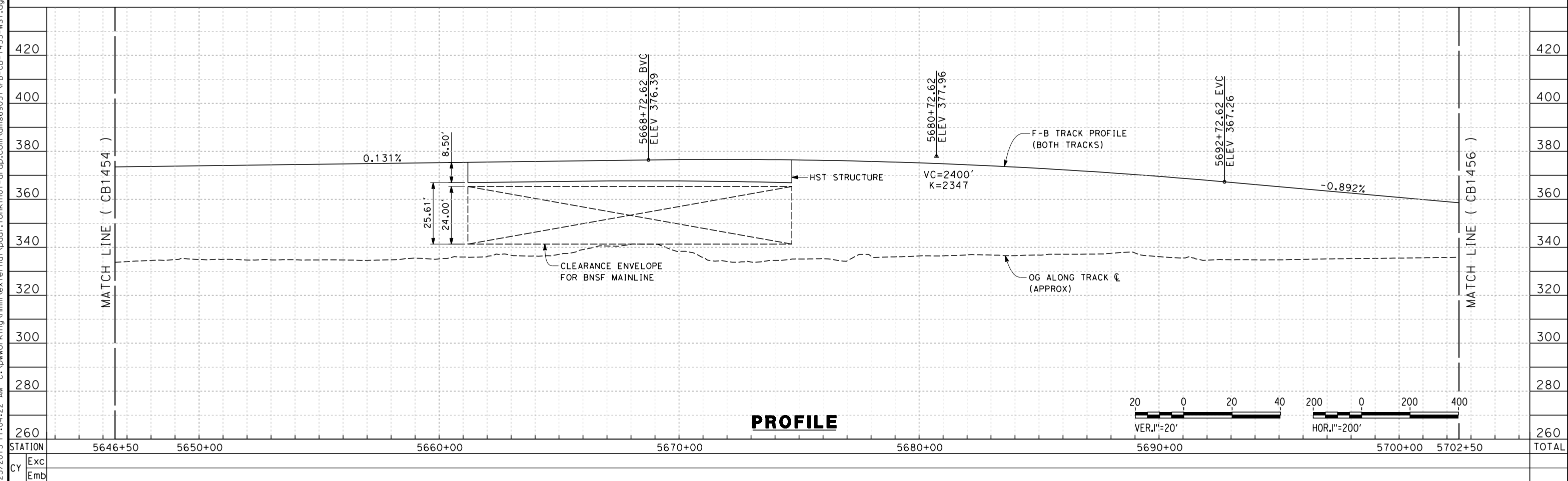
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5618+50 TO 5646+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1454
SCALE
AS SHOWN
SHEET NO.
7 OF 35

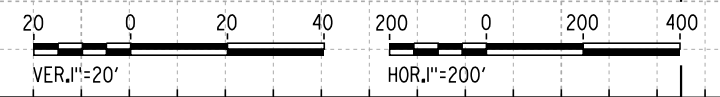


PLAN

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PROFILE



REV	DATE	BY	CHK	APP	DESCRIPTION

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IN CHARGE
R. COFFIN
DATE
12/31/13

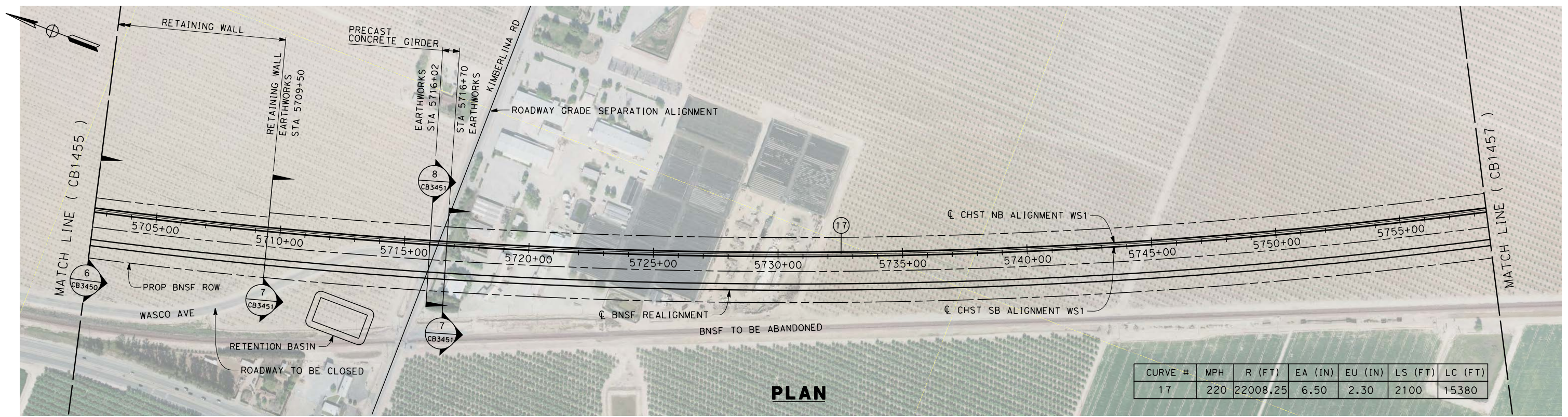
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DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5646+50 TO 5702+50
PLAN AND PROFILE

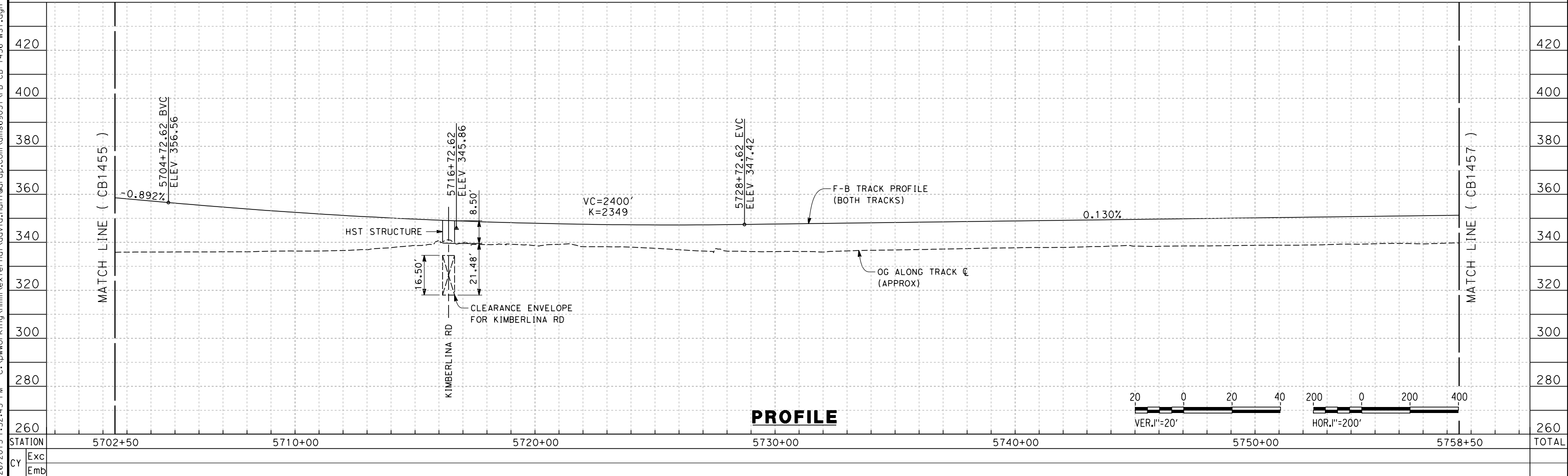
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HSR 06-0003
DRAWING NO.
CB1455
SCALE
AS SHOWN
SHEET NO.
8 OF 35



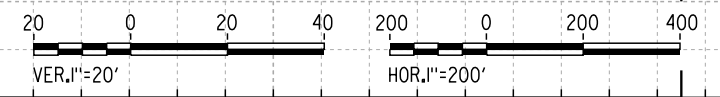
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PLAN

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PROFILE



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IN CHARGE
R. COFFIN
DATE
12/31/13

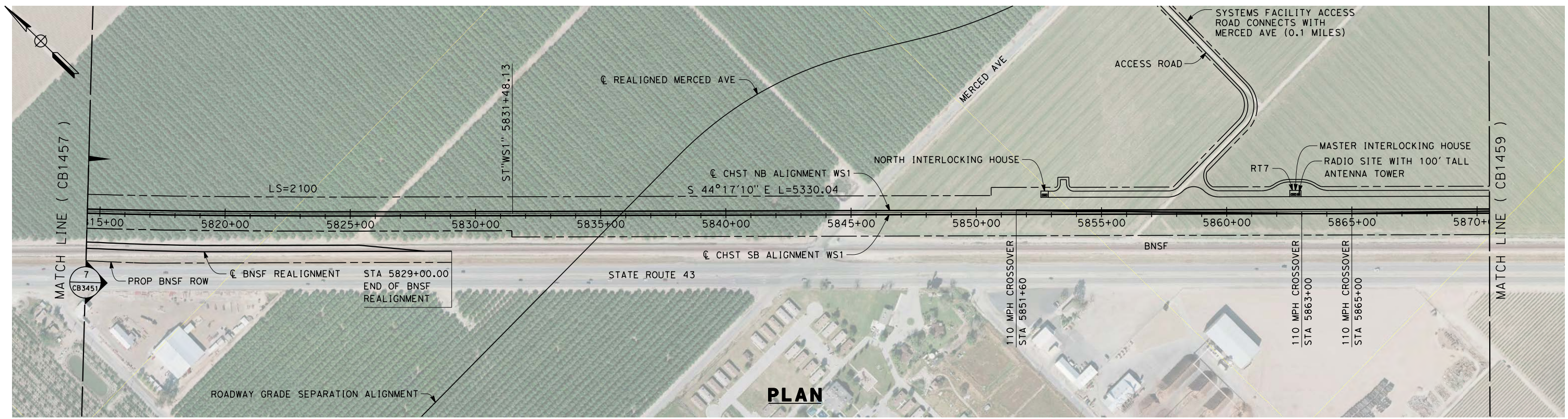
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DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



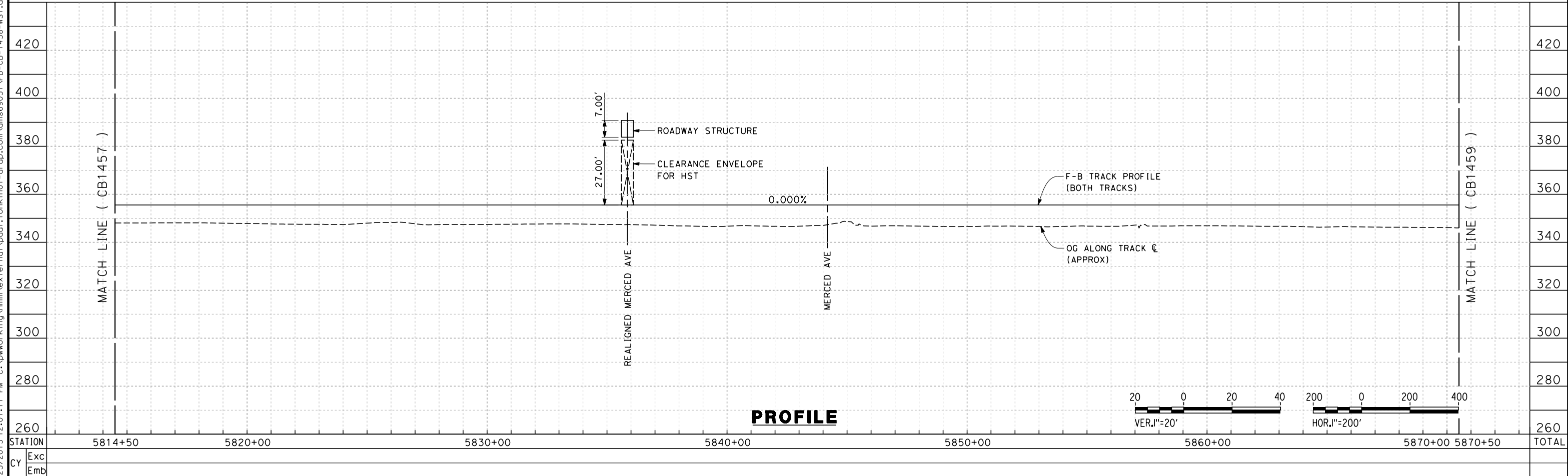
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5702+50 TO 5758+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1456
SCALE
AS SHOWN
SHEET NO.
9 OF 35



PLAN

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PROFILE

STATION	5814+50	5820+00	5830+00	5840+00	5850+00	5860+00	5870+00	5870+50	TOTAL
CY									
	Exc								
	Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

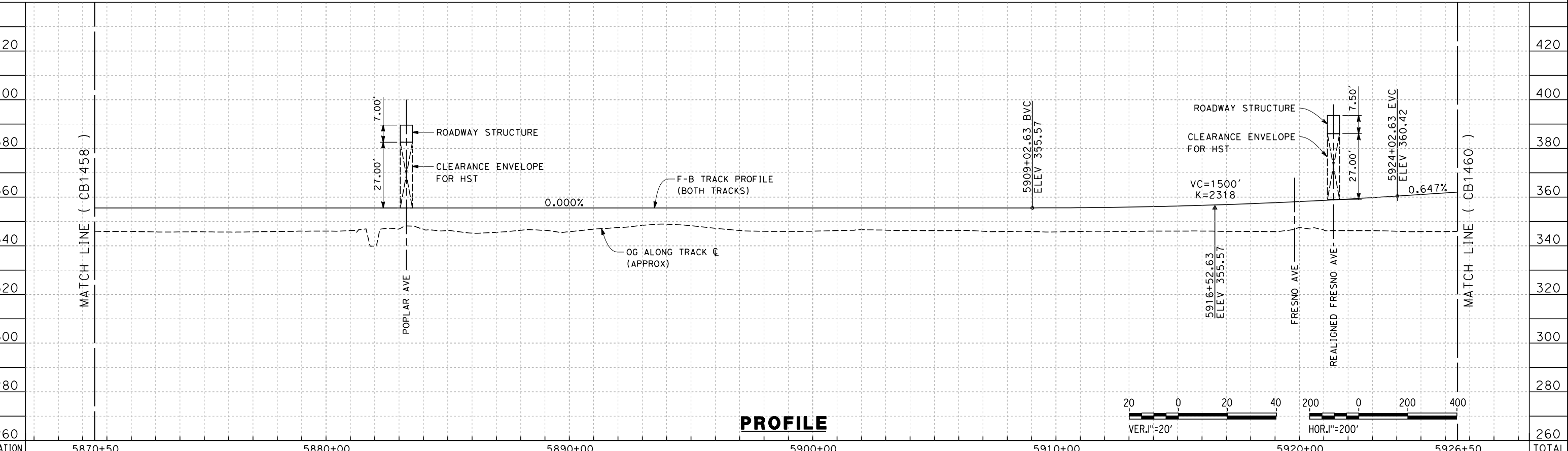
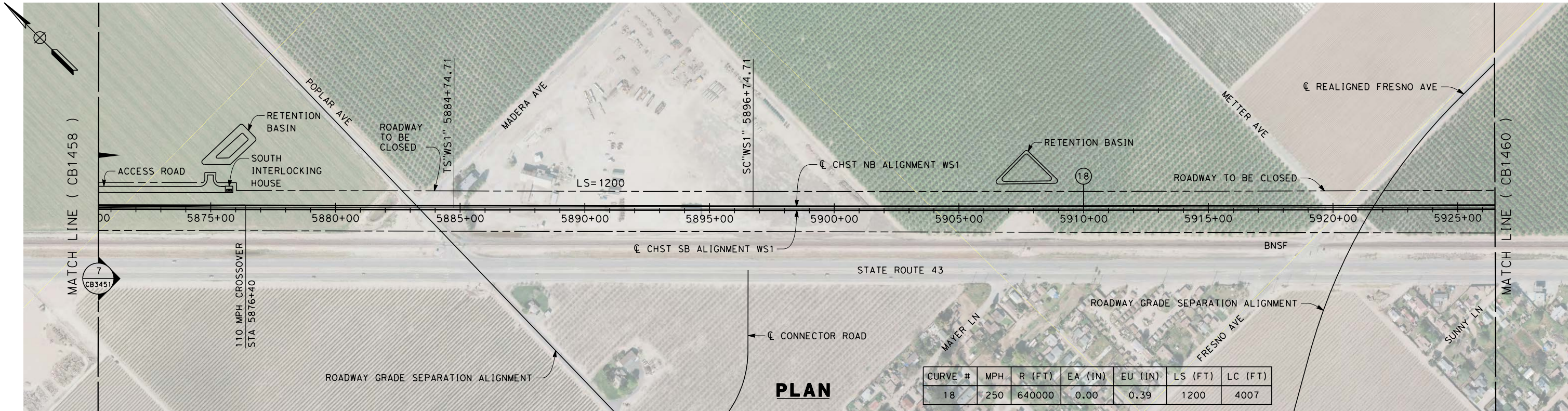
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5814+50 TO 5870+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1458
SCALE
AS SHOWN
SHEET NO.
11 OF 35



