

12/30/2013 3:03:55 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CB0210.dgn

STREET CLOSURE

STREET NAME	HST ALIGNMENT STA	LOCAL STANDARD
S TOPEKA AVE	1124+00.00	FRESNO COUNTY
S PEACH AVE	1162+00.00	FRESNO COUNTY
E CLARKSON AVE	1175+00.00	FRESNO COUNTY
S MINNEWAWA AVE	1230+00.00	FRESNO COUNTY
E DAVIS ST	1288+00.00	FRESNO COUNTY
E BARRETT AVE	1368+00.00	FRESNO COUNTY
ELDER AVE	1610+00.00	KINGS COUNTY



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

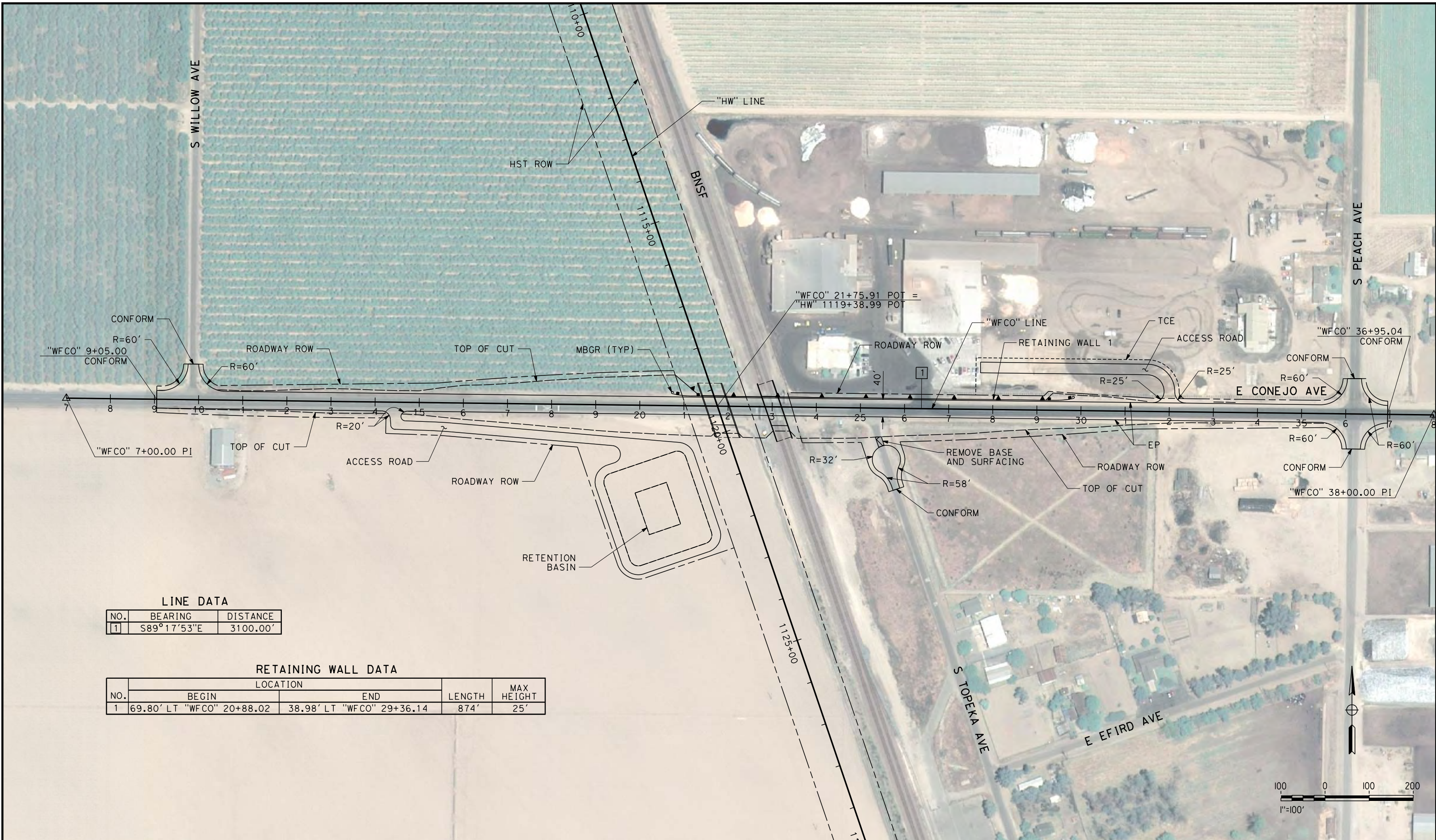
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
ROADWAY/GRADE SEPARATION
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB0210
SCALE
AS SHOWN
SHEET NO.
1 OF 47

12/30/2013 3:04:48 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603\external\bar59603.ctb



LINE DATA

NO.	BEARING	DISTANCE
1	S89°17'53"E	3100.00'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	69.80' LT "WFCO" 20+88.02	38.98' LT "WFCO" 29+36.14	874'	25'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

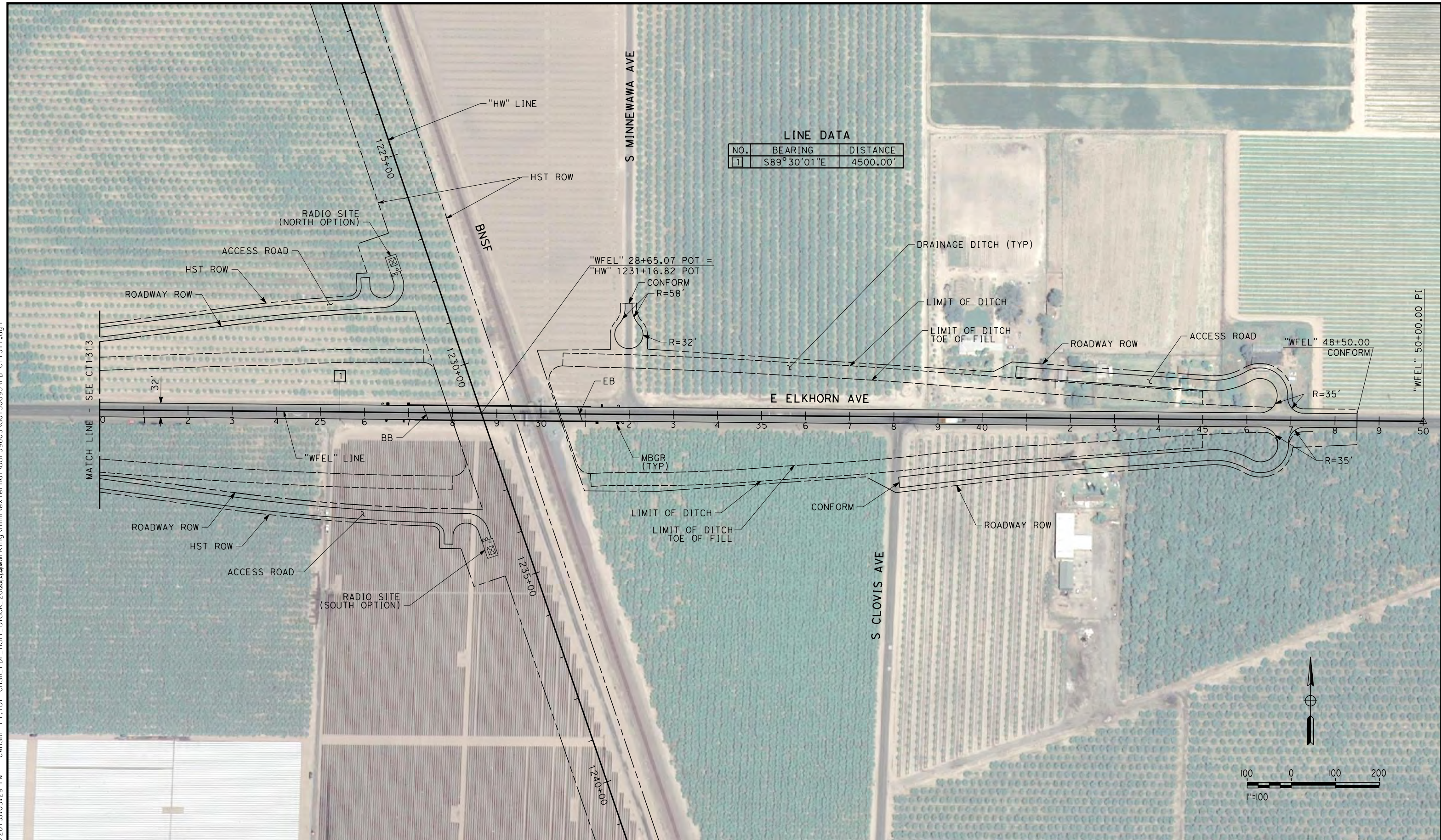
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
E CONEJO AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1310
SCALE
AS SHOWN
SHEET NO.
2 OF 47

12/30/2013 3:05:29 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1311.dgn



LINE DATA		
NO.	BEARING	DISTANCE
1	S89° 30' 01" E	4500.00'

MATCH LINE - SEE CT1313

"WFEL" 50+00.00 PI

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

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

HANFORD WEST BYPASS SUBSECTION

ALIGNMENT HW

GRADE SEPARATION LAYOUT

E ELKHORN AVE

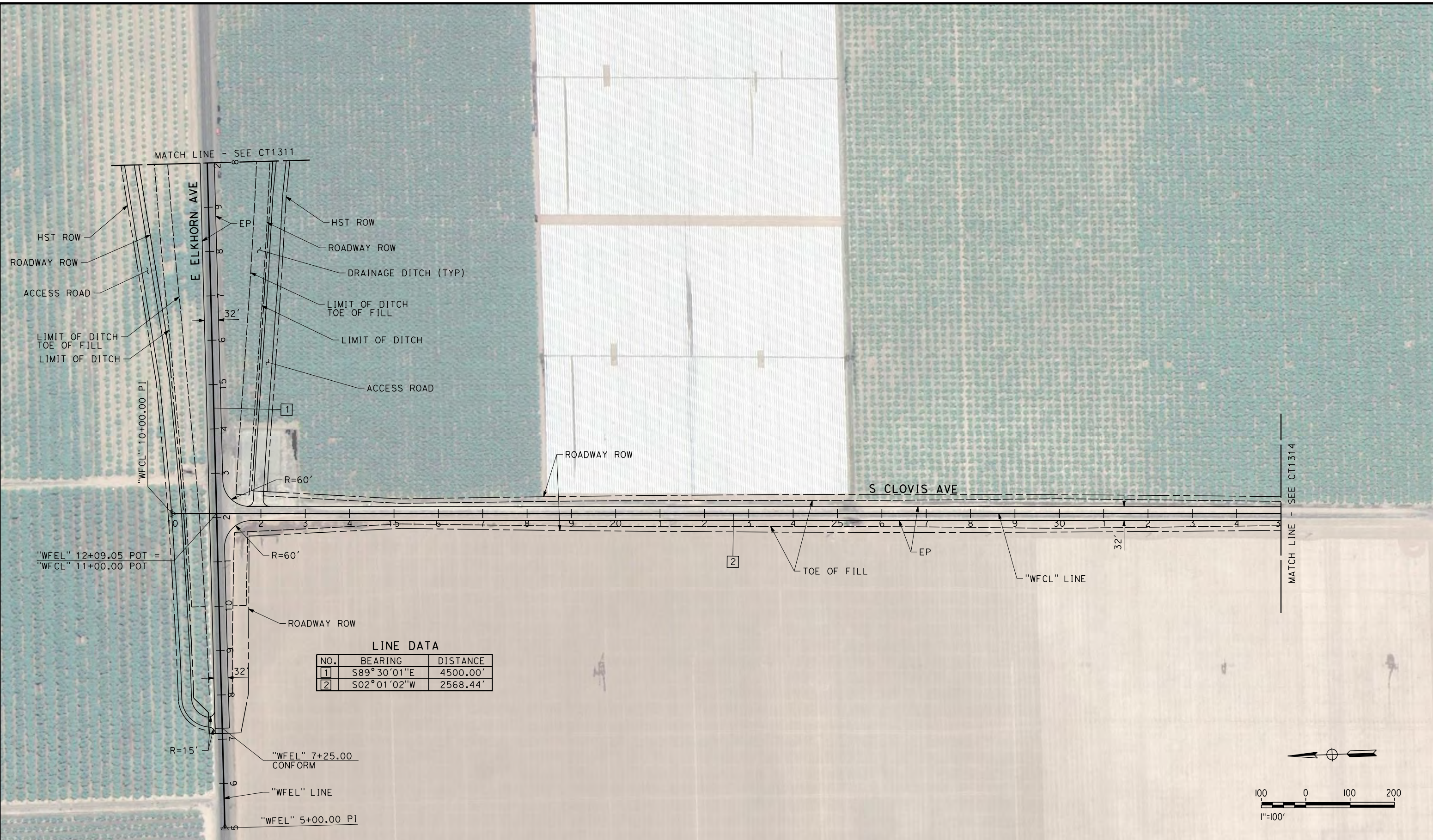
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1311

SCALE
AS SHOWN

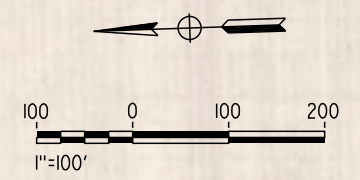
SHEET NO.
3 OF 47

12/30/2013 3:06:02 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1313.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°30'01"E	4500.00'
2	S02°01'02"W	2568.44'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION LAYOUT
 S CLOVIS AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1313

SCALE
AS SHOWN

SHEET NO.
4 OF 47

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LINE DATA

NO.	BEARING	DISTANCE
2	S02°01'02"W	2568.44'
3	S89°35'27"E	1955.68'
4	S02°26'31"W	214.33'

CURVE DATA

NO.	R	Δ	T	L
1	300.00'	91°36'29"	308.54'	479.66'
2	300.00'	92°01'58"	310.84'	481.88'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

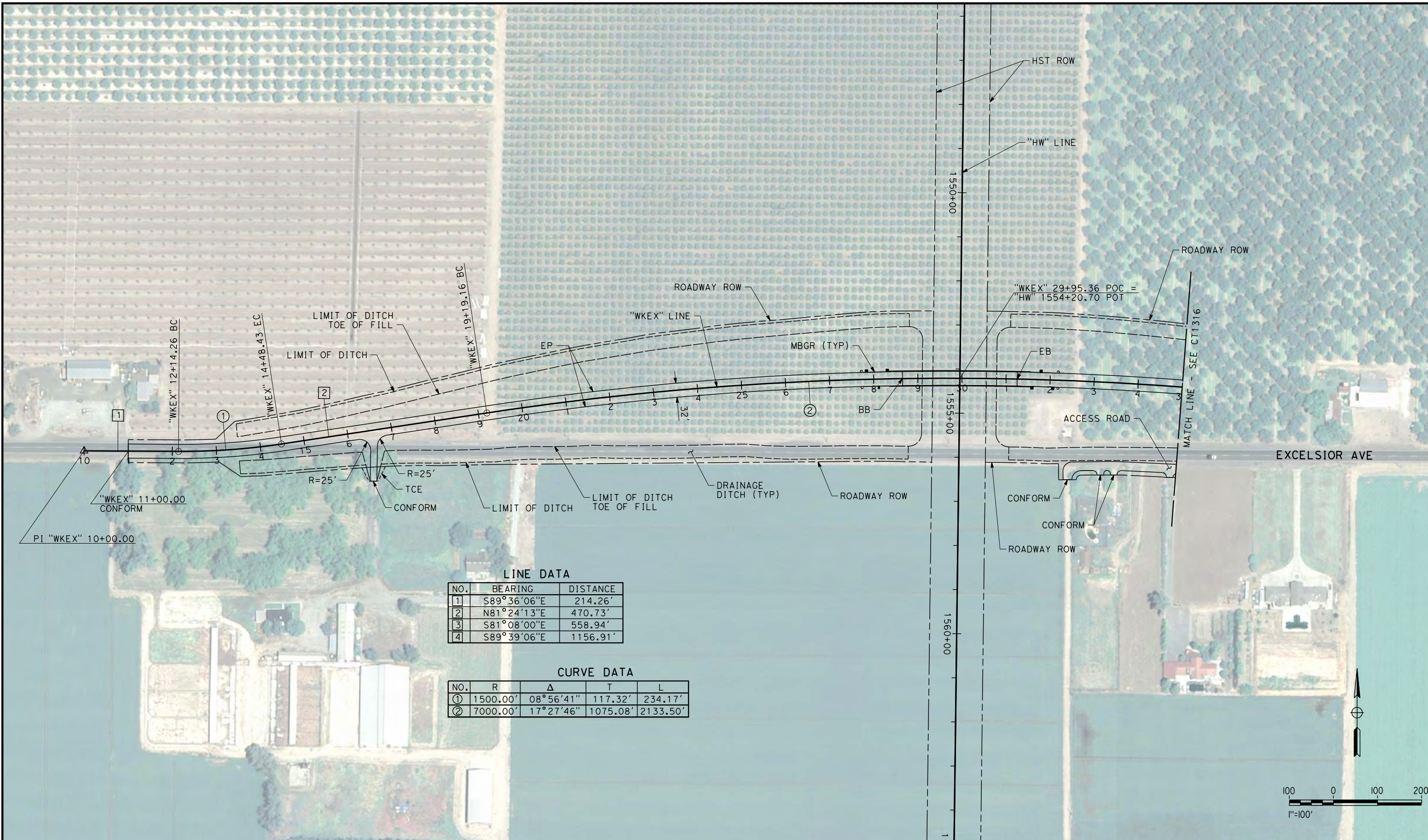
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
S CLOVIS AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1314
SCALE
AS SHOWN
SHEET NO.
5 OF 47

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LINE DATA

NO.	BEARING	DISTANCE
1	S89°36'06"E	214.26'
2	N81°24'13"E	470.73'
3	S81°08'00"E	558.94'
4	S89°39'06"E	1156.91'

CURVE DATA

NO.	R	Δ	T	L
①	1500.00'	08°56'41"	117.32'	234.17'
②	7000.00'	17°27'46"	1075.08'	2133.50'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

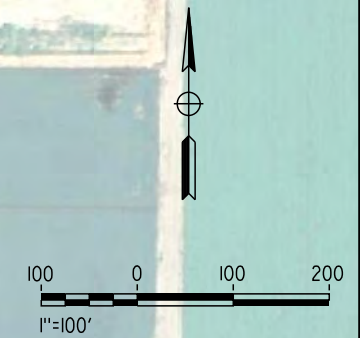
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

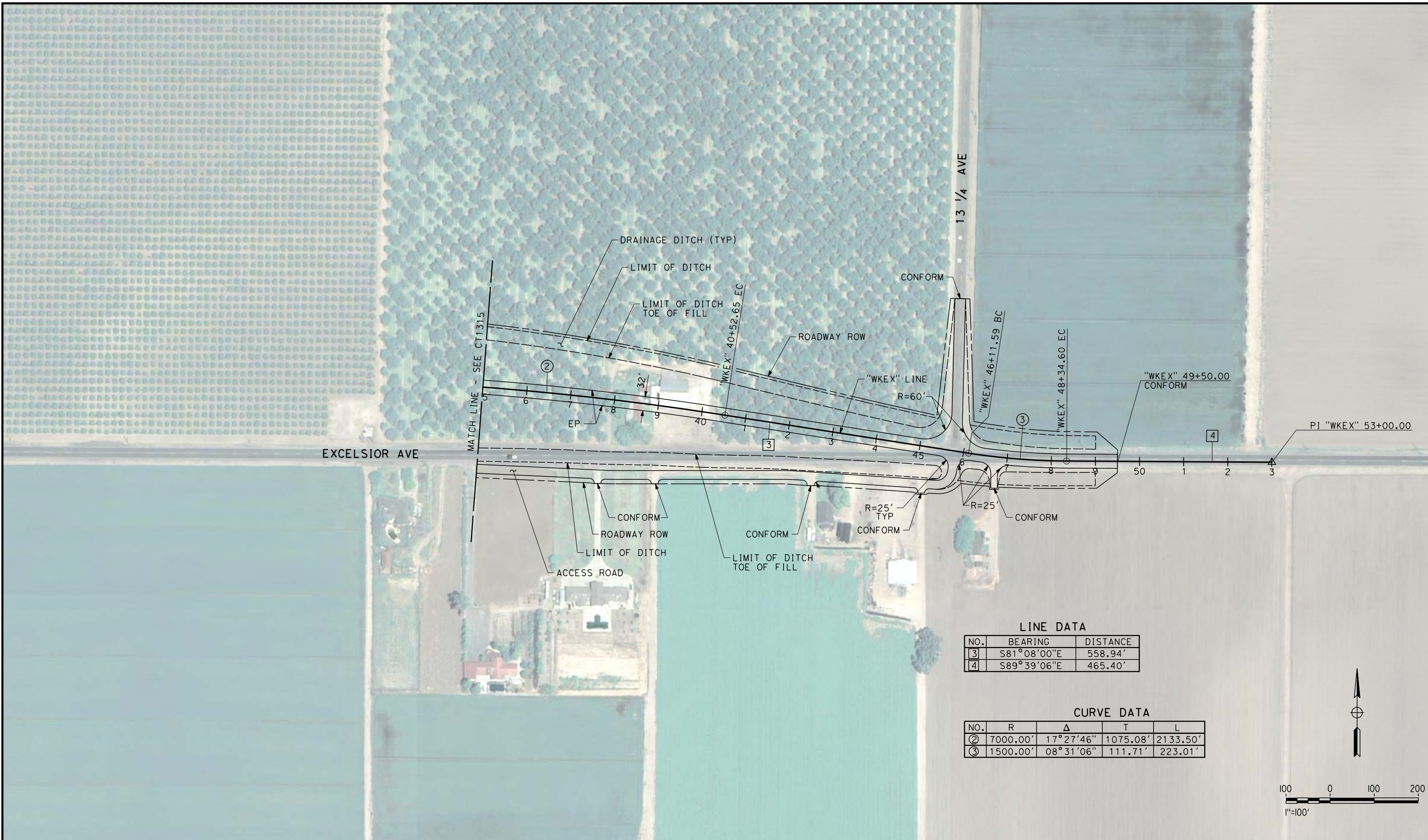


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1315
SCALE
AS SHOWN
SHEET NO.
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LINE DATA

NO.	BEARING	DISTANCE
3	S81°08'00"E	558.94'
4	S89°39'06"E	465.40'

CURVE DATA

NO.	R	Δ	T	L
2	7000.00'	17°27'46"	1075.08'	2133.50'
3	1500.00'	08°31'06"	111.71'	223.01'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION LAYOUT
 EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003

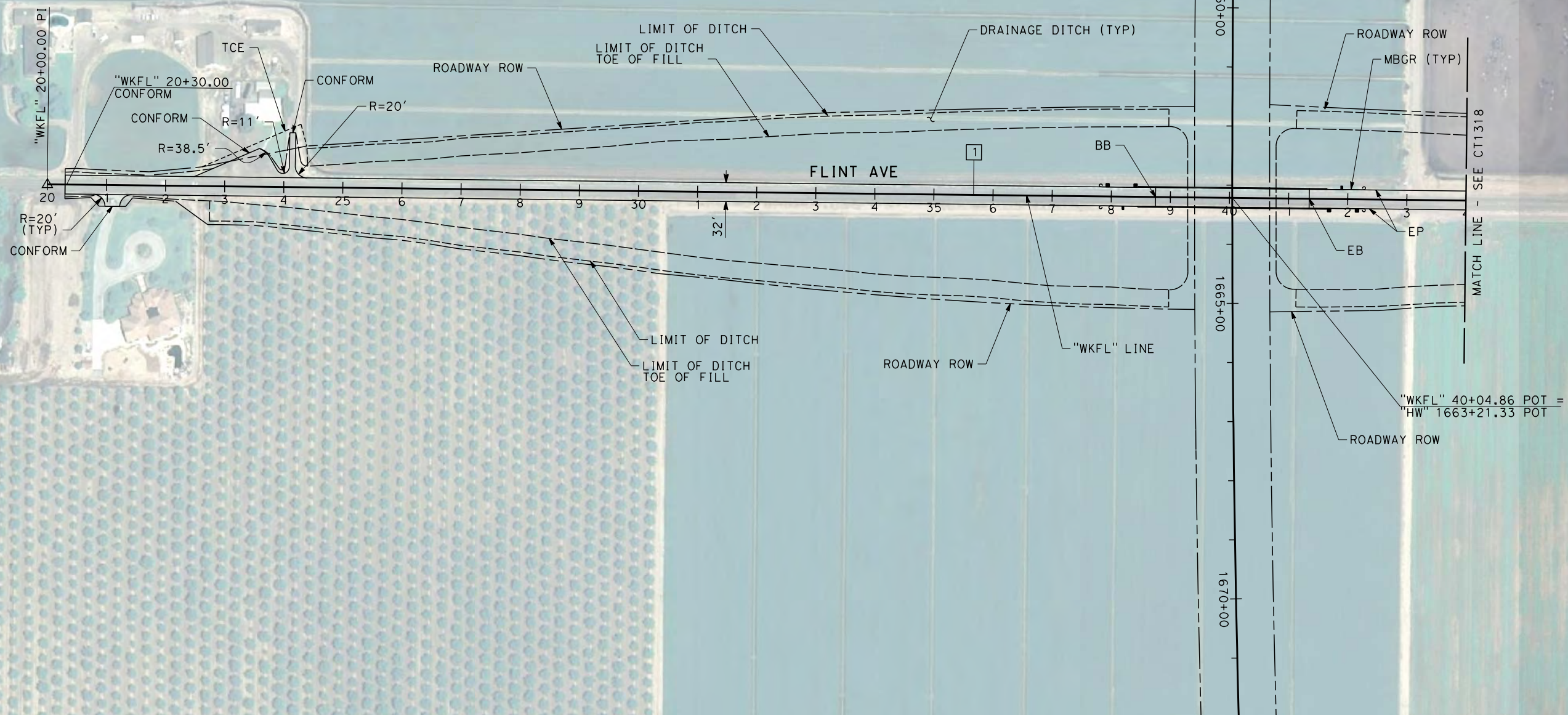
DRAWING NO.
CT1316

SCALE
AS SHOWN

SHEET NO.
7 OF 47

LINE DATA		
NO.	BEARING	DISTANCE
1	S89°20'46"E	4000.00'

12/30/2013 3:09:02 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1317.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION LAYOUT
 FLINT AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1317

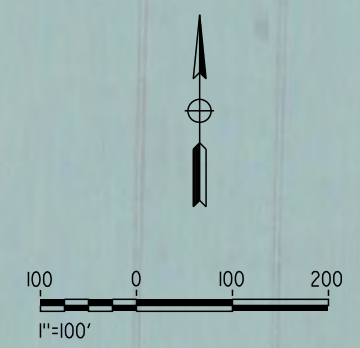
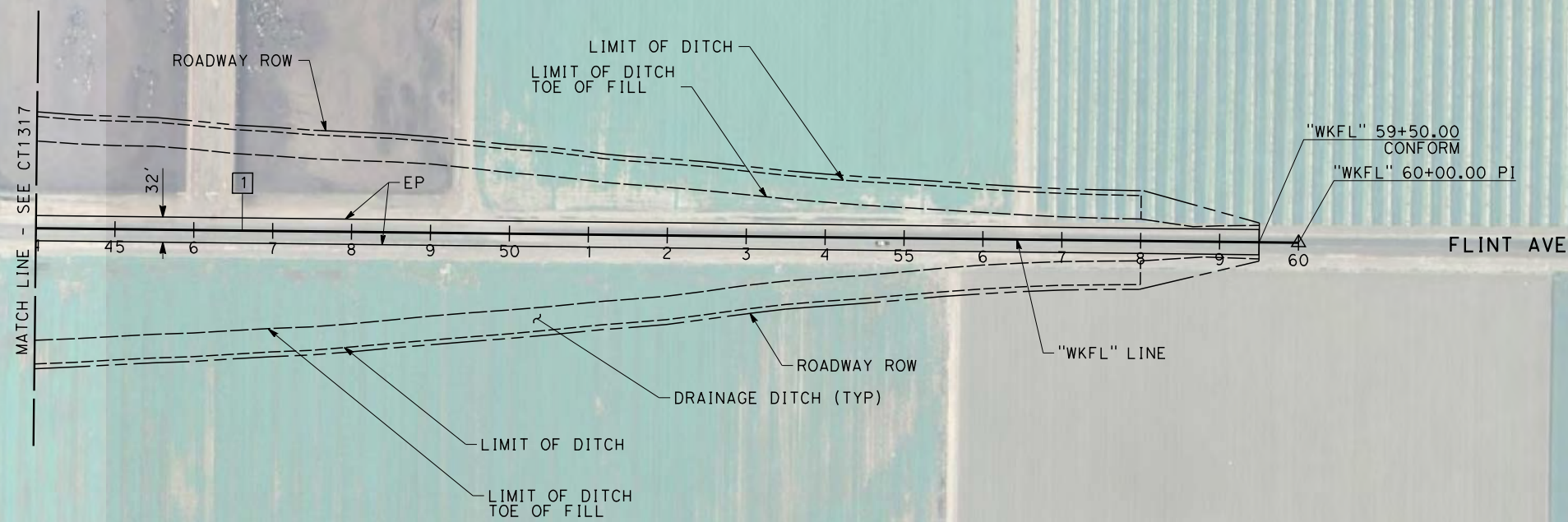
SCALE
AS SHOWN

SHEET NO.
8 OF 47

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LINE DATA

NO.	BEARING	DISTANCE
1	S89°20'46"E	4000.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
FLINT AVE

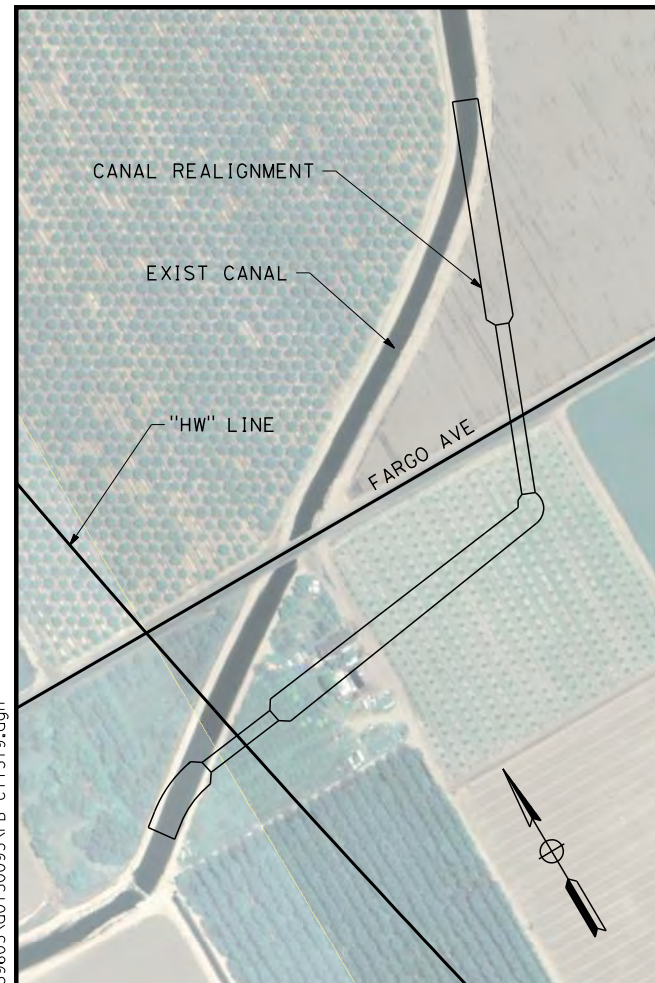
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1318

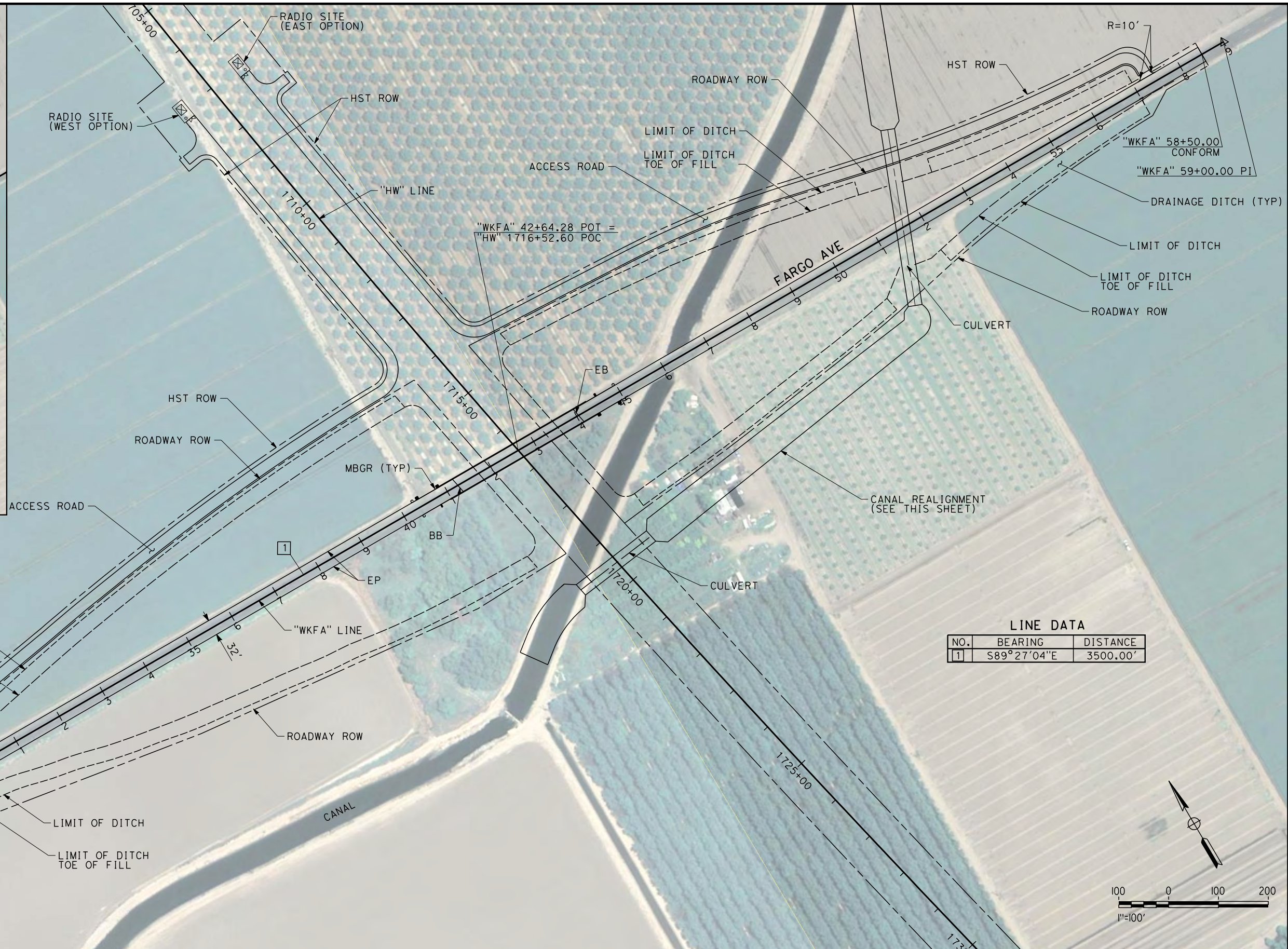
SCALE
AS SHOWN

SHEET NO.
9 OF 47

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CANAL REALIGNMENT
SCALE: 1"=200'



LINE DATA

NO.	BEARING	DISTANCE
1	S89°27'04"E	3500.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
FARGO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1319

SCALE
AS SHOWN

SHEET NO.
10 OF 47

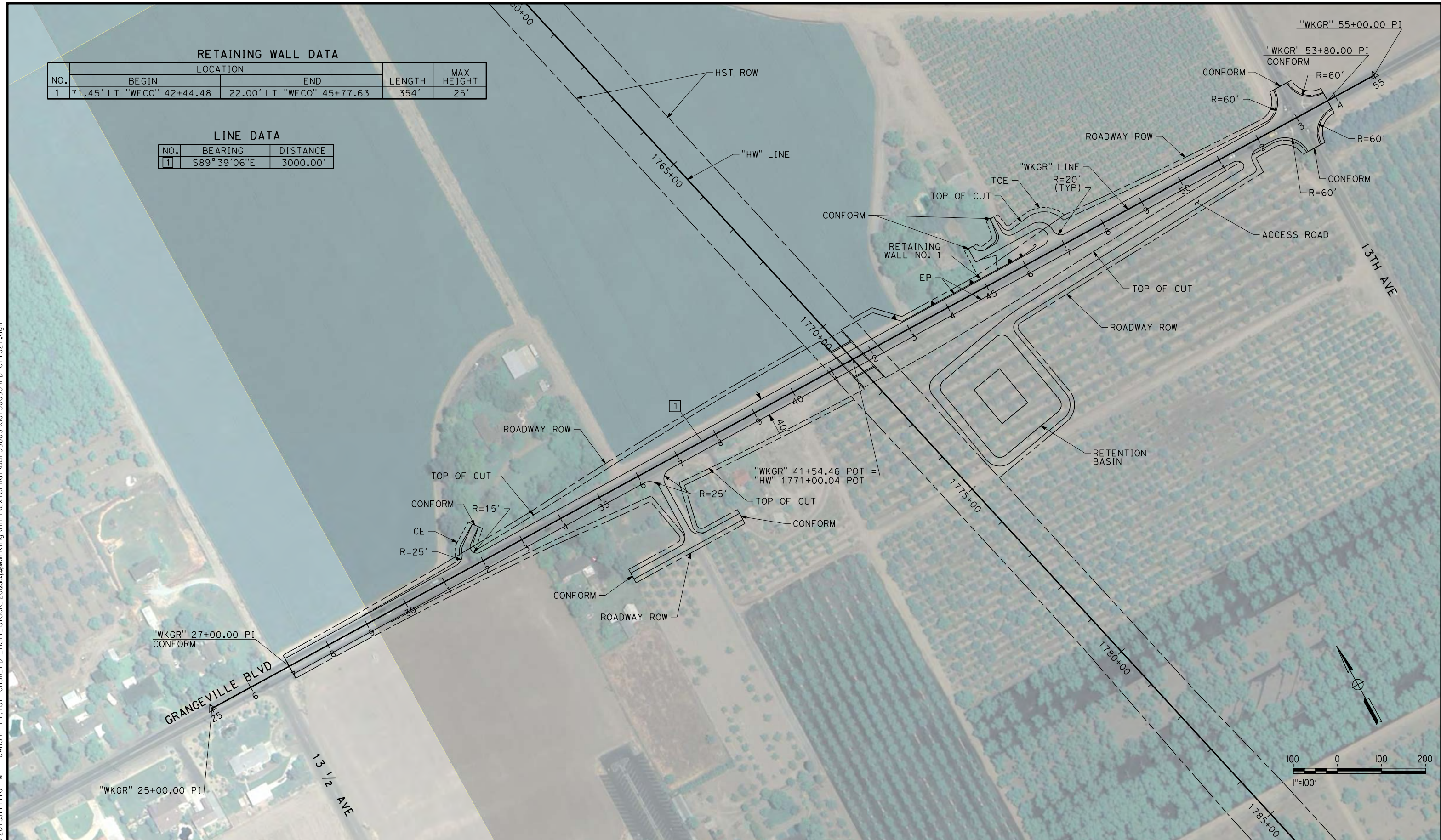
RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	71.45' LT "WFCO" 42+44.48	22.00' LT "WFCO" 45+77.63	354'	25'

LINE DATA

NO.	BEARING	DISTANCE
1	S89°39'06"E	3000.00'

12/30/2013 11:16 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\external\bar59603\external\bar59603.ctb



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
GRANGEVILLE BLVD

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1321
SCALE
AS SHOWN
SHEET NO.
11 OF 47

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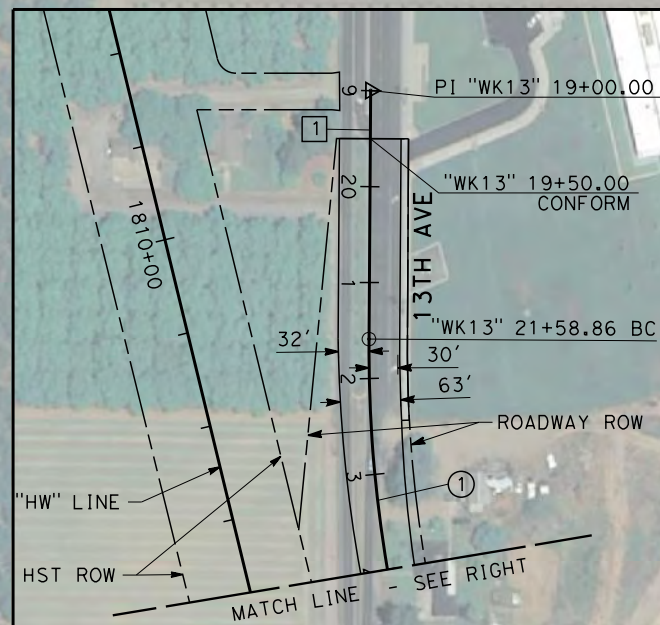
CANAL REALIGNMENT
SCALE: 1"=500'

LINE DATA

NO.	BEARING	DISTANCE
1	S0°22'01"W	258.86'
2	S24°37'59"E	305.76'
3	S0°24'07"W	250.52'
6	S89°35'53"E	2036.02'
7	S79°35'53"E	227.53'
8	S89°35'53"E	366.92'

CURVE DATA

NO.	R	Δ	T	L
①	1400.00'	25°00'00"	310.37'	610.87'
②	1400.00'	25°02'05"	310.82'	611.72'
⑤	1500.00'	10°00'00"	131.23'	261.80'
⑥	1500.00'	10°00'00"	131.23'	261.80'
⑦	1500.00'	10°00'00"	131.23'	261.80'



CANAL REALIGNMENT
(SEE THIS SHEET)



PI "WKLC" 10+00.00

W LACEY BLVD

"WKLC" 12+25.00
CONFORM

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	85.92' LT "WKLC" 27+64.34	82.72' LT "WKLC" 29+04.04	250'	25'
2	86.06' RT "WKLC" 28+01.96	79.79' RT "WKLC" 29+51.16	252'	25'

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

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
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
W LACEY BOULEVARD / 13TH AVE

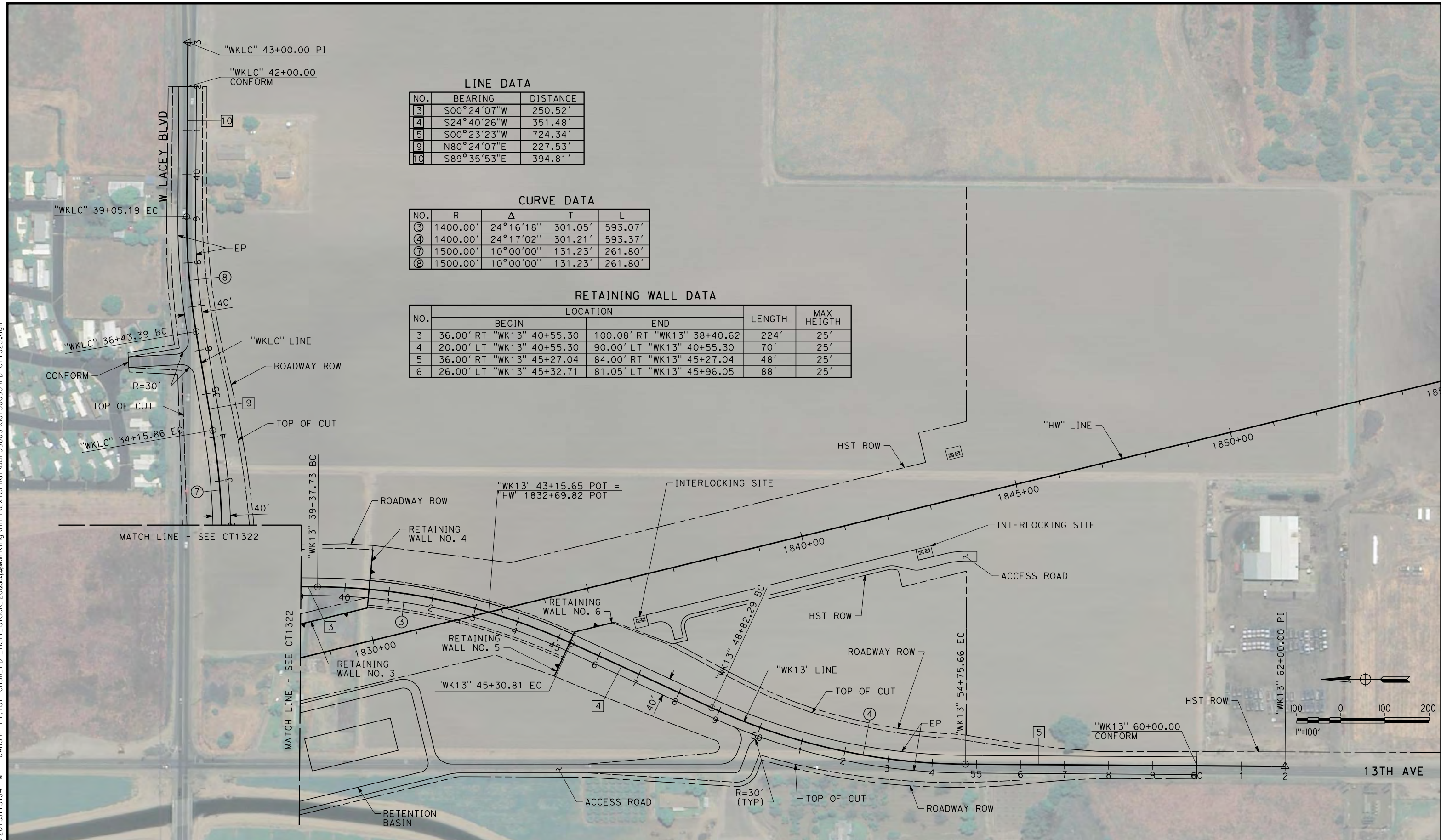
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1322

SCALE
AS SHOWN

SHEET NO.
12 OF 47

12/30/2013 1:31:04 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1323.dgn



LINE DATA

NO.	BEARING	DISTANCE
3	S00°24'07"W	250.52'
4	S24°40'26"W	351.48'
5	S00°23'23"W	724.34'
9	N80°24'07"E	227.53'
10	S89°35'53"E	394.81'

CURVE DATA

NO.	R	Δ	T	L
3	1400.00'	24°16'18"	301.05'	593.07'
4	1400.00'	24°17'02"	301.21'	593.37'
7	1500.00'	10°00'00"	131.23'	261.80'
8	1500.00'	10°00'00"	131.23'	261.80'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
3	36.00' RT "WK13" 40+55.30	100.08' RT "WK13" 38+40.62	224'	25'
4	20.00' LT "WK13" 40+55.30	90.00' LT "WK13" 40+55.30	70'	25'
5	36.00' RT "WK13" 45+27.04	84.00' RT "WK13" 45+27.04	48'	25'
6	26.00' LT "WK13" 45+32.71	81.05' LT "WK13" 45+96.05	88'	25'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
W LACEY BOULEVARD/13TH AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1323
SCALE
AS SHOWN
SHEET NO.
13 OF 47

CURVE DATA

NO.	R	Δ	T	L
①	650.00'	18°22'38"	105.14'	208.48'
②	650.00'	39°04'52"	230.69'	443.36'
④	850.00'	11°05'59"	82.59'	164.67'
⑤	2500.00'	05°55'58"	129.55'	258.87'
⑦	5400.00'	10°23'26"	490.99'	979.28'
⑧	1150.00'	23°23'25"	238.05'	469.47'

LINE DATA

NO.	BEARING	DISTANCE
1	N89°48'41"E	471.95'
2	S71°48'41"E	289.44'
3	N69°06'27"E	720.70'
5	N68°48'35"E	482.85'
6	N79°54'34"E	210.72'
7	N73°58'35"E	819.15'
8	N69°06'27"E	2832.27'
10	N57°34'17"E	276.77'
11	N67°57'43"E	522.98'
12	S66°00'45"E	90.94'
13	S89°24'10"E	3439.59'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	114.49' LT "SR198" 27+14.08	114.80' LT "SR198" 29+45.51	231'	4'

12/30/2013 11:31:52 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1327.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
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IN CHARGE
R. COFFIN
DATE
12/31/13

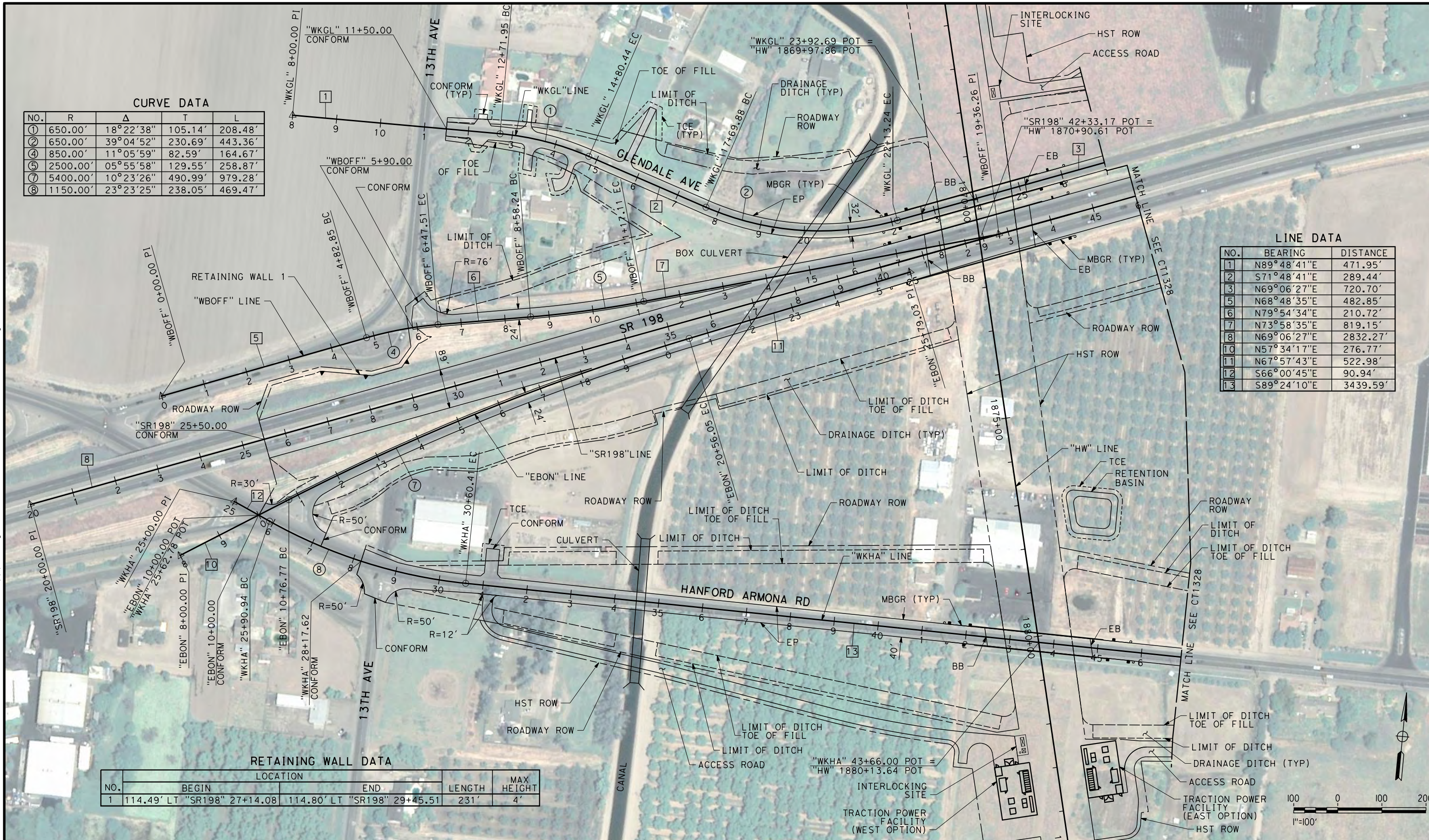
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

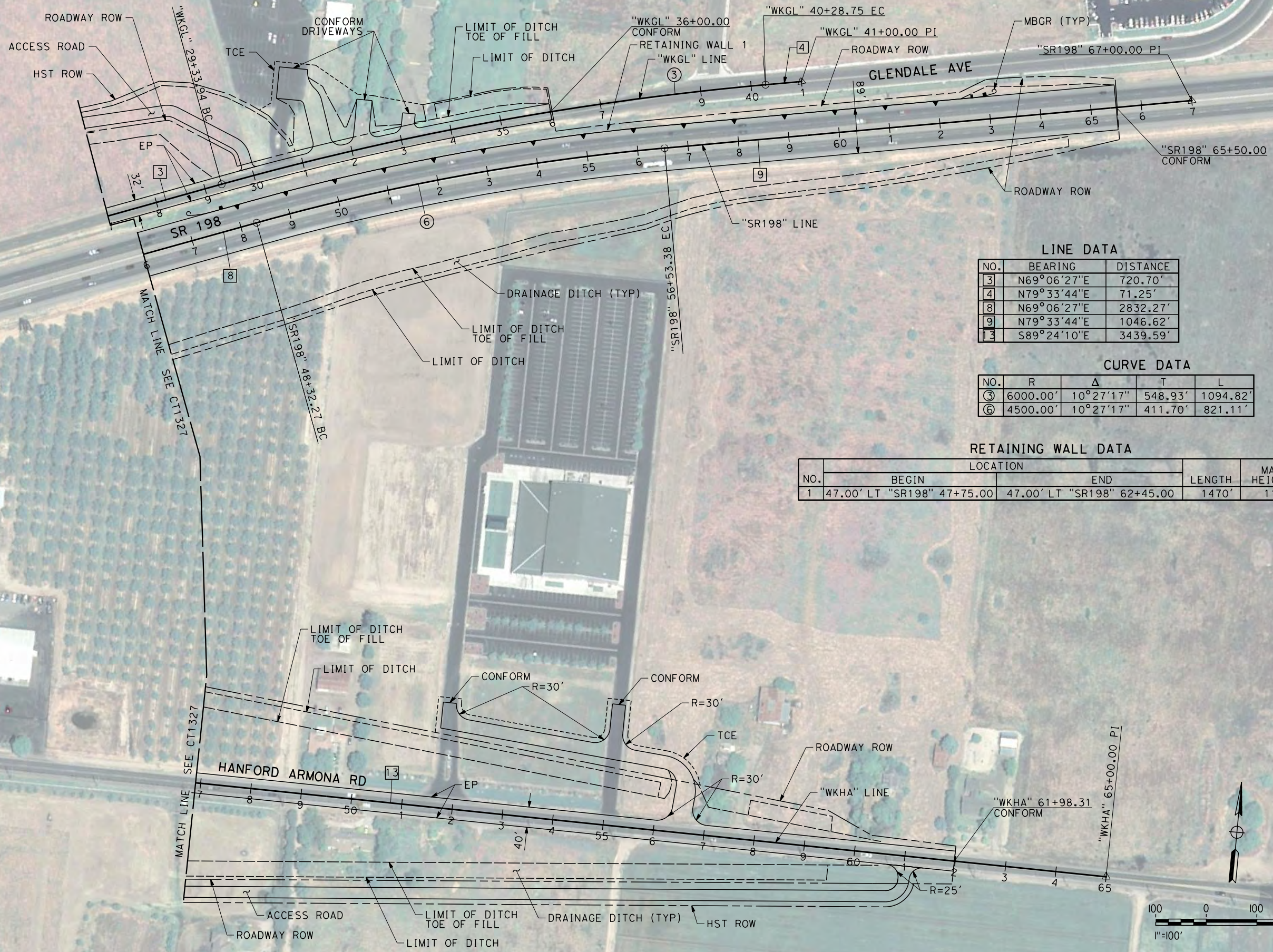


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
GLENDALE AVE/STATE ROUTE 198/HANFORD ARMONA RD

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1327
SCALE
AS SHOWN
SHEET NO.
14 OF 47



12/30/2013 1:41:24 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT1328.dgn



LINE DATA

NO.	BEARING	DISTANCE
3	N69°06'27"E	720.70'
4	N79°33'44"E	71.25'
8	N69°06'27"E	2832.27'
9	N79°33'44"E	1046.62'
13	S89°24'10"E	3439.59'

CURVE DATA

NO.	R	Δ	T	L
3	6000.00'	10°27'17"	548.93'	1094.82'
6	4500.00'	10°27'17"	411.70'	821.11'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	47.00' LT "SR198" 47+75.00	47.00' LT "SR198" 62+45.00	1470'	11'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
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CHECKED BY
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R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

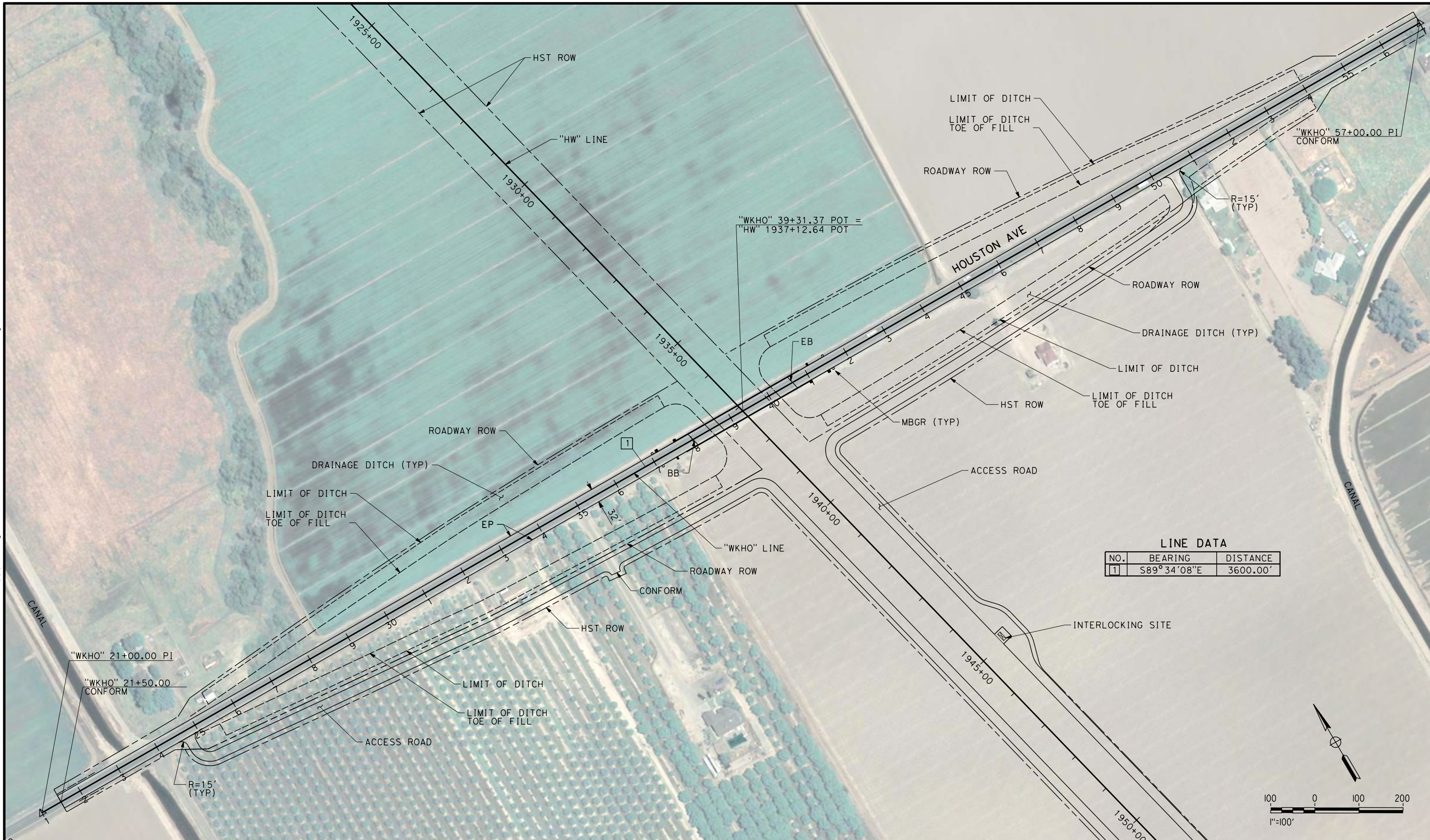
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
GLENDALE AVE/STATE ROUTE 198/HANFORD ARMONA RD

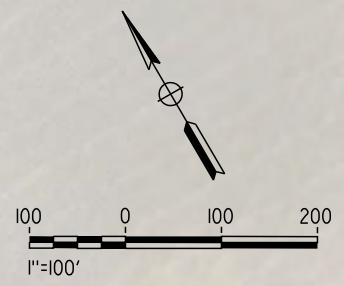
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1328
SCALE
AS SHOWN
SHEET NO.
15 OF 47

12/30/2013 1:15:06 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb CT1334.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89° 34' 08" E	3600.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

HANFORD WEST BYPASS SUBSECTION

ALIGNMENT HW

GRADE SEPARATION LAYOUT

HOUSTON AVE

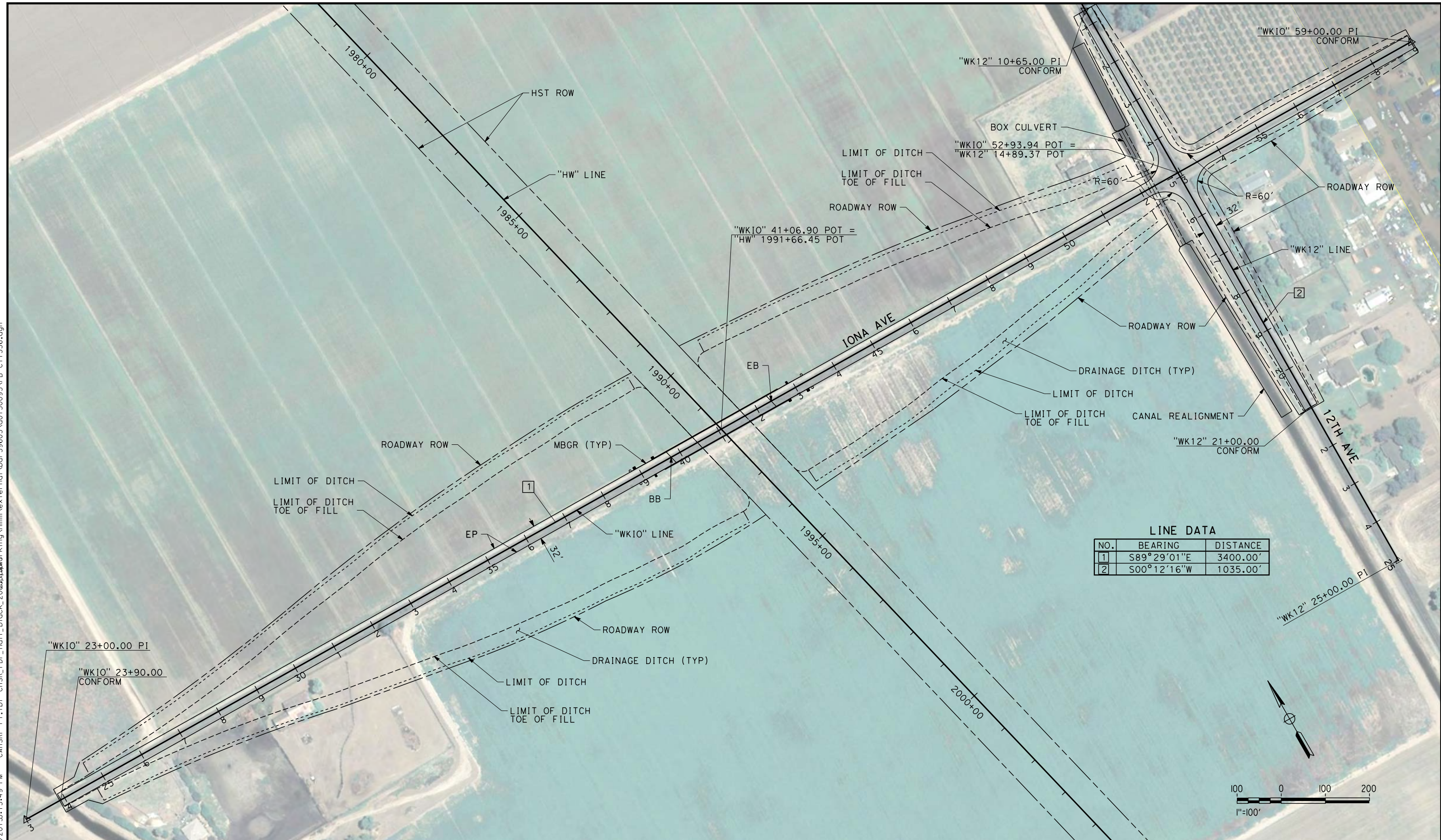
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1334

