

CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

Final EIR/EIS
Fresno to Bakersfield Section

Volume III:
Alignments and Other Plans

Section G
HST Structure Plans
Part 2 of 2

April 2014



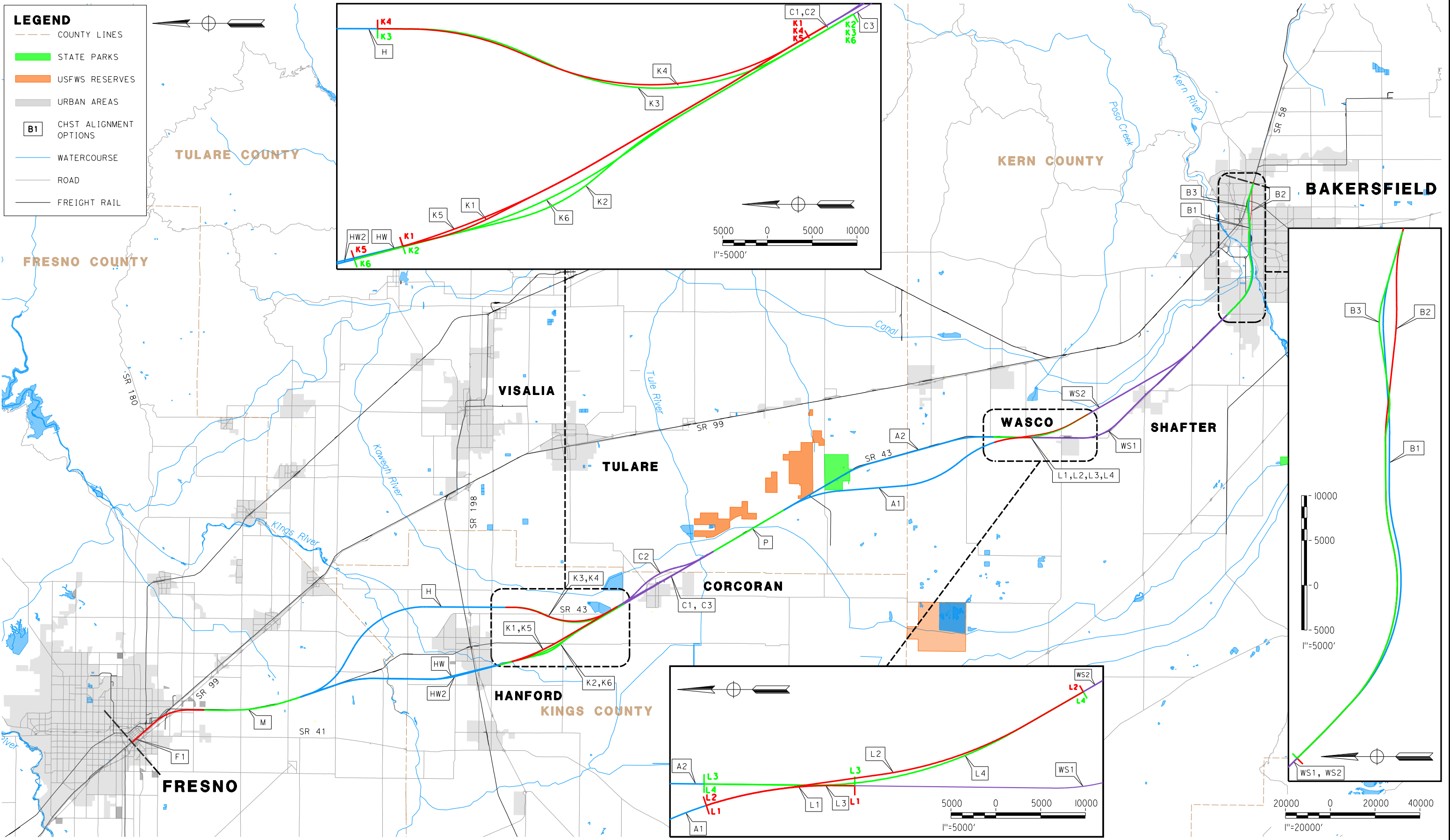
CALIFORNIA
High-Speed Rail Authority



U.S. Department of Transportation
Federal Railroad Administration

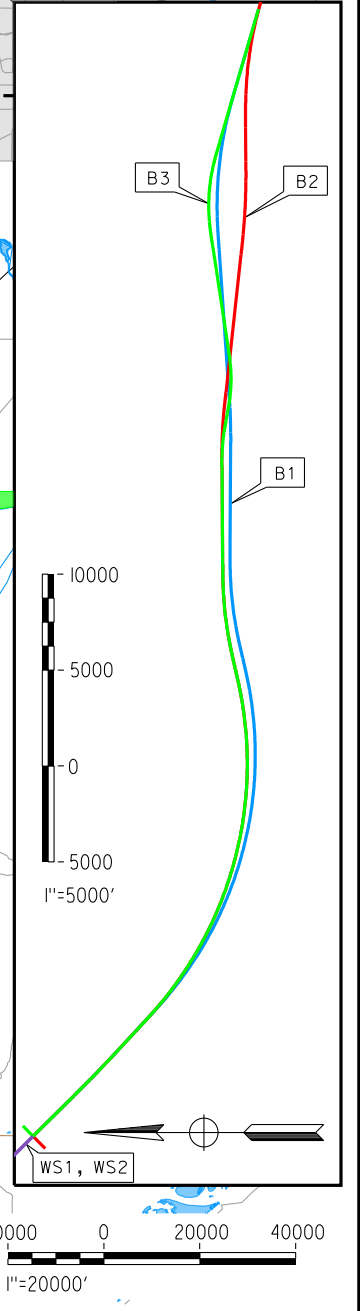
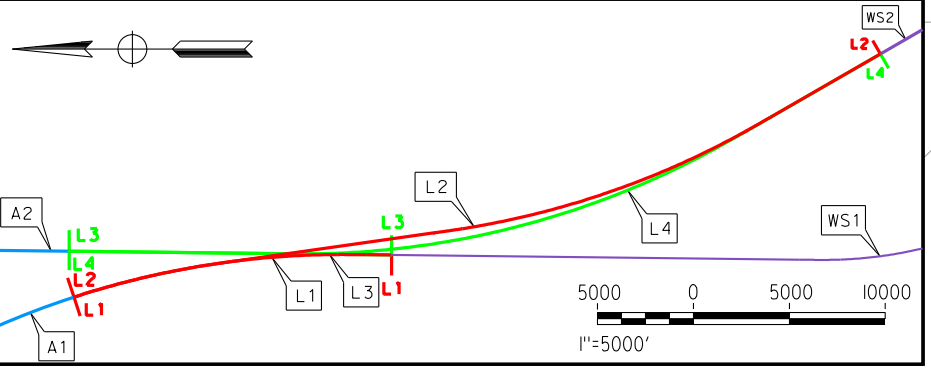
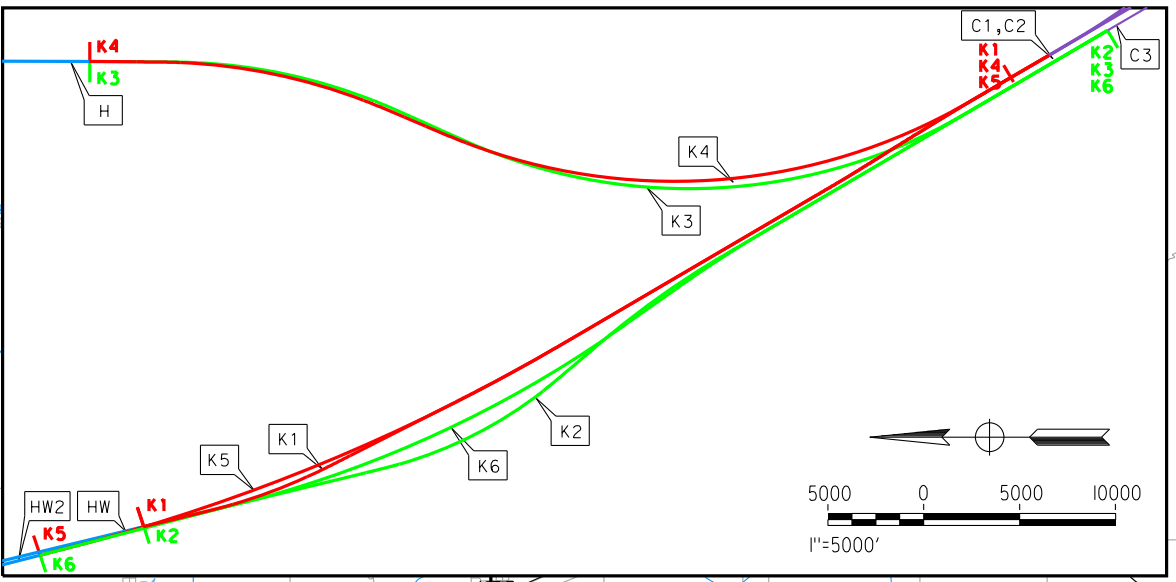


Nadine.Hutton 12/9/2013 4:54:34 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0155956\FB-CB-0001.dgn



LEGEND

- COUNTY LINES
- STATE PARKS
- USFWS RESERVES
- URBAN AREAS
- B1 CHST ALIGNMENT OPTIONS
- WATERCOURSE
- ROAD
- FREIGHT RAIL



REV	DATE	BY	CHK	APP	DESCRIPTION

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

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

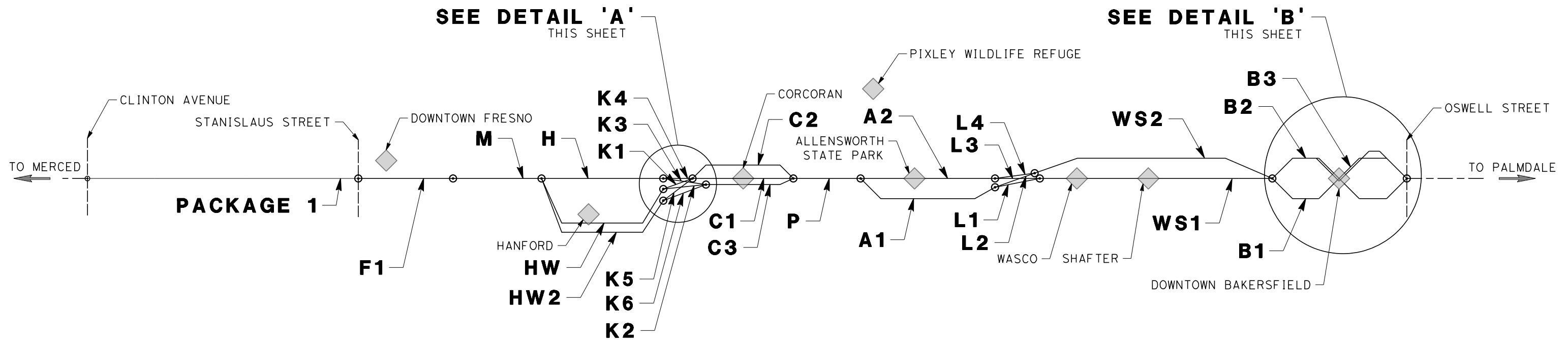
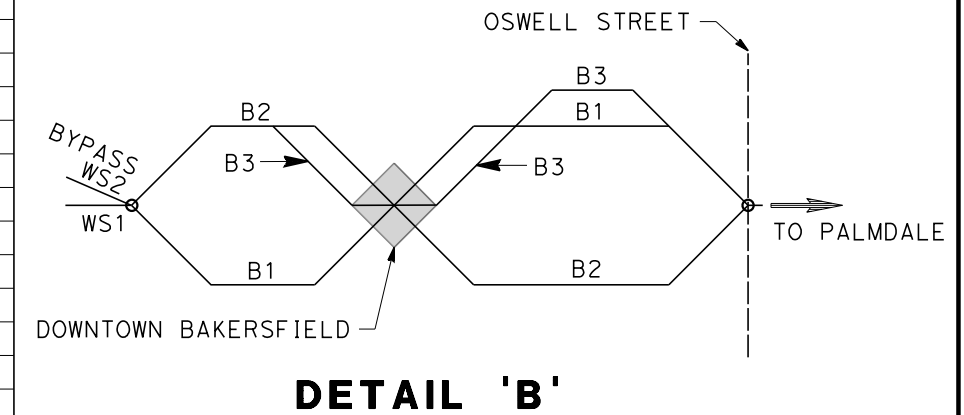
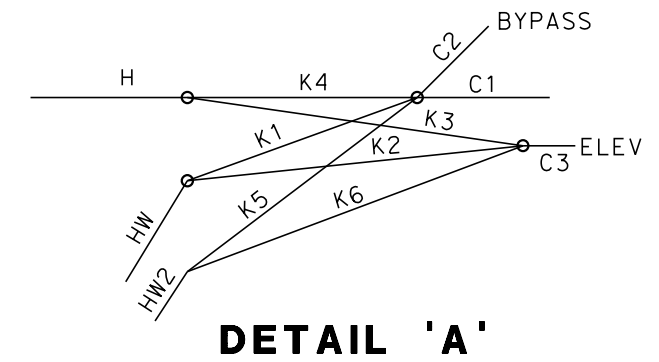


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

ALIGNMENT
LOCATION MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB0001
SCALE
AS SHOWN
SHEET NO.
1 OF 12

SUBSECTION CODE	NAME	LENGTH (MI)	EIR-EIS ALTERNATIVE
F1	FRESNO SUBSECTION	7.00	BNSF
M	MONMOUTH SUBSECTION	8.24	BNSF
H	HANFORD SUBSECTION	20.45	BNSF (HANFORD EAST)
HW	HANFORD WEST BYPASS SUBSECTION	18.27	HANFORD WEST BYPASS 1 & 2
HW2	HANFORD WEST BYPASS SUBSECTION	17.22	HANFORD WEST BYPASS 1 & 2 MODIFIED
K1	KAWEAH SUBSECTION	10.12	HANFORD WEST BYPASS 2 (AT-GRADE) (CONNECTS TO C1 [CORCORAN ELEVATED] OR C2 [CORCORAN BYPASS])
K2	KAWEAH SUBSECTION	10.83	HANFORD WEST BYPASS 1 (AT-GRADE) (CONNECTS TO C3 [BNSF THROUGH CORCORAN])
K3	KAWEAH SUBSECTION	10.61	BNSF (HANFORD EAST) (CONNECTS TO C3 [BNSF THROUGH CORCORAN])
K4	KAWEAH SUBSECTION	9.92	BNSF (HANFORD EAST) (CONNECTS TO C1 [CORCORAN ELEVATED] OR C2 [CORCORAN BYPASS])
K5	KAWEAH SUBSECTION	11.17	HANFORD WEST BYPASS 2 MODIFIED (BELOW-GRADE) (CONNECTS TO C1 [CORCORAN ELEVATED] OR C2 [CORCORAN BYPASS])
K6	KAWEAH SUBSECTION	11.84	HANFORD WEST BYPASS 1 MODIFIED (BELOW-GRADE) (CONNECTS TO C3 [BNSF THROUGH CORCORAN])
C1	CORCORAN SUBSECTION	9.36	CORCORAN ELEVATED
C2	CORCORAN BYPASS SUBSECTION	9.49	CORCORAN BYPASS
C3	CORCORAN SUBSECTION	8.74	BNSF (THROUGH CORCORAN)
P	PIXLEY SUBSECTION	6.88	BNSF
A1	ALLENSWORTH BYPASS SUBSECTION	19.05	ALLENSWORTH BYPASS
A2	THROUGH ALLENSWORTH SUBSECTION	19.03	BNSF (THROUGH ALLENSWORTH)
L1	POSO CREEK SUBSECTION	3.18	ALLENSWORTH BYPASS (CONNECTS TO BNSF [THROUGH WASCO-SHAFTER])
L2	POSO CREEK SUBSECTION	8.41	ALLENSWORTH BYPASS (CONNECTS TO WASCO-SHAFTER BYPASS)
L3	POSO CREEK SUBSECTION	3.18	BNSF (THROUGH ALLENSWORTH) (CONNECTS TO BNSF [THROUGH WASCO-SHAFTER])
L4	POSO CREEK SUBSECTION	8.43	BNSF (THROUGH ALLENSWORTH) (CONNECTS TO WASCO-SHAFTER BYPASS)
WS1	THROUGH WASCO-SHAFTER SUBSECTION	20.63	BNSF (THROUGH WASCO-SHAFTER)
WS2	WASCO-SHAFTER BYPASS SUBSECTION	14.49	WASCO-SHAFTER BYPASS
B1	BAKERSFIELD URBAN SUBSECTION	11.95	BNSF (BAKERSFIELD NORTH)
B2	BAKERSFIELD URBAN SUBSECTION	11.88	BAKERSFIELD SOUTH
B3	BAKERSFIELD URBAN SUBSECTION	11.95	BAKERSFIELD HYBRID



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

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

ALIGNMENT
ALIGNMENT SUBSECTION DIAGRAM

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB0002
SCALE
NTS
SHEET NO.
2 OF 12

c:\pwworking\hmm\external\jojo.valenzuela-arup.com\d0155956\FB-CB-0002.dgn 12/30/2013 2:52:13 PM

GENERAL SHEETS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
CB0001	ALIGNMENT - LOCATION MAP	SHEET 1 OF 12	1
CB0002	ALIGNMENT - ALIGNMENT SUBSECTION DIAGRAM	SHEET 2 OF 12	
SB2001	HST STRUCTURES - INDEX OF SHEETS - SHEET 1 OF 8	SHEET 3 OF 12	
SB2002	HST STRUCTURES - INDEX OF SHEETS - SHEET 2 OF 8	SHEET 4 OF 12	
SB2003	HST STRUCTURES - INDEX OF SHEETS - SHEET 3 OF 8	SHEET 5 OF 12	
SB2004	HST STRUCTURES - INDEX OF SHEETS - SHEET 4 OF 8	SHEET 6 OF 12	
SB2005	HST STRUCTURES - INDEX OF SHEETS - SHEET 5 OF 8	SHEET 7 OF 12	
SB2006	HST STRUCTURES - INDEX OF SHEETS - SHEET 6 OF 8	SHEET 8 OF 12	
SB2007	HST STRUCTURES - INDEX OF SHEETS - SHEET 7 OF 8	SHEET 9 OF 12	
SB2008	HST STRUCTURES - INDEX OF SHEETS - SHEET 8 OF 8	SHEET 10 OF 12	
CB0010	GENERAL - ABBREVIATIONS AND LEGENDS - SHEET 1 OF 2	SHEET 11 OF 12	
CB0011	GENERAL - ABBREVIATIONS AND LEGENDS - SHEET 2 OF 2	SHEET 12 OF 12	

ALIGNMENT F1 - FRESNO STREET UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2185	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO STREET UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2186	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO STREET UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT F1 - TULARE STREET UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2187	FRESNO SUBSECTION - ALIGNMENT F1 - TULARE STREET UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2188	FRESNO SUBSECTION - ALIGNMENT F1 - TULARE STREET UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT F1 - TULARE STREET UPRR UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2280	FRESNO SUBSECTION - ALIGNMENT F1 - TULARE STREET UPRR UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2281	FRESNO SUBSECTION - ALIGNMENT F1 - TULARE STREET UPRR UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT F1 - VENTURA STREET UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2215	FRESNO SUBSECTION - ALIGNMENT F1 - VENTURA STREET UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2216	FRESNO SUBSECTION - ALIGNMENT F1 - VENTURA STREET UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT F1 - VENTURA STREET UPRR UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2282	FRESNO SUBSECTION - ALIGNMENT F1 - VENTURA STREET UPRR UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2283	FRESNO SUBSECTION - ALIGNMENT F1 - VENTURA STREET UPRR UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT F1 - JENSEN TRENCH

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2190	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - KEY MAP	SHEET 1 OF 10	1
SV2191	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 2 OF 10	
SV2192	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 3 OF 10	
SV2193	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 4 OF 10	
SV2194	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 5 OF 10	
SV2195	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 6 OF 10	
SV2196	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 7 OF 10	
SV2197	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 8 OF 10	
SV2198	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - PLAN AND ELEVATION	SHEET 9 OF 10	
SV2199	FRESNO SUBSECTION - ALIGNMENT F1 - JENSEN TRENCH - TYPICAL SECTIONS	SHEET 10 OF 10	

ALIGNMENT F1 - FRESNO VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2200	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - KEY MAP	SHEET 1 OF 10	1
SV2201	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 10	
SV2202	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 10	
SV2203	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 10	
SV2204	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 10	
SV2205	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 10	
SV2206	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 10	
SV2207	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 10	
SV2208	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - TYPICAL SECTIONS	SHEET 9 OF 10	
SV2209	FRESNO SUBSECTION - ALIGNMENT F1 - FRESNO VIADUCT - TYPICAL SECTIONS	SHEET 10 OF 10	

ALIGNMENT H - CONEJO VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2220	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - KEY MAP	1 OF 8	1
SV2221	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	2 OF 8	
SV2222	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	3 OF 8	
SV2223	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	4 OF 8	
SV2224	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	5 OF 8	
SV2225	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	6 OF 8	
SV2226	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	7 OF 8	
SV2227	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - TYPICAL SECTIONS	8 OF 8	

ALIGNMENT H - KINGS RIVER VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2258	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - KEY MAP	SHEET 1 OF 18	1
SV2259	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 18	
SV2260	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 18	
SV2261	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 18	
SV2262	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 18	
SV2263	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 18	
SV2264	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 18	
SV2265	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 18	
SV2266	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 18	
SV2267	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 18	
SV2268	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 18	
SV2269	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 18	
SV2270	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 18	
SV2271	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 18	
SV2272	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 18	
SV2273	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 18	
SV2274	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - TYPICAL SECTIONS	SHEET 17 OF 18	
SV2275	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - TYPICAL SECTIONS	SHEET 18 OF 18	

ALIGNMENT H - HANFORD VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2300	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - KEY MAP	SHEET 1 OF 14	1
SV2301	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 14	
SV2302	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 14	
SV2303	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 14	
SV2304	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 14	
SV2305	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 14	
SV2306	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 14	
SV2307	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 14	
SV2308	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 14	
SV2309	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 14	
SV2310	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 14	
SV2311	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 14	
SV2312	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - TYPICAL SECTIONS	SHEET 13 OF 14	
SV2313	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - TYPICAL SECTIONS	SHEET 14 OF 14	

jojo.valenzuela 12/13/2013 10:05:29 AM c:\pwworking\hmm\external\jojo.valenzuela-arup.com\d0155956\FB-SB-2001.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HST STRUCTURES
INDEX OF SHEETS
SHEET 1 OF 8

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SB2001
SCALE
NO SCALE
SHEET NO.
3 OF 12

ALIGNMENT HW - E CONEJO AVE HST UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2010	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - E CONEJO AVE HST UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2011	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - E CONEJO AVE HST UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW - E CONEJO AVE BNSF UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2040	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - E CONEJO AVE BNSF UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2041	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - E CONEJO AVE BNSF UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW - KINGS RIVER VIADUCT (AT-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1110	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - KEY MAP	SHEET 1 OF 11	1
SV1111	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 11	
SV1112	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 11	
SV1113	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 11	
SV1114	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 11	
SV1115	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 11	
SV1116	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 11	
SV1117	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 11	
SV1118	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 11	
SV1119	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 11	
SV1120	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - KINGS RIVER VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 11	

ALIGNMENT HW - GRANGEVILLE BLVD UNDERPASS (AT-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2025	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - GRANGEVILLE BLVD UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2026	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - GRANGEVILLE BLVD UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW - W LACEY BLVD UNDERPASS (AT-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2030	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - W LACEY BLVD UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2031	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - W LACEY BLVD UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW - 13TH AVE UNDERPASS (AT-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2035	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - 13TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2036	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - 13TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW - SJVR OVERPASS (AT-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2045	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - KEY MAP	SHEET 1 OF 4	1
SV2046	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - PLAN AND ELEVATION	SHEET 2 OF 4	
SV2047	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - PLAN AND ELEVATION	SHEET 3 OF 4	
SV2048	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - PLAN AND ELEVATION	SHEET 4 OF 4	

ALIGNMENT HW2 - E CONEJO AVE HST UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1000	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - E CONEJO AVE HST UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1001	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - E CONEJO AVE HST UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW2 - E CONEJO AVE BNSF UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1002	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - E CONEJO AVE BNSF UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1003	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - E CONEJO AVE BNSF UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW2 - KINGS RIVER VIADUCT (BELOW-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1010	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - KEY MAP	SHEET 1 OF 11	1
SV1011	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 11	
SV1012	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 11	
SV1013	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 11	
SV1014	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 11	
SV1015	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 11	
SV1016	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 11	
SV1017	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 11	
SV1018	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 11	
SV1019	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 11	
SV1020	HANFORD WEST ALTERNATIVE SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - KINGS RIVER VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 11	

ALIGNMENT HW2 - GRANGEVILLE BLVD UNDERPASS (BELOW-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2027	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - GRANGEVILLE BLVD UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2028	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW2 (BELOW-GRADE) - MODIFIED - GRANGEVILLE BLVD UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT HW2 - SJVR OVERPASS (BELOW-GRADE)

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2050	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - KEY MAP	SHEET 1 OF 2	1
SV2051	HANFORD WEST BYPASS SUBSECTION - ALIGNMENT HW (AT-GRADE) - SJVR OVERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K1 - IDAHO AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2060	KAWEAH SUBSECTION - ALIGNMENT K1 - IDAHO AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2061	KAWEAH SUBSECTION - ALIGNMENT K1 - IDAHO AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K1 - 12TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2065	KAWEAH SUBSECTION - ALIGNMENT K1 - 12TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2066	KAWEAH SUBSECTION - ALIGNMENT K1 - 12TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K1 - S 11TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2070	KAWEAH SUBSECTION - ALIGNMENT K1 - S 11TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2071	KAWEAH SUBSECTION - ALIGNMENT K1 - S 11TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K1 - SOUTH BNSF VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2080	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - KEY MAP	SHEET 1 OF 9	1
SV2081	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 9	
SV2082	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 9	
SV2083	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 9	
SV2084	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 9	
SV2085	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 9	
SV2086	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 9	
SV2087	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 9	
SV2088	KAWEAH SUBSECTION - ALIGNMENT K1 - SOUTH BNSF VIADUCT - TYPICAL SECTION	SHEET 9 OF 9	

Nadine.Hutton 12/9/2013 4:12:57 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0155956\FB-SB-2002.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**DRAFT 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HST STRUCTURES
INDEX OF SHEETS
SHEET 2 OF 8

CONTRACT NO. HSR 06-0003
DRAWING NO. SB2002
SCALE NO SCALE
SHEET NO. 4 OF 12

ALIGNMENT K1 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2100	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 14	1
SV2101	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 14	
SV2102	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 14	
SV2103	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 14	
SV2104	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 14	
SV2105	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 14	
SV2106	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 14	
SV2107	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 14	
SV2108	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 14	
SV2109	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 14	
SV2110	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 14	
SV2111	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 14	
SV2112	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 13 OF 14	
SV2113	KAWEAH SUBSECTION - ALIGNMENT K1 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 14 OF 14	