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STATION	5870+50	5880+00	5890+00	5900+00	5910+00	5920+00	5926+50	TOTAL
Exc								
Emb								

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

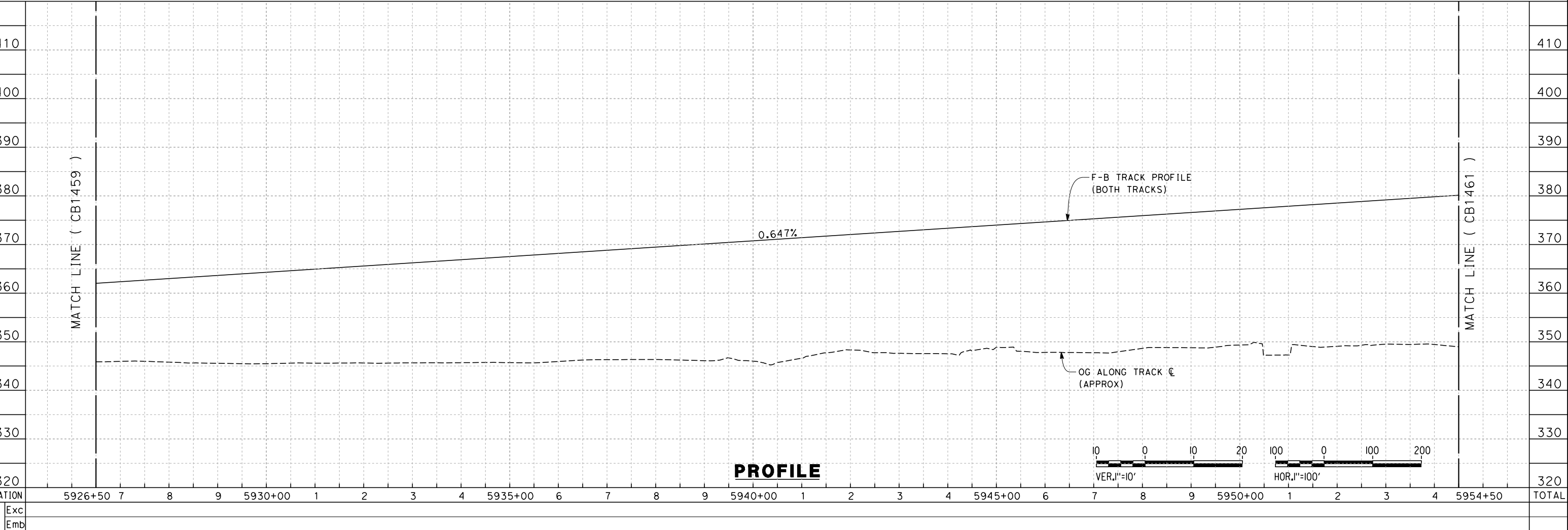
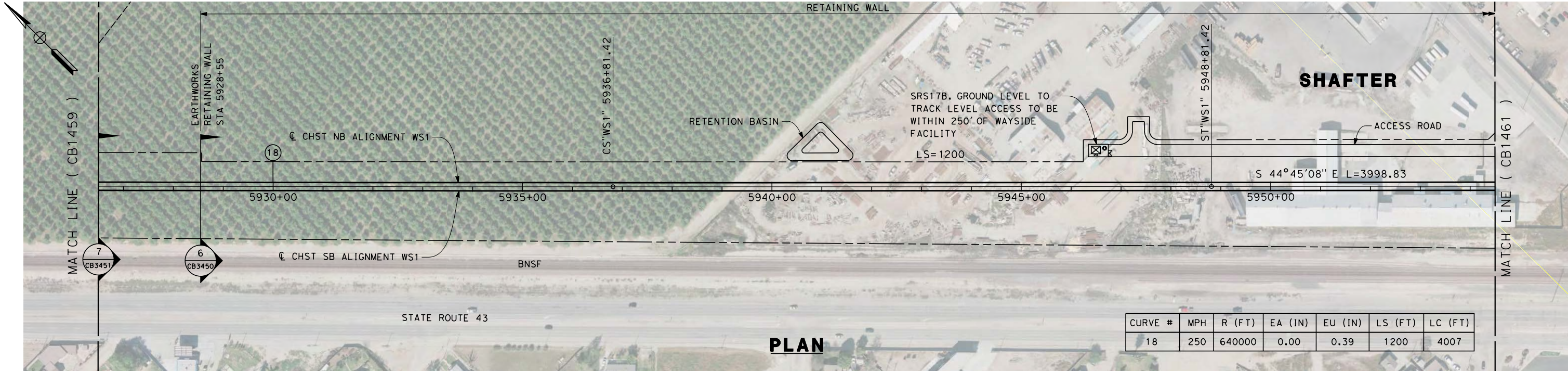
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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5870+50 TO 5926+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1459
SCALE
AS SHOWN
SHEET NO.
12 OF 35



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J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

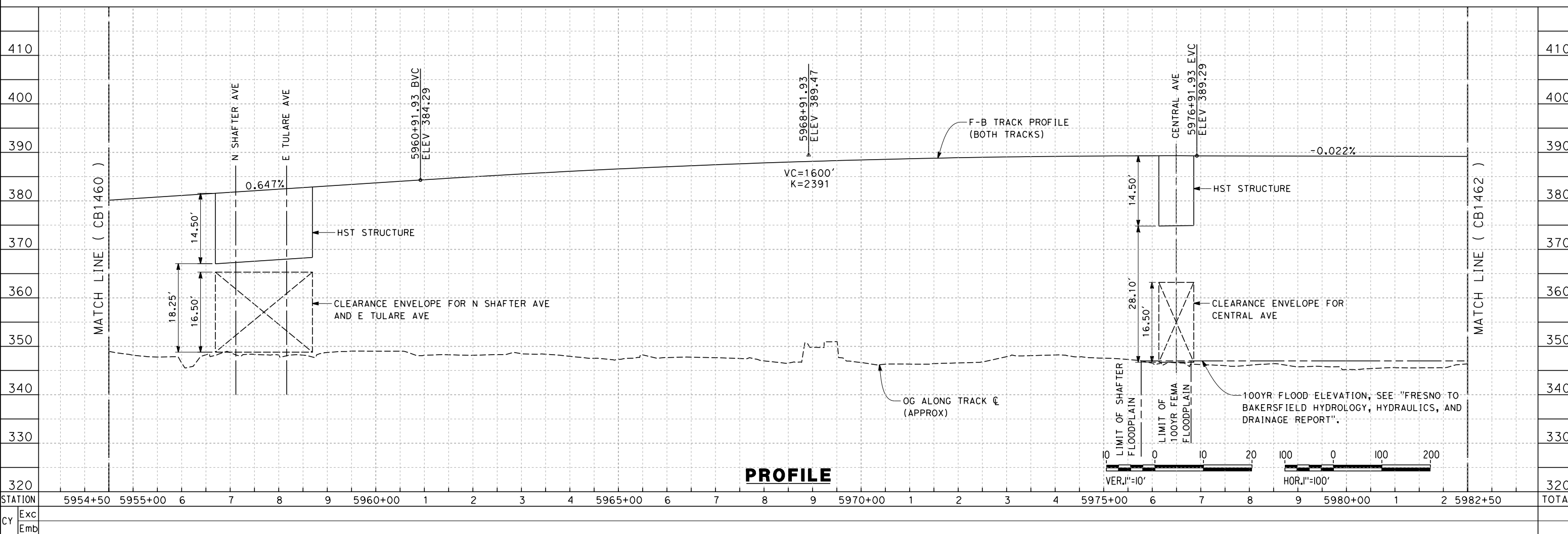
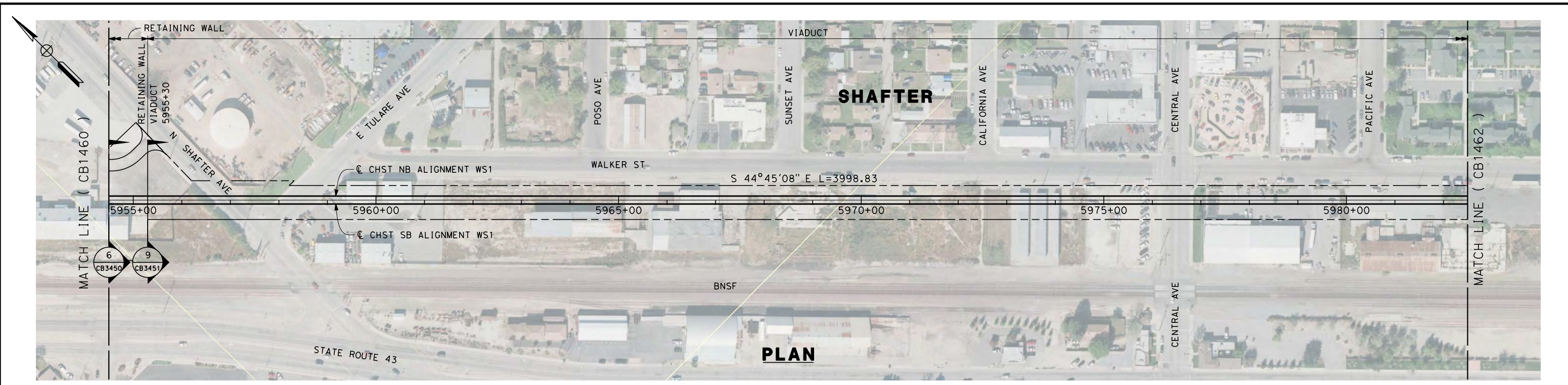
**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 5926+50 TP 5954+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1460
SCALE
AS SHOWN
SHEET NO.
13 OF 35



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

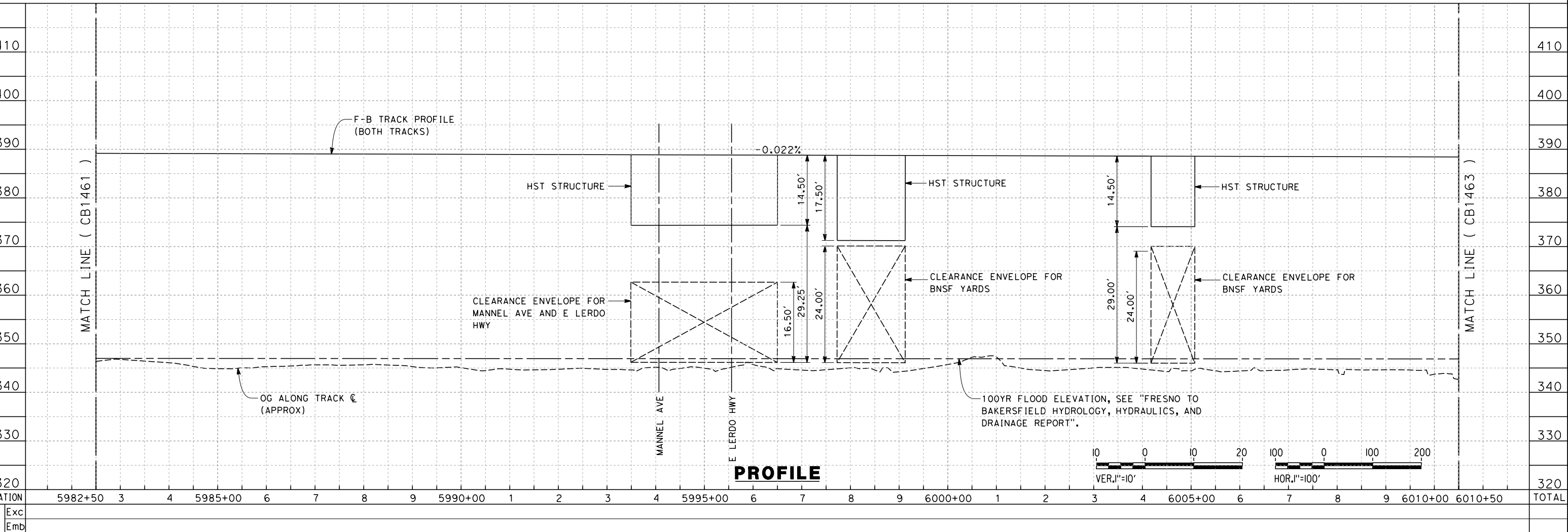
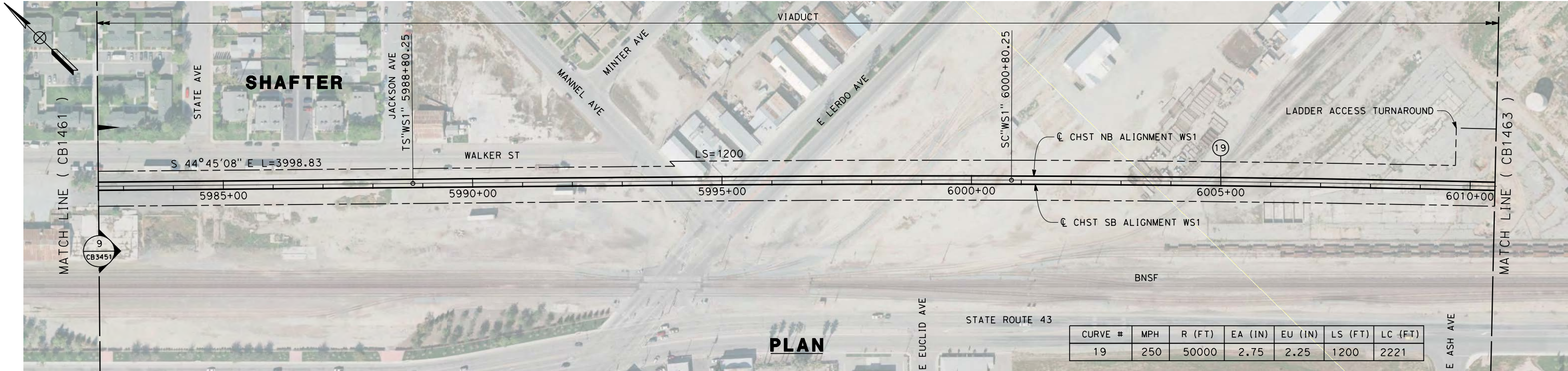
**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 5954+50 TP 5982+50
 PLAN AND PROFILE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB1461
 SCALE
 AS SHOWN
 SHEET NO.
 14 OF 35



stephen.litsas 12/12/2013 2:40:02 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms69051\FB-CB-1462-WS1.dgn