SCALE
AS SHOWN

SHEET NO.
16 OF 47

12/30/2013 11:15:49 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb



LINE DATA

NO.	BEARING	DISTANCE
1	S89°29'01"E	3400.00'
2	S00°12'16"W	1035.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



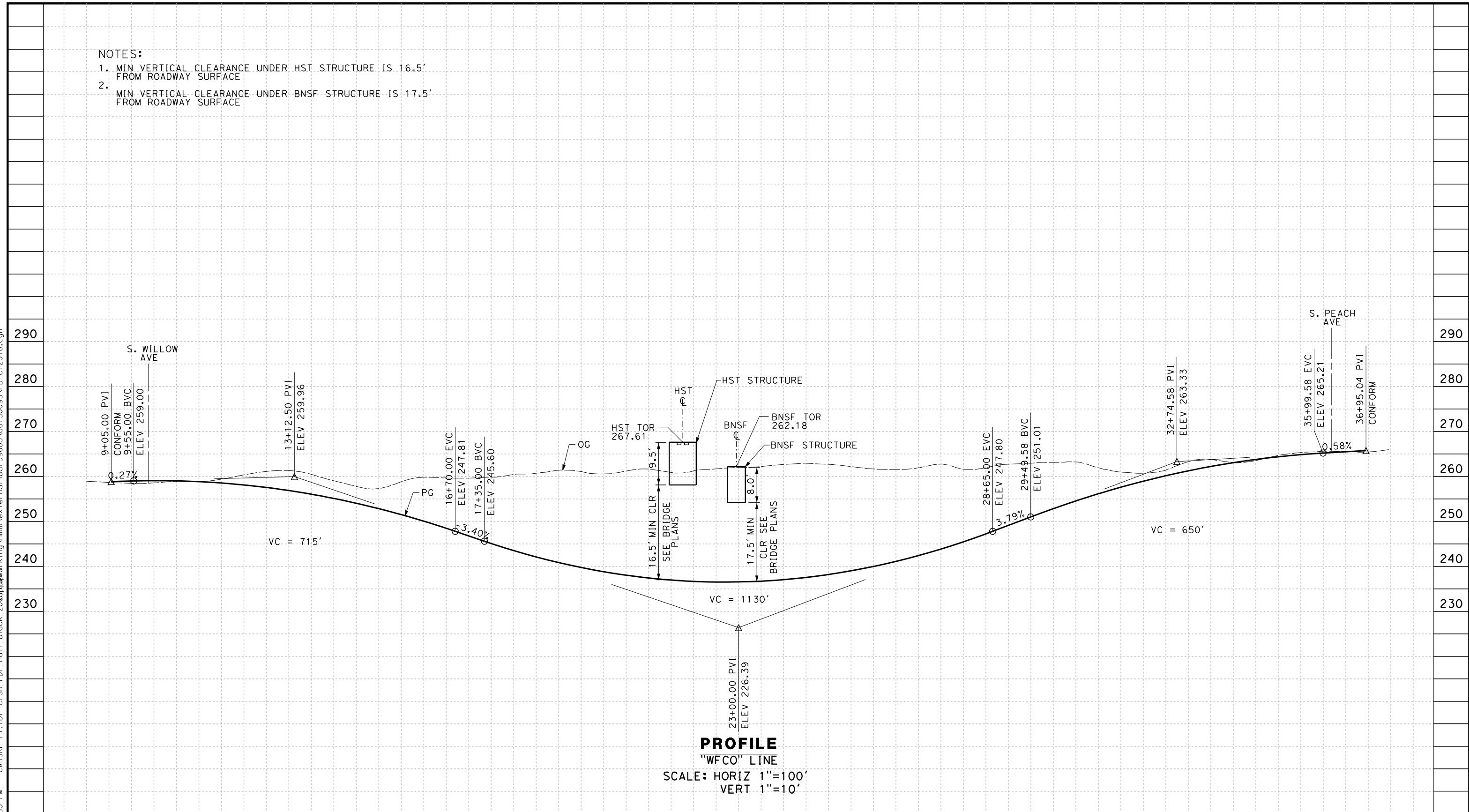
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION LAYOUT
IONA AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1336
SCALE
AS SHOWN
SHEET NO.
17 OF 47

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE
2. MIN VERTICAL CLEARANCE UNDER BNSF STRUCTURE IS 17.5' FROM ROADWAY SURFACE

12/30/2013 2:35 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\ad0150095\FB-CT2310.dgn



STATION	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL		
Exc																																
Emb																																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 E CONEJO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2310

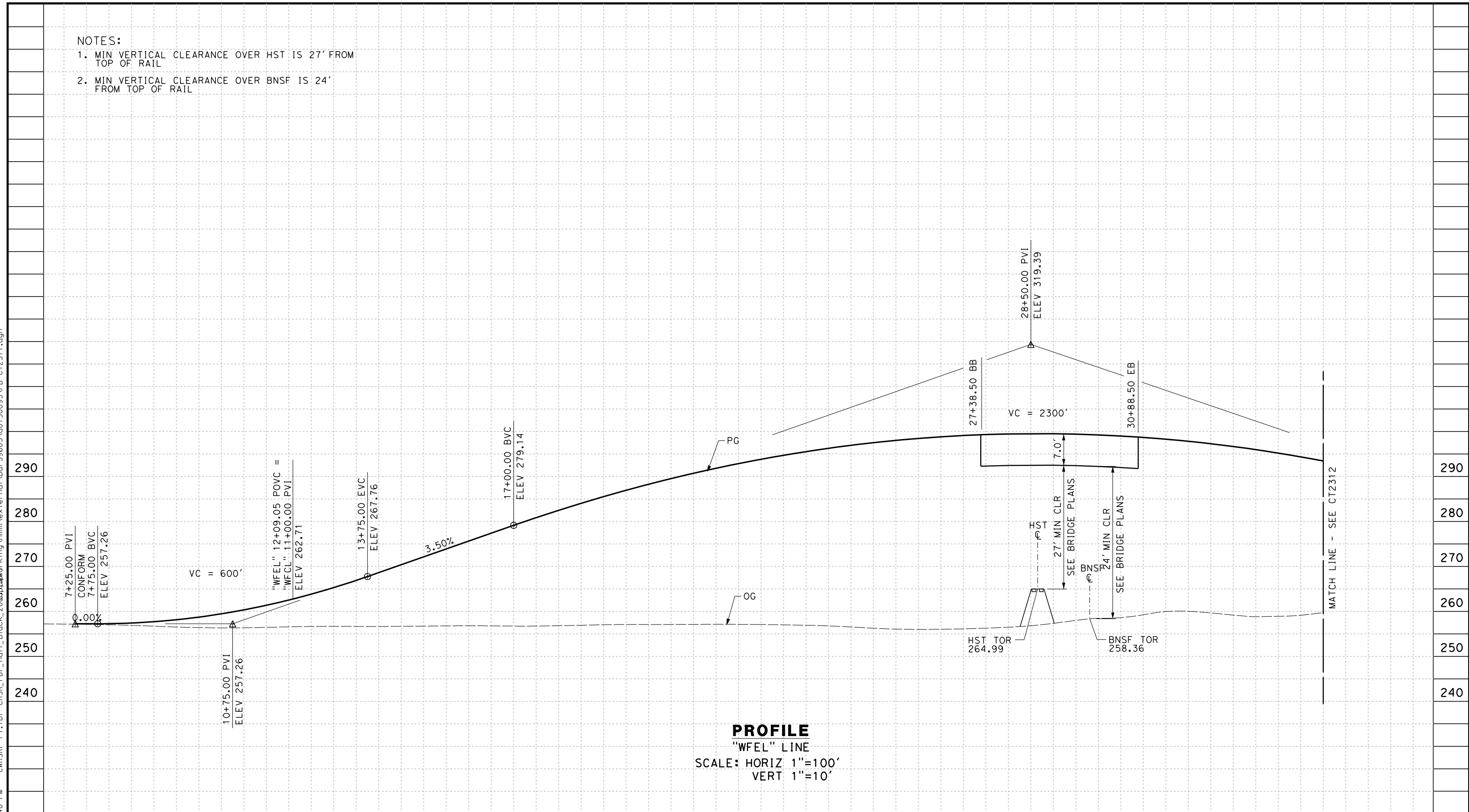
SCALE
AS SHOWN

SHEET NO.
18 OF 47

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MIN VERTICAL CLEARANCE OVER BNSF IS 24' FROM TOP OF RAIL

12/30/2013 3:26:40 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT2311.dgn



STATION	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	TOTAL	
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 E ELKHORN AVE

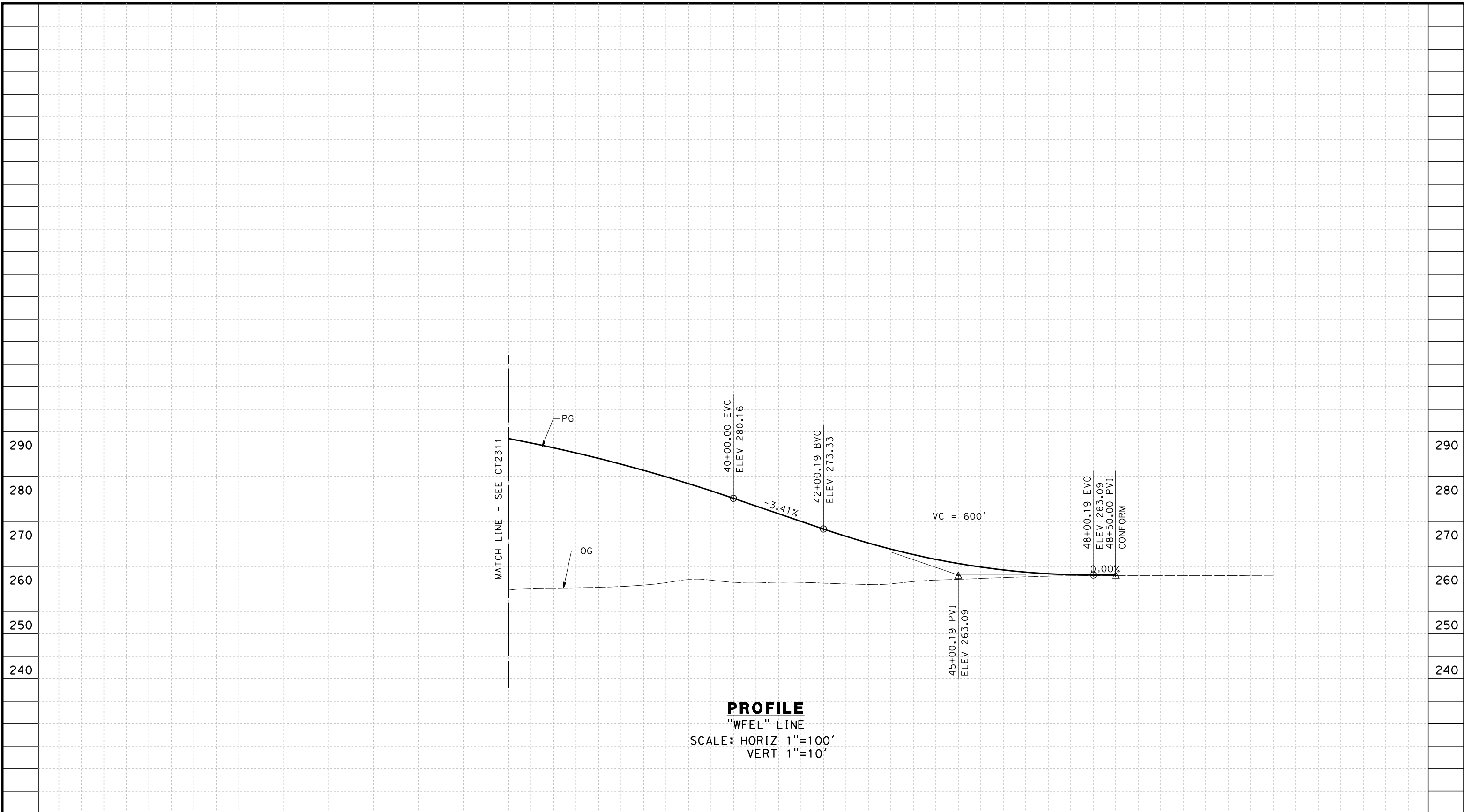
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2311

SCALE
AS SHOWN

SHEET NO.
19 OF 47

12/30/2013 3:16:38 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150095\FB-CT2312.dgn



PROFILE
 "WFEL" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 E ELKHORN AVE

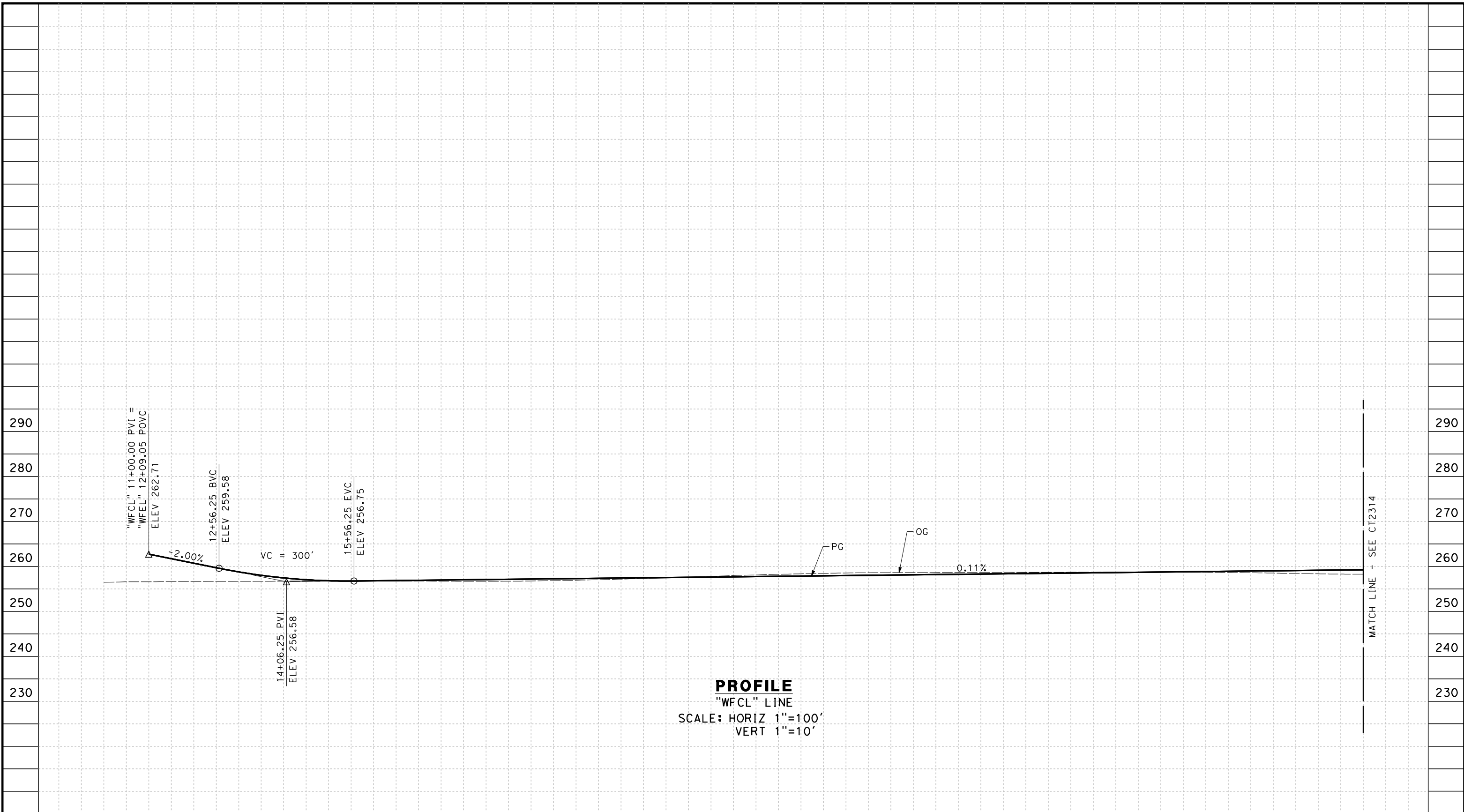
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2312

SCALE
AS SHOWN

SHEET NO.
20 OF 47

12/30/2013 3:16:55 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\ad0150095\FB-CT2313.dgn



PROFILE
 "WFCL" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

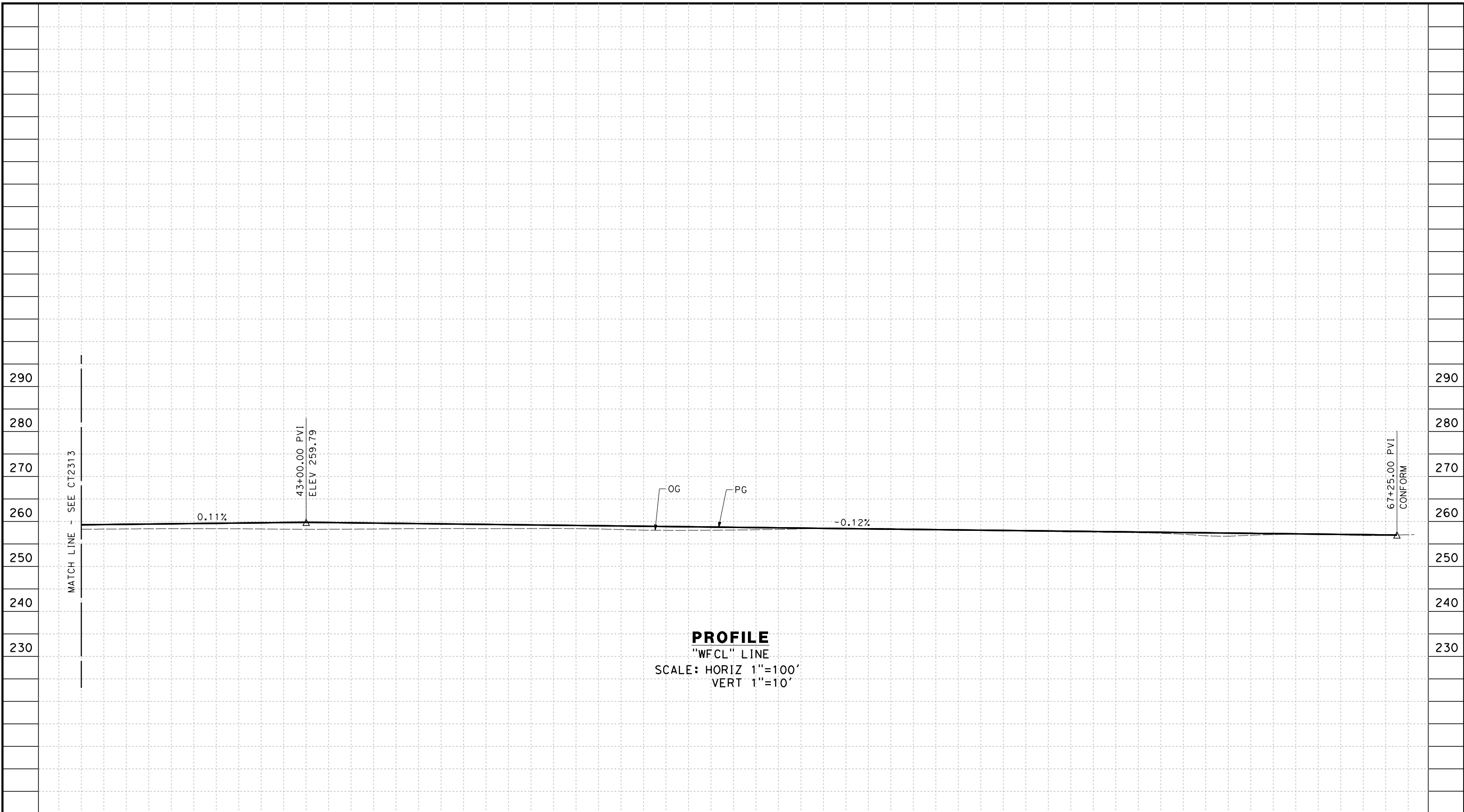
**RECORD SET 15%
 DESIGN SUBMISSION**
 -
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 S CLOVIS AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2313
 SCALE
AS SHOWN
 SHEET NO.
21 OF 47

12/30/2013 3:17:12 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150095\FB-CT2314.dgn



STATION	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	6	7	TOTAL
CY																															
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION PROFILE
S CLOVIS AVE

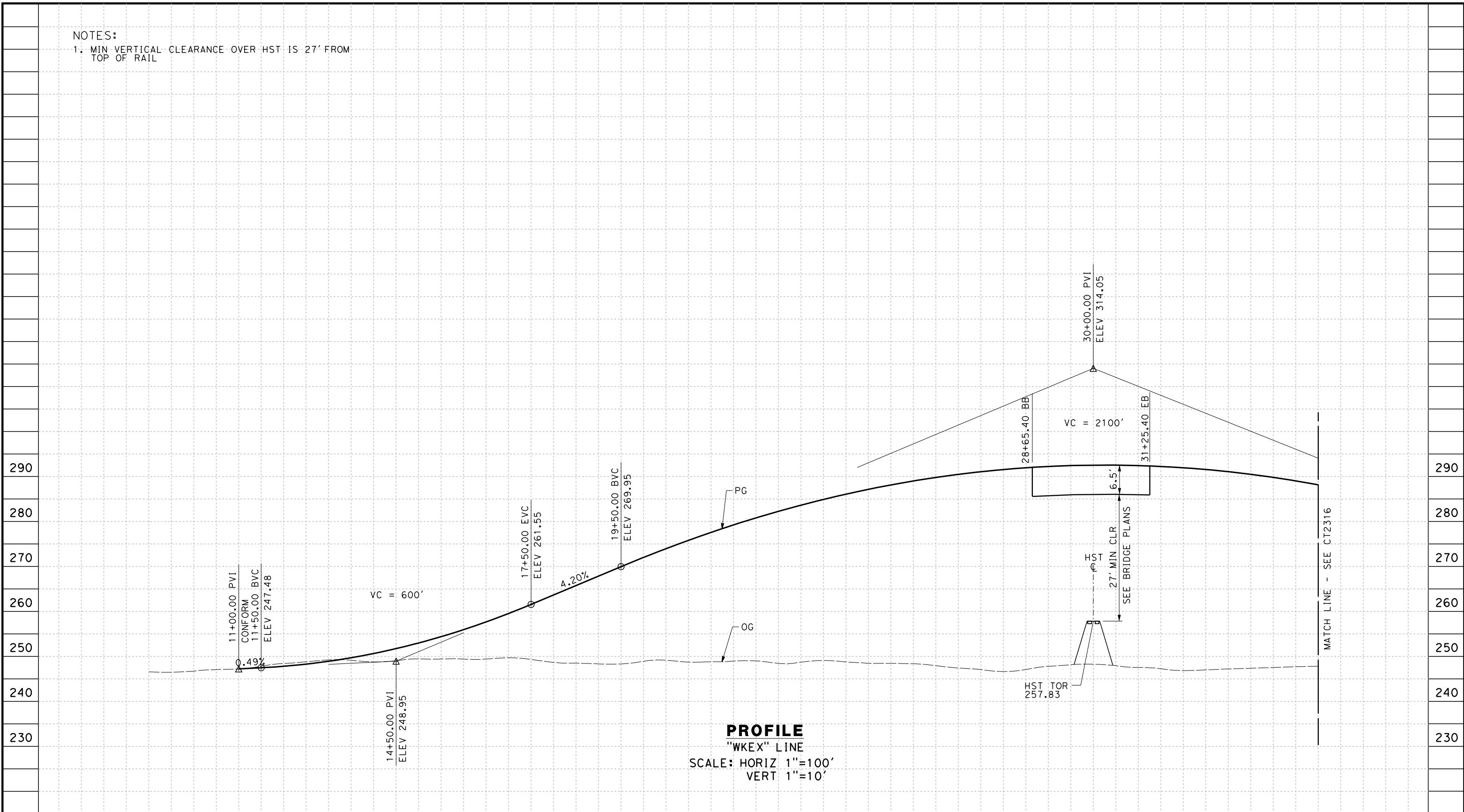
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2314

SCALE
AS SHOWN

SHEET NO.
22 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL



STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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

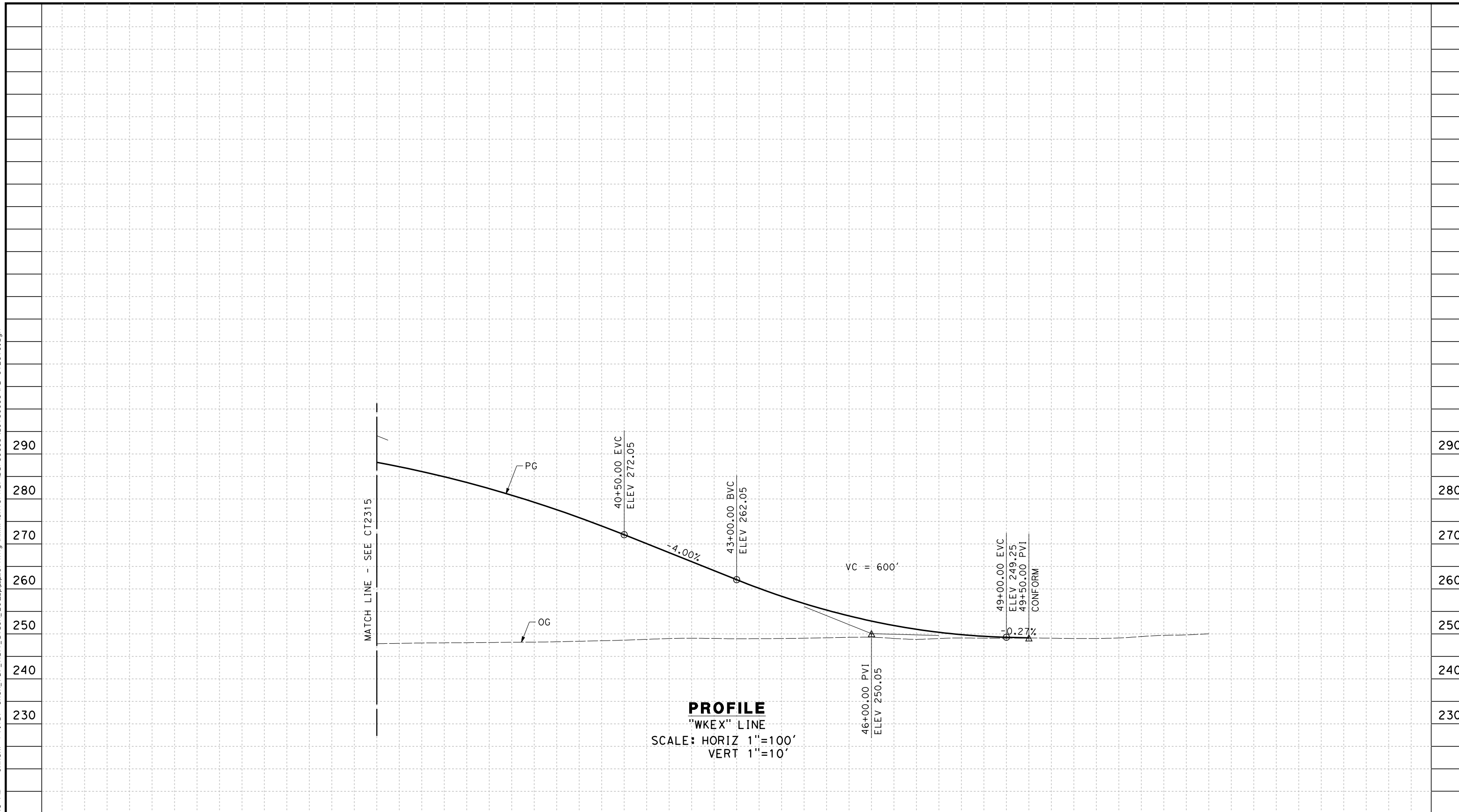


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2315
 SCALE
AS SHOWN
 SHEET NO.
23 OF 47

12/30/2013 3:30:41 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\hmm\external\bar59603\0150095\FB-CT2315.dgn

12/30/2013 3:17:45 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150095\FB-CT2316.dgn



STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	TOTAL	
Exc																					
Emb																					

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2316

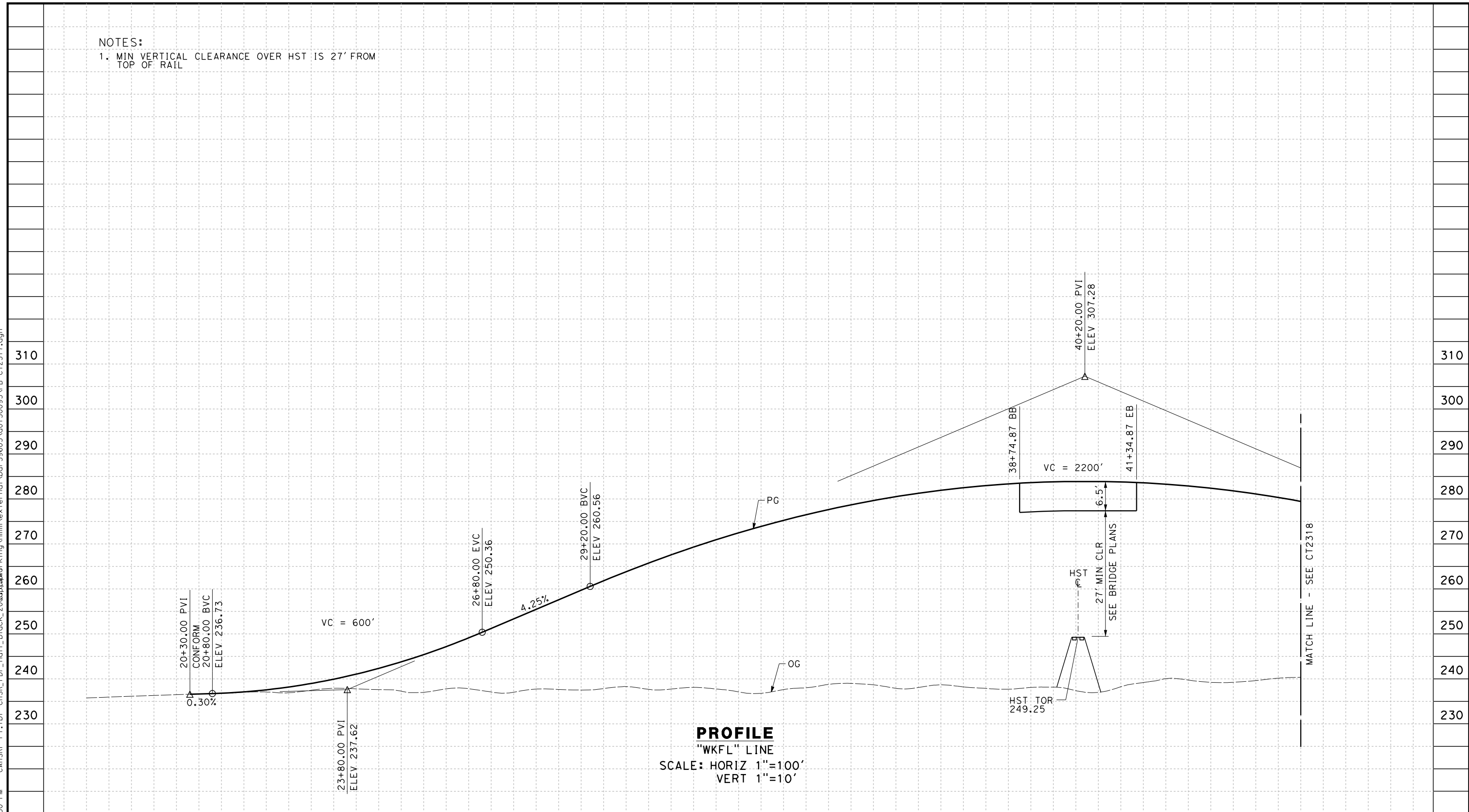
SCALE
AS SHOWN

SHEET NO.
24 OF 47

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL

12/30/2013 3:32:50 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb CT2317.dgn



PROFILE
 "WKFL" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 FLINT AVE

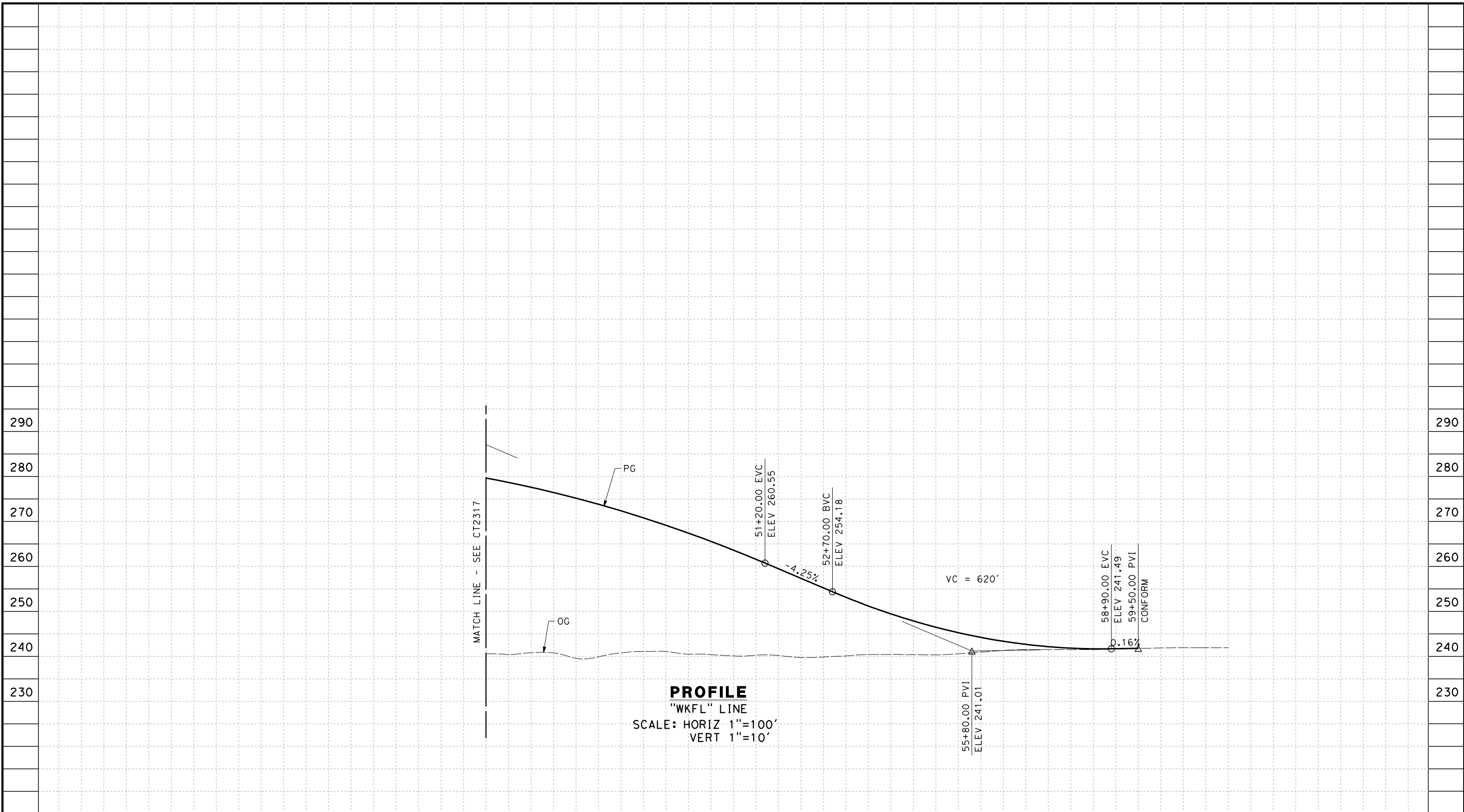
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2317

SCALE
AS SHOWN

SHEET NO.
25 OF 47

12/30/2013 3:18:19 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150095\FB-CT2318.dgn



STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 FLINT AVE

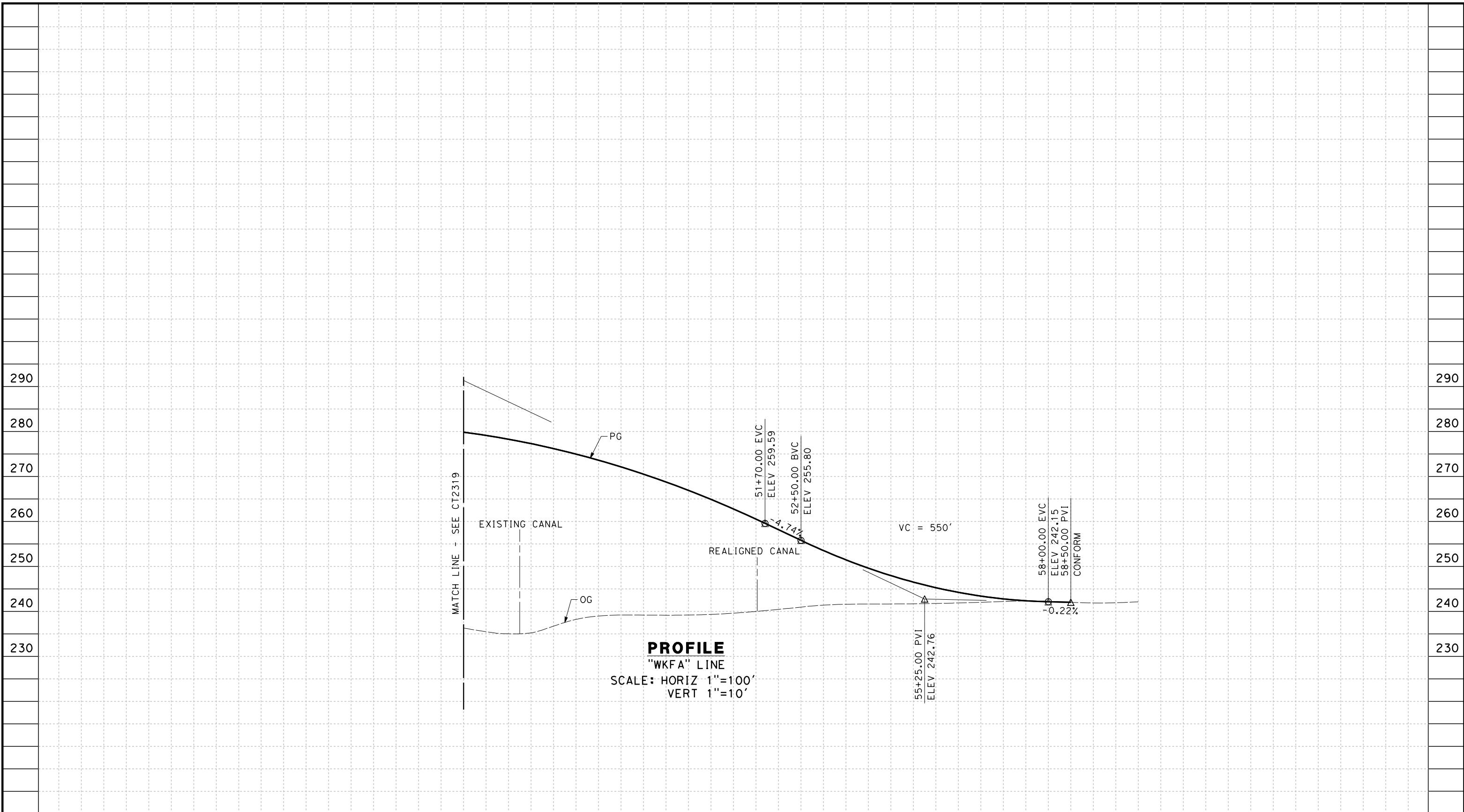
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2318

SCALE
AS SHOWN

SHEET NO.
26 OF 47

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STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION PROFILE
FARGO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2320

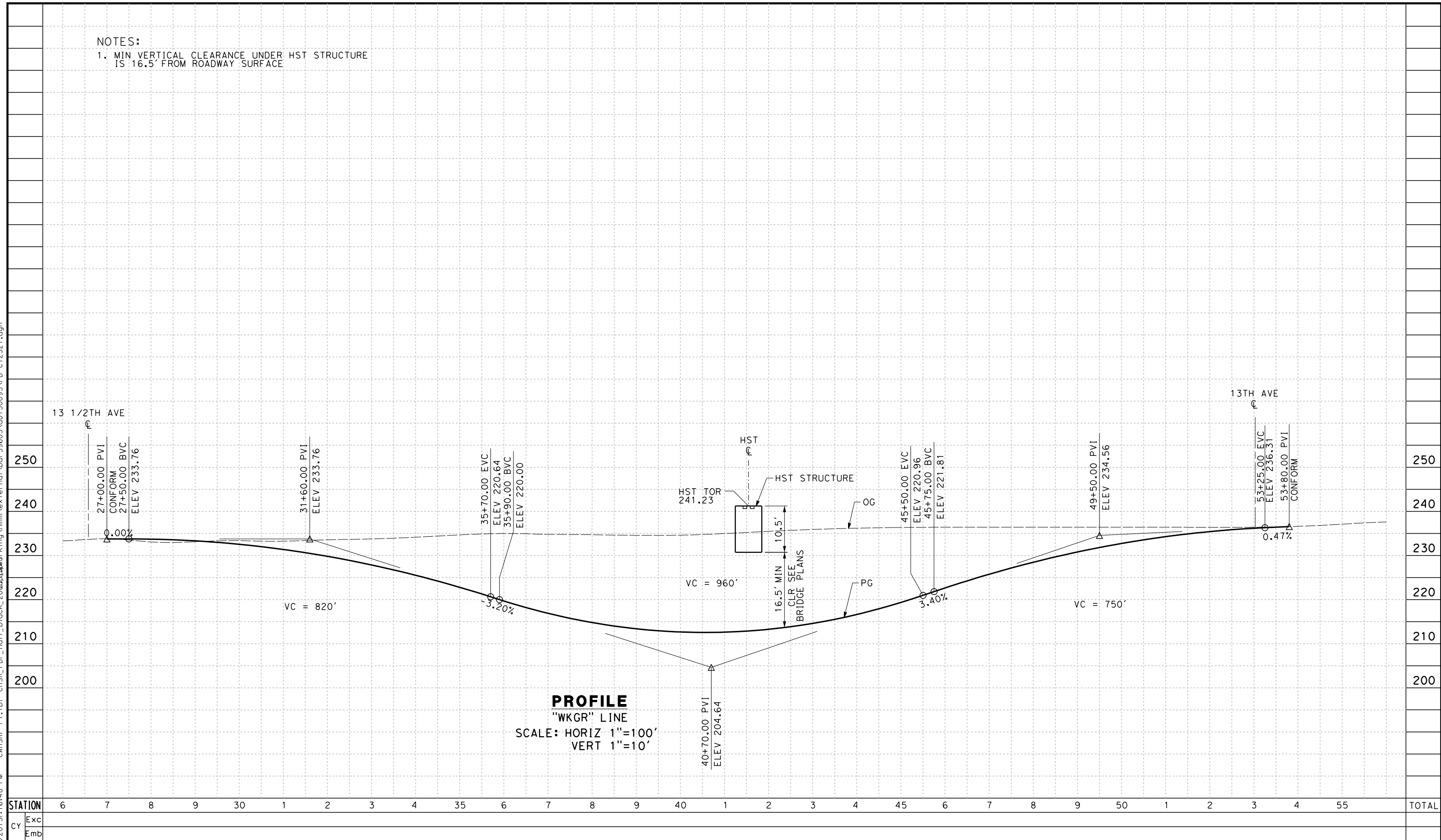
SCALE
AS SHOWN

SHEET NO.
28 OF 47

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/30/2013 1:16:48 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT2321.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 GRANGEVILLE BLVD

CONTRACT NO.
HSR 06-0003

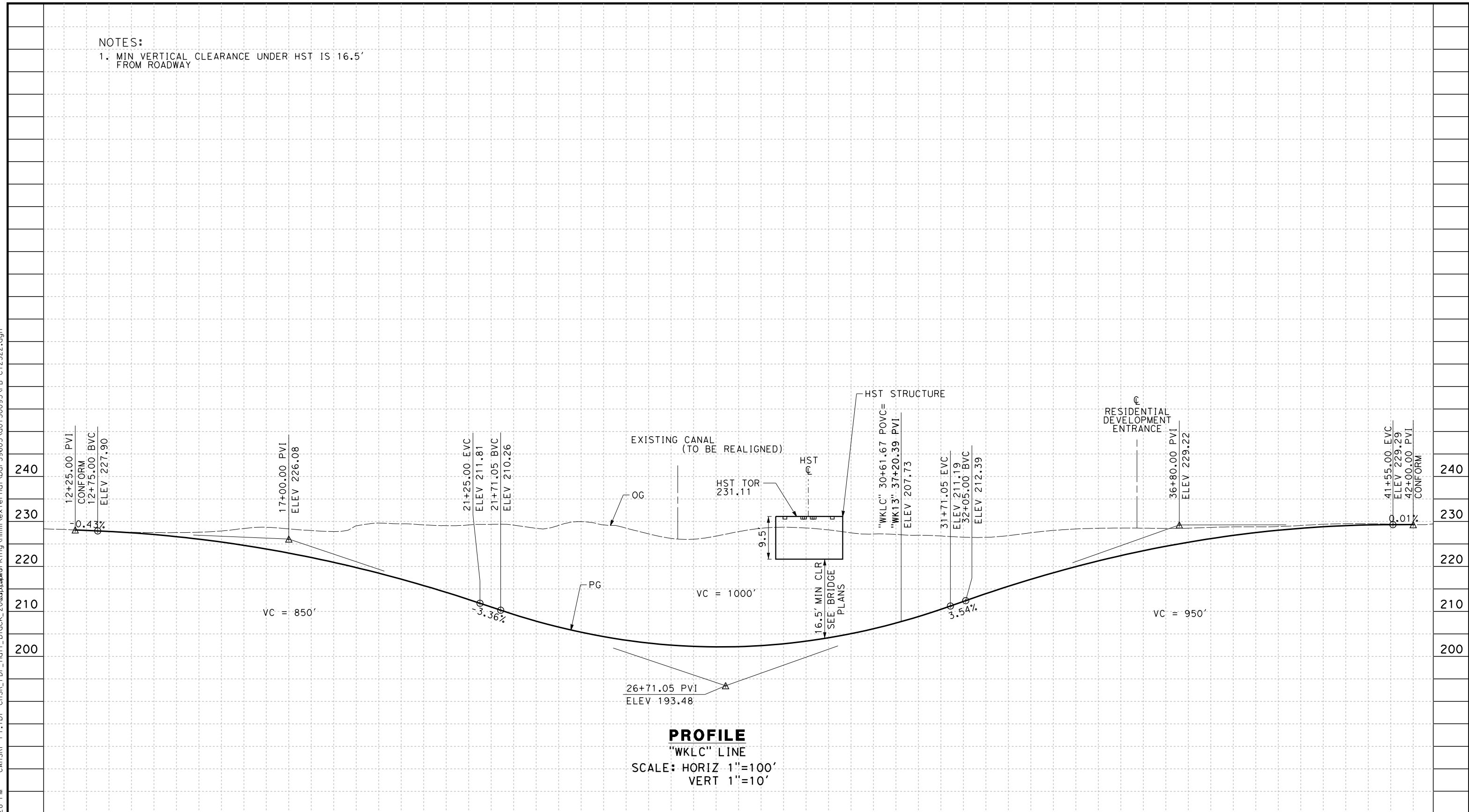
DRAWING NO.
CT2321

SCALE
AS SHOWN

SHEET NO.
29 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE UNDER HST IS 16.5'
 FROM ROADWAY

12/30/2013 1:19:28 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150095\FB-CT2322.dgn



PROFILE
 "WKLC" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	TOTAL	
Exc																																	
Emb																																	

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

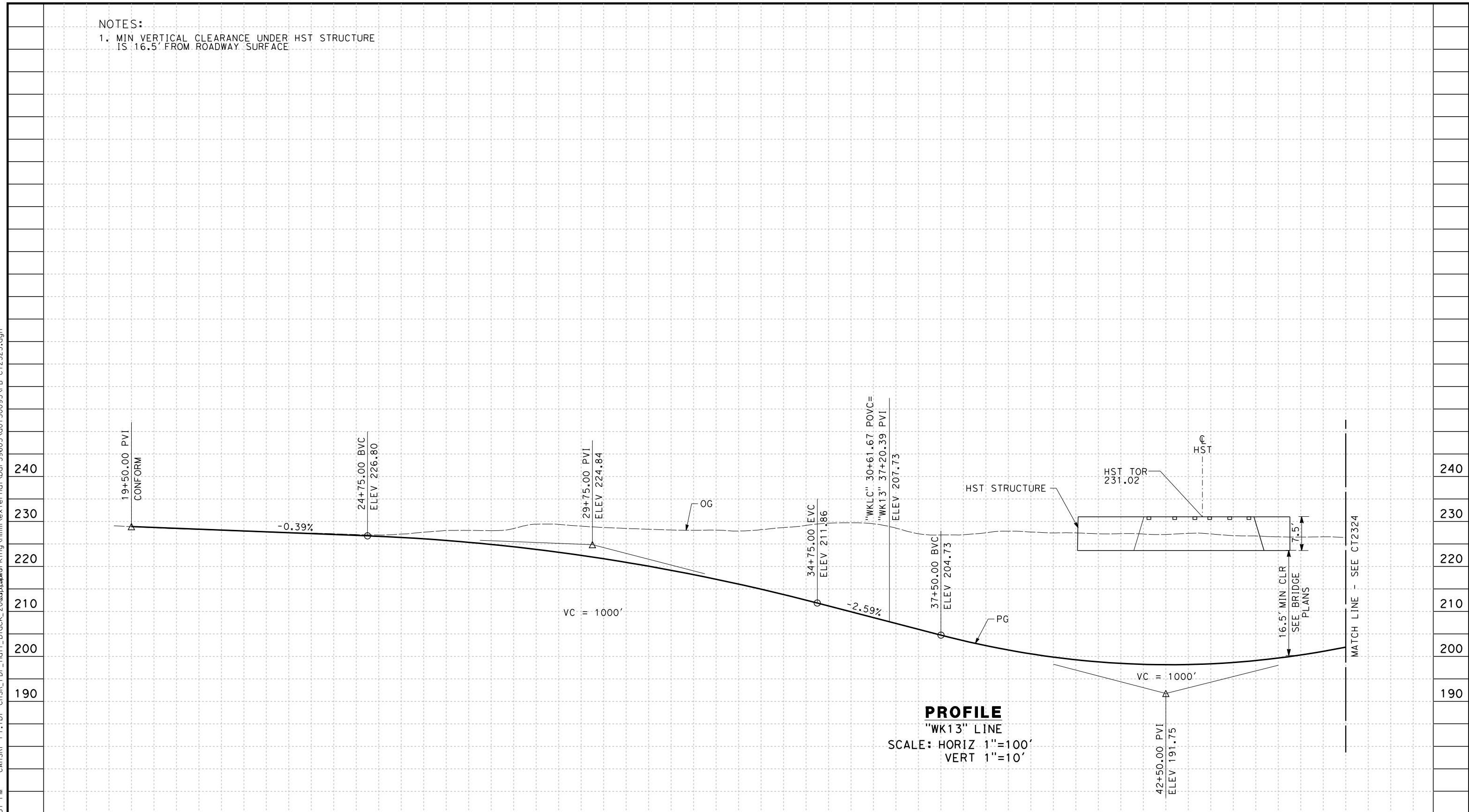


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 W LACEY BLVD

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2322
SCALE	AS SHOWN
SHEET NO.	30 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/30/2013 12:31:31 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603\FB-CT2323.dgn



PROFILE
 "WK13" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	TOTAL
Exc																												
Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

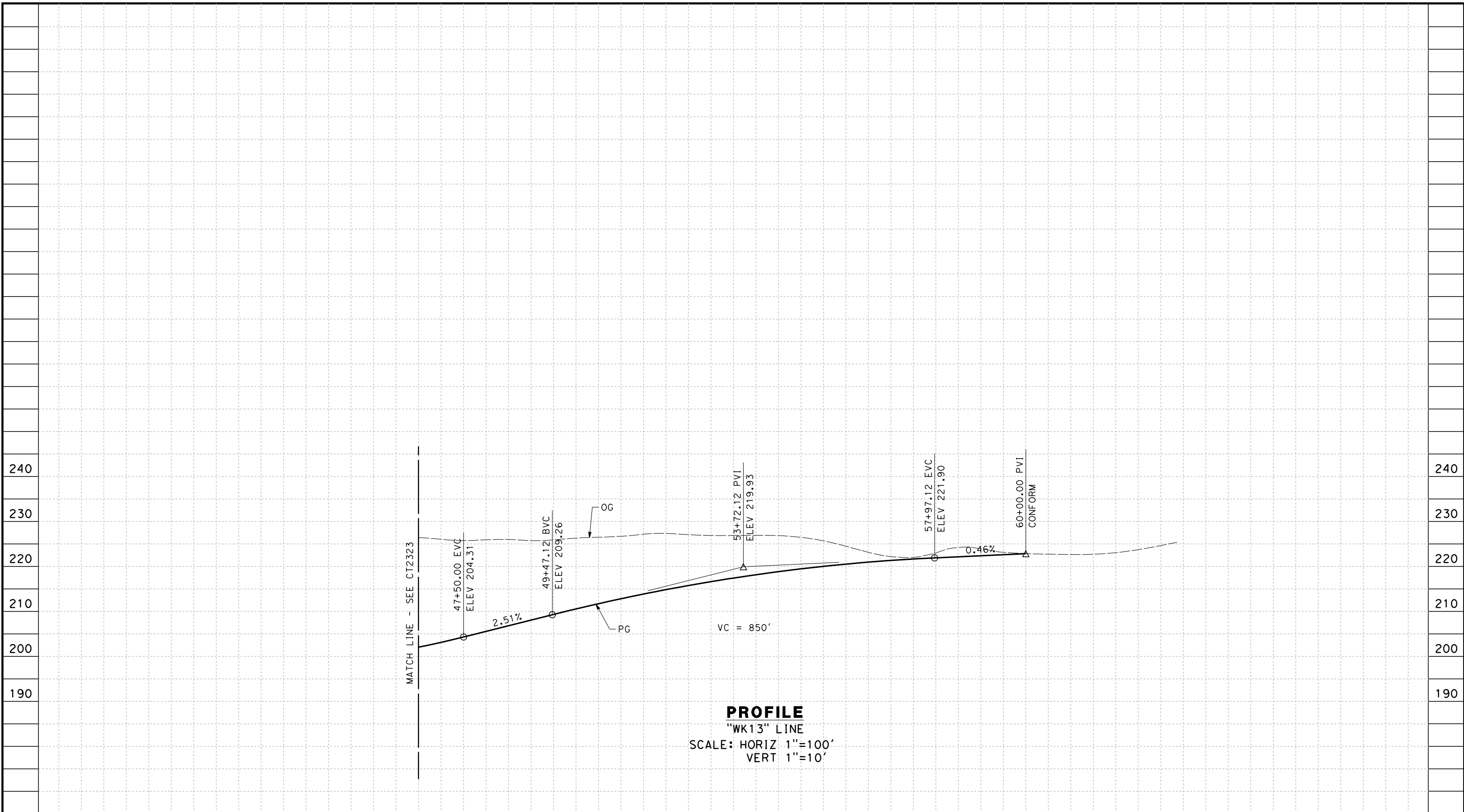
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 13TH AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2323
 SCALE
AS SHOWN
 SHEET NO.
31 OF 47

12/30/2013 3:20:05 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603\d0150095\FB-CT2324.dgn



STATION	7	8	9	50	1	2	3	4	55	6	7	8	9	60	TOTAL
Exc															
Emb															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEPARATION PROFILE
13TH AVE

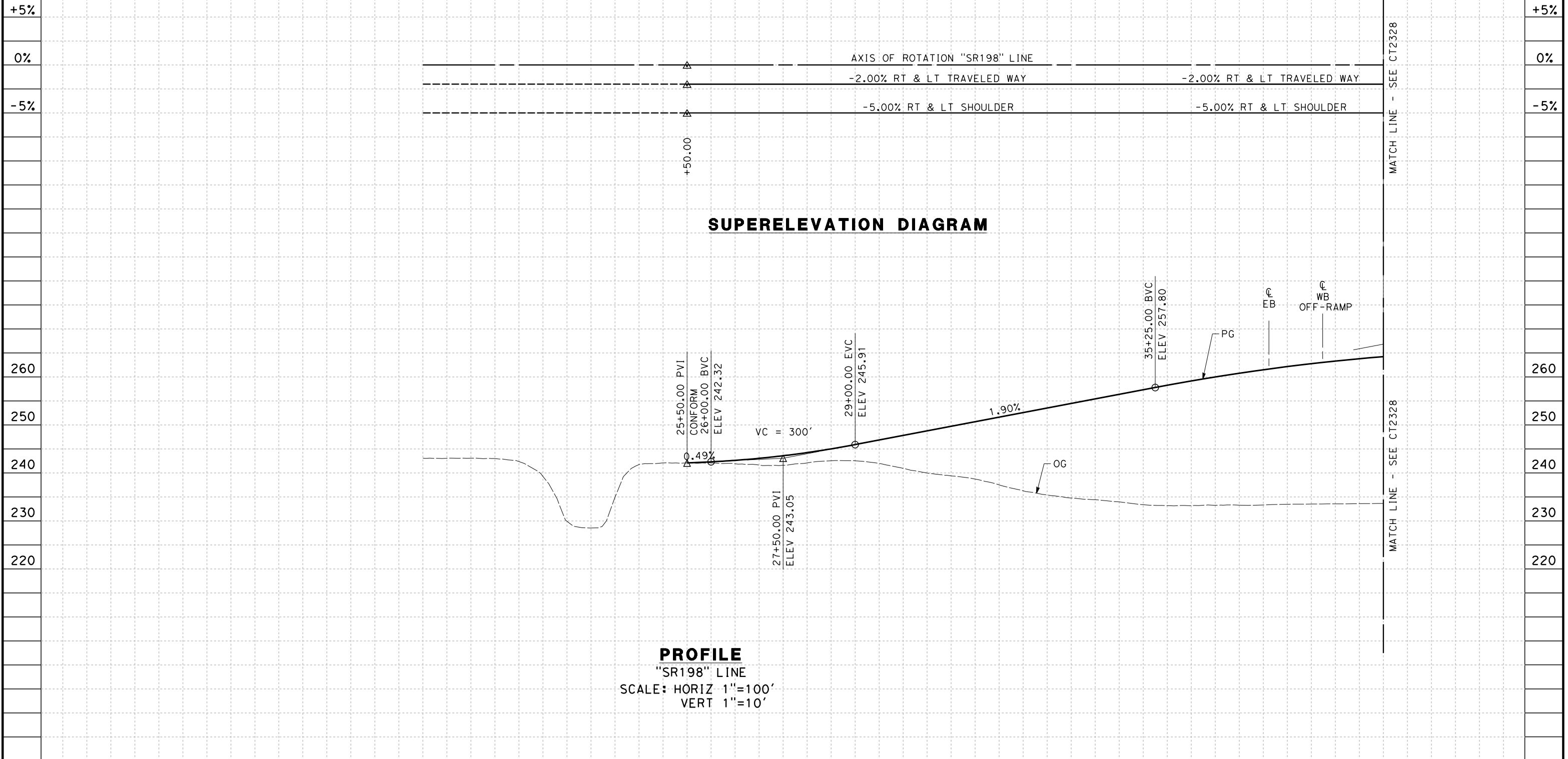
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2324

SCALE
AS SHOWN

SHEET NO.
32 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL



SUPERELEVATION DIAGRAM

PROFILE
 "SR198" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	TOTAL	
Exc																							
Emb																							

DESIGNED BY	I. JOSIFEK
DRAWN BY	P. BARBER
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



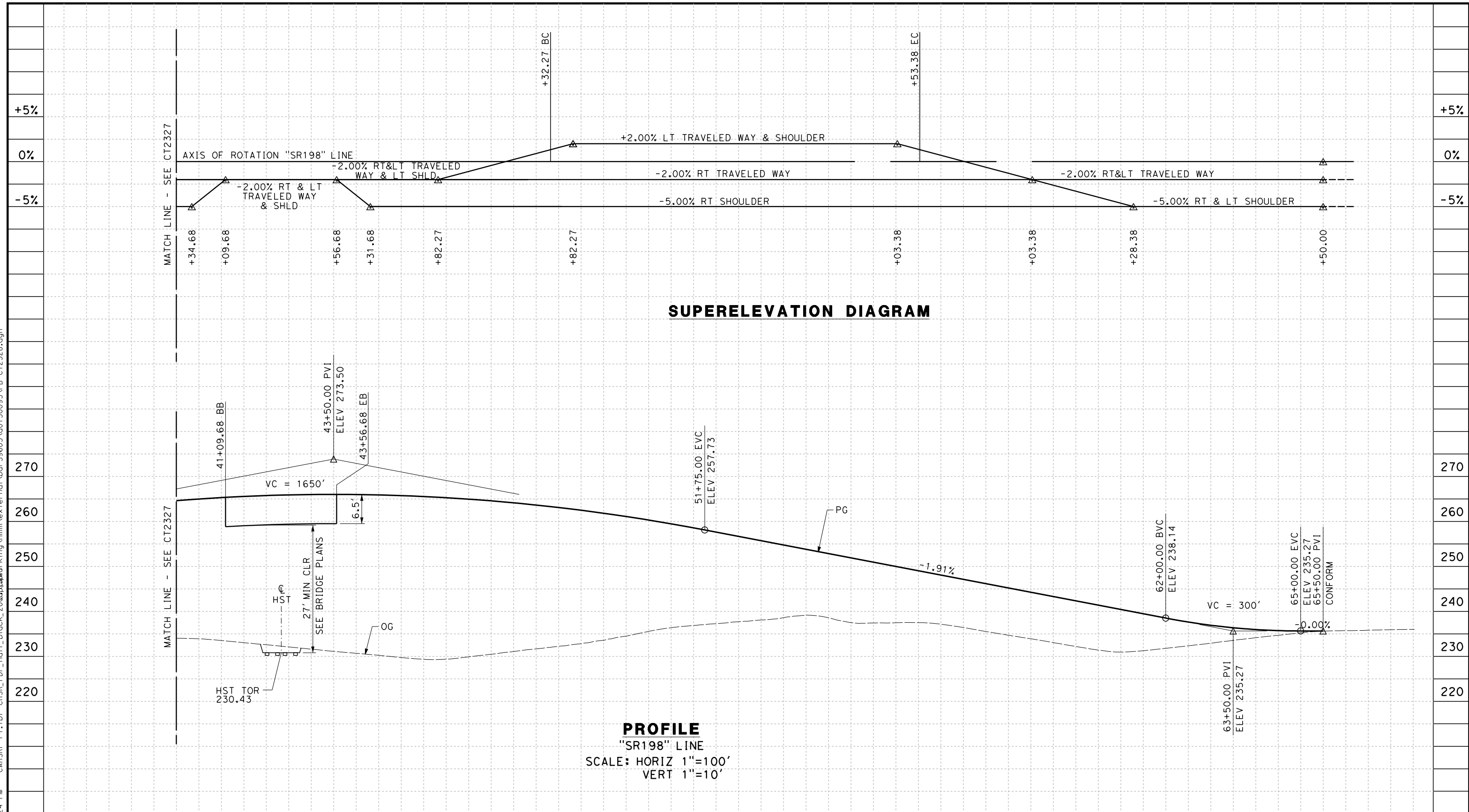
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM
 STATE ROUTE 198

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2327
SCALE	AS SHOWN
SHEET NO.	33 OF 47

12/30/2013 3:20:22 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603\external\bar59603.ctb