ALIGNMENT K2 - IDAHO AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2120	KAWEAH SUBSECTION - ALIGNMENT K2 - IDAHO AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2121	KAWEAH SUBSECTION - ALIGNMENT K2 - IDAHO AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K2 - 12TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2125	KAWEAH SUBSECTION - ALIGNMENT K2 - 12TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2126	KAWEAH SUBSECTION - ALIGNMENT K2 - 12TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K2 - S 11TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2130	KAWEAH SUBSECTION - ALIGNMENT K2 - S 11TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2131	KAWEAH SUBSECTION - ALIGNMENT K2 - S 11TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K2 - KENT AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2135	KAWEAH SUBSECTION - ALIGNMENT K2 - KENT AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2136	KAWEAH SUBSECTION - ALIGNMENT K2 - KENT AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K2 - KANSAS AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2140	KAWEAH SUBSECTION - ALIGNMENT K2 - KANSAS AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV2141	KAWEAH SUBSECTION - ALIGNMENT K2 - KANSAS AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K2 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2150	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 18	1
SV2151	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 18	
SV2152	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 18	
SV2153	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 18	
SV2154	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 18	
SV2155	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 18	
SV2156	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 18	
SV2157	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 18	
SV2158	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 18	
SV2159	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 18	
SV2160	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 18	
SV2161	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 18	
SV2162	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 18	
SV2163	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 18	
SV2164	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 18	
SV2165	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 18	
SV2166	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 17 OF 18	
SV2167	KAWEAH SUBSECTION - ALIGNMENT K2 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 18 OF 18	

ALIGNMENT K3 - STATE ROUTE 43 UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2540	KAWEAH SUBSECTION - ALIGNMENT K3 - STATE ROUTE 43 UNDERPASS - KEY MAP	SHEET 1 OF 3	1
SV2541	KAWEAH SUBSECTION - ALIGNMENT K3 - STATE ROUTE 43 UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 3	
SV2542	KAWEAH SUBSECTION - ALIGNMENT K3 - STATE ROUTE 43 UNDERPASS - TYPICAL SECTIONS	SHEET 3 OF 3	

ALIGNMENT K3 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2380	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 18	1
SV2381	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 18	
SV2382	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 18	
SV2383	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 18	
SV2384	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 18	
SV2385	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 18	
SV2386	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 18	
SV2387	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 18	
SV2388	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 18	
SV2389	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 18	
SV2390	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 18	
SV2391	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 18	
SV2392	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 18	
SV2393	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 18	
SV2394	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 18	
SV2395	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 18	
SV2396	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 17 OF 18	
SV2397	KAWEAH SUBSECTION - ALIGNMENT K3 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 18 OF 18	

ALIGNMENT K4 - STATE ROUTE 43 UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2450	KAWEAH SUBSECTION - ALIGNMENT K4 - STATE ROUTE 43 UNDERPASS - KEY MAP	SHEET 1 OF 3	1
SV2451	KAWEAH SUBSECTION - ALIGNMENT K4 - STATE ROUTE 43 UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 3	
SV2452	KAWEAH SUBSECTION - ALIGNMENT K4 - STATE ROUTE 43 UNDERPASS - TYPICAL SECTIONS	SHEET 3 OF 3	

Nadine.Hutton 12/9/2013 4:11:00 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0155956\FB-SB-2003.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**DRAFT 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HST STRUCTURES
INDEX OF SHEETS
SHEET 3 OF 8

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SB2003
SCALE
NO SCALE
SHEET NO.
5 OF 12

ALIGNMENT K4 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2460	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 13	1
SV2461	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 13	
SV2462	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 13	
SV2463	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 13	
SV2464	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 13	
SV2465	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 13	
SV2466	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 13	
SV2467	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 13	
SV2468	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 13	
SV2469	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 13	
SV2470	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 13	
SV2471	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 12 OF 13	
SV2472	KAWEAH SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 13 OF 13	

ALIGNMENT K5 - IDAHO AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1150	KAWEAH SUBSECTION - ALIGNMENT K5 - IDAHO AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1151	KAWEAH SUBSECTION - ALIGNMENT K5 - IDAHO AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K5 - 12TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1155	KAWEAH SUBSECTION - ALIGNMENT K5 - 12TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1156	KAWEAH SUBSECTION - ALIGNMENT K5 - 12TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K5 - 11TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1160	KAWEAH SUBSECTION - ALIGNMENT K5 - 11TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1161	KAWEAH SUBSECTION - ALIGNMENT K5 - 11TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K5 - BNSF VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1050	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - KEY MAP	SHEET 1 OF 8	1
SV1052	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 8	
SV1053	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 8	
SV1054	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 8	
SV1055	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 8	
SV1056	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 8	
SV1057	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 8	
SV1058	KAWEAH SUBSECTION - ALIGNMENT K5 - BNSF VIADUCT - TYPICAL SECTIONS	SHEET 8 OF 8	

ALIGNMENT K5 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1070	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 14	1
SV1071	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 14	
SV1072	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 14	
SV1073	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 14	
SV1074	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 14	
SV1075	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 14	
SV1076	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 14	
SV1077	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 14	
SV1078	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 14	
SV1079	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 14	
SV1080	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 14	
SV1081	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 14	
SV1082	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 13 OF 14	
SV1083	KAWEAH SUBSECTION - ALIGNMENT K5 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 14 OF 14	

ALIGNMENT K6 - IDAHO AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1165	KAWEAH SUBSECTION - ALIGNMENT K6 - IDAHO AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1166	KAWEAH SUBSECTION - ALIGNMENT K6 - IDAHO AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K6 - 12TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1170	KAWEAH SUBSECTION - ALIGNMENT K6 - 12TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1171	KAWEAH SUBSECTION - ALIGNMENT K6 - 12TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K6 - KENT AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1175	KAWEAH SUBSECTION - ALIGNMENT K6 - KENT AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1176	KAWEAH SUBSECTION - ALIGNMENT K6 - KENT AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K6 - 11TH AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1180	KAWEAH SUBSECTION - ALIGNMENT K6 - 11TH AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1181	KAWEAH SUBSECTION - ALIGNMENT K6 - 11TH AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K6 - KANSAS AVE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1185	KAWEAH SUBSECTION - ALIGNMENT K6 - KANSAS AVE UNDERPASS - KEY MAP	SHEET 1 OF 2	1
SV1186	KAWEAH SUBSECTION - ALIGNMENT K6 - KANSAS AVE UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT K6 - CROSS CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1080	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - KEY MAP	SHEET 1 OF 18	1
SV1081	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 18	
SV1082	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 18	
SV1083	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 18	
SV1084	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 18	
SV1085	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 18	
SV1086	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 18	
SV1087	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 18	
SV1088	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 18	
SV1089	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 18	
SV1090	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 18	
SV1091	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 18	
SV1092	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 18	
SV1093	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 18	
SV1094	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 18	
SV1095	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 18	
SV1096	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	SHEET 17 OF 18	
SV1097	KAWEAH SUBSECTION - ALIGNMENT K6 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	SHEET 18 OF 18	

Nadine.Hutton 12/9/2013 4:12:05 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0155956\FB-SB-2004.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

HST STRUCTURES
INDEX OF SHEETS
SHEET 4 OF 8

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SB2004

SCALE
NO SCALE

SHEET NO.
6 OF 12

ALIGNMENT C1 - CORCORAN VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1370	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - KEY MAP	SHEET 1 OF 28	2
SV1371	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 28	
SV1372	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 28	
SV1373	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 28	
SV1374	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 28	
SV1375	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 28	
SV1376	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 28	
SV1377	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 28	
SV1378	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 28	
SV1379	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 28	
SV1380	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 28	
SV1381	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 28	
SV1382	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 28	
SV1383	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 28	
SV1384	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 28	
SV1385	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 28	
SV1386	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 17 OF 28	
SV1387	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 18 OF 28	
SV1388	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 19 OF 28	
SV1389	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 20 OF 28	
SV1390	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 21 OF 28	
SV1391	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 22 OF 28	
SV1392	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 23 OF 28	
SV1393	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 24 OF 28	
SV1394	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - PLAN AND ELEVATION	SHEET 25 OF 28	
SV1395	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - TYPICAL SECTIONS	SHEET 26 OF 28	
SV1396	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - TYPICAL SECTIONS	SHEET 27 OF 28	
SV1397	CORCORAN SUBSECTION - ALIGNMENT C1 - CORCORAN VIADUCT - TYPICAL SECTIONS	SHEET 28 OF 28	

ALIGNMENT C1 - TULE RIVER BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2350	CORCORAN SUBSECTION - ALIGNMENT C1 - TULE RIVER BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV2355	CORCORAN SUBSECTION - ALIGNMENT C1 - TULE RIVER BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT C2 - WHITLEY AVENUE UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2445	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - WHITLEY AVENUE/SR137 UNDERPASS - KEY MAP	SHEET 1 OF 2	2
SV2446	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - WHITLEY AVENUE/SR137 UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2490	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - KEY MAP	SHEET 1 OF 11	2
SV2491	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 11	
SV2492	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 11	
SV2493	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 11	
SV2494	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 11	
SV2495	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 11	
SV2496	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 11	
SV2497	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 11	
SV2499	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - TYPICAL SECTIONS	SHEET 9 OF 11	
SV2500	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - TYPICAL SECTIONS	SHEET 10 OF 11	
SV2501	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 11	

ALIGNMENT C3 - BOSWELL SPUR VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2580	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - KEY MAP	SHEET 1 OF 11	2
SV2581	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 11	
SV2582	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 11	

ALIGNMENT C3 - BOSWELL SPUR VIADUCT CONT'D.

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2583	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 11	2
SV2584	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 11	
SV2585	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 11	
SV2586	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 11	
SV2587	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 11	
SV2588	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 11	
SV2589	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 11	
SV2590	CORCORAN SUBSECTION - ALIGNMENT C3 - BOSWELL SPUR VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 11	

ALIGNMENT C3 - SWEET CANAL BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2595	CORCORAN SUBSECTION - ALIGNMENT C3 - SWEET CANAL BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV2596	CORCORAN SUBSECTION - ALIGNMENT C3 - SWEET CANAL BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT C3 - TULE RIVER BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV2598	CORCORAN SUBSECTION - ALIGNMENT C3 - TULE RIVER BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV2599	CORCORAN SUBSECTION - ALIGNMENT C3 - TULE RIVER BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT A1 - DEER CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1500	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - KEY MAP	SHEET 1 OF 9	2
SV1501	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 9	
SV1502	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 9	
SV1503	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 9	
SV1504	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 9	
SV1505	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 9	
SV1506	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 9	
SV1507	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 9	
SV1508	ALLENSWORTH BYPASS SUBSECTION - ALIGNMENT A1 - DEER CREEK VIADUCT - TYPICAL SECTIONS	SHEET 9 OF 9	

ALIGNMENT A2 - DEER CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1530	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - KEY MAP	SHEET 1 OF 10	2
SV1531	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 10	
SV1532	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 10	
SV1533	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 10	
SV1534	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 10	
SV1535	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 10	
SV1536	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 10	
SV1537	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 10	
SV1538	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 10	
SV1539	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - DEER CREEK VIADUCT - TYPICAL SECTIONS	SHEET 10 OF 10	

ALIGNMENT A2 - NORTH COUNTY LINE CREEK BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1560	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - NORTH COUNTY LINE CREEK BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV1561	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - NORTH COUNTY LINE CREEK BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT A2 - SOUTH COUNTY LINE CREEK BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1562	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - SOUTH COUNTY LINE CREEK BRIDGE - KEY MAP	SHEET 1 OF 2	
SV1563	THROUGH ALLENSWORTH SUBSECTION - ALIGNMENT A2 - SOUTH COUNTY LINE CREEK BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

12/12/2013 5:10:38 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0155956\FB-SB-2005.dgn paul.tonkin

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

HST STRUCTURES
INDEX OF SHEETS
SHEET 5 OF 8

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SB2005
SCALE
NO SCALE
SHEET NO.
7 OF 12

ALIGNMENT L1 - POSO CREEK BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1600	POSO CREEK SUBSECTION - ALIGNMENT L1 - POSO CREEK BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV1601	POSO CREEK SUBSECTION - ALIGNMENT L1 - POSO CREEK BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT L2 - POSO CREEK VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1620	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - KEY MAP	SHEET 1 OF 12	2
SV1622	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 12	
SV1623	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 12	
SV1624	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 12	
SV1625	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 12	
SV1626	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 12	
SV1627	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 12	
SV1628	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 12	
SV1629	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 12	
SV1630	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - TYPICAL SECTIONS	SHEET 10 OF 12	
SV1631	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 12	
SV1632	POSO CREEK SUBSECTION - ALIGNMENT L2 - POSO CREEK VIADUCT - TYPICAL SECTIONS	SHEET 12 OF 12	

ALIGNMENT L2 - WHISLER ROAD UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1635	POSO CREEK SUBSECTION - ALIGNMENT L2 - WHISLER ROAD UNDERPASS - KEY MAP	SHEET 1 OF 2	2
SV1636	POSO CREEK SUBSECTION - ALIGNMENT L2 - WHISLER ROAD UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT L3 - POSO CREEK BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1640	POSO CREEK SUBSECTION - ALIGNMENT L3 - POSO CREEK BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV1641	POSO CREEK SUBSECTION - ALIGNMENT L3 - POSO CREEK BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT L4 - POSO CREEK BRIDGE

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1675	POSO CREEK SUBSECTION - ALIGNMENT L4 - POSO CREEK BRIDGE - KEY MAP	SHEET 1 OF 2	2
SV1676	POSO CREEK SUBSECTION - ALIGNMENT L4 - POSO CREEK BRIDGE - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT L4 - BNSF VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1660	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - KEY MAP	SHEET 1 OF 12	2
SV1661	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 12	
SV1662	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 12	
SV1663	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 12	
SV1664	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 12	
SV1665	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 12	
SV1666	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 12	
SV1667	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 12	
SV1668	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 12	
SV1669	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - TYPICAL SECTIONS	SHEET 10 OF 12	
SV1670	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - TYPICAL SECTIONS	SHEET 11 OF 12	
SV1671	POSO CREEK SUBSECTION - ALIGNMENT L4 - BNSF VIADUCT - TYPICAL SECTIONS	SHEET 12 OF 12	

ALIGNMENT WS1 - STATE ROUTE 46 UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1698	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - STATE ROUTE 46 UNDERPASS - KEY MAP	SHEET 1 OF 2	2
SV1699	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - STATE ROUTE 46 UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 2	

ALIGNMENT WS1 - WASCO VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1700	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - KEY MAP	SHEET 1 OF 15	2
SV1703	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 15	
SV1704	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 15	
SV1705	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 15	
SV1706	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 15	
SV1707	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 15	
SV1708	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 15	
SV1709	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 15	
SV1710	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 15	
SV1711	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 15	
SV1712	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 15	
SV1713	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 15	
SV1714	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 15	
SV1715	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 15	
SV1716	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - WASCO VIADUCT - TYPICAL SECTIONS	SHEET 15 OF 15	

ALIGNMENT WS1 - KIMBERLINA ROAD UNDERPASS

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1720	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - KIMBERLINA ROAD UNDERPASS - KEY MAP	SHEET 1 OF 3	2
SV1721	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - KIMBERLINA ROAD UNDERPASS - PLAN AND ELEVATION	SHEET 2 OF 3	
SV1722	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - KIMBERLINA ROAD BNSF UNDERPASS - PLAN AND ELEVATION	SHEET 3 OF 3	

ALIGNMENT WS1 - SHAFTER VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1750	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - KEY MAP	SHEET 1 OF 20	2
SV1756	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 20	
SV1757	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 20	
SV1758	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 20	
SV1759	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 20	
SV1760	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 20	
SV1761	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 20	
SV1762	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 20	
SV1763	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 20	
SV1764	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 20	
SV1765	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 20	
SV1766	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 20	
SV1767	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 13 OF 20	
SV1768	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 14 OF 20	
SV1769	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 15 OF 20	
SV1770	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 16 OF 20	
SV1771	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 17 OF 20	
SV1772	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - PLAN AND ELEVATION	SHEET 18 OF 20	
SV1773	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - TYPICAL SECTIONS	SHEET 19 OF 20	
SV1774	THROUGH WASCO-SHAFTER SUBSECTION - ALIGNMENT WS1 - SHAFTER VIADUCT - TYPICAL SECTIONS	SHEET 20 OF 20	

ALIGNMENT WS2 - WASCO VIADUCT

DRAWING No	DRAWING DESCRIPTION	SHEET No.	PART No.
SV1870	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - KEY MAP	SHEET 1 OF 15	2
SV1873	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 2 OF 15	
SV1874	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 3 OF 15	
SV1875	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 4 OF 15	
SV1876	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 5 OF 15	
SV1877	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 6 OF 15	
SV1878	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 7 OF 15	
SV1879	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 8 OF 15	
SV1880	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 9 OF 15	
SV1881	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 10 OF 15	
SV1882	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 11 OF 15	
SV1883	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - PLAN AND ELEVATION	SHEET 12 OF 15	
SV1884	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - TYPICAL SECTIONS	SHEET 13 OF 15	
SV1885	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - TYPICAL SECTIONS	SHEET 14 OF 15	
SV1886	WASCO-SHAFTER BYPASS SUBSECTION - ALIGNMENT WS2 - WASCO VIADUCT - TYPICAL SECTIONS	SHEET 15 OF 15	

Nadine.Hutton 12/9/2013 4:06:29 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0155956\FB-SB-2006.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
HST STRUCTURES
INDEX OF SHEETS
SHEET 6 OF 8

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SB2006
SCALE
NO SCALE
SHEET NO.
8 OF 12

A

AB AGGREGATE BASE
ABBC ASBESTOS BONDED BITUMINOUS COATED
ABM AIR-BLOWN MORTAR
ABN ABANDON
ABUT ABUTMENT
AC ASPHALT CONCRETE
ACB ASPHALT CONCRETE BASE
ACP ASBESTOS CEMENT PIPE
ADL ADDED DEAD LOAD
ADJ ADJUST
AFES ALTERNATIVE FLARED END SECTION
AHD AHEAD
ALT ALTERNATE
AM TIME FROM MIDNIGHT TO NOON
AP ALTERNATIVE PIPE
APC ALTERNATIVE PIPE CULVERT
APPROX APPROXIMATE
APU ALTERNATIVE PIPE UNDERDRAIN
ARS ACCELERATION RESPONSE SPECTRUM
AR ACCESS RESTRICTION
AS AGGREGATE SUBBASE
ASRP ALUMINUM SPIRAL RIB PIPE
ASSY ASSEMBLY
ATPB ASPHALT TREATED PERMEABLE BASE
ATPM ASPHALT TREATED PERMEABLE MATERIAL
AVE AVENUE
AVG AVERAGE
@ AT

B

BAGR BRIDGE APPROACH GUARD RAILING
BB BEGINNING OF BRIDGE
BC BEGIN HORIZONTAL CURVE
BCC BALANCED CANTILEVER CONSTRUCTION
BCR BEGIN CURB RETURN
BEG BEGIN
BIT CTD BITUMINOUS COATED
BK BACK
BKF BACKFILL
BLDG BUILDING
BLM BRIDGE-LOG MILE
BLVD BOULEVARD
BM BENCH MARK
BND BOUND
BNSF BURLINGTON NORTH & SANTA FE
BOT BOTTOM
BR BRIDGE
BRG BEARING
BTU BRITISH THERMAL UNIT
BVC BEGIN VERTICAL CURVE
BW BARBED WIRE

C

CAA CABLE ANCHOR ASSEMBLY
CAP CORRUGATED ALUMINUM PIPE
CAPA CORRUGATED ALUMINUM PIPE ARCH
CAS CONSTRUCTION AREA SIGN
CB CONCRETE BARRIER
CBW CONCRETE BLOCK WALL
C-C CENTER TO CENTER

C CONTINUED

CHSRA CALIFORNIA HIGH SPEED RAIL AUTHORITY
CHST CALIFORNIA HIGH SPEED TRAIN
CHSR CALIFORNIA HIGH SPEED RAIL
CG CENTER OF GRAVITY
CHNL CHANNEL
CI CAST IRON
CIDH CAST-IN-DRILLED-HOLE
CIP,C-I-P CAST-IN-PLACE, CAST IRON PIPE
CIPCP CAST IN PLACE CONCRETE PIPE
CISS CAST-IN-STEEL-SHELL
CJP COMPLETE JOINT PENETRATION
CL CENTERLINE, CLASS
CL2 CLASS 2
CL-6 CHAIN LINK FENCE (6 FT)
CLR CLEAR, CLEARANCE
CM CORRUGATED METAL
CMP CORRUGATED METAL PIPE
CO COUNTY
COL COLUMN
CONC CONCRETE
COND CONDUIT
CONN CONNECTOR
CONST CONSTRUCT, CONSTRUCTION
CONT CONTINUOUS
COORD COORDINATE
CP CLEARANCE POINT
CR CREEK
CRCP CONTINUOUS REINFORCED CONCRETE PAVEMENT
CRSP CONCRETED ROCK SLOPE PROTECTION
CS CURVE TO SPIRAL
CSP CORRUGATED STEEL PIPE
CSPA CORRUGATED STEEL PIPE ARCH
CTB CEMENT TREATED BASE
CTPB CEMENT TREATED PERMEABLE BASE
CTPM CEMENT TREATED PERMEABLE MATERIAL
CTRS CENTERS
CVFPB CENTRAL VALLEY FLOOD PROTECTION BOARD
CULV CULVERT
@ CENTERLINE

D

D DEPTH
DD DOWNDRAIN, DIRECTIVE DRILLING
DBL DOUBLE
DEG DEGREE
DEL DELINEATOR
DET DETAIL, DETOUR
DF DOUGLAS FIR
DI DRAINAGE INLET, DROP INLET
DIA DIAMETER
DIAPH DIAPHRAGM
DIST DISTANCE, DISTRICT
DMBB DOUBLE METAL BEAM BARRIER
DR DRIVE
DTBB DOUBLE THRIE BEAM BARRIER
DWY DRIVEWAY

E

E EAST, EASTING
EA ACTUAL SUPERELEVATION
EU UNBALANCED SUPERELEVATION

E CONTINUED

EASE EASEMENT
EB END OF BRIDGE, EASTBOUND
EC END HORIZONTAL CURVE
ECR END CURB RETURN
ED EDGE DRAIN
EDC EDGE DRAIN CLEANOUT
EDO EDGE DRAIN OUTLET
EDV EDGE DRAIN VENT
ELEC ELECTROLIER
ELECT ELECTRIC
ELEV ELEVATION
EMB EMBANKMENT
ENGR ENGINEER
EOD EDGE OF DECK
EP EDGE OF PAVEMENT
EQ EQUATION, EQUAL
ES EDGE OF SHOULDER
ETW EDGE OF TRAVELED WAY
EVC END VERTICAL CURVE
EW ENDWALL
EXC EXCAVATION
EXIST, EX. EXISTING
EXP EXPANSION
EXP JT EXPANSION JOINT
EXWY EXPRESSWAY
EXT EXTERIOR

F

F & C FRAME AND COVER
F & G FRAME AND GRATE
FB FLOOR BEAM
F-B FRESNO TO BAKERSFIELD
FDN FOUNDATION
FEBT FACING EASTBOUND TRAFFIC
FES FLARED END SECTION
FF FILTER FABRIC
FG FINISHED GRADE
FH FIRE HYDRANT
FIG FIGURE
FL FLOW LINE
FNBT FACING NORTHBOUND TRAFFIC
FOC FACE OF CONCRETE
FR RD FRONTAGE ROAD
FS FAR SIDE, FINISHED SURFACE
FSBT FACING SOUTHBOUND TRAFFIC
FT FOOT, FEET
FTG FOOTING
FWBT FACING WESTBOUND TRAFFIC
FWY FREEWAY
FPLM FULL SPAN PRECAST LAUNCHING METHOD

G

G ACCELERATION DUE TO GRAVITY
GA GAGE
GALV GALVANIZED
GP GRADING PLANE
GR GUARD RAILING
GSP GALVANIZED STEEL PIPE
GTR GUTTER

H

H HEIGHT
HR HOUR
HD HORIZONTAL DRAIN
HDWL HEADWALL
HEX HD HEXAGONAL HEAD
HMA HOT MIXED ASPHALT
HORIZ HORIZONTAL
HP HINGE POINT, HORSEPOWER
HPS HIGH PERFORMANCE STEEL
HS HIGH STRENGTH
HST HIGH SPEED TRAIN
HSR HIGH SPEED RAIL
HW HEADWALL, HIGH WATER
HWM HIGH WATER MARK
HWY HIGHWAY

I

IB IMPORTED BORROW
ID INSIDE DIAMETER
IF INSIDE FACE
IN INCH, INCHES
INT INTERIOR
INV INVERT
IRR IRRIGATION

J

JCT JUNCTION
JP JOINT POLE
JPCP JOINTED PLAIN CONCRETE PAVEMENT
JS JUNCTION STRUCTURE
JT JOINT

K

K DISTANCE TO ACHIEVE 1% GRADE CHANGE

L

L LENGTH
LAT LATITUDE
LCB LEAN CONCRETE BASE
LN LANE
LOC LOCATION
LOL LAYOUT LINE
LONG LONGITUDE
LONGIT LONGITUDINAL
LS LENGTH OF SPIRAL
LC LENGTH OF CURVE
LT LEFT

M

MAINT MAINTENANCE
MAX MAXIMUM
MB METAL BEAM
MBB METAL BEAM BARRIER
MBGR METAL BEAM GUARD RAILING
MED MEDIAN
M-F MERCED TO FRESNO
MH MANHOLE
MIN MINIMUM
MISC MISCELLANEOUS
MISC I & S MISCELLANEOUS IRON AND STEEL
MKR MARKER
M/L MAIN LINE (RAILWAY)

M CONTINUED

MOD MODIFIED, MODIFY
MON MONUMENT
MP METAL PLATE
MPGR METAL PLATE GUARD RAILING
MPH MILES PER HOUR
MR MOVEMENT RATING
MSE MECHANICALLY STABILIZED EARTH MATERIAL
MTL MATERIAL
MSS MOVING SCAFFOLDING SYSTEM

N

N NORTH, NORTHING
NB NORTHBOUND
NO. NUMBER (MUST HAVE PERIOD)
NOS. NUMBERS (MUST HAVE PERIOD)
NPS NOMINAL PIPE SIZE
NS NEAR SIDE
NTS NOT TO SCALE
N/A NOT APPLICABLE

O

OBLR OBLITERATE
OC OVERCROSSING
OCS OVERHEAD CONTACT SYSTEM
OD OUTSIDE DIAMETER
OF OUTSIDE FACE
OG ORIGINAL GROUND
OGAC OPEN GRADED ASPHALT CONCRETE
OH OVERHEAD
O-O OUT TO OUT
OPP OPPOSITE

P

P PAGE
PAP PERFORATED ALUMINUM PIPE
PB PULL BOX
PC POINT OF CURVATURE, PRECAST
PCC POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCP PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC POINT OF COMPOUND VERTICAL CURVE
PED PEDESTRIAN
PED OC PEDESTRIAN OVERCROSSING
PED UC PEDESTRIAN UNDERCROSSING
PERM MTL PERMEABLE MATERIAL
PG PROFILE GRADE
PI POINT OF INTERSECTION
PJP PARTIAL JOINT PENETRATION
@,PL PLATE
P/L PROPERTY LINE
PM POST MILE, TIME FROM NOON TO MIDNIGHT
PN PAVING NOTCH
POB POINT OF BEGINNING
POC POINT OF HORIZONTAL CURVE
POE POINT OF ENDING
POT POINT OF TANGENT
POVC POINT OF VERTICAL CURVE
PP PIPE PILE, PLASTIC PIPE, POWER POLE
PPL PREFORMED PERMEABLE LINER
PPP PERFORATED PLASTIC PIPE
PRC POINT OF REVERSE CURVE

12/12/2013 5:41:55 PM c:\pwworking\hmm\external\paul.tonkin\01-arup.com\d015956\FB-CB-0010.dgn

Table with 5 columns: REV, DATE, BY, CHK, APP, DESCRIPTION. Includes a revision history table and a design information table.