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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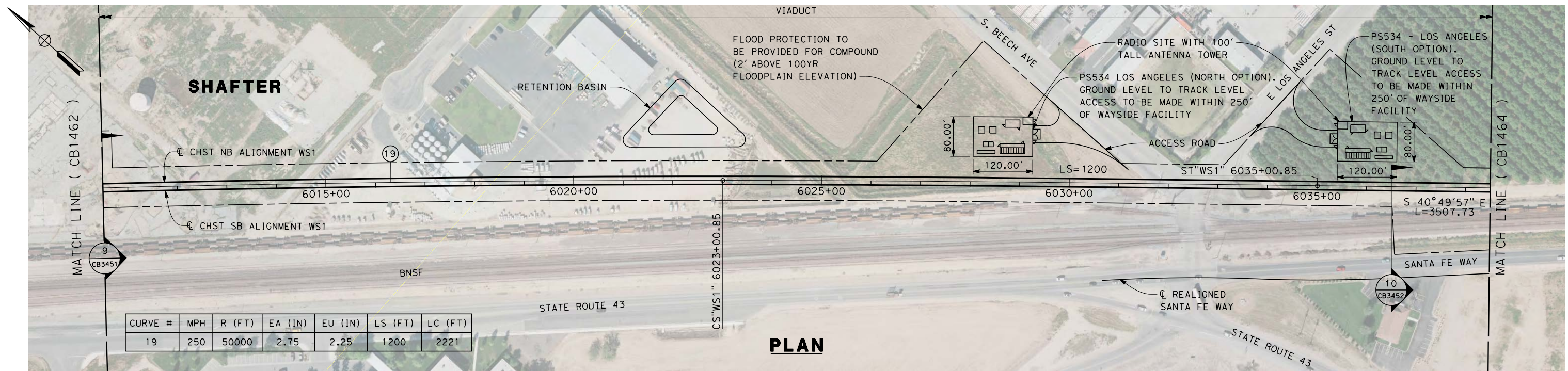
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 CONSTRUCTION**



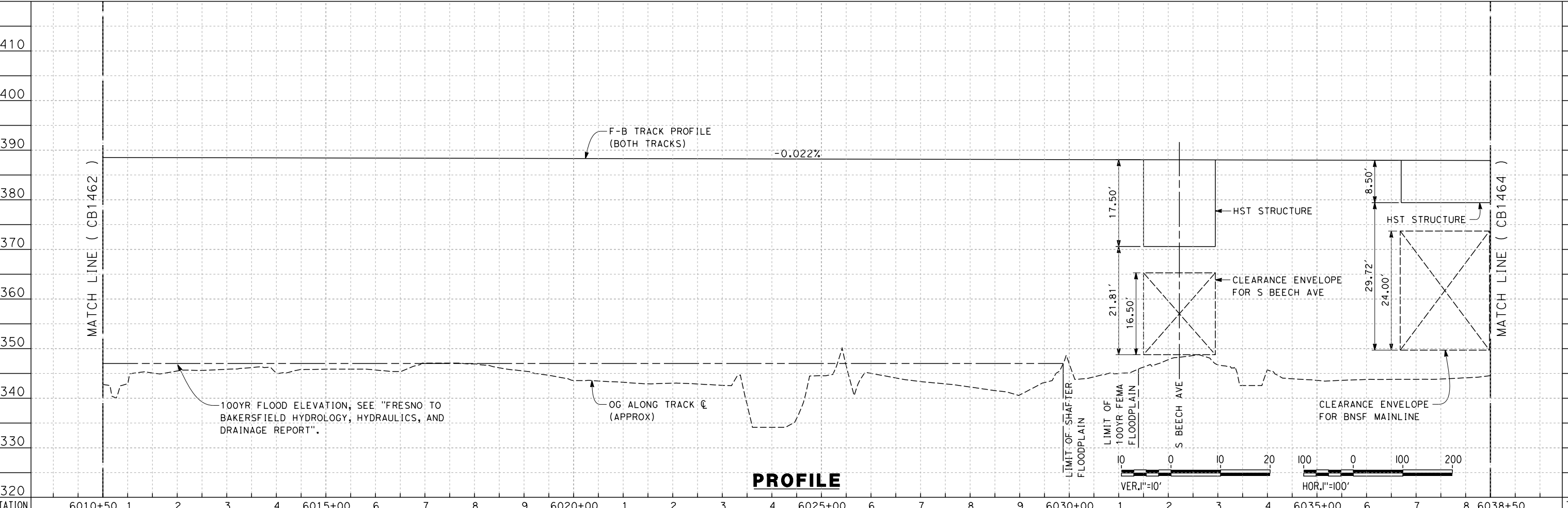
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 5982+50 TO 6010+50
 PLAN AND PROFILE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB1462
 SCALE
 AS SHOWN
 SHEET NO.
 15 OF 35

REV	DATE	BY	CHK	APP	DESCRIPTION



PLAN



PROFILE

Nadine.Hutton 12/12/2013 7:48:05 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\dms69051\FB-CB-1463-WS1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

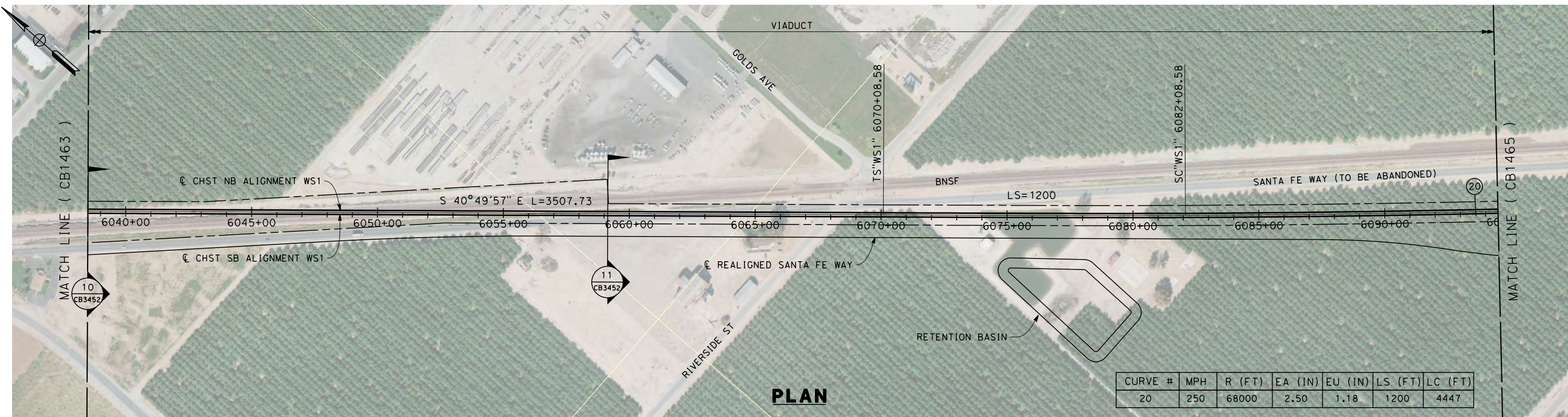
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DESIGN SUBMISSION**

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CONSTRUCTION**



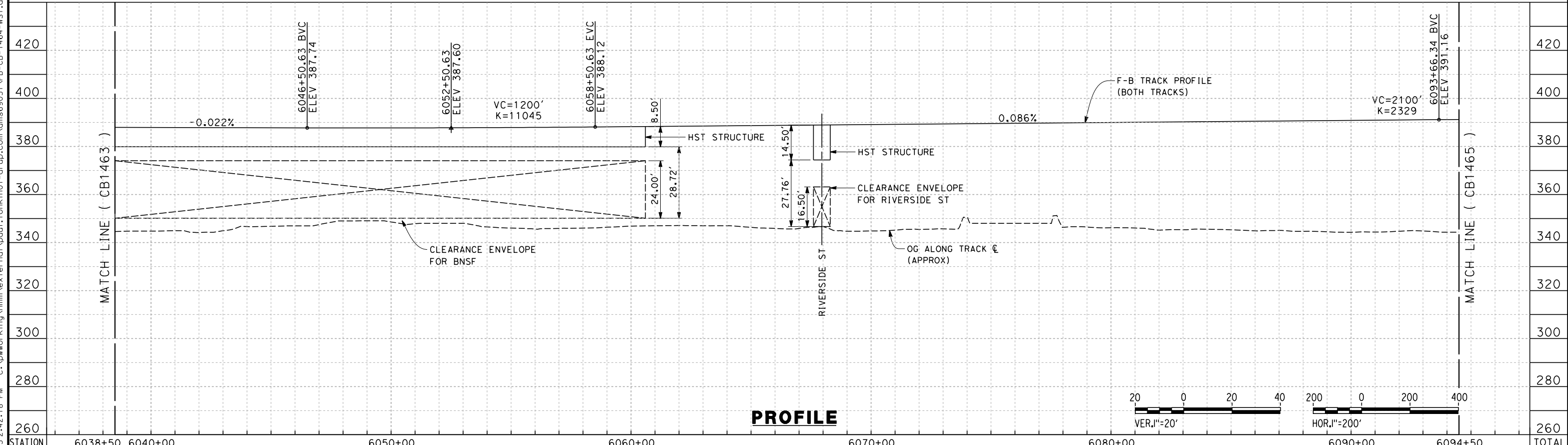
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6010+50 TO 6038+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1463
SCALE
AS SHOWN
SHEET NO.
16 OF 35



PLAN

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PROFILE

STATION	6038+50	6040+00	6050+00	6060+00	6070+00	6080+00	6090+00	6094+50	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

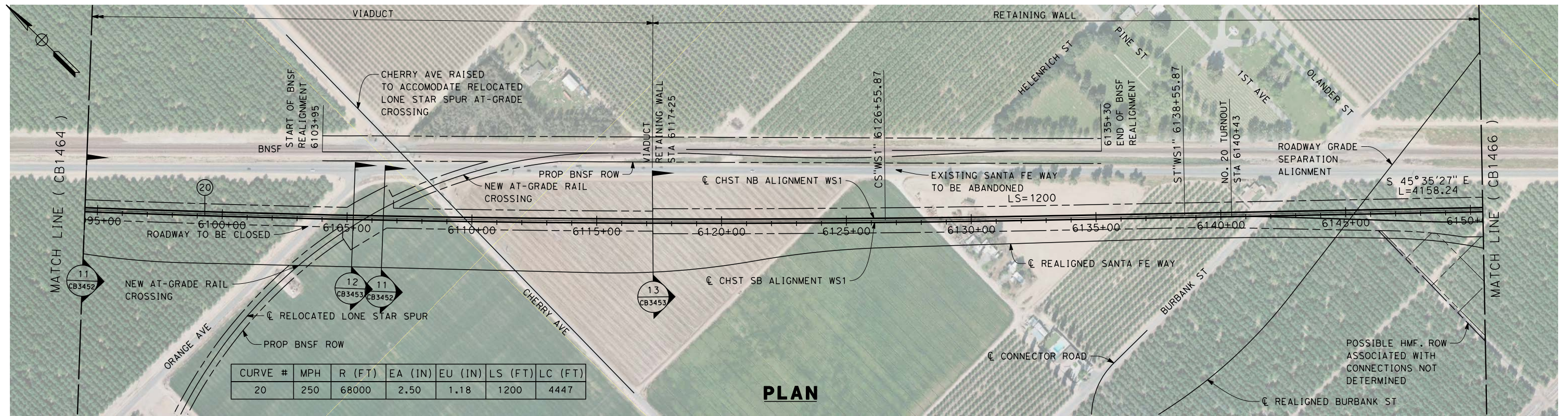
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**NOT FOR
CONSTRUCTION**

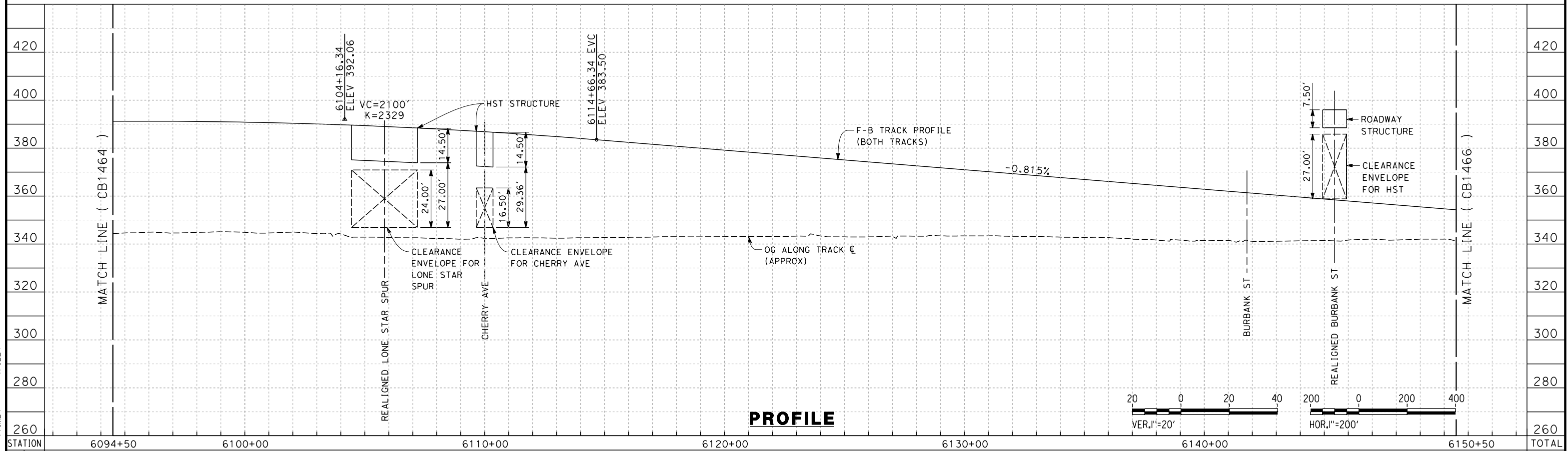


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6038+50 TO 6094+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1464
SCALE
AS SHOWN
SHEET NO.
17 OF 35



PLAN



PROFILE

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

STATION	6094+50	6100+00	6110+00	6120+00	6130+00	6140+00	6150+50	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

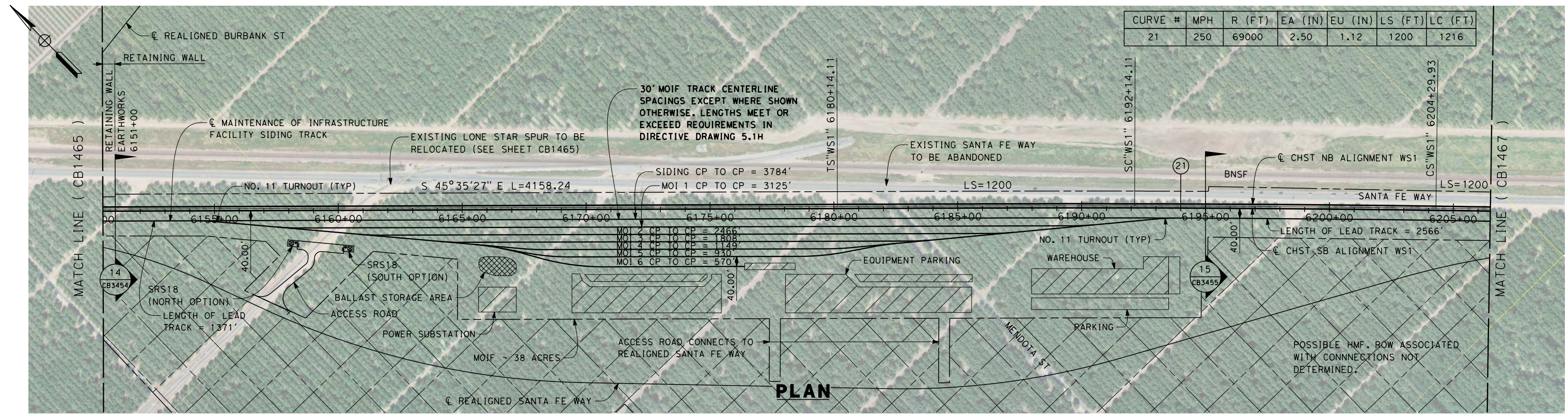
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**NOT FOR
 CONSTRUCTION**