12/30/2013 1:25:24 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT2328.dgn



STATION	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	6	TOTAL
Exc																												
Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM
STATE ROUTE 198

CONTRACT NO.
HSR 06-0003

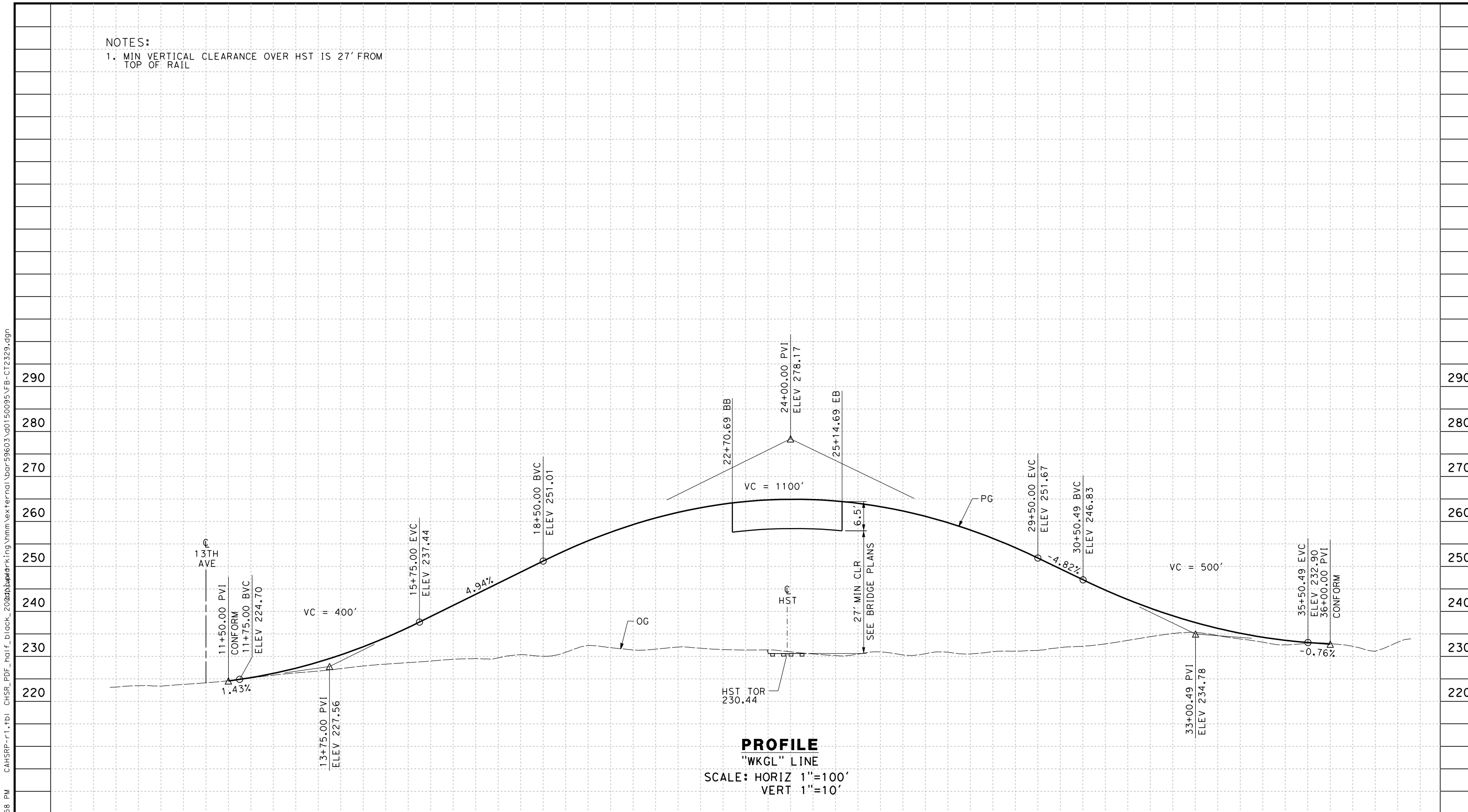
DRAWING NO.
CT2328

SCALE
AS SHOWN

SHEET NO.
34 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL

12/30/2013 1:23:58 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150095\FB-CT2329.dgn



STATION	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	TOTAL	
Exc																																
Emb																																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
P. BARBER
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

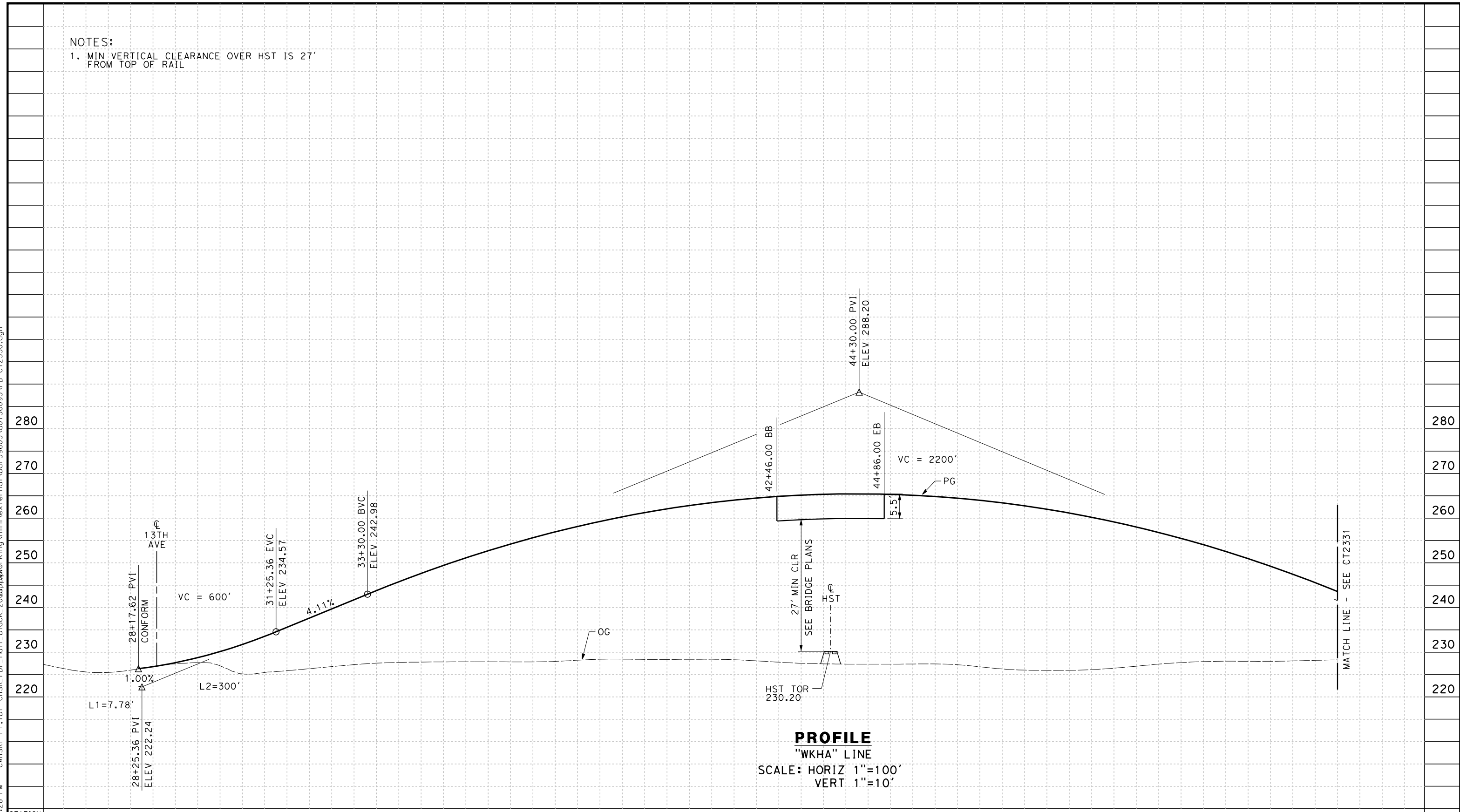
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 GLENDALE AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2329
 SCALE
AS SHOWN
 SHEET NO.
35 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL



PROFILE
 "WKHA" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	6	TOTAL
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
P. BARBER
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

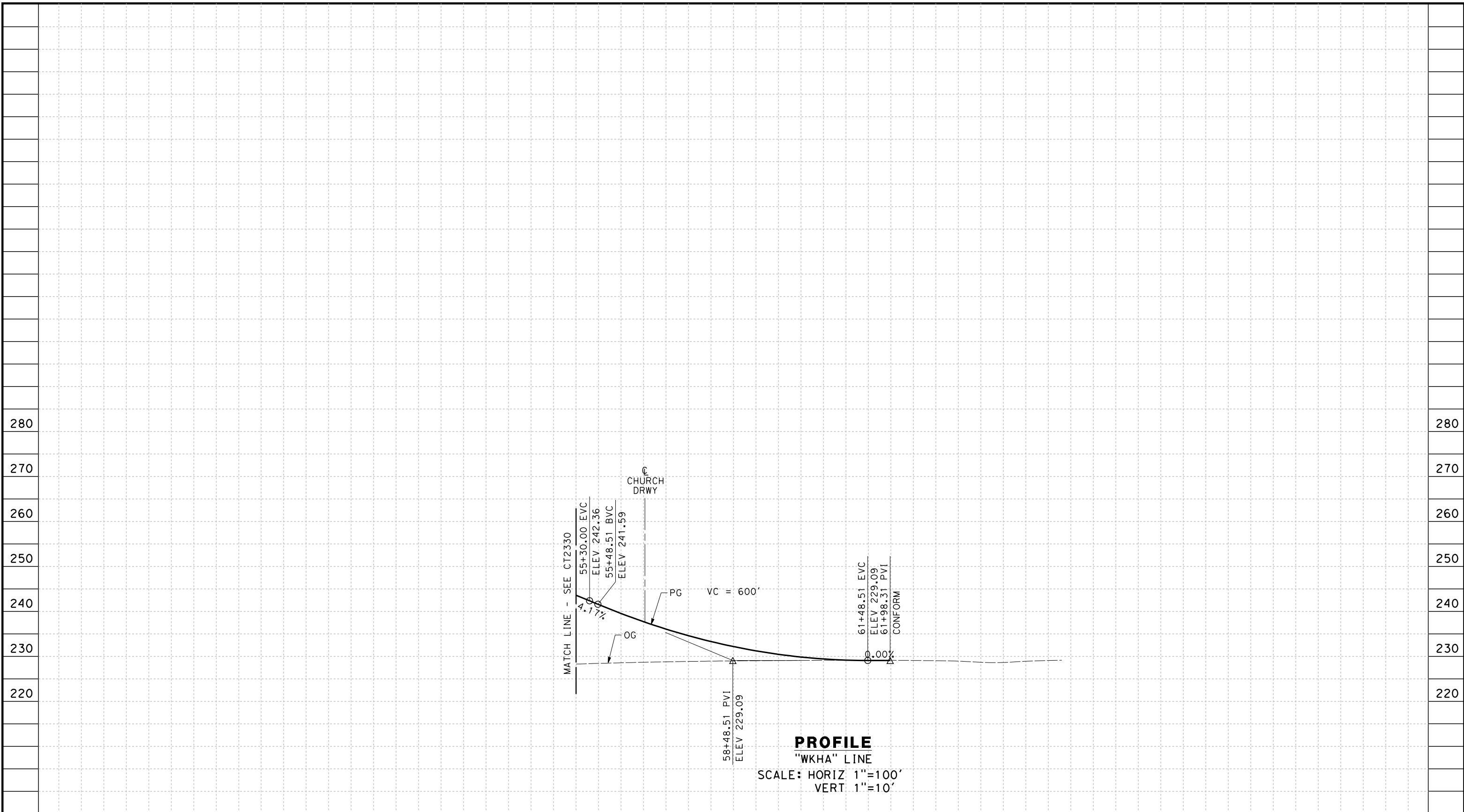


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 HANFORD ARMONA RD

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CT2330
 SCALE
 AS SHOWN
 SHEET NO.
 36 OF 47

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12/30/2013 3:21:29 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150095\FB-CT2331.dgn



PROFILE
 "WKHA" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	55	6	7	8	9	60	1	2	3	4	65	TOTAL
Exc												
Emb												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
P. BARBER
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

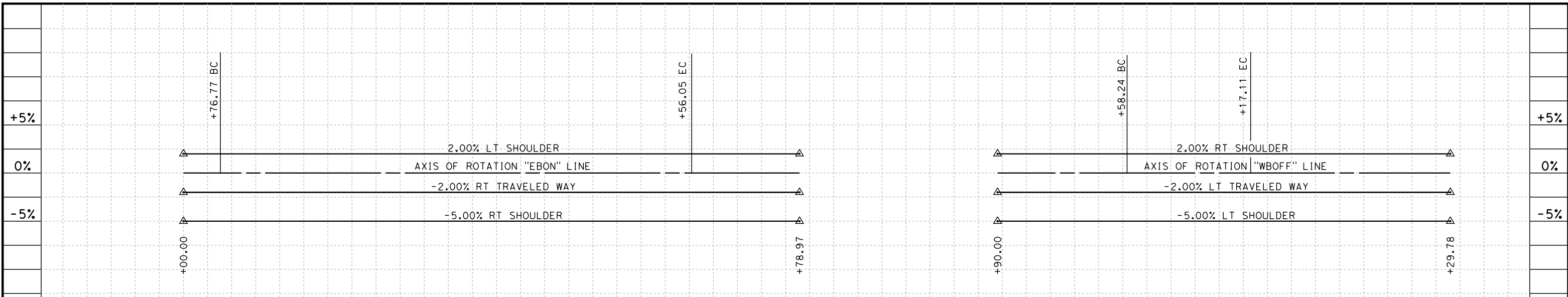
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 HANFORD ARMONA RD

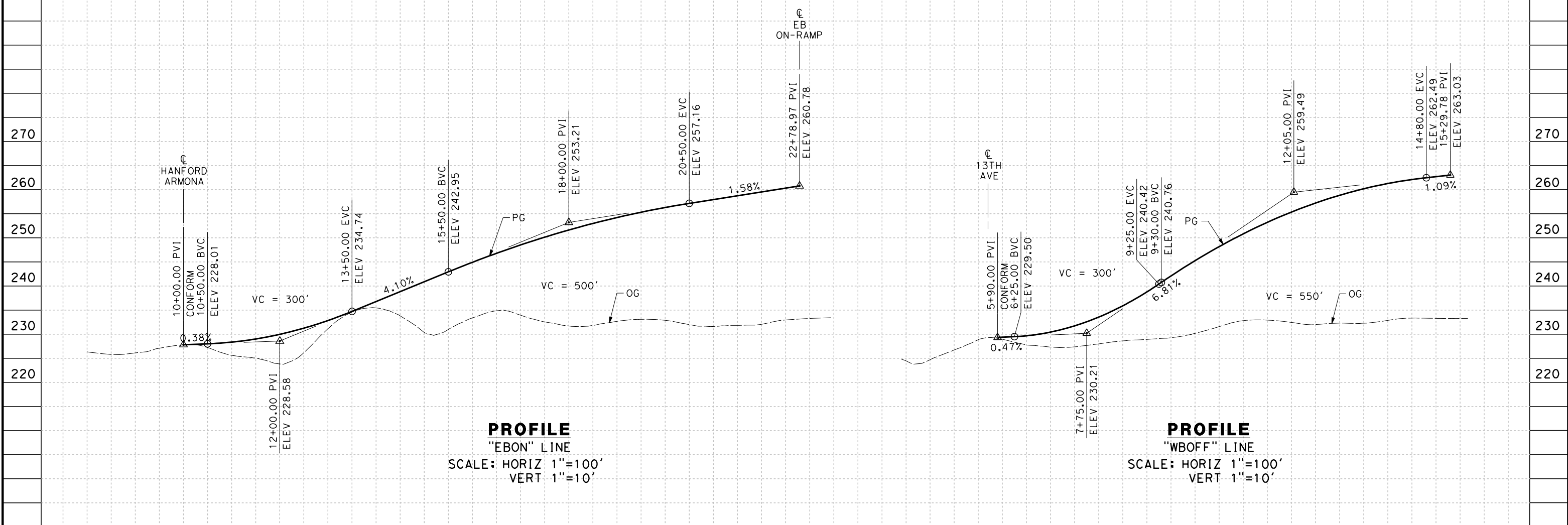
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2331
 SCALE
AS SHOWN
 SHEET NO.
37 OF 47

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SUPERELEVATION DIAGRAM

SUPERELEVATION DIAGRAM



PROFILE
"EBON" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

PROFILE
"WBOFF" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	5	6	7	8	9	10	1	2	3	4	15	6	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

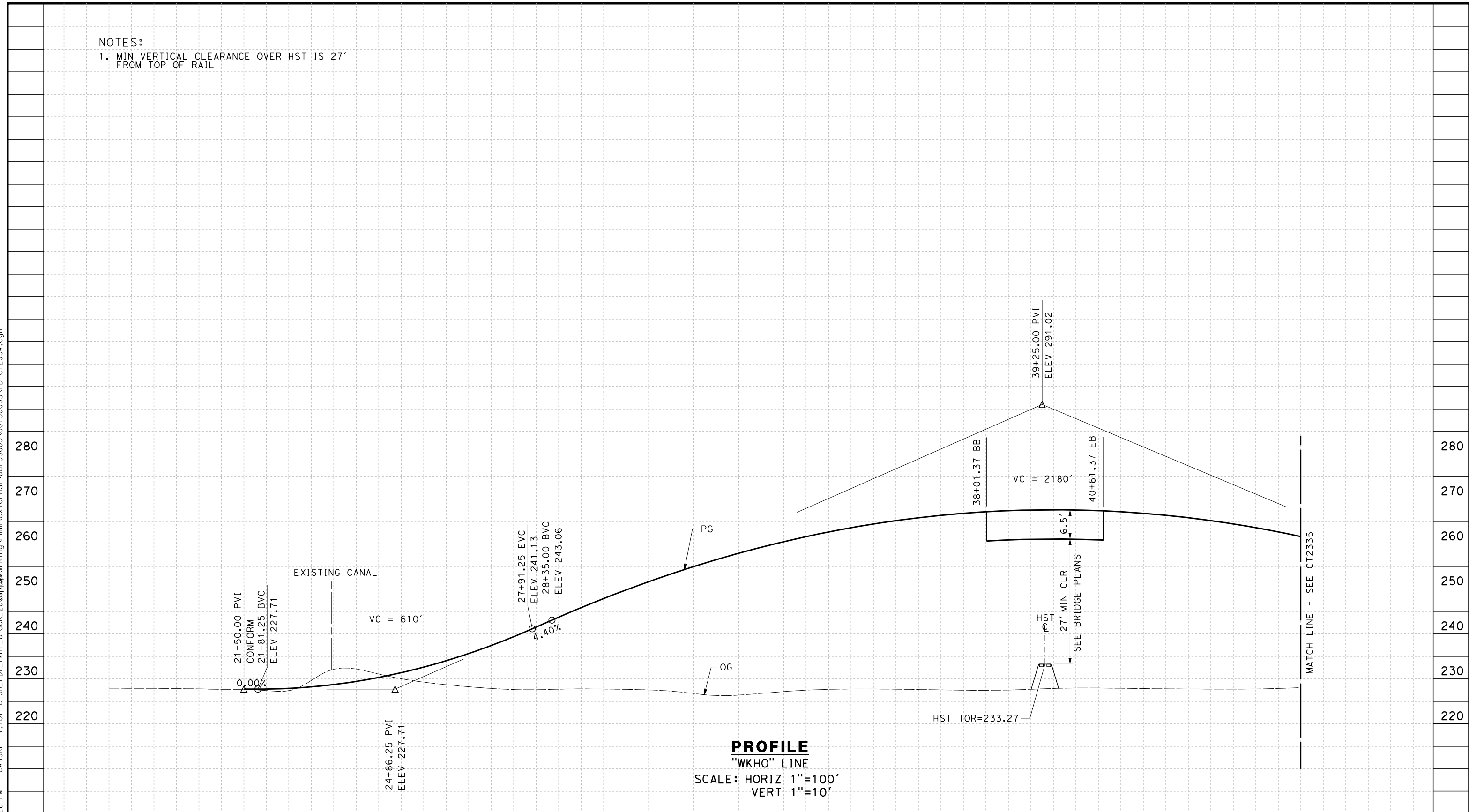
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM
STATE ROUTE 198 RAMPS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT2332
SCALE
AS SHOWN
SHEET NO.
38 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL



STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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

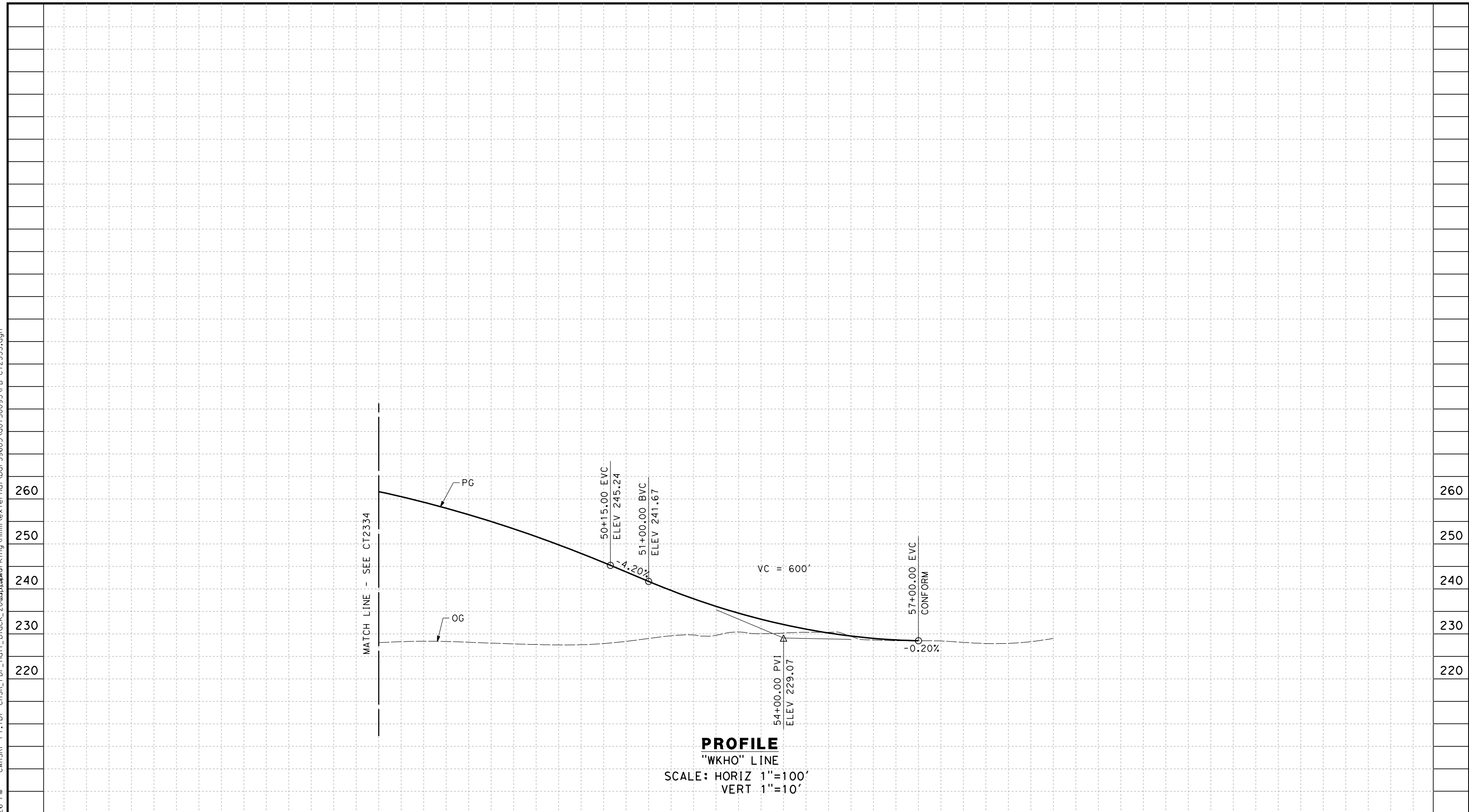


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 HOUSTON AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2334
 SCALE
AS SHOWN
 SHEET NO.
39 OF 47

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12/30/2013 3:22:26 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150095\FB-CT2335.dgn



PROFILE
 "WKHO" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 HOUSTON AVE

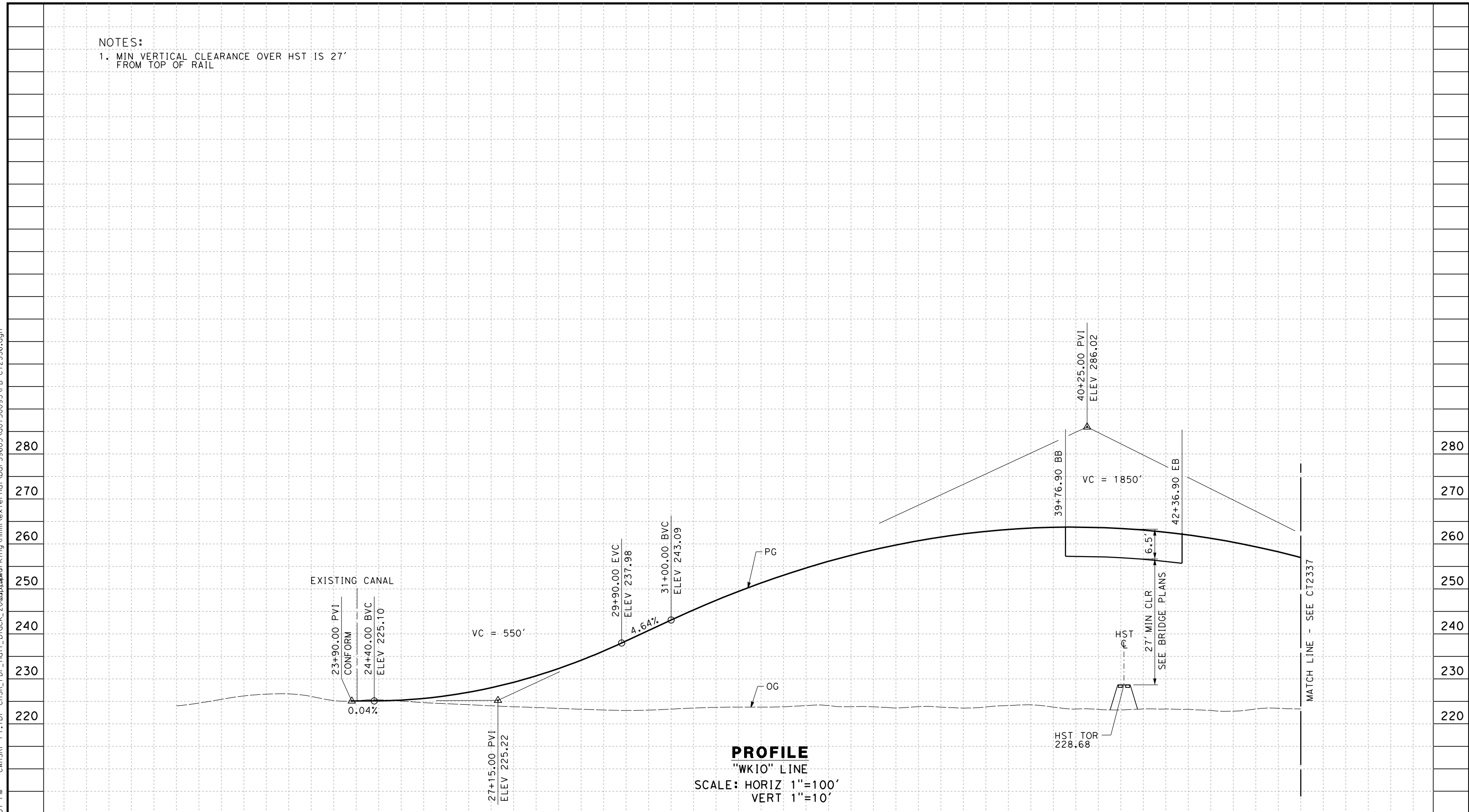
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2335

SCALE
AS SHOWN

SHEET NO.
40 OF 47

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL



STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

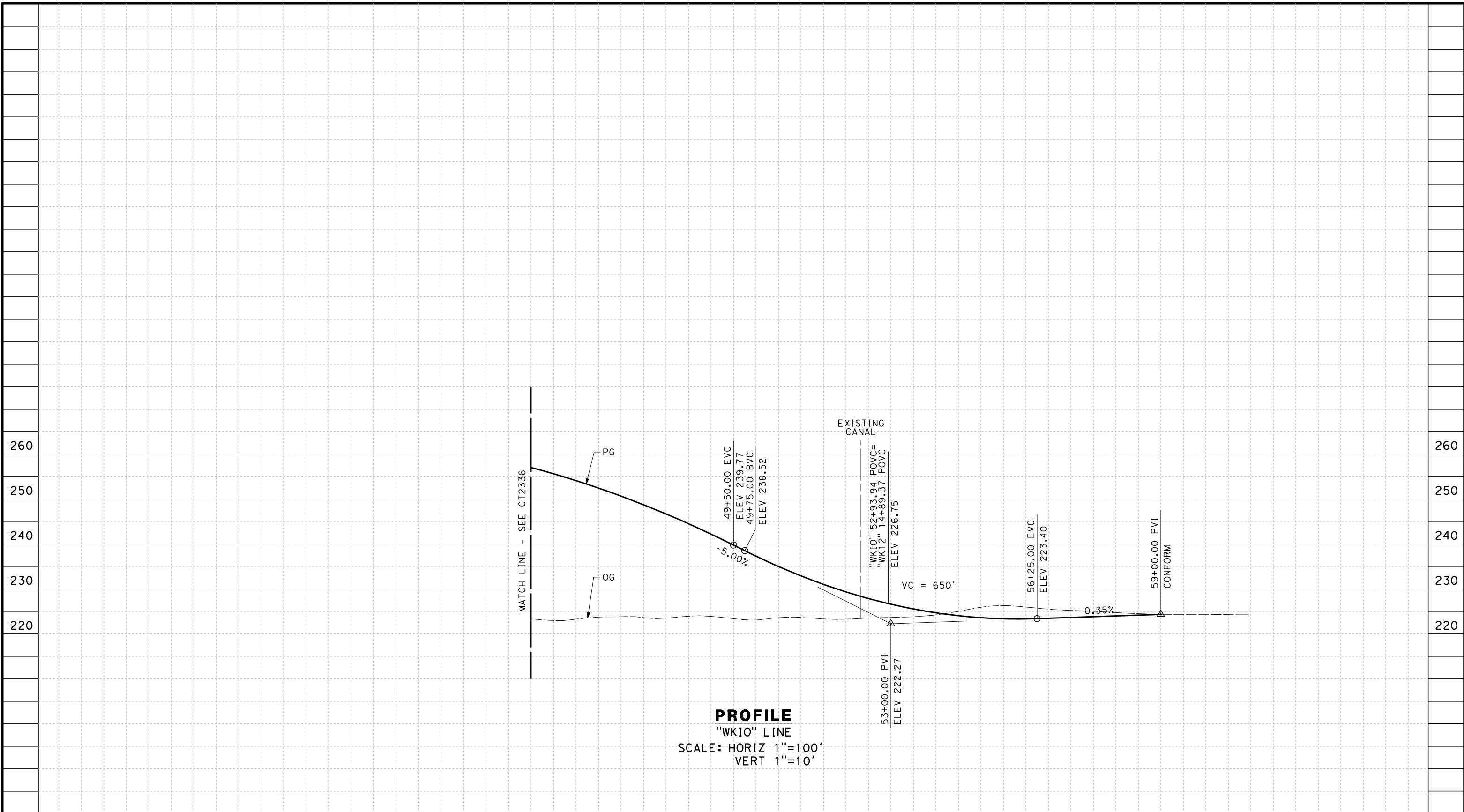


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 IONA AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2336
SCALE	AS SHOWN
SHEET NO.	41 OF 47

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12/30/2013 3:22:57 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150095\FB-CT2337.dgn



PROFILE
 "WKIO" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	TOTAL
Exc																		
Emb																		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

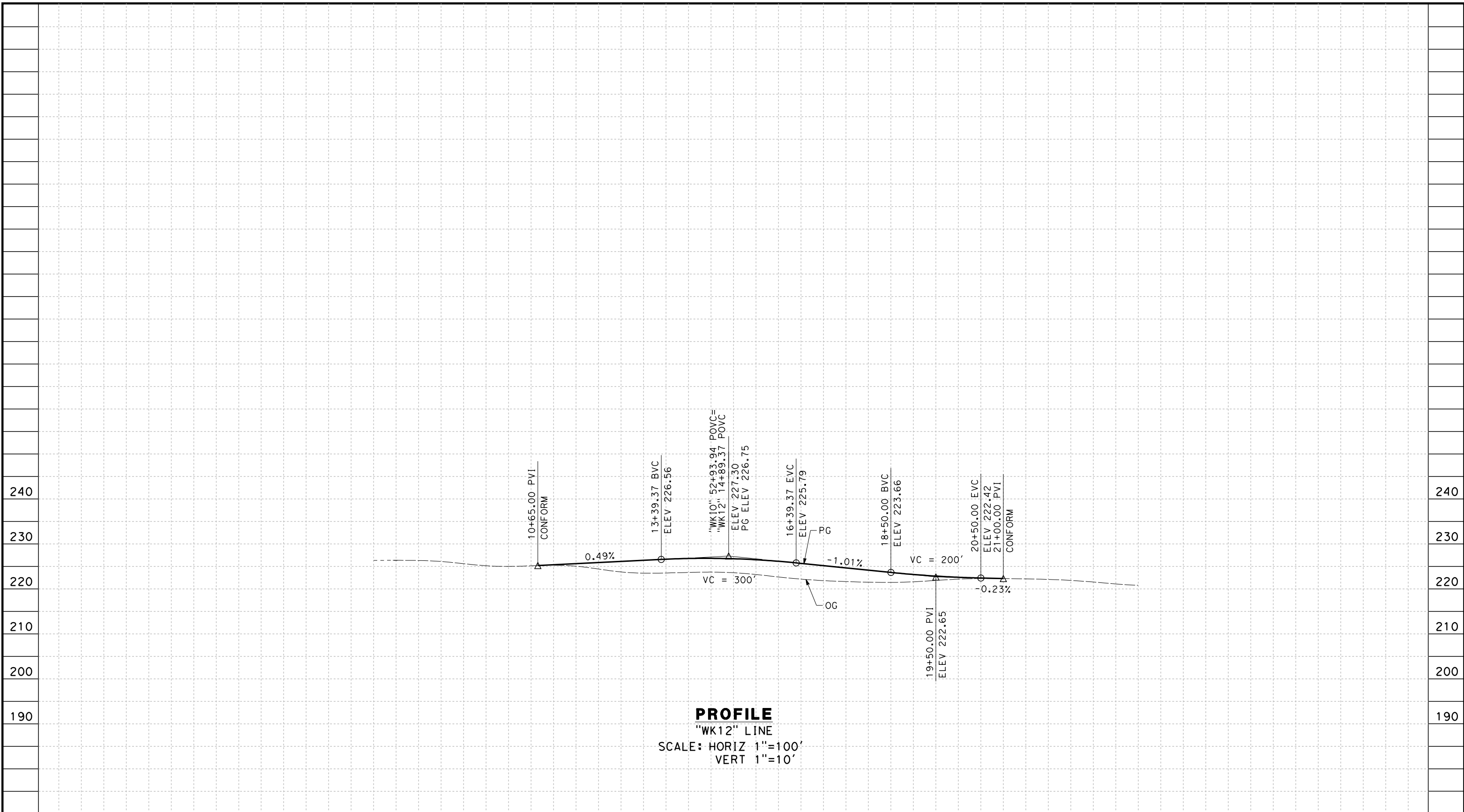
**RECORD SET 15%
 DESIGN SUBMISSION**
 NOT FOR
 CONSTRUCTION



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 IONA AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2337
 SCALE
AS SHOWN
 SHEET NO.
42 OF 47

12/30/2013 3:23:13 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150095\FB-CT2338.dgn



PROFILE
 "WK12" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	TOTAL
Exc															
Emb															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 GRADE SEPARATION PROFILE
 12TH AVE (AT IONA AVE)

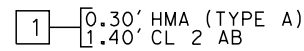
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2338
 SCALE
AS SHOWN
 SHEET NO.
43 OF 47

NOTES:

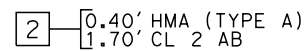
1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSIONS AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.
3. WKFA (FARGO) HAS 4:1 EMBANKMENT SLOPES

STRUCTURAL SECTIONS

TYPICAL ROADWAY (4' SHOULDER)



TYPICAL ROADWAY (8' SHOULDER)



TYPICAL ROADWAY (SR198)

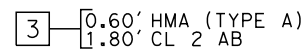
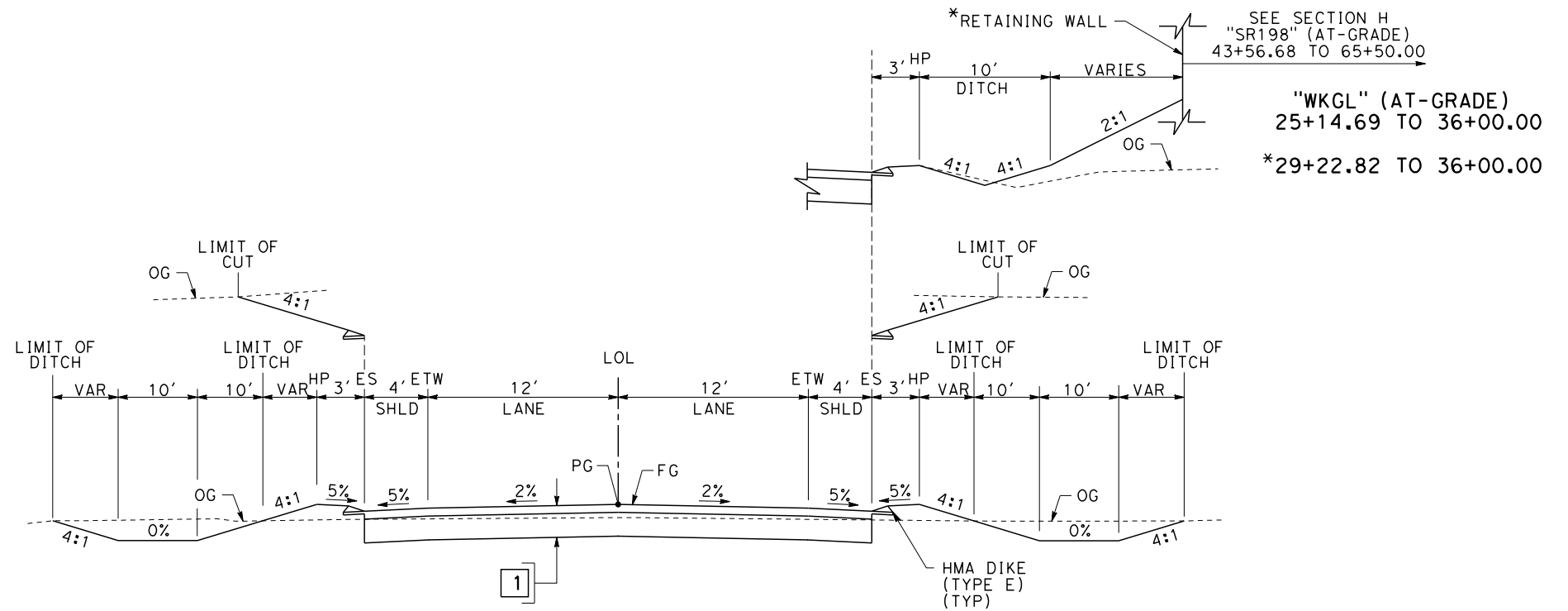


TABLE OF DESIGN SPEEDS

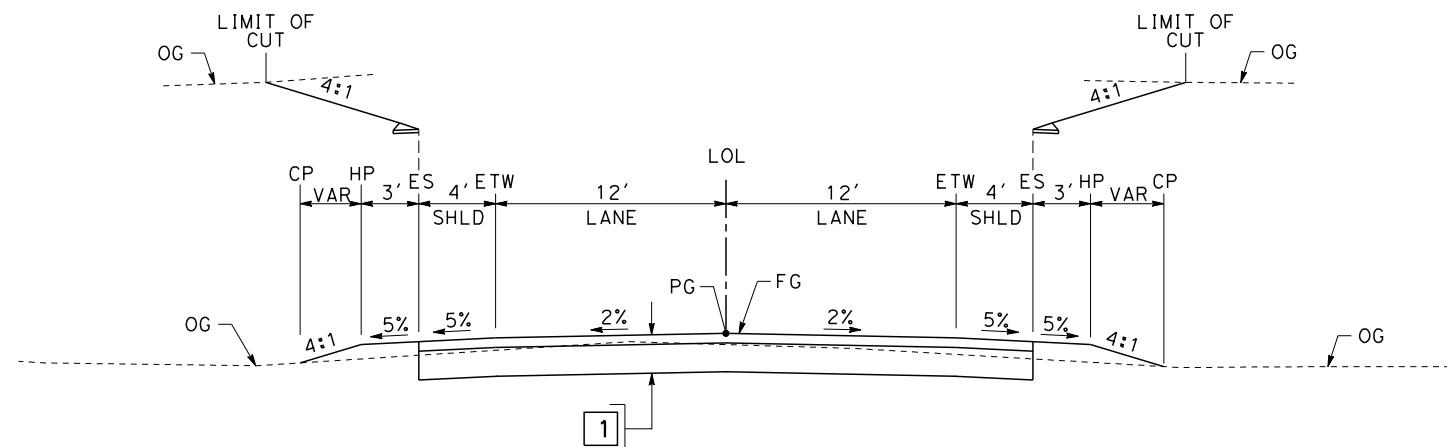
STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED	CRITERIA/JURISDICTION
E CONEJO AVE	WFCO	65	AASHTO/FRESNO COUNTY
E ELKHORN AVE	WFEL	65	AASHTO/FRESNO COUNTY
S CLOVIS AVE	WFCL	55(30*)	AASHTO/FRESNO COUNTY
EXCELSIOR AVE	WKEX	60	KINGS COUNTY/KINGS COUNTY
FLINT AVE	WKFL	60	KINGS COUNTY/KINGS COUNTY
FARGO AVE	WKFA	55	KINGS COUNTY/KINGS COUNTY
GRANGEVILLE BLVD	WKGR	60**	KINGS COUNTY/KINGS COUNTY
W LACEY BLVD	WKLC	60**	KINGS COUNTY/KINGS COUNTY
13TH AVE	WK13	60**	KINGS COUNTY/KINGS COUNTY
SR 198	SR198	70	HDM/CALTRANS
GLENDALE AVE	WKGL	40	KINGS COUNTY/KINGS COUNTY
HANFORD ARMONA RD	WKHA	60**	KINGS COUNTY/KINGS COUNTY
SR 198 RAMPS	EBON, WBOFF	50/25	HDM/CALTRANS
HOUSTON AVE	WKHO	60**	KINGS COUNTY/KINGS COUNTY
IONA AVE	WKIO	55	KINGS COUNTY/KINGS COUNTY
12TH AVE	WK12	55	KINGS COUNTY/KINGS COUNTY

* WILL REQUIRE REDUCED DESIGN SPEED AT HORIZONTAL CURVES
 ** DESIGN SPEED PER CITY OF HANFORD GENERAL PLAN



SECTION A

- "WFEL" 10+00.00 TO 27+38.50
- "WFEL" 30+88.50 TO 45+00.00
- "WKEX" 13+50.00 TO 28+65.40
- "WKEX" 31+25.40 TO 49+00.00
- "WKFL" 22+80.00 TO 38+74.87
- "WKFL" 41+34.87 TO 58+00.00
- "WKFA" 25+50.00 TO 41+24.32
- "WKFA" 44+04.32 TO 57+00.00
- "WKFA" 57+00.00 TO 58+50.00
- "WKFL" 58+00.00 TO 59+50.00
- "WKGL" 11+50.00 TO 22+70.69
- "WKGL" 25+14.69 TO 36+00.00
- "WKHO" 25+00.00 TO 38+01.37
- "WKHO" 40+61.37 TO 54+00.00
- "WKHO" 54+00.00 TO 57+00.00
- "WKIO" 23+90.00 TO 24+75.00
- "WKIO" 42+36.90 TO 52+00.00



SECTION B

- "WFEL" 7+25.00 TO 10+00.00
- "WFEL" 45+00.00 TO 48+50.00
- "WFCL" 11+00.00 TO 67+25.00
- "WKEX" 11+00.00 TO 13+50.00
- "WKFL" 20+30.00 TO 22+80.00
- "WKFA" 25+00.00 TO 25+50.00
- "WKFA" 57+00.00 TO 58+50.00
- "WKEX" 49+00.00 TO 49+50.00
- "WKHO" 21+50.00 TO 25+00.00
- "WKFL" 58+00.00 TO 59+50.00
- "WKIO" 23+90.00 TO 24+75.00
- "WKIO" 52+00.00 TO 59+00.00
- "WK12" 10+65.00 TO 21+00.00
- "WKHO" 54+00.00 TO 57+00.00

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

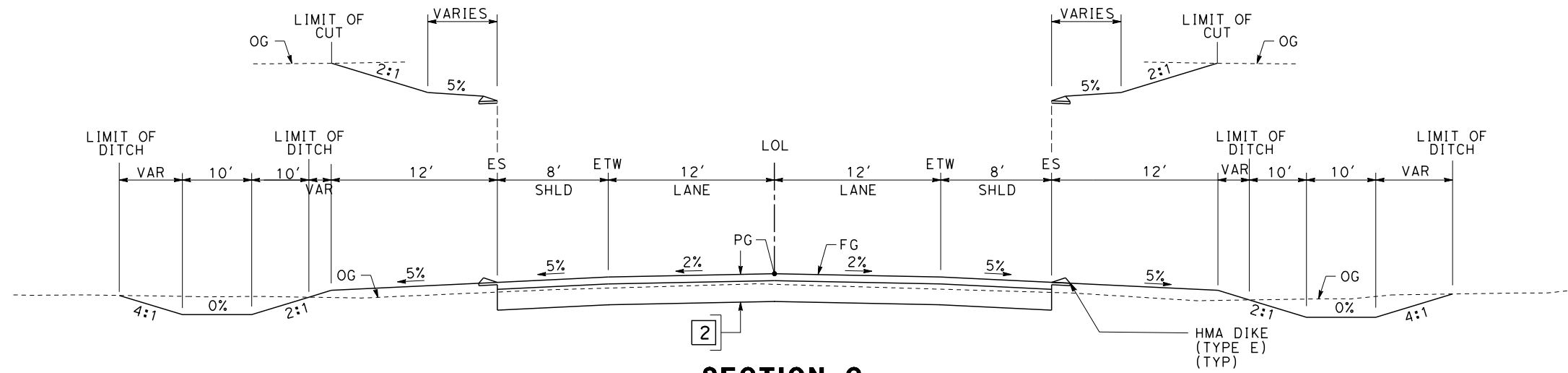
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT3330
 SCALE
AS SHOWN
 SHEET NO.
44 OF 47

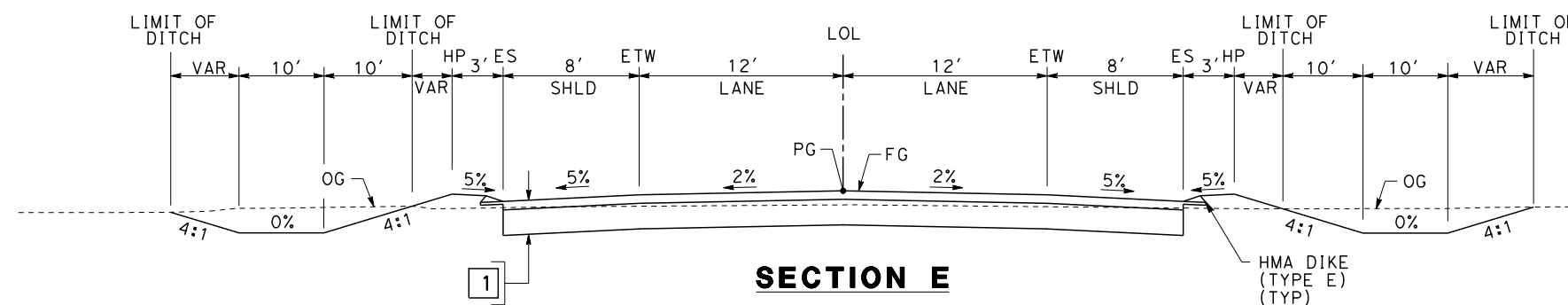
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SECTION C

"WK13" 19+50.00 TO 60+00.00

"WKLC" 12+25.00 TO 42+00.00



SECTION E

"WKHA" 31+50.00 TO 42+46.00

"WKHA" 44+86.00 TO 59+50.00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

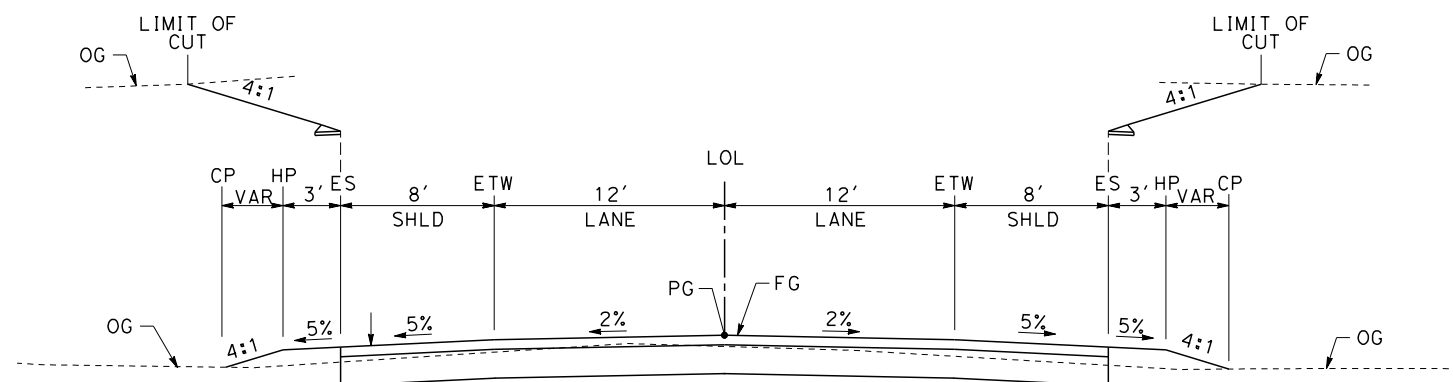
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT3331
SCALE
AS SHOWN
SHEET NO.
45 OF 47

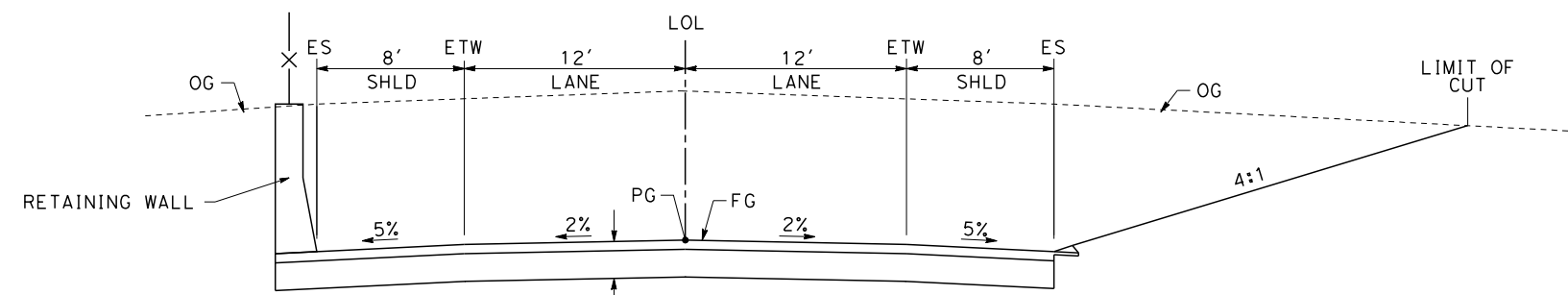
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1

SECTION F

"WFCO" 9+05.00 TO 21+36.11 "WKHA" 28+17.62 TO 31+50.00
 "WFCO" 29+36.14 TO 36+95.04 "WKHA" 59+50.00 TO 61+98.31
 "WKGR" 27+00.00 TO 42+44.48 "WKGR" 45+77.63 TO 53+80.00



2

SECTION G

"WFCO" 21+36.11 TO 29+36.14
 "WKGR" 42+44.48 TO 45+77.63

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

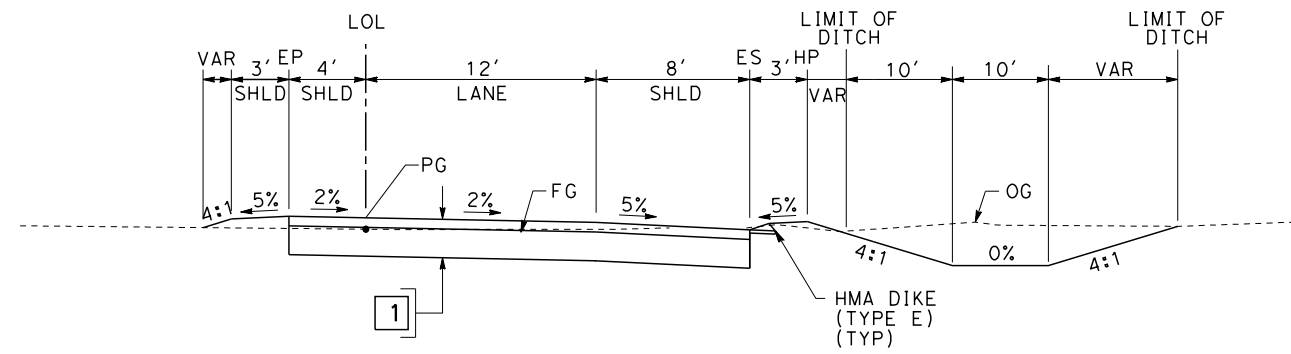
**NOT FOR
 CONSTRUCTION**



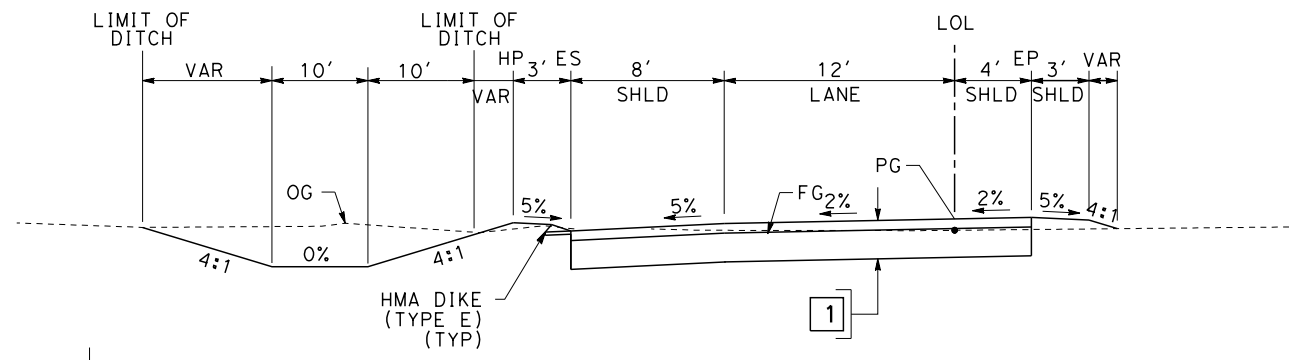
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT3332
 SCALE
AS SHOWN
 SHEET NO.
46 OF 47

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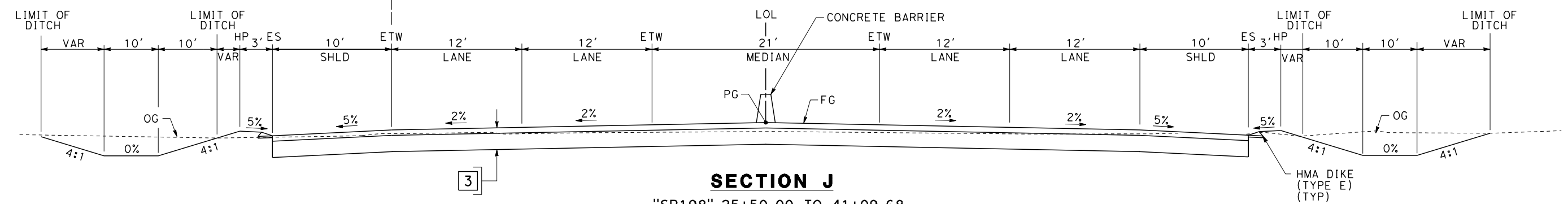
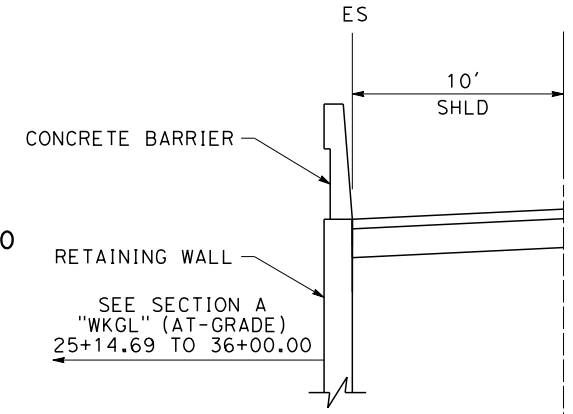


SECTION H
"EBON" 10+00.00 TO 22+78.97



SECTION I
"WBOFF" 5+90.00 TO 15+29.78

"SR198"
47+75.00 TO 62+45.00



SECTION J
"SR198" 25+50.00 TO 41+09.68
"SR198" 43+56.68 TO 65+50.00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT3333
SCALE
AS SHOWN
SHEET NO.
47 OF 47

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STREET CLOSURES

STREET NAME	HST ALIGNMENT STA.	LOCAL STANDARD
S TOPEKA AVE	1121+00.00	FRESNO COUNTY
S PEACH AVE	1162+00.00	FRESNO COUNTY
E CLARKSON AVE	1175+00.00	FRESNO COUNTY
S MINNEWAWA AVE	1230+00.00	FRESNO COUNTY
S CLOVIS AVE	1258+00.00	FRESNO COUNTY
E DAVIS ST	1288+00.00	FRESNO COUNTY
E BARRETT AVE	1368+00.00	FRESNO COUNTY
ELDER AVE	1610+00.00	KINGS COUNTY



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
ROADWAY/GRADE SEPARATION
KEY MAP

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB0215

SCALE
AS SHOWN

SHEET NO.
1 OF 37

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LINE DATA

NO.	BEARING	DISTANCE
1	S89°17'53"E	3000.00'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	69.80' LT "WFCO" 20+88.02	39.98' LT "WFCO" 29+36.14	875'	25'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

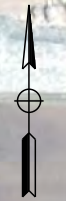
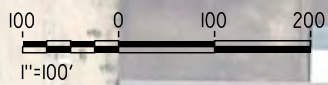
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
E CONEJO AVE

CONTRACT NO.
HSR 06-0003

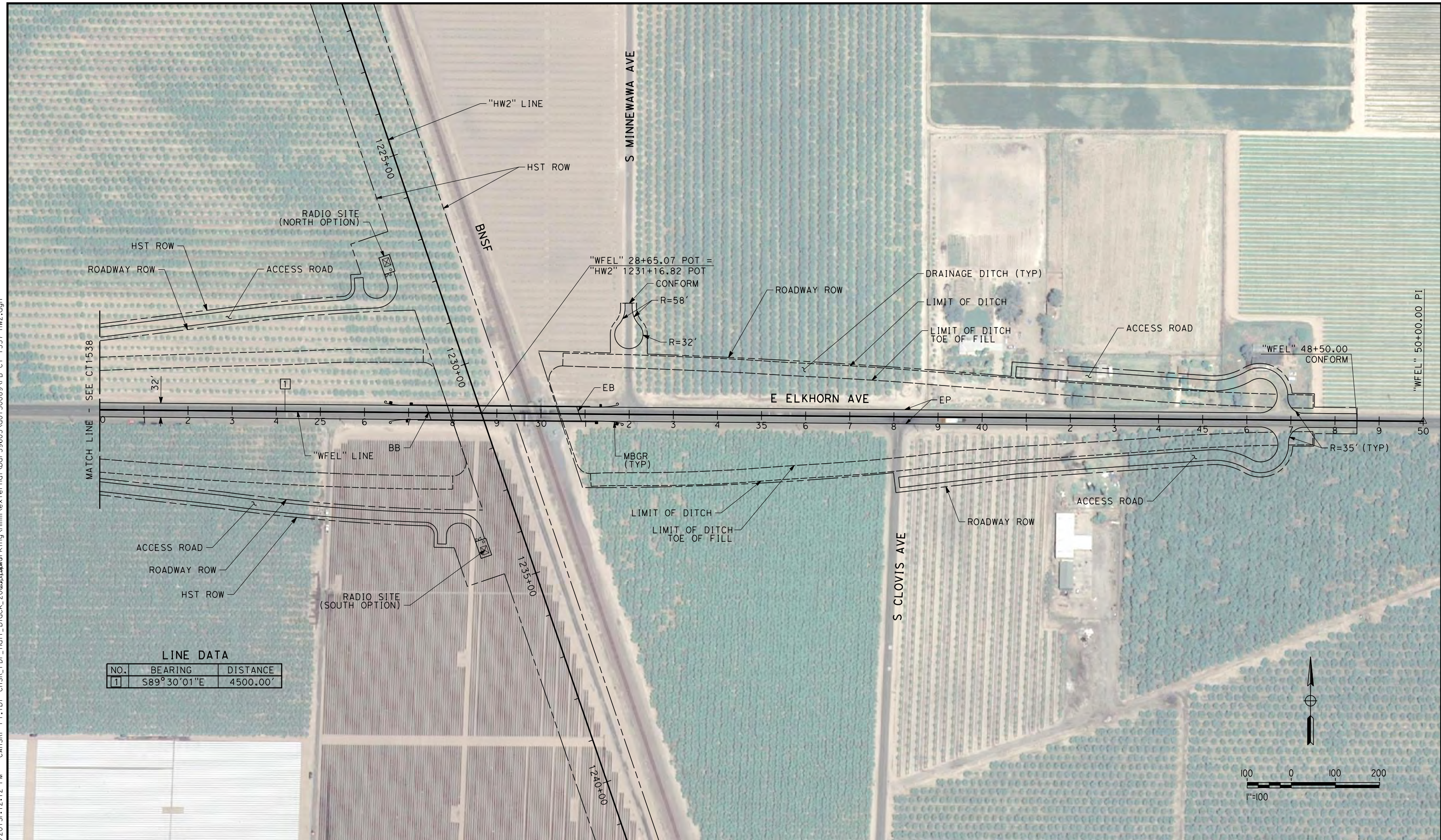
DRAWING NO.
CT1536

SCALE
AS SHOWN

SHEET NO.
2 OF 37



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LINE DATA

NO.	BEARING	DISTANCE
1	S89°30'01"E	4500.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
E ELKHORN AVE