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

RECORD SET 15% DESIGN SUBMISSION
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
GENERAL ABBREVIATIONS AND LEGENDS
SHEET 1 OF 2

CONTRACT NO. HSR 06-0003
DRAWING NO. CB0010
SCALE NO SCALE
SHEET NO. 11 OF 12

P CONTINUED

PRF	PAVEMENT REINFORCING FABRIC
PRVC	POINT OF REVERSE VERTICAL CURVE
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS, P/S	PRESTRESSED, PARALLEL STATION
PSP	PERFORATED STEEL PIPE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVP	MAINTENANCE VEHICLE PULLOUT

Q

QTY QUANTITY

R

R	RADIUS
R & D	REMOVE AND DISPOSE
R & S	REMOVE AND SALVAGE
R/C	RATE OF CHANGE
RCA	REINFORCED CONCRETE ARCH
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
REINF	REINFORCED, REINFORCEMENT, REINFORCING
REL	RELOCATE
REPL	REPLACEMENT
RET	RETAINING
REV	REVISED
RDWY	ROADWAY
RM	ROAD-MIXED
RP	RADIUS POINT, REFERENCE POINT
RR	RAILROAD
RSP	ROCK SLOPE PROTECTION
RT	RIGHT
RTE	ROUTE
RW	REDWOOD, RETAINING WALL
R/W, ROW	RIGHT OF WAY
RWY	RAILWAY

S

S	SOUTH, SUPPLEMENT
SAE	STRUCTURE APPROACH EMBANKMENT
SALV	SALVAGE
SAPP	STRUCTURAL ALUMINUM PLATE PIPE
SB	SOUTHBOUND
SC	SPIRAL TO CURVE
SCSP	SLOTTED CORRUGATED STEEL PIPE
SD	STORM DRAIN
SEC	SECOND
SECT	SECTION
SEP	SEPARATION
SG	SUBGRADE
SHLD	SHOULDER
SHT	SHEET
SIM	SIMILAR
S	STATION LINE
SM	SELECTED MATERIAL
SPEC	SPECIAL, SPECIFICATIONS
SPP	SLOTTED PLASTIC PIPE
SS	SLOPE STAKE, SPIRAL TO SPIRAL

S CONTINUED

SSBM	STRAP AND SADDLE BRACKET METHOD
SSD	STRUCTURAL SECTION DRAIN
SSPA	STRUCTURAL STEEL PLATE ARCH
SSPP	STRUCTURAL STEEL PLATE PIPE
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH
SSRP	STEEL SPIRAL RIB PIPE
SR	STATE ROUTE
ST	STREET, SPIRAL TO TANGENT
STA	STATION
STBB	SINGLE THRIE BEAM BARRIER
STD	STANDARD
STR	STRUCTURE
SRS	STAND ALONE RADIO SITE
SURF	SURFACING
SW	SIDEWALK, SOUND WALL
SWR	SEWER
SWS	SWITCHING STATION
SYM	SYMMETRICAL
S4S	SURFACE 4 SIDES
SJVR	SAN JOAQUIN VALLEY RAILROAD

T

T	SEMI-TANGENT
TAB	TABLET
TAN	TANGENT
TBB	THRIE BEAM BARRIER
TBR	TIMBER
TC	TOP OF CURB, TANGENT TO CURVE
TCB	TRAFFIC CONTROL BOX
TEL	TELEPHONE
TEMP	TEMPORARY
TG	TOP OF GRADE
TOT	TOTAL
TM	TECHNICAL MEMORANDUM
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
TPSS	TRACTION POWER SUPPLY STATION
TRANS	TRANSITION, TRANSVERSE
TS	TRAFFIC SIGNAL, TUBULAR STEEL, TANGET TO SPIRAL
TYP	TYPICAL
TOR	TOP OF RAIL

U

UC	UNDERCROSSING
UD	UNDERDRAIN
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
UPRR	UNION PACIFIC RAILROAD
USFWS	UNITED STATES FISH AND WILDLIFE SERVICE

V

V	VALVE, DESIGN SPEED
VAR	VARIABLE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VIA	VIADUCT
VOL	VOLUME

W

W	WEST, WIDTH
WB	WESTBOUND
WH	WEEP HOLE
WM	WIRE MESH
WS	WATER SURFACE
WSP	WELDED STEEL PIPE
WT	WEIGHT
WV	WATER VALVE
WW	WINGWALL
WWLOL	WINGWALL LAYOUT LINE
W/	WITH

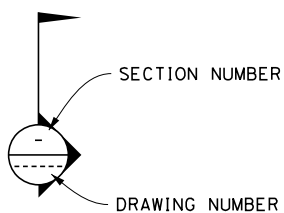
X

X SEC CROSS SECTION
XING CROSSING

Y

YR YEAR
YRS YEARS

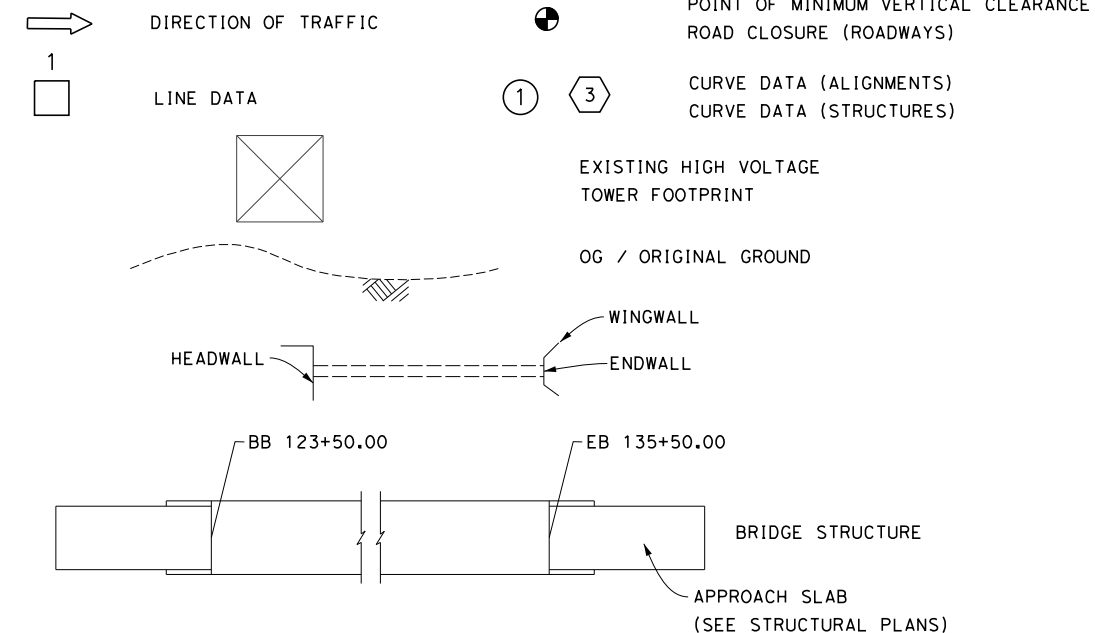
LEGEND



- E--- PROPOSED ELECTRICITY LINE
- e--- EXISTING ELECTRICITY LINE
- e---(oh)--- EXISTING OVERHEAD ELECTRICITY LINE
- E---(oh)--- PROPOSED OVERHEAD ELECTRICITY LINE
- PROPOSED HST RIGHT OF WAY
- PROPOSED HST TRACK CENTERLINE
- ▲▲▲▲ RETAINING WALL
- TOE OF SLOPE / TOP OF CUT

CONTROL LINE EXAMPLE "A" LINE
255+00 260+00 265+00

- TRACK (PLAN AND ELEVATION)
- TRACK TO BE REMOVED AND RELOCATED PER BNSF
- REMOVE BASE & SURFACING
- SOUND BARRIER (POTENTIAL)
- DIRECTION OF FLOW
- WATER SURFACE



GENERAL NOTES

- TRACK PROFILE IS DESIGNED AS TOP OF THE LOW RAIL. VERTICAL CLEARANCE REQUIREMENTS ARE MEASURED FROM THE TOP OF THE HIGH RAIL ON SUPERELEVATED TRACK. THE CLEARANCE ENVELOPES SHOWN DEMONSTRATE THE MINIMUM CLEARANCE REQUIREMENTS.
- MINIMUM VERTICAL CLEARANCE REQUIREMENTS TO CANALS AND DITCHES ARE NOT KNOWN. FURTHER CONSULTATION WITH THE WATERCOURSE OWNERS WILL BE REQUIRED TO DETERMINE NECESSARY CLEARANCES.
- THE FOLLOWING ARE ROADWAY DESIGN STANDARDS AND GUIDELINES:
 - CALTRANS HIGHWAY DESIGN MANUAL (2012)
 - AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (2011)
 - AASHTO ROADSIDE DESIGN GUIDE (2011)
 - APPLICABLE LOCAL DESIGN STANDARD AND GUIDELINES (I.E., CITY OF FRESNO)
- THE FEMA FLOODPLAIN BOUNDARIES ARE CALLED OUT AS "LIMIT OF 100YR FEMA FLOODPLAIN". THE LIMITS OF THE MODELED 100 YEAR WATER SURFACE ELEVATIONS (WSE) ARE APPROXIMATE AND ARE MARKED WITH THE NAME OF THE WATERBODY ASSOCIATED WITH THE MODELED FLOODING, E.G. "LIMIT OF POSO CREEK FLOODPLAIN".
- THE STRUCTURE DESIGN ASSUMES THAT THE DEPTH FROM TOR TO TOP OF DECK IS 2'-6" THROUGHOUT. HOWEVER, WHERE BALLASTED TRACK FORM IS USED, THE HEIGHT FROM TOR TO DECK SHALL BE 2'-9" PLUS AN ALLOWANCE FOR WATERPROOF MEMBRANE, AND PROTECTION LAYER IF REQUIRED. FOR SLAB TRACKFORM, THE HEIGHT FROM TOR TO DECK SHALL BE 2'-6" PLUS AN ALLOWANCE FOR WATERPROOF MEMBRANE AND PROTECTION LAYER IF REQUIRED.
- WHERE THE VERTICAL ALIGNMENT GRADE IS LESS THAN 0.5% THE UPPER SURFACE OF THE VIADUCT STRUCTURE SHALL BE PROFILED TO GIVE A MINIMUM LONGITUDINAL FALL OF 0.5%. TYPICALLY FOR A SPAN OF 120'-00" ON A 0% GRADE SECTION OF VIADUCT THIS COULD BE ACHIEVED BY MODIFYING THE CROSS SLOPE OF THE GIRDER LINEARLY BETWEEN 0.8% AT MID-SPAN TO 2% AT EACH END.
- WHEN LATERAL SEPARATION BETWEEN THE CONVENTIONAL RAILROAD AND HST SYSTEM IS LESS THAN 102', A SITE SPECIFIC HAZARD ANALYSIS WILL BE CONDUCTED TO DETERMINE WHAT SPECIFIC COLLISION PROTECTION MEASURES MAY NEED TO BE IMPLEMENTED.
- RIP-RAP PROTECTION IS REQUIRED FOR EMBANKMENTS WITHIN FEMA SPECIAL FLOOD HAZARD ZONES, IN ACCORDANCE WITH DESIGN CRITERIA.
- HST ALIGNMENT CONTROL LINE IS DESIGNED AS THE CENTERLINE BETWEEN THE TWO MAINLINE TRACKS.
- TRACK FORM USED IN TYPICAL SECTIONS IS INDICATIVE.

c:\pwworking\hmm\external\jojo.valenzuela-arup.com\d0155956\FB-CB-0011.dgn 12/30/2013 4:10:30 PM

REV	DATE	BY	CHK	APP	DESCRIPTION

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

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
GENERAL
ABBREVIATIONS AND LEGENDS
SHEET 2 OF 2

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB0011
SCALE
NO SCALE
SHEET NO.
12 OF 12

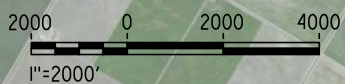
12/28/2013 2:41:21 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1370-C1.dgn frank.palermo



LEGEND

— EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 KEY MAP

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 SV1370
 SCALE
 AS SHOWN
 SHEET NO.
 1 OF 28

NOTES

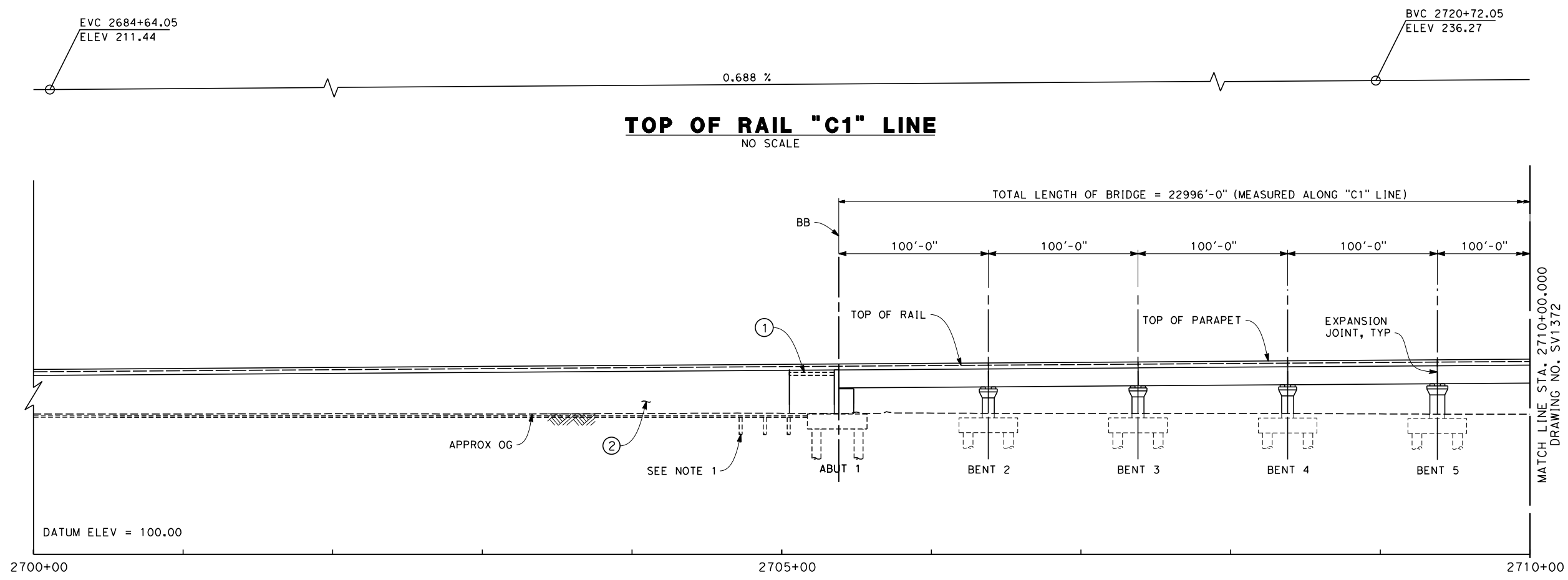
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

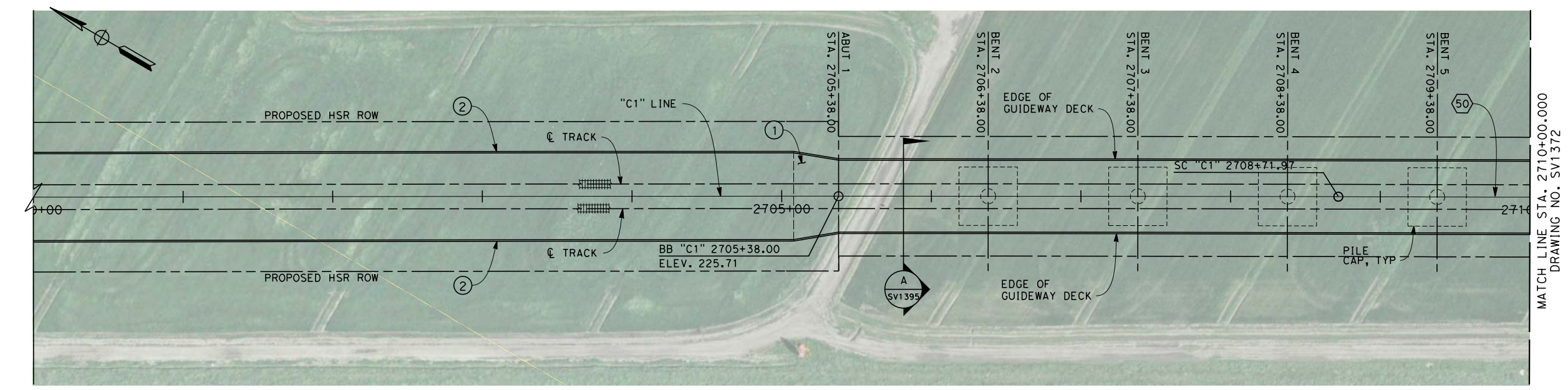
CURVE DATA

Ⓢ
 R = 140000.00'
 Δ = 01° 33' 28.8"
 T = 1903.6'
 L = 3806.9'



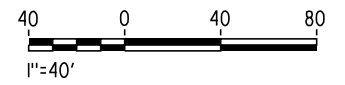
ELEVATION

SCALE 1" = 40'



PLAN

SCALE 1" = 40'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1371-C1.dgn 12/28/2013 2:42:22 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

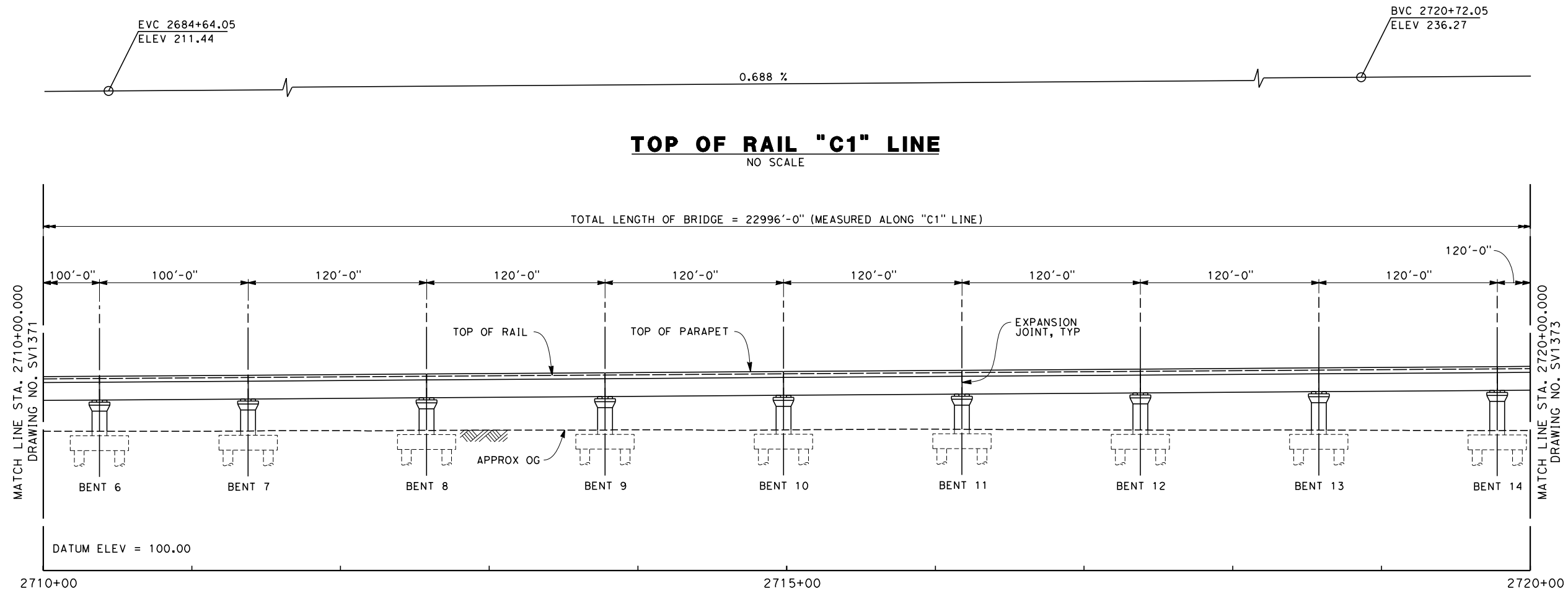
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1371

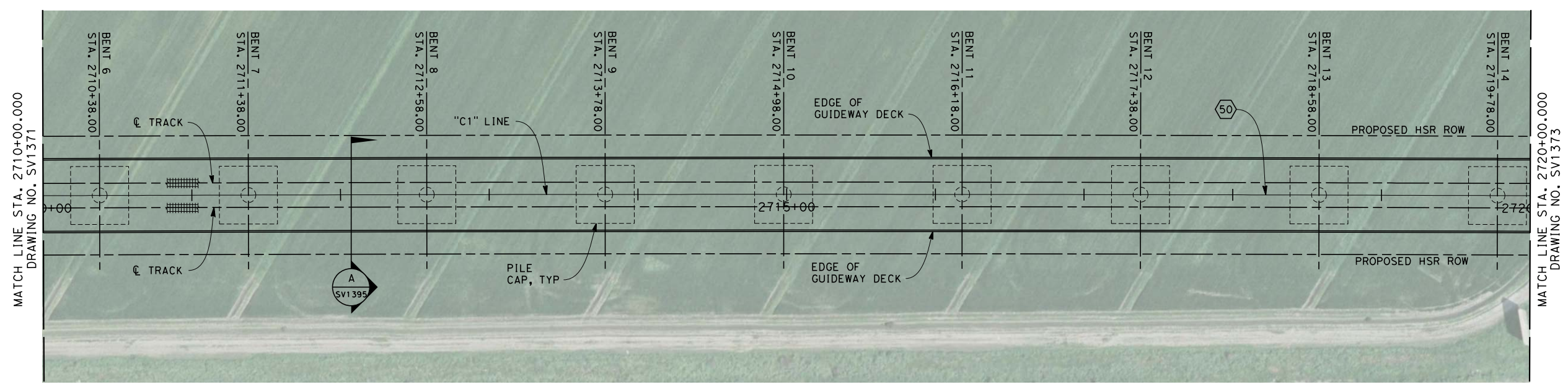
SCALE
AS SHOWN

SHEET NO.
2 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1372-C1.dgn 12/28/2013 2:42:49 PM frank.palermo



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

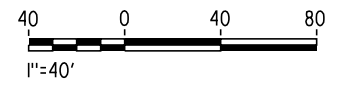
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤

R = 140000.00'
 $\Delta = 01^\circ 33' 28.8"$
 T = 1903.6'
 L = 3806.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

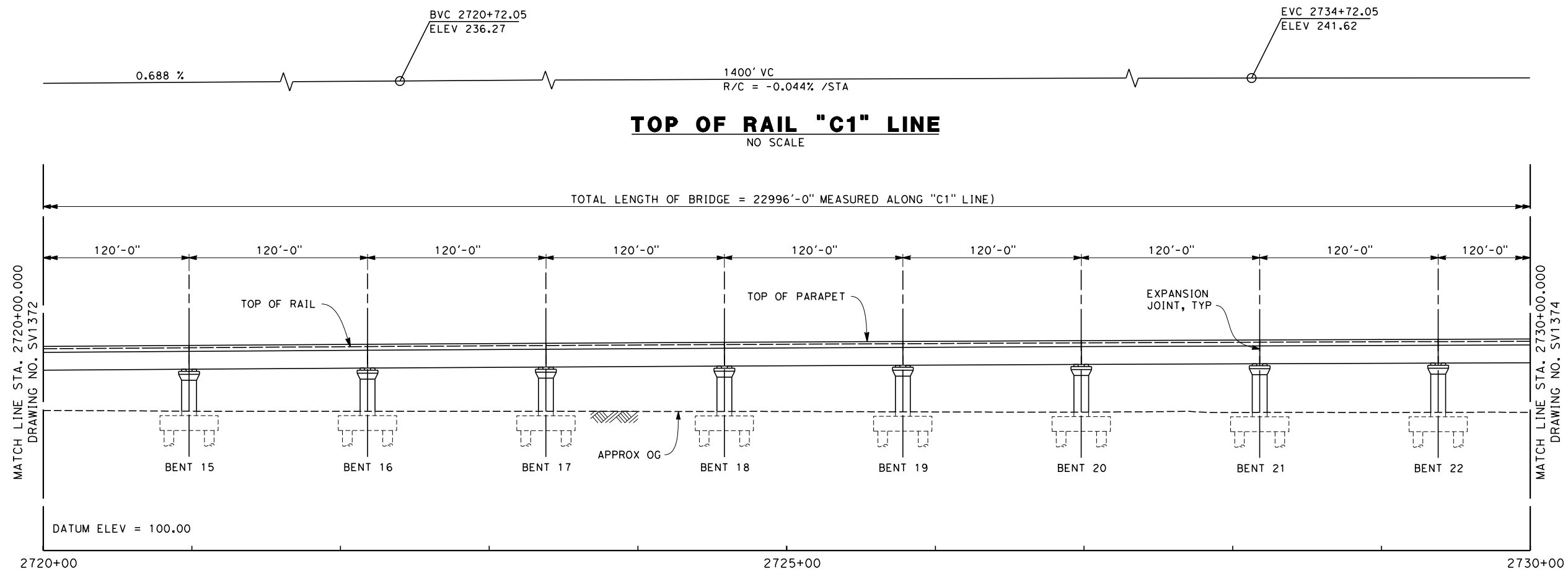
DRAWING NO.
SV1372

SCALE
AS SHOWN

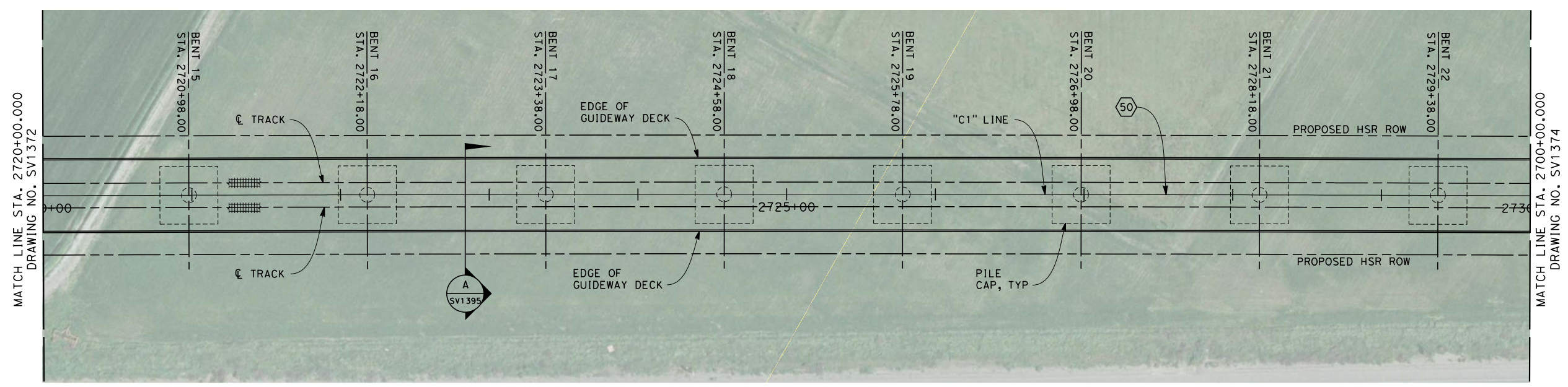
SHEET NO.
3 OF 28

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

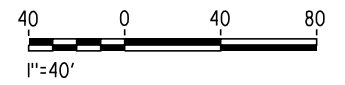
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤