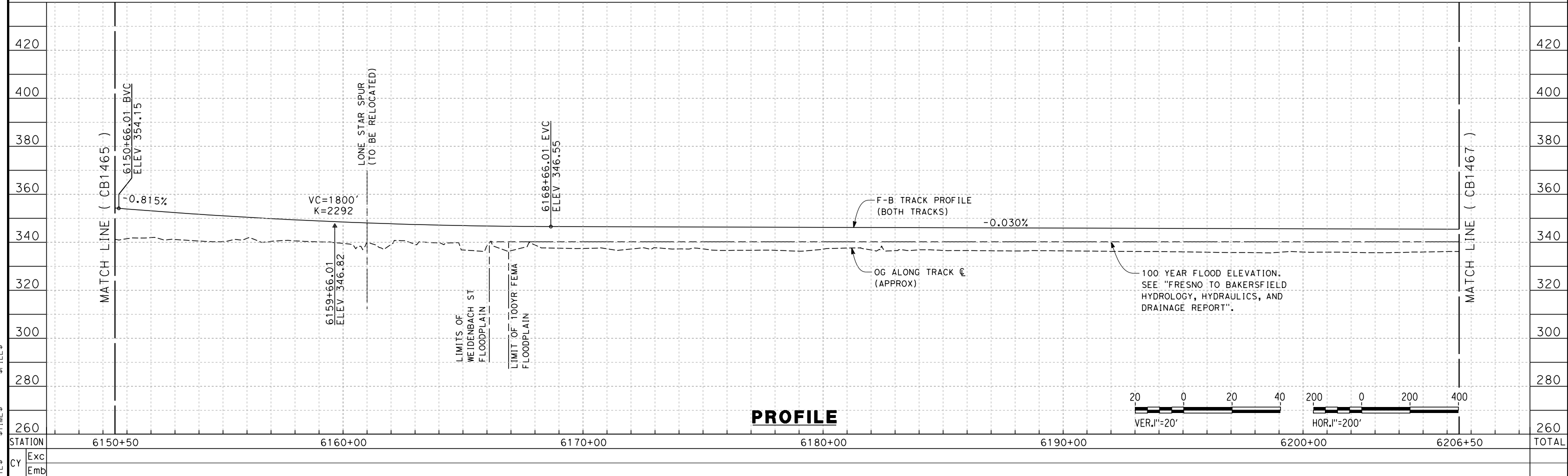


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 6094+50 TO 6150+50
 PLAN AND PROFILE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB1465
 SCALE
 AS SHOWN
 SHEET NO.
 18 OF 35



PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
DRAWN BY
J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

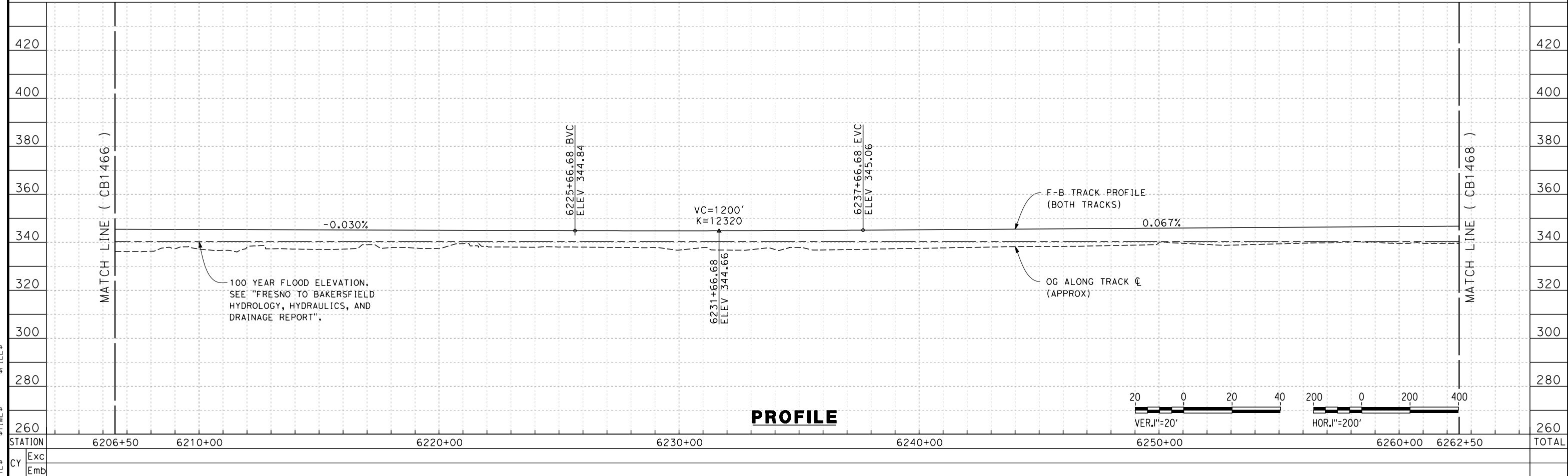
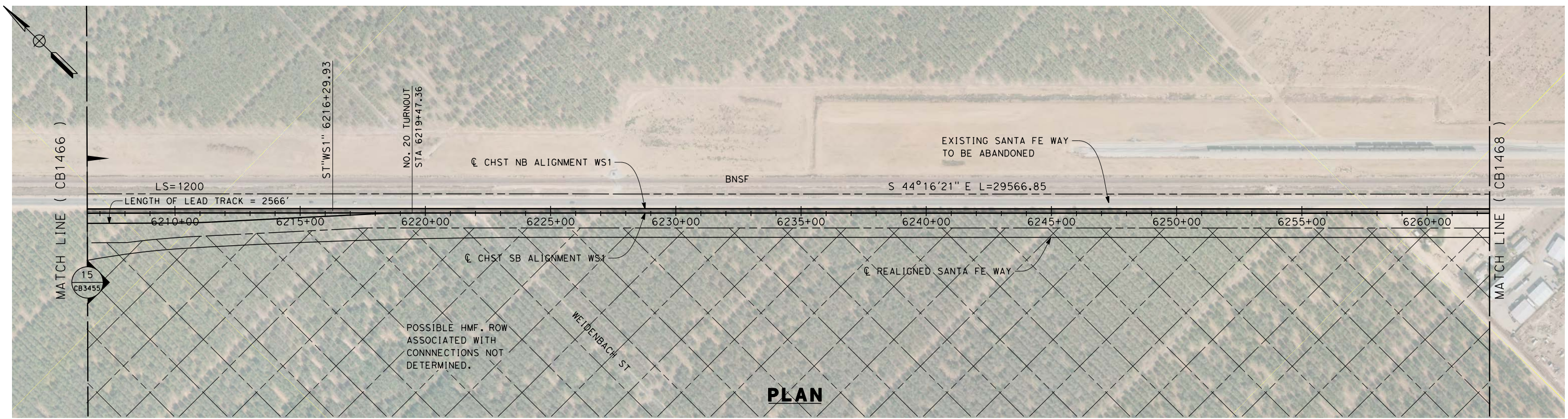
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DESIGN SUBMISSION**

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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6150+50 TO 6206+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1466
SCALE
AS SHOWN
SHEET NO.
19 OF 35



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
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J. BORGHESI
CHECKED BY
G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

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DESIGN SUBMISSION**

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CONSTRUCTION**

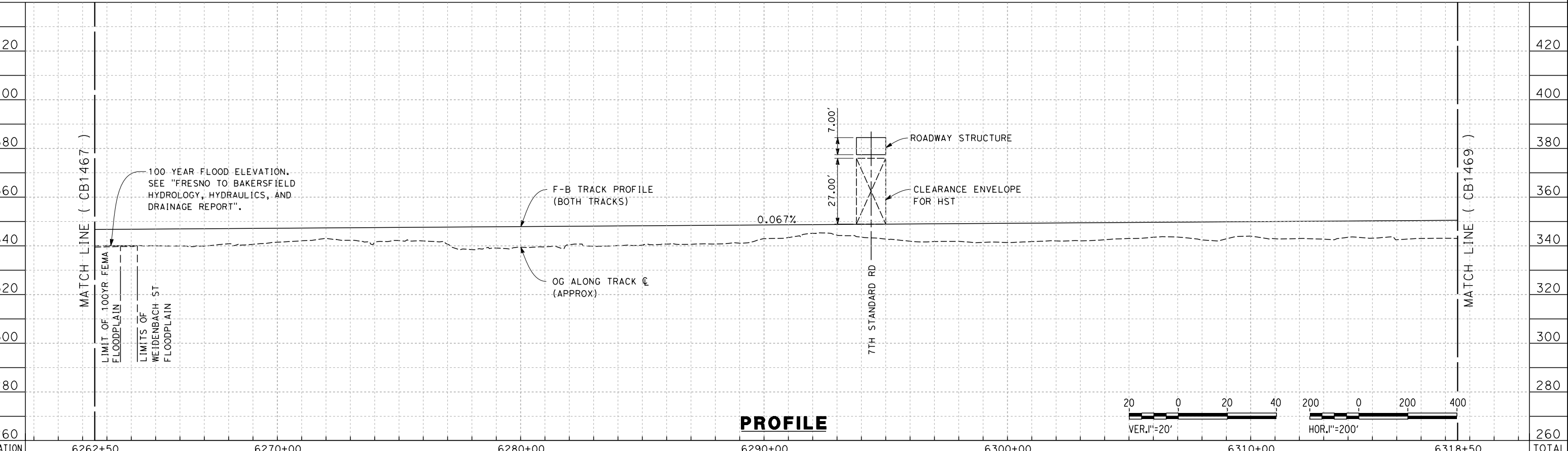
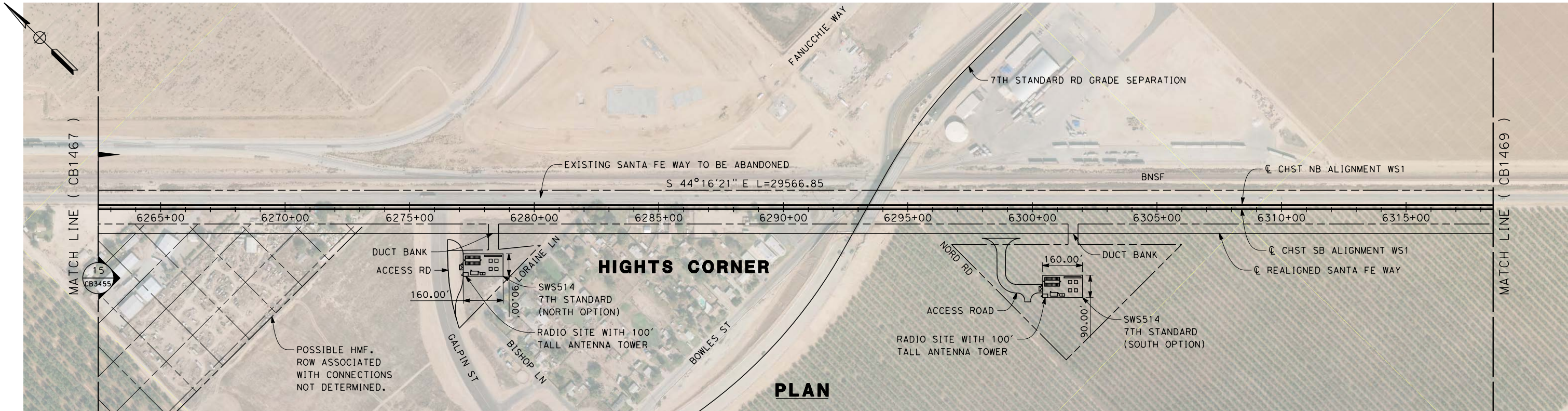


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6206+50 TO 6262+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1467
SCALE
AS SHOWN
SHEET NO.
20 OF 35

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REV	DATE	BY	CHK	APP	DESCRIPTION

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 DRAWN BY
J. BORGHESI
 CHECKED BY
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R. COFFIN
 DATE
12/31/13

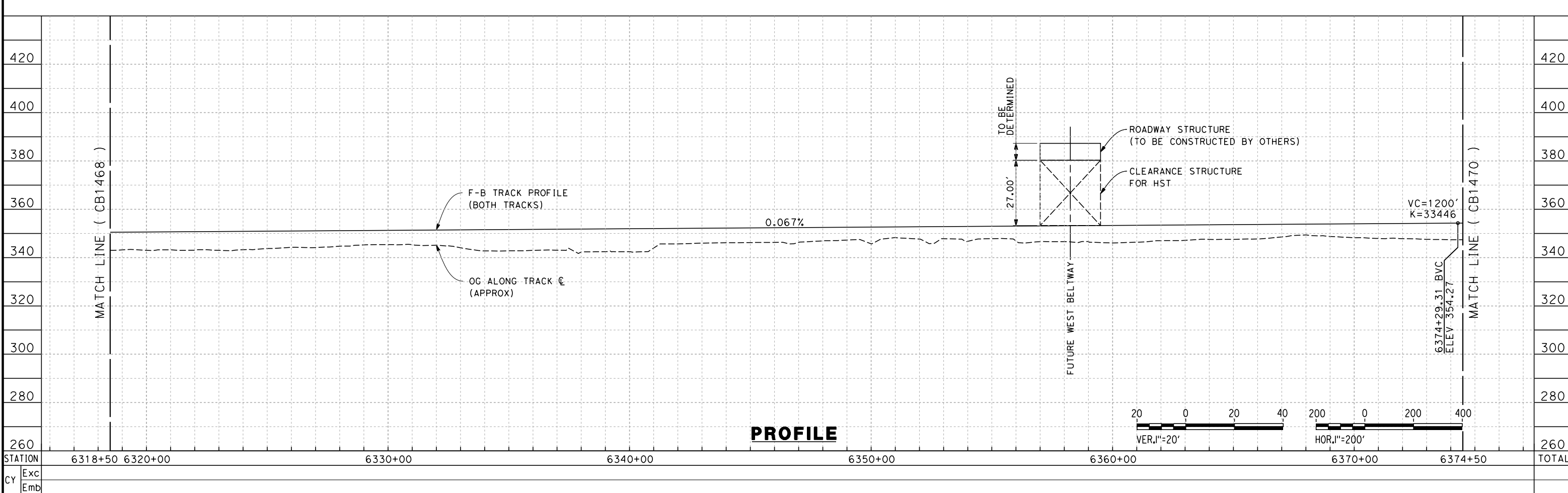
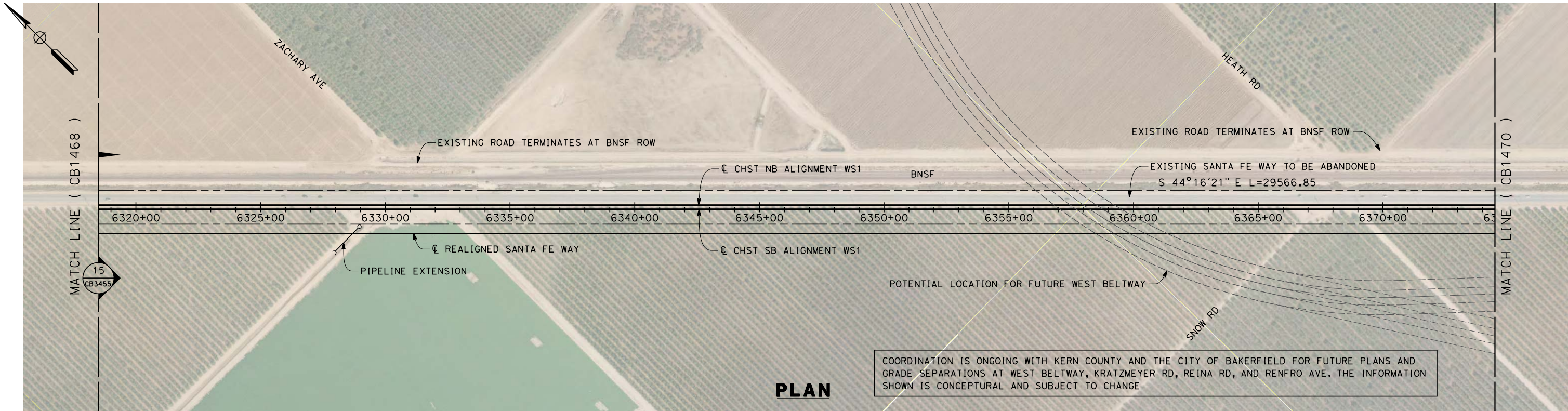
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DESIGN SUBMISSION**