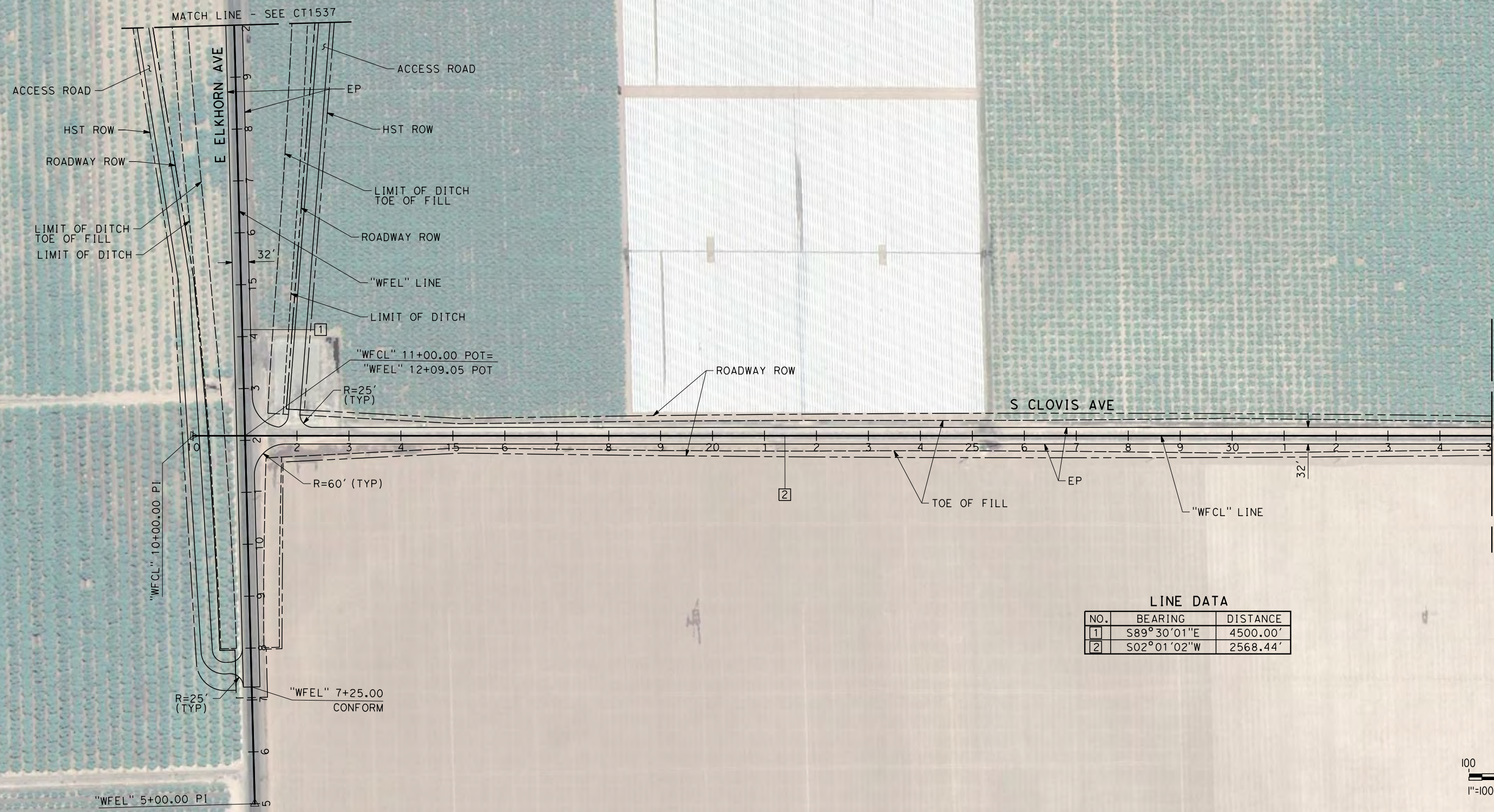
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1537

SCALE
AS SHOWN

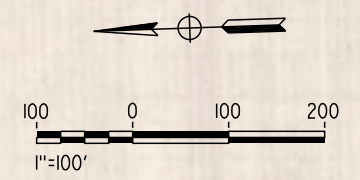
SHEET NO.
3 OF 37

12/30/2013 11:12:43 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-1538-HW2.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°30'01"E	4500.00'
2	S02°01'02"W	2568.44'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
E ELKHORN AVE / S CLOVIS AVE

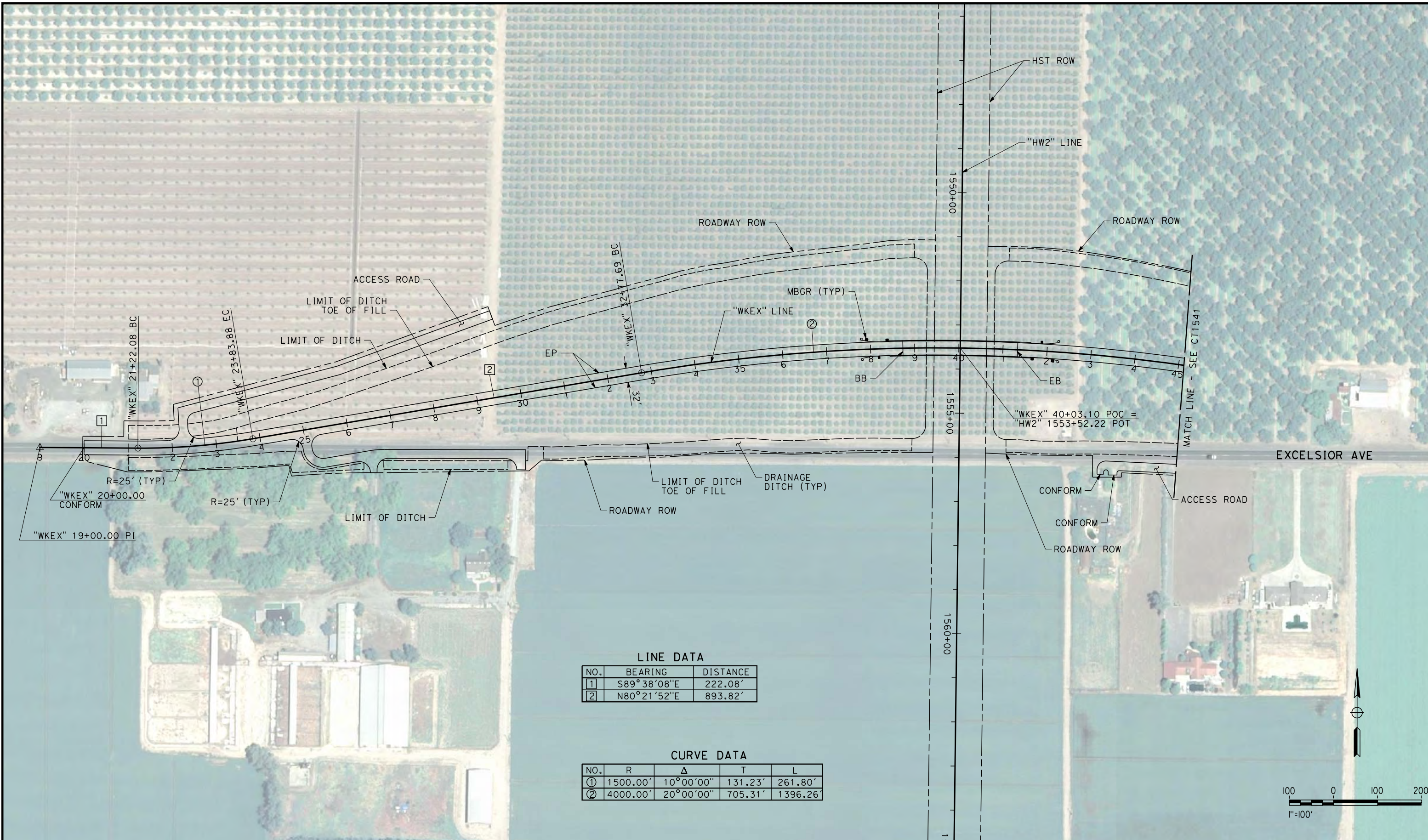
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1538

SCALE
AS SHOWN

SHEET NO.
4 OF 37

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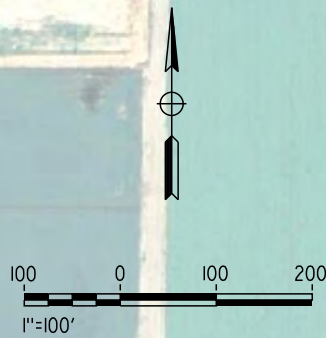


LINE DATA

NO.	BEARING	DISTANCE
1	S89°38'08"E	222.08'
2	N80°21'52"E	893.82'

CURVE DATA

NO.	R	Δ	T	L
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②	4000.00'	20°00'00"	705.31'	1396.26'

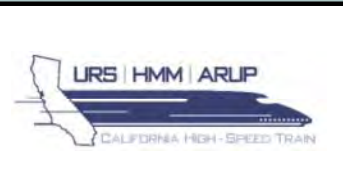


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

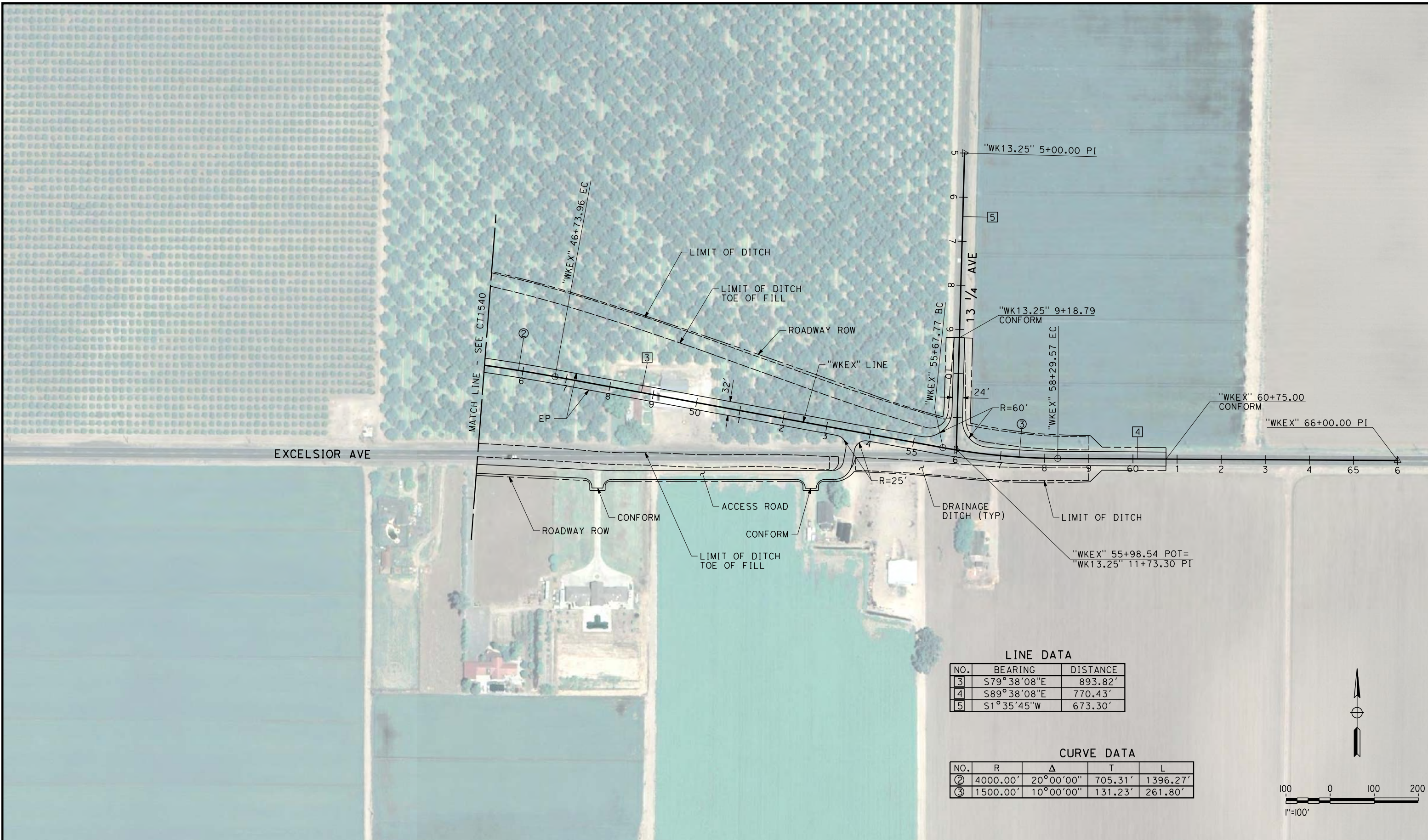


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1540
SCALE
AS SHOWN
SHEET NO.
6 OF 37

12/30/2013 11:41:37 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150089\FB-CT-1541-HW2.dgn



LINE DATA

NO.	BEARING	DISTANCE
3	S79°38'08"E	893.82'
4	S89°38'08"E	770.43'
5	S1°35'45"W	673.30'

CURVE DATA

NO.	R	Δ	T	L
2	4000.00'	20°00'00"	705.31'	1396.27'
3	1500.00'	10°00'00"	131.23'	261.80'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

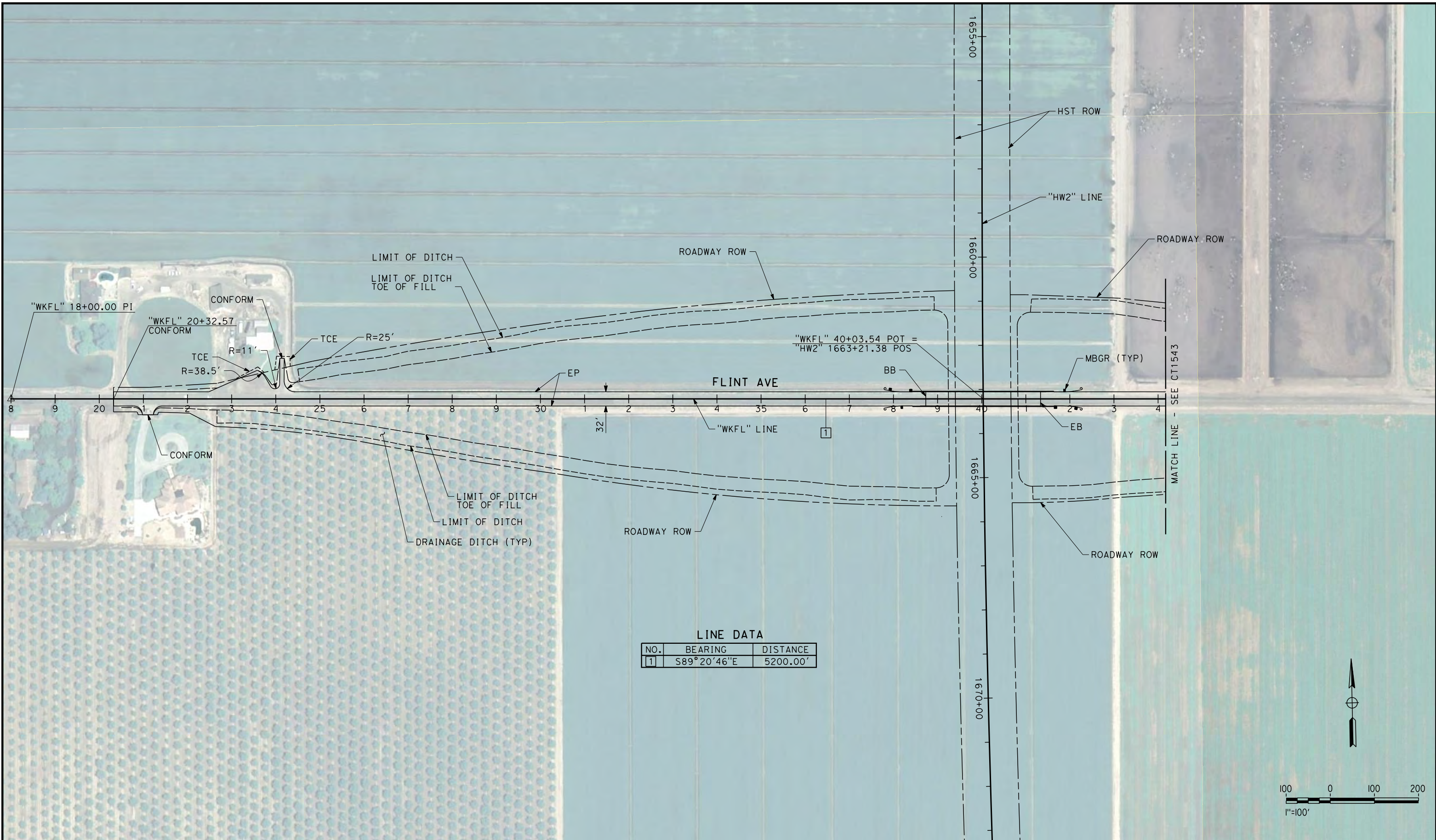
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
EXCELSIOR AVE

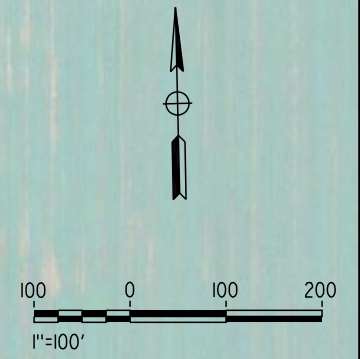
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1541
SCALE
AS SHOWN
SHEET NO.
7 OF 37

12/30/2013 11:15:15 PM CAHSR-r1.tbl CHSR_PDF_half_block_200dpi.ctb \\bar59603\d0150089\FB-CT-1542-HW2.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°20'46"E	5200.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
FLINT AVE

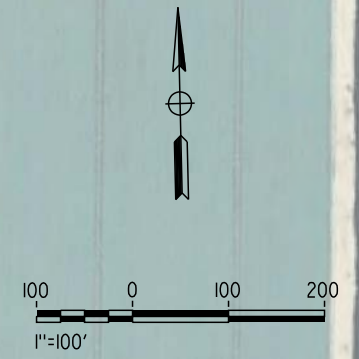
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1542
SCALE
AS SHOWN
SHEET NO.
8 OF 37

12/30/2013 11:51:49 PM CAHSR-r1.tbl CHSR_PDF_half_block_2000.ctb \\bar59603\external\bar59603\bar59603-CT-1543-HW2.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°20'46"E	5200.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

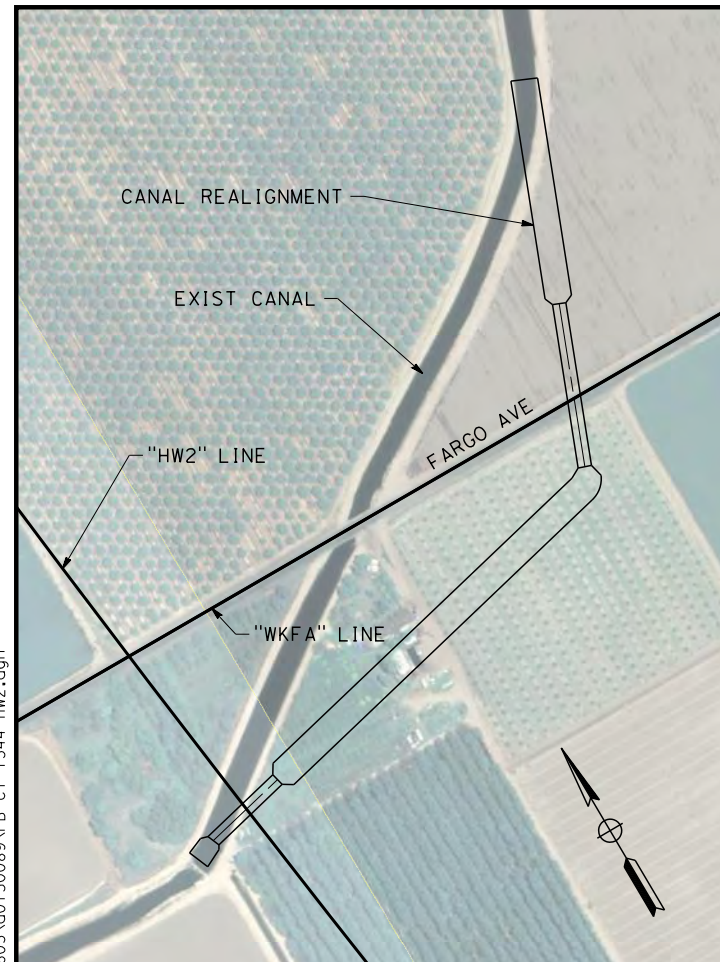


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

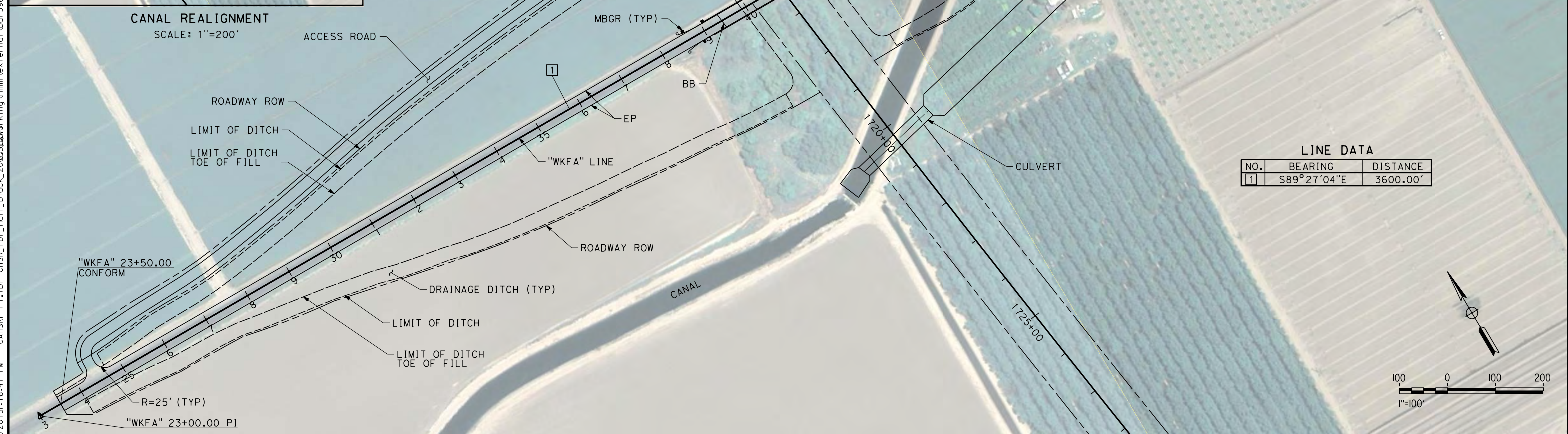
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
FLINT AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1543
SCALE
AS SHOWN
SHEET NO.
9 OF 37

12/30/2013 11:16:41 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-1544-HW2.dgn

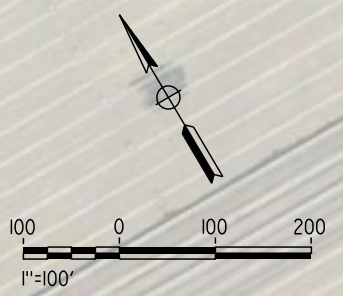


CANAL REALIGNMENT
SCALE: 1"=200'



LINE DATA

NO.	BEARING	DISTANCE
1	S89°27'04"E	3600.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
FARGO AVE

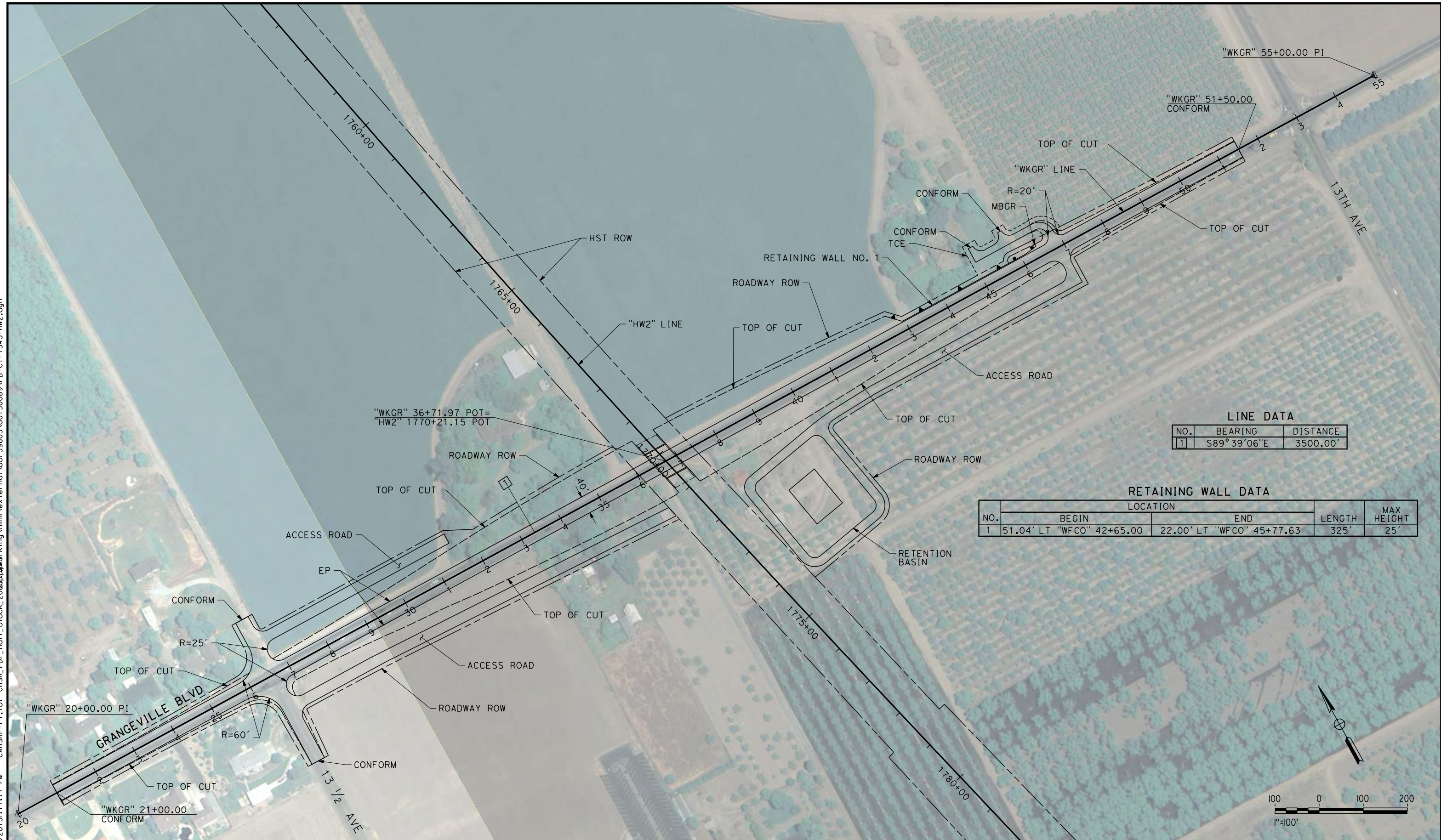
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1544

SCALE
AS SHOWN

SHEET NO.
10 OF 37

12/30/2013 11:17:17 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150089\FB-CT-1545-HW2.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°39'06"E	3500.00'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	51.04' LT "WFCO" 42+65.00	22.00' LT "WFCO" 45+77.63	325'	25'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

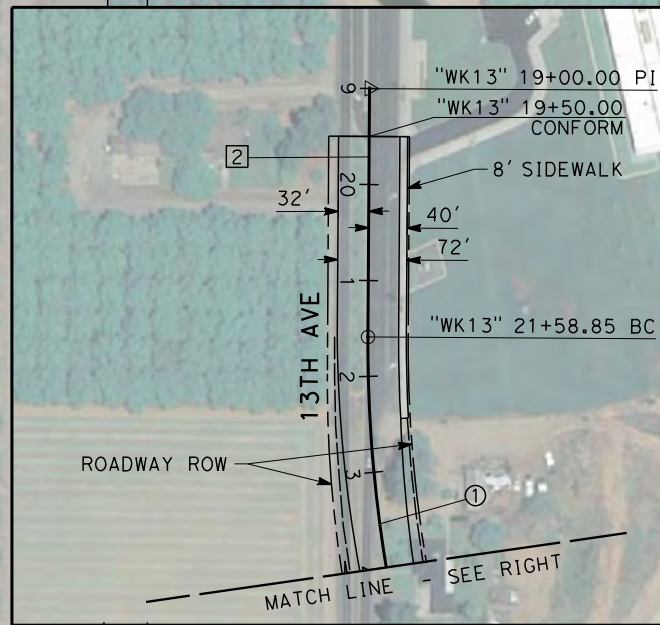
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
GRANGEVILLE BLVD

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1545
SCALE
AS SHOWN
SHEET NO.
11 OF 37

12/30/2013 11:18:11 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-1546-HW2.dgn



CANAL REALIGNMENT
SCALE: 1"=500'

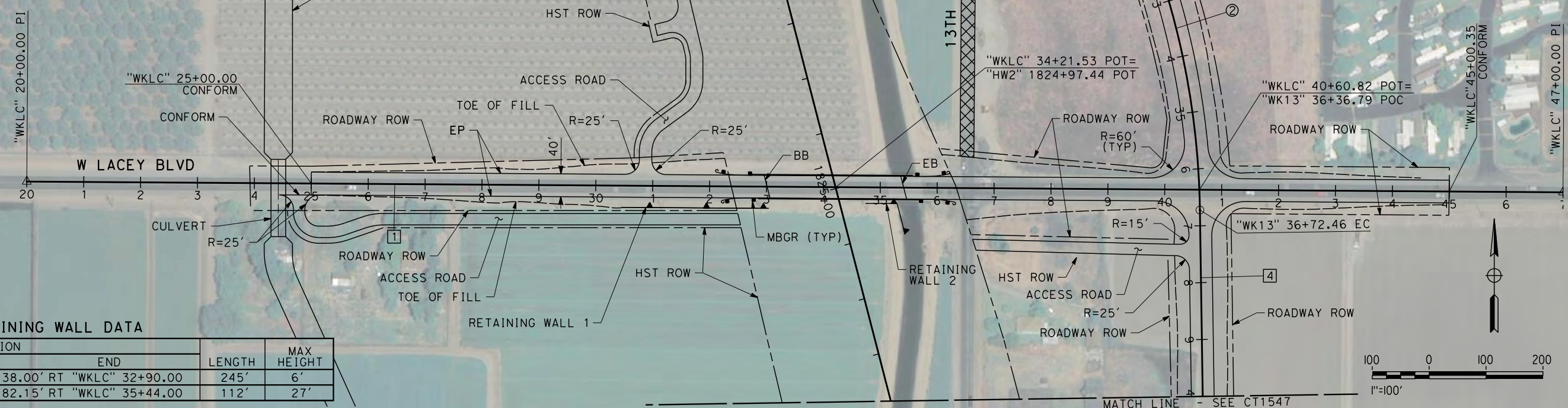


LINE DATA

NO.	BEARING	DISTANCE
1	S89°35'53"E	2700'
2	S00°22'01"W	258.85'
3	S24°37'58"E	321.94'
4	S00°51'48"E	518.31'

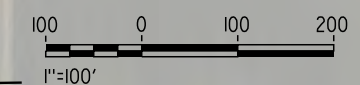
CURVE DATA

NO.	R	Δ	T	L
①	1400.00'	25°00'00"	310.37'	610.87'
②	1400.00'	23°46'11"	294.64'	580.80'



RETAINING WALL DATA

NO.	BEGIN	END	LENGTH	MAX HEIGHT
1	38.00' RT "WKLC" 30+45.00	38.00' RT "WKLC" 32+90.00	245'	6'
2	28.39' RT "WKLC" 34+74.00	82.15' RT "WKLC" 35+44.00	112'	27'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
W LACEY BOULEVARD / 13TH AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1546

SCALE
AS SHOWN

SHEET NO.
12 OF 37

12/30/2013 1:18:53 PM CAHSR-r1.tbl CHSR_PDF_half_block_200dpi.dwg \working\hmm\external\bar59603\d0150089\FB-CT-1547-HW2.dgn

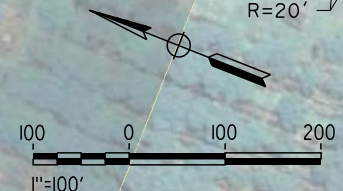


LINE DATA

NO.	BEARING	DISTANCE
4	S00°51'48"E	518.31'
5	S25°10'43"W	815.67'
6	S15°43'45"E	226.33'
7	S0°31'14"W	257.00'

CURVE DATA

NO.	R	Δ	T	L
③	1350.00'	26°02'31"	312.19'	613.60'
④	1400.00'	40°54'28"	522.15'	999.57'
⑤	1400.00'	16°14'59"	199.87'	397.06'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
13TH AVE

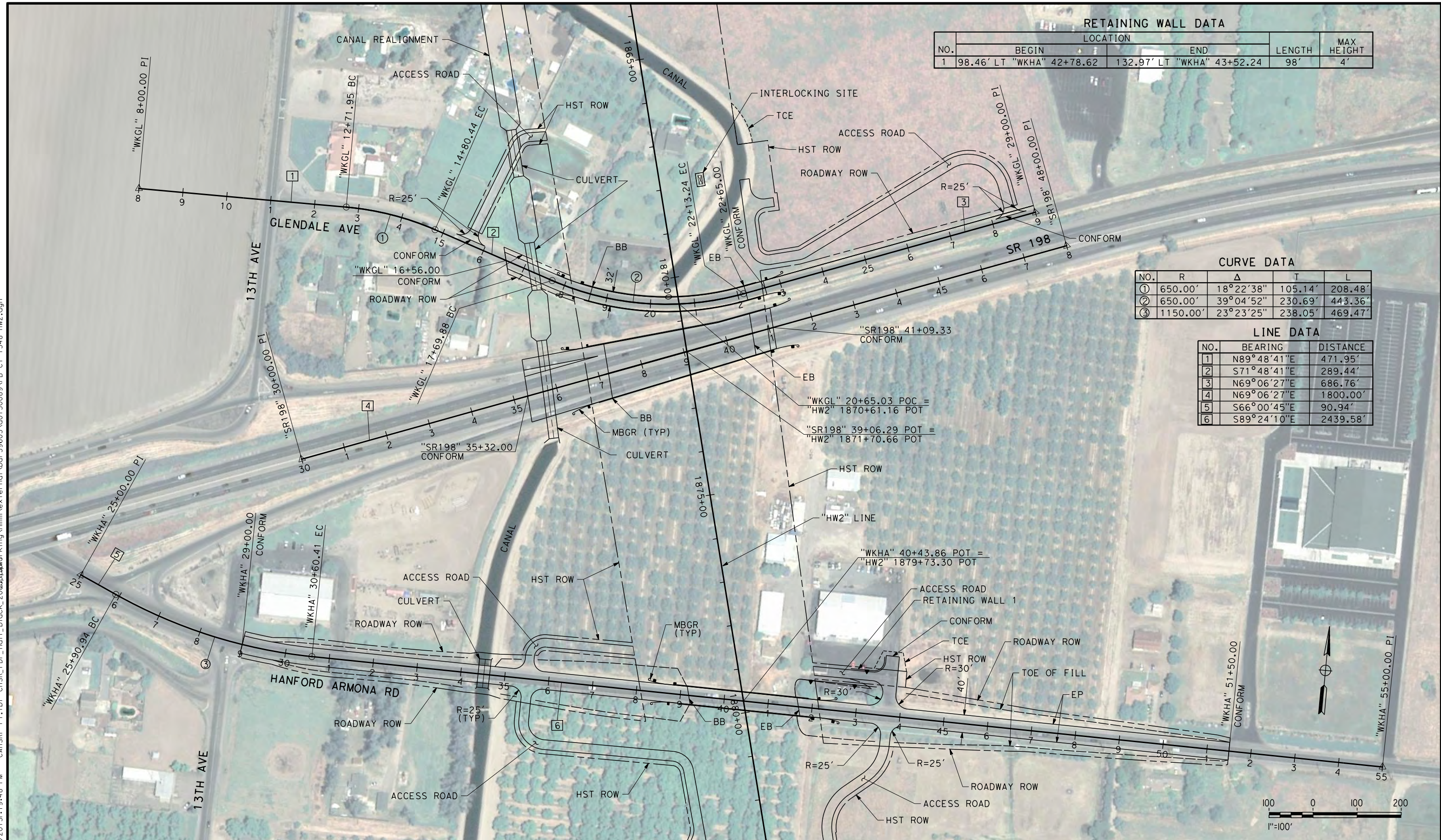
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1547

SCALE
AS SHOWN

SHEET NO.
13 OF 37

12/30/2013 1:19:48 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150089\FB-CT-1548-HW2.dgn



NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	98.46' LT "WKHA" 42+78.62	132.97' LT "WKHA" 43+52.24	98'	4'

CURVE DATA				
NO.	R	Δ	T	L
①	650.00'	18°22'38"	105.14'	208.48'
②	650.00'	39°04'52"	230.69'	443.36'
③	1150.00'	23°23'25"	238.05'	469.47'

LINE DATA		
NO.	BEARING	DISTANCE
1	N89°48'41"E	471.95'
2	S71°48'41"E	289.44'
3	N69°06'27"E	686.76'
4	N69°06'27"E	1800.00'
5	S66°00'45"E	90.94'
6	S89°24'10"E	2439.58'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
GLENDALE AVE/STATE ROUTE 198/HANFORD ARMONA RD

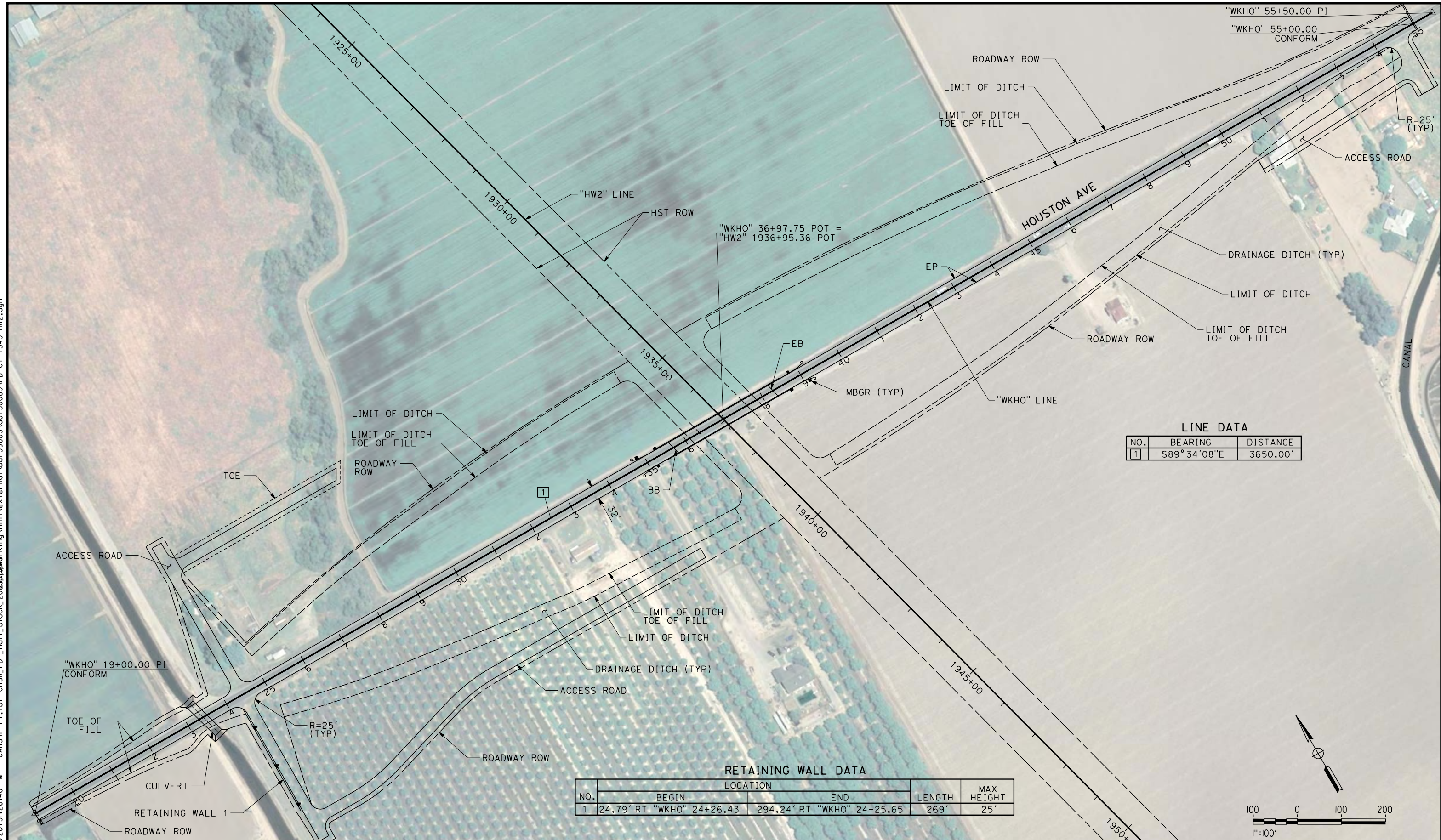
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1548

SCALE
AS SHOWN

SHEET NO.
14 OF 37

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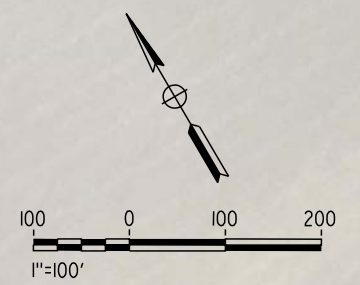


LINE DATA

NO.	BEARING	DISTANCE
1	S89°34'08"E	3650.00'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	24.79' RT "WKHO" 24+26.43	294.24' RT "WKHO" 24+25.65	269'	25'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



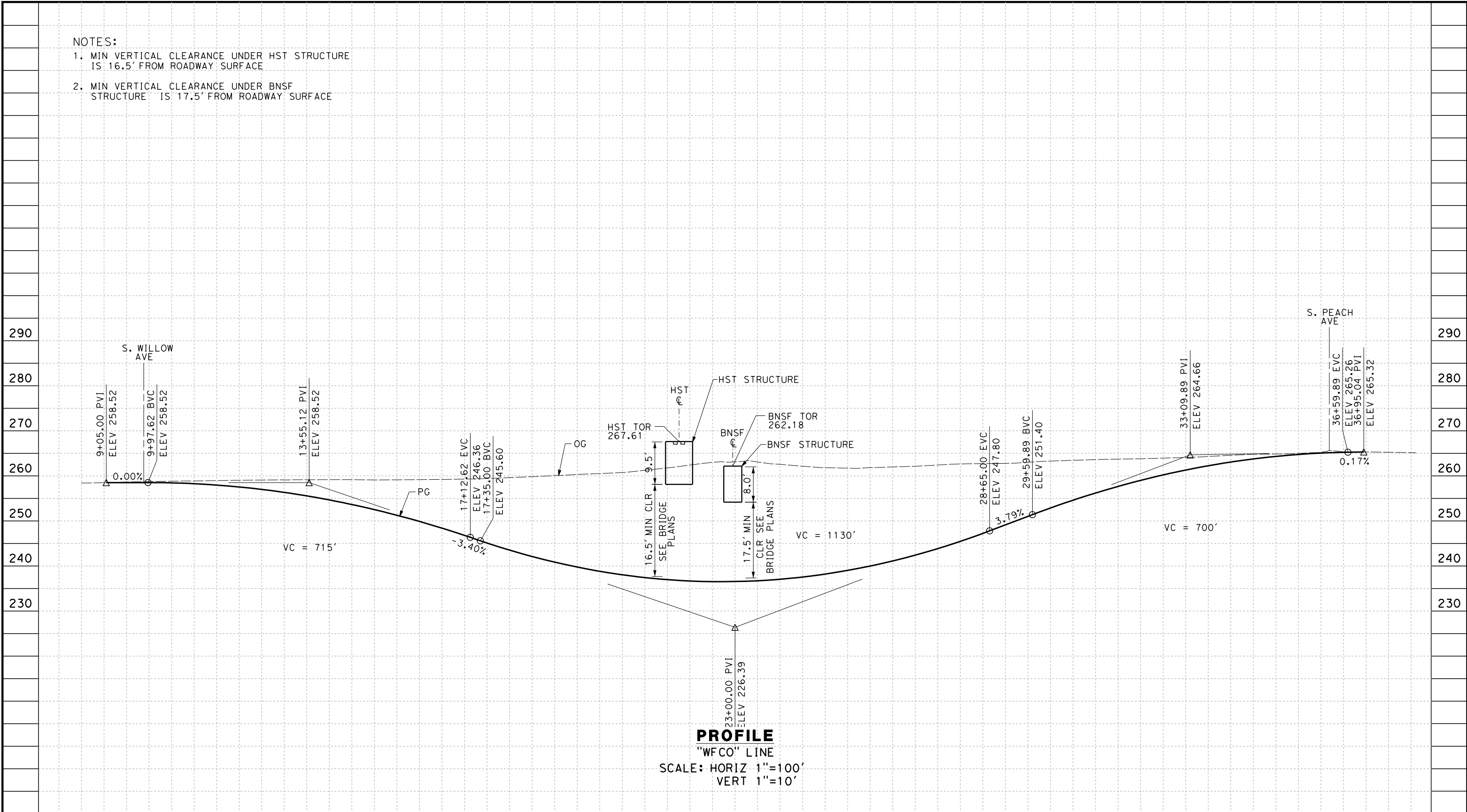
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION LAYOUT
HOUSTON AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1549
SCALE
AS SHOWN
SHEET NO.
15 OF 37

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE
2. MIN VERTICAL CLEARANCE UNDER BNSF STRUCTURE IS 17.5' FROM ROADWAY SURFACE

12/30/2013 1:21:06 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150089\FB-CT-2535-HW2.dgn



STATION	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 E CONEJO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2535

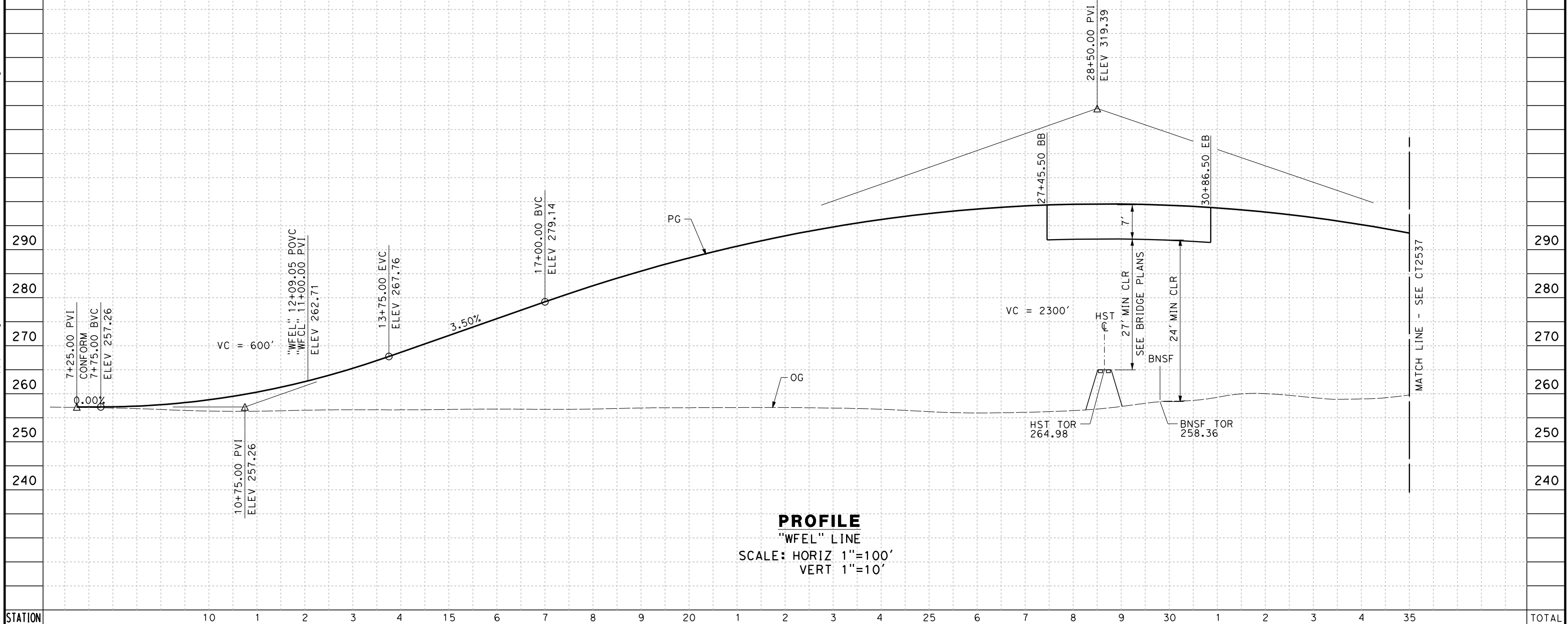
SCALE
AS SHOWN

SHEET NO.
16 OF 37

12/30/2013 1:21:27 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603\external\bar59603.ctb-2536-HW2.dgn

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER BNSF IS 24' FROM TOP OF RAIL



STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 E ELKHORN AVE

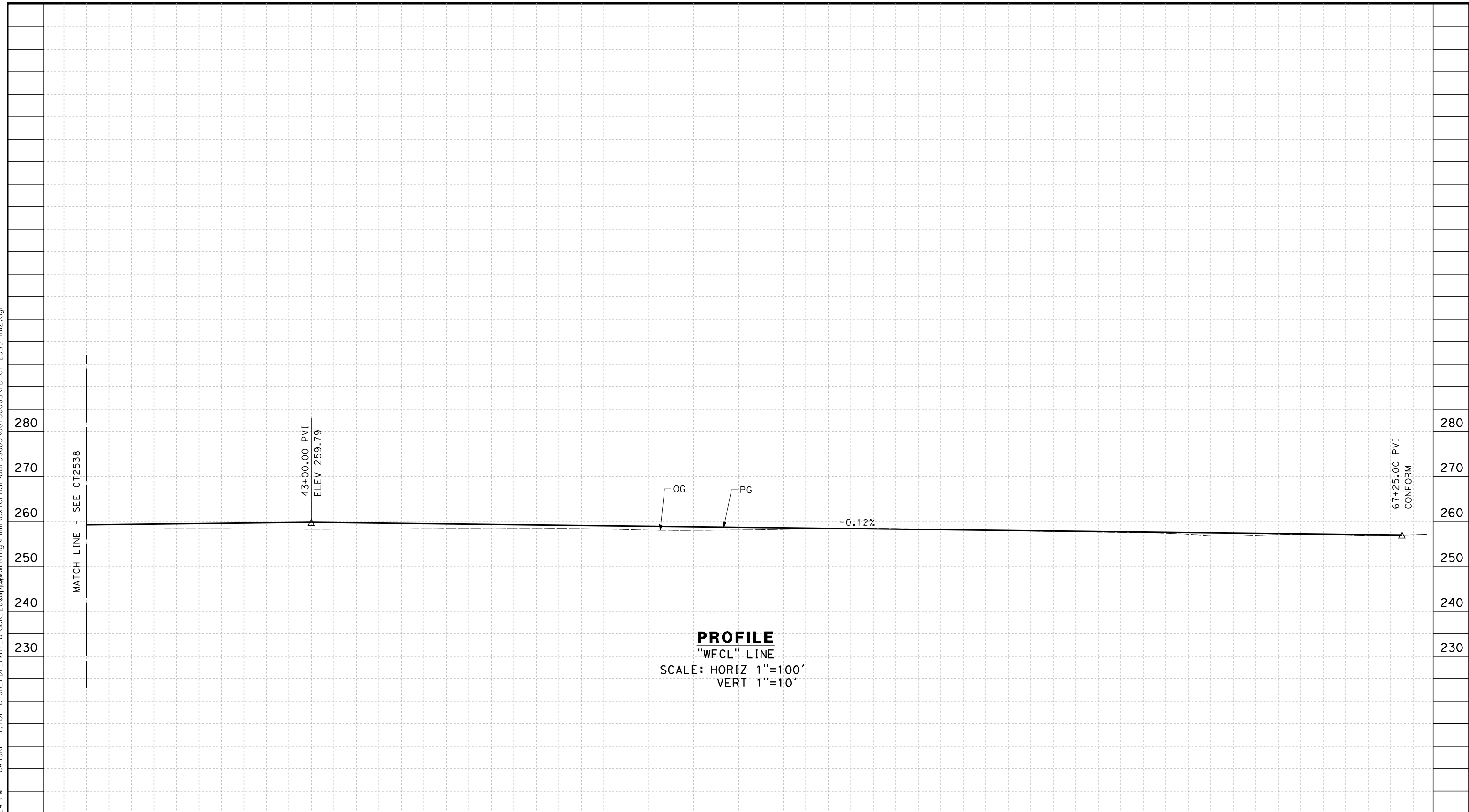
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2536

SCALE
AS SHOWN

SHEET NO.
17 OF 37

12/30/2013 1:22:24 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603\external\bar59603-CT-2539-HW2.dgn



PROFILE
 "WFCL" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	6	7	TOTAL
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 S CLOVIS AVE

CONTRACT NO.
HSR 06-0003

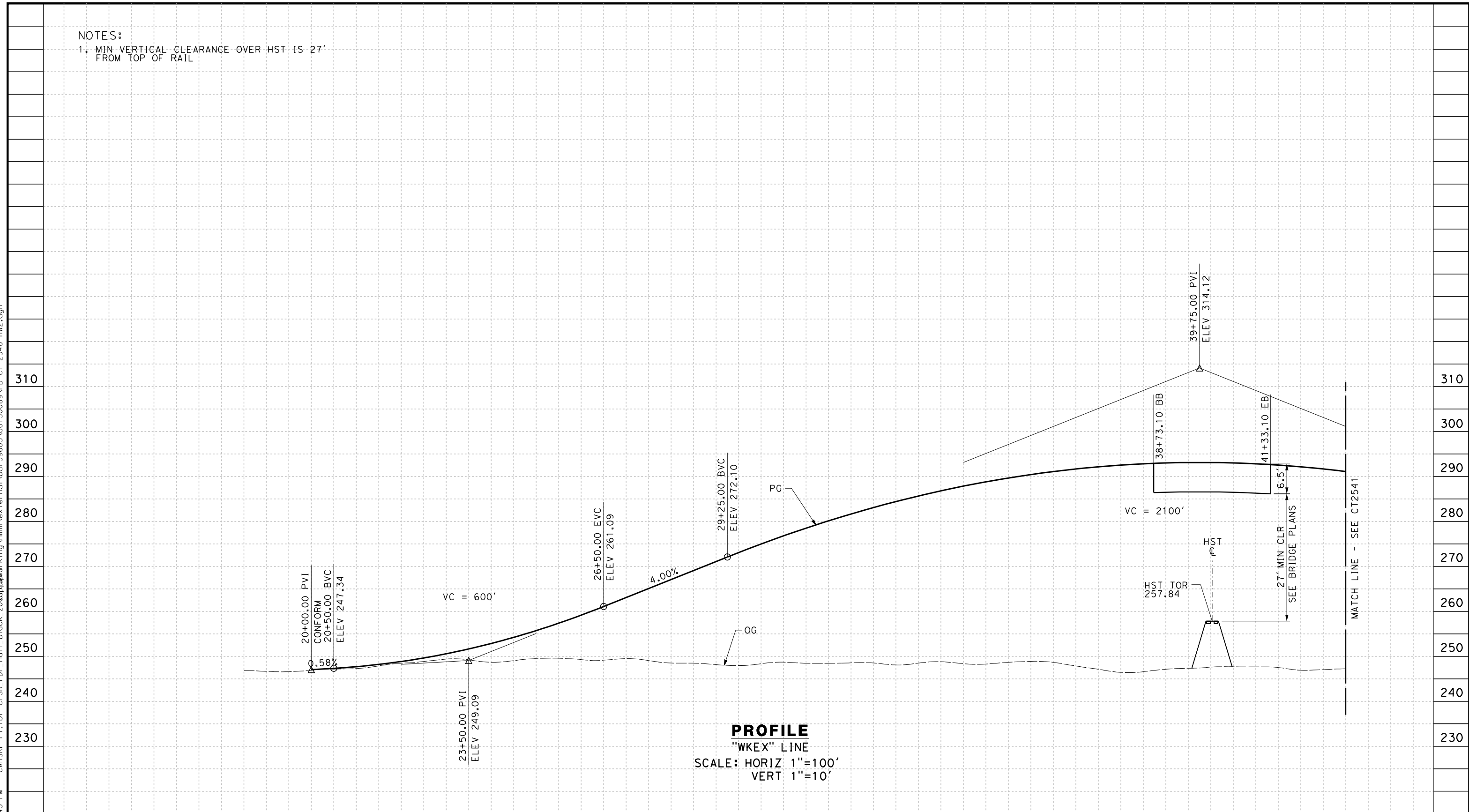
DRAWING NO.
CT2539

SCALE
AS SHOWN

SHEET NO.
20 OF 37

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL

12/30/2013 1:22:43 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2540-HW2.dgn



PROFILE
 "WKEX" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	TOTAL
Exc																														
Emb																														

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	T. CLIFFORD
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

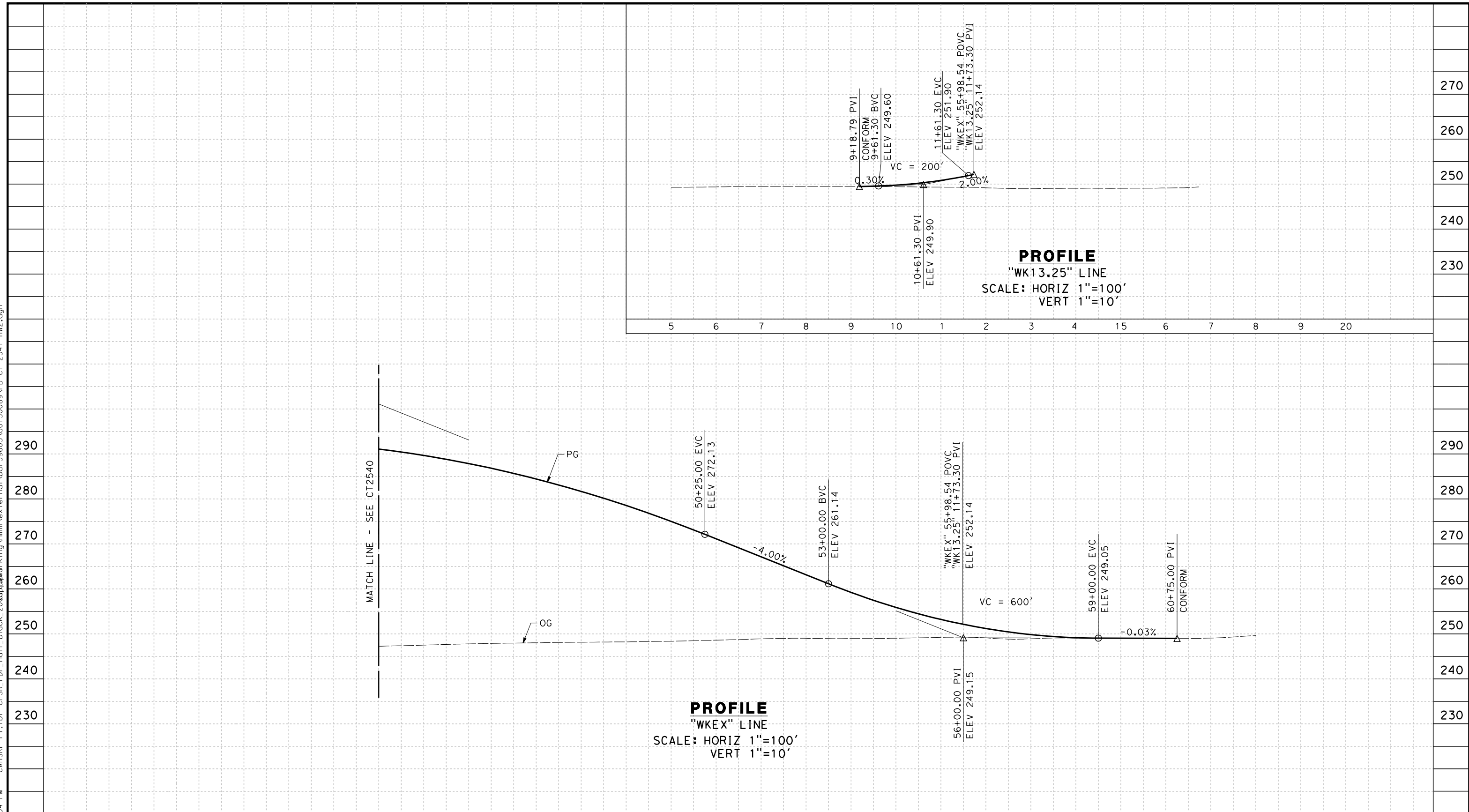


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 EXCELSIOR AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2540
SCALE	AS SHOWN
SHEET NO.	21 OF 37

12/30/2013 1:23:04 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2541-HW2.dgn



STATION	3	4	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	TOTAL
Exc																								
Emb																								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

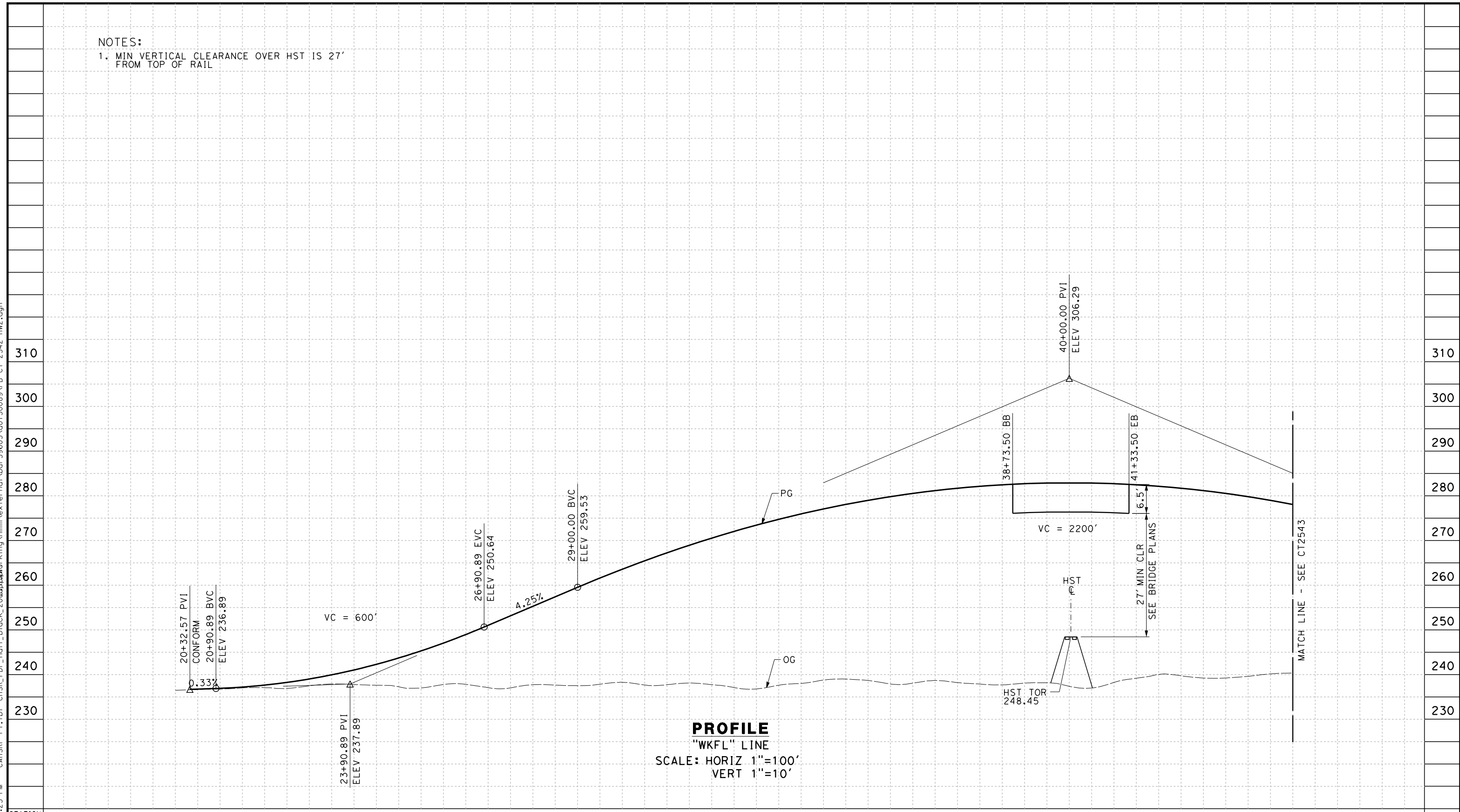


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
EXCELSIOR AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT2541
SCALE
AS SHOWN
SHEET NO.
22 OF 37

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL

12/30/2013 1:23:23 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2542-HW2.dgn



STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

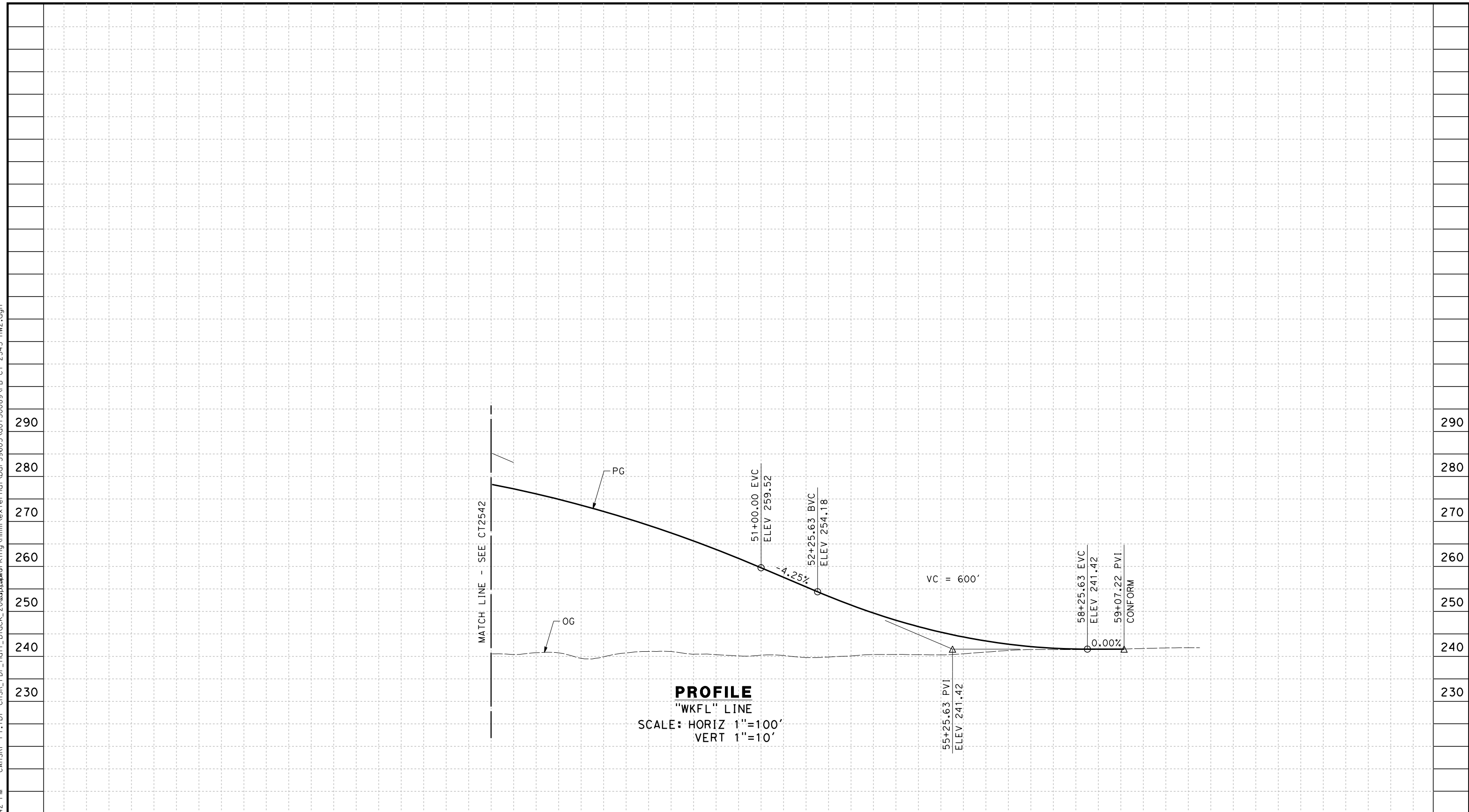
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 FLINT AVE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CT2542
 SCALE
 AS SHOWN
 SHEET NO.
 23 OF 37

12/30/2013 1:23:42 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2543-HW2.dgn



STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
FLINT AVE

CONTRACT NO.
HSR 06-0003

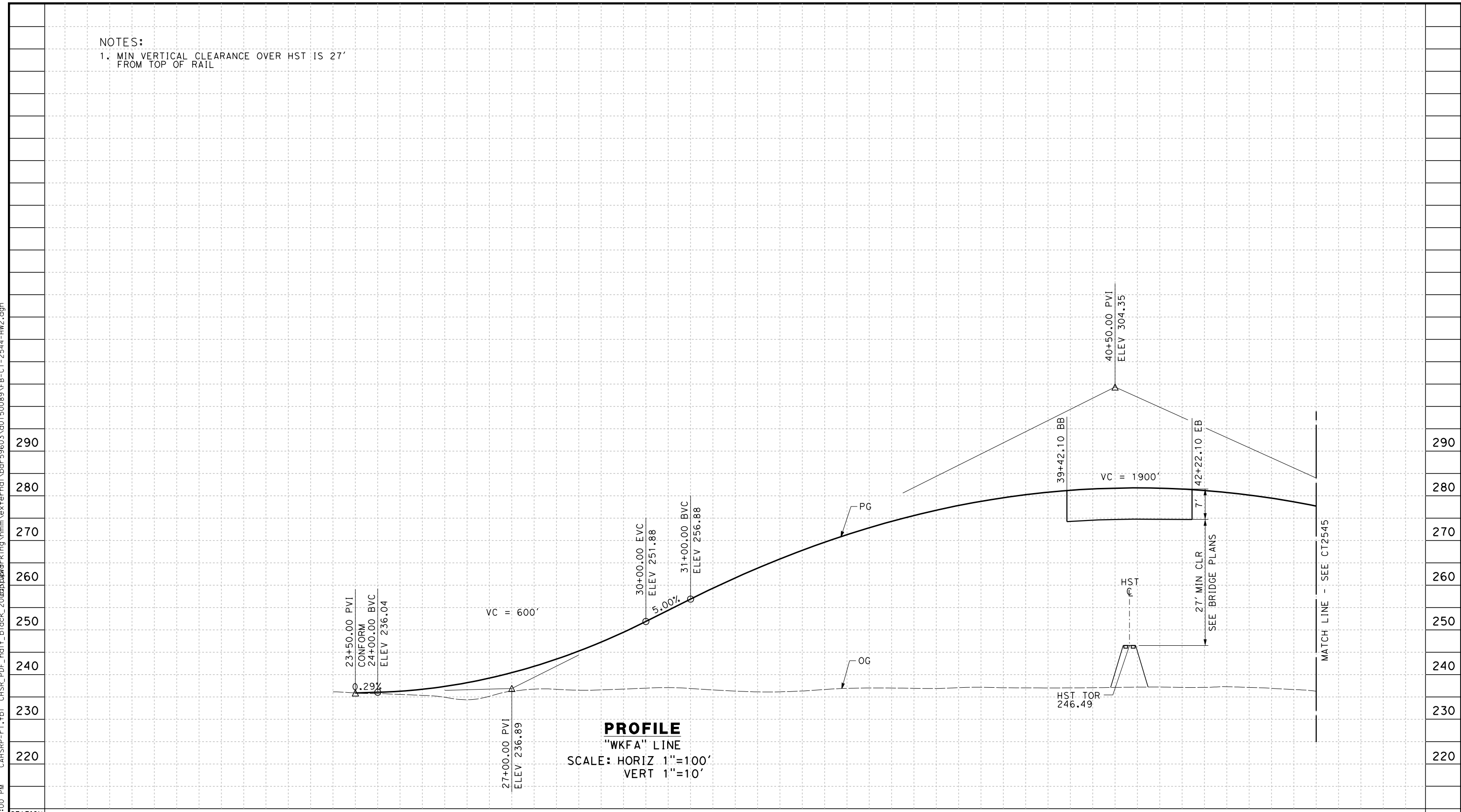
DRAWING NO.
CT2543

SCALE
AS SHOWN

SHEET NO.
24 OF 37

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27'
FROM TOP OF RAIL



STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	T. CLIFFORD
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



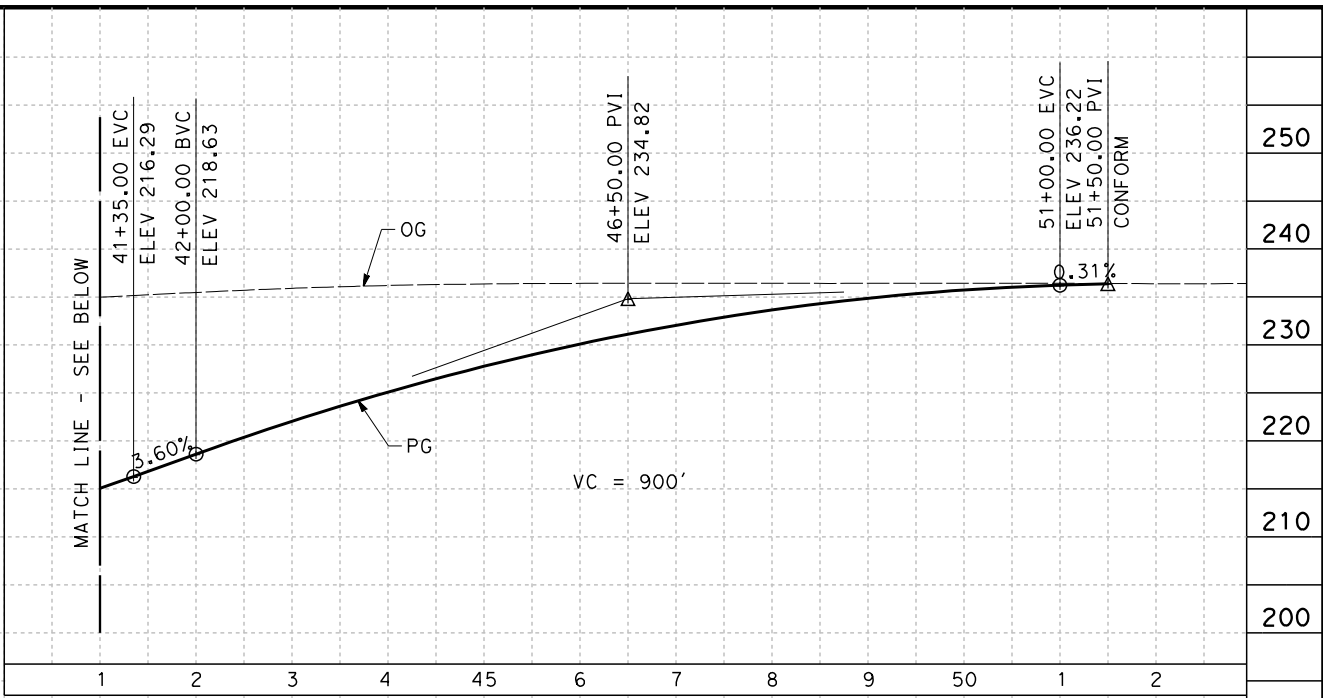
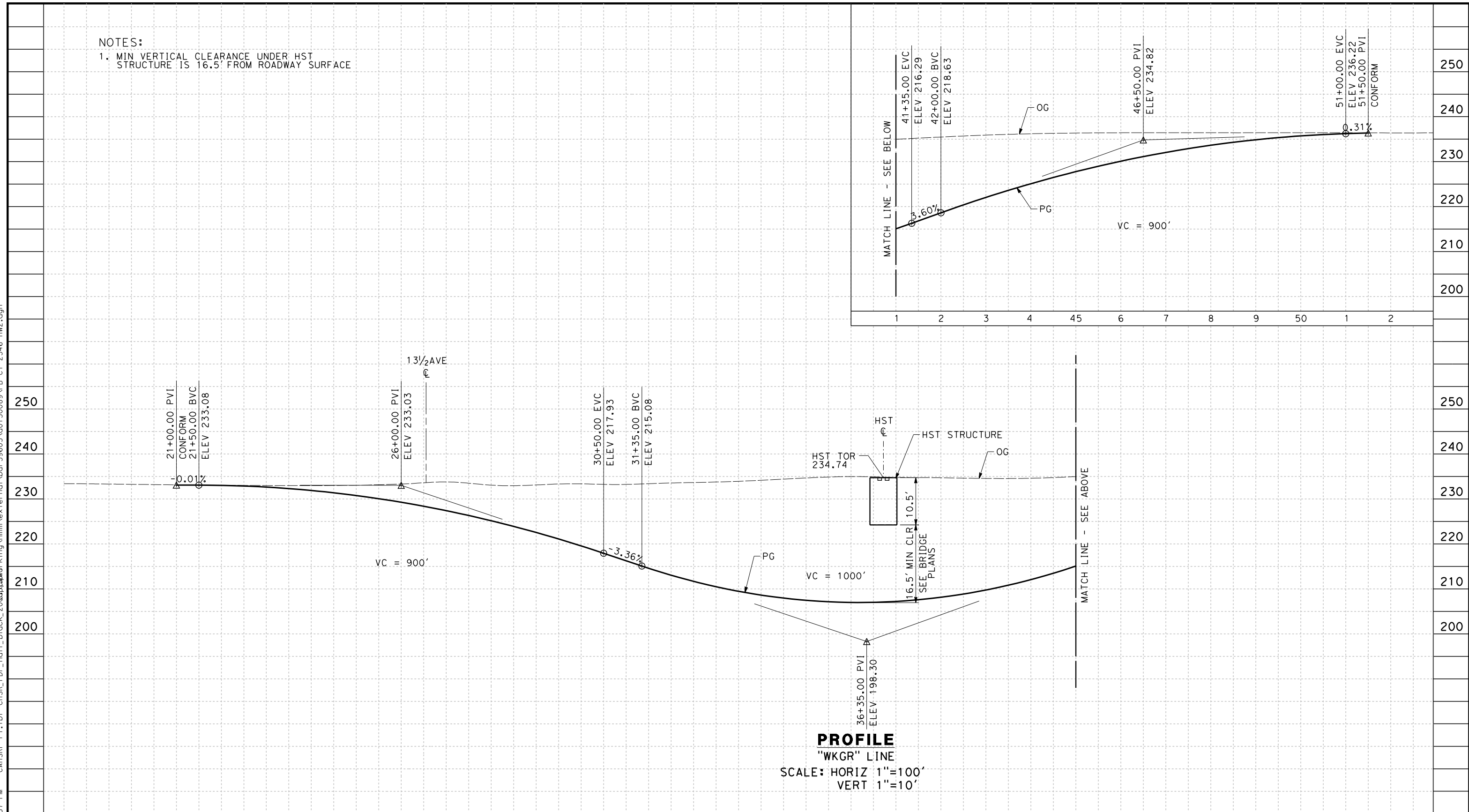
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
FARGO AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2544
SCALE	AS SHOWN
SHEET NO.	25 OF 37

12/30/2013 12:24:00 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2544-HW2.dgn

NOTES:
 1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE



STATION	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	TOTAL	
Exc																							
Emb																							

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	T. CLIFFORD
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



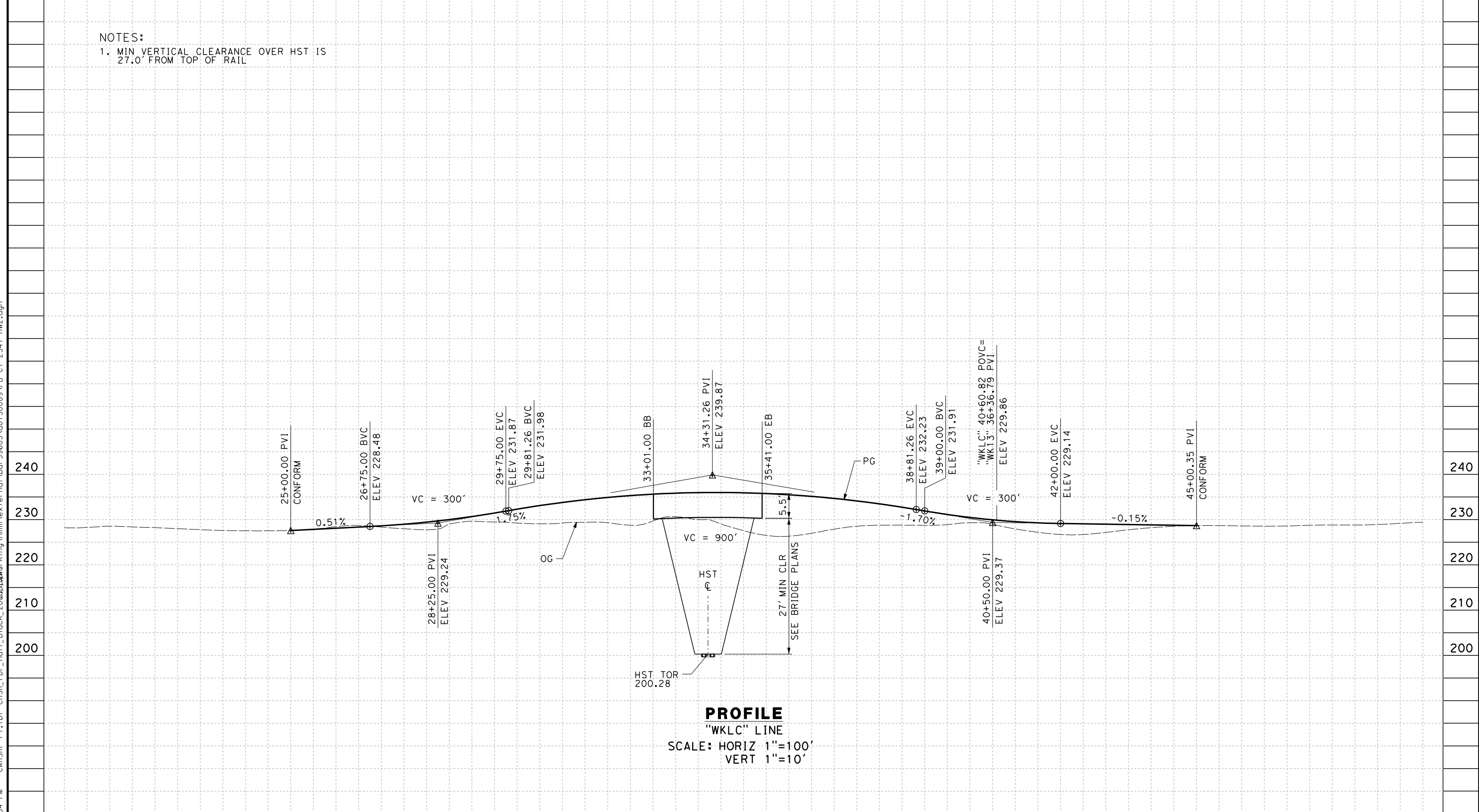
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 GRANGEVILLE BLVD

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2546
SCALE	AS SHOWN
SHEET NO.	27 OF 37

12/30/2013 12:24:37 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2546-HW2.dgn

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27.0' FROM TOP OF RAIL



PROFILE
"WKLC" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	7	8	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
W LACEY BLVD

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2547

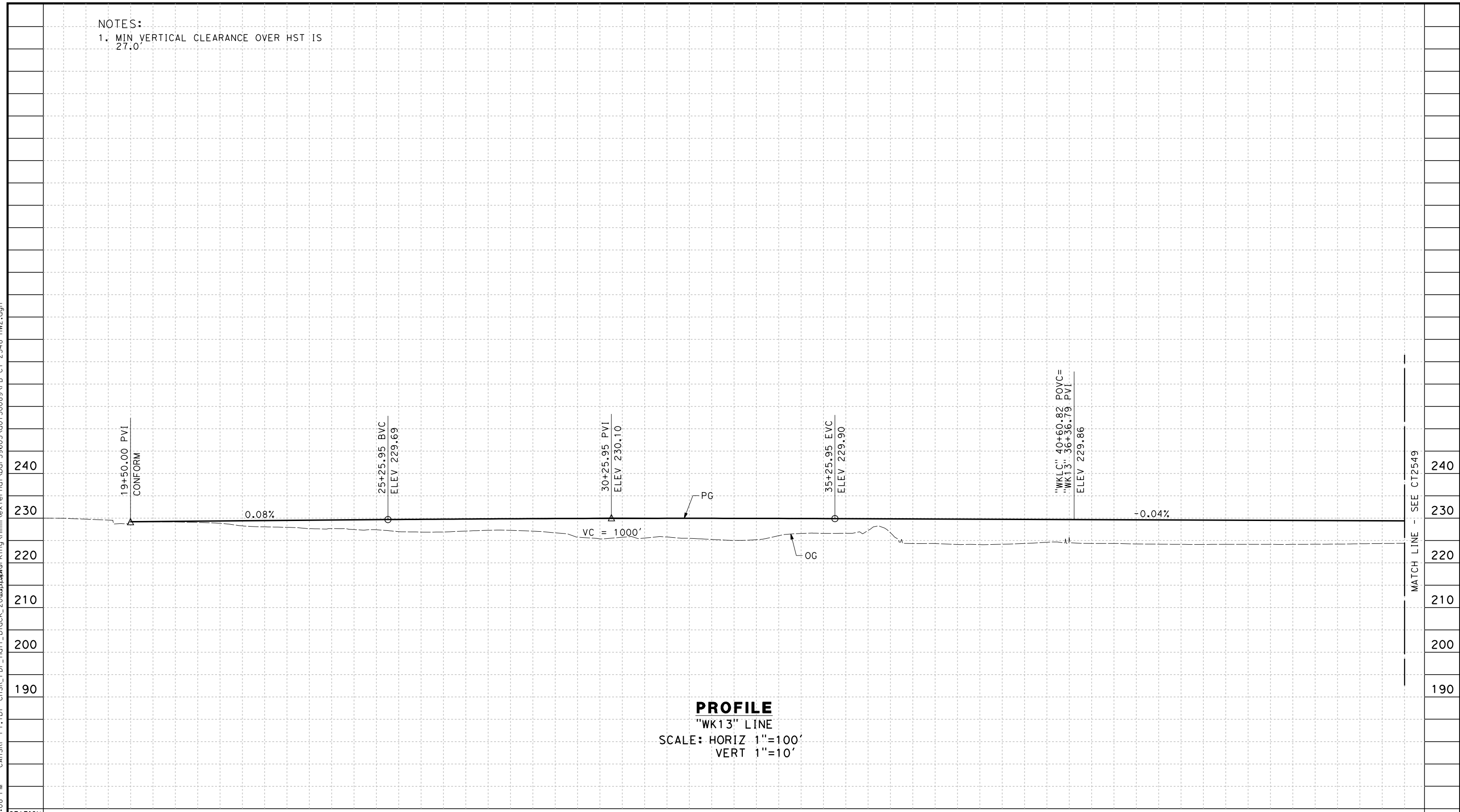
SCALE
AS SHOWN

SHEET NO.
28 OF 37

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NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27.0'

12/30/2013 1:25:08 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2548-HW2.dgn



PROFILE
 "WK13" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	7	8	TOTAL
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

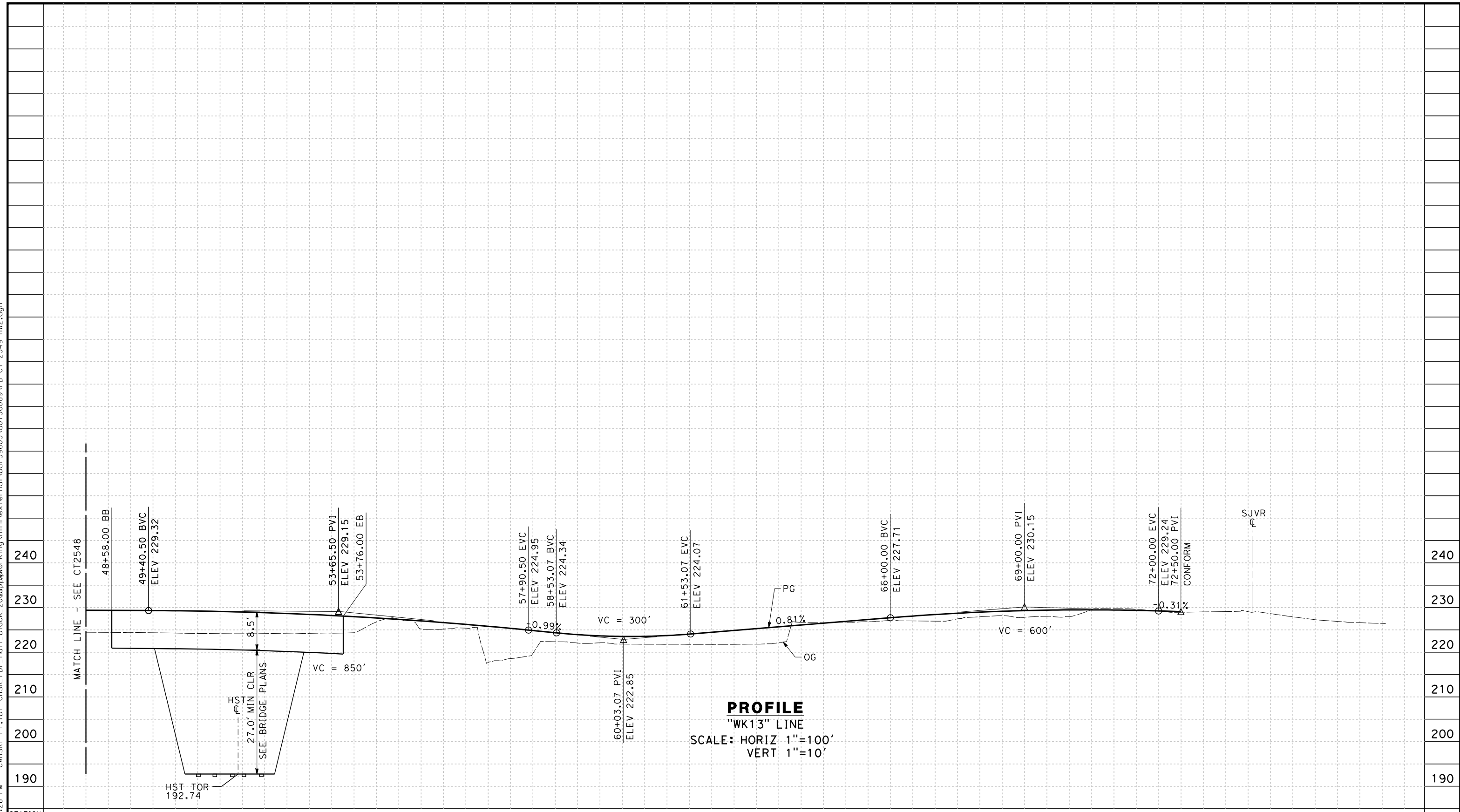
**RECORD SET 15%
 DESIGN SUBMISSION**
 NOT FOR
 CONSTRUCTION



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 13TH AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2548
 SCALE
AS SHOWN
 SHEET NO.
29 OF 37

12/30/2013 1:25:26 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2549-HW2.dgn



PROFILE
 "WK13" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	6	7	8	9	70	1	2	3	4	75	6	7	TOTAL
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 13TH AVE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CT2549
 SCALE
 AS SHOWN
 SHEET NO.
 30 OF 37

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL

+5%
0%
-5%

+5%
0%
-5%

260

260

250

250

240

240

230

230

220

220

210

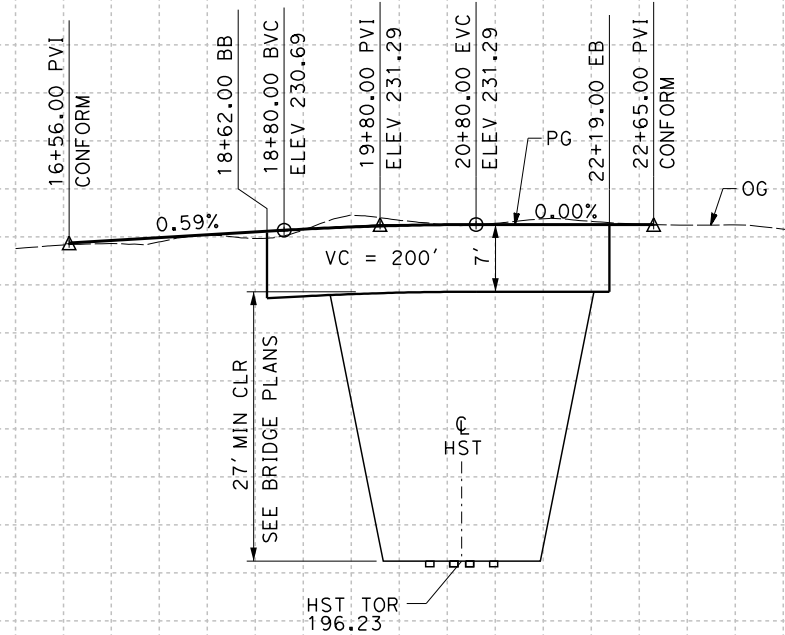
210

200

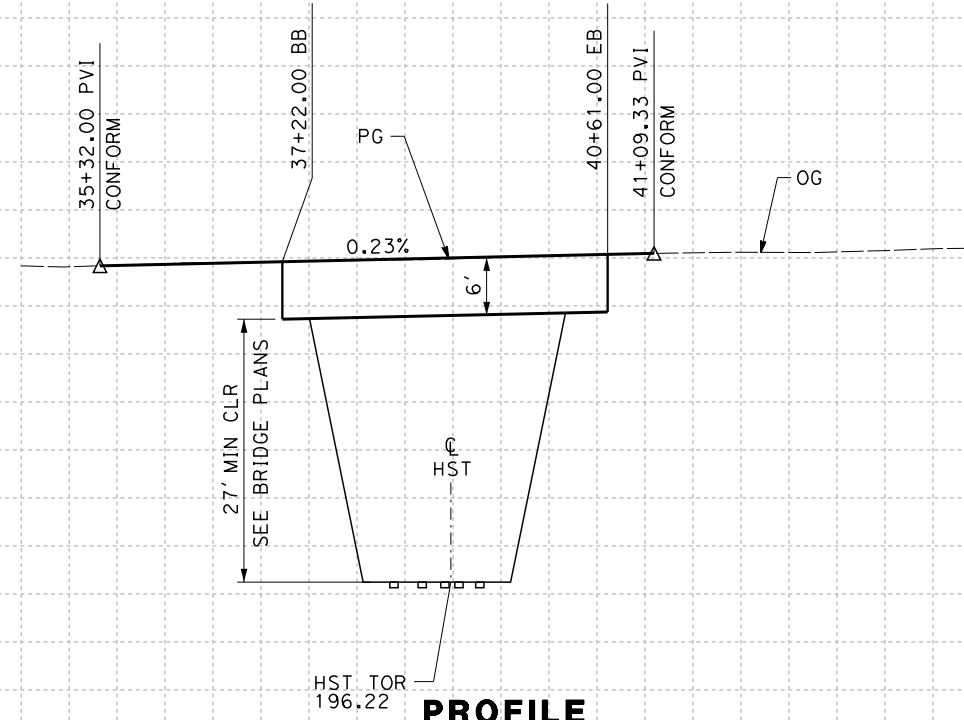
200

190

190



PROFILE
"WKGL" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'



PROFILE
"SR198" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	15	6	7	8	9	20	1	2	3	4	25	35	6	7	8	9	40	1	2	3	4	45	TOTAL	
Exc																								
Emb																								

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	T. CLIFFORD
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



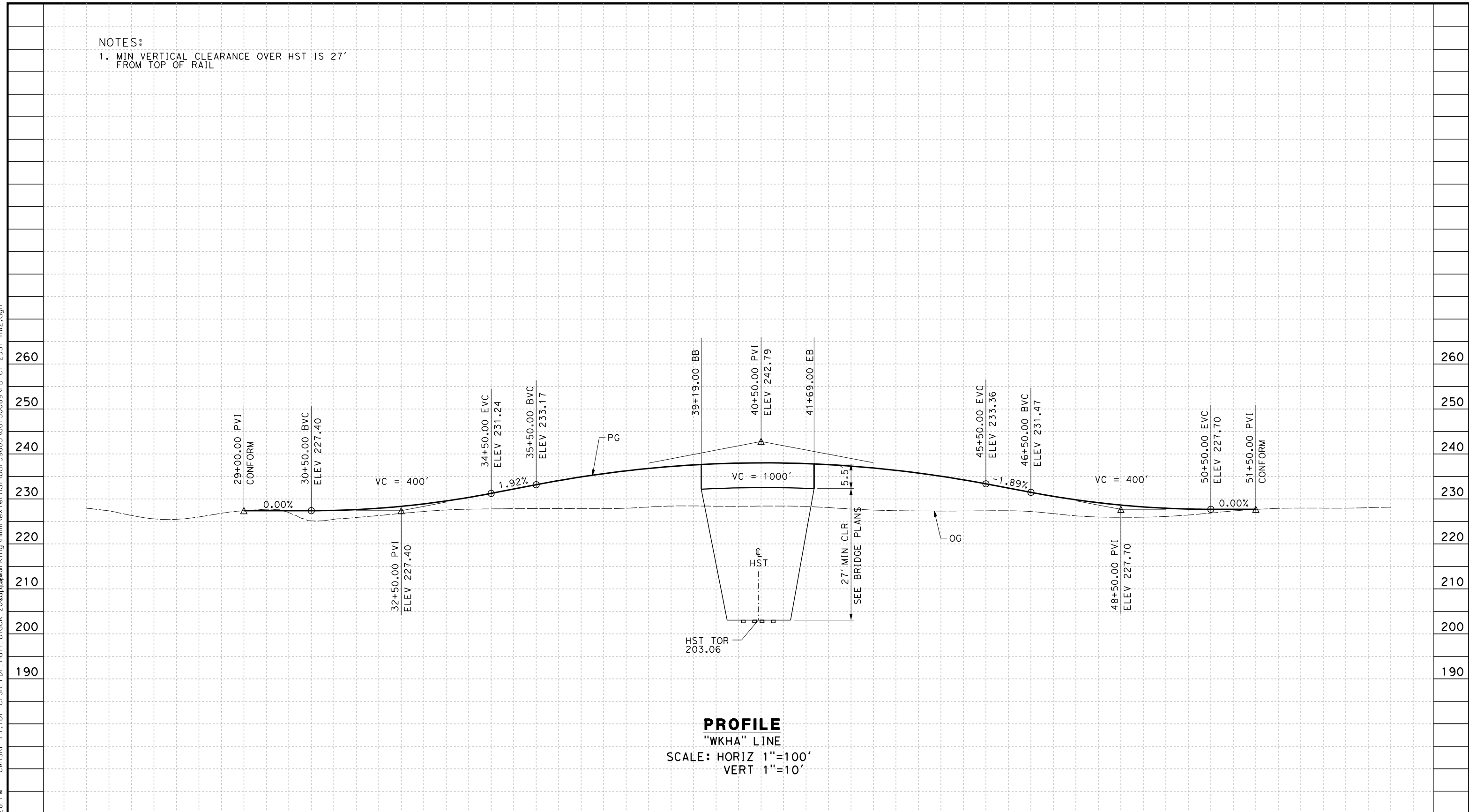
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
STATE ROUTE 198/GLENDALE AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2550
SCALE	AS SHOWN
SHEET NO.	31 OF 37

12/30/2013 1:25:49 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603.d0150089\FB-CT-2550-HW2.dgn

NOTES:
 1. MIN VERTICAL CLEARANCE OVER HST IS 27'
 FROM TOP OF RAIL

12/30/2013 1:26:28 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603-CT-2551-HW2.dgn



PROFILE
 "WKHA" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	TOTAL
Exc																										
Emb																										

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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



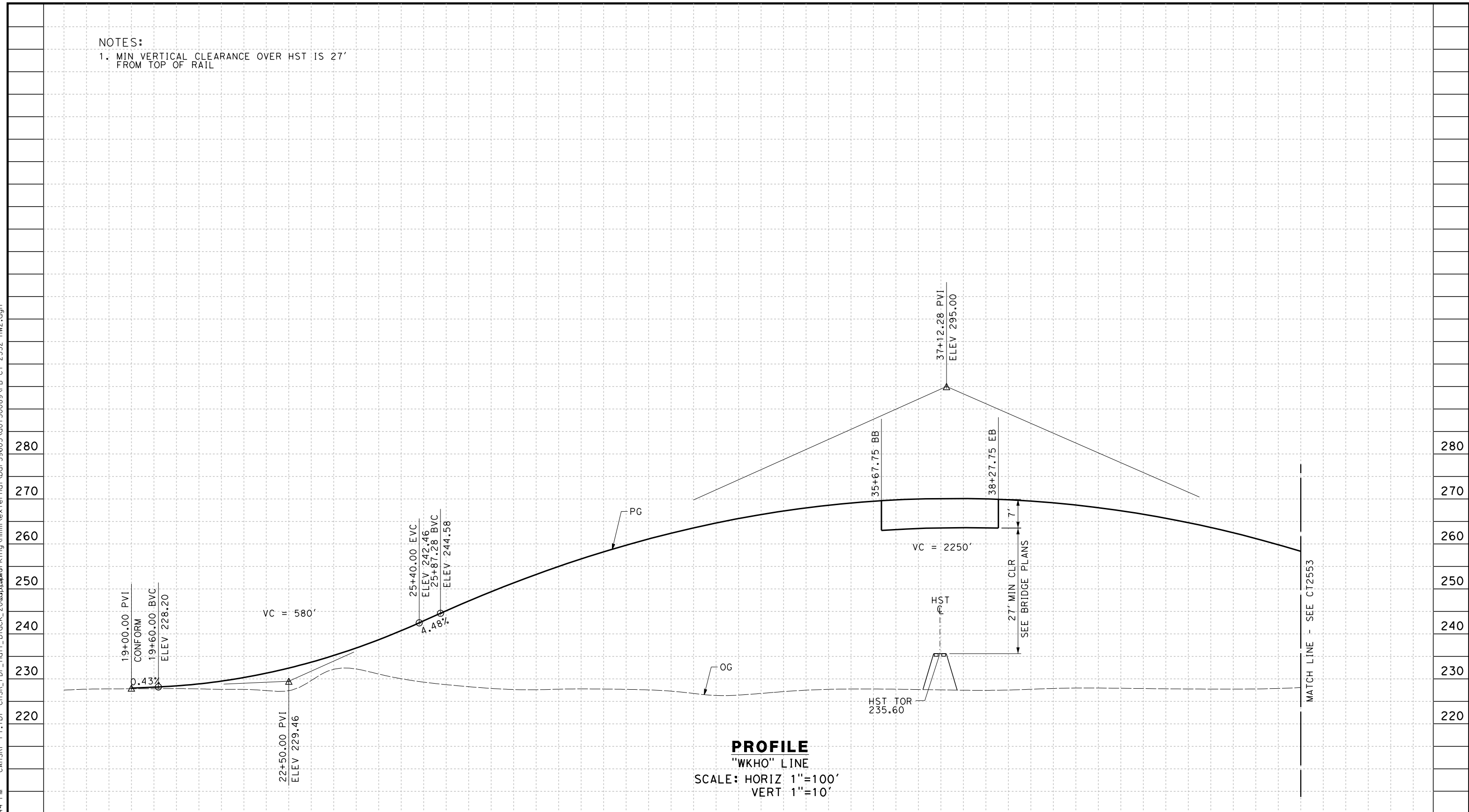
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 HANFORD ARMONA RD

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2551
 SCALE
AS SHOWN
 SHEET NO.
32 OF 37

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27'
FROM TOP OF RAIL

12/30/2013 1:26:44 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2552-HW2.dgn



PROFILE
"WKHO" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	TOTAL
Exc																											
Emb																											

DESIGNED BY	I. JOSIFEK
DRAWN BY	D. BARNHART
CHECKED BY	T. CLIFFORD
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

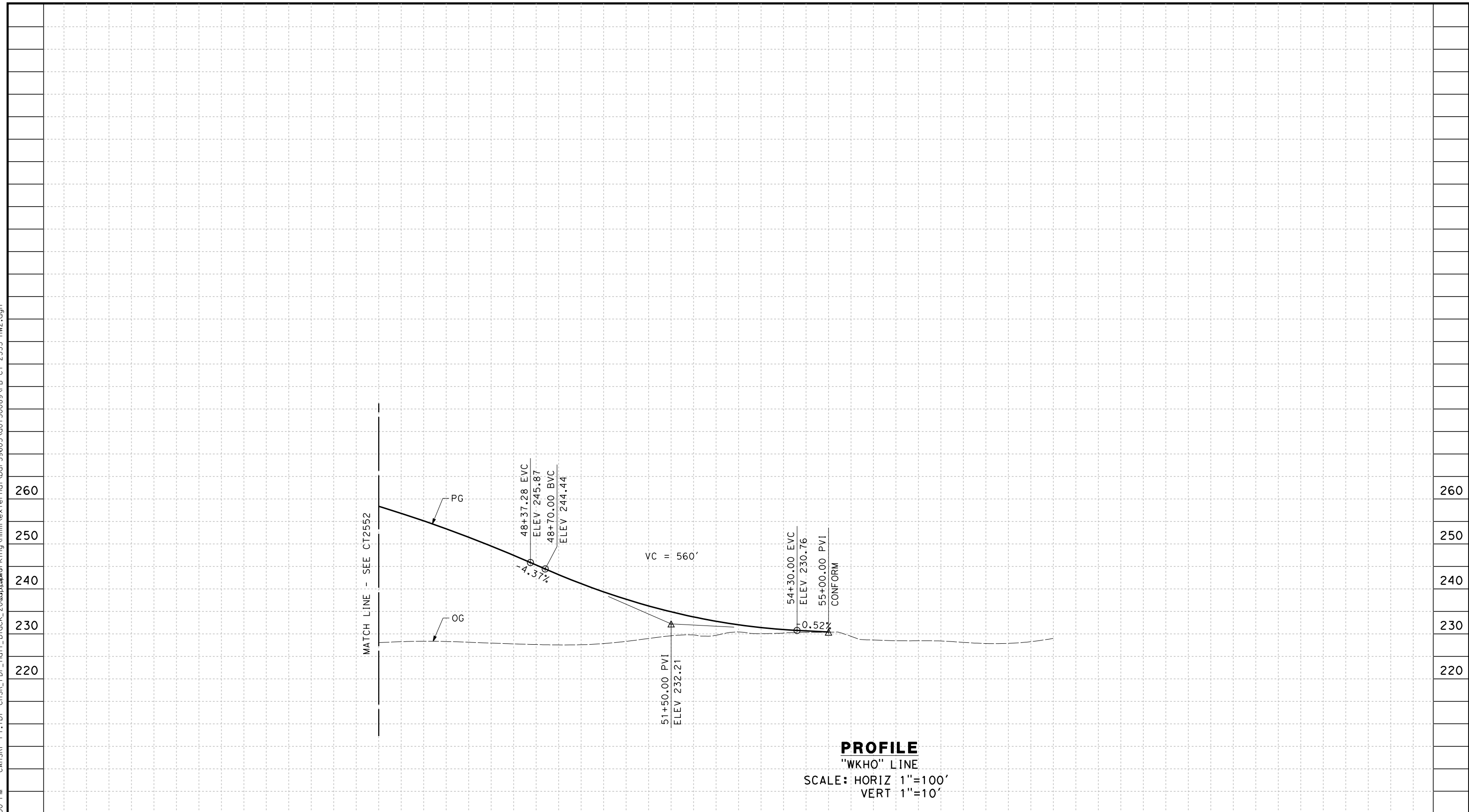
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
GRADE SEPARATION PROFILE
HOUSTON AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2552
SCALE	AS SHOWN
SHEET NO.	33 OF 37

12/30/2013 1:27:00 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150089\FB-CT-2553-HW2.dgn



PROFILE
 "WKHO" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
T. CLIFFORD

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 GRADE SEPARATION PROFILE
 HOUSTON AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2553

SCALE
AS SHOWN

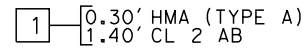
SHEET NO.
34 OF 37

NOTES:

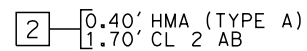
1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSIONS AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.

STRUCTURAL SECTIONS

TYPICAL ROADWAY (4' SHOULDER)



TYPICAL ROADWAY (8' SHOULDER)



TYPICAL ROADWAY (SR198)

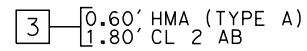
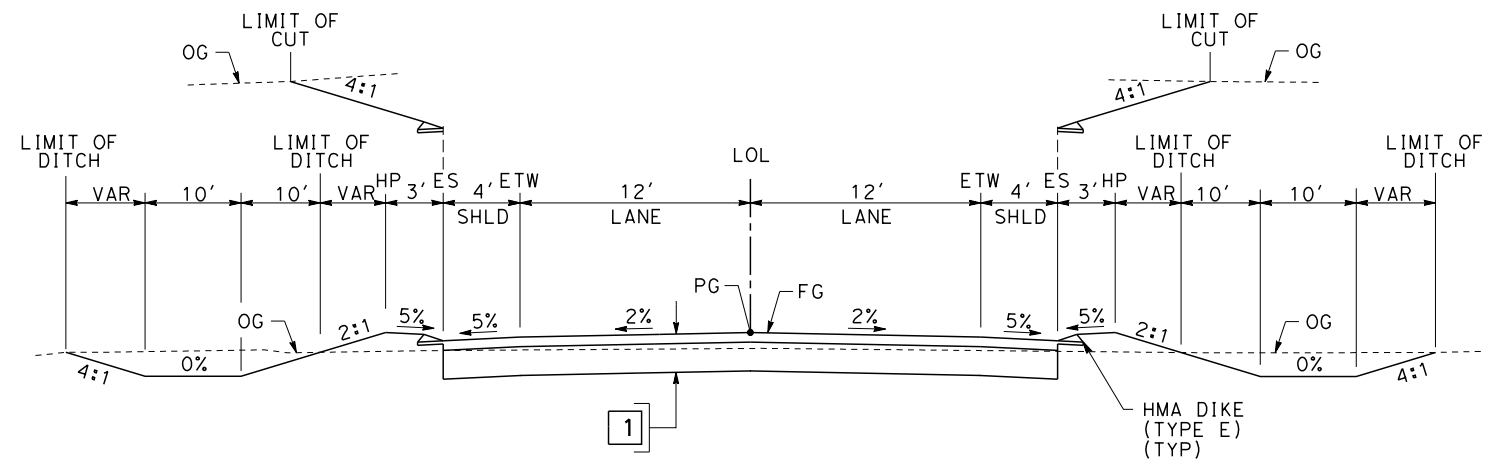


TABLE OF DESIGN SPEEDS

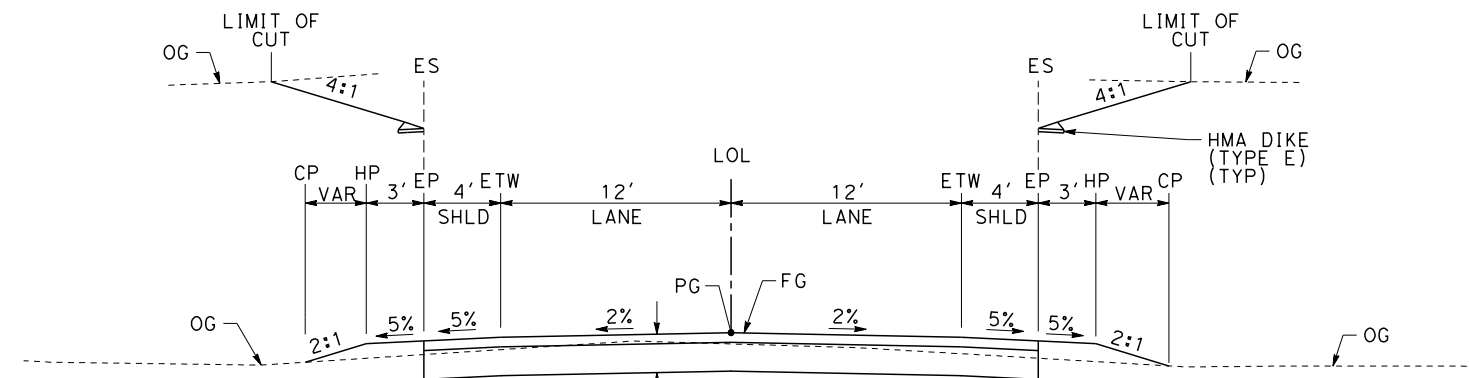
STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED	CRITERIA / JURISDICTION
E CONEJO AVE	WFCO	65	AASHTO/FRESNO COUNTY
E ELKHORN AVE	WFEL	65	AASHTO/FRESNO COUNTY
S CLOVIS AVE	WFCL	55(30*)	AASHTO/FRESNO COUNTY
EXCELSIOR AVE	WKEX	60	KINGS COUNTY/KINGS COUNTY
FLINT AVE	WKFL	60	KINGS COUNTY/KINGS COUNTY
FARGO AVE	WKFA	55	KINGS COUNTY/KINGS COUNTY
GRANGEVILLE BLVD	WKGR	60**	KINGS COUNTY/KINGS COUNTY
W LACEY BOULEVARD	WKLC	60**	KINGS COUNTY/KINGS COUNTY
13TH AVE	WK13	60**	KINGS COUNTY/KINGS COUNTY
GLENDALE AVE	WKGL	40	KINGS COUNTY/KINGS COUNTY
SR 198	SR198	70	HDM/CALTRANS
HANFORD ARMONA RD	WKHA	60**	KINGS COUNTY/KINGS COUNTY
HOUSTON AVE	WKHO	60**	KINGS COUNTY/KINGS COUNTY

* WILL REQUIRE REDUCED DESIGN SPEEDS FOR HORIZONTAL CURVES
 ** DESIGN SPEED PER CITY OF HANFORD GENERAL PLAN



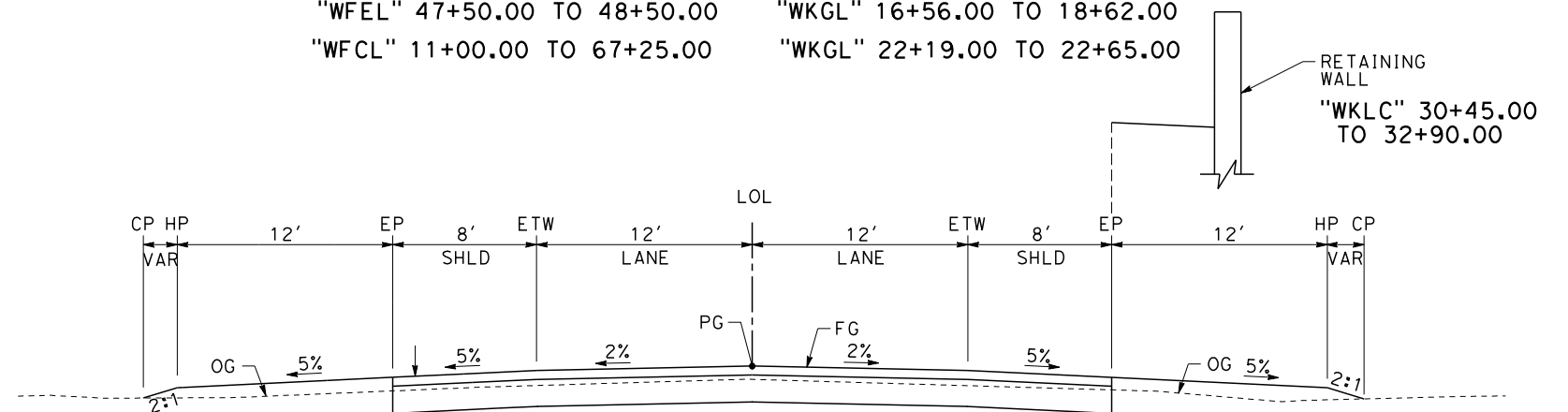
SECTION A

"WFEL" 8+00.00 TO 27+45.50 "WKHO" 25+00.00 TO 35+67.75
 "WFEL" 30+86.50 TO 47+50.00 "WKHO" 38+27.75 TO 55+00.00



SECTION B

"WFEL" 7+25.00 TO 8+00.00 "WKHO" 19+00.00 TO 25+00.00
 "WFEL" 47+50.00 TO 48+50.00 "WKGL" 16+56.00 TO 18+62.00
 "WFCL" 11+00.00 TO 67+25.00 "WKGL" 22+19.00 TO 22+65.00



SECTION C

"WK13" 19+50.00 TO 48+58.00 "WKLC" 25+00.00 TO 33+01.00
 "WK13" 53+76.00 TO 72+50.00 "WKLC" 35+41.00 TO 45+00.35

12/30/2013 1:27:22 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150089\FB-CT-3355-HW2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

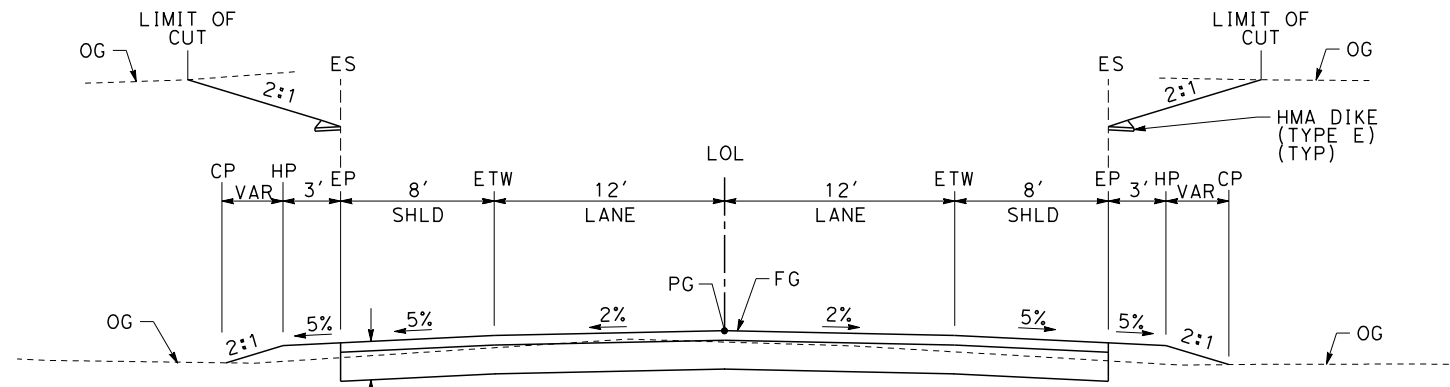
DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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



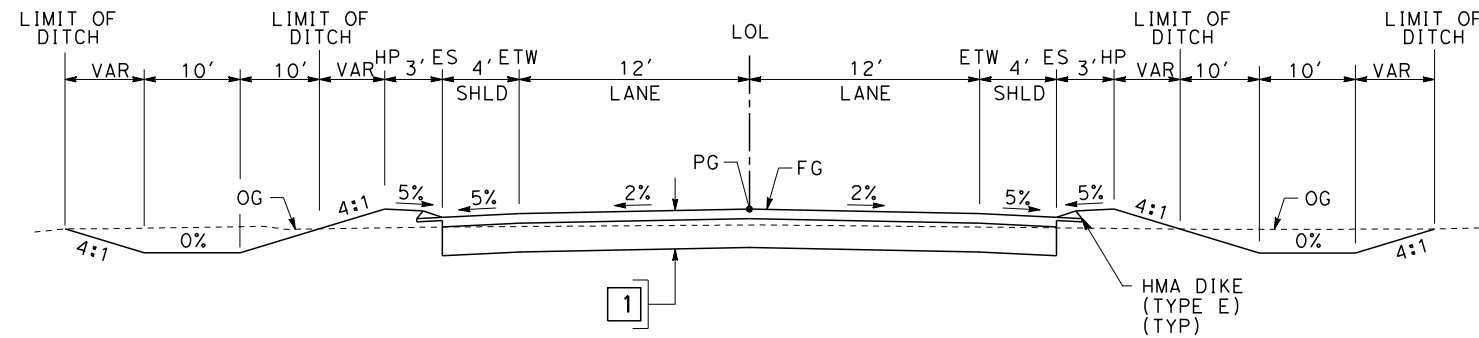
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT3355
 SCALE
AS SHOWN
 SHEET NO.
35 OF 37



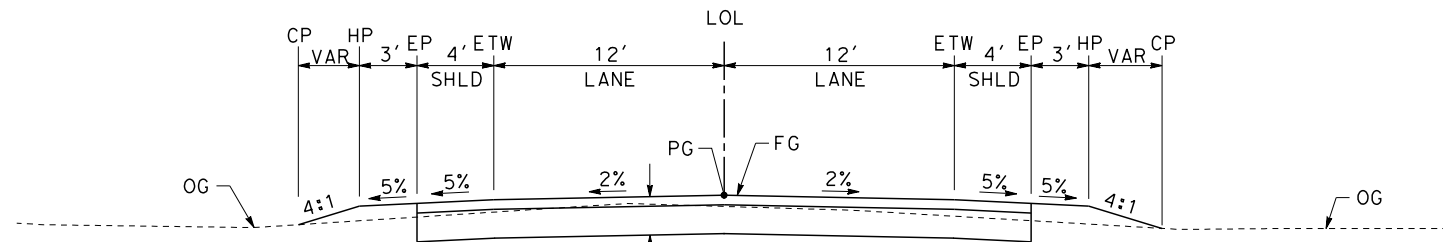
SECTION D

"WFCO" 9+05.00 TO 20+88.02 "WKHA" 29+00.00 TO 39+19.00
 "WFCO" 29+36.14 TO 36+95.04 "WKHA" 41+69.00 TO 51+50.00
 "WKGR" 21+00.00 TO 42+65.00 "WKGR" 45+77.63 TO 51+50.00



SECTION E

"WKEX" 21+00.00 TO 38+73.10 "WKFL" 22+67.00 TO 38+73.50 "WKFA" 24+00.00 TO 39+42.10
 "WKEX" 41+33.10 TO 59+00.00 "WKFL" 41+33.50 TO 58+50.00 "WKFA" 42+22.10 TO 57+00.00



SECTION F

"WKEX" 20+00.00 TO 21+00.00 "WKFL" 20+32.57 TO 22+67.00
 "WKEX" 59+00.00 TO 60+75.00 "WKFL" 58+50.00 TO 59+07.22
 "WKFA" 23+50.00 TO 24+00.00 "WKFA" 57+00.00 TO 57+25.00
 "WK13.25" 9+18.79 TO 11+73.30

12/30/2013 1:27:47 PM CAHSR-r1.tbl CHSR_PDF_half_black_200.ctb \\bar59603\d0150089\FB-CT-3356-HW2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

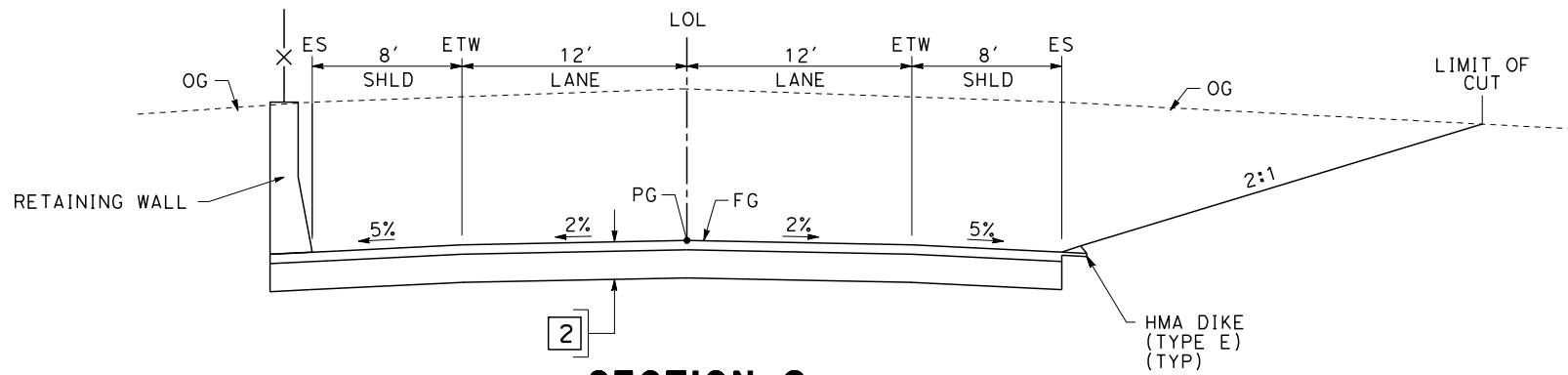
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

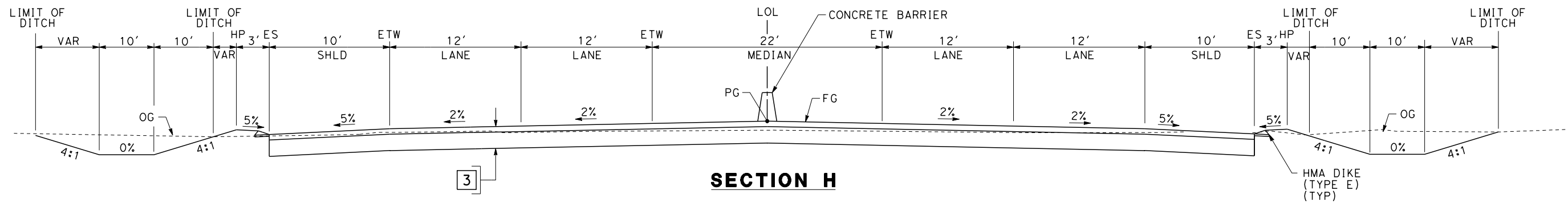
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT3356
 SCALE
AS SHOWN
 SHEET NO.
36 OF 37

12/30/2013 1:28:10 PM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\external\bar59603\FB-CT-3357-HW2.dgn



SECTION G

"WFCO" 20+88.02 TO 29+36.14
 "WKGR" 42+65.00 TO 45+77.63



SECTION H

"SR198" 35+32.00 TO 37+22.00
 "SR198" 40+61.00 TO 41+09.33

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
T. CLIFFORD
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 HANFORD WEST BYPASS SUBSECTION
 ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CT3357
 SCALE
 AS SHOWN
 SHEET NO.
 37 OF 37

STREET CLOSURE		
STREET NAME	HST ALIGNMENT STA.	LOCAL STANDARD
S 10TH AVE	2290+00.00	KINGS COUNTY



12/29/2013 5:02:120 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CB0220.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K1
ROADWAY/GRADE SEPARATION
KEY MAP