R = 140000.00'
 $\Delta = 01^\circ 33' 28.8"$
 T = 1903.6'
 L = 3806.9'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1373-C1.dgn 12/28/2013 2:43:19 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

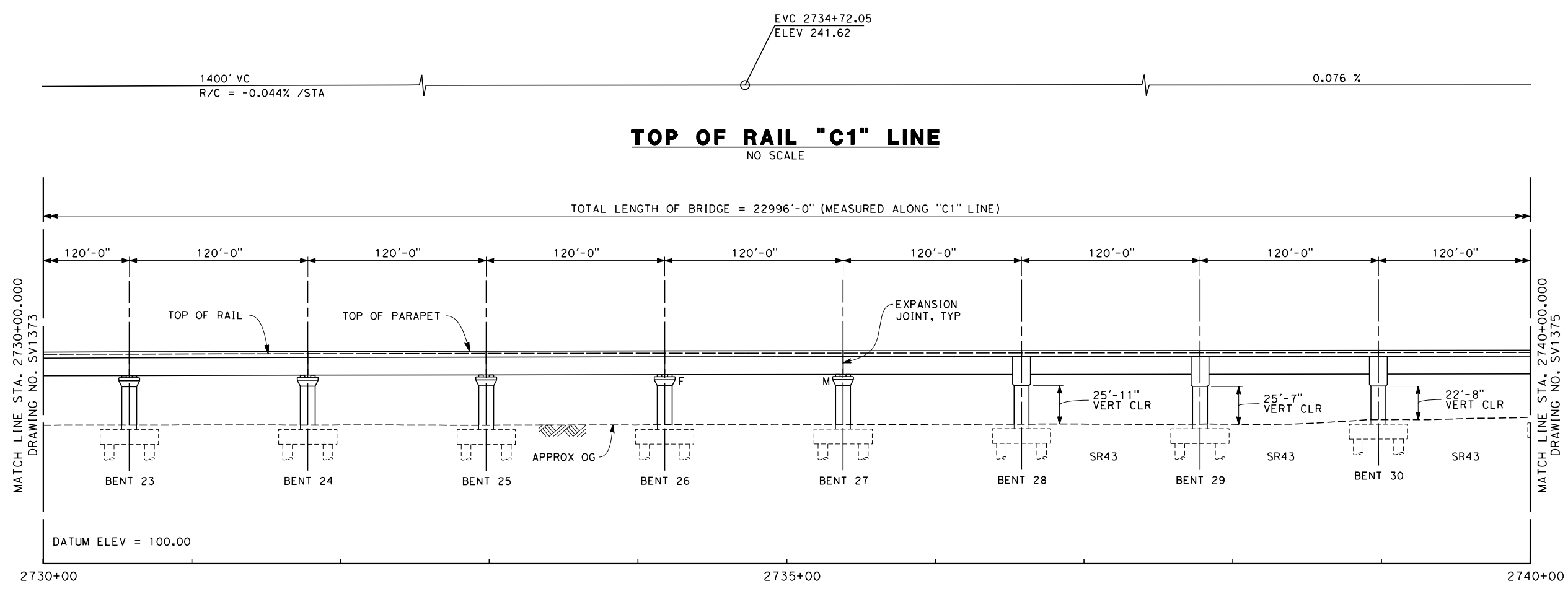
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1373

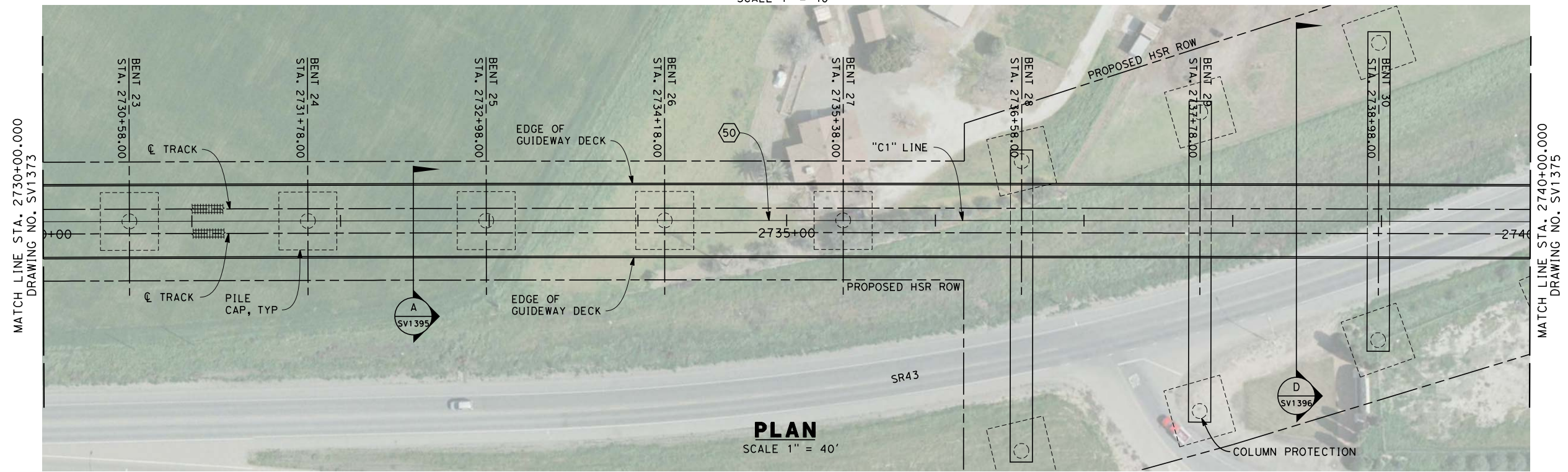
SCALE
AS SHOWN

SHEET NO.
4 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



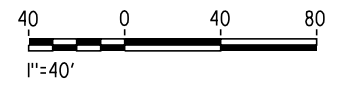
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤0

R = 140000.00'
 Δ = 01° 33' 28.8"
 T = 1903.6'
 L = 3806.9'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1374-C1.dgn 12/28/2013 2:43:47 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1374

SCALE
AS SHOWN

SHEET NO.
5 OF 28

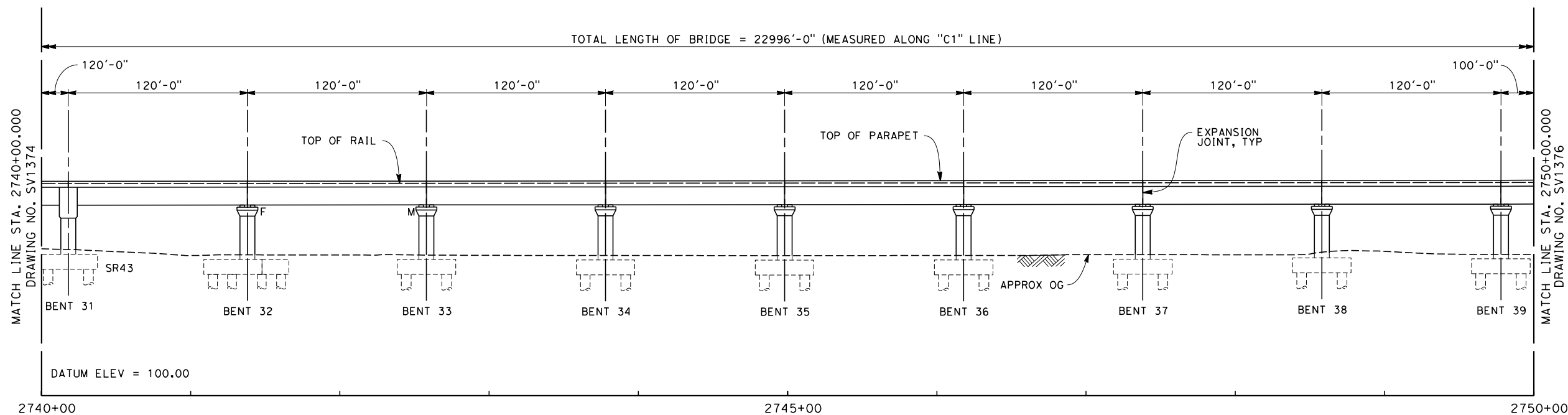
EVC 2734+72.05
ELEV 241.62

BVC 2818+66.97
ELEV 247.96

0.076 %

TOP OF RAIL "C1" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 22996'-0" (MEASURED ALONG "C1" LINE)

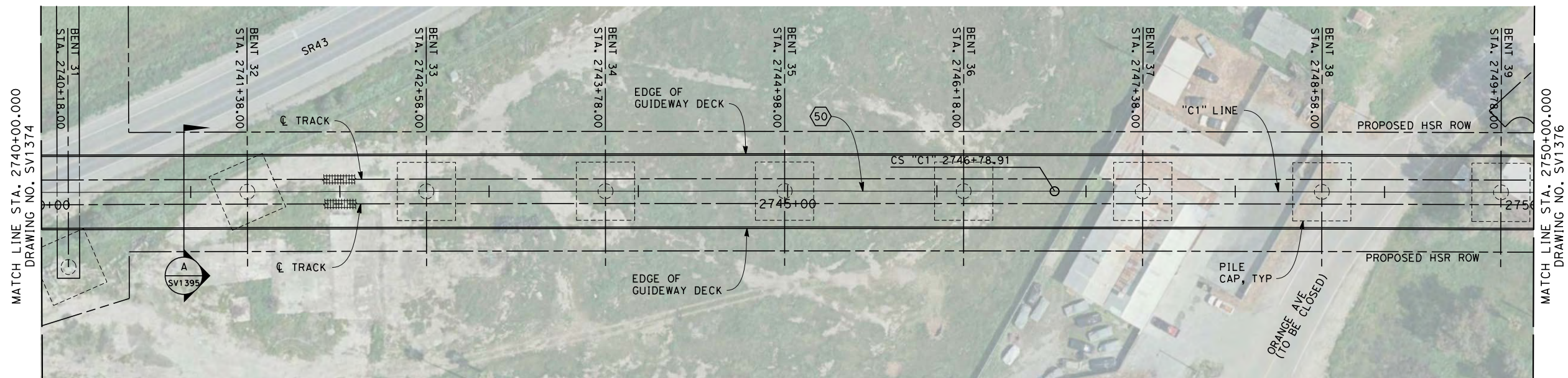


ELEVATION
SCALE 1" = 40'

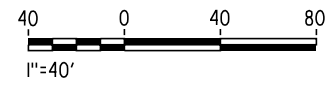
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA
 (50)
 R = 140000.00'
 Δ = 01° 33' 28.8"
 T = 1903.6'
 L = 3806.9'



PLAN
SCALE 1" = 40'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1375-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

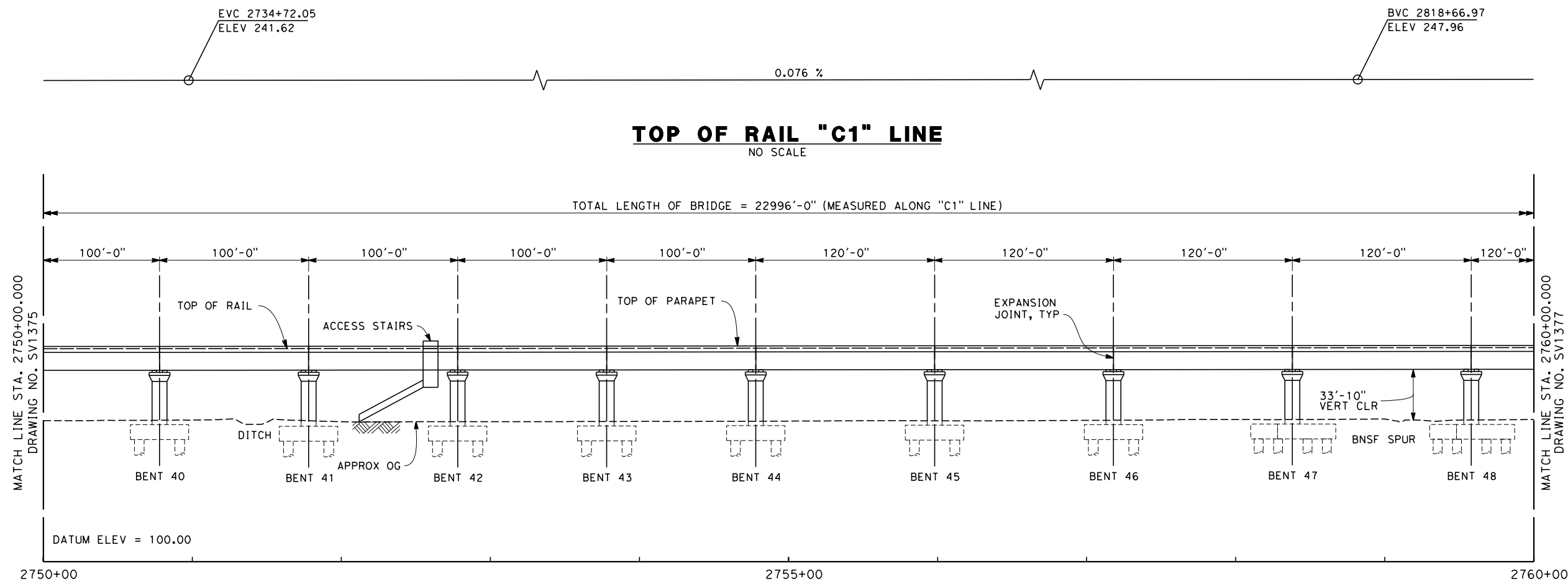
**NOT FOR
CONSTRUCTION**



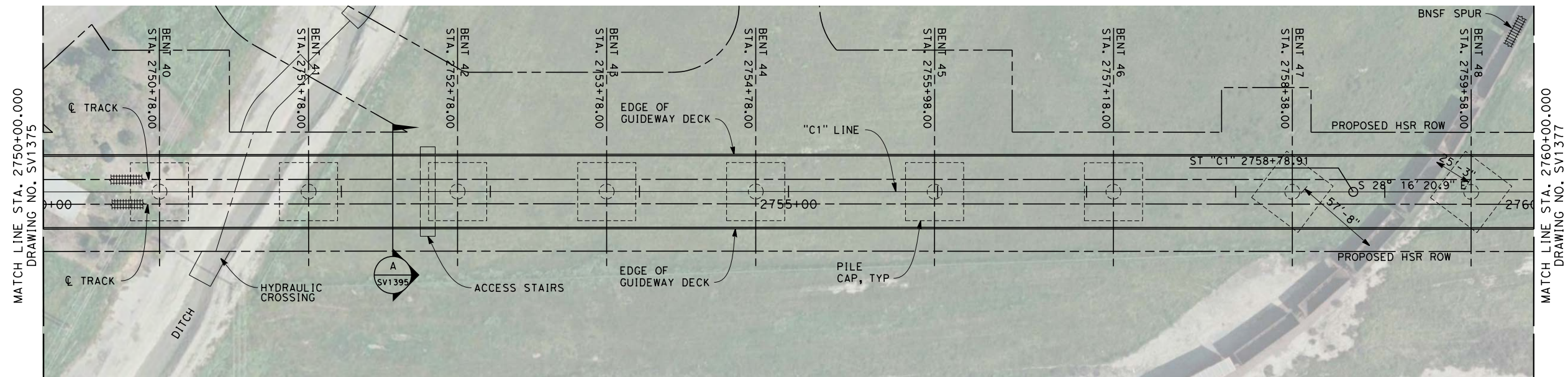
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1375
 SCALE
AS SHOWN
 SHEET NO.
6 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1376-C1.dgn 12/28/2013 2:44:42 PM frank.palermo



ELEVATION
SCALE 1" = 40'



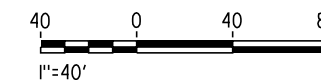
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

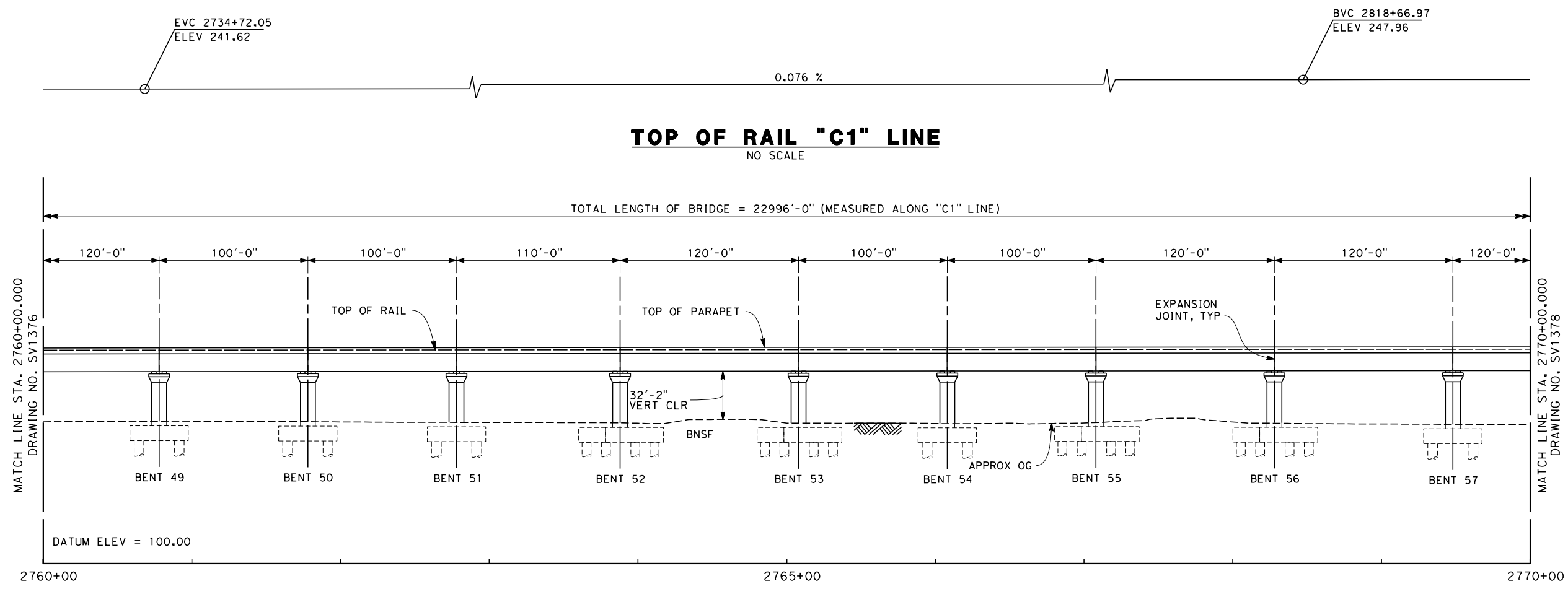
**NOT FOR
CONSTRUCTION**



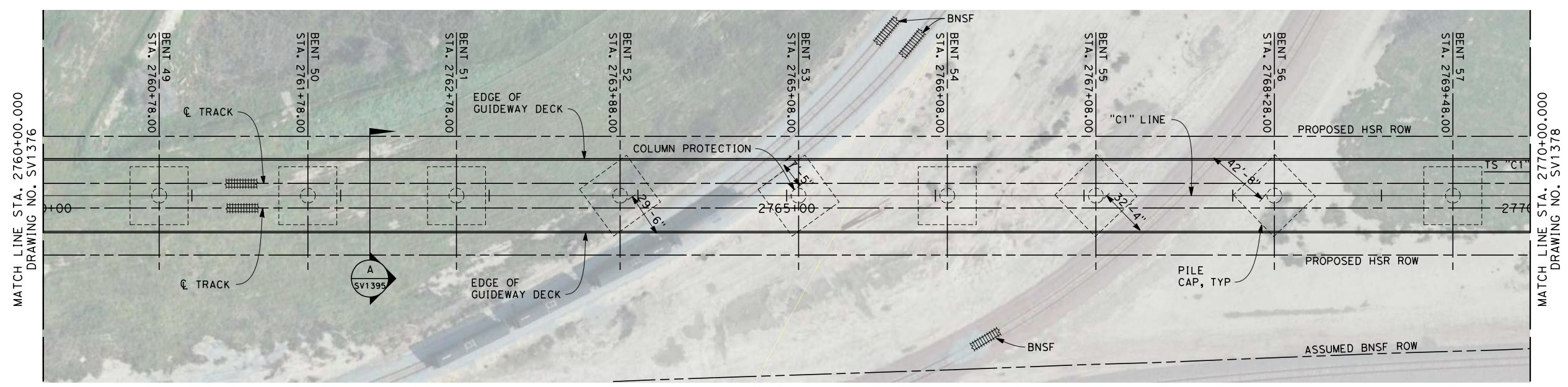
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV1376
SCALE
AS SHOWN
SHEET NO.
7 OF 28

12/28/2013 2:45:08 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1377-C1.dgn



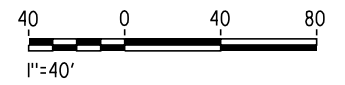
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

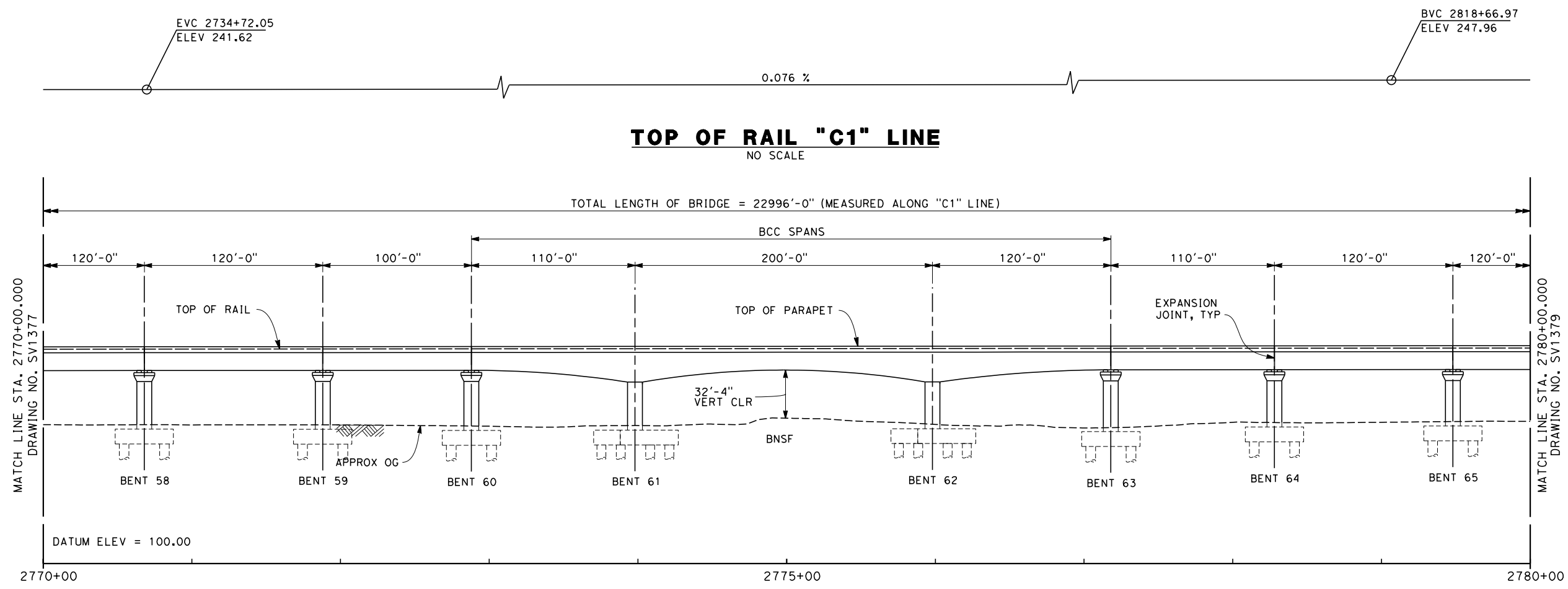
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1377

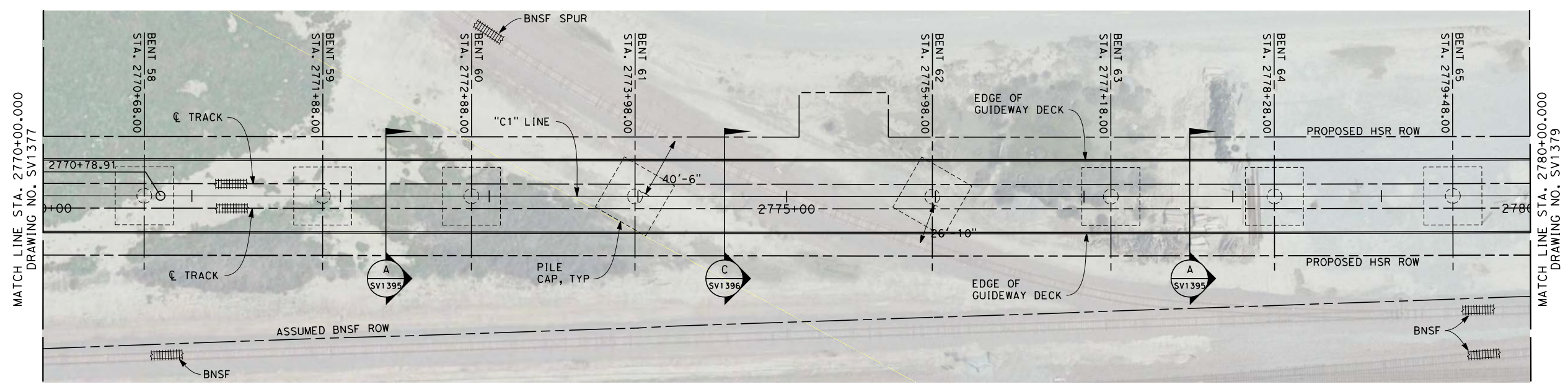
SCALE
AS SHOWN

SHEET NO.
8 OF 28

12/28/2013 2:45:43 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1378-C1.dgn



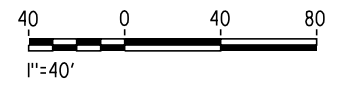
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1378
 SCALE
AS SHOWN
 SHEET NO.
9 OF 28

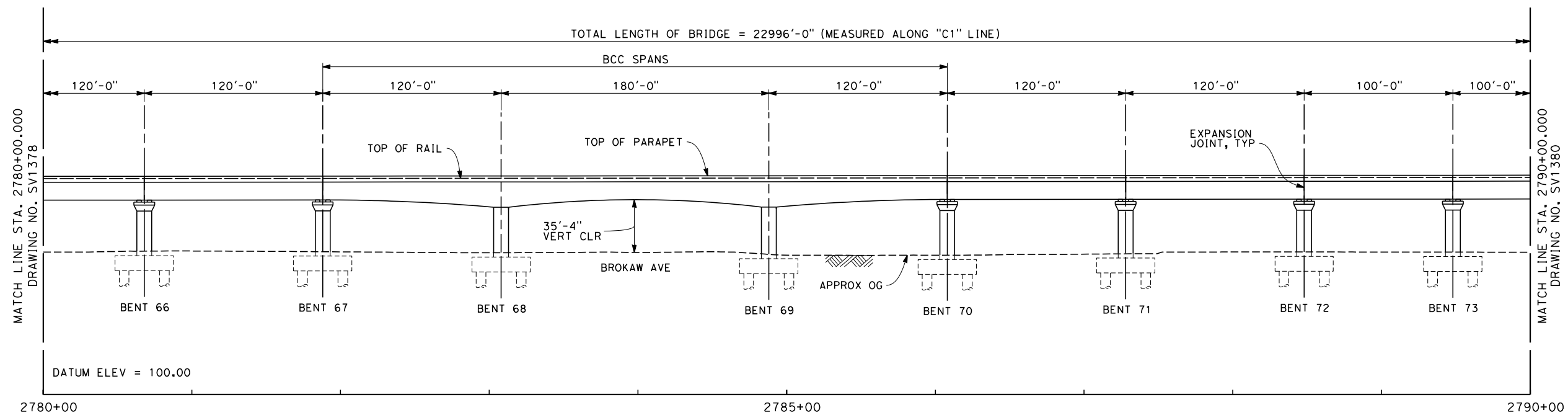
EVC 2734+72.05
ELEV 241.62

BVC 2818+66.97
ELEV 247.96

0.076 %

TOP OF RAIL "C1" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 22996'-0" (MEASURED ALONG "C1" LINE)