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 6262+50 TO 6318+50
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1468
 SCALE
AS SHOWN
 SHEET NO.
21 OF 35



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

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DESIGN SUBMISSION**

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CONSTRUCTION**

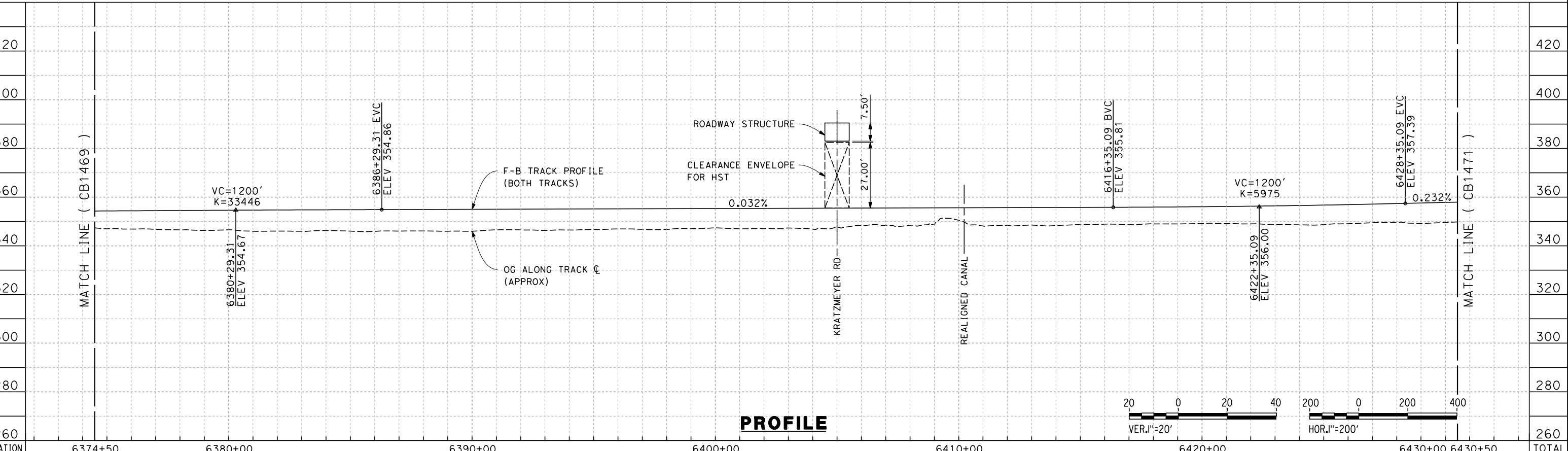
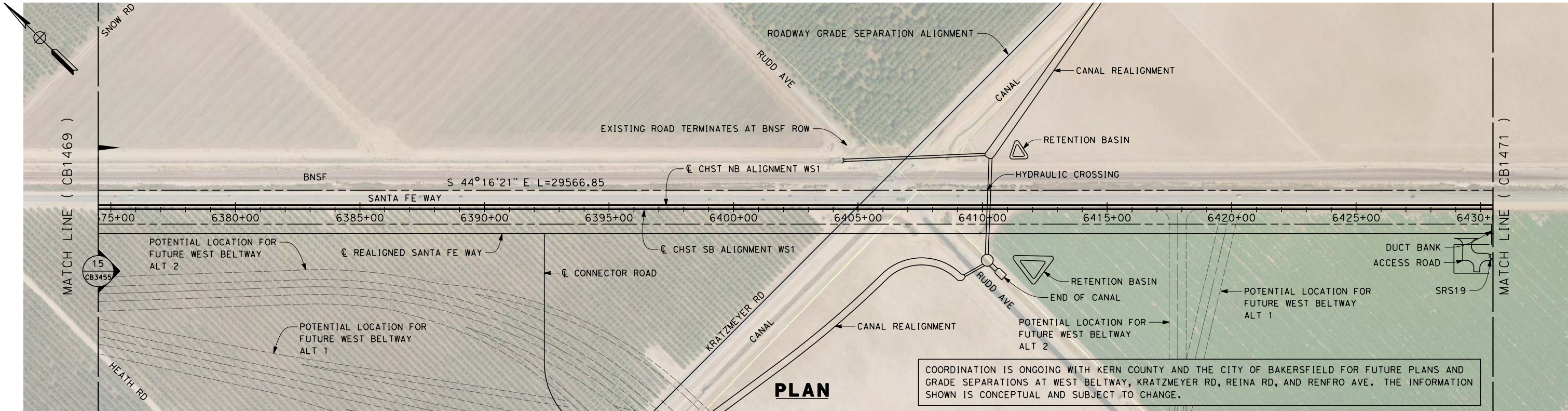


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6318+50 TO 6374+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1469
SCALE
AS SHOWN
SHEET NO.
22 OF 35

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 joshua.thomas

REV	DATE	BY	CHK	APP	DESCRIPTION

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R. COFFIN
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12/31/13

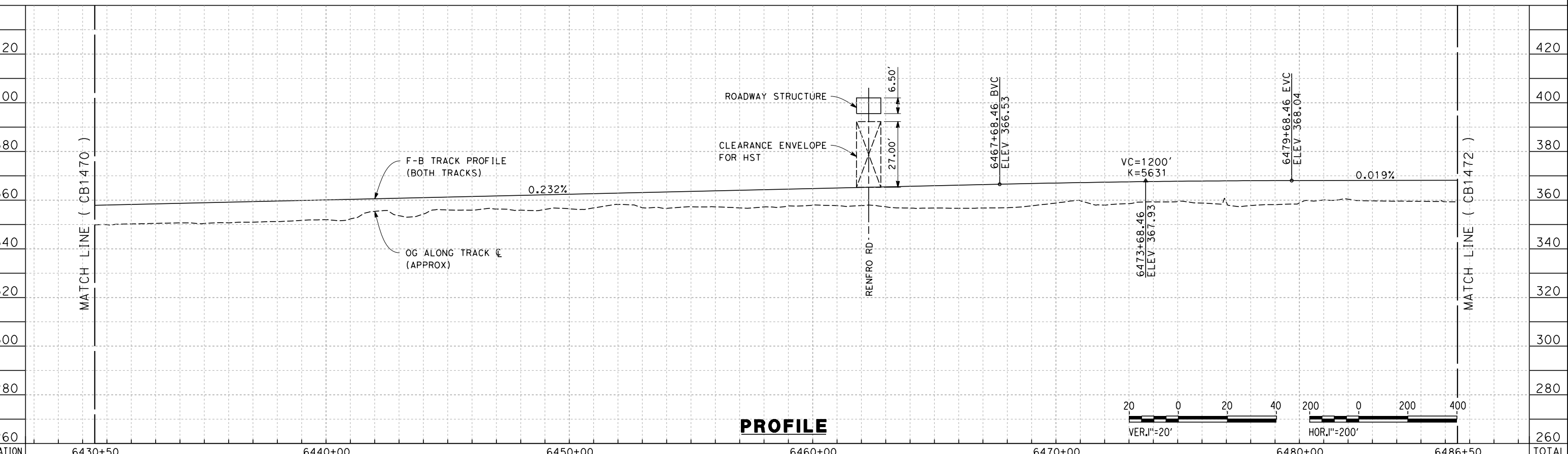
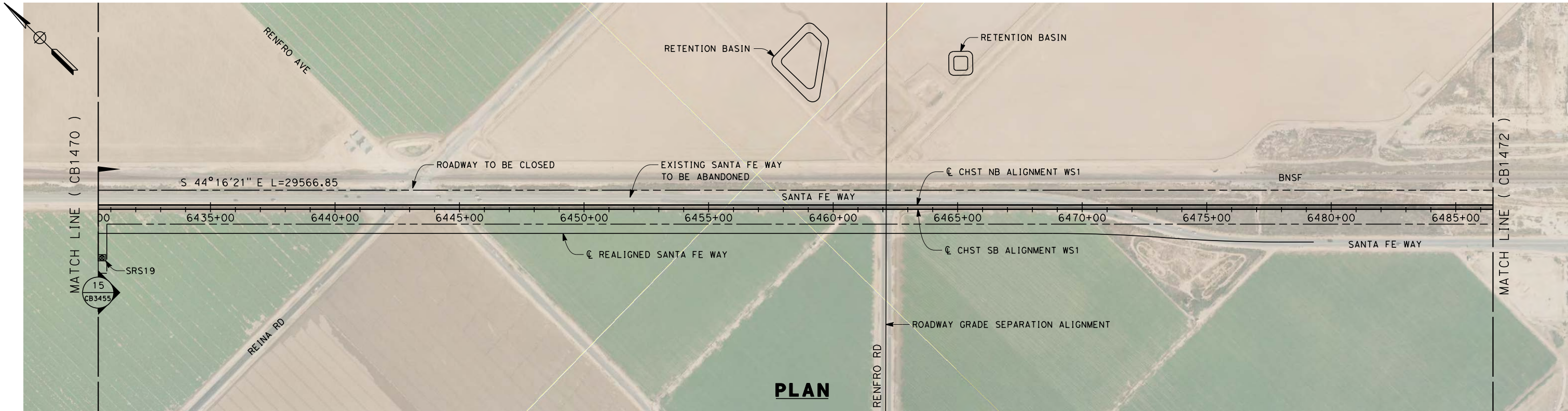
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**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 STA. 6374+50 TO 6430+50
 PLAN AND PROFILE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
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 SCALE
 AS SHOWN
 SHEET NO.
 23 OF 35



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REV	DATE	BY	CHK	APP	DESCRIPTION

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G. WALKER
IN CHARGE
R. COFFIN
DATE
12/31/13

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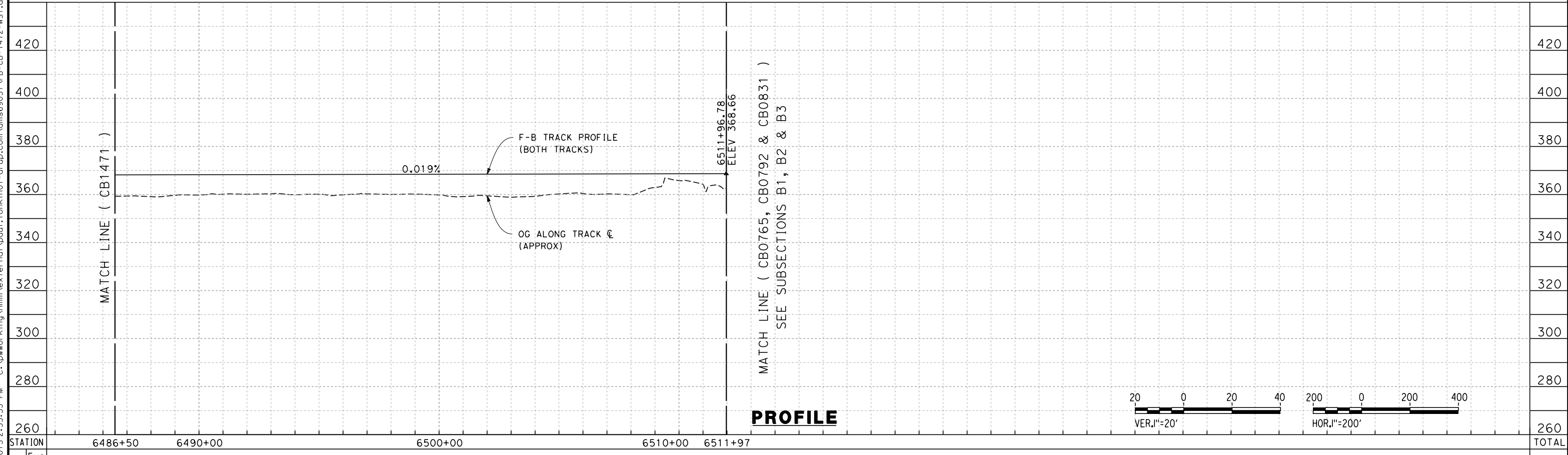
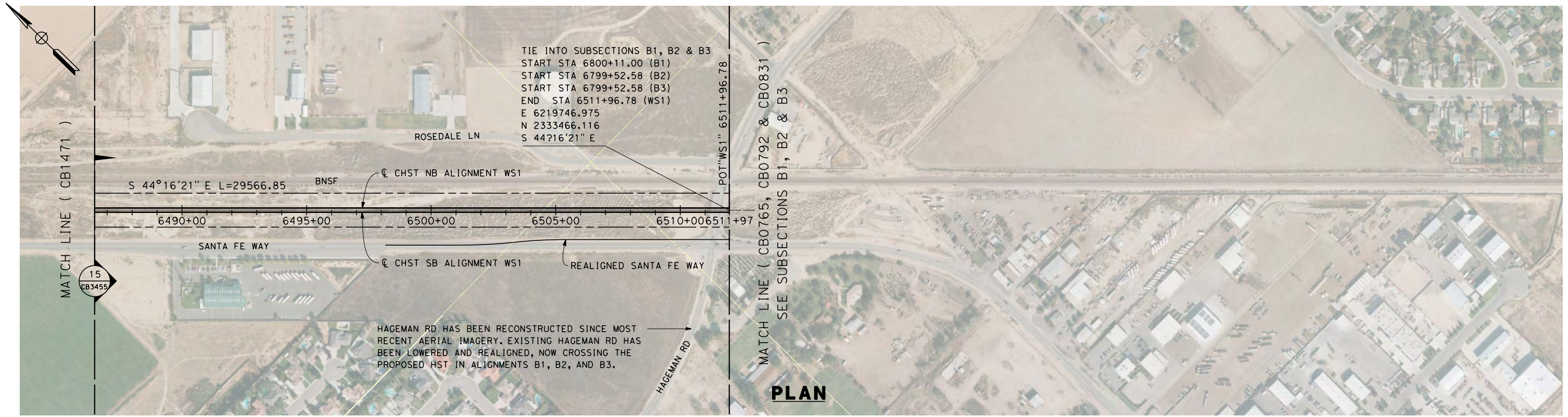
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CONSTRUCTION**



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

THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6430+50 TO 6486+50
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1471
SCALE
AS SHOWN
SHEET NO.
24 OF 35



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REV	DATE	BY	CHK	APP	DESCRIPTION

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

THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
STA. 6486+50 TO 6511+96.78
PLAN AND PROFILE

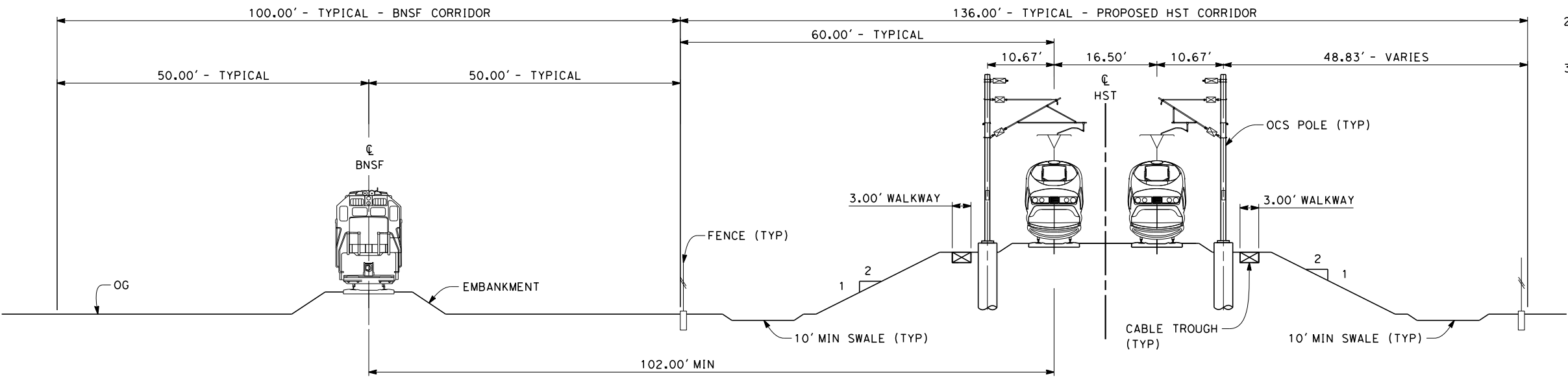
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HSR 06-0003