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB0220

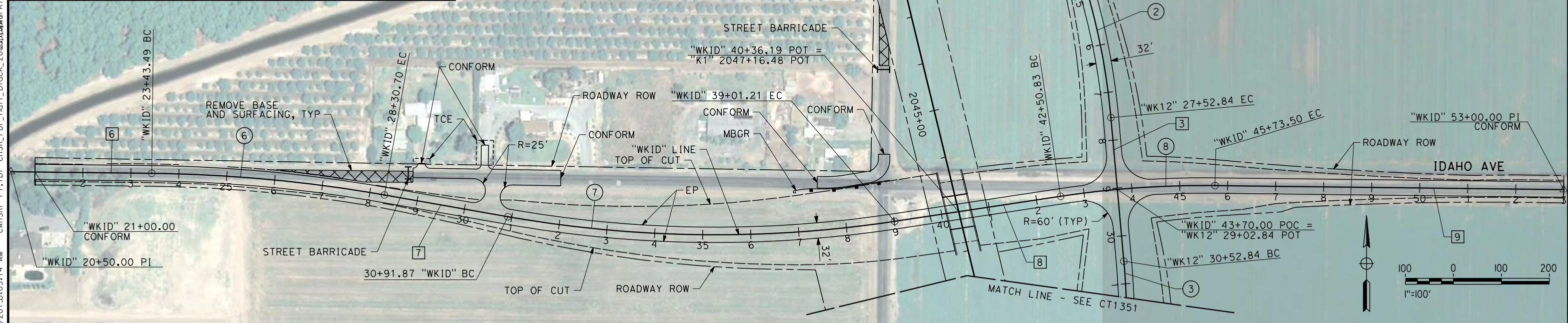
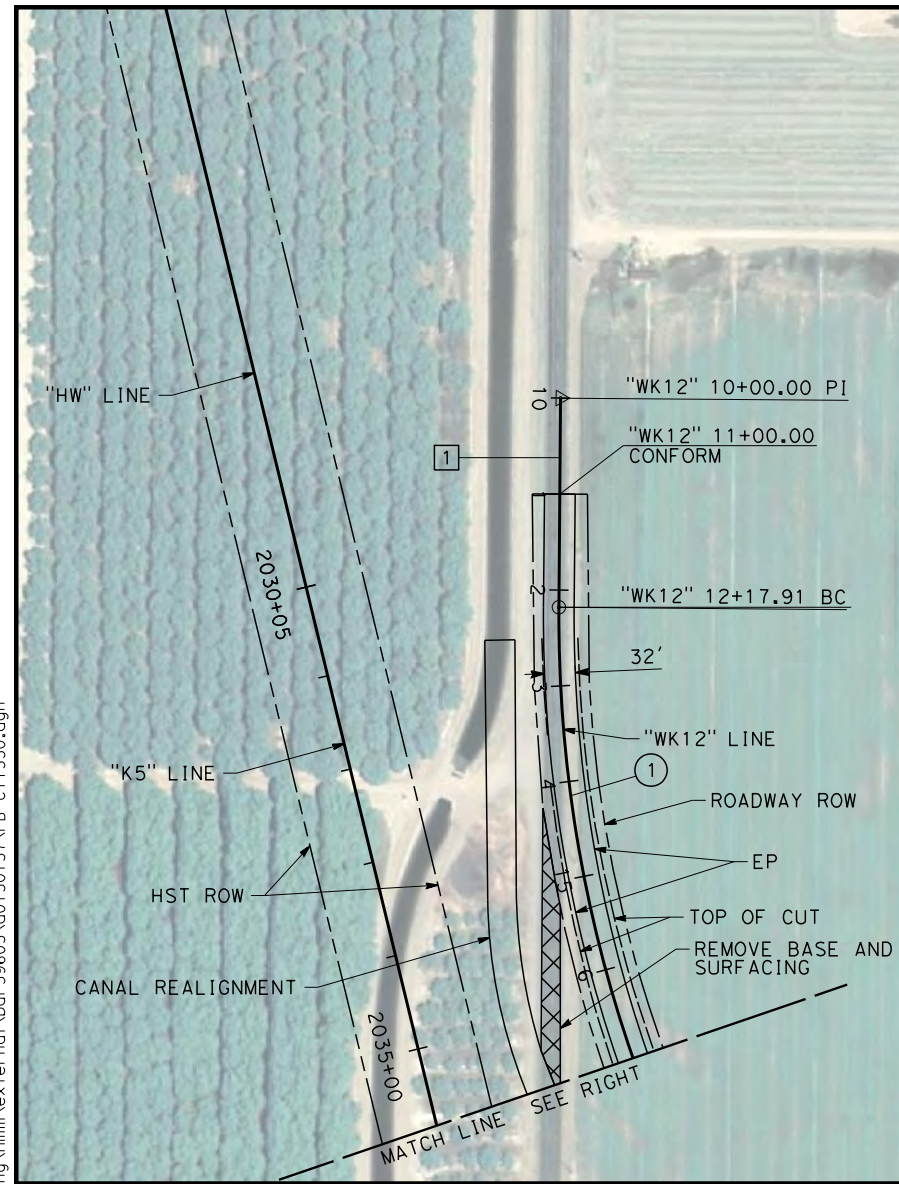
SCALE
AS SHOWN

SHEET NO.
1 OF 23

12/29/2013 10:03:14 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150137\FB-CT1350.dgn

LINE DATA		
NO.	BEARING	DISTANCE
1	S00°27'17"W	217.91'
2	S28°46'41"E	243.77'
3	S05°10'10"E	300.00'
6	S89°20'22"E	293.49'
7	S80°02'04"E	261.16'
8	N81°25'00"E	349.62'
9	S89°20'22"E	726.50'

CURVE DATA				
NO.	R	Δ	T	L
1	1400.00'	29°13'58"	365.10'	714.29'
2	1400.00'	23°36'30"	292.58'	576.86'
3	1400.00'	36°27'47"	461.15'	890.96'
6	3000.00'	09°18'18"	244.14'	487.21'
7	2500.00'	18°32'56"	408.25'	809.35'
8	2000.00'	09°14'38"	161.69'	322.67'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K1
GRADE SEPARATION LAYOUT
12TH AVE / IDAHO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1350

SCALE
AS SHOWN

SHEET NO.
2 OF 23

12/29/2013 10:05:00 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb CT1351.dgn



LINE DATA

NO.	BEARING	DISTANCE
4	S31°17'37"W	212.95'
5	S00°27'17"W	239.71'
6	S59°24'53"E	58.40'
7	S21°50'48"W	174.39'
8	N88°55'48"E	79.37'

CURVE DATA

NO.	R	Δ	T	L
3	1400.00'	36°27'47"	461.15'	890.96'
4	1400.00'	30°50'20"	386.14'	753.54'
5	100.00'	81°15'41"	85.80'	141.83'
6	100.00'	112°54'59"	150.85'	197.08'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K1
GRADE SEPARATION LAYOUT
12TH AVE / IDAHO AVE

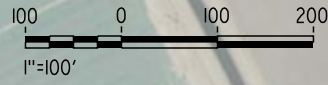
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1351
SCALE
AS SHOWN
SHEET NO.
3 OF 23

12/29/2013 5:05:48 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT1354.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°52'31"E	3500.00'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

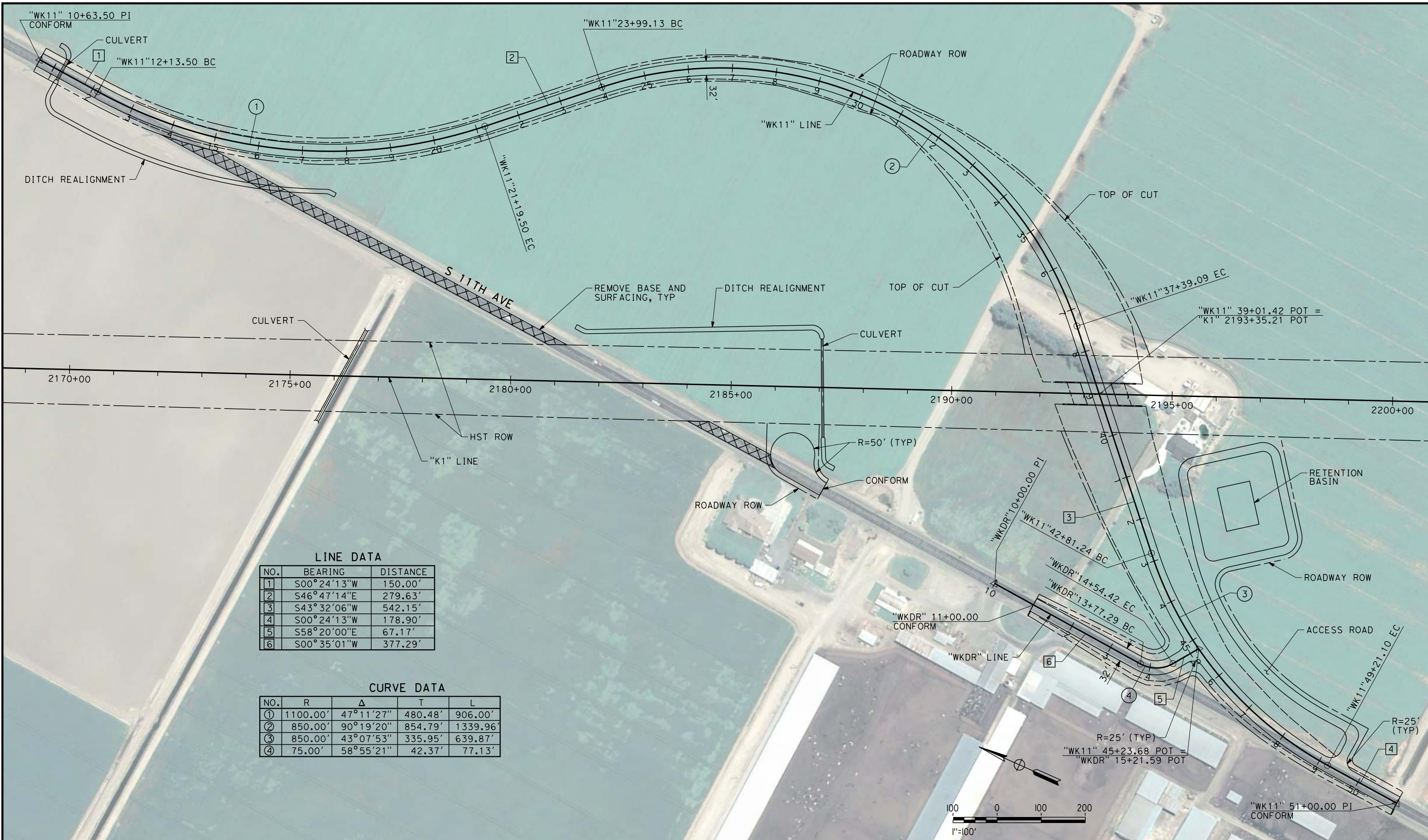
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
GRADE SEPARATION LAYOUT
JACKSON AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1354
SCALE
AS SHOWN
SHEET NO.
4 OF 23

12/29/2013 10:06:24 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\external\bar59603.ctb



LINE DATA

NO.	BEARING	DISTANCE
1	S00°24'13"W	150.00'
2	S46°47'14"E	279.63'
3	S43°32'06"W	542.15'
4	S00°24'13"W	178.90'
5	S58°20'00"E	67.17'
6	S00°35'01"W	377.29'

CURVE DATA

NO.	R	Δ	T	L
①	1100.00'	47°11'27"	480.48'	906.00'
②	850.00'	90°19'20"	854.79'	1339.96'
③	850.00'	43°07'53"	335.95'	639.87'
④	75.00'	58°55'21"	42.37'	77.13'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
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 K1
GRADE SEPARATION LAYOUT
S 11TH AVE

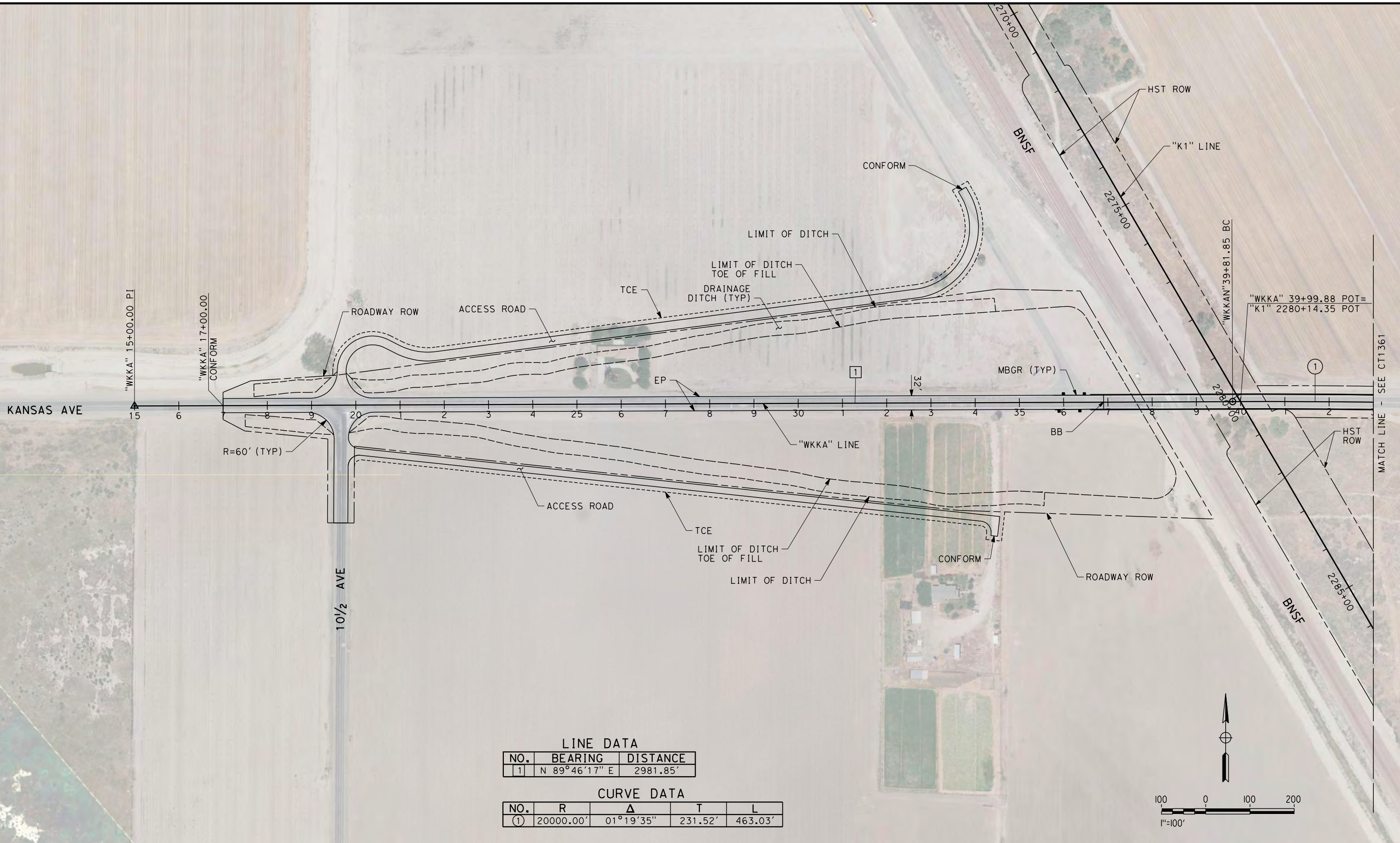
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1356

SCALE
AS SHOWN

SHEET NO.
5 OF 23

12/29/2013 5:07:36 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150137\FB-CT1359.dgn

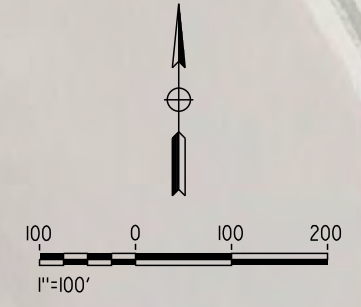


LINE DATA

NO.	BEARING	DISTANCE
1	N 89°46'17" E	2981.85'

CURVE DATA

NO.	R	Δ	T	L
①	20000.00'	01°19'35"	231.52'	463.03'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
C. RAMIREZ
DRAWN BY
P. BARBER
CHECKED BY
T. CLIFFORD
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 K1
GRADE SEPARATION LAYOUT
KANSAS AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1359
SCALE
AS SHOWN
SHEET NO.
6 OF 23

12/29/2013 5:08:32 AM CAHSR-r1.tbl CHSR_PDF_half_block_2000.ctb \\bar59603\d0150137\FB-CT1360.dgn

LINE DATA

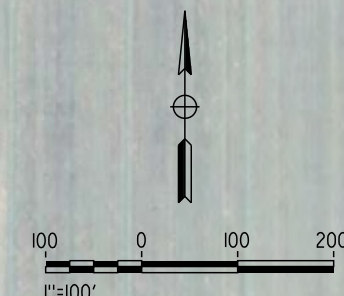
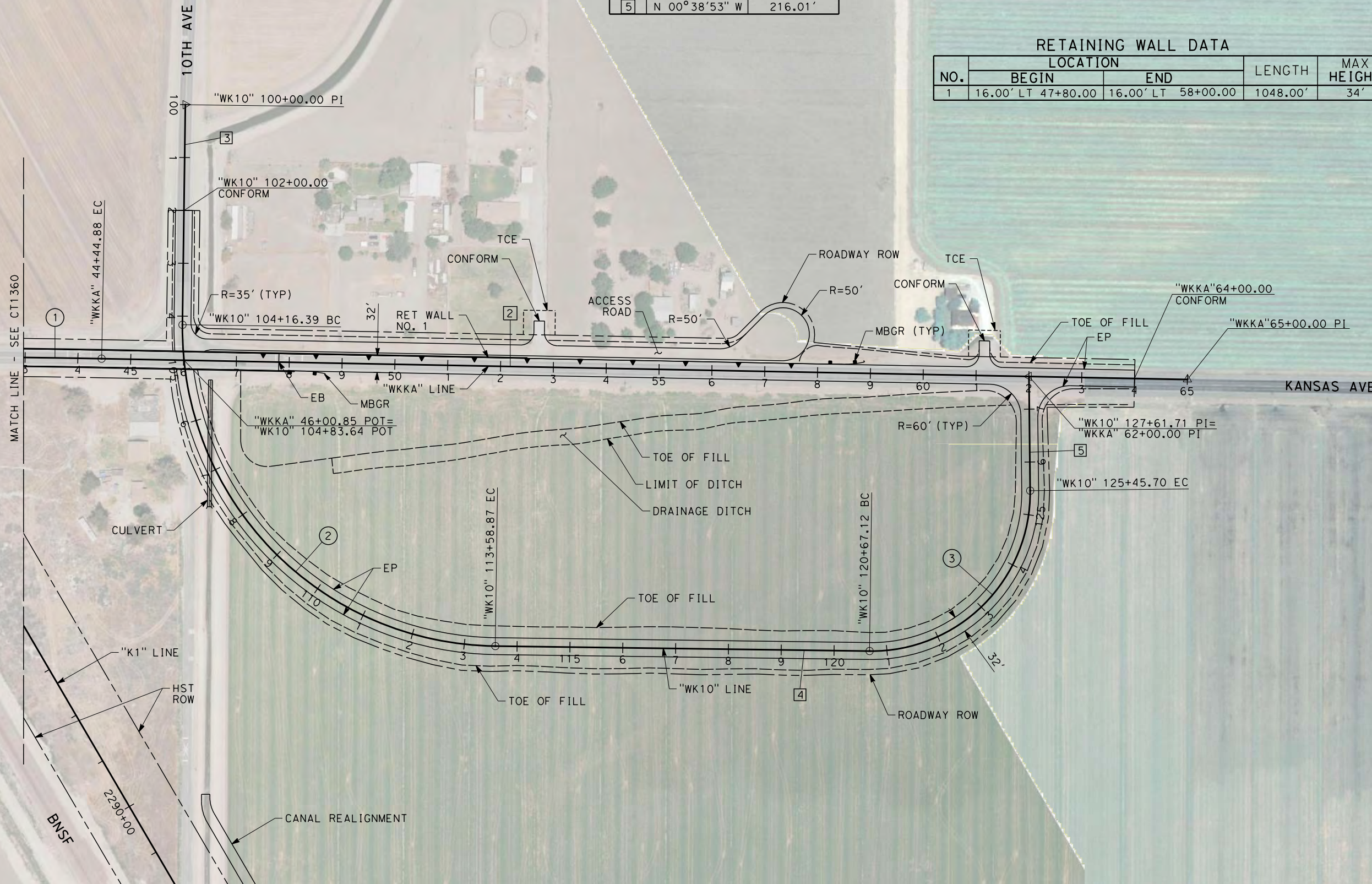
NO.	BEARING	DISTANCE
2	S 88°54'07" E	2555.15'
3	S 00°45'13" W	416.39'
4	S 89°14'47" E	708.25'
5	N 00°38'53" W	216.01'

CURVE DATA

NO.	R	Δ	T	L
①	20000.00'	01°19'35"	231.52'	463.03'
②	600.00'	90°00'00"	600.00'	942.48'
③	300.00'	91°24'05"	307.43'	478.58'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	16.00' LT 47+80.00	16.00' LT 58+00.00	1048.00'	34'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
C. RAMIREZ
DRAWN BY
P. BARBER
CHECKED BY
T. CLIFFORD
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

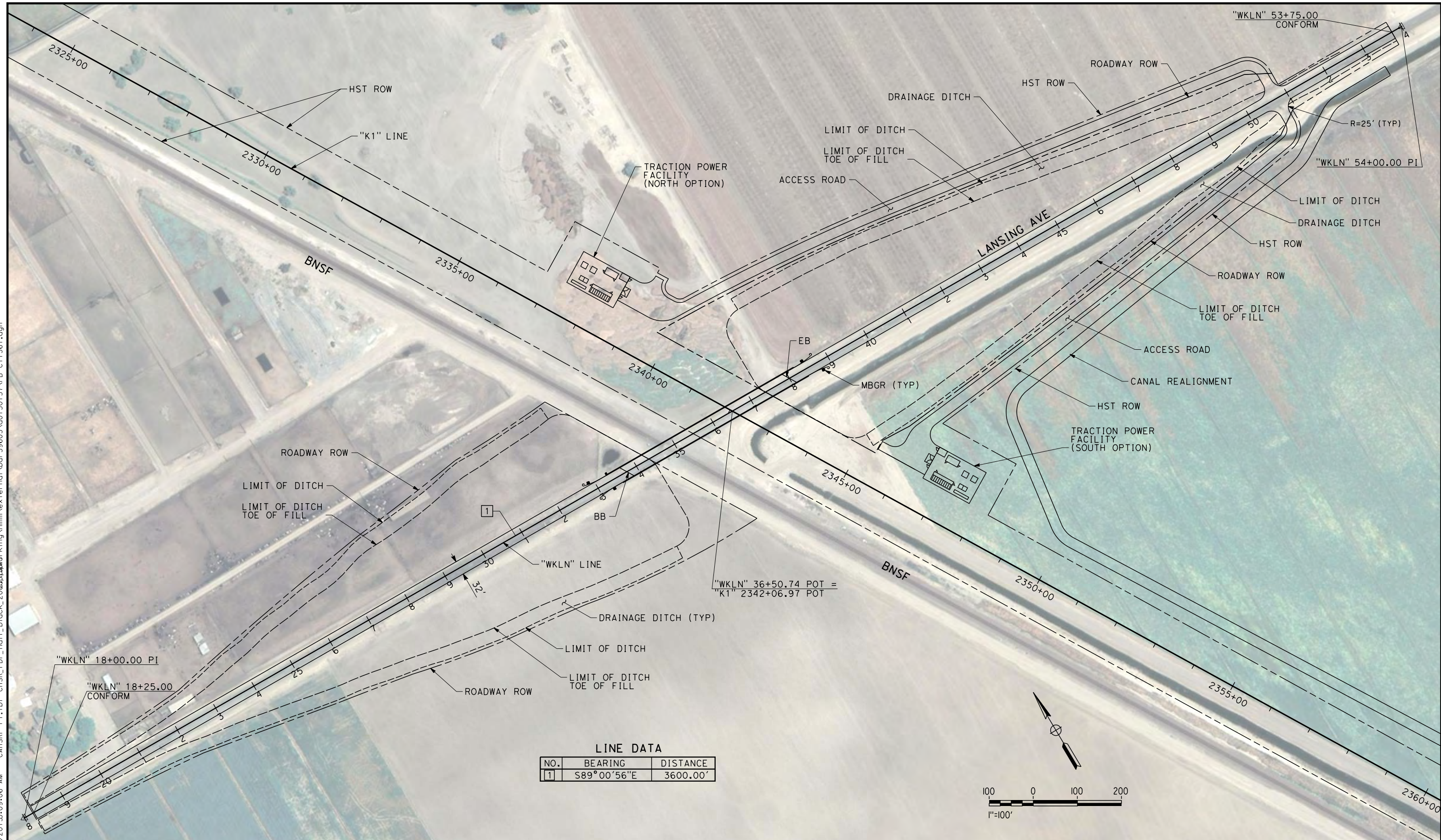
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
GRADE SEPARATION LAYOUT
KANSAS AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1360
SCALE
AS SHOWN
SHEET NO.
7 OF 23

12/29/2013 5:09:06 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603-CT1361.dgn



LINE DATA

NO.	BEARING	DISTANCE
1	S89°00'56"E	3600.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
P. BARBER

CHECKED BY
B. RAWSON

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 K1
GRADE SEPARATION LAYOUT
LANSING AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1361

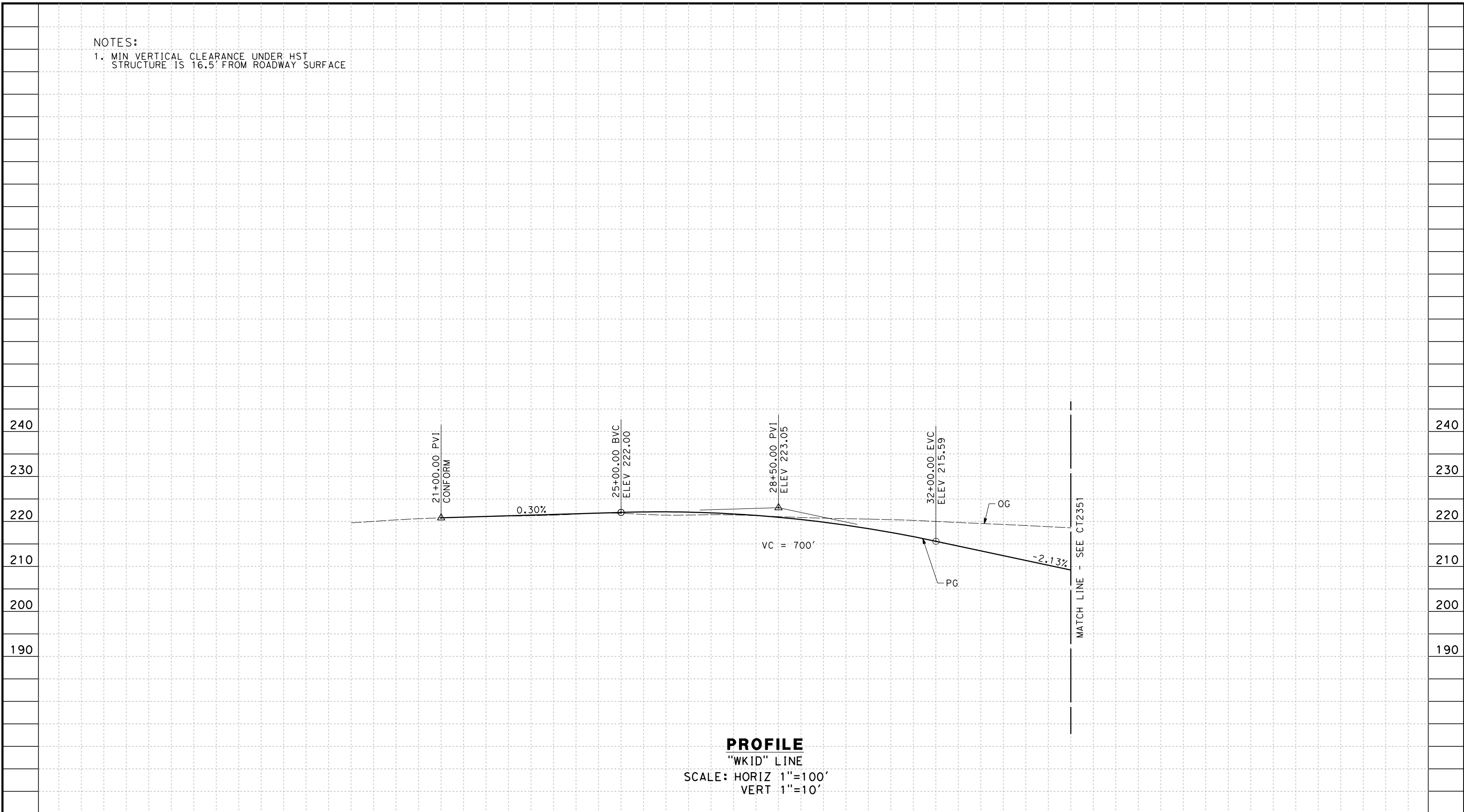
SCALE
AS SHOWN

SHEET NO.
8 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/29/2013 5:09:28 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150137\FB-CT2350.dgn



PROFILE
 "WKID" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

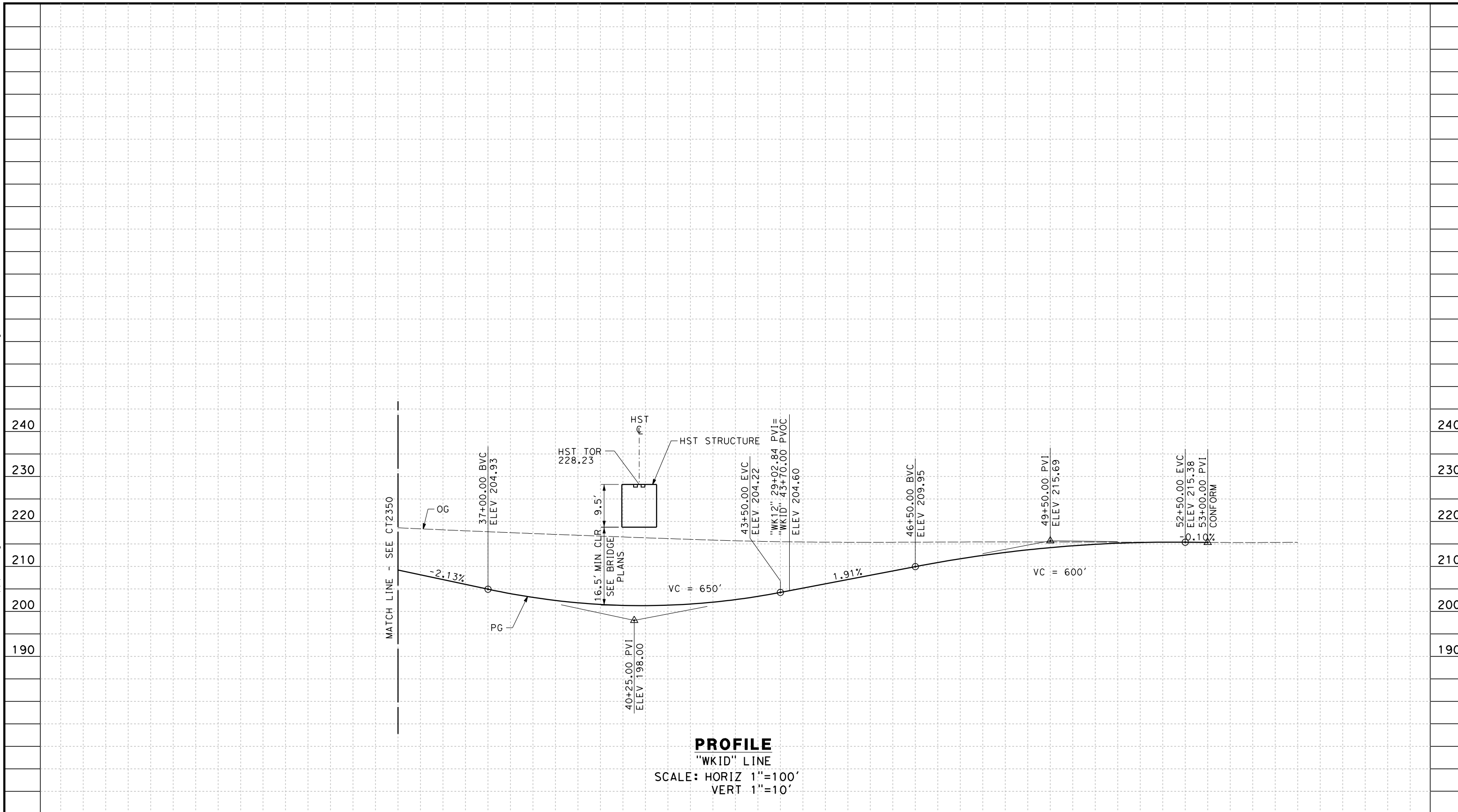
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K1
 GRADE SEPARATION PROFILE
 IDAHO AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2350
 SCALE
AS SHOWN
 SHEET NO.
9 OF 23

12/29/2013 5:09:46 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2351.dgn



STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	TOTAL	
Exc																					
Emb																					

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

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



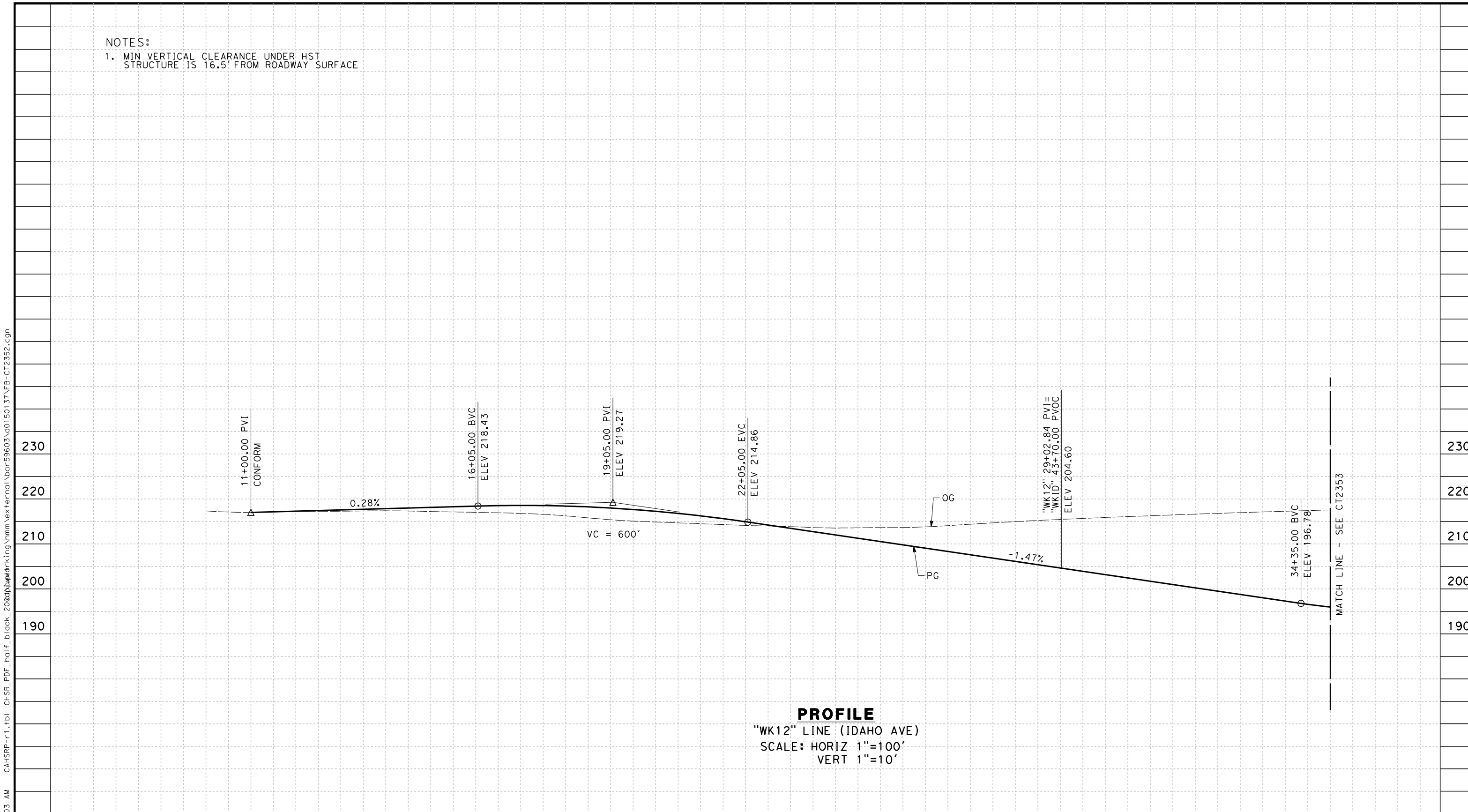
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K1
 GRADE SEPARATION PROFILE
 IDAHO AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2351
 SCALE
AS SHOWN
 SHEET NO.
10 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/29/2013 10:03 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2352.dgn



PROFILE

"WK12" LINE (IDAHO AVE)
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																									
Emb																									

DESIGNED BY	I. JOSIFEK
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

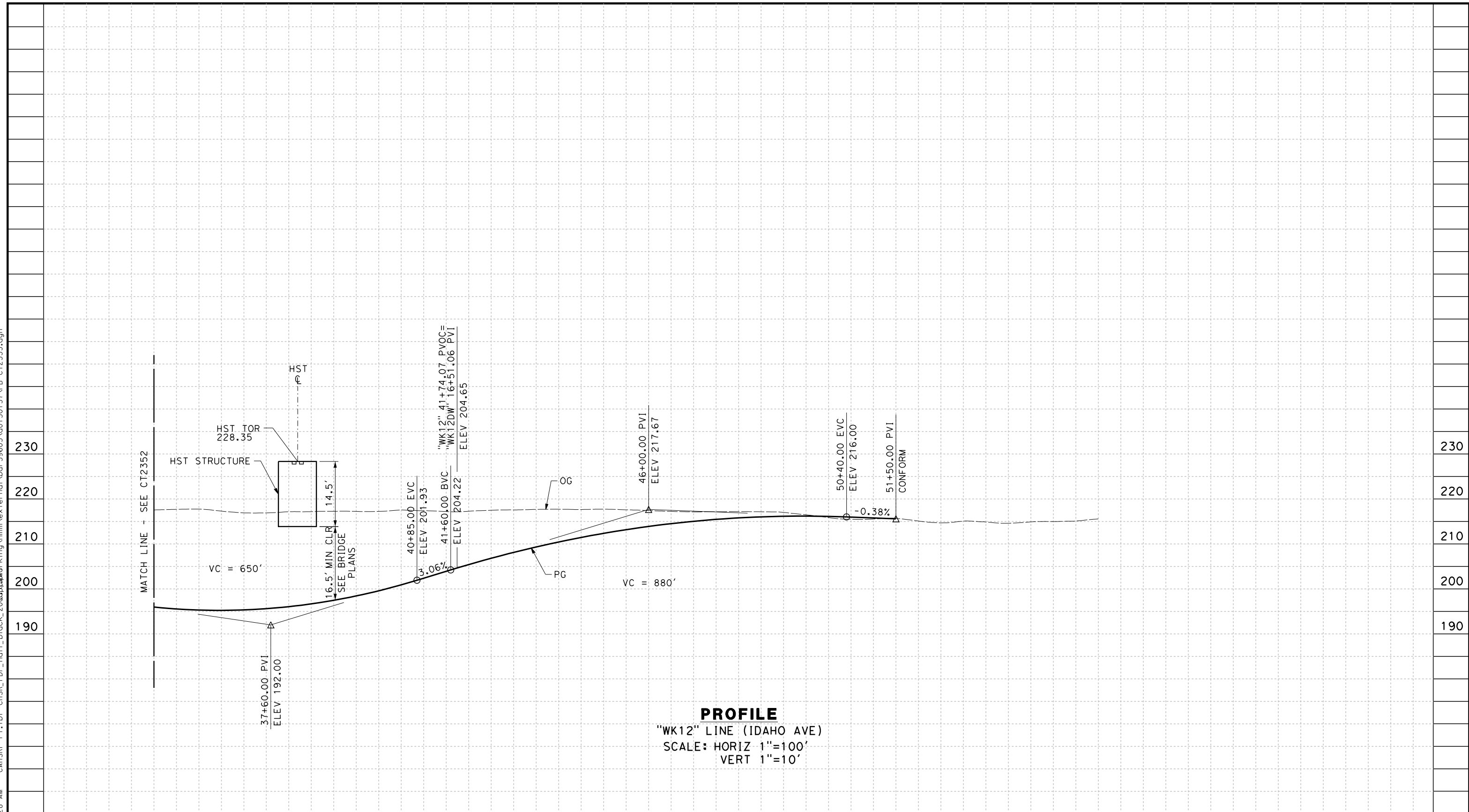


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
GRADE SEPARATION PROFILE
12TH AVE (IDAHO AVE)

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2352
SCALE	AS SHOWN
SHEET NO.	11 OF 23

12/29/2013 10:28 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb CT2353.dgn



PROFILE
 "WK12" LINE (IDAHO AVE)
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	TOTAL
Exc																		
Emb																		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
V. ORTEGA
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

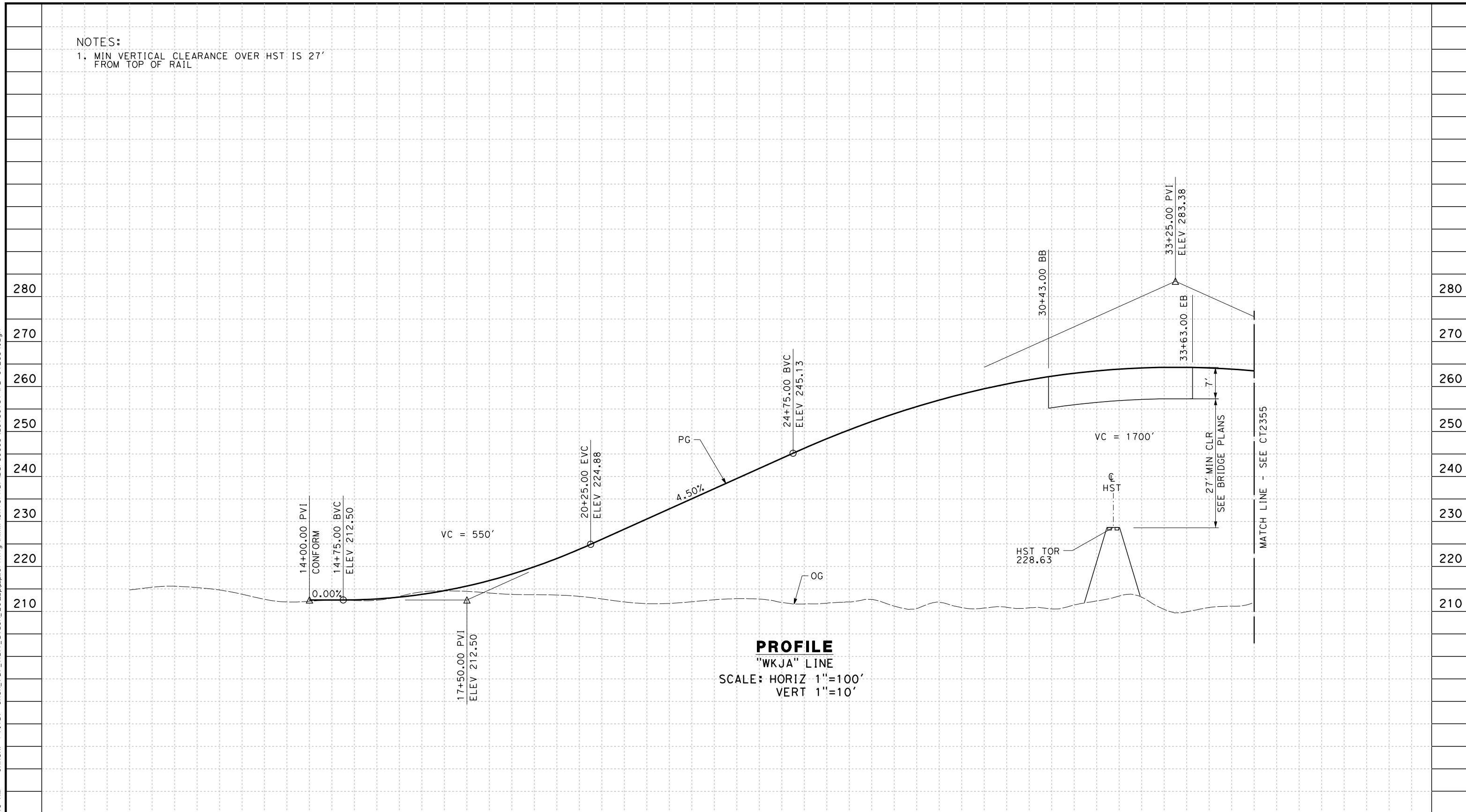


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K1
 GRADE SEPARATION PROFILE
 12TH AVE (IDAHO AVE)

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2353
 SCALE
AS SHOWN
 SHEET NO.
12 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27'
FROM TOP OF RAIL



PROFILE
"WKJA" LINE
SCALE: HORIZ 1"=100'
VERT 1"=10'

STATION	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																									
Emb																									

DESIGNED BY I. JOSIFEK
DRAWN BY D. BARNHART
CHECKED BY B. RAWSON
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



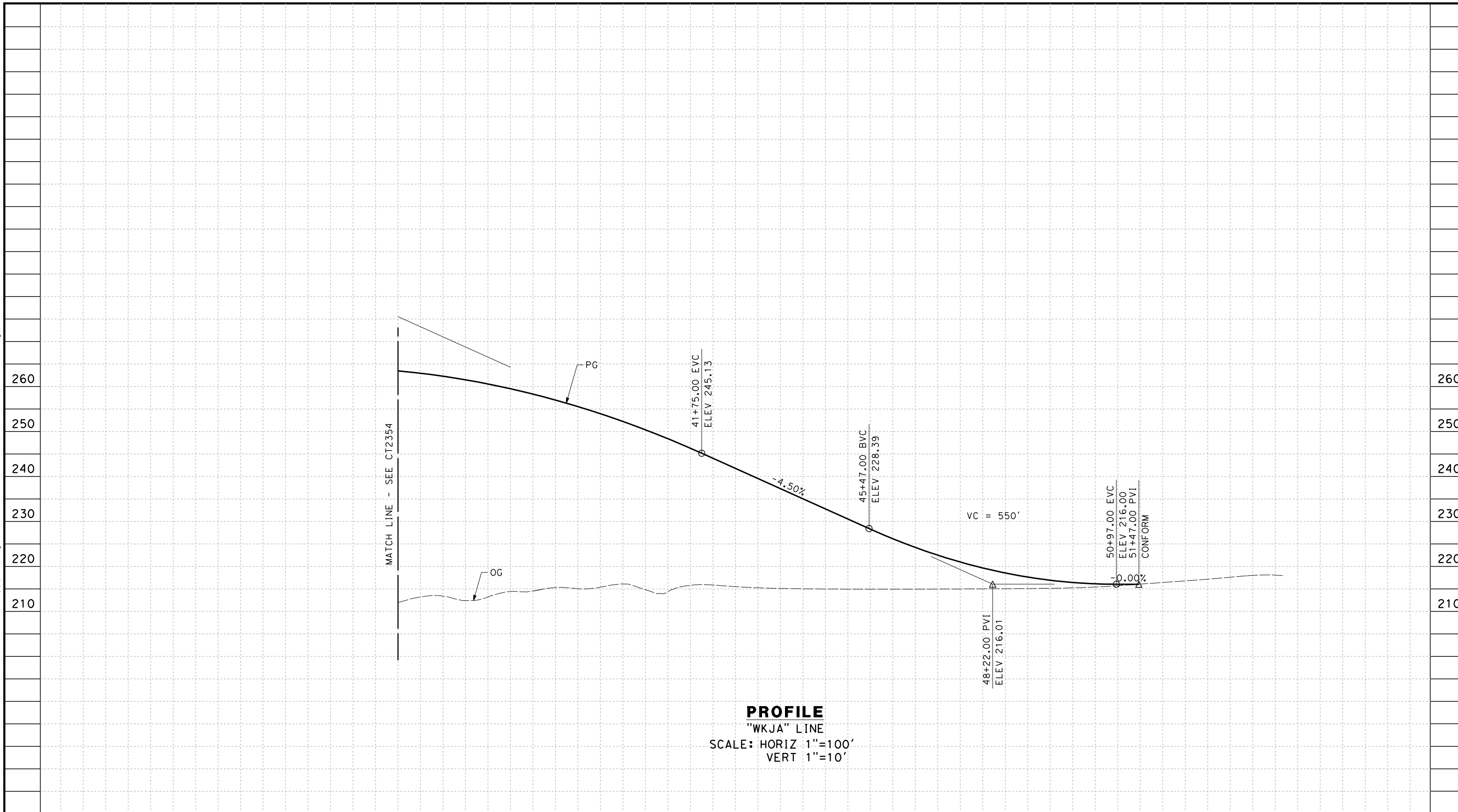
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K1
GRADE SEPARATION PROFILE
JACKSON AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2354
SCALE AS SHOWN
SHEET NO. 13 OF 23

12/29/2013 10:48 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2354.dgn

12/29/2013 11:06 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150137\FB-CT2355.dgn



STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	TOTAL	
Exc																					
Emb																					

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

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 K1
GRADE SEPARATION PROFILE
JACKSON AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2355

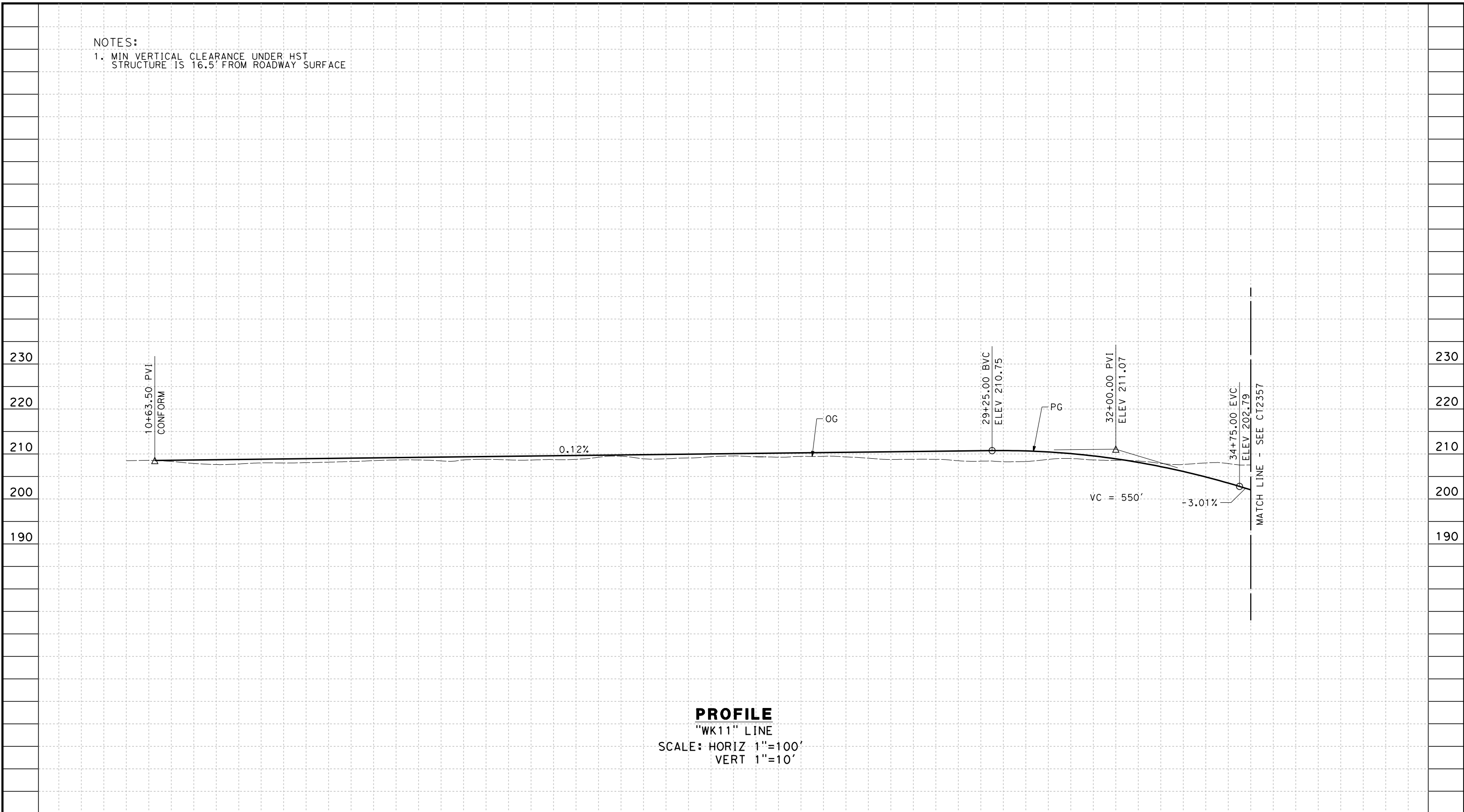
SCALE
AS SHOWN

SHEET NO.
14 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/29/2013 11:25 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150137\FB-CT2356.dgn



PROFILE
 "WK11" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																											
Emb																											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

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 K1
 GRADE SEPARATION PROFILE
 11TH AVE

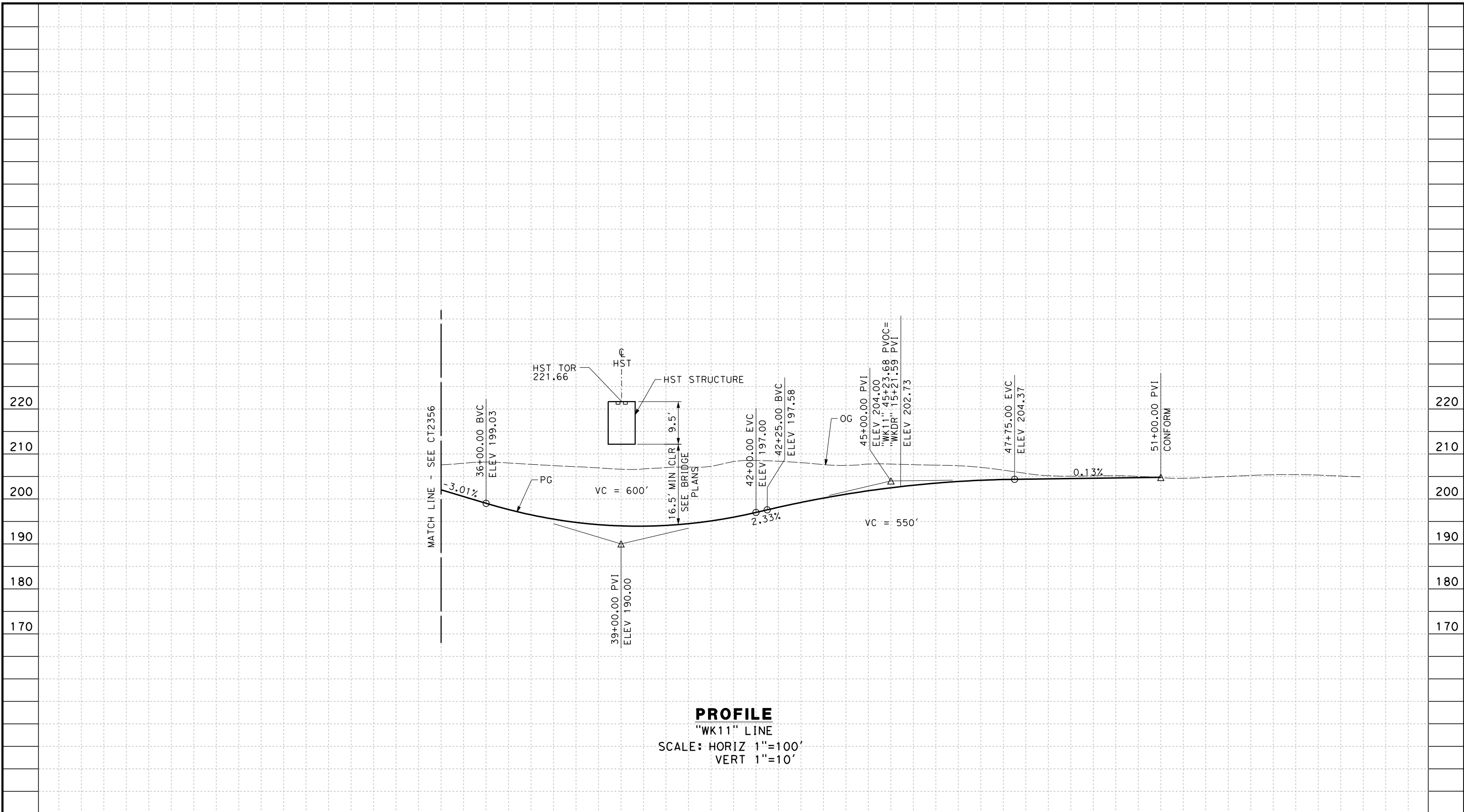
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2356

SCALE
AS SHOWN

SHEET NO.
15 OF 23

12/29/2013 11:45 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150137\FB-CT2357.dgn



PROFILE
 "WK11" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	TOTAL	
Exc																					
Emb																					

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

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 K1
 GRADE SEPARATION PROFILE
 11TH AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2357

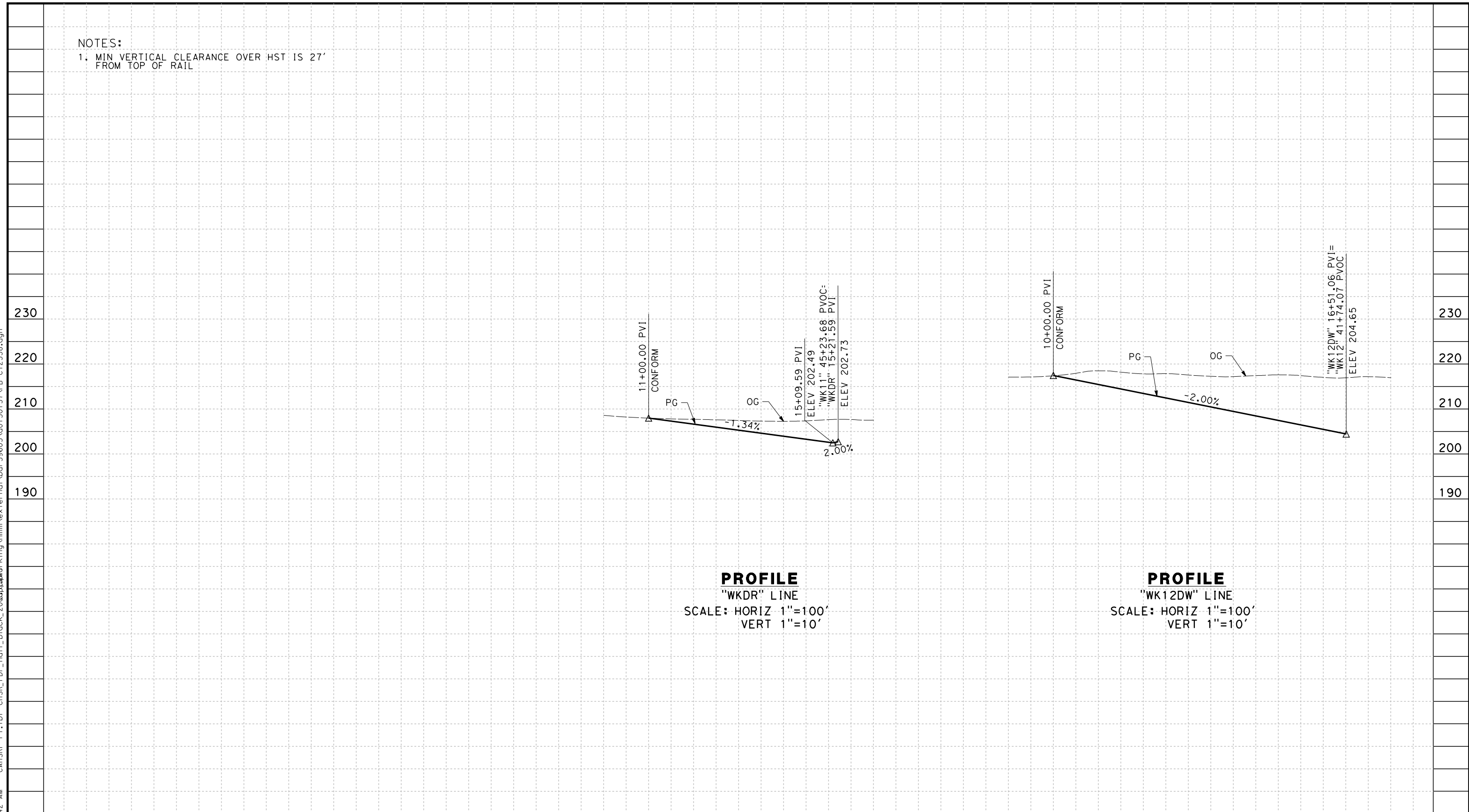
SCALE
AS SHOWN

SHEET NO.
16 OF 23

NOTES:

- 1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL

12/29/2013 1:19:42 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2358.dgn



PROFILE
 "WKDR" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

PROFILE
 "WK12DW" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	10	1	2	3	4	15	6	10	1	2	3	4	15	6	7	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



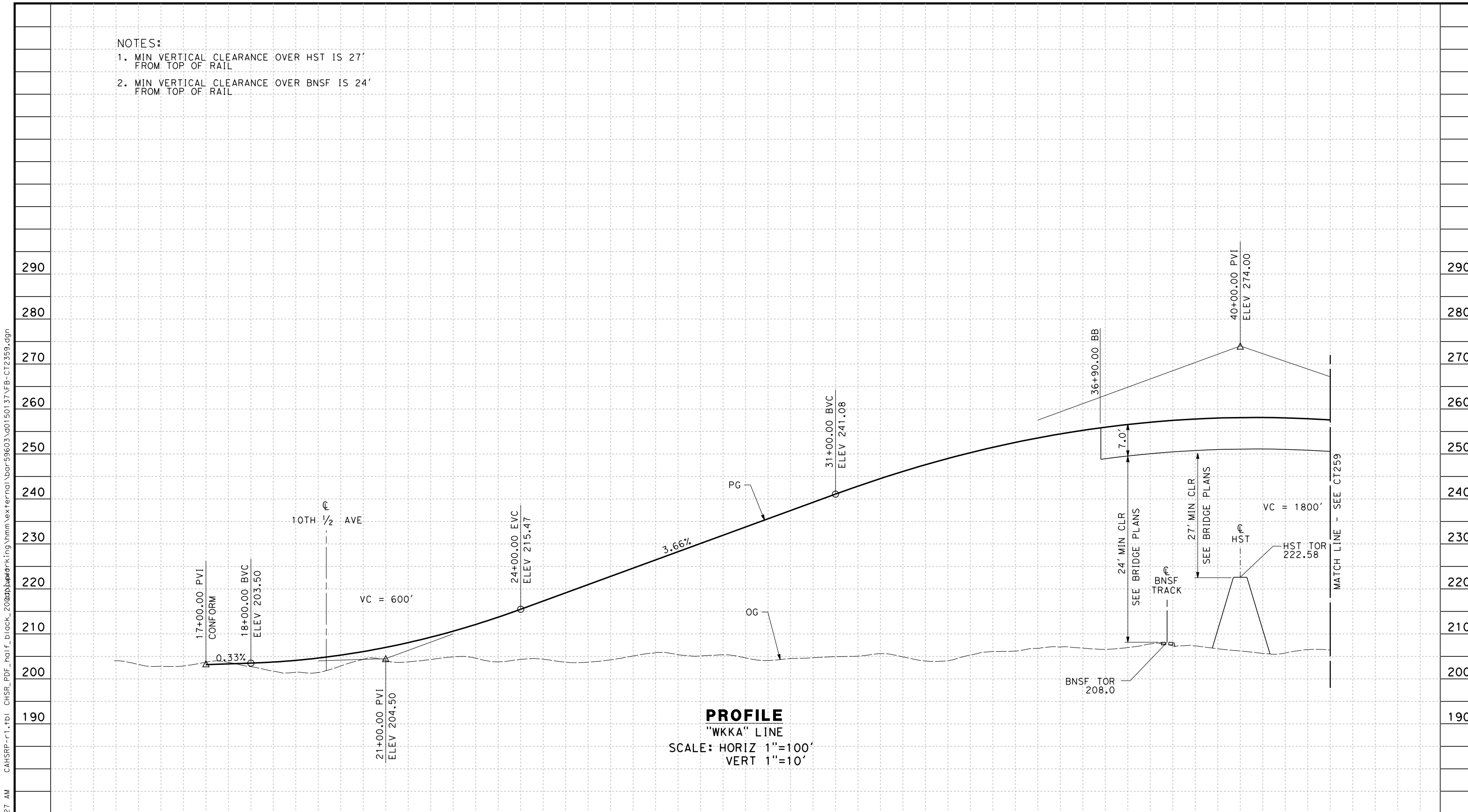
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K1
 GRADE SEPARATION PROFILE
 DRIVEWAYS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2358
 SCALE
AS SHOWN
 SHEET NO.
17 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MIN VERTICAL CLEARANCE OVER BNSF IS 24' FROM TOP OF RAIL

12/29/2013 11:21:27 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2359.dgn



PROFILE
 "WKKA" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	TOTAL	
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
P. BARBER
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