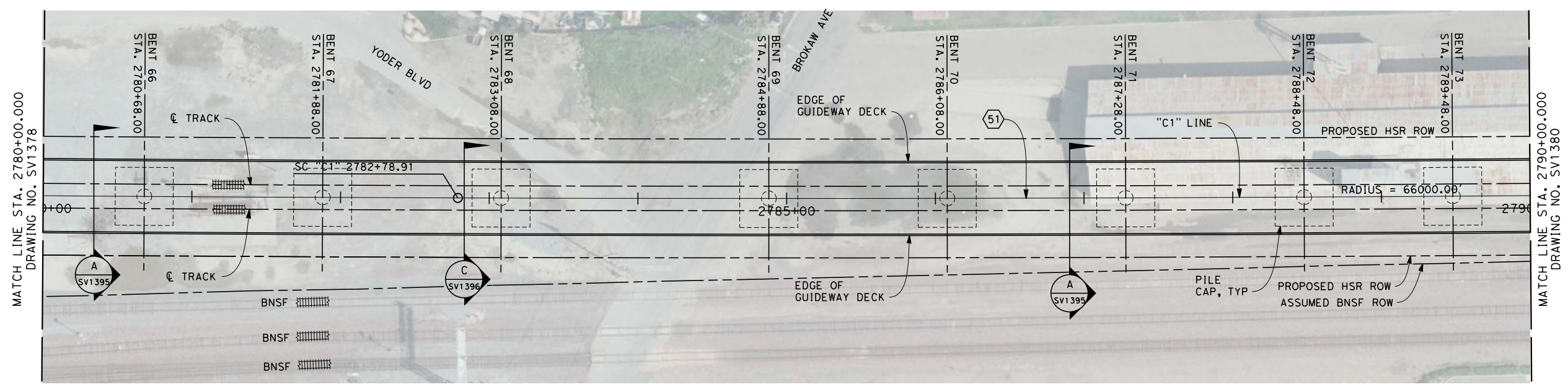
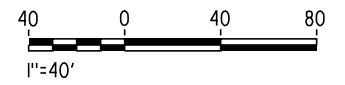
ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤
 R = 66000.00'
 Δ = 01° 01' 53.0"
 T = 594.0'
 L = 1188.1'



PLAN
SCALE 1" = 40'

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1379-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

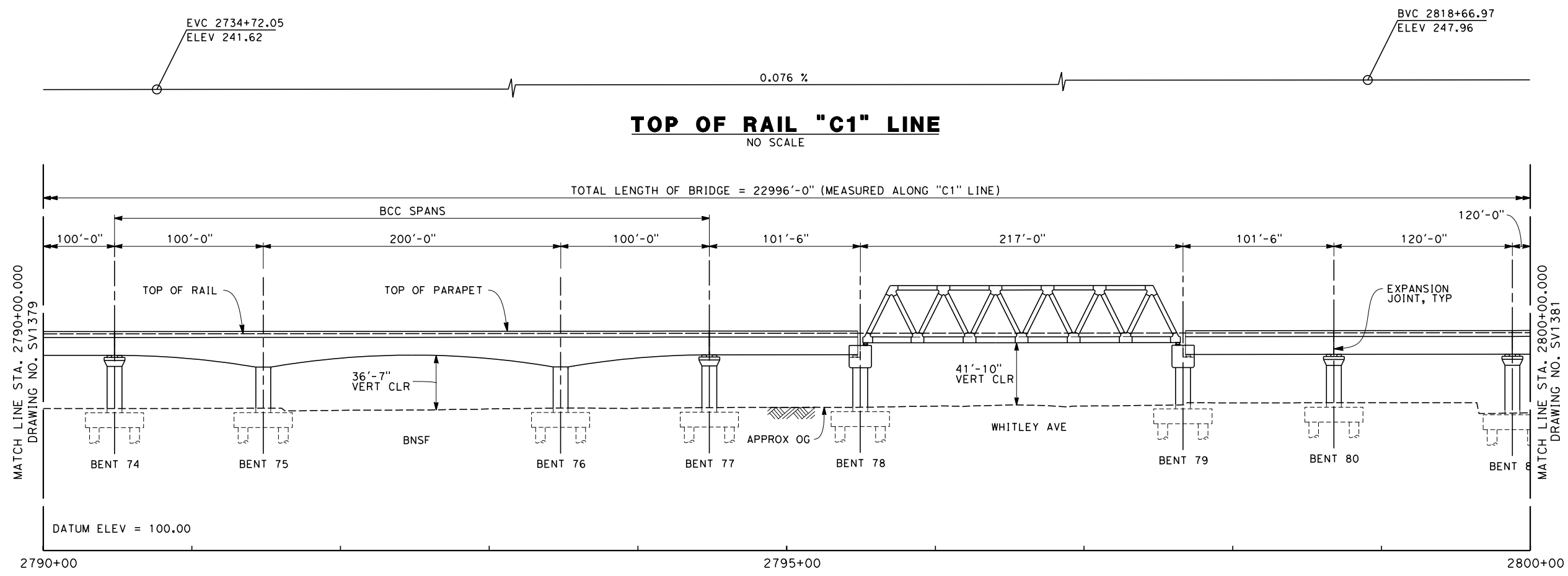
**NOT FOR
CONSTRUCTION**



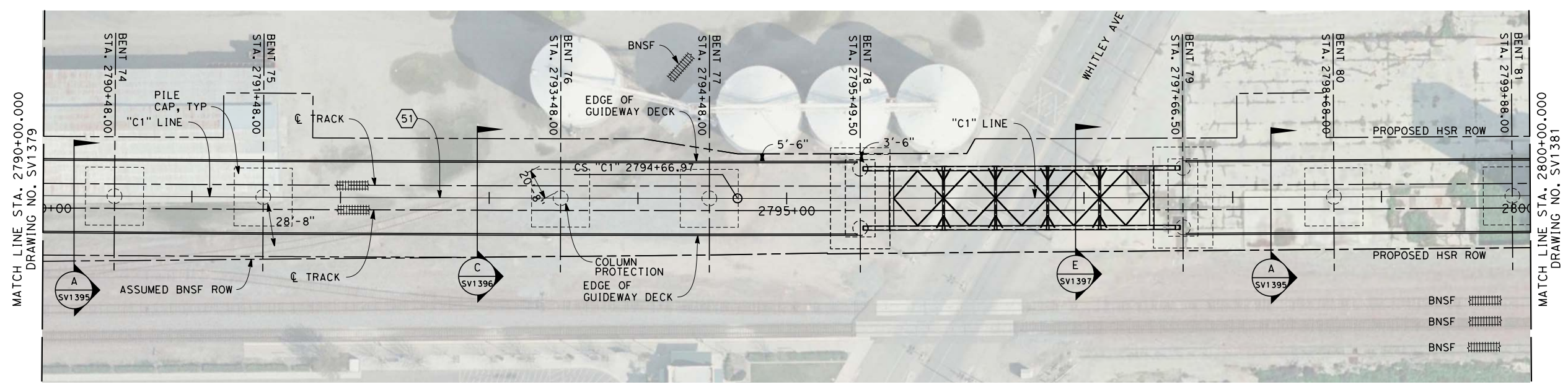
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1379
 SCALE
AS SHOWN
 SHEET NO.
10 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



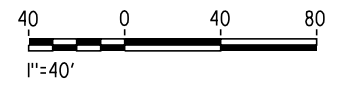
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤1

R = 66000.00'
 $\Delta = 01^\circ 01' 53.0''$
 T = 594.0'
 L = 1188.1'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1380-C1.dgn 12/28/2013 2:46:33 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1380

SCALE
AS SHOWN

SHEET NO.
11 OF 28

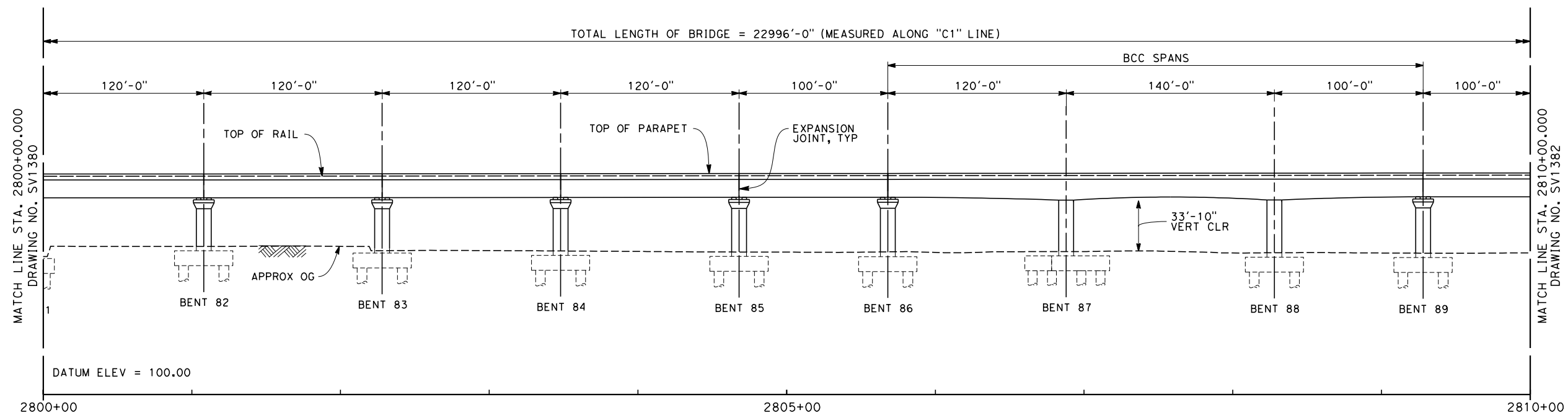
EVC 2734+72.05
ELEV 241.62

BVC 2818+66.97
ELEV 247.96

0.076 %

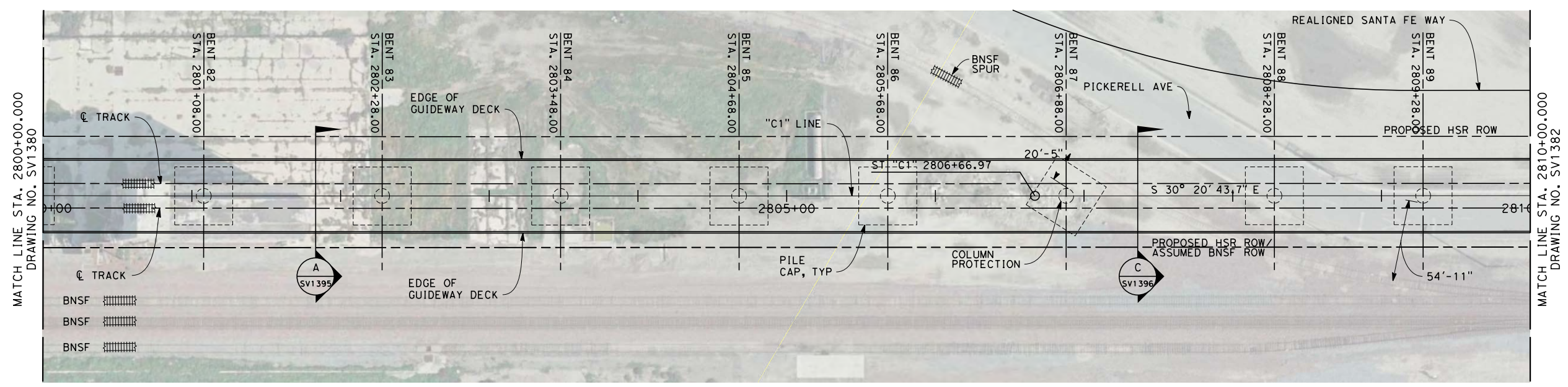
TOP OF RAIL "C1" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 22996'-0" (MEASURED ALONG "C1" LINE)



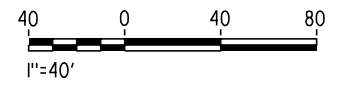
ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1381-C1.dgn 12/28/2013 2:46:57 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



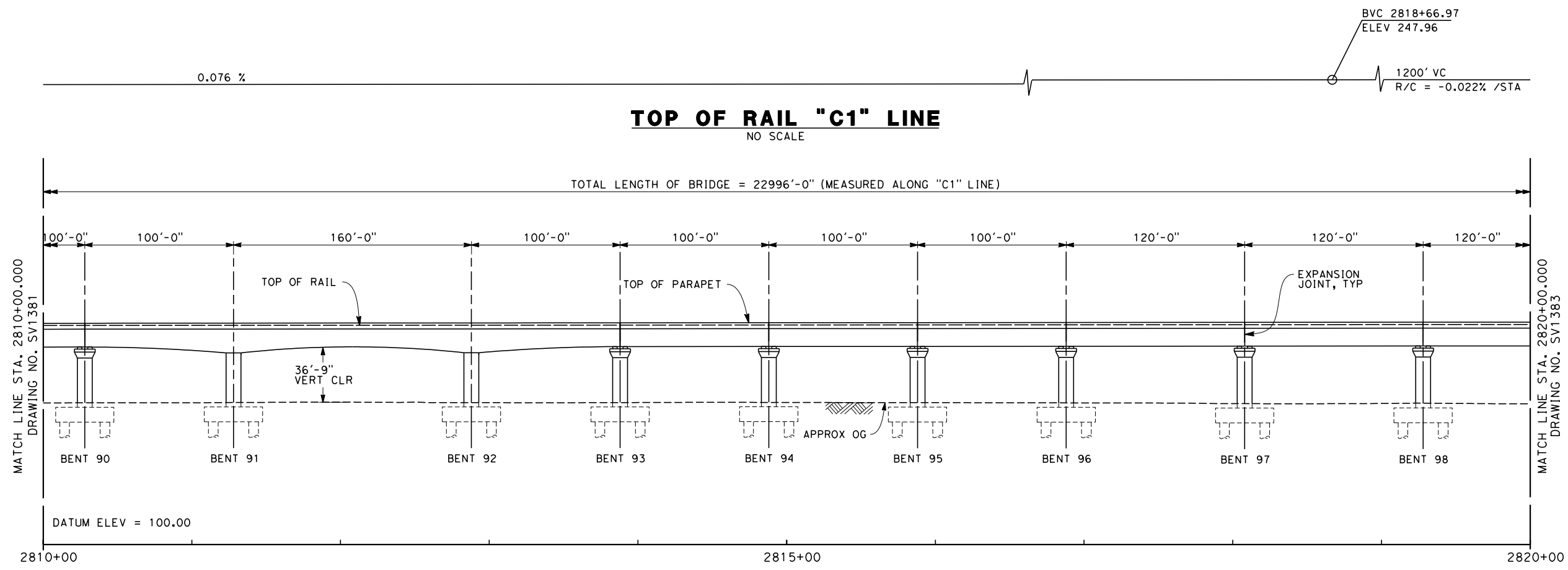
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

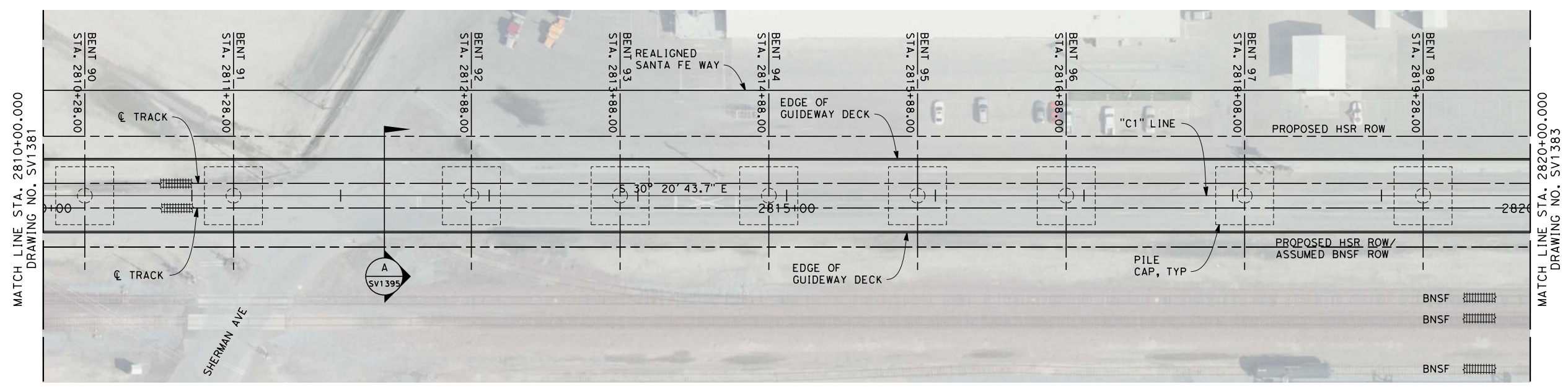
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV1381
SCALE
AS SHOWN
SHEET NO.
12 OF 28

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



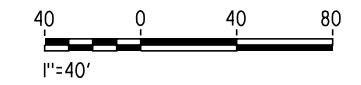
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1382-C1.dgn 12/28/2013 2:47:19 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

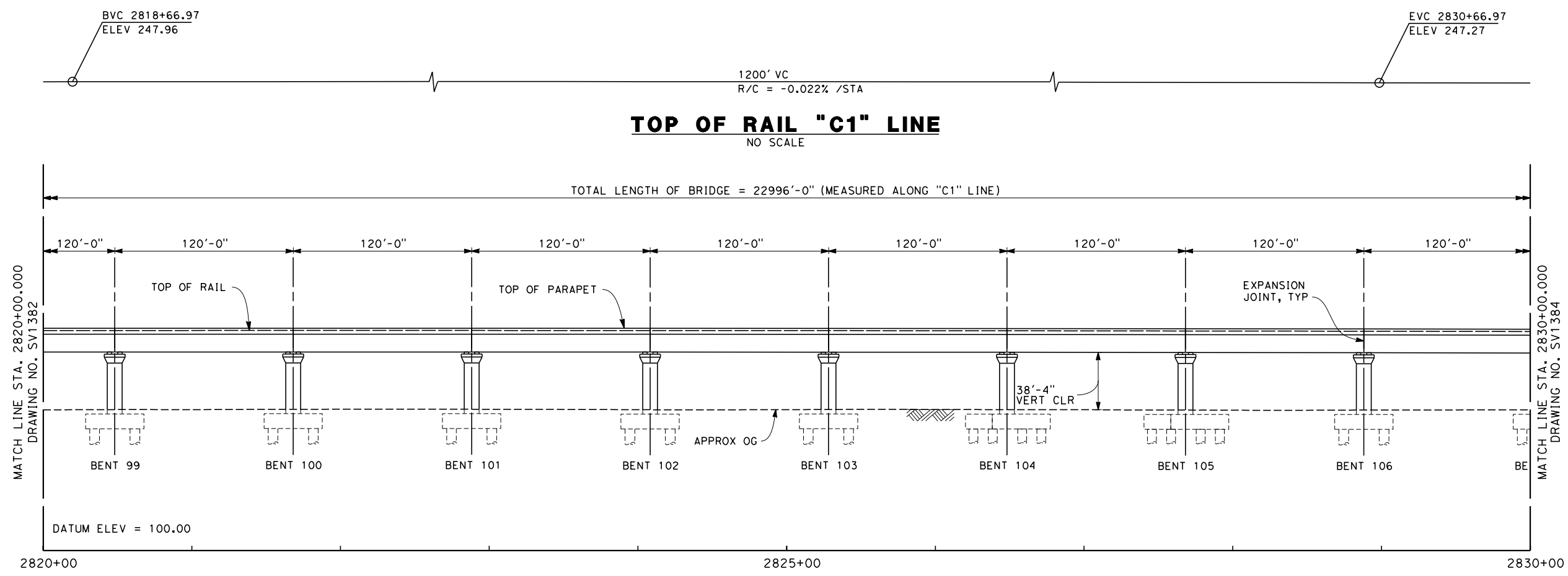
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1382

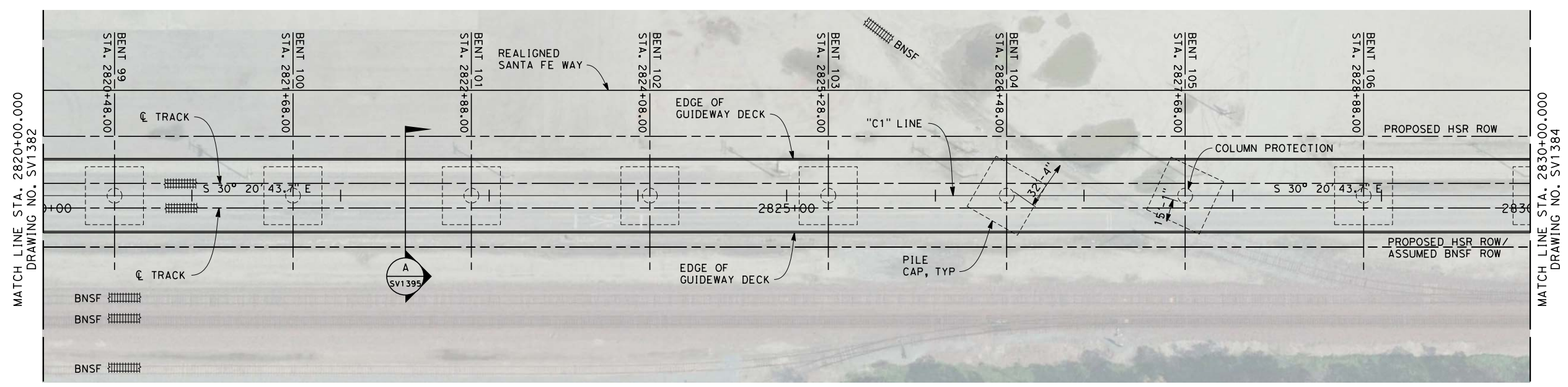
SCALE
AS SHOWN

SHEET NO.
13 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

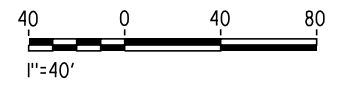


ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



f:\work\king\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1383-C1.dgn 12/28/2013 2:47:41 PM

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

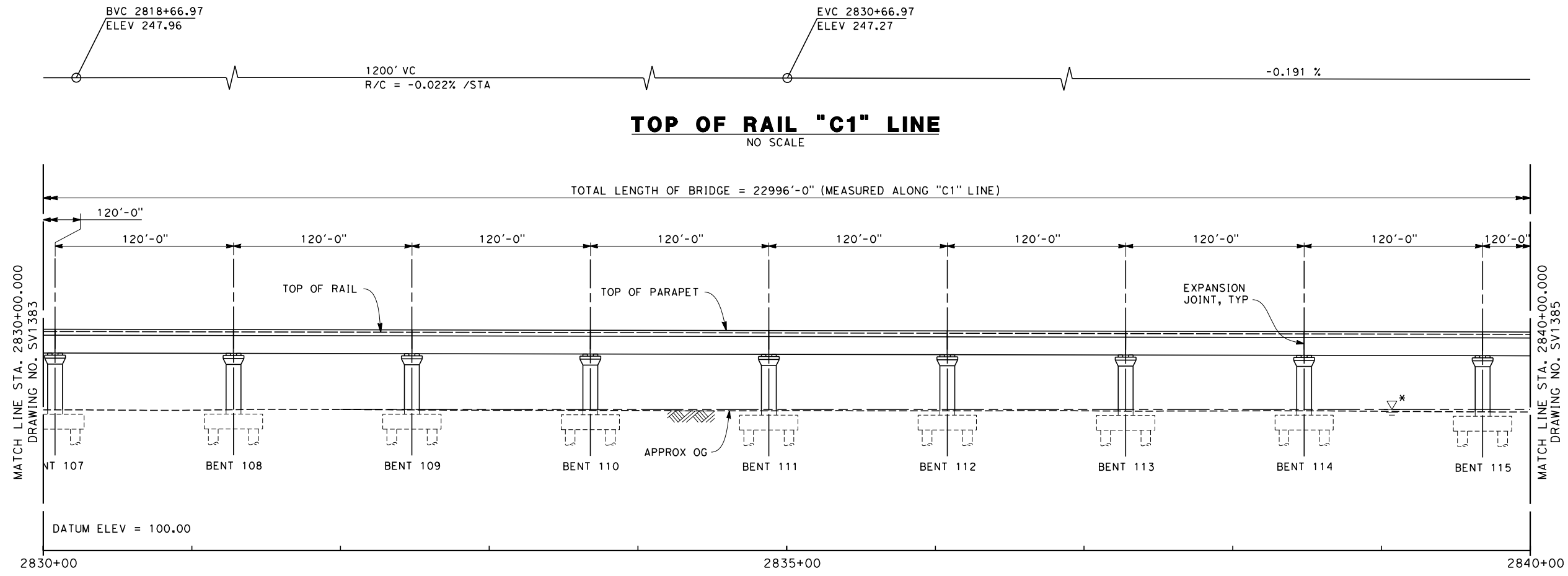
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1383

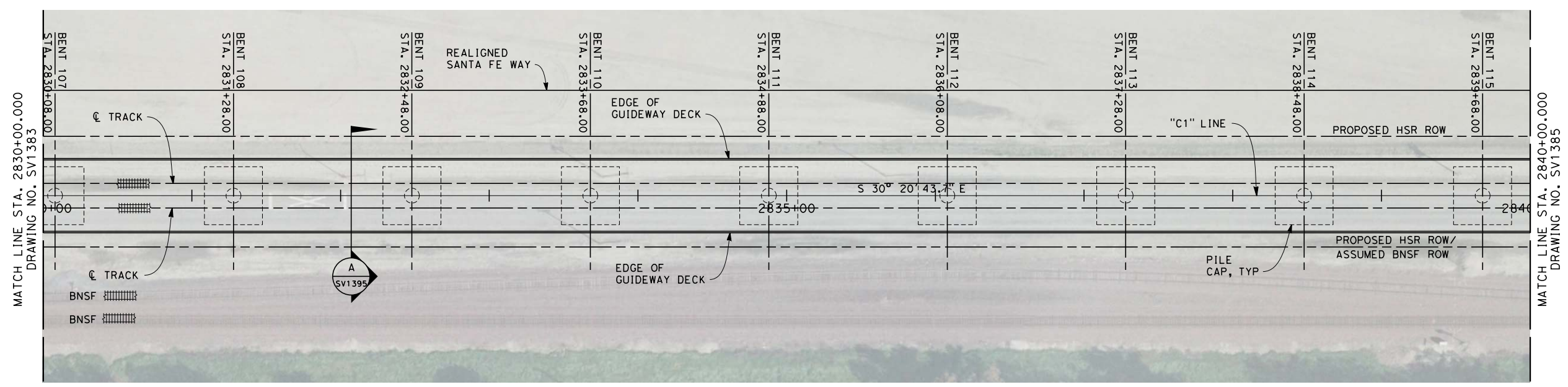
SCALE
AS SHOWN

SHEET NO.
14 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

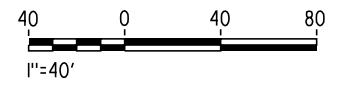


ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-ar.com\d0125261\FB-SV-1384-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