DRAWING NO.
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SCALE
AS SHOWN

SHEET NO.
25 OF 35

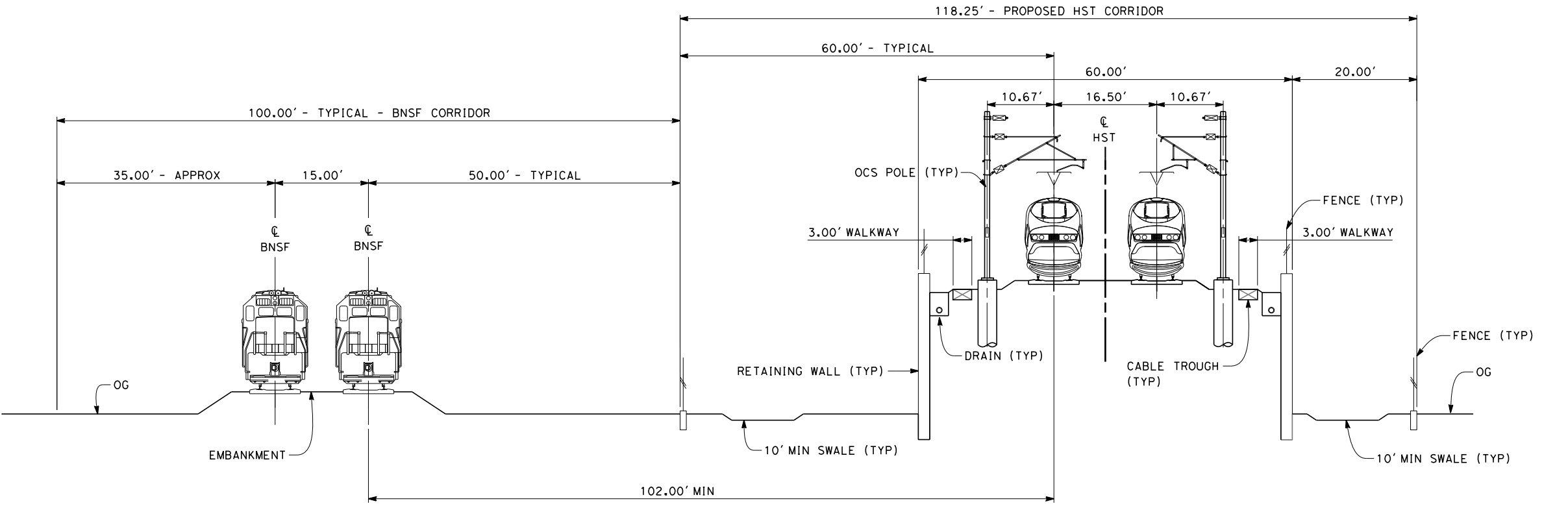
- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE.
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
 3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



NOTE:
"TWIN-TRACK BNSF EXISTS BETWEEN
STA: 5506+00 TO 5551+00"

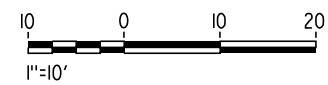
SECTION 1

TWIN TRACK - ADJACENT TO BNSF
STA 5422+50 THROUGH STA 5551+00



SECTION 2

TWIN TRACK ON RETAINED EMBANKMENT, ADJACENT TO BNSF
STA 5551+00 THROUGH STA 5556+40
STA 5557+60 THROUGH STA 5564+80



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R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

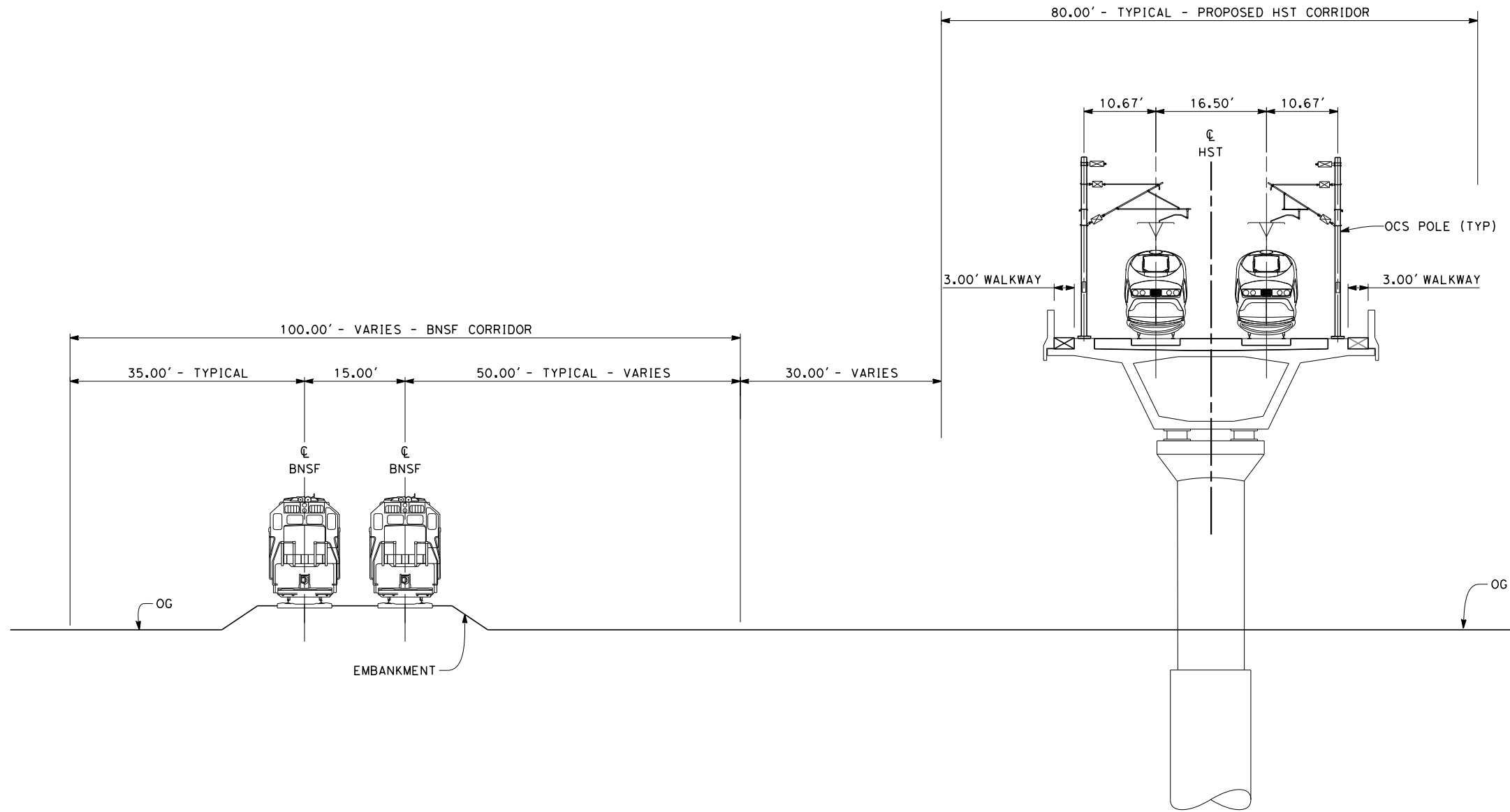


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
THROUGH WASCO-SHAFTER SUBSECTION
ALIGNMENT WS1
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3446
SCALE
AS SHOWN
SHEET NO.
26 OF 35

NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
3. FOR EXTENTS OF BNSF REALIGNMENTS AND LOCATION OF BNSF SIDING TRACKS, SEE PLAN SHEETS.
4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



SECTION 3

TWIN TRACK - AERIAL VIADUCT ADJACENT TO BNSF
 STA 5556+40 THROUGH STA 5557+60
 STA 5564+80 THROUGH STA 5661+30



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J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
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**NOT FOR
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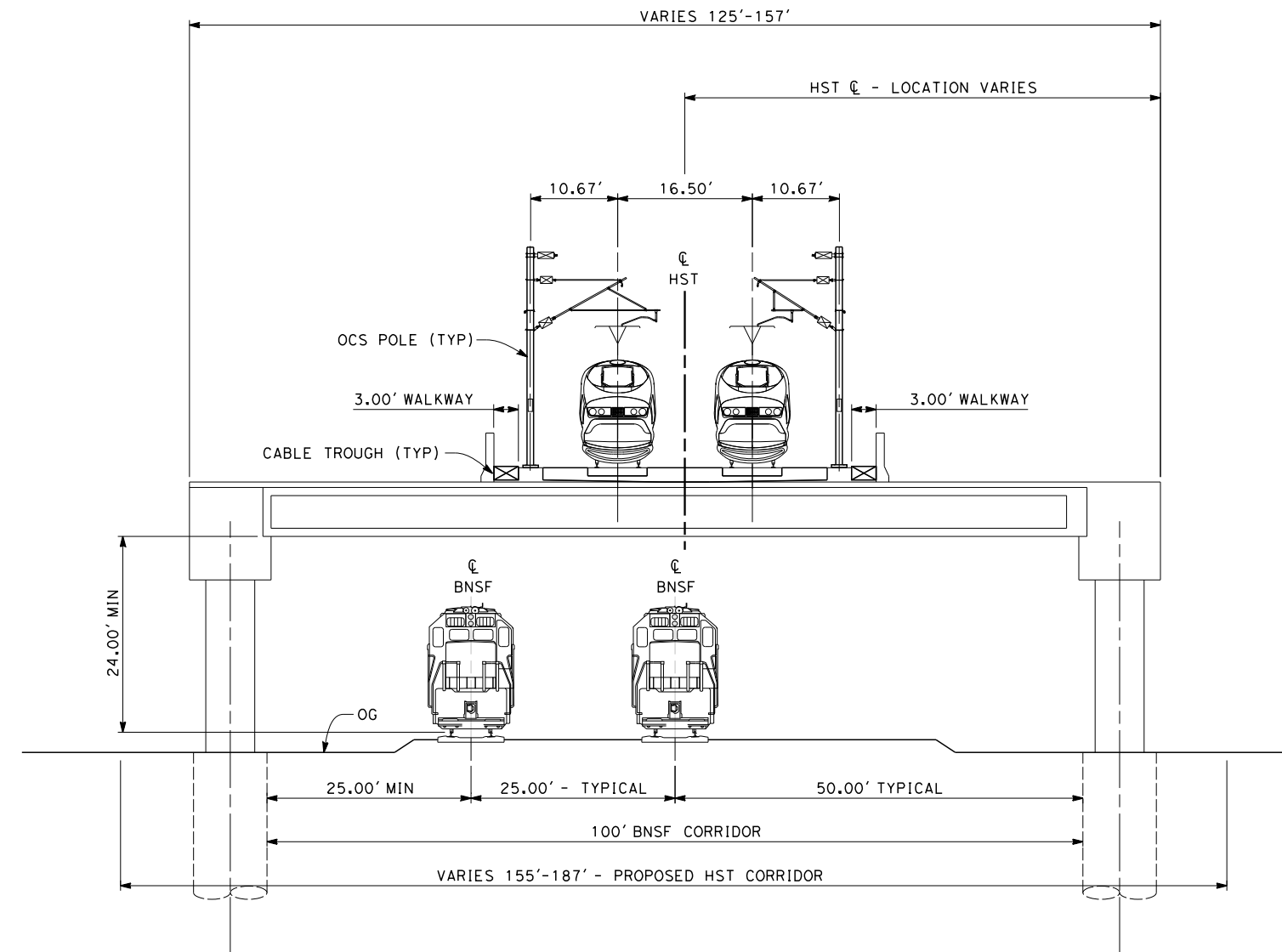


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 TYPICAL SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3447
 SCALE
 AS SHOWN
 SHEET NO.
 27 OF 35

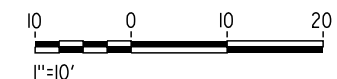
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
3. FOR EXTENTS OF BNSF REALIGNMENTS, SEE PLAN SHEETS.
4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



SECTION 4

TWIN TRACK - ELEVATED SLAB OVER BNSF
 STA 5661+30 THROUGH STA 5674+55



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

REV	DATE	BY	CHK	APP	DESCRIPTION

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 CHECKED BY
 G. WALKER
 IN CHARGE
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 DATE
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**RECORD SET 15%
 DESIGN SUBMISSION**

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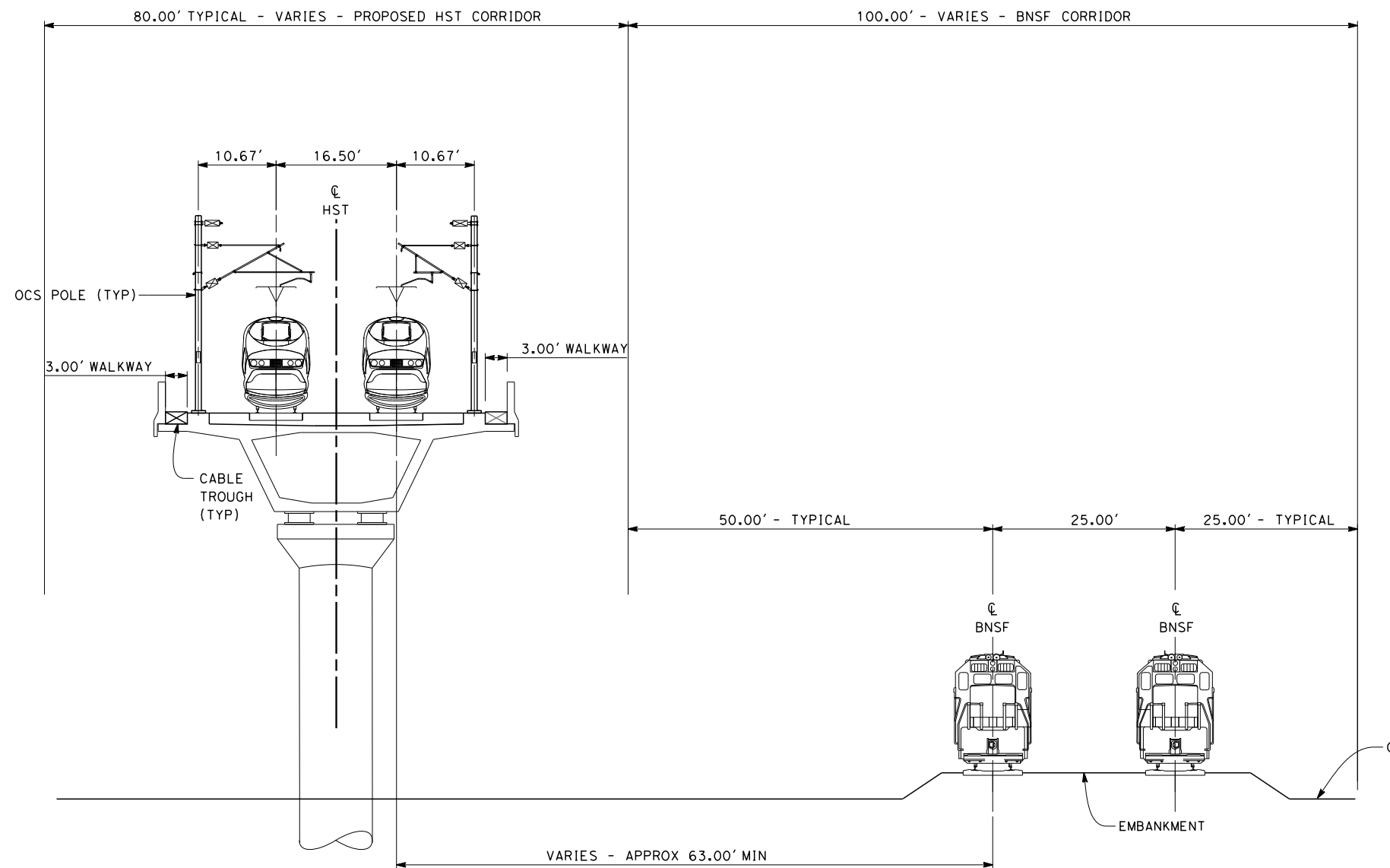