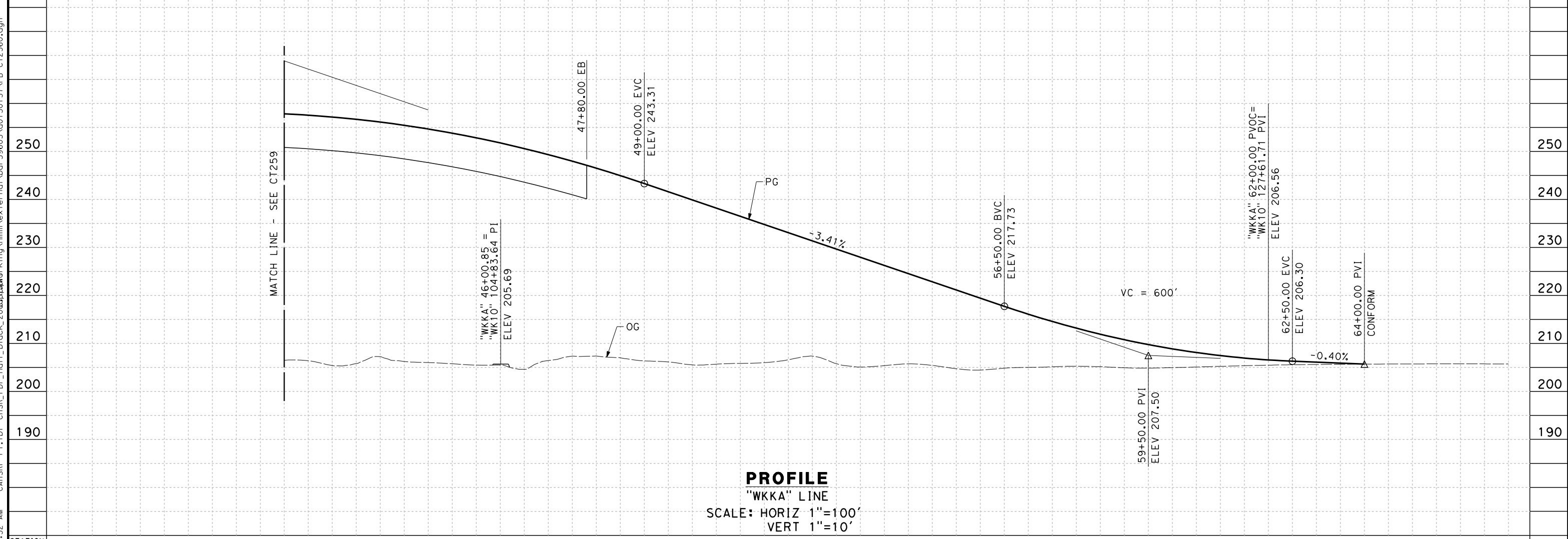
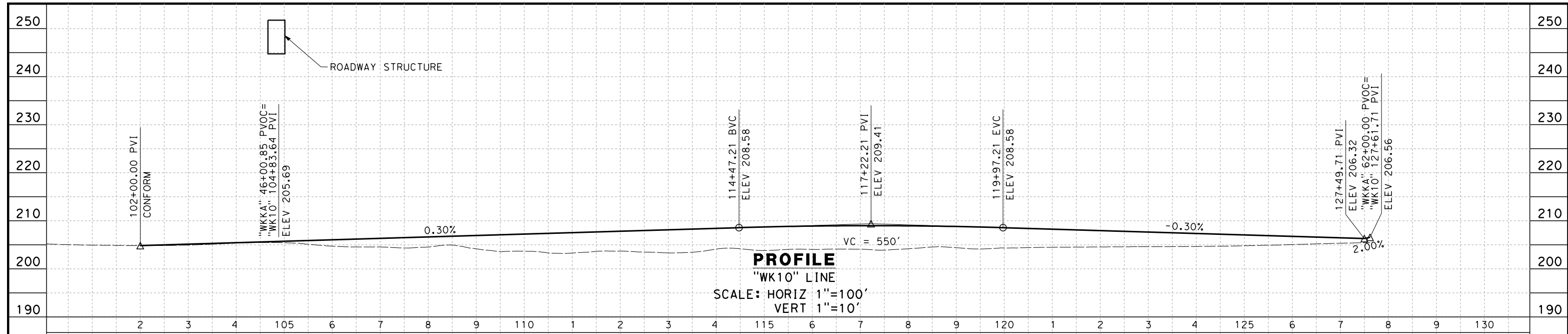
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K1
 GRADE SEPARATION PROFILE
 KANSAS AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2359
 SCALE
AS SHOWN
 SHEET NO.
18 OF 23

12/29/2013 11:21:52 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150137\FB-CT2360.dgn



STATION	2	3	4	45	6	7	8	9	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	TOTAL
Exc																									
Emb																									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
P. BARBER
CHECKED BY
B. RAWSON
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 K1
GRADE SEPARATION PROFILE
KANSAS AVE / 10TH AVE

CONTRACT NO.
HSR 06-0003

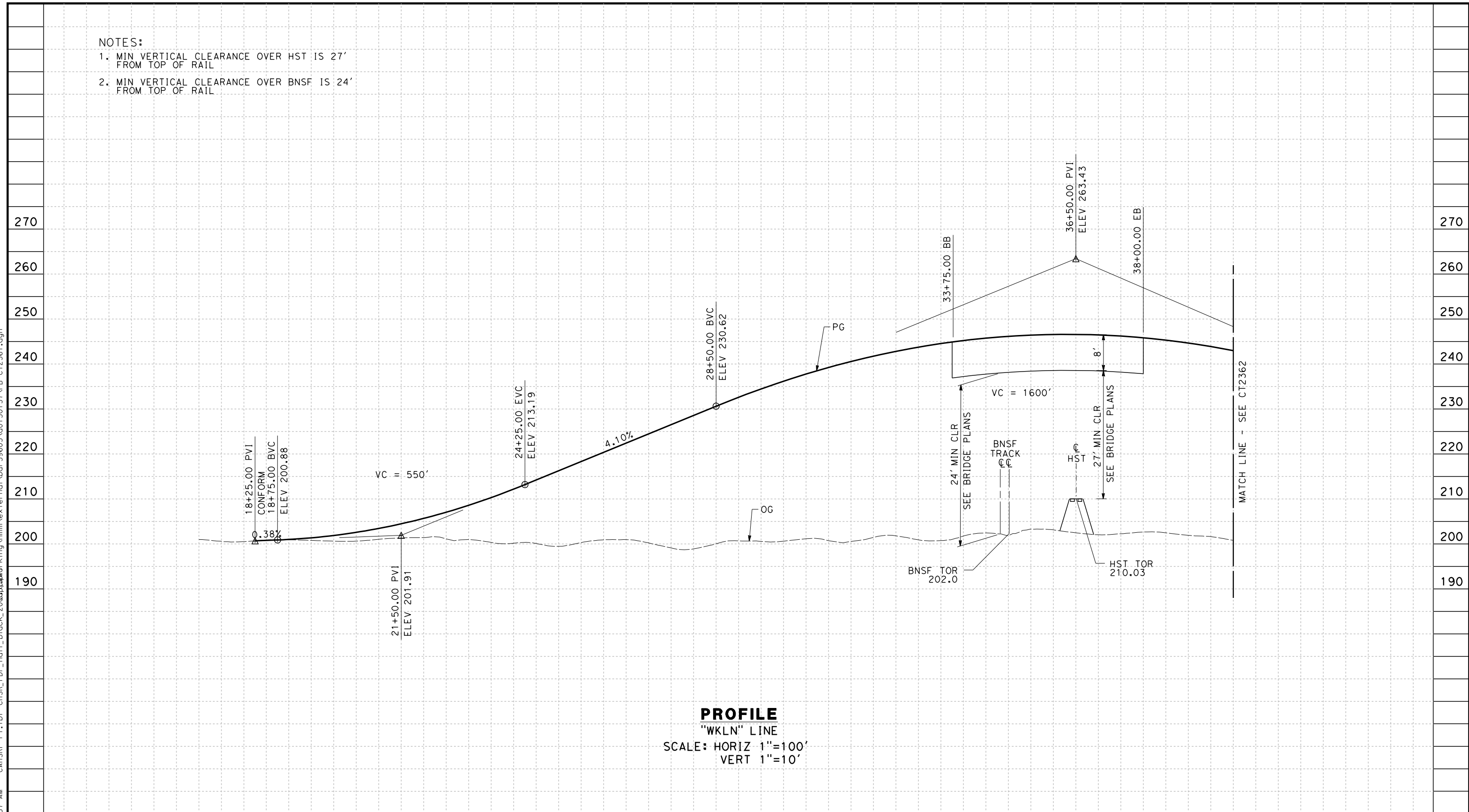
DRAWING NO.
CT2360

SCALE
AS SHOWN

SHEET NO.
19 OF 23

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MIN VERTICAL CLEARANCE OVER BNSF IS 24' FROM TOP OF RAIL



PROFILE
 "WKLN" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	TOTAL	
Exc																										
Emb																										

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
D. BARNHART

CHECKED BY
B. RAWSON

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 K1
GRADE SEPARATION PROFILE
LANSING AVE

CONTRACT NO.
HSR 06-0003

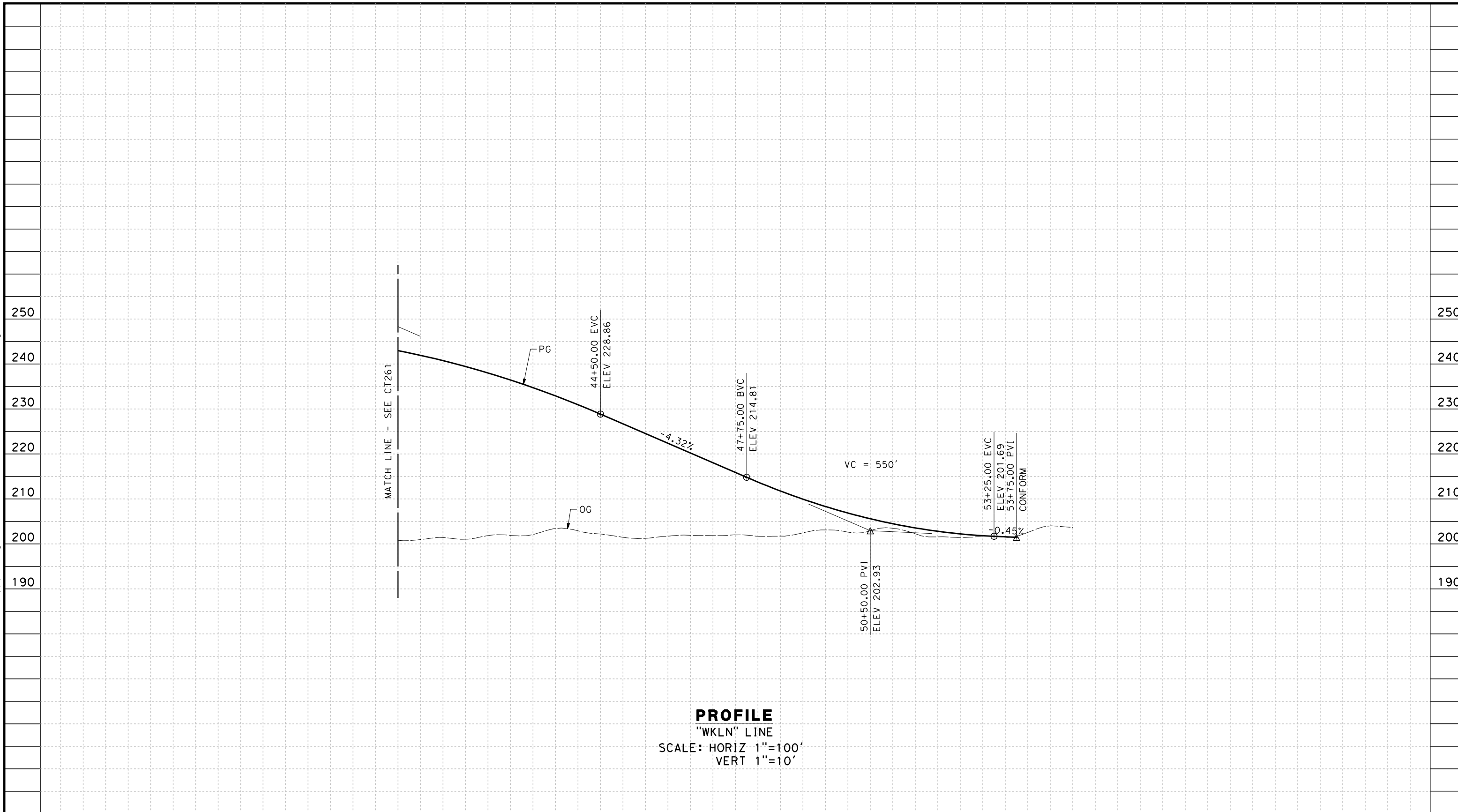
DRAWING NO.
CT2361

SCALE
AS SHOWN

SHEET NO.
20 OF 23

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12/29/2013 11:31:56 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb



PROFILE
 "WKLN" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
D. BARNHART
 CHECKED BY
B. RAWSON
 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 K1
 GRADE SEPARATION PROFILE
 LANSING AVE

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CT2362
 SCALE
 AS SHOWN
 SHEET NO.
 21 OF 23

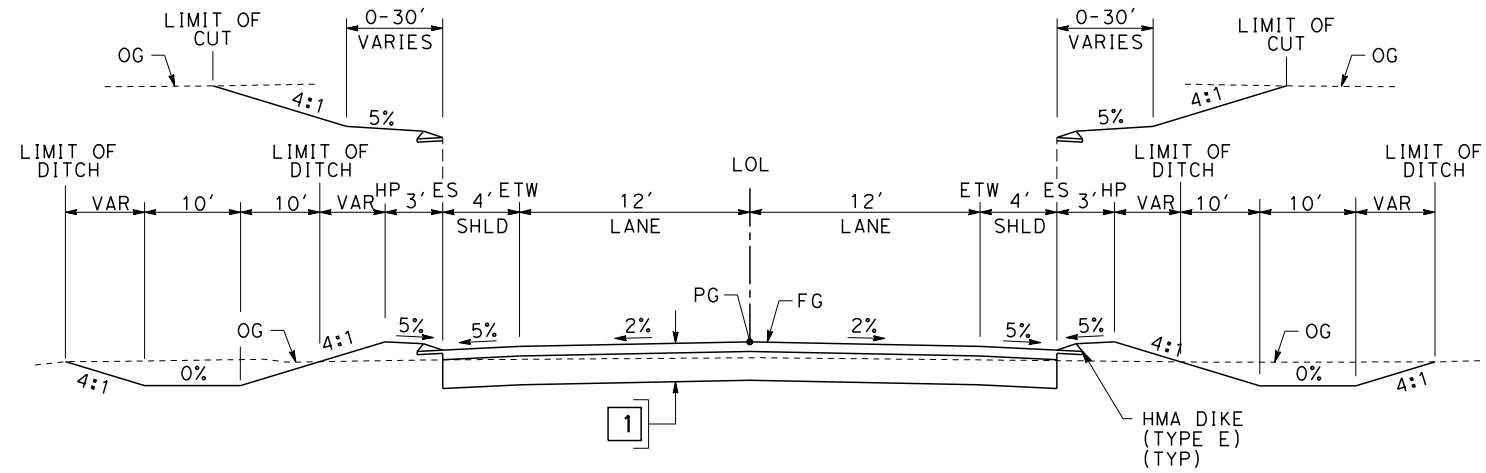
NOTES:

1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSIONS AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.

STRUCTURAL SECTIONS

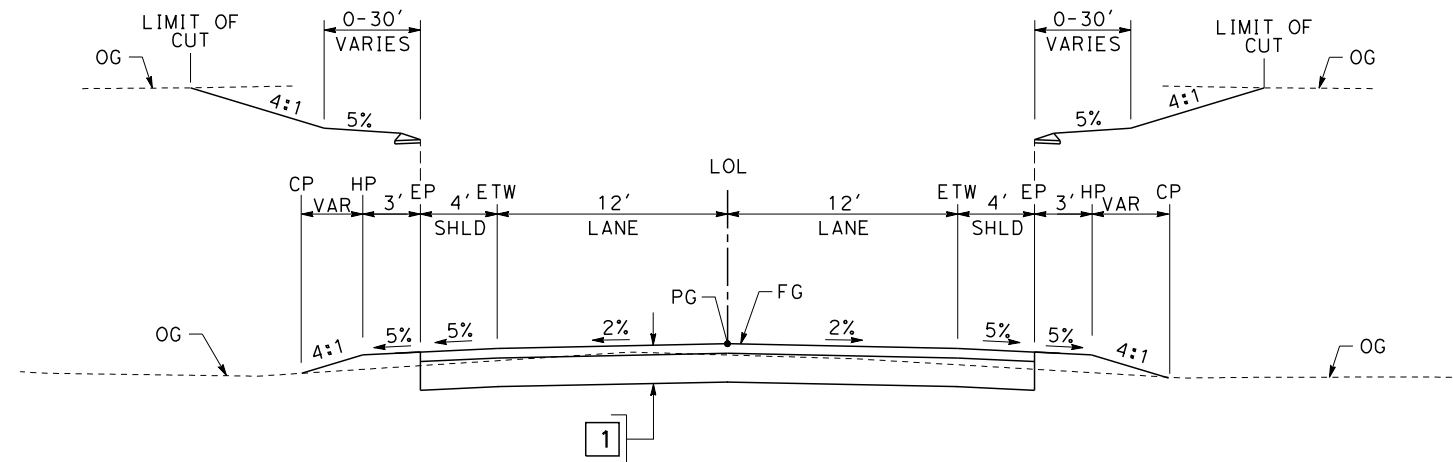
TYPICAL ROADWAY (4' SHOULDER)

1 - 0.30' HMA (TYPE A)
1.40' CL 2' AB



SECTION A

- "WKJA" 17+25.00 TO 30+43.00
- "WKJA" 33+63.00 TO 48+20.00
- "WKLN" 18+25.00 TO 33+75.00
- "WKLN" 38+00.00 TO 50+52.00
- "WKKA" 17+00.00 TO 36+90.00
- "WKKA" 58+00.00 TO 64+00.00



SECTION B

- "WKID" 21+00.00 TO 53+00.00
- "WK12" 11+00.00 TO 51+50.00 (IDAHO AVE)
- "WKJA" 14+00.00 TO 17+25.00
- "WKJA" 48+20.00 TO 51+47.00
- "WK11" 10+63.50 TO 51+00.00
- "WKDR" 11+00.00 TO 15+21.59
- "WK10" 102+00.00 TO 127+61.71 (KANSAS AVE)
- "WK12DW" 10+00.00 TO 16+51.06 (12TH AVE)
- "WKLN" 50+52.00 TO 53+75.00

TABLE OF DESIGN SPEEDS

STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED	CRITERIA / JURISDICTION
IDAHO AVE	WKID	60*	KINGS COUNTY/KINGS COUNTY
12TH AVE AT IDAHO AVE	WK12	60*	KINGS COUNTY/KINGS COUNTY
JACKSON AVE	WKJA	55	KINGS COUNTY/KINGS COUNTY
S 11TH AVE	WK11	50	KINGS COUNTY/KINGS COUNTY
KANSAS AVE	WKKA	60	KINGS COUNTY/KINGS COUNTY
10TH AVE	WK10	45	KINGS COUNTY/KINGS COUNTY
LANSING AVE	WKLN	55	KINGS COUNTY/KINGS COUNTY
12TH AVE CONNECTOR	WK12DW	15	KINGS COUNTY/KINGS COUNTY

* DESIGN SPEED PER CITY OF HANFORD GENERAL PLAN

12/29/2013 11:41:19 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150137\FB-CT3340.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

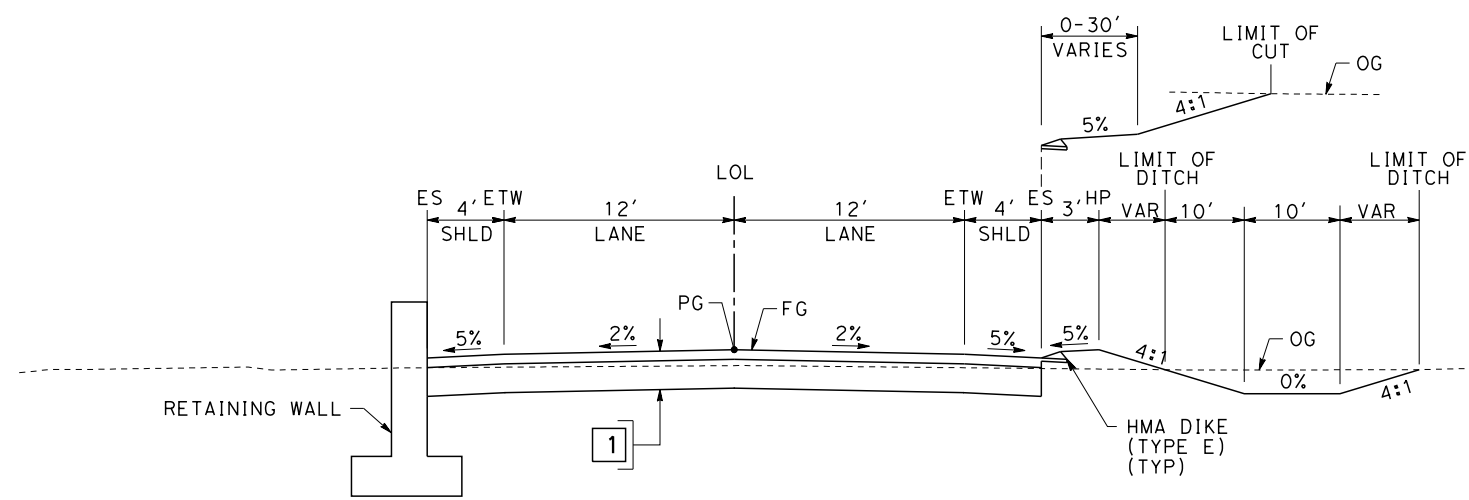
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K1
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT3340
SCALE
AS SHOWN
SHEET NO.
22 OF 23

12/29/2013 11:43:38 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603\0150137\FB-CT3341.dgn



SECTION C

"WKKA" 47+80.00 TO 58+00.00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
D. BARNHART
CHECKED BY
B. RAWSON
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 K1
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT3341
SCALE
AS SHOWN
SHEET NO.
23 OF 23

12/30/2013 8:00:15 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150156\FB-CB0230.dgn

STREET CLOSURE

STREET NAME	HST ALIGNMENT STA	LOCAL STANDARD
S 10TH AVE	2315+00.00	KINGS COUNTY



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K2
ROADWAY/GRADE SEPARATION
KEY MAP

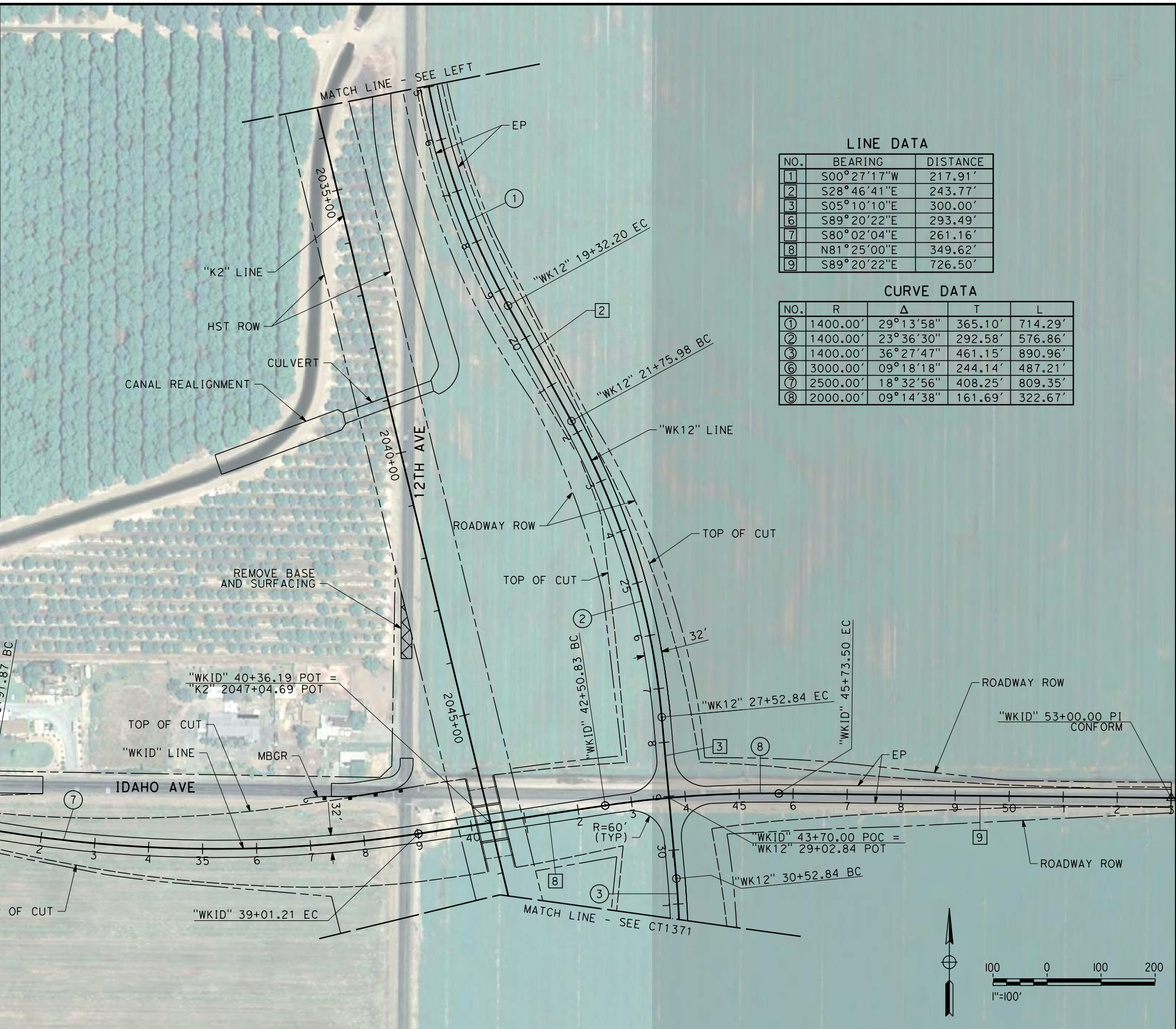
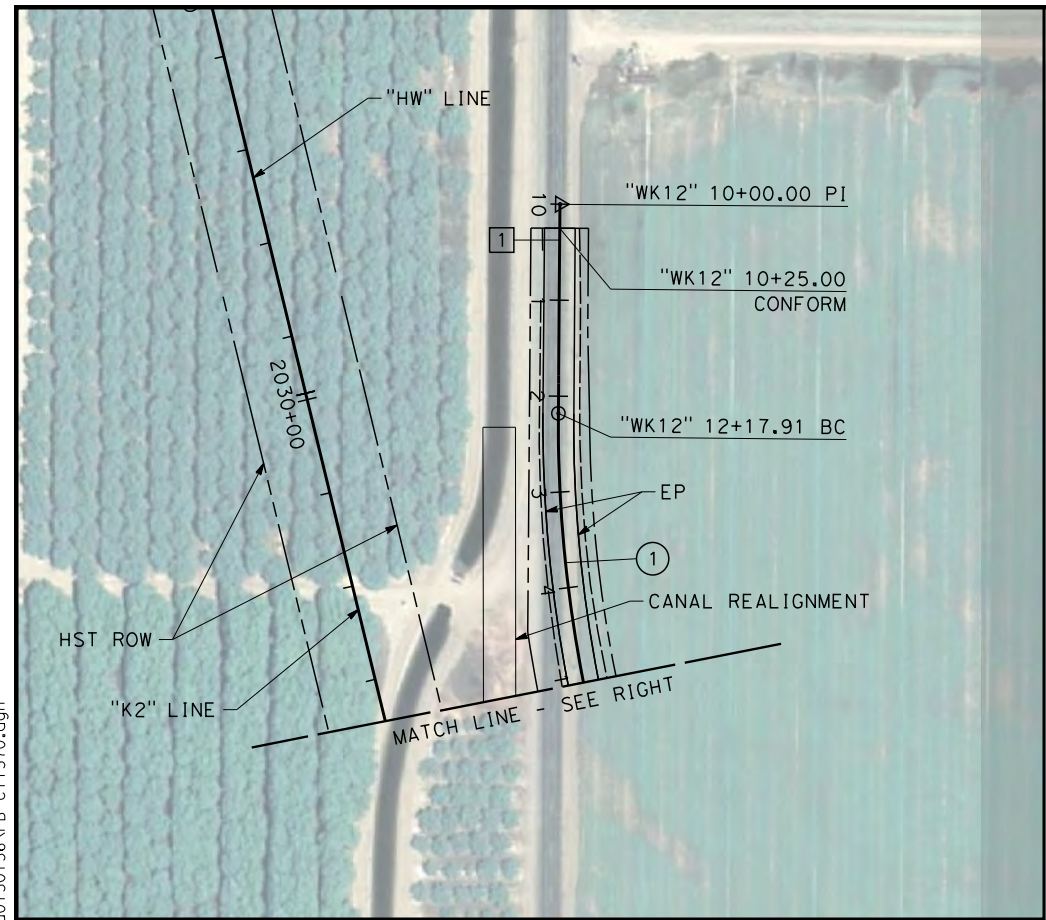
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB0230

SCALE
AS SHOWN

SHEET NO.
1 OF 27

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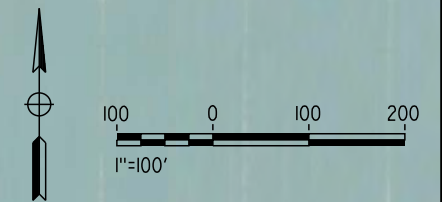


LINE DATA

NO.	BEARING	DISTANCE
1	S00°27'17"W	217.91'
2	S28°46'41"E	243.77'
3	S05°10'10"E	300.00'
6	S89°20'22"E	293.49'
7	S80°02'04"E	261.16'
8	N81°25'00"E	349.62'
9	S89°20'22"E	726.50'

CURVE DATA

NO.	R	Δ	T	L
①	1400.00'	29°13'58"	365.10'	714.29'
②	1400.00'	23°36'30"	292.58'	576.86'
③	1400.00'	36°27'47"	461.15'	890.96'
⑥	3000.00'	09°18'18"	244.14'	487.21'
⑦	2500.00'	18°32'56"	408.25'	809.35'
⑧	2000.00'	09°14'38"	161.69'	322.67'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K2
GRADE SEPARATION LAYOUT
12TH AVE / IDAHO AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1370
SCALE
AS SHOWN
SHEET NO.
2 OF 27

12/30/2013 10:00:32 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\external\bar59603-CT1371.dgn

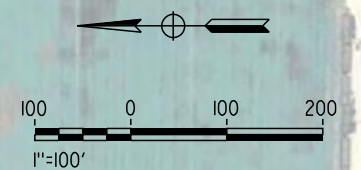


LINE DATA

NO.	BEARING	DISTANCE
4	S31°17'37"W	212.95'
5	S00°27'17"W	589.71'
6	S59°24'53"E	58.40'
7	S21°50'48"W	174.39'
8	N88°55'48"E	79.37'

CURVE DATA

NO.	R	Δ	T	L
3	1400.00'	36°27'47"	461.15'	890.96'
4	1400.00'	30°50'20"	386.14'	753.54'
5	100.00'	81°15'41"	85.80'	141.83'
6	100.00'	112°54'59"	150.85'	197.08'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

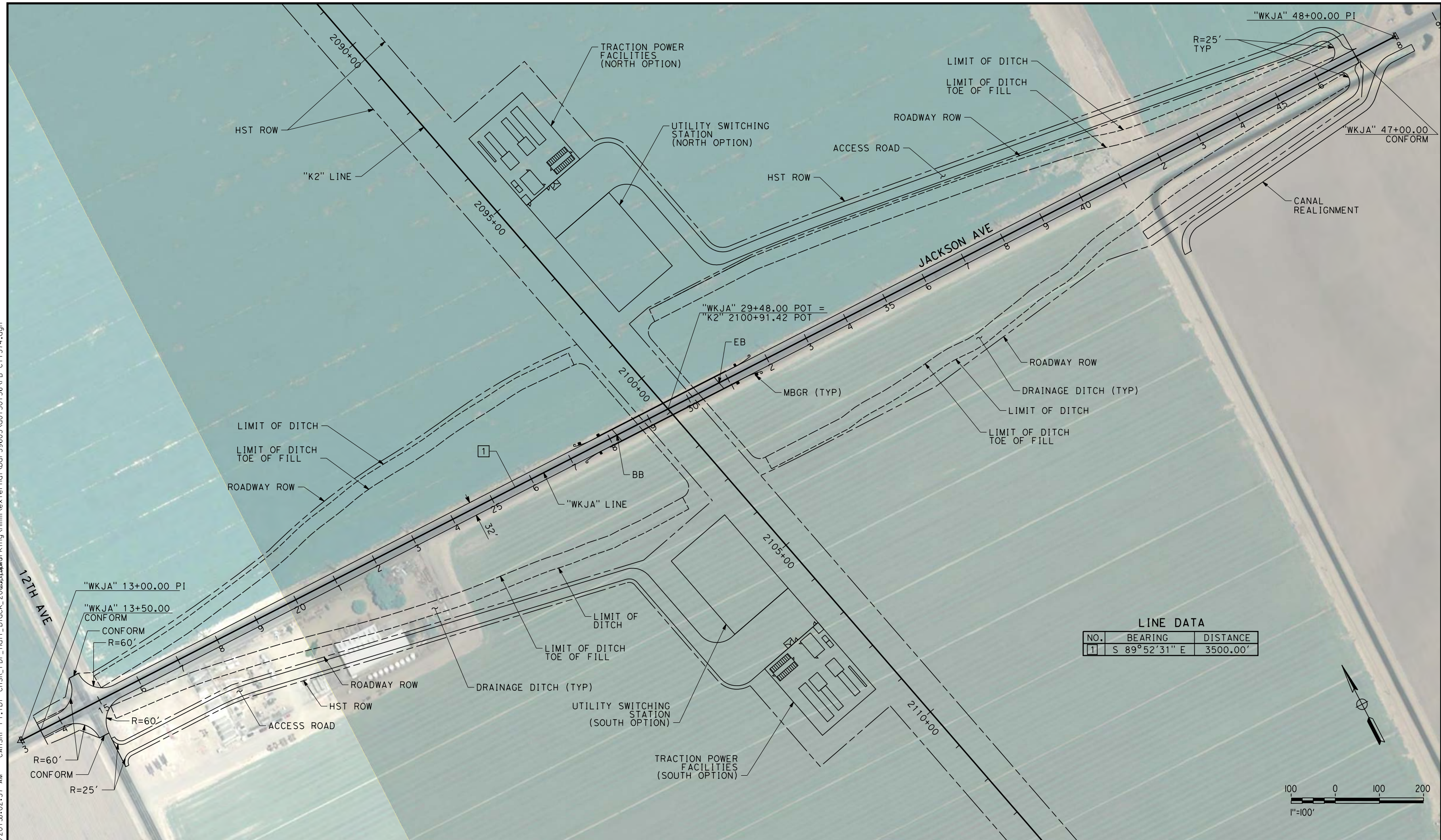
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION LAYOUT
12TH AVE / IDAHO AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1371
SCALE
AS SHOWN
SHEET NO.
3 OF 27

12/30/2013 10:02:13 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb



LINE DATA

NO.	BEARING	DISTANCE
1	S 89°52'31" E	3500.00'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
C. RAMIREZ
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

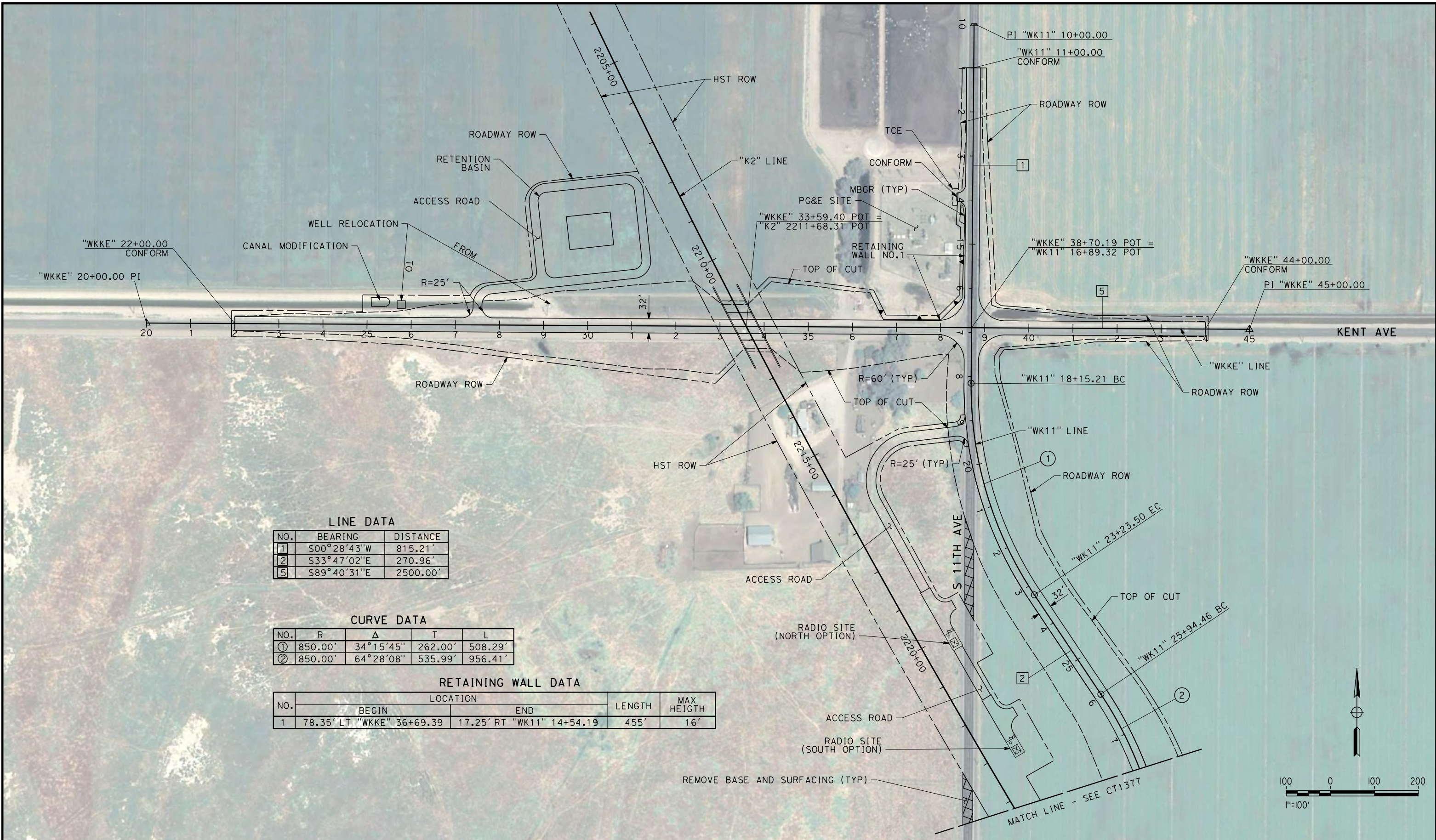
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION LAYOUT
JACKSON AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1374
SCALE
AS SHOWN
SHEET NO.
4 OF 27

12/30/2013 8:03:15 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150156\FB-CT1376.dgn



LINE DATA

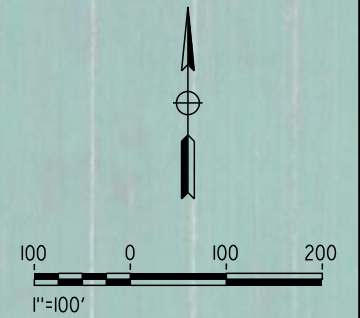
NO.	BEARING	DISTANCE
1	S00°28'43"W	815.21'
2	S33°47'02"E	270.96'
5	S89°40'31"E	2500.00'

CURVE DATA

NO.	R	Δ	T	L
1	850.00'	34°15'45"	262.00'	508.29'
2	850.00'	64°28'08"	535.99'	956.41'

RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	78.35' LT "WKKE" 36+69.39	17.25' RT "WK11" 14+54.19	455'	16'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K2
GRADE SEPARATION LAYOUT
S 11TH AVE / KENT AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1376
SCALE
AS SHOWN
SHEET NO.
5 OF 27

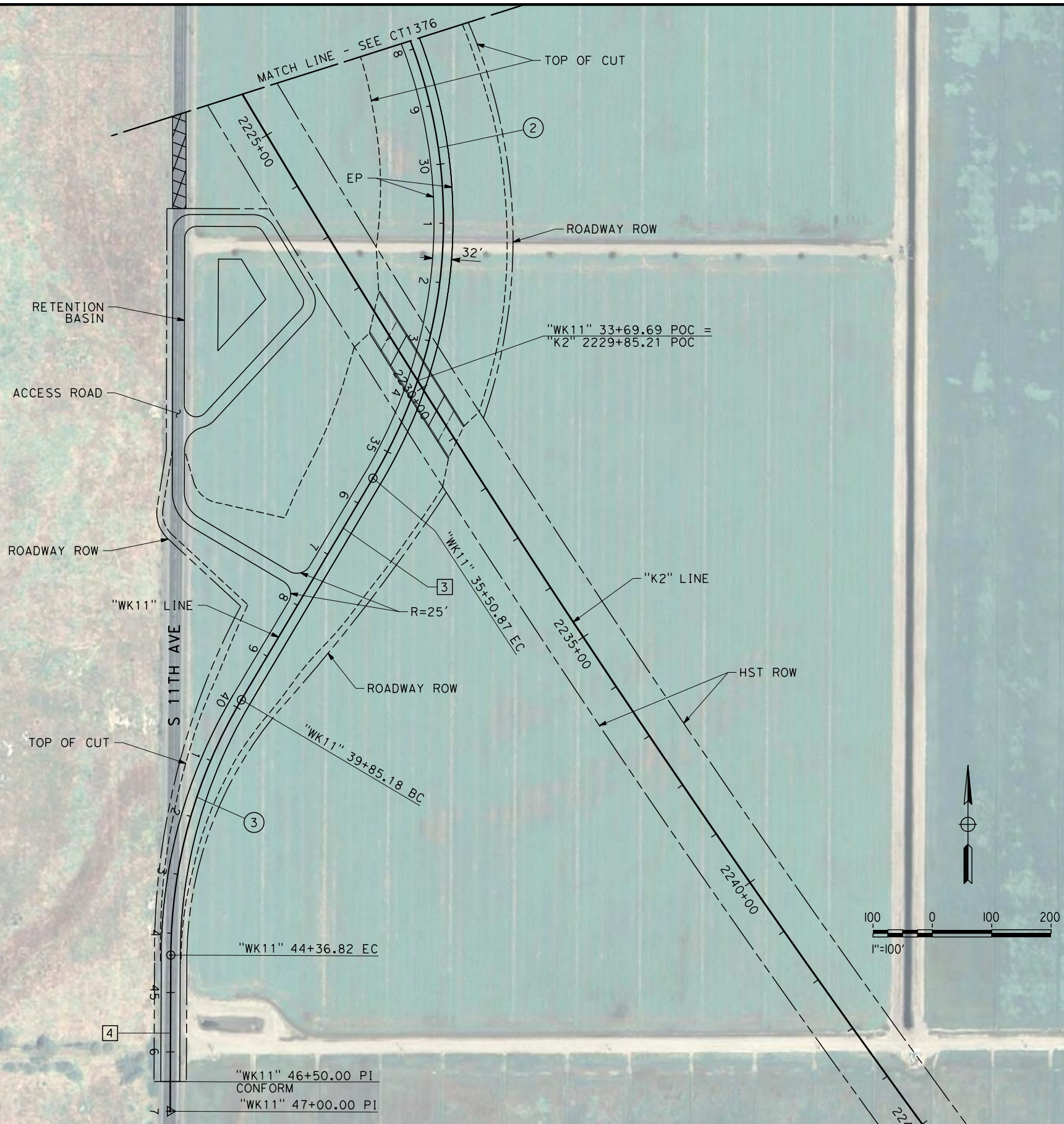
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LINE DATA

NO.	BEARING	DISTANCE
3	S30°41'05"W	434.31'
4	S00°14'28"W	263.18'

CURVE DATA

NO.	R	Δ	T	L
2	850.00'	64°28'08"	535.99'	956.41'
3	850.00'	30°26'37"	231.29'	451.64'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
GRADE SEPARATION LAYOUT
S 11TH AVE / KENT AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1377

SCALE
AS SHOWN

SHEET NO.
6 OF 27

12/30/2013 10:04:33 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb 1378.dgn

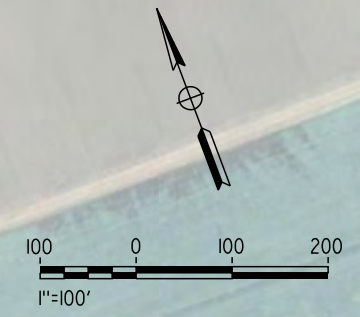


LINE DATA

NO.	BEARING	DISTANCE
1	N89°43'07"E	201.60'
2	S70°35'48"E	215.86'
3	N90°00'00"E	303.67'
4	N70°08'45"E	220.51'
5	S89°57'35"E	562.00'
6	S00°14'53"W	866.00'

CURVE DATA

NO.	R	Δ	T	L
①	1400.00'	19°41'05"	242.89'	480.99'
②	1400.00'	19°24'12"	239.35'	474.12'
③	1400.00'	19°51'15"	245.02'	485.13'
④	1400.00'	19°53'41"	245.53'	486.12'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
GRADE SEPARATION LAYOUT
KANSAS AVE

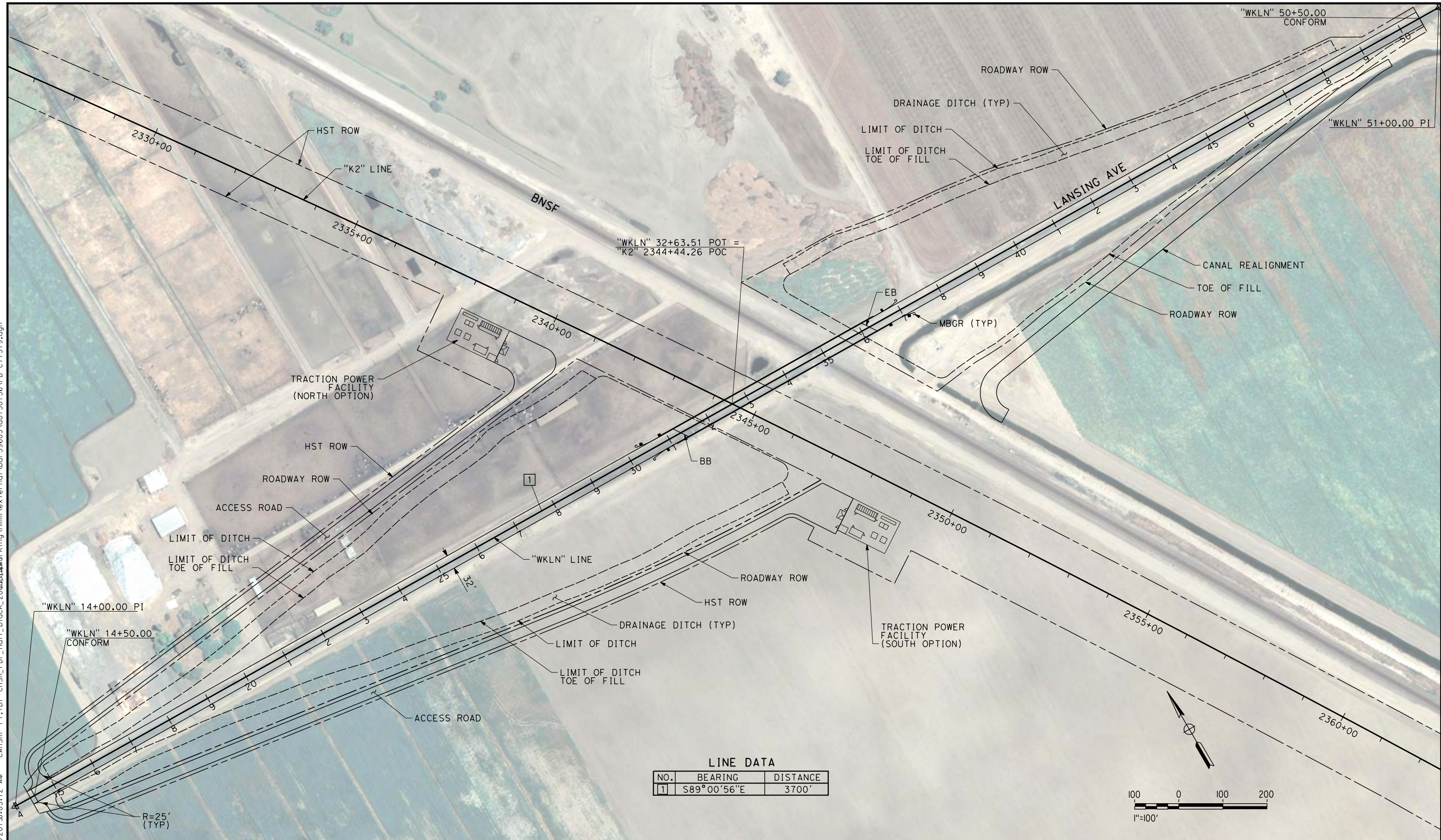
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1378

SCALE
AS SHOWN

SHEET NO.
7 OF 27

12/30/2013 8:05:12 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb



LINE DATA

NO.	BEARING	DISTANCE
1	S89°00'56"E	3700'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION LAYOUT
LANSING AVE

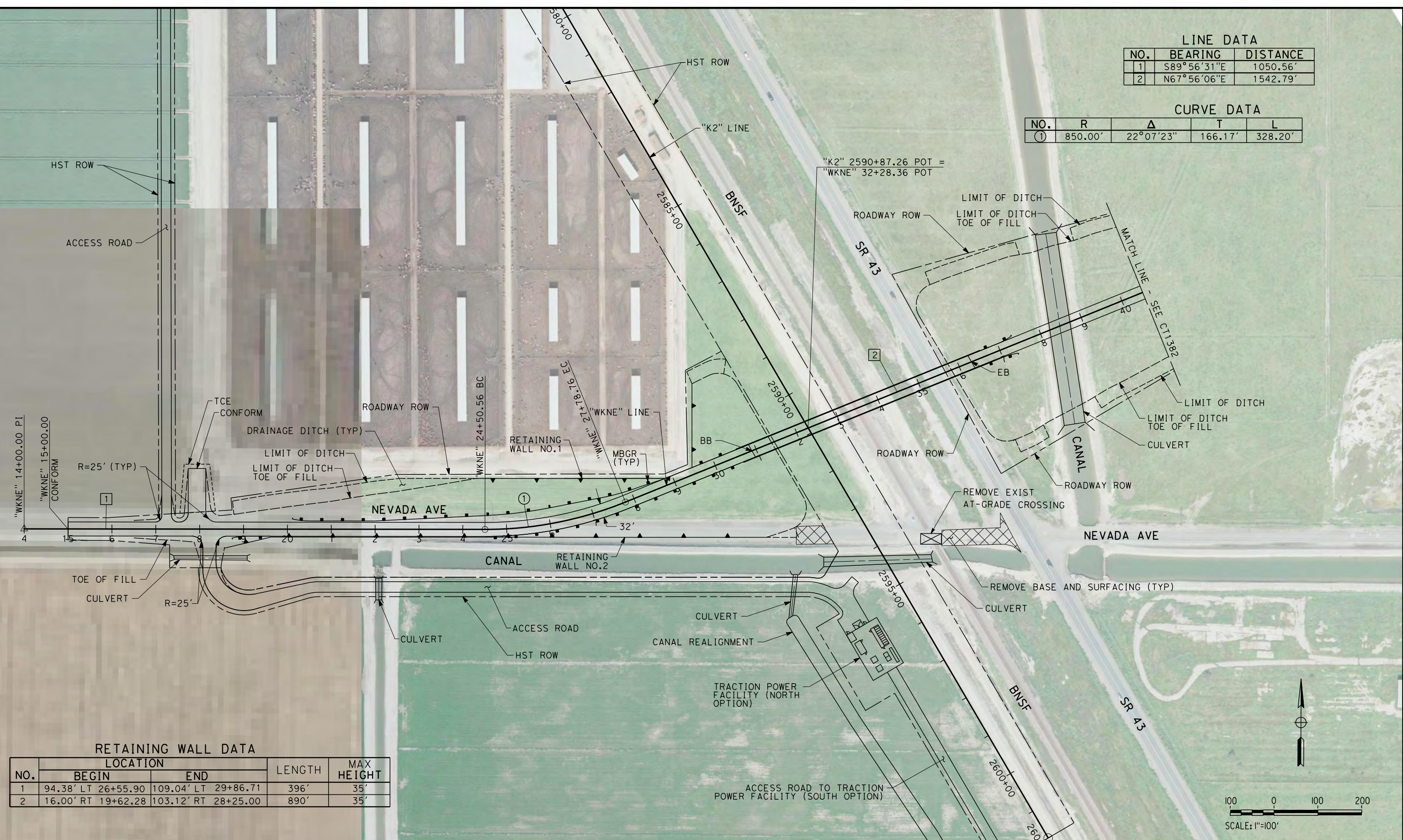
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT1379
SCALE
AS SHOWN
SHEET NO.
8 OF 27

LINE DATA

NO.	BEARING	DISTANCE
1	S89°56'31"E	1050.56'
2	N67°56'06"E	1542.79'

CURVE DATA

NO.	R	Δ	T	L
①	850.00'	22°07'23"	166.17'	328.20'



RETAINING WALL DATA

NO.	LOCATION		LENGTH	MAX HEIGHT
	BEGIN	END		
1	94.38' LT 26+55.90	109.04' LT 29+86.71	396'	35'
2	16.00' RT 19+62.28	103.12' RT 28+25.00	890'	35'

12/30/2013 10:08:10 AM \\bar59603\bar59603.dwg V:\bar59603\bar59603.dwg V:\bar59603\bar59603.dwg V:\bar59603\bar59603.dwg V:\bar59603\bar59603.dwg

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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**

KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION LAYOUT
NEVADA AVE

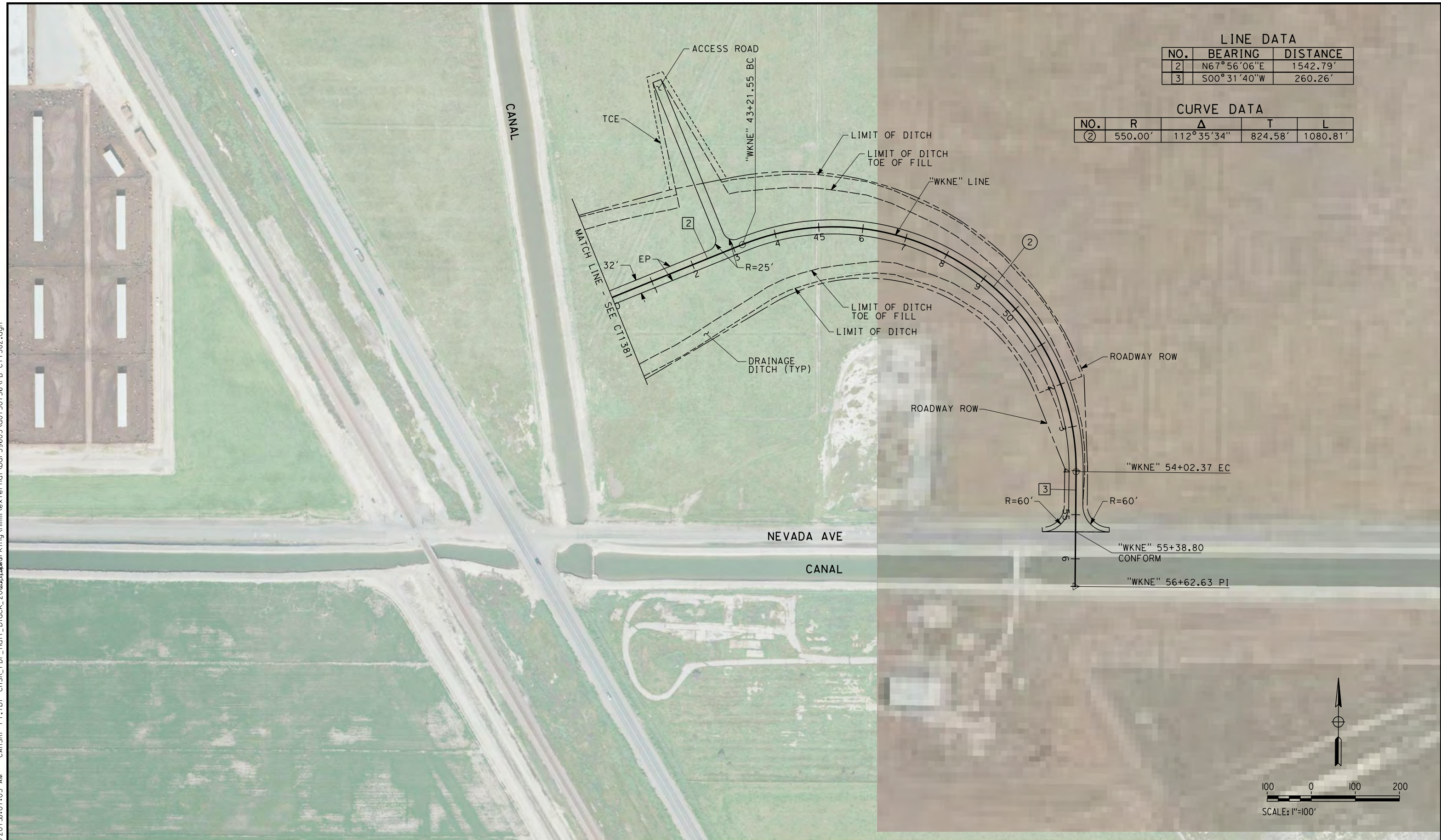
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT1381

SCALE
AS SHOWN

SHEET NO.
9 OF 27

12/30/2013 8:07:03 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \bar59603\bar59603\d0150156\FB-CT1382.dgn

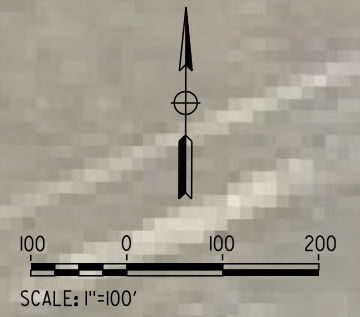


LINE DATA

NO.	BEARING	DISTANCE
2	N67°56'06"E	1542.79'
3	S00°31'40"W	260.26'

CURVE DATA

NO.	R	Δ	T	L
(2)	550.00'	112°35'34"	824.58'	1080.81'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

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

KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION LAYOUT
NEVADA AVE

CONTRACT NO.
HSR 06-0003

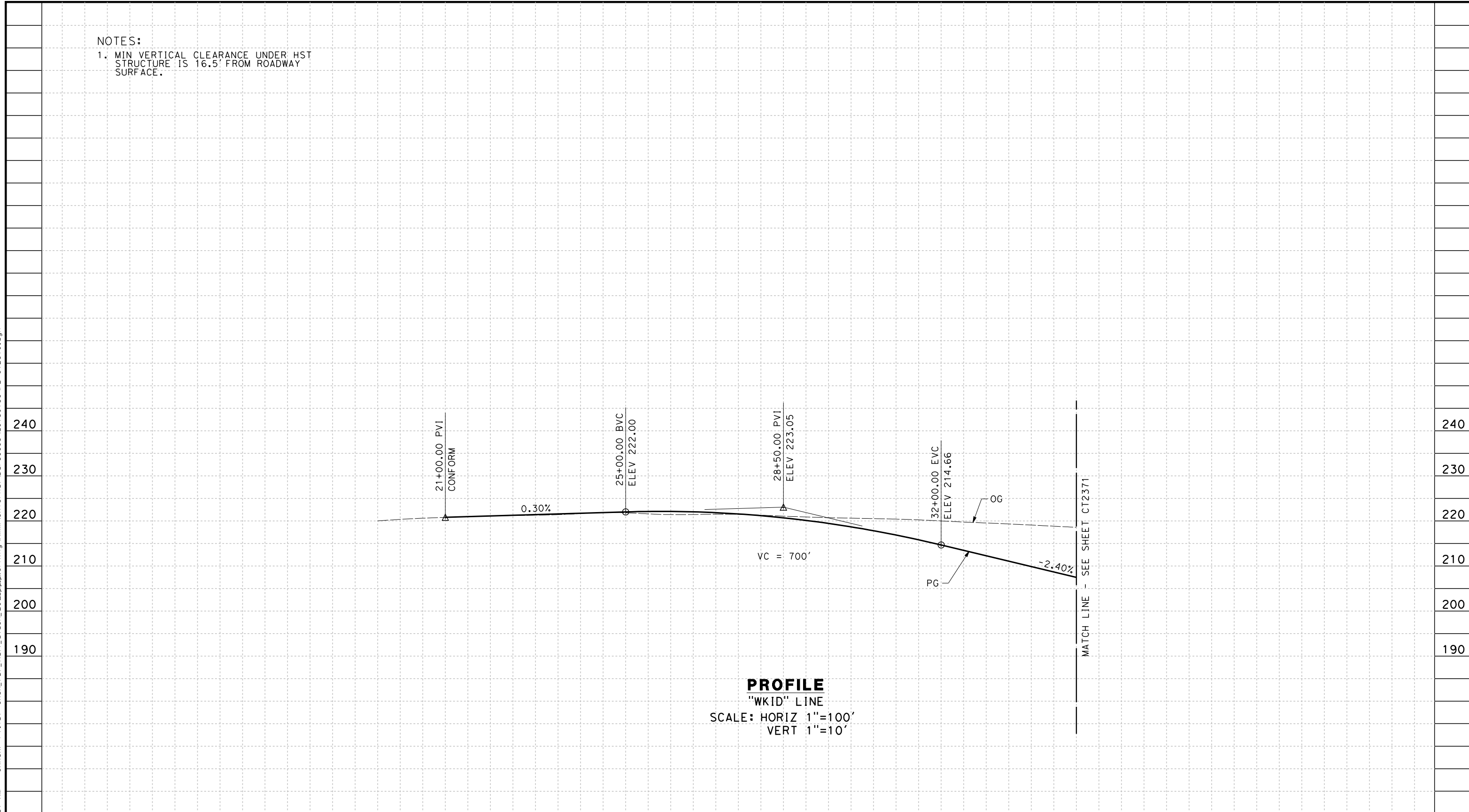
DRAWING NO.
CT1382

SCALE
AS SHOWN

SHEET NO.
10 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE.