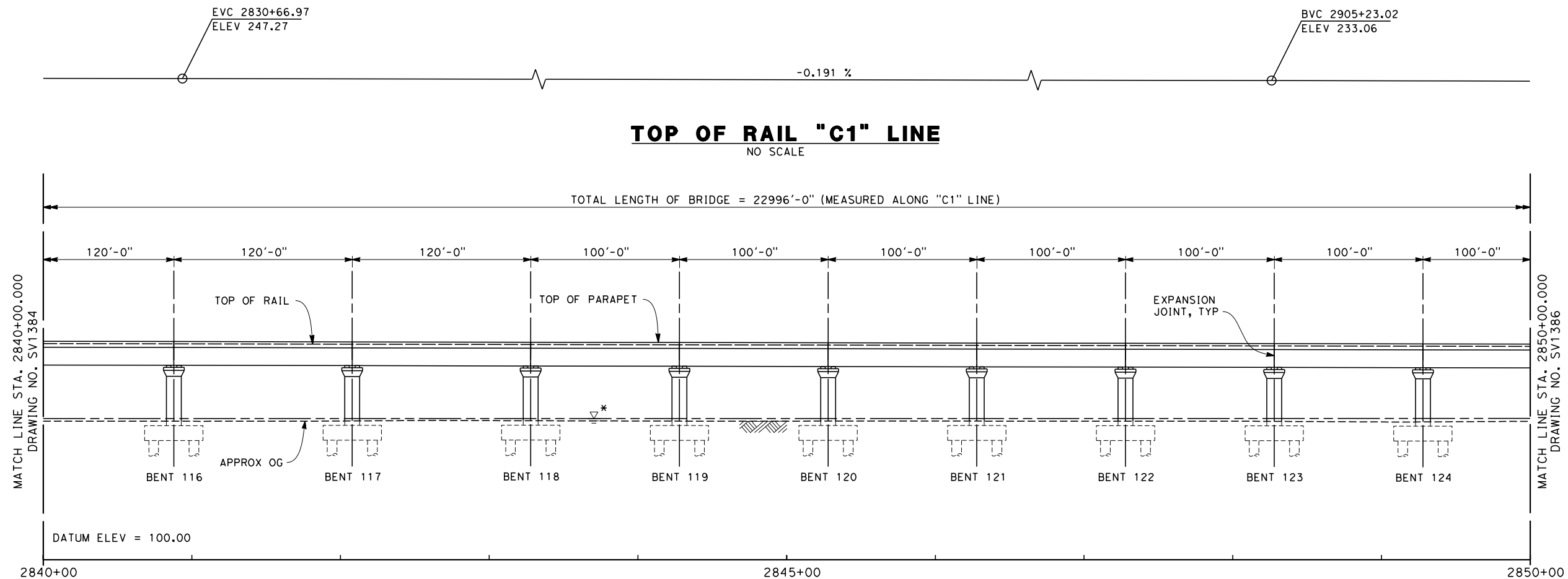
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1384

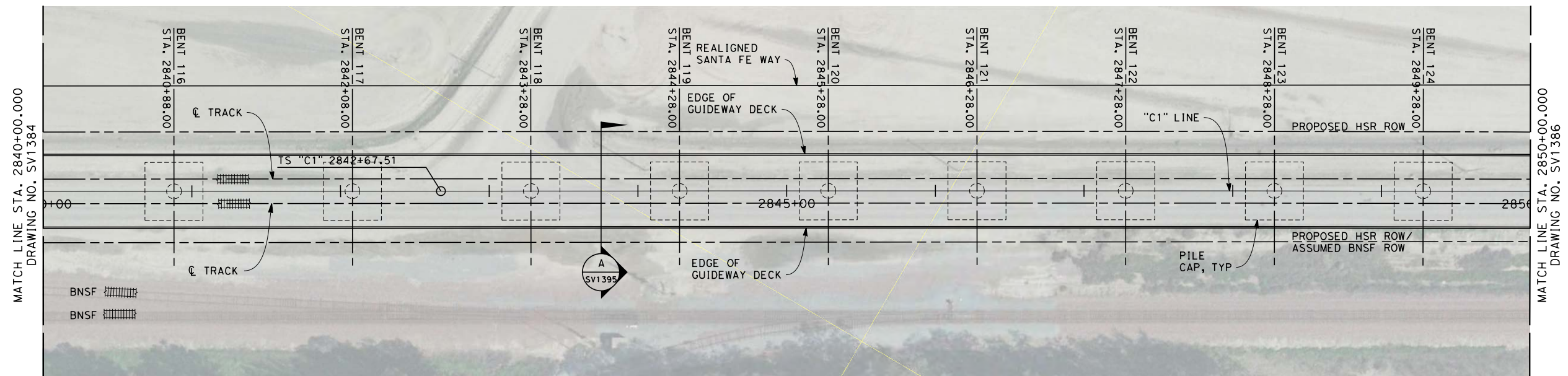
SCALE
AS SHOWN

SHEET NO.
15 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1385-C1.dgn
 frank.palermo 12/28/2013 2:48:42 PM



ELEVATION
SCALE 1" = 40'



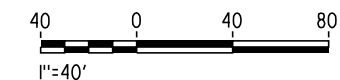
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

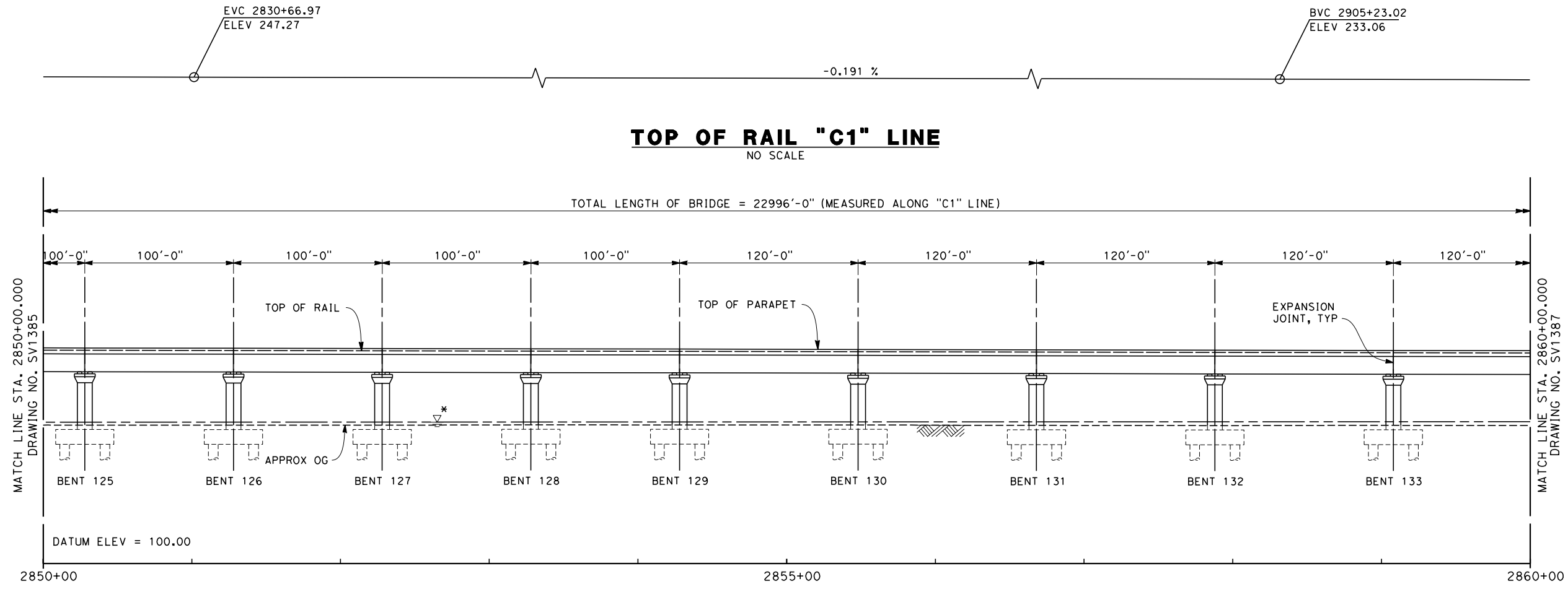
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1385

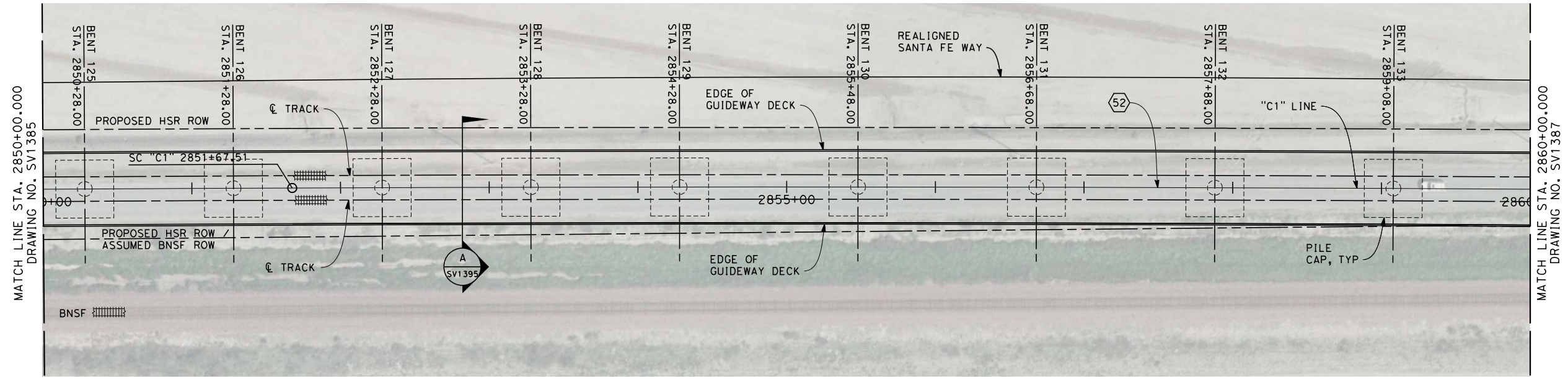
SCALE
AS SHOWN

SHEET NO.
16 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1386-C1.dgn 12/28/2013 2:49:14 PM frank.palermo



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

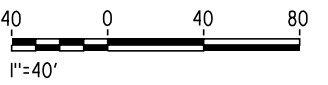
- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤2

R = 80000.00'
Δ = 01° 54' 06.7"
T = 1327.9'
L = 2655.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

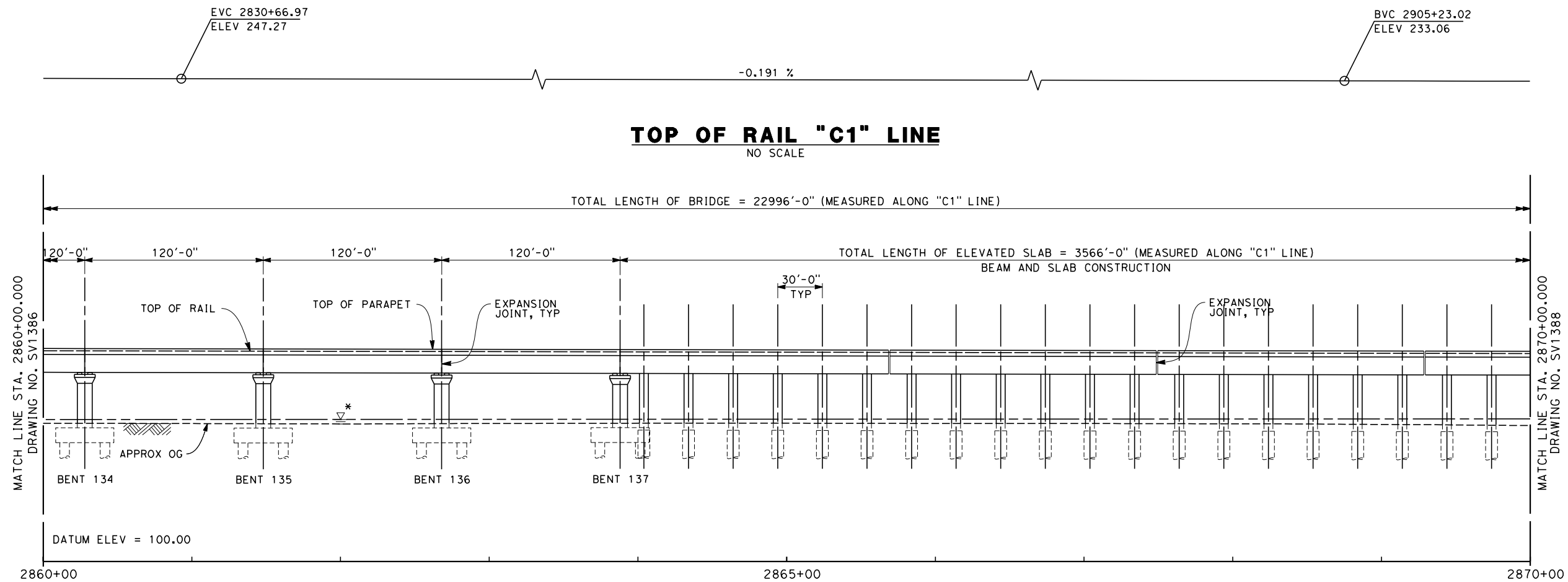
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1386

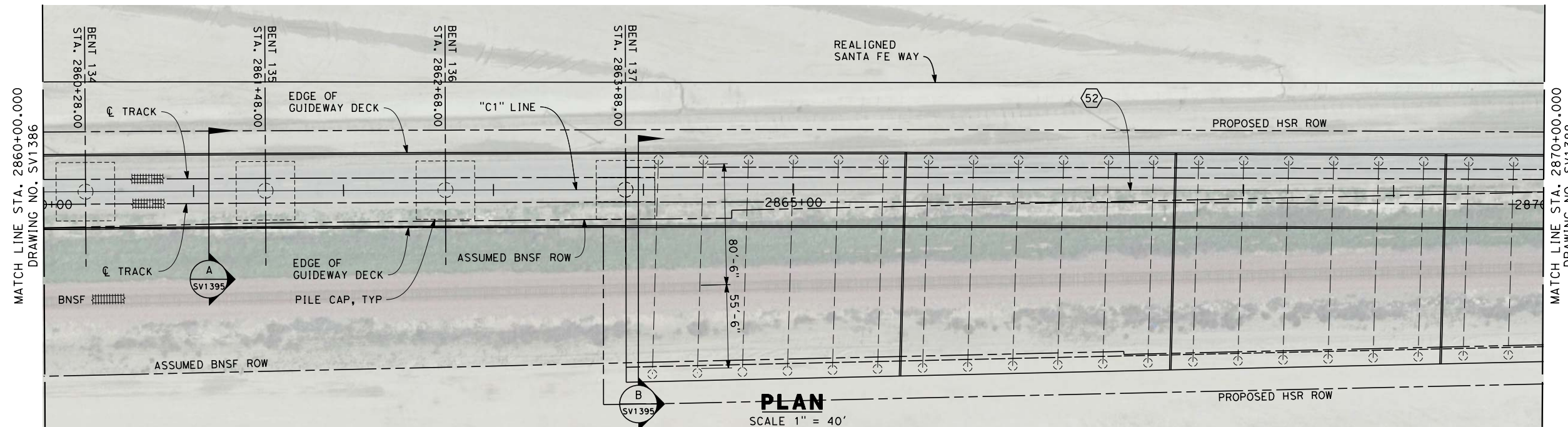
SCALE
AS SHOWN

SHEET NO.
17 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1387-C1.dgn 12/28/2013 2:49:43 PM frank.palermo



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

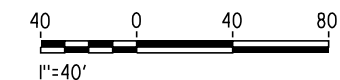
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

Ⓢ
 R = 80000.00'
 Δ = 01° 54' 06.7"
 T = 1327.9'
 L = 2655.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

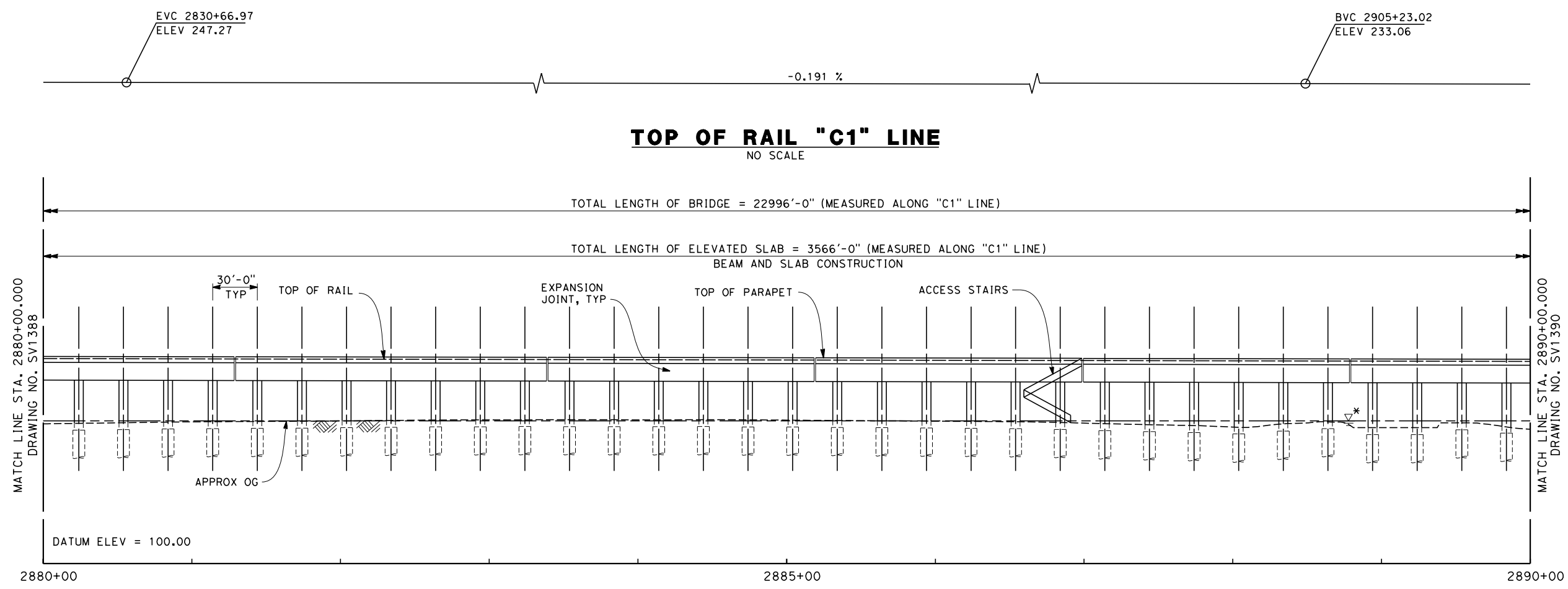
**NOT FOR
CONSTRUCTION**



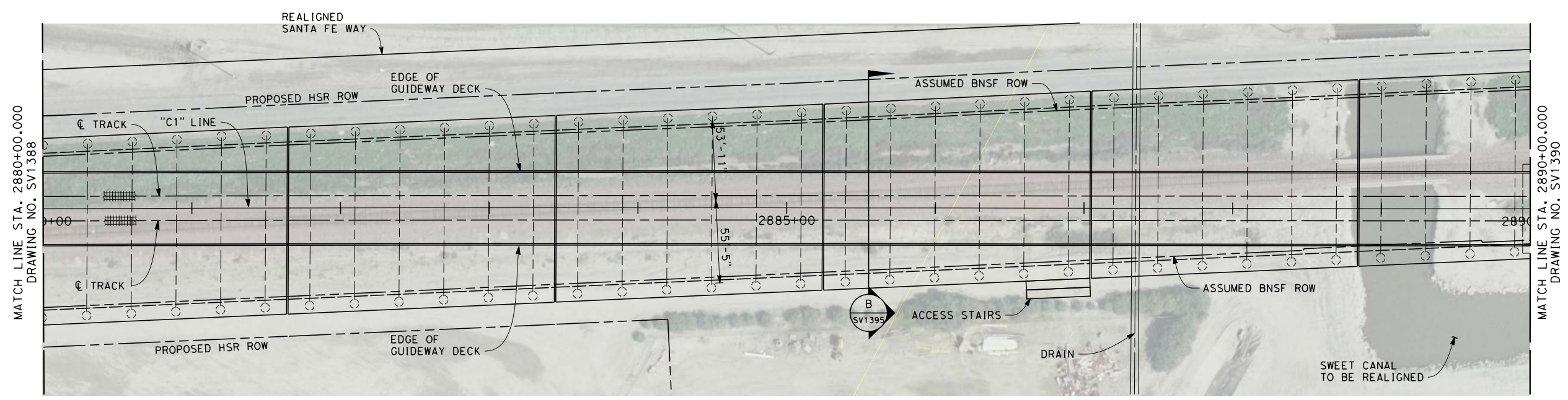
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1387
 SCALE
AS SHOWN
 SHEET NO.
18 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

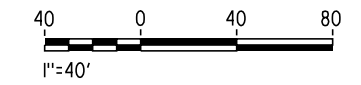


ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1389-C1.dgn 12/28/2013 2:50:49 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

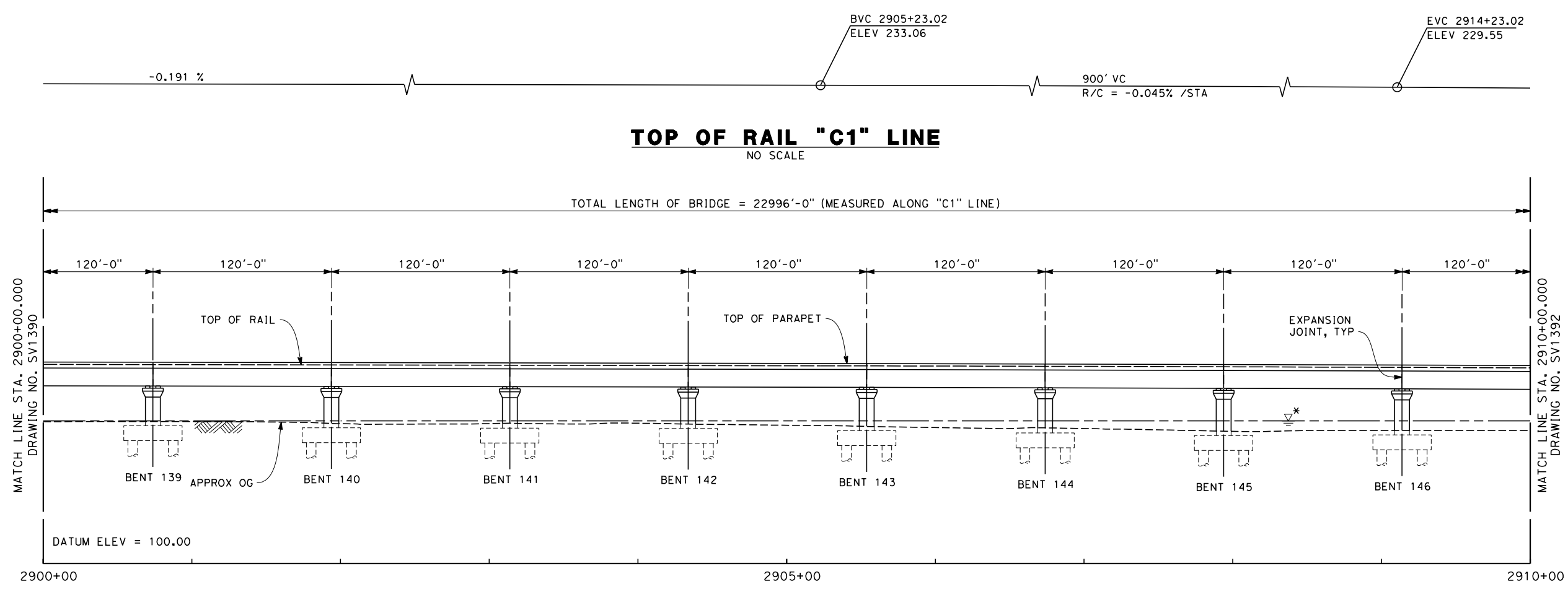
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1389

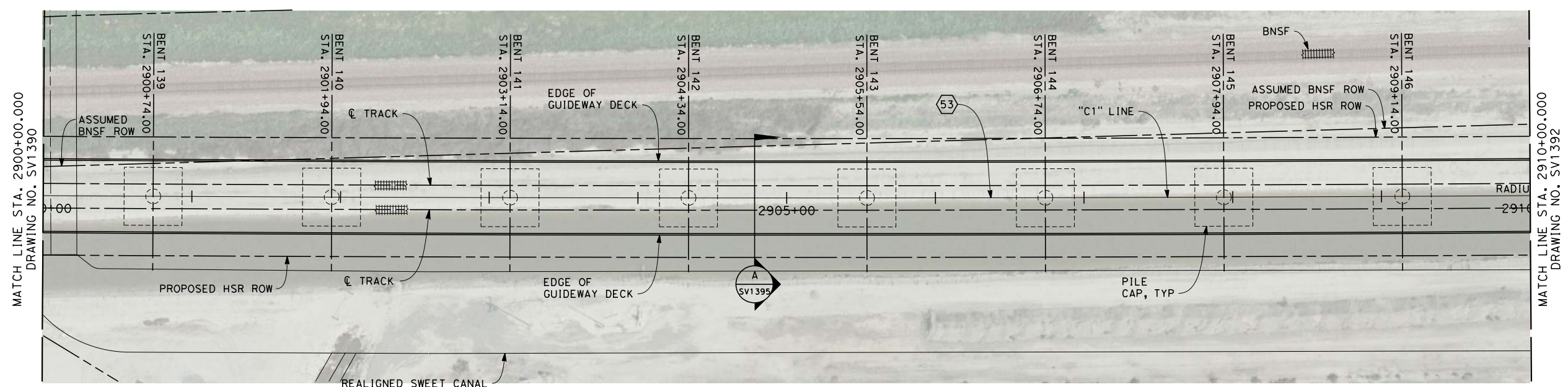
SCALE
AS SHOWN

SHEET NO.
20 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



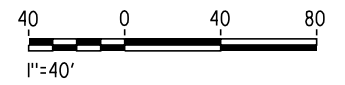
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑤3

R = 80000.00'
 Δ = 01° 56' 22.1"
 T = 1354.1'
 L = 2708.0'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1391-C1.dgn 12/28/2013 2:51:59 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