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 TYPICAL SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3448
 SCALE
 AS SHOWN
 SHEET NO.
 28 OF 35

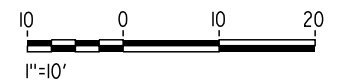
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
3. FOR EXTENTS OF BNSF REALIGNMENTS, SEE PLAN SHEETS.
4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



SECTION 5

TWIN TRACK - AERIAL VIADUCT ADJACENT TO BNSF
 STA 5674+55 THROUGH STA 5682+95



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 CHECKED BY
 G. WALKER
 IN CHARGE
 R. COFFIN
 DATE
 12/31/13

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 CONSTRUCTION**

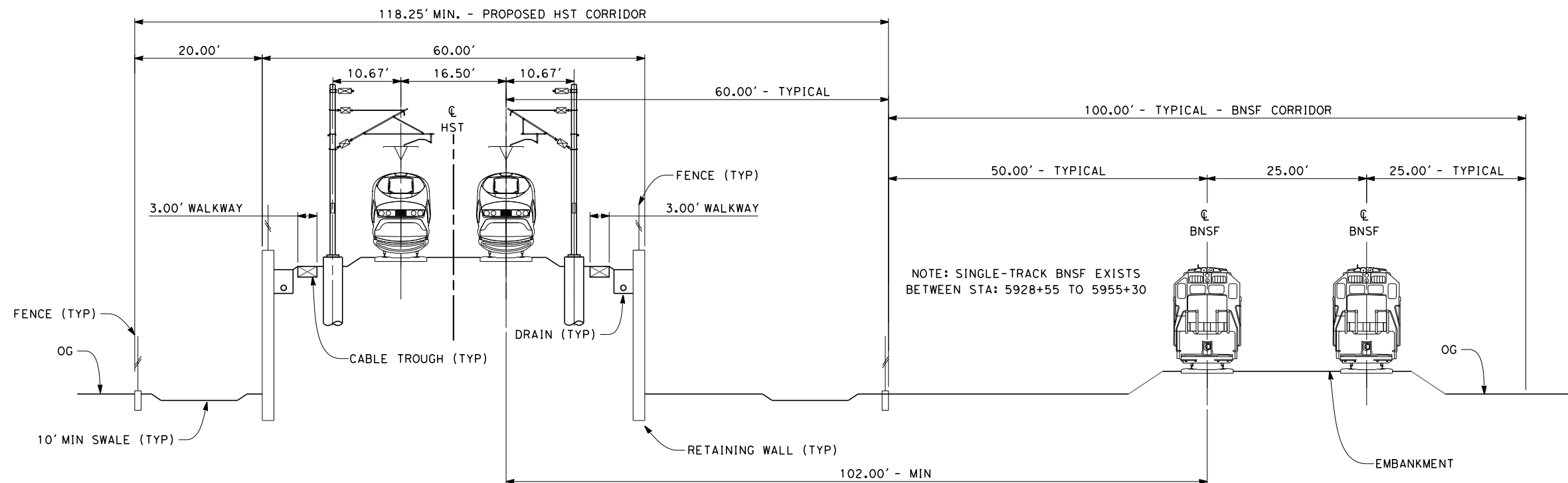


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 TYPICAL SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3449
 SCALE
 AS SHOWN
 SHEET NO.
 29 OF 35

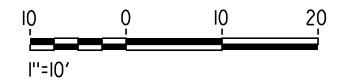
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
3. FOR EXTENTS OF BNSF REALIGNMENT, SEE PLAN SHEETS.
4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



SECTION 6

TWIN TRACK ON RETAINED EMBANKMENT - ADJACENT TO BNSF
 STA 5682+95 THROUGH STA 5709+50
 STA 5928+55 THROUGH STA 5955+30



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DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

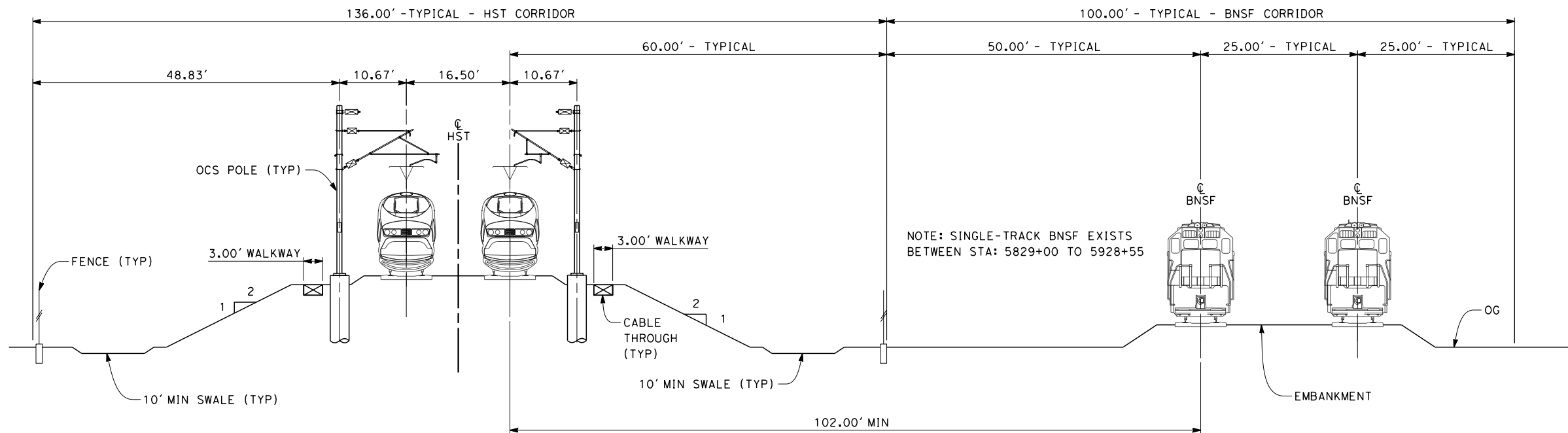
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 DESIGN SUBMISSION**

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 TYPICAL SECTIONS

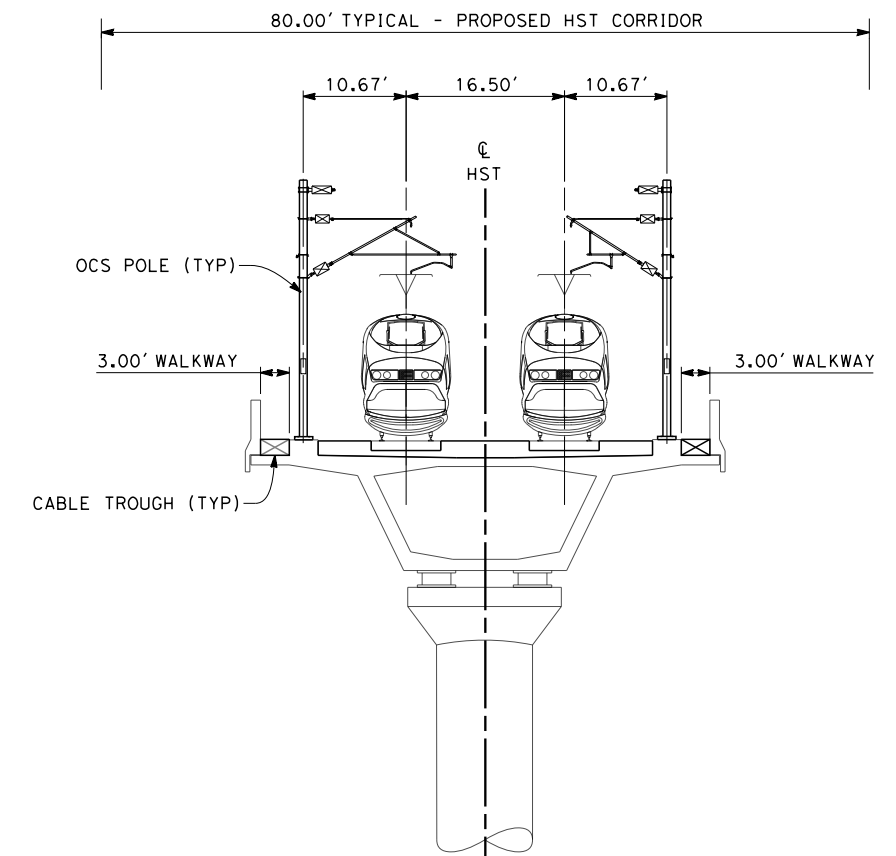
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3450
 SCALE
 AS SHOWN
 SHEET NO.
 30 OF 35



- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE.
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
 3. FOR EXTENTS OF BNSF REALIGNMENTS, SEE PLAN SHEETS.
 4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
 5. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST STRUCTURE COLUMN IS NOT MET. STA 5968+70 TO 5996+40

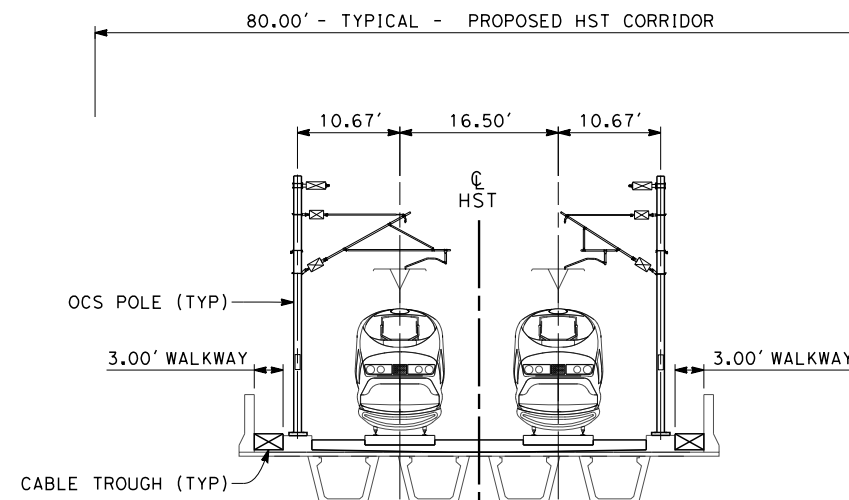
SECTION 7

TWIN TRACK - ADJACENT TO BNSF
 STA 5709+50 THROUGH STA 5715+96
 STA 5716+80 THROUGH STA 5928+55



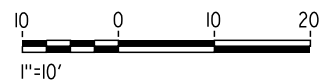
SECTION 9

TWIN TRACK - AERIAL VIADUCT
 STA 5955+30 THROUGH STA 6036+65



SECTION 8

TWIN TRACK - ELEVATED PRECAST CONCRETE GIRDER STRUCTURE
 STA 5715+96 THROUGH STA 5716+80



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. LITSAS
 DRAWN BY
J. BORGHESI
 CHECKED BY
G. WALKER
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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 DESIGN SUBMISSION**

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 CONSTRUCTION**

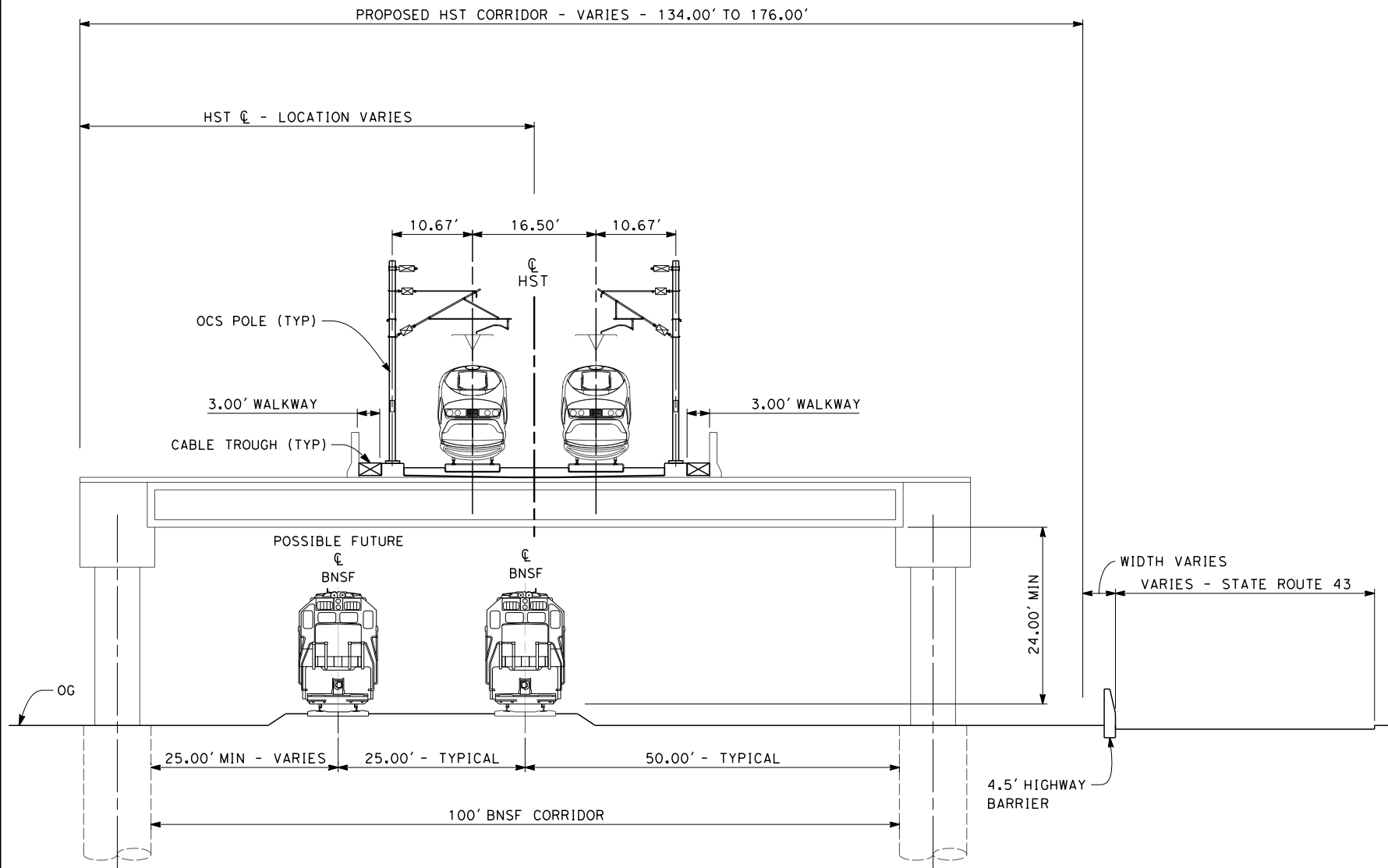


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 THROUGH WASCO-SHAFTER SUBSECTION
 ALIGNMENT WS1
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
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 SCALE
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31 OF 35