PROFILE
 "WKID" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION		1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																	
Emb																	

DESIGNED BY I. JOSIFEK
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

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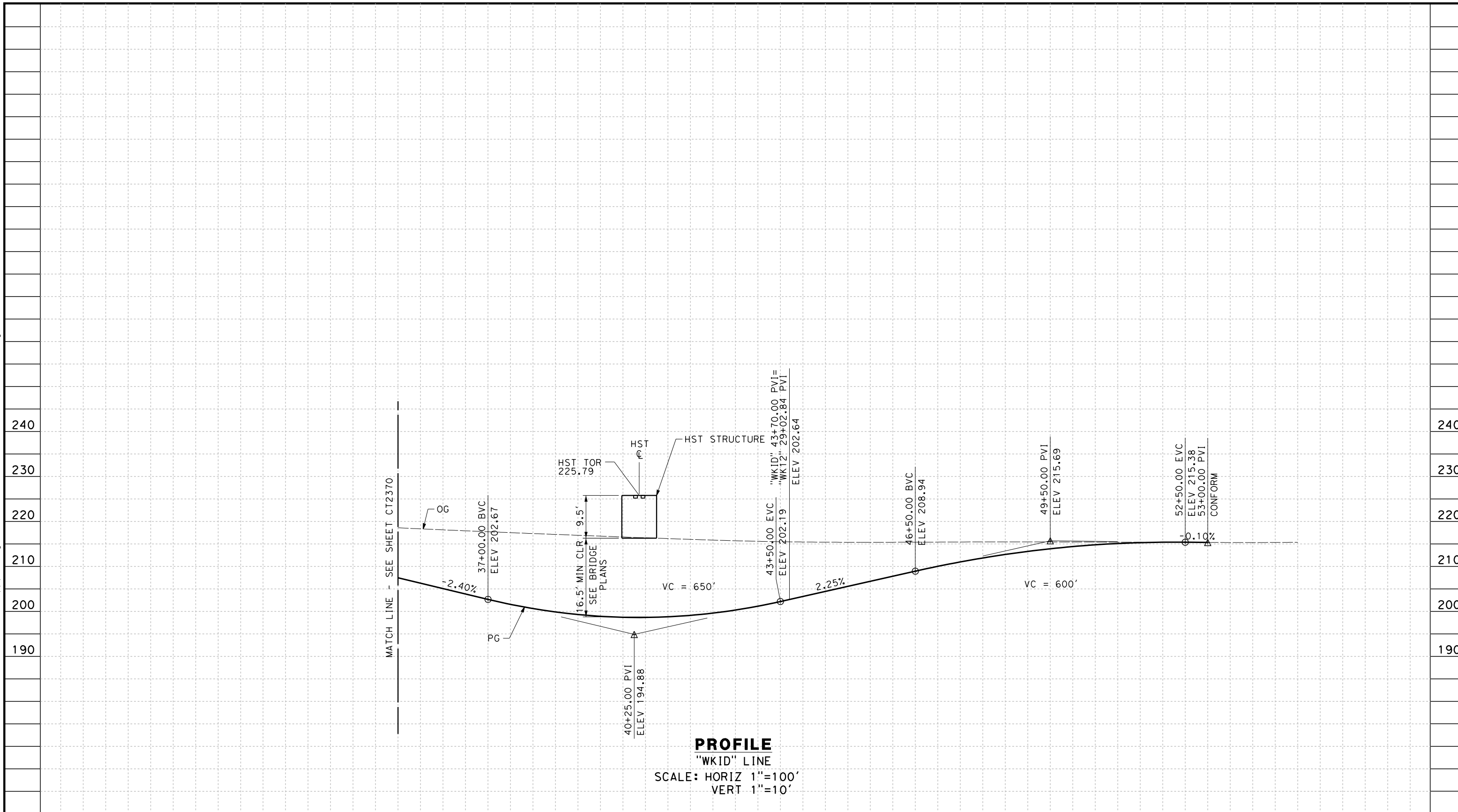
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 IDAHO AVE

CONTRACT NO. HSR 06-0003
DRAWING NO. CT2370
SCALE AS SHOWN
SHEET NO. 11 OF 27

12/30/2013 8:07:21 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603.ctb CT2370.dgn

12/30/2013 8:07:36 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150156\FB-CT2371.dgn



STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	TOTAL	
Exc																					
Emb																					

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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 K2
GRADE SEPARATION PROFILE
IDAHO AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2371

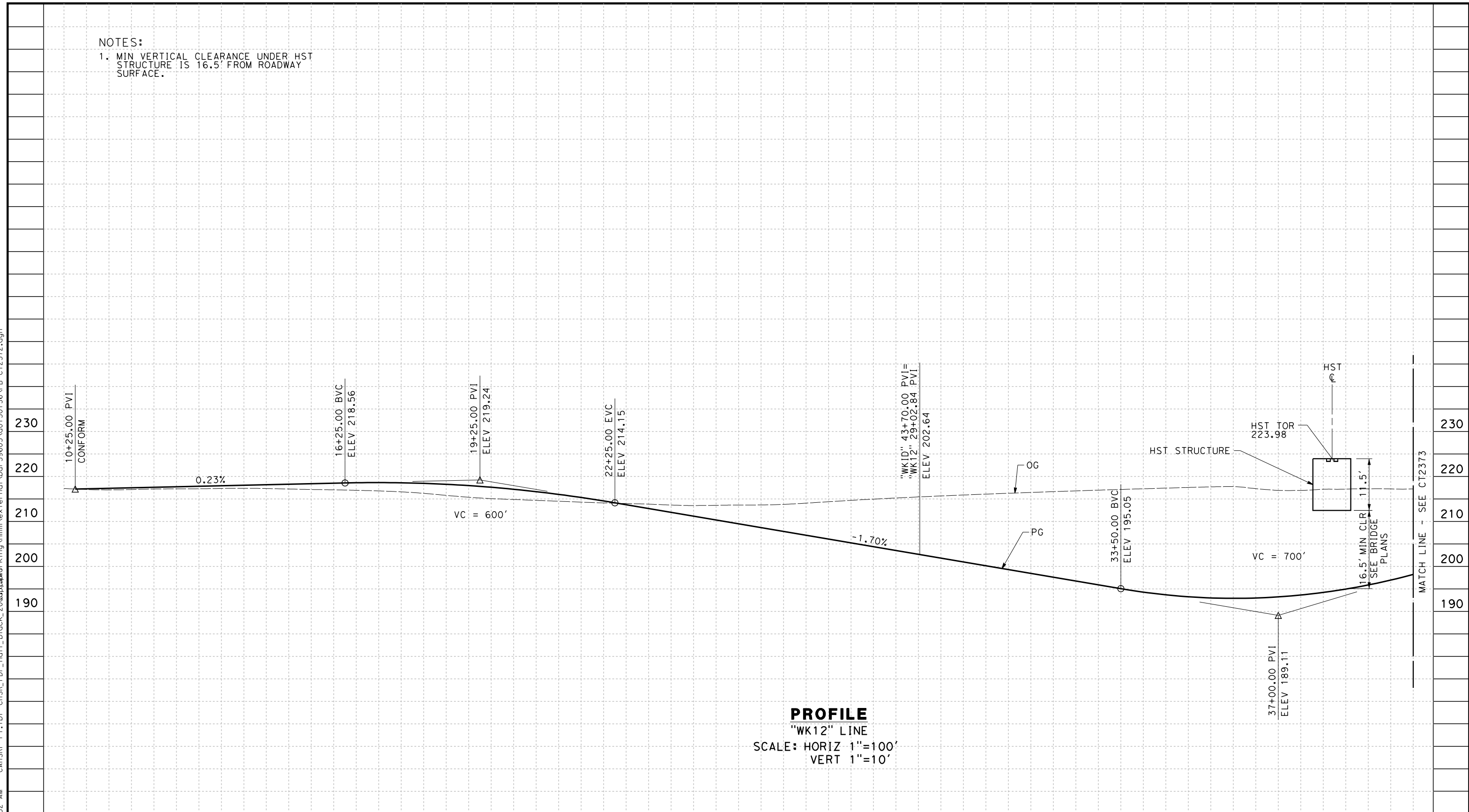
SCALE
AS SHOWN

SHEET NO.
12 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE.

12/30/2013 8:07:52 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\hmm\external\bar59603\ad0150156\FB-CT2372.dgn



PROFILE
 "WK12" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	TOTAL	
Exc																																	
Emb																																	

DESIGNED BY	I. JOSIFEK
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

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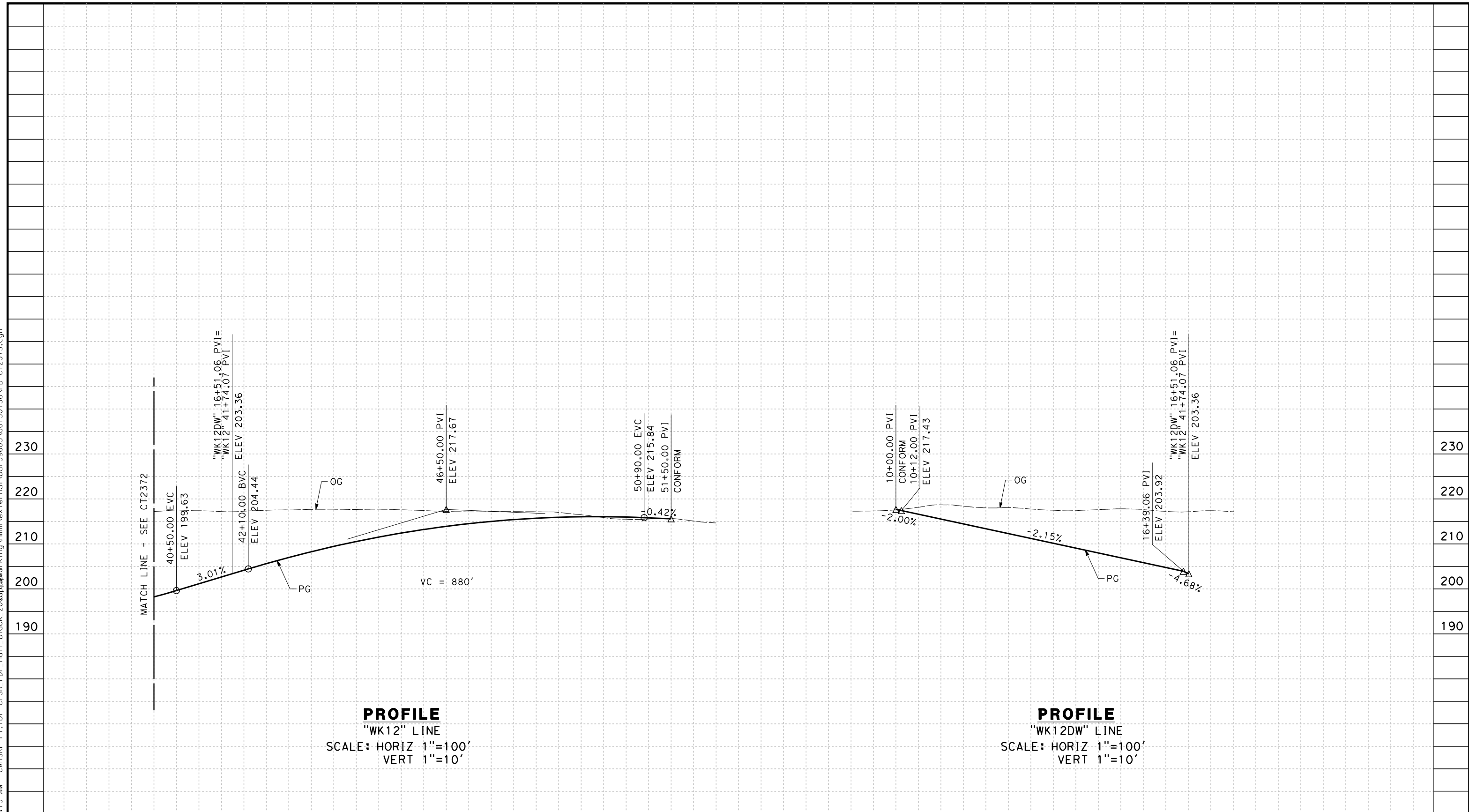


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 12TH AVE (AT IDAHO AVE)

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2372
SCALE	AS SHOWN
SHEET NO.	13 OF 27

12/30/2013 10:08:13 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\0150156\FB-CT2373.dgn



STATION	40	1	2	3	4	45	6	7	8	9	50	1	2	10	1	2	3	4	15	6	7	TOTAL	
Exc																							
Emb																							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
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**

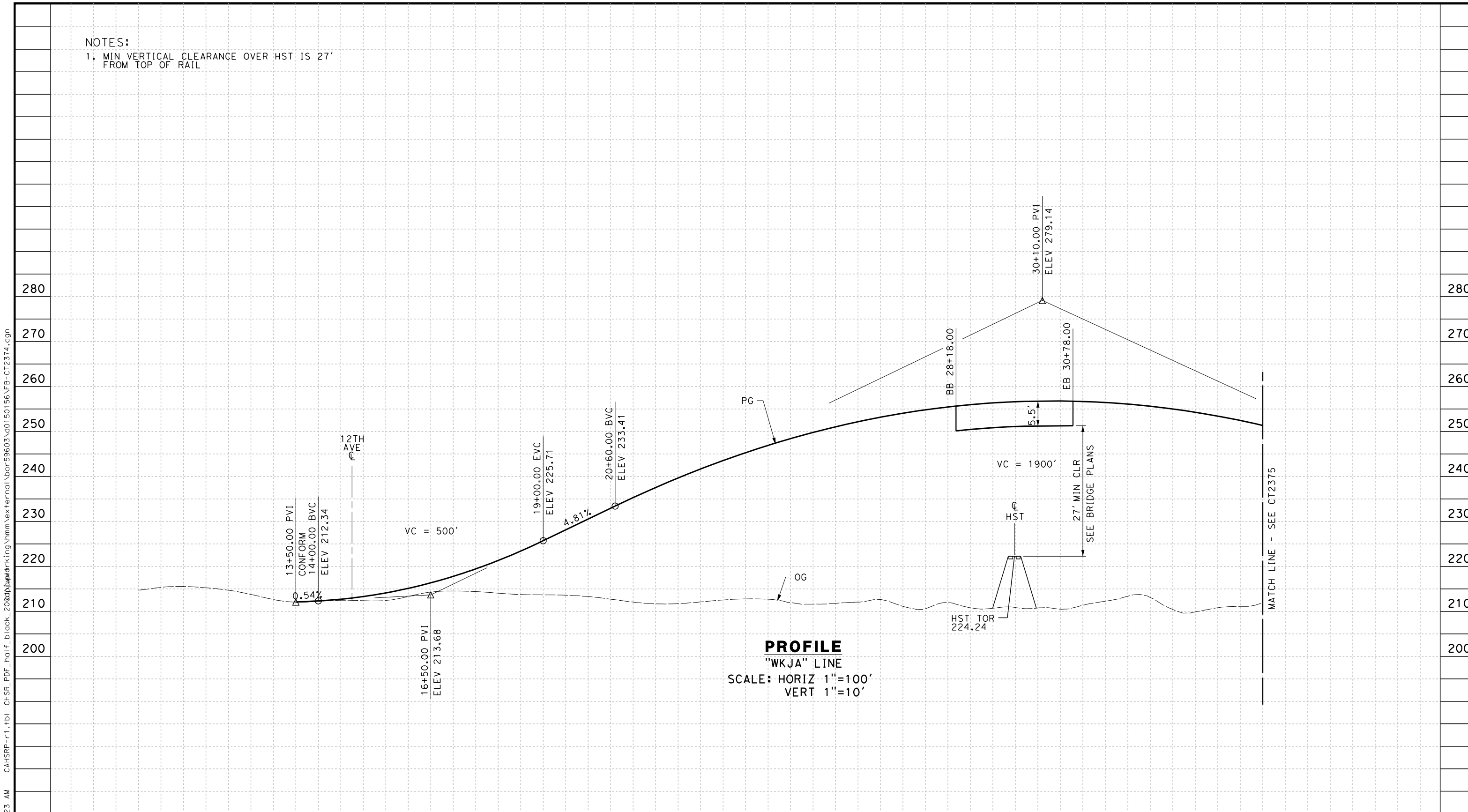
KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION PROFILE
12TH AVE (AT IDAHO AVE)

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT2373
SCALE
AS SHOWN
SHEET NO.
14 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE OVER HST IS 27'
FROM TOP OF RAIL

12/30/2013 8:08:23 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150156\FB-CT2374.dgn



STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	TOTAL
Exc																											
Emb																											

DESIGNED BY	I. JOSIFEK
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

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CONSTRUCTION**

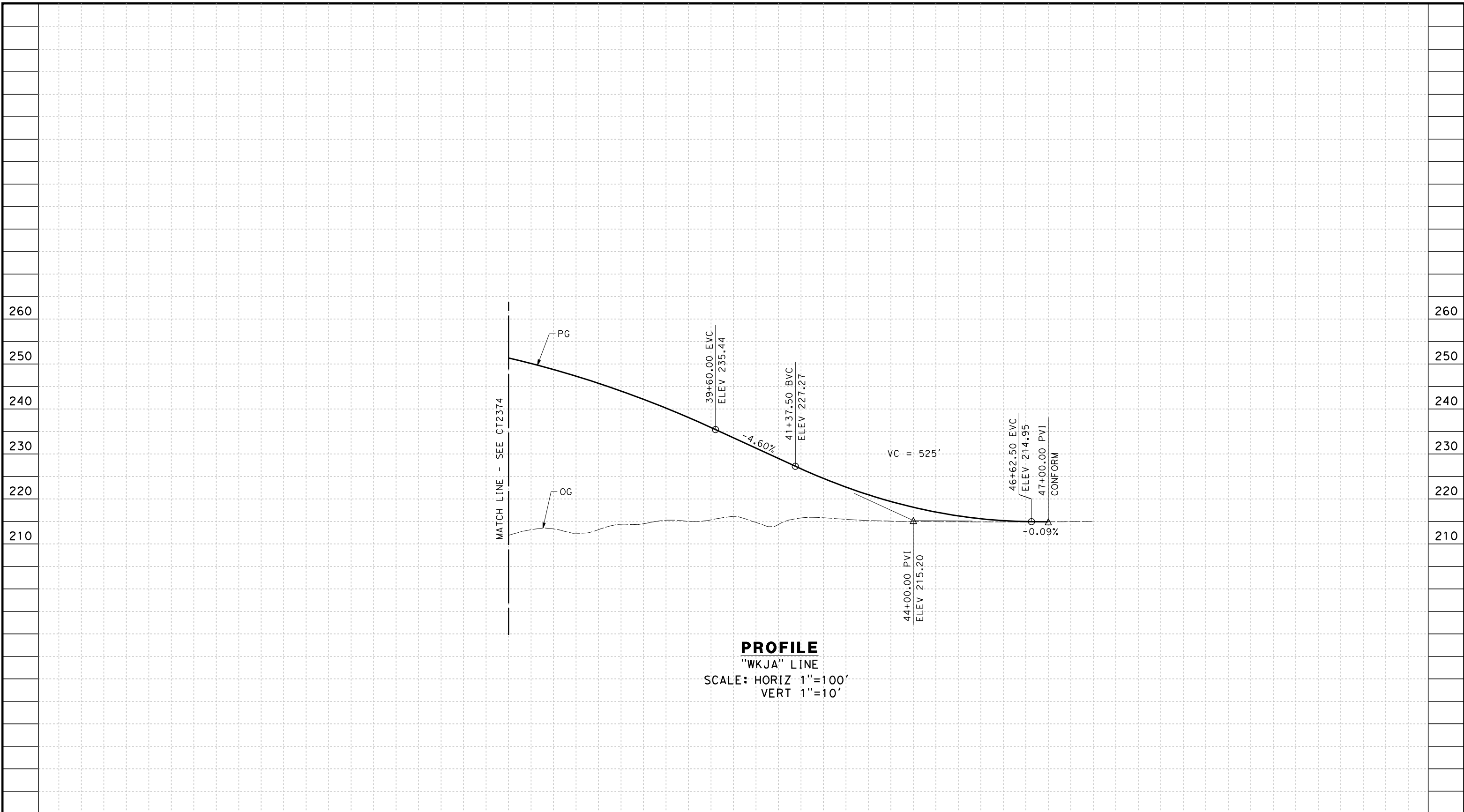


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION PROFILE
JACKSON AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2374
SCALE	AS SHOWN
SHEET NO.	15 OF 27

12/30/2013 8:08:37 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150156\FB-CT2375.dgn



STATION	35	6	7	8	9	40	1	2	3	4	45	6	7	8	TOTAL
CY	Exc														
	Emb														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
GRADE SEPARATION PROFILE
JACKSON AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2375

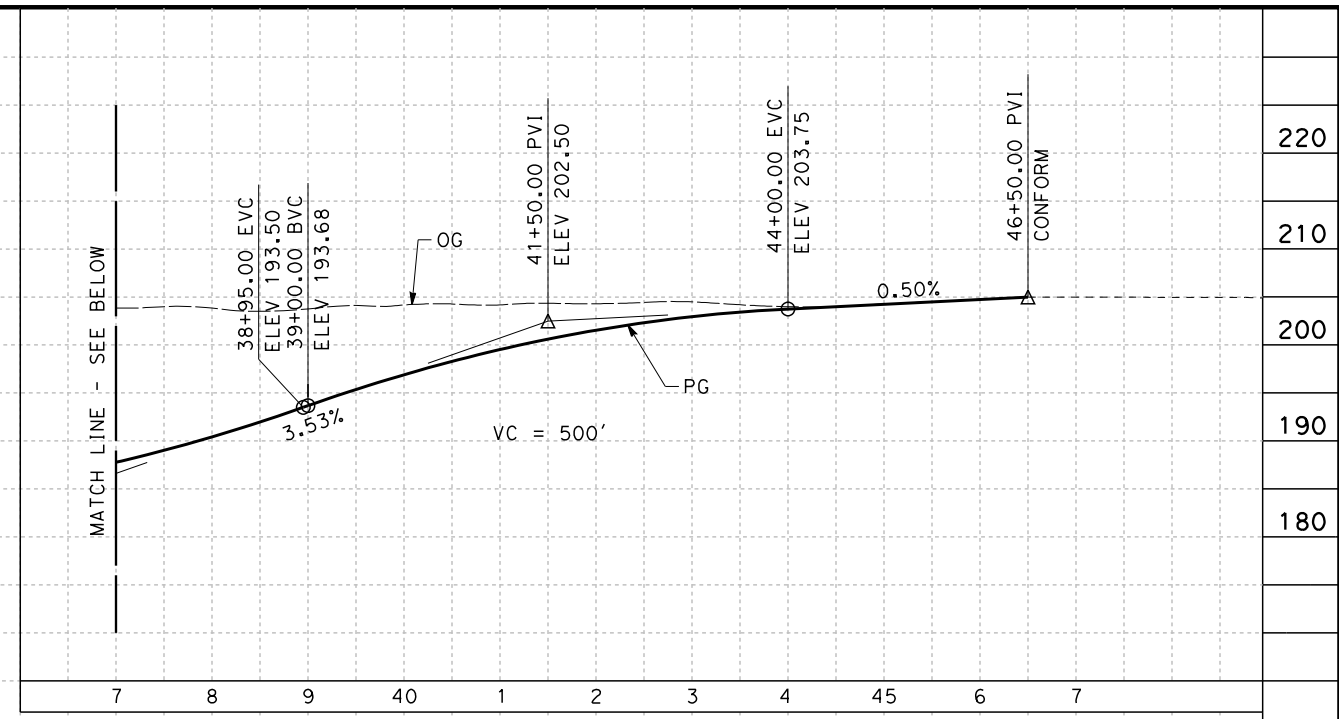
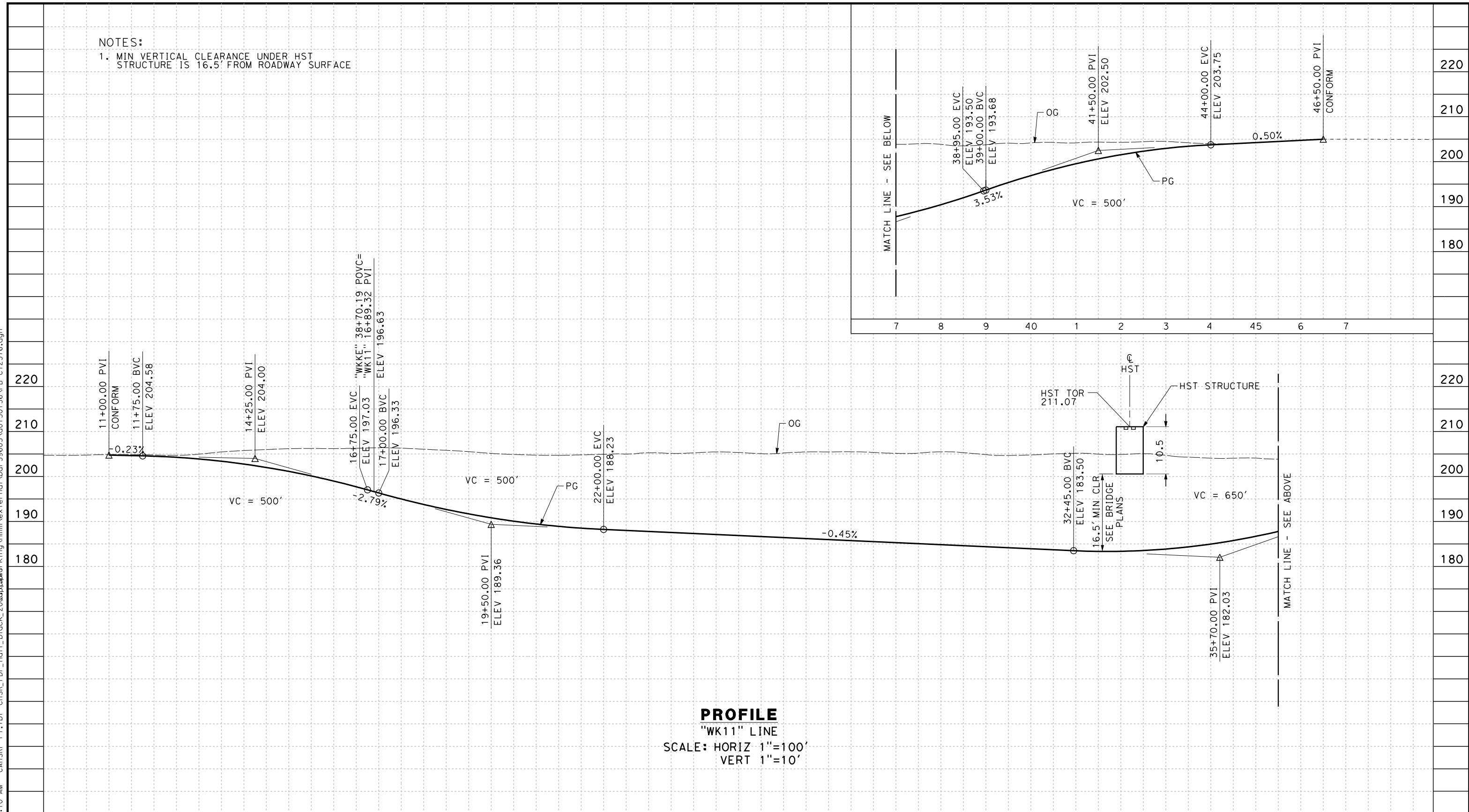
SCALE
AS SHOWN

SHEET NO.
16 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SURFACE

12/30/2013 10:14:10 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150156\FB-CT2376.dgn



STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL	
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
GRADE SEPARATION PROFILE
11TH AVE

CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT2376

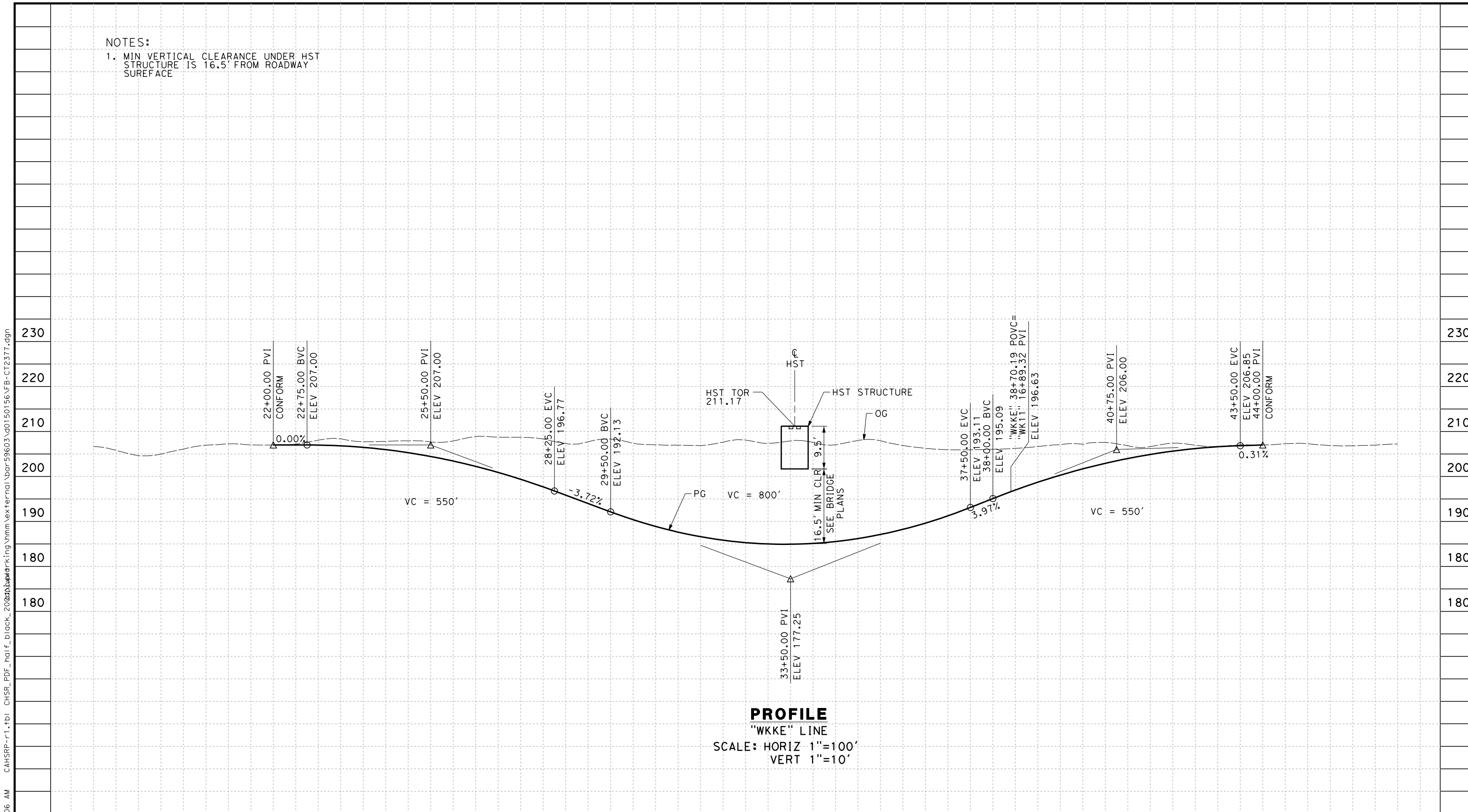
SCALE
AS SHOWN

SHEET NO.
17 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST STRUCTURE IS 16.5' FROM ROADWAY SUREFACE

12/30/2013 8:09:06 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150156\FB-CT2377.dgn



PROFILE
 "WKKE" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	9	40	1	2	3	4	45	6	7	TOTAL	
Exc																																
Emb																																

DESIGNED BY	I. JOSIFEK
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

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

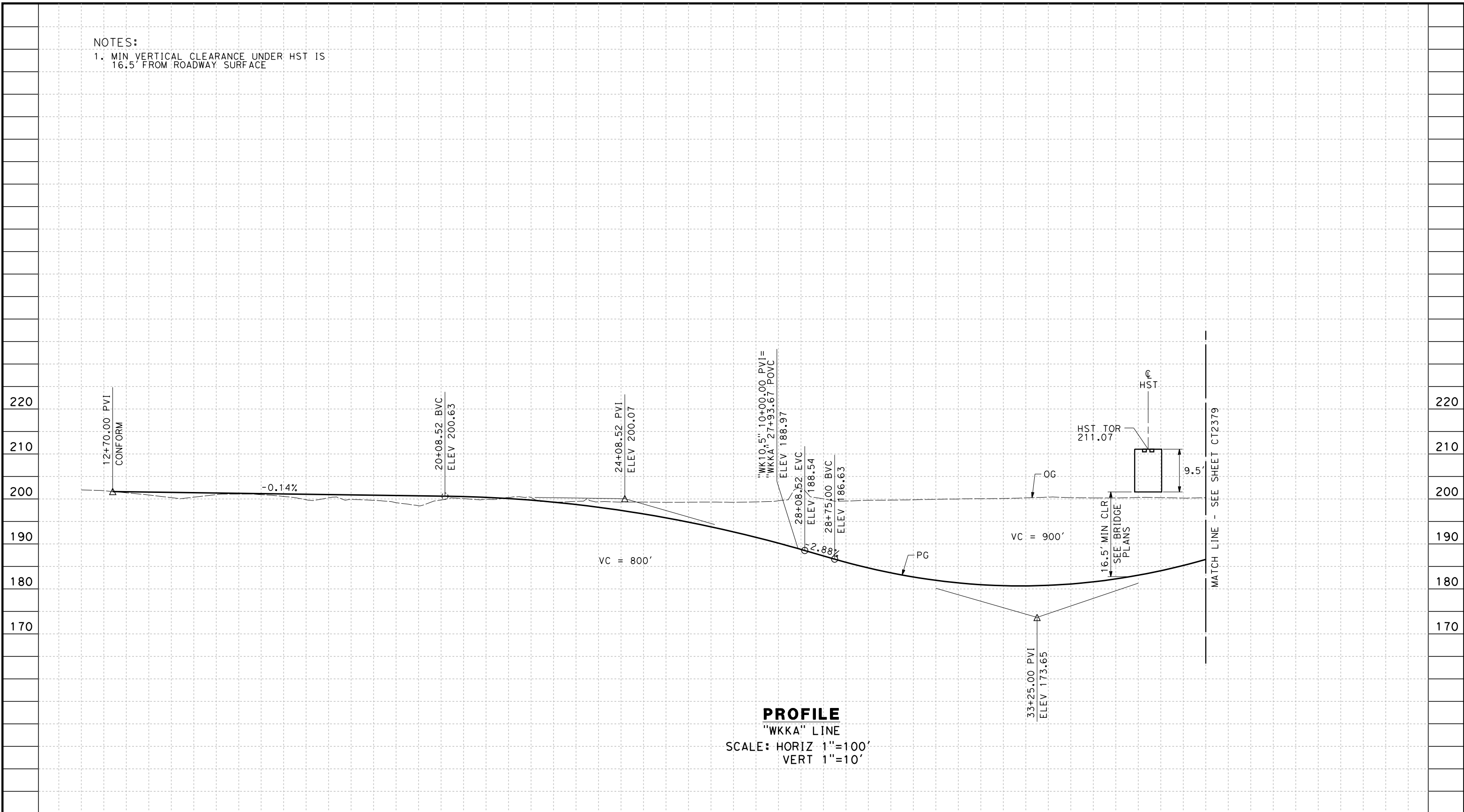
KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 KENT AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2377
SCALE	AS SHOWN
SHEET NO.	18 OF 27

NOTES:

1. MIN VERTICAL CLEARANCE UNDER HST IS 16.5' FROM ROADWAY SURFACE

12/30/2013 8:09:20 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\external\bar59603\0150156\FB-CT2378.dgn



STATION	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL
Exc																									
Emb																									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
DRAWN BY
V. ORTEGA
CHECKED BY
B. RAWSON
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

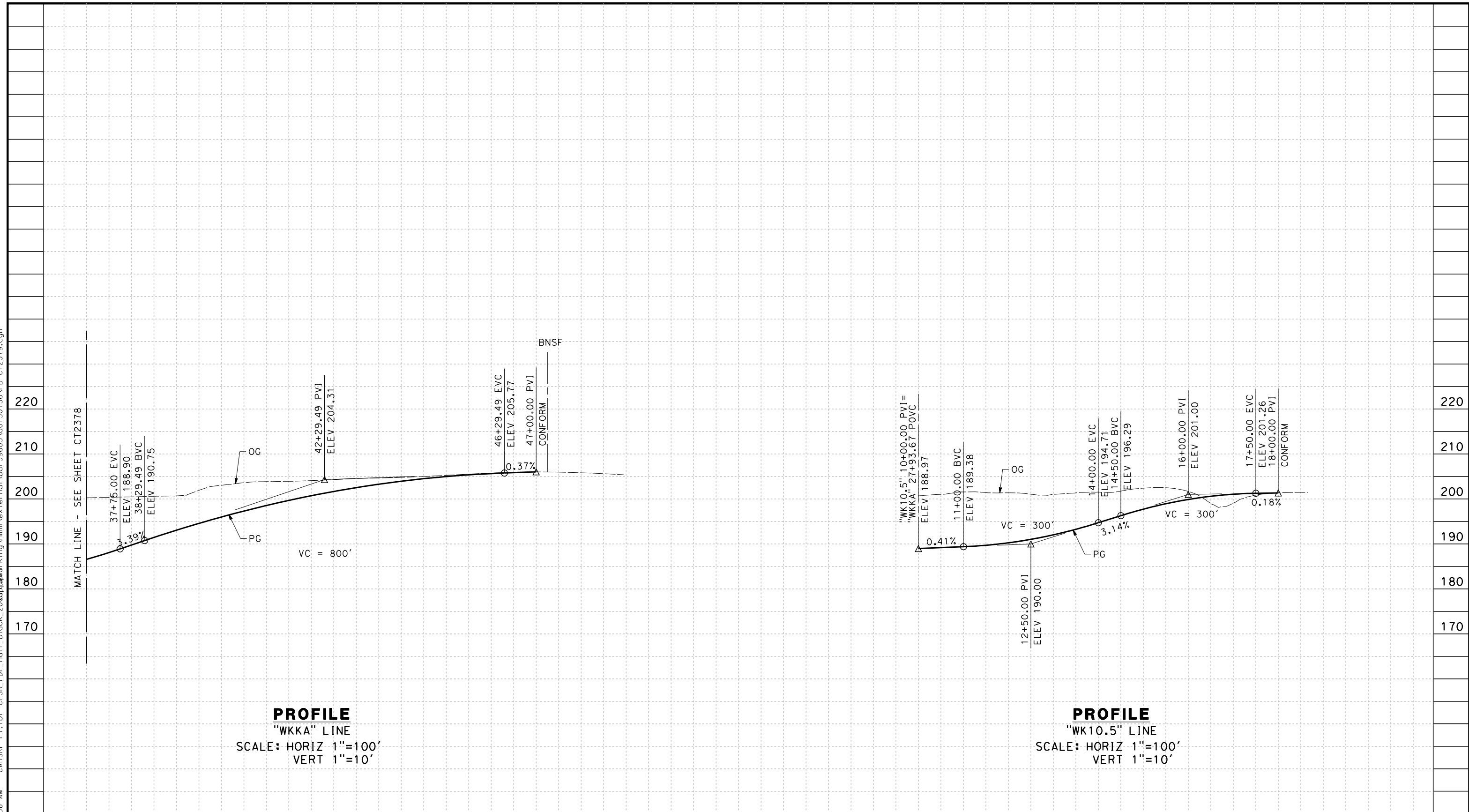
**NOT FOR
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K2
GRADE SEPARATION PROFILE
KANSAS AVE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CT2378
SCALE
AS SHOWN
SHEET NO.
19 OF 27

12/30/2013 8:09:36 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.ctb \\bar59603\d0150156\FB-CT2379.dgn



PROFILE
 "WKKA" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

PROFILE
 "WK10.5" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	7	8	9	40	1	2	3	4	45	6	7	10	1	2	3	4	15	6	7	8	9	20	TOTAL
Exc																							
Emb																							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
V. ORTEGA
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

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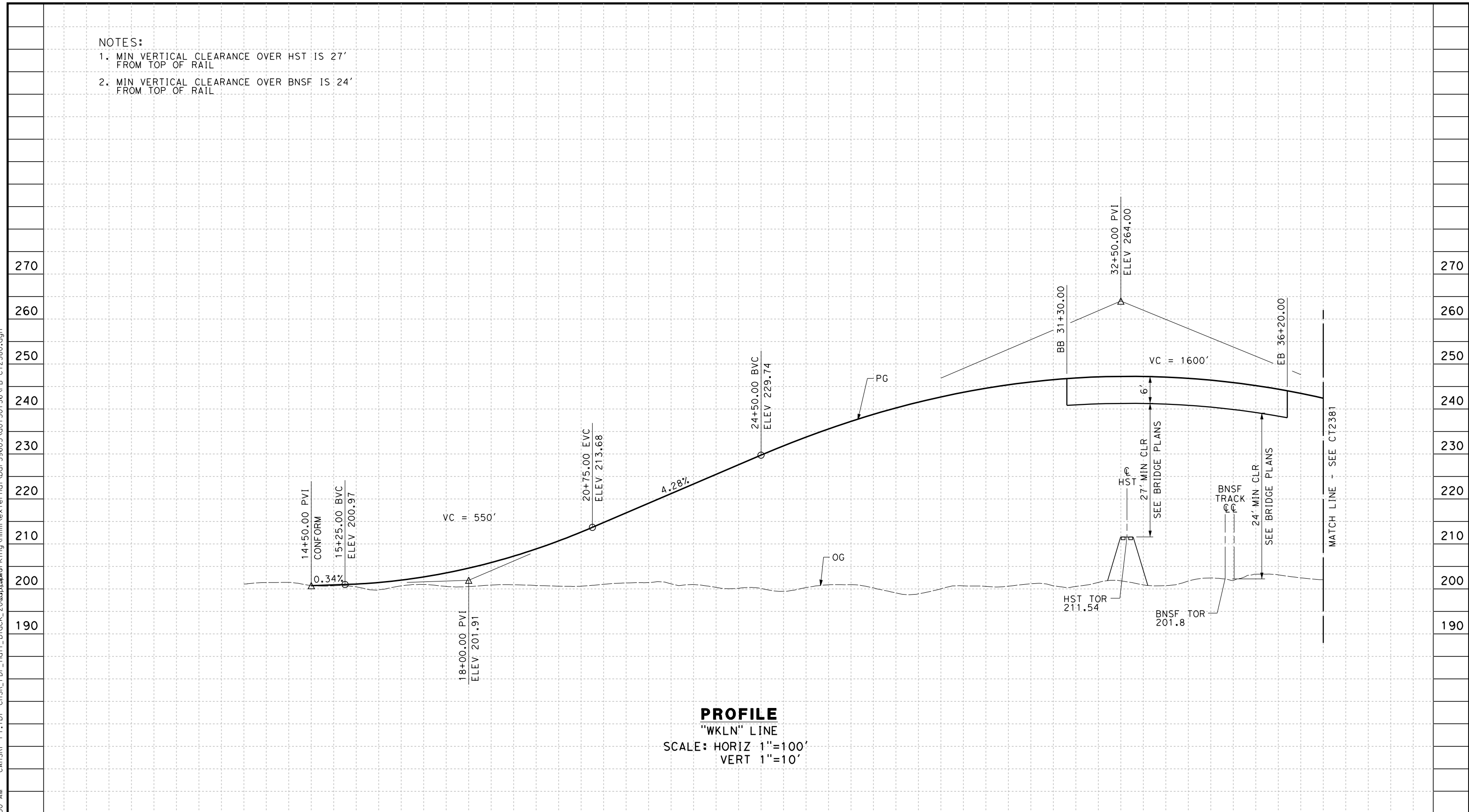


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 KANSAS AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2379
 SCALE
AS SHOWN
 SHEET NO.
20 OF 27

NOTES:

- 1. MIN VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
- 2. MIN VERTICAL CLEARANCE OVER BNSF IS 24' FROM TOP OF RAIL



PROFILE
 "WKLN" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	TOTAL	
Exc																										
Emb																										

DESIGNED BY	I. JOSIFEK
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	R. COFFIN
DATE	12/31/13

**RECORD SET 15%
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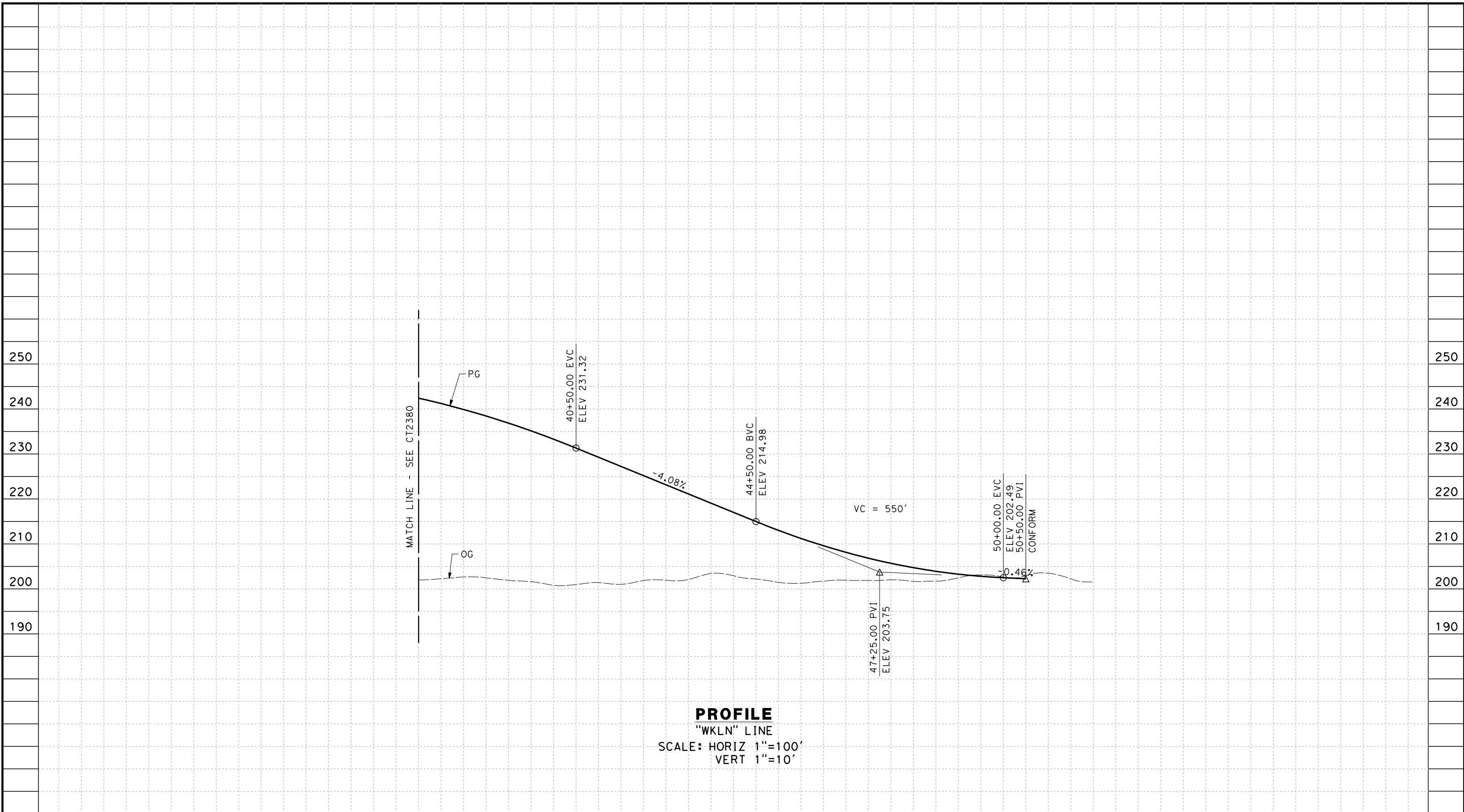
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 LANSING AVE

CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT2380
SCALE	AS SHOWN
SHEET NO.	21 OF 27

12/30/2013 09:50 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\d0150156\FB-CT2380.dgn

12/30/2013 8:10:04 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150156\FB-CT2381.dgn



STATION	7	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	TOTAL
Exc																	
Emb																	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
V. ORTEGA
 CHECKED BY
B. RAWSON
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**
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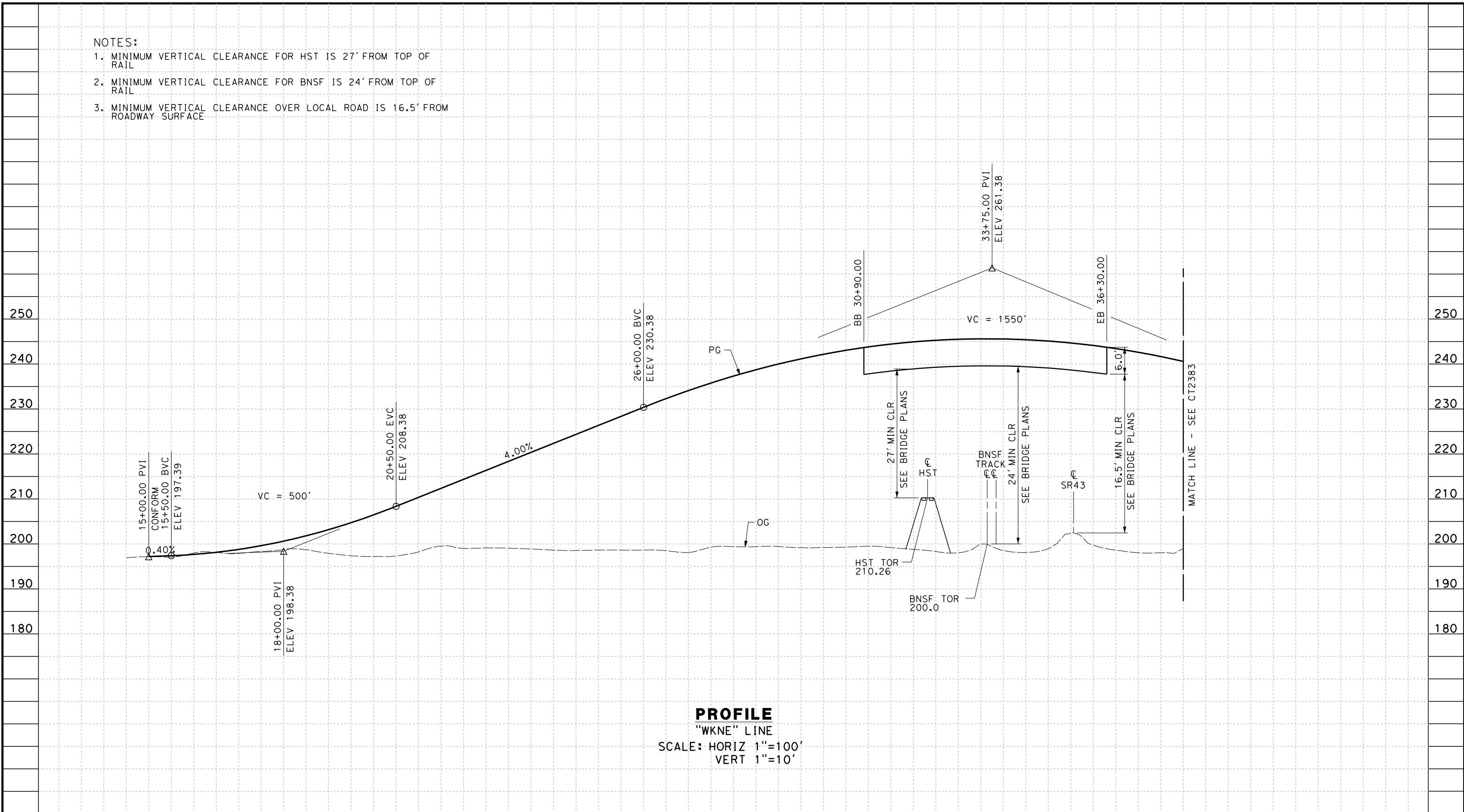


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 LANSING AVE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2381
 SCALE
AS SHOWN
 SHEET NO.
22 OF 27

NOTES:

1. MINIMUM VERTICAL CLEARANCE FOR HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE FOR BNSF IS 24' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL ROAD IS 16.5' FROM ROADWAY SURFACE



PROFILE
 "WKNE" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	TOTAL	
CY	Exc																									
	Emb																									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
 ALIGNMENT K2
 GRADE SEPARATION PROFILE
 NEVADA AVE

CONTRACT NO.
HSR 06-0003

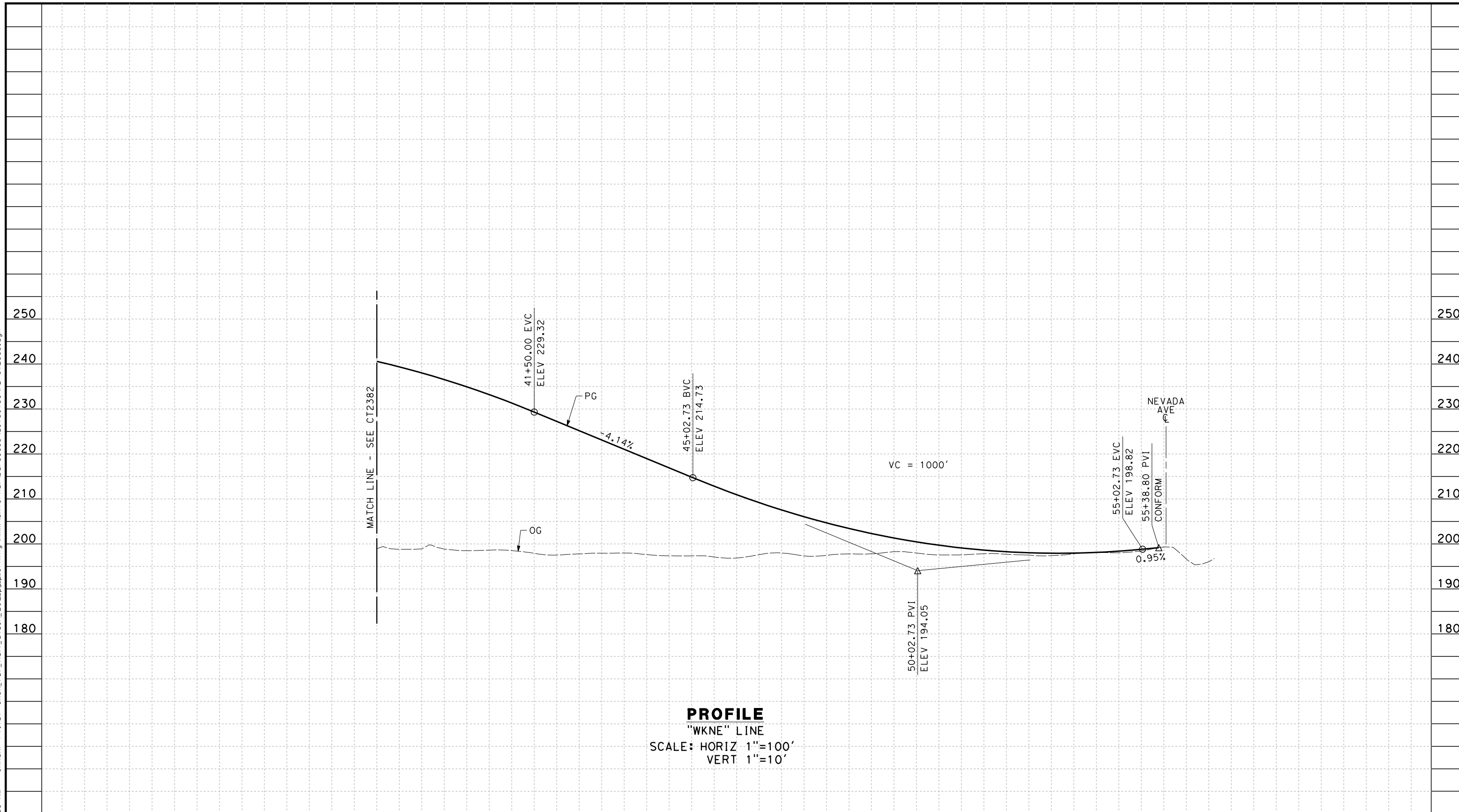
DRAWING NO.
CT2382

SCALE
AS SHOWN

SHEET NO.
23 OF 27

12/30/2013 10:19 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\ad0150156\FB-CT2382.dgn

12/30/2013 10:33 AM CAHSR-r1.tbl CHSR_PDF_half_black_200dpi.dwg \\bar59603\bar59603\d0150156\FB-CT2383.dgn



PROFILE
 "WKNE" LINE
 SCALE: HORIZ 1"=100'
 VERT 1"=10'

STATION	8	9	40	1	2	3	4	45	6	7	8	9	50	1	2	3	4	55	TOTAL
Exc																			
Emb																			

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
V. ORTEGA
 CHECKED BY
B. RAWSON
 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 K2
 GRADE SEPARATION PROFILE
 NEVADA AVE

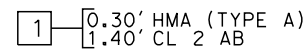
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT2383
 SCALE
AS SHOWN
 SHEET NO.
24 OF 27

NOTES:

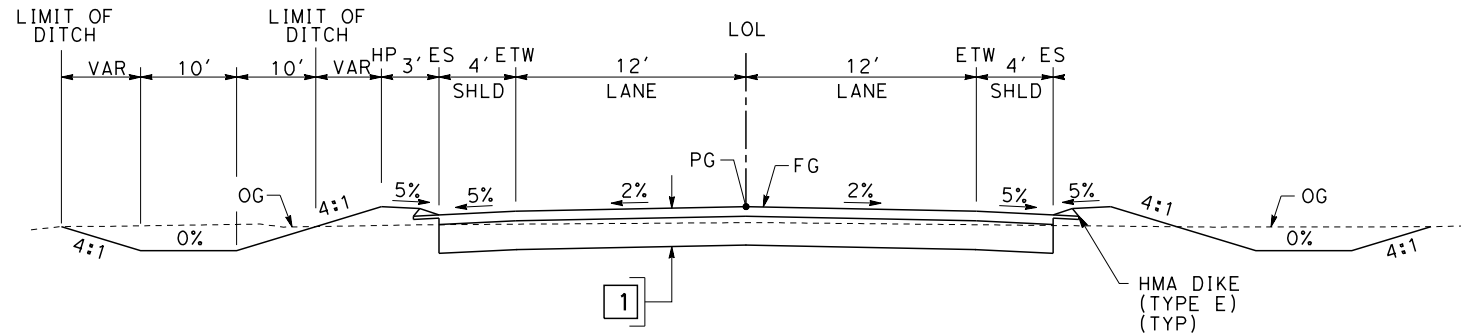
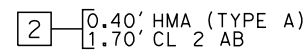
1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSIONS AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.

STRUCTURAL SECTIONS

TYPICAL ROADWAY (4' SHOULDER)



TYPICAL ROADWAY (8' SHOULDER)



SECTION A

- "WKJA" 14+88.53 TO 28+18.00
- "WKJA" 30+78.00 TO 46+62.50
- "WKLN" 15+00.00 TO 31+30.00
- "WKLN" 36+20.00 TO 48+50.00

TABLE OF DESIGN SPEEDS

STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED	CRITERIA/JURISDICTION
IDAHO AVE	WKID	60*	KINGS COUNTY/KINGS COUNTY
12TH AVE(AT IDAHO AVE)	WK12	60*	KINGS COUNTY/KINGS COUNTY
JACKSON AVE	WKJA	55	KINGS COUNTY/KINGS COUNTY
11TH AVE	WK11	45	KINGS COUNTY/KINGS COUNTY
KENT AVE	WKKE	50	KINGS COUNTY/KINGS COUNTY
KANSAS AVE	WKKA	60	KINGS COUNTY/KINGS COUNTY
10 1/2 AVE	WK10 1/2	40	KINGS COUNTY/KINGS COUNTY
LANSING AVE	WKLN	55	KINGS COUNTY/KINGS COUNTY
NEVADA AVE	WKNE	50(40**)	KINGS COUNTY/KINGS COUNTY
12TH AVE DRIVEWAY	WK12DW	15	KINGS COUNTY/KINGS COUNTY

* DESIGN SPEED PER CITY OF HANFORD GENERAL PLAN
 ** WILL REQUIRE REDUCED DESIGN SPEED ON HORIZONTAL CURVE APPROACHING STOP CONDITION

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

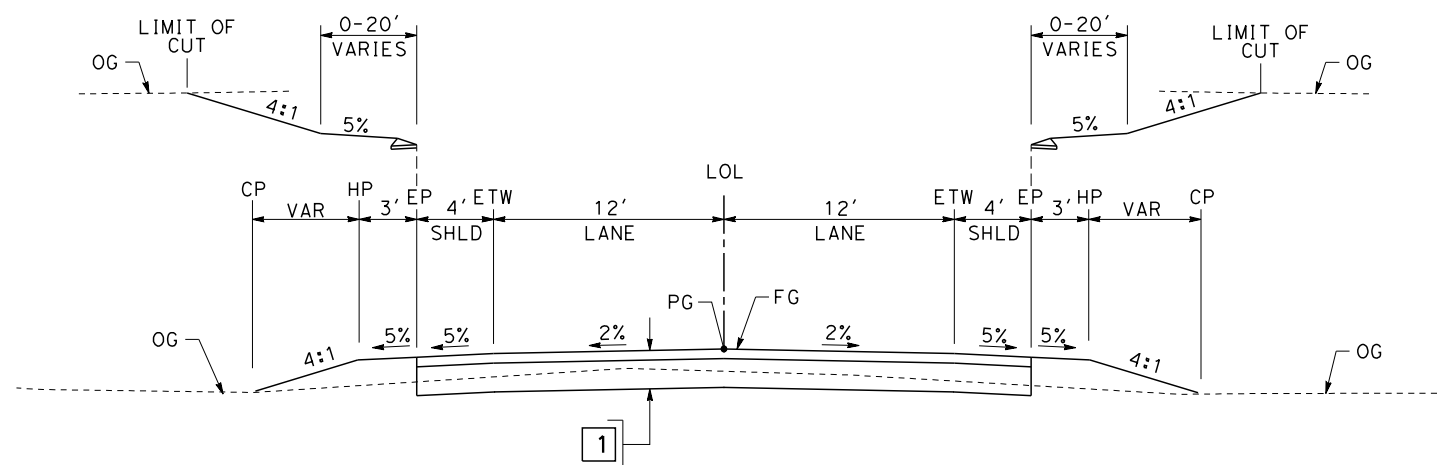
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT3350

SCALE
AS SHOWN

SHEET NO.
25 OF 27

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SECTION B

- "WKID" 21+00.00 TO 53+00.00
- "WK12" 10+25.00 TO 51+50.00
- "WKJA" 13+50.00 TO 14+88.53
- "WKJA" 46+62.50 TO 47+00.00
- "WK11" 11+00.00 TO 46+50.00
- "WKNE" 15+00.00 TO 18+95.00
- "WK12DW" 10+00.00 TO 16+51.06
- "WKKE" 22+00.00 TO 44+00.00
- "WK10.5" 10+00.00 TO 18+00.00
- "WKKA" 12+70.00 TO 47+00.00
- "WKLN" 14+50.00 TO 15+00.00
- "WKLN" 48+50.00 TO 50+50.00
- "WKNE" 52+00.00 TO 55+38.80

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK

DRAWN BY
V. ORTEGA

CHECKED BY
B. RAWSON

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 K2
ROADWAY/GRADE SEPARATION
TYPICAL CROSS SECTIONS

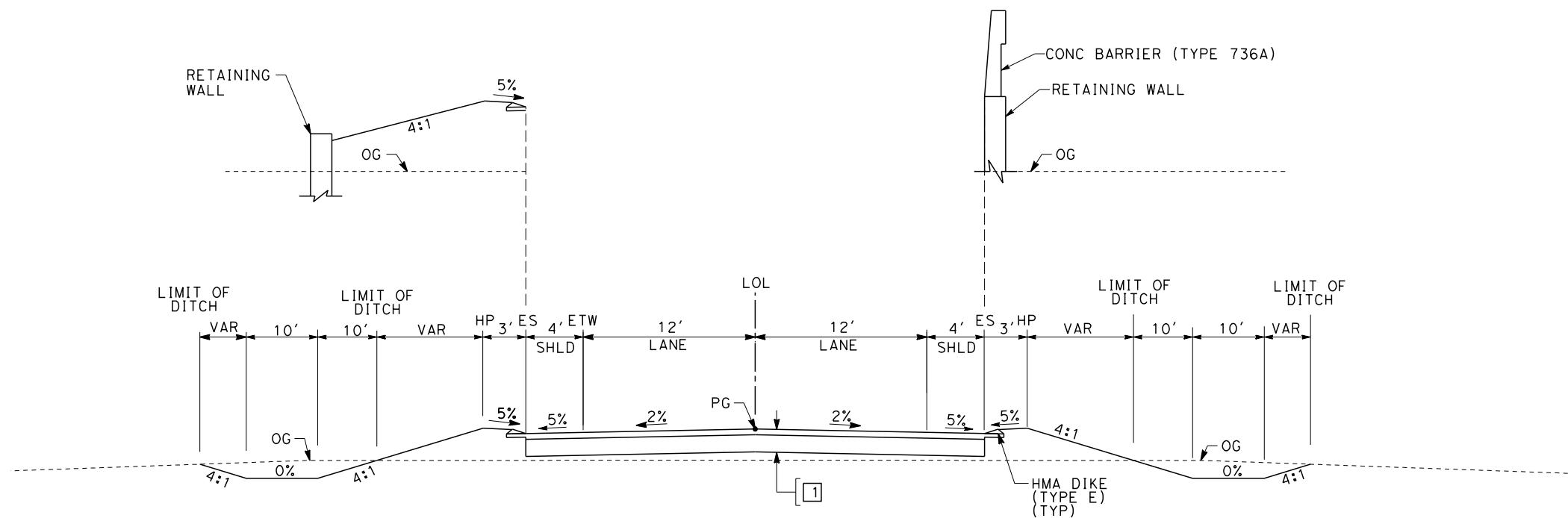
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CT3351

SCALE
AS SHOWN

SHEET NO.
26 OF 27

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SECTION C

"WKNE" 18+95.00 TO 30+90.00
 "WKNE" 36+30.00 TO 52+00.00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
I. JOSIFEK
 DRAWN BY
V. ORTEGA
 CHECKED BY
B. RAWSON
 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 K2
 ROADWAY/GRADE SEPARATION
 TYPICAL CROSS SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CT3352
 SCALE
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