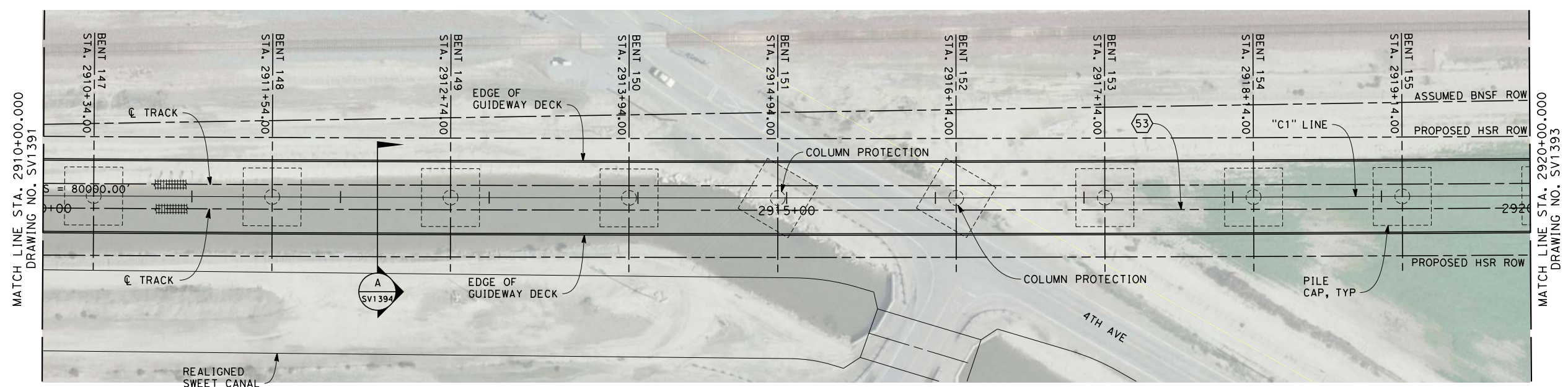
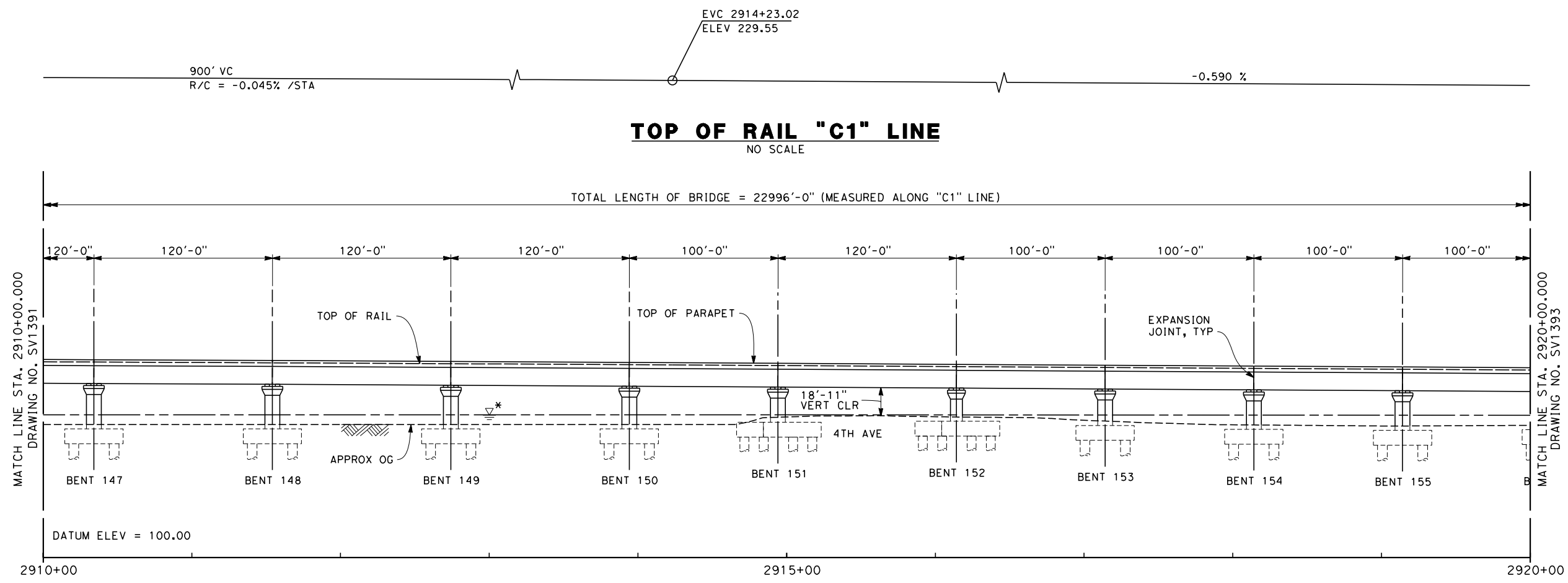
DRAWING NO.
SV1391

SCALE
AS SHOWN

SHEET NO.
22 OF 28

NOTES

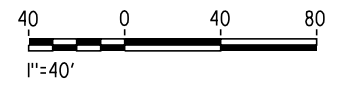
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA
 (53)
 R = 80000.00'
 Δ = 01° 56' 22.1"
 T = 1354.1'
 L = 2708.0'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1392-C1.dgn 12/28/2013 2:52:52 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

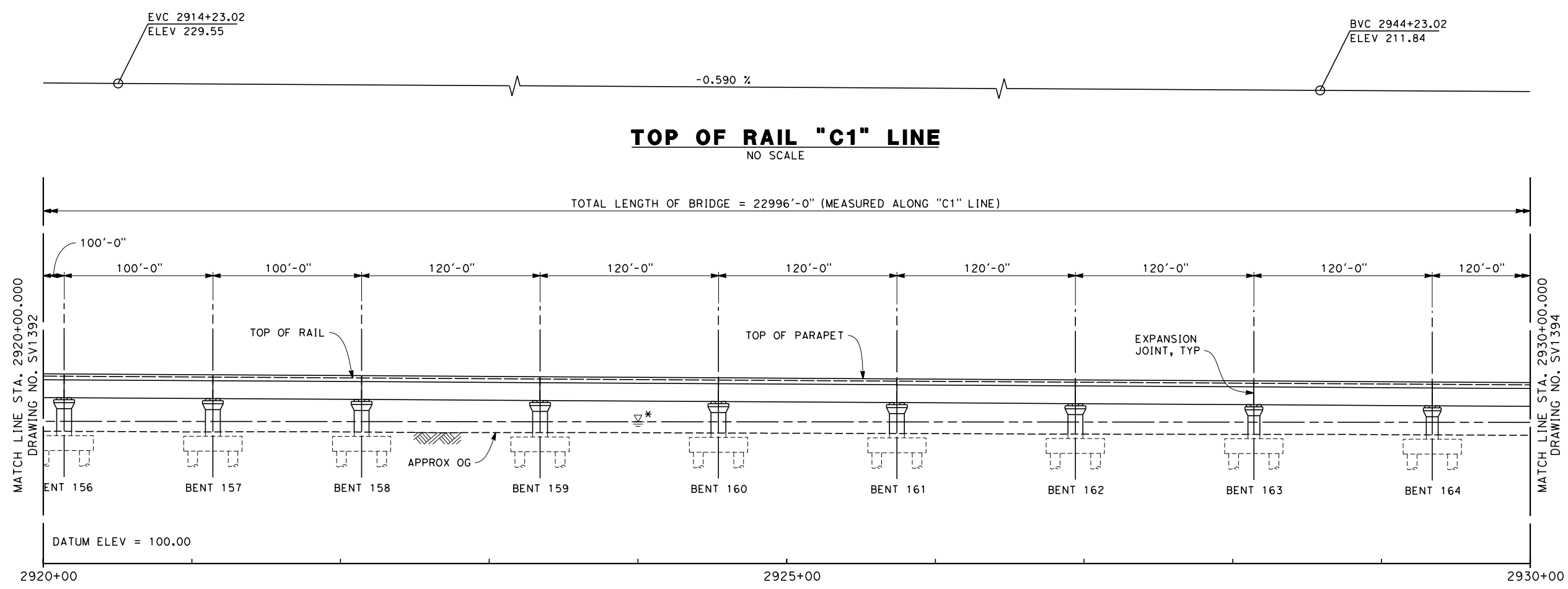
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



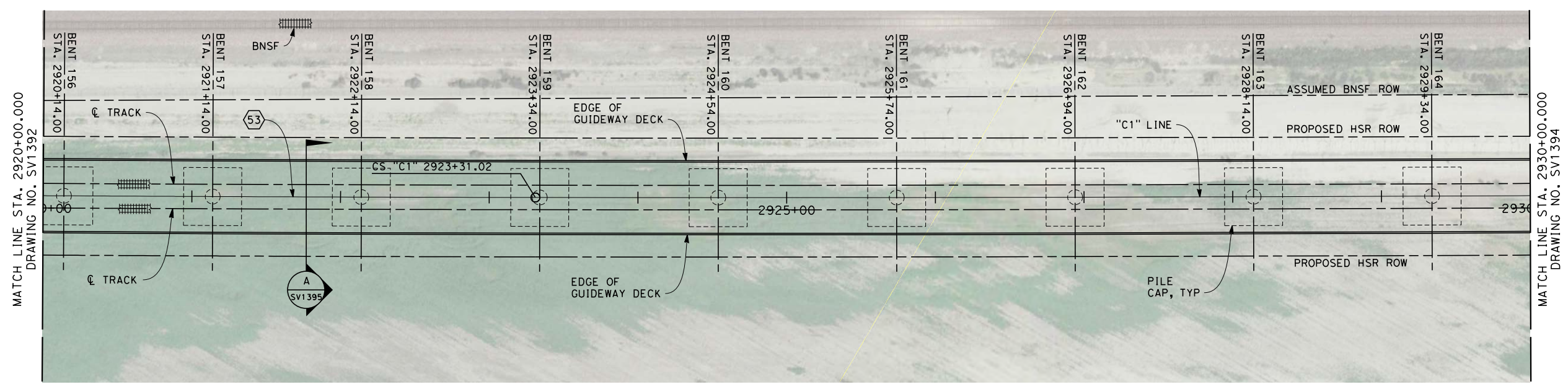
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1392
 SCALE
AS SHOWN
 SHEET NO.
23 OF 28

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



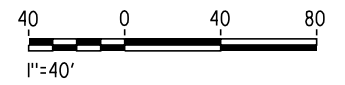
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

53

R = 80000.00'
 $\Delta = 01^\circ 56' 22.1''$
 T = 1354.1'
 L = 2708.0'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1393-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

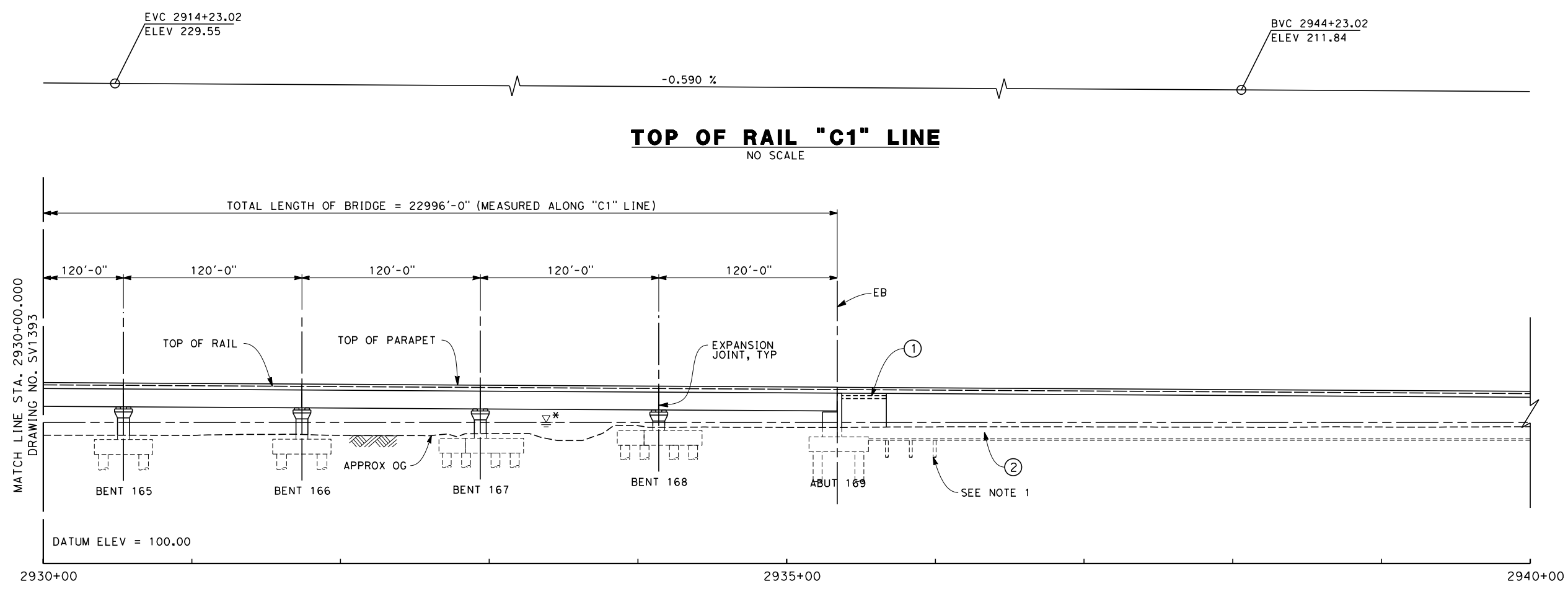
DRAWING NO.
SV1393

SCALE
AS SHOWN

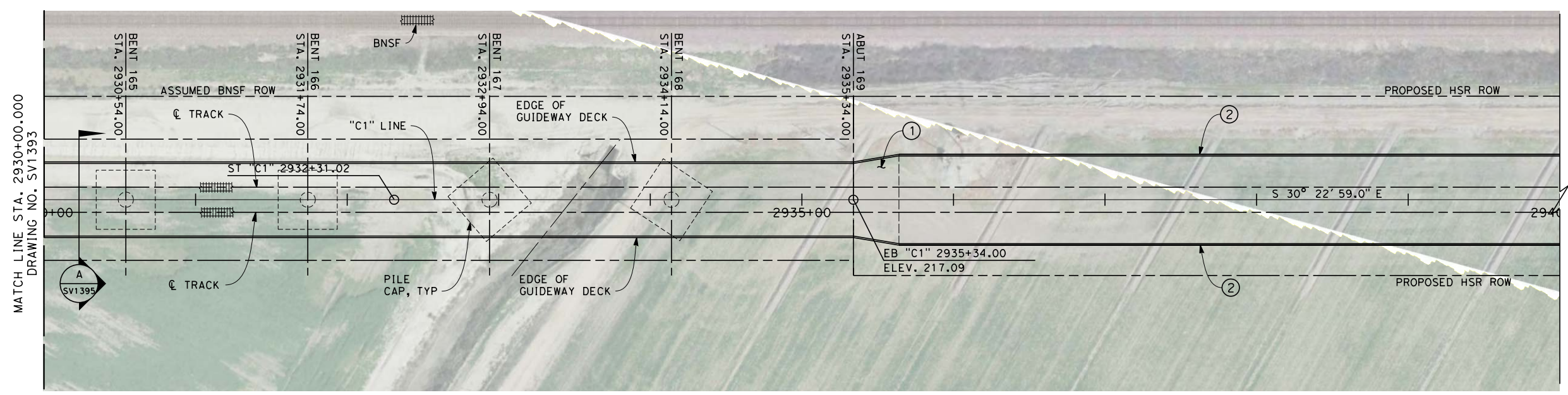
SHEET NO.
24 OF 28

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



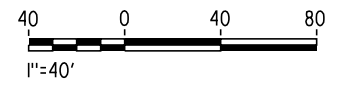
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



12/28/2013 2:53:59 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1394-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

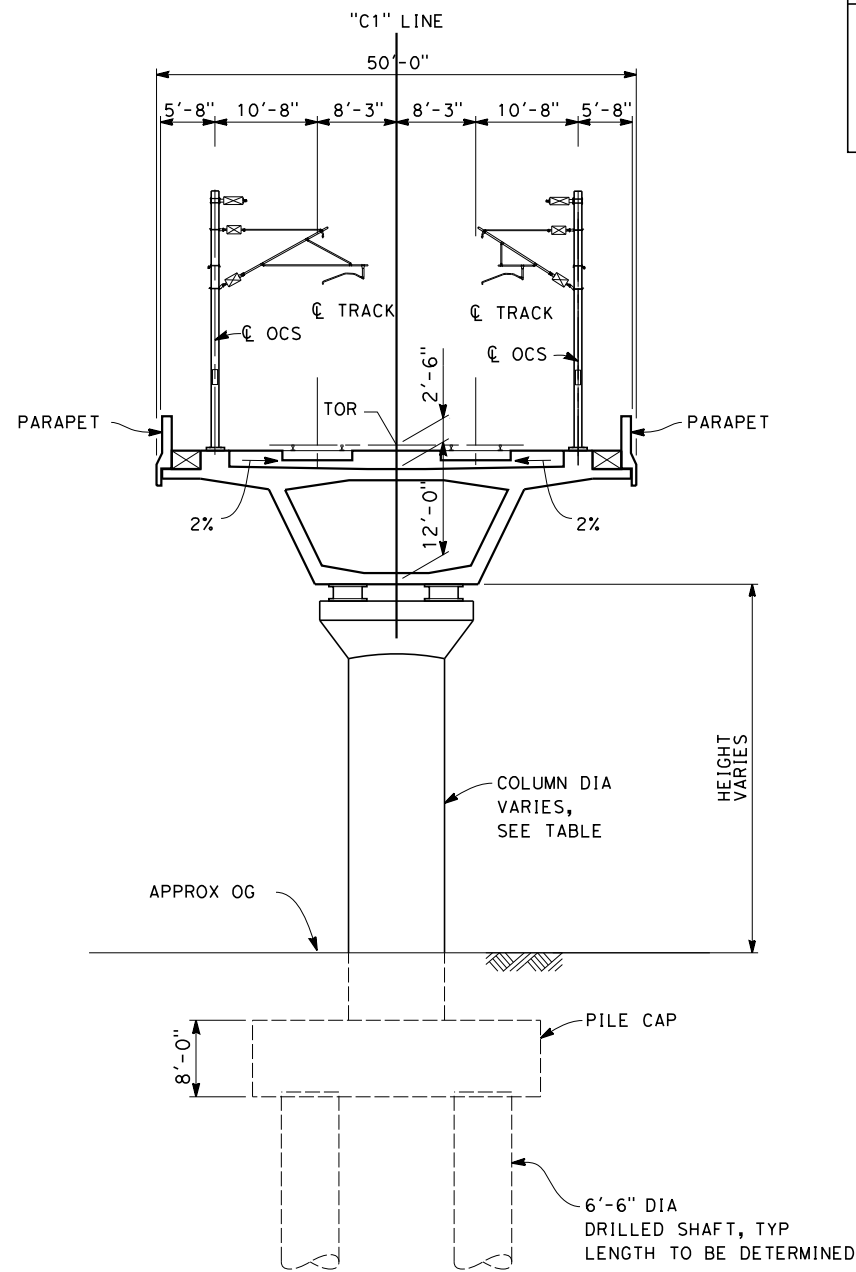
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
PLAN AND ELEVATION

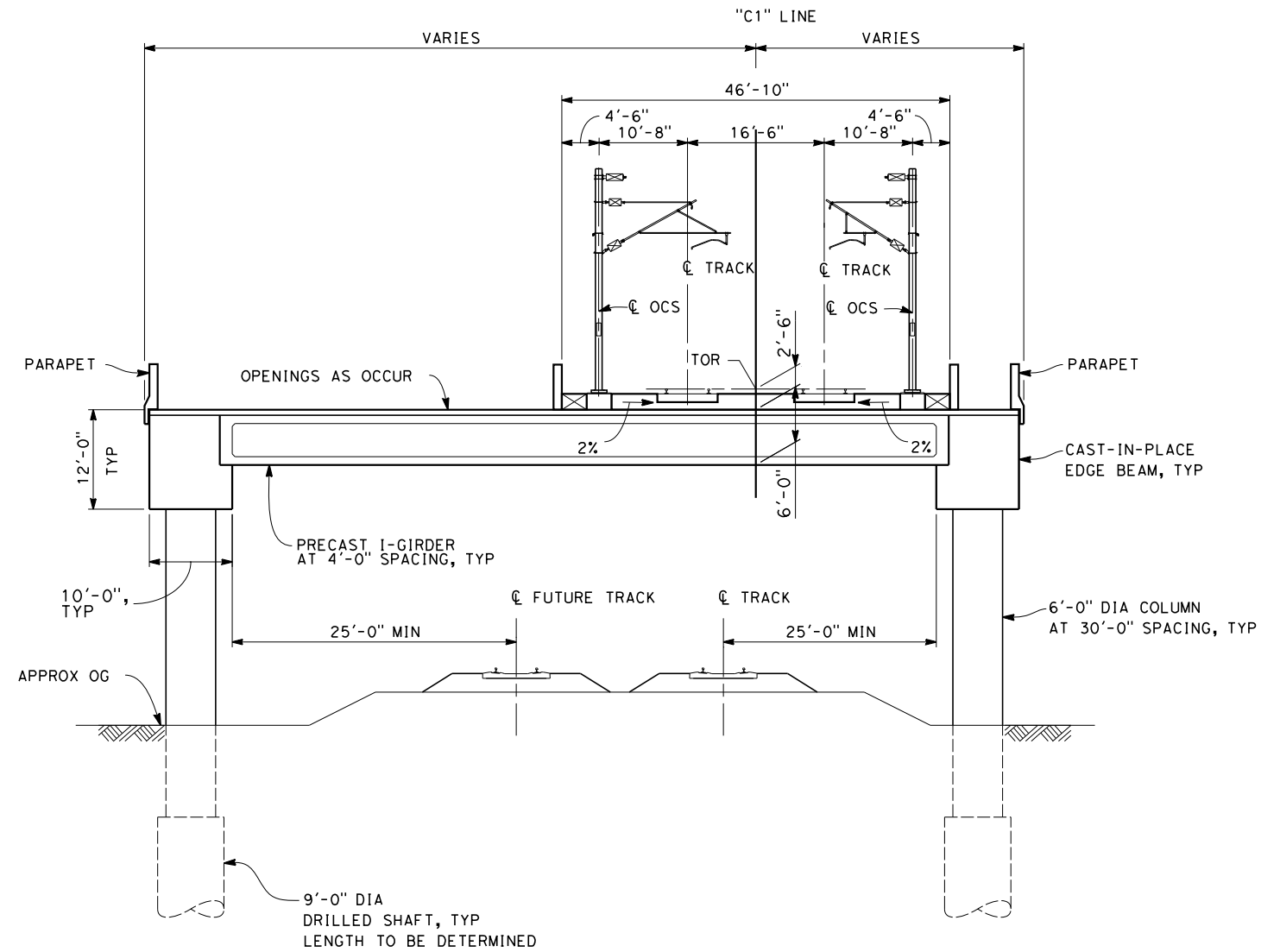
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV1394
SCALE
AS SHOWN
SHEET NO.
25 OF 28

COLUMN DIAMETERS	
COLUMN HEIGHT	DIAMETER
0-20 FT	8 FT
20-40 FT	10 FT
40-50 FT	12 FT
50-60 FT	15 FT
60-80 FT	20 FT
80-100 FT	25 FT



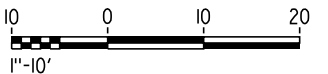
SECTION A

SCALE: 1" = 10'
 STA 2705+38 THROUGH 2735+38
 STA 2740+18 THROUGH 2772+88
 STA 2777+18 THROUGH 2781+88
 STA 2786+08 THROUGH 2790+48
 STA 2794+48 THROUGH 2795+50
 STA 2797+67 THROUGH 2805+68
 STA 2809+88 THROUGH 2863+88
 STA 2899+54 THROUGH 2935+34



SECTION B

SCALE: 1" = 10'
 STA 2863+88 THROUGH 2899+54



12/28/2013 2:54:05 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1395-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY E. SUDHAUSEN
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

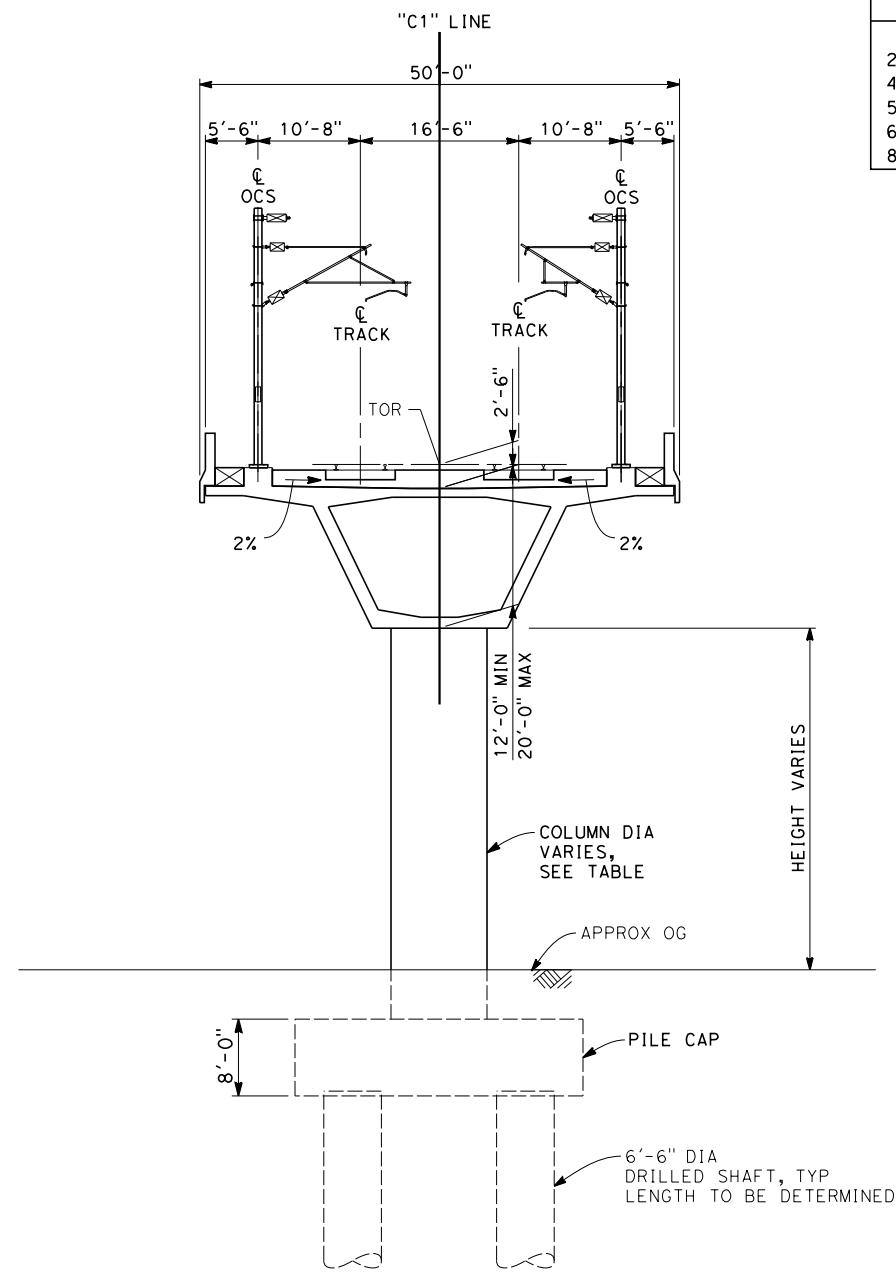
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1395
SCALE AS SHOWN
SHEET NO. 26 OF 28