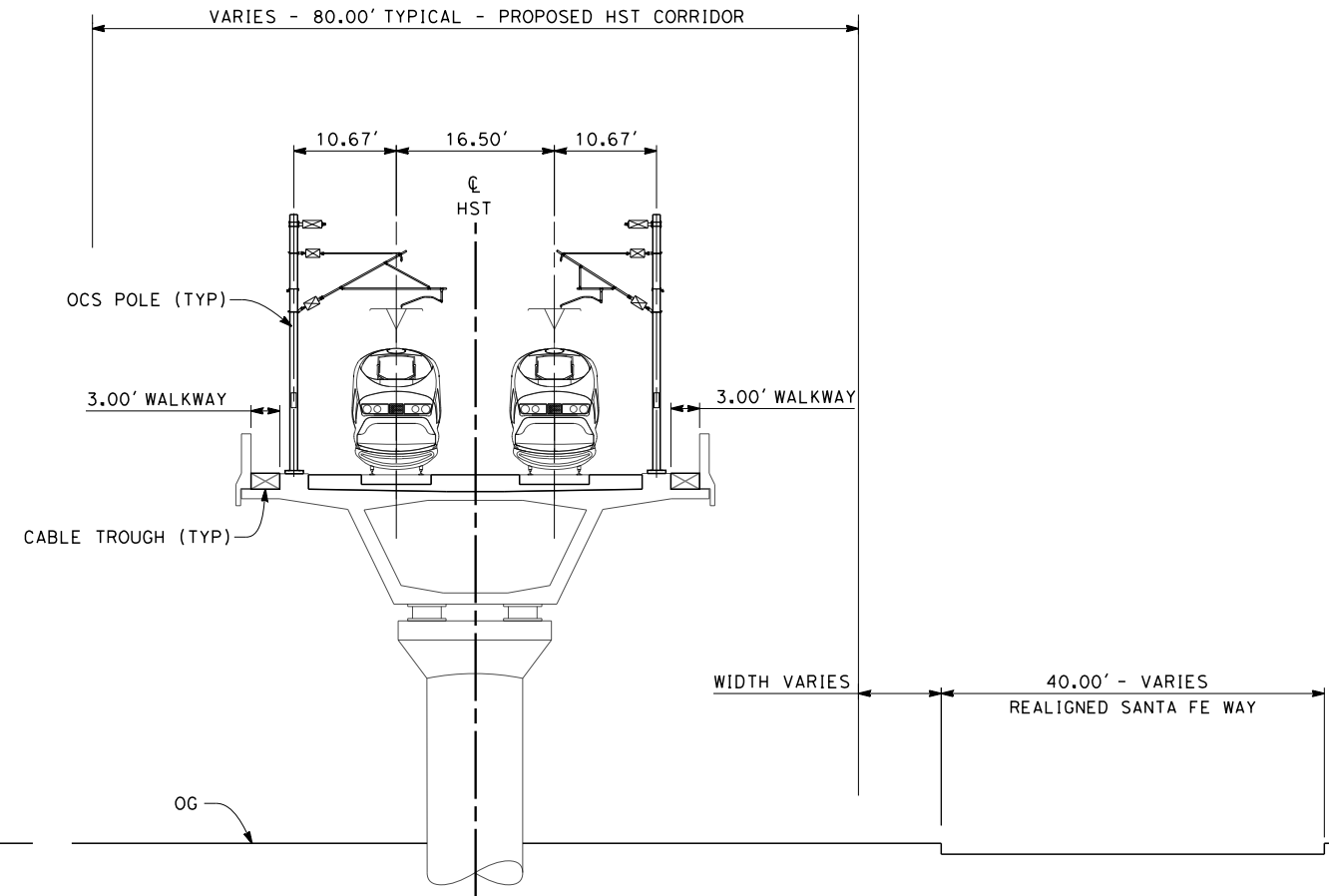
NOTES:

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 THE CURVE DATA TABLES.
4. PER CALTRANS HIGHWAY DESIGN MANUAL REQUIREMENTS, A HIGHWAY BARRIER IS REQUIRED WHEN ADEQUATE HORIZONTAL CLEARANCE BETWEEN ROADWAY TRAVELED WAY AND HST STRUCTURE COLUMN IS NOT MET. STA 6036+65 TO 6059+05.



SECTION 10

TWIN TRACK - ELEVATED SLAB OVER BNSF ADJACENT TO HIGHWAY
STA 6036+65 THROUGH STA 6059+05



SECTION 11

TWIN TRACK - AERIAL VIADUCT ADJACENT TO REALIGNED SANTA FE WAY
STA 6059+05 THROUGH STA 6105+25
STA 6106+45 THROUGH STA 6117+75



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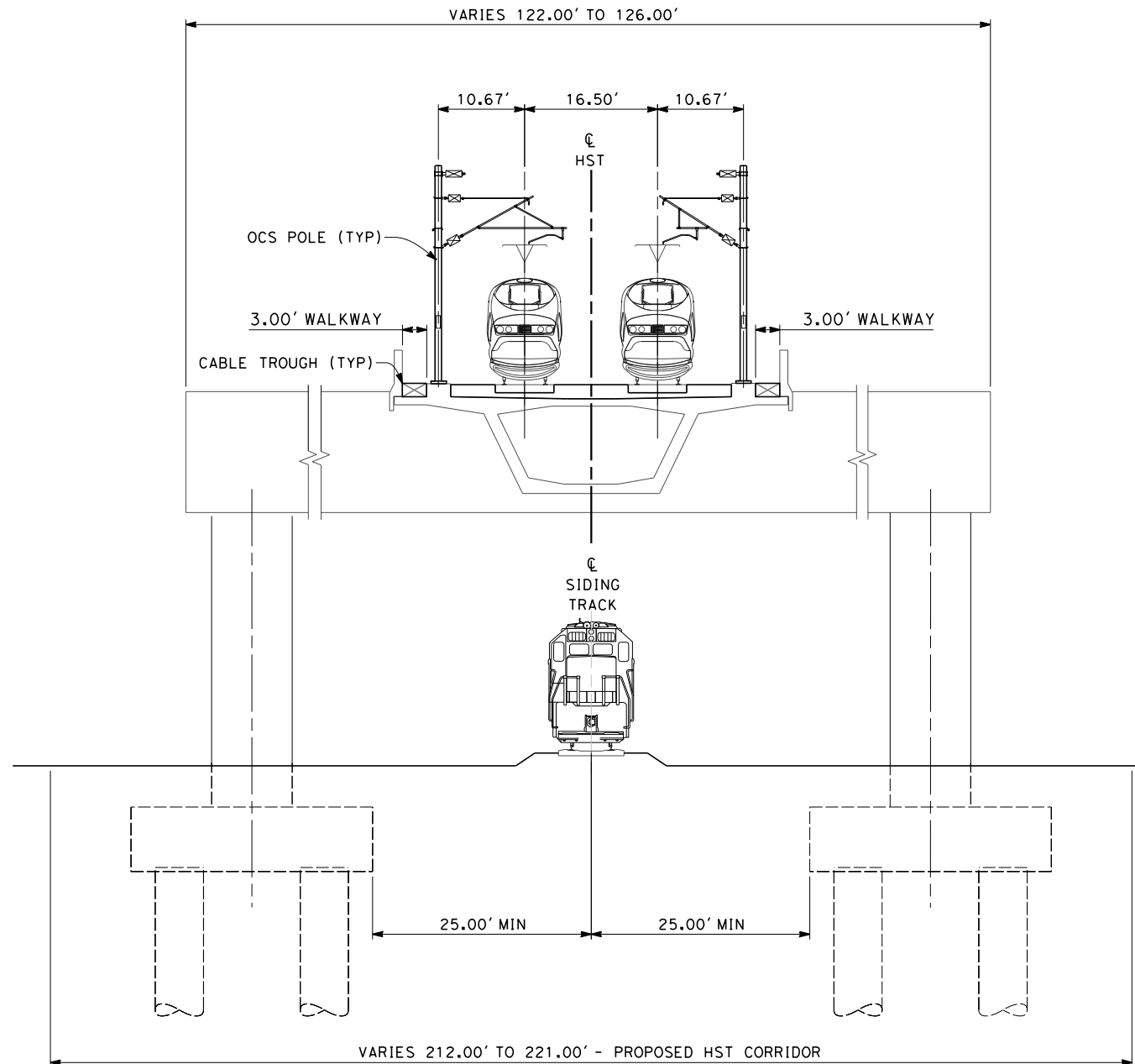


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32 OF 35

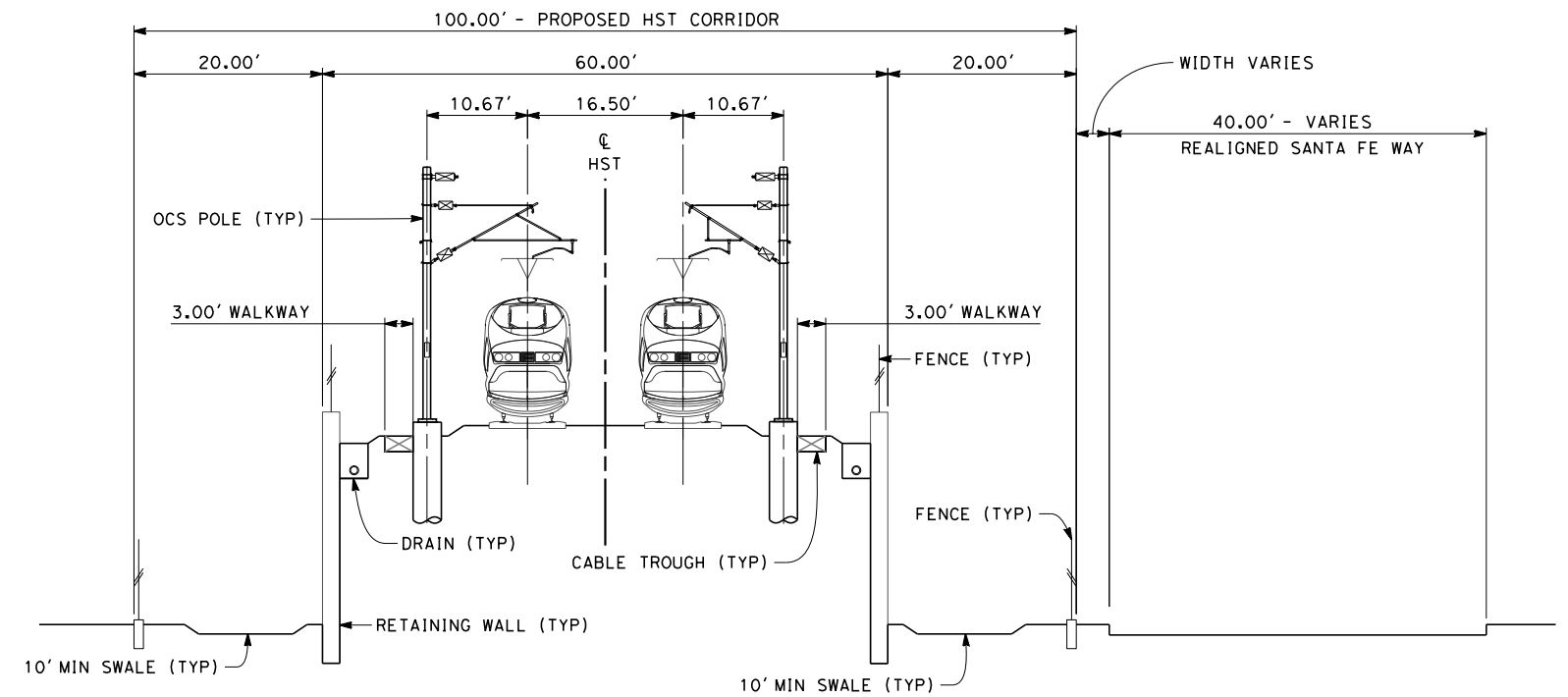
NOTES:

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 THE CURVE DATA TABLES.



SECTION 12

TWIN TRACK - INTEGRAL STRADDLE BENT
STA 6105+25 THROUGH STA 6106+45



SECTION 13

TWIN TRACK ON RETAINED EMBANKMENT - ADJACENT TO REALIGNED SANTA FE WAY
STA 6117+25 THROUGH STA 6151+00



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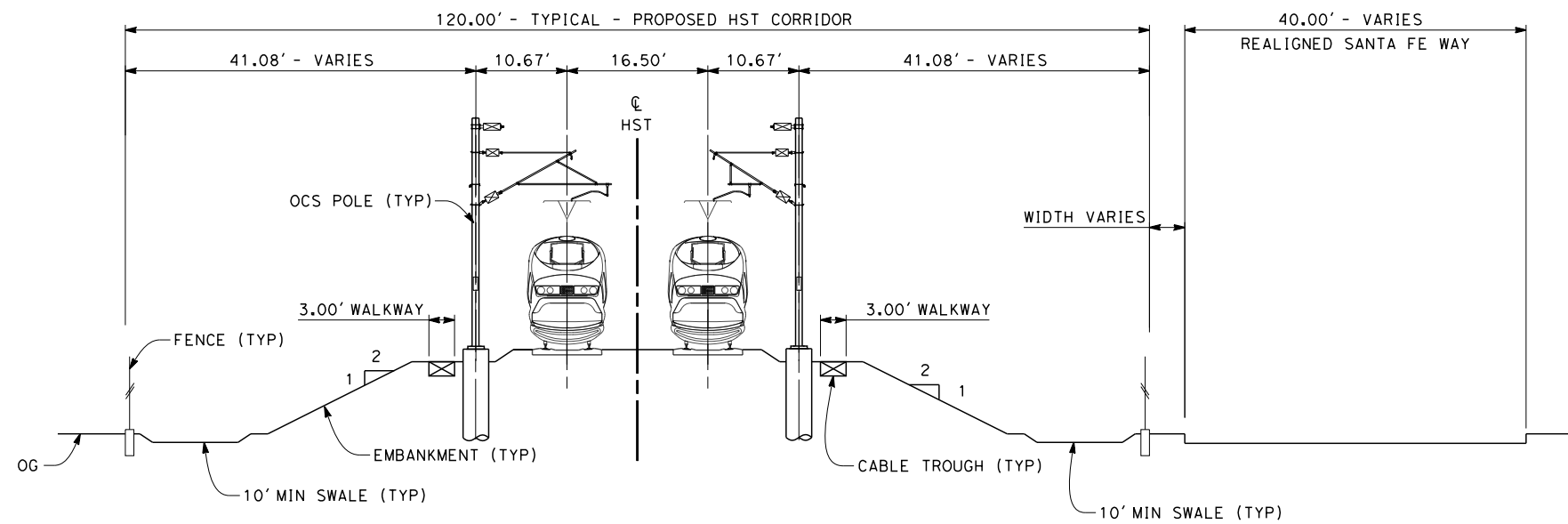


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
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SHEET NO.
33 OF 35

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 THE CURVE DATA TABLES.
4. MOIF NOT SHOWN. SEE PLAN DRAWINGS.



SECTION 14

TWIN TRACK - AT GRADE ADJACENT TO REALIGNED SANTA FE WAY
 STA 6151+00 THROUGH STA 6195+00



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 R. COFFIN
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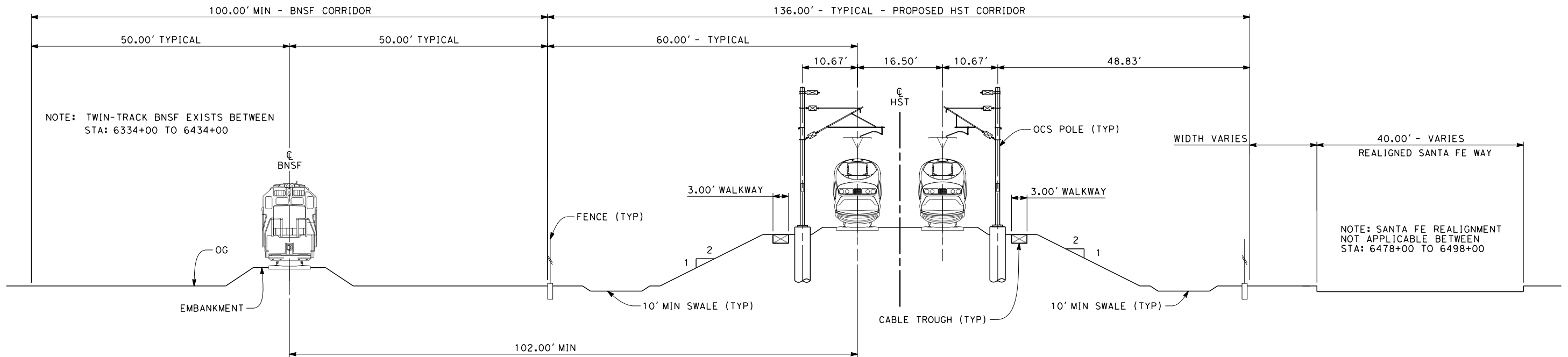


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
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CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3454
 SCALE
 AS SHOWN
 SHEET NO.
 34 OF 35

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 THE CURVE DATA TABLES.



SECTION 15

TWIN TRACK - BETWEEN BNSF AND REALIGNED SANTA FE
STA 6195+00 THROUGH STA 6511+96.78



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