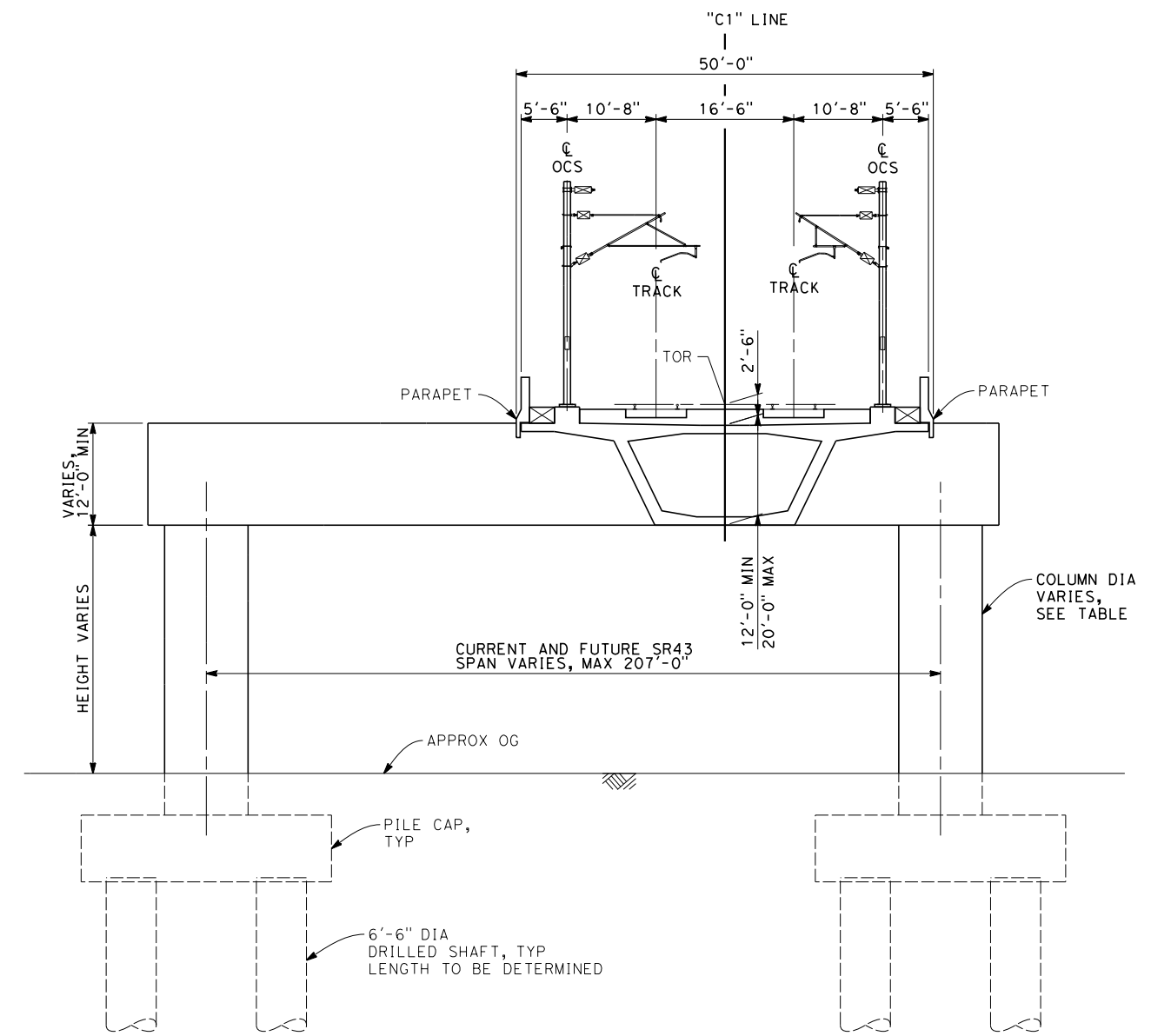
COLUMN DIAMETERS	
COLUMN HEIGHT	DIAMETER
0-20 FT	8 FT
20-40 FT	10 FT
40-50 FT	12 FT
50-60 FT	15 FT
60-80 FT	20 FT
80-100 FT	25 FT



SECTION C

SCALE: 1" = 10'

STA 2772+88 THROUGH 2777+18
 STA 2781+88 THROUGH 2786+08
 STA 2790+48 THROUGH 2794+48
 STA 2805+68 THROUGH 2809+88



SECTION D

SCALE: 1" = 10'

STA 2736+58 THROUGH 2740+18



12/28/2013 2:54:10 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1396-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



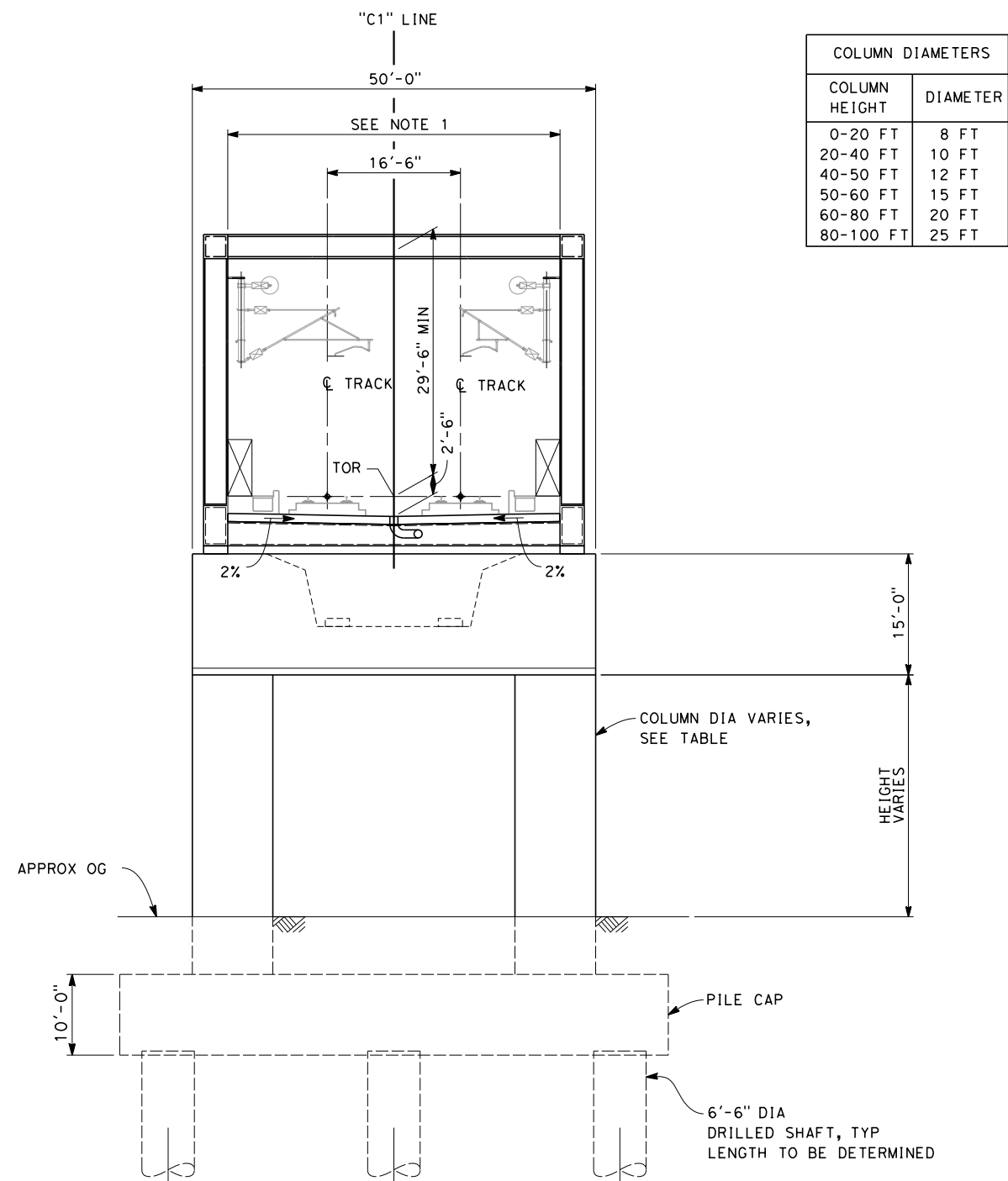
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

CORCORAN SUBSECTION
 ALIGNMENT C1
 CORCORAN VIADUCT
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1396
SCALE AS SHOWN
SHEET NO. 27 OF 28

NOTES

1. TRUSS INTERNAL WIDTH SHALL BE 44'-4" MIN. ADDITIONAL WIDTH MAY BE NECESSARY TO ALLOW FOR TRACK SUPERELEVATION.



SECTION E

SCALE: 1" = 10'

STA 2795+50 THROUGH 2797+67



f:\work\king\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-1397-C1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
CORCORAN SUBSECTION
ALIGNMENT C1
CORCORAN VIADUCT
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV1397
SCALE
AS SHOWN
SHEET NO.
28 OF 28

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125261\FB-SV-2350-C1.dgn



LEGEND

--- EXISTING FREIGHT RAILROAD

— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

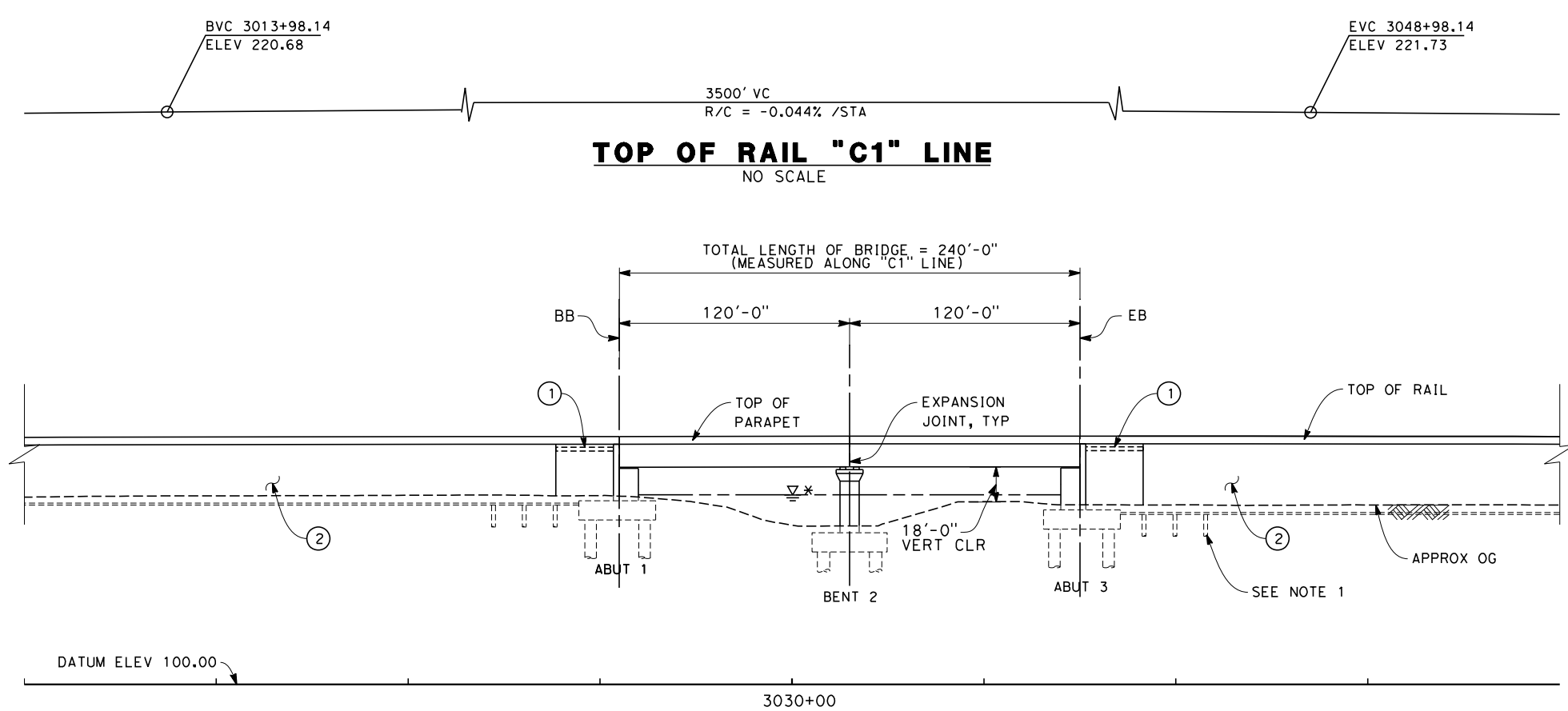
CORCORAN SUBSECTION
ALIGNMENT C1
TULE RIVER BRIDGE
KEY MAP

CONTRACT NO.
HSR 06-0003

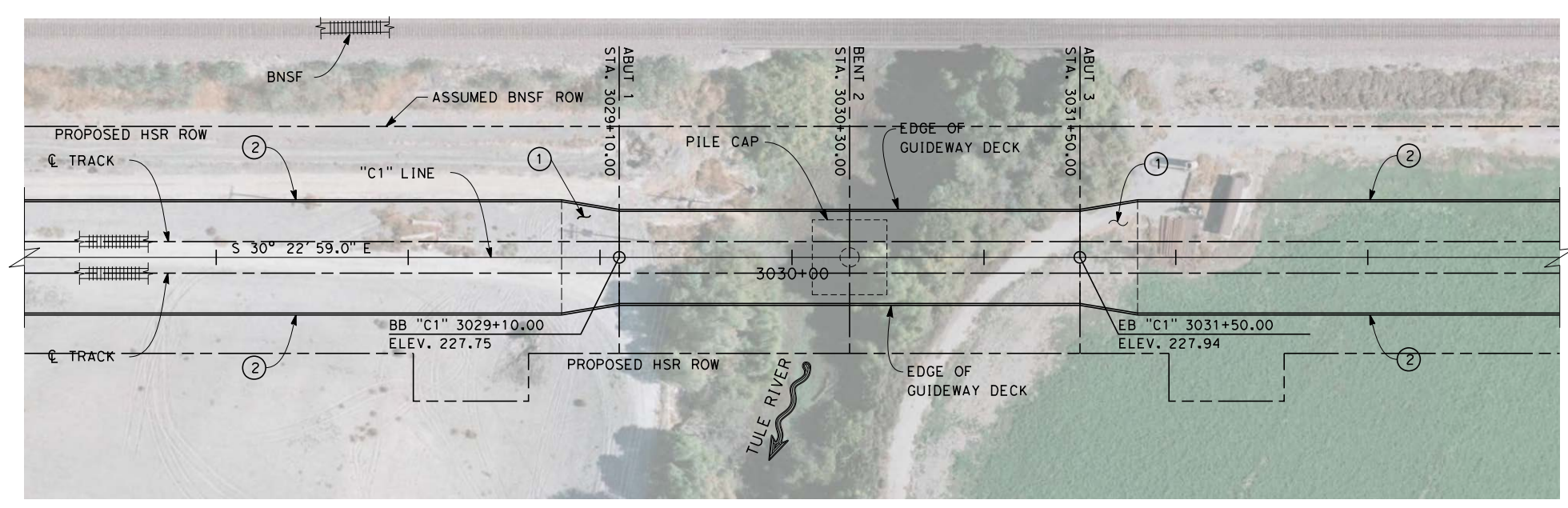
DRAWING NO.
SV2350

SCALE
AS SHOWN

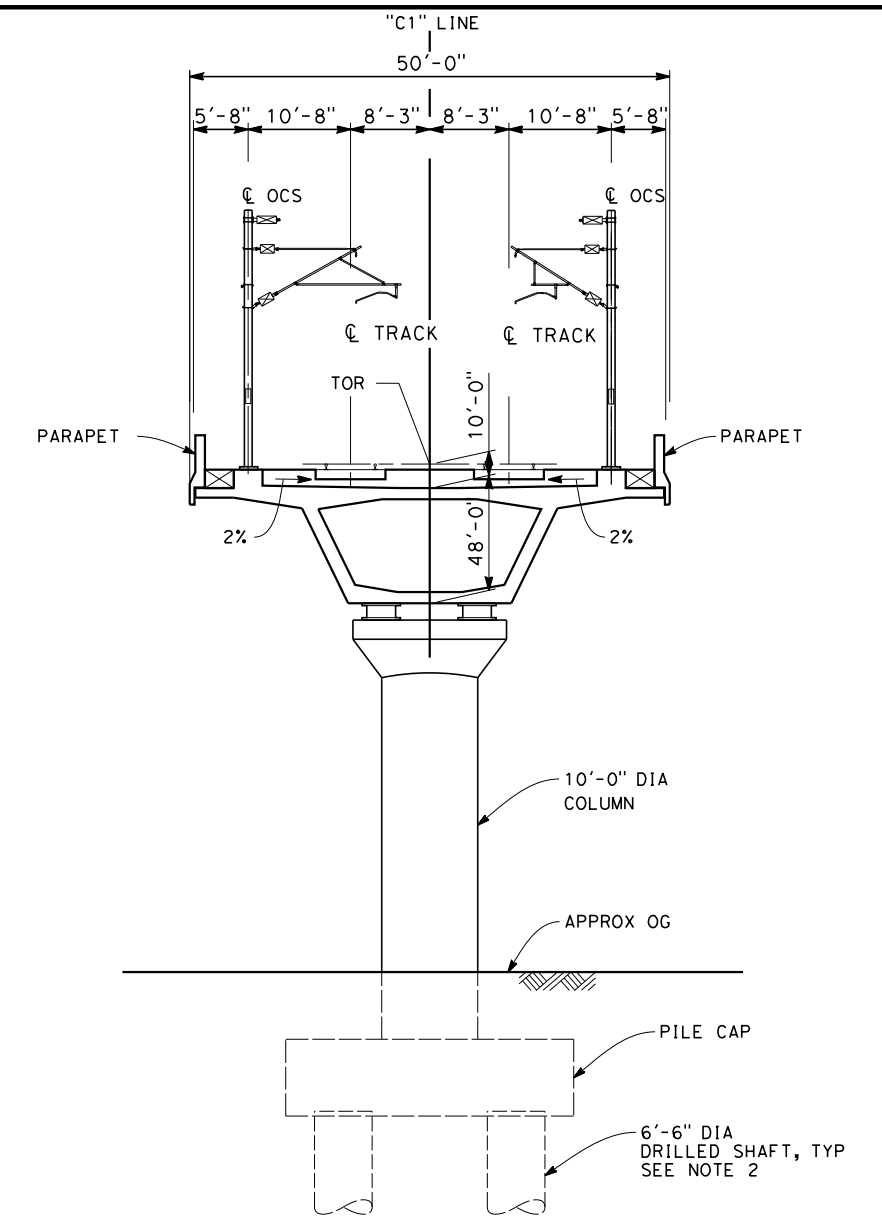
SHEET NO.
1 OF 2



ELEVATION
SCALE 1" = 40'

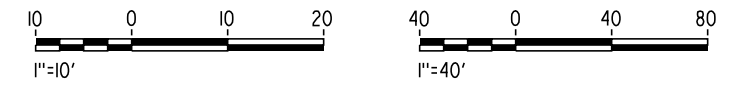


PLAN
SCALE 1" = 40'



TYPICAL SECTION
SCALE: 1" = 10'

- NOTES:
- ALL PILES NOT SHOWN
 - PILE LENGTH TO BE DETERMINED
- LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT"



c:\pwworking\hmm\external\frank.palermo01-ar-up.com\d0125261\FB-SV-2355-C1.dgn 12/28/2013 2:54:52 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SHEIKH

DRAWN BY
J. REILLY

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C1
TULE RIVER BRIDGE
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2355

SCALE
AS SHOWN

SHEET NO.
2 OF 2

andrew.armstrong 2/12/2013 11:15:56 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2445-C2.dgn



LEGEND

- EXISTING FREIGHT RAILROAD
- PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
Y. REN
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

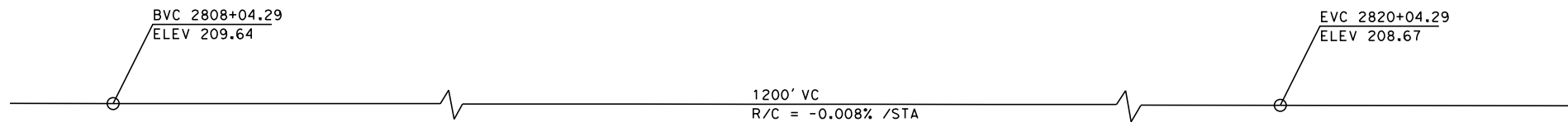
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

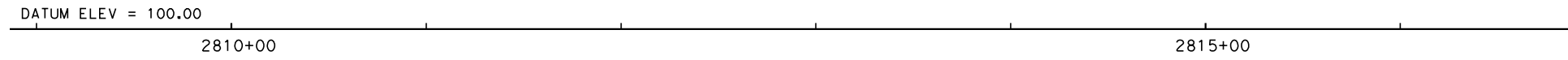
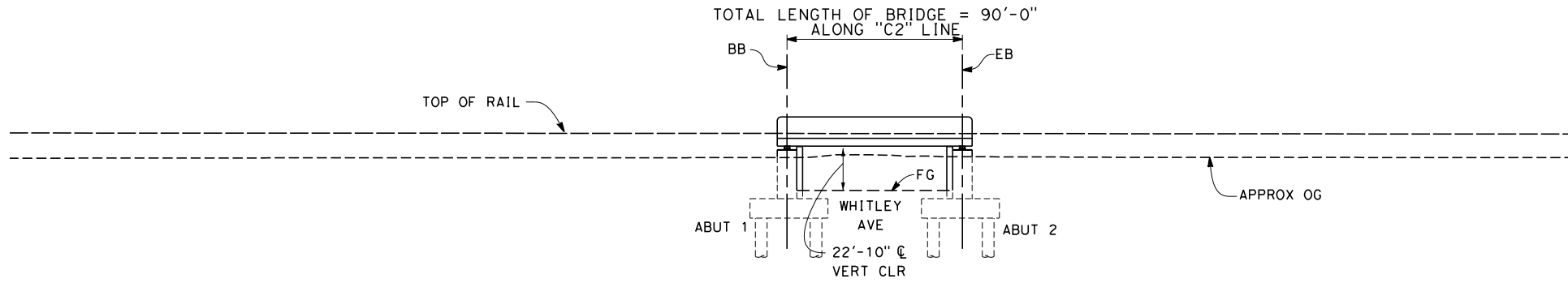


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN BYPASS SUBSECTION
 ALIGNMENT C2
 WHITLEY AVE/SR137 UNDERPASS
 KEY MAP

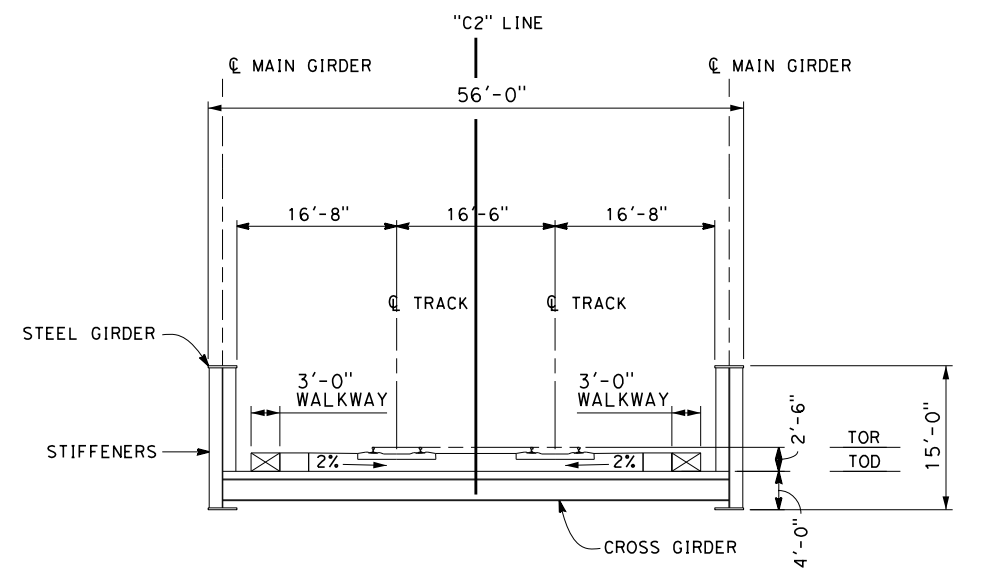
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2445
SCALE
AS SHOWN
SHEET NO.
1 OF 2



TOP OF RAIL "C2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



TYPICAL SECTION
SCALE 1" = 10'

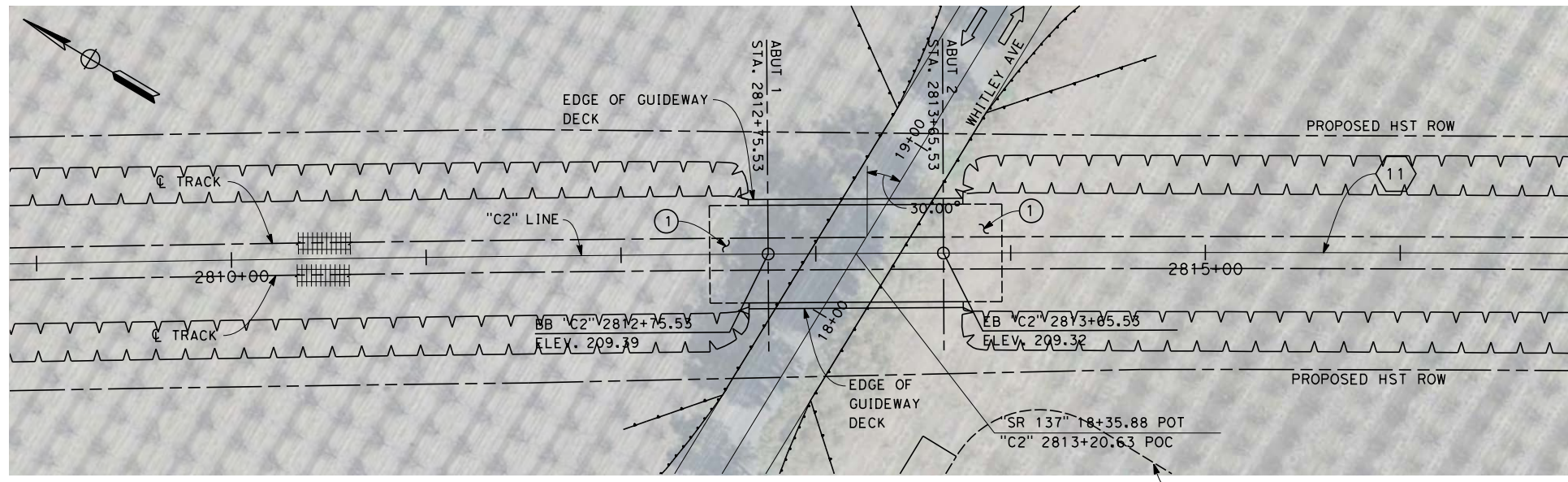
- NOTES
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. UTILITY LOCATIONS TO BE DETERMINED

- LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

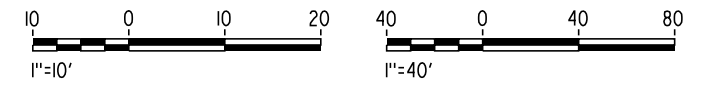
INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

CURVE DATA

①
R = 32000.00'
Δ = 0° 50' 01.6"
T = 618.5'
L = 15313.7'



PLAN
SCALE 1" = 40'



andrew.armstrong 2/12/2013 11:16:52 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2446-C2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
WHITLEY AVE/SR137 UNDERPASS
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2446
SCALE
AS SHOWN
SHEET NO.
2 OF 2

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2490-C2.dgn



LEGEND
 —+— EXISTING FREIGHT RAILROAD
 — PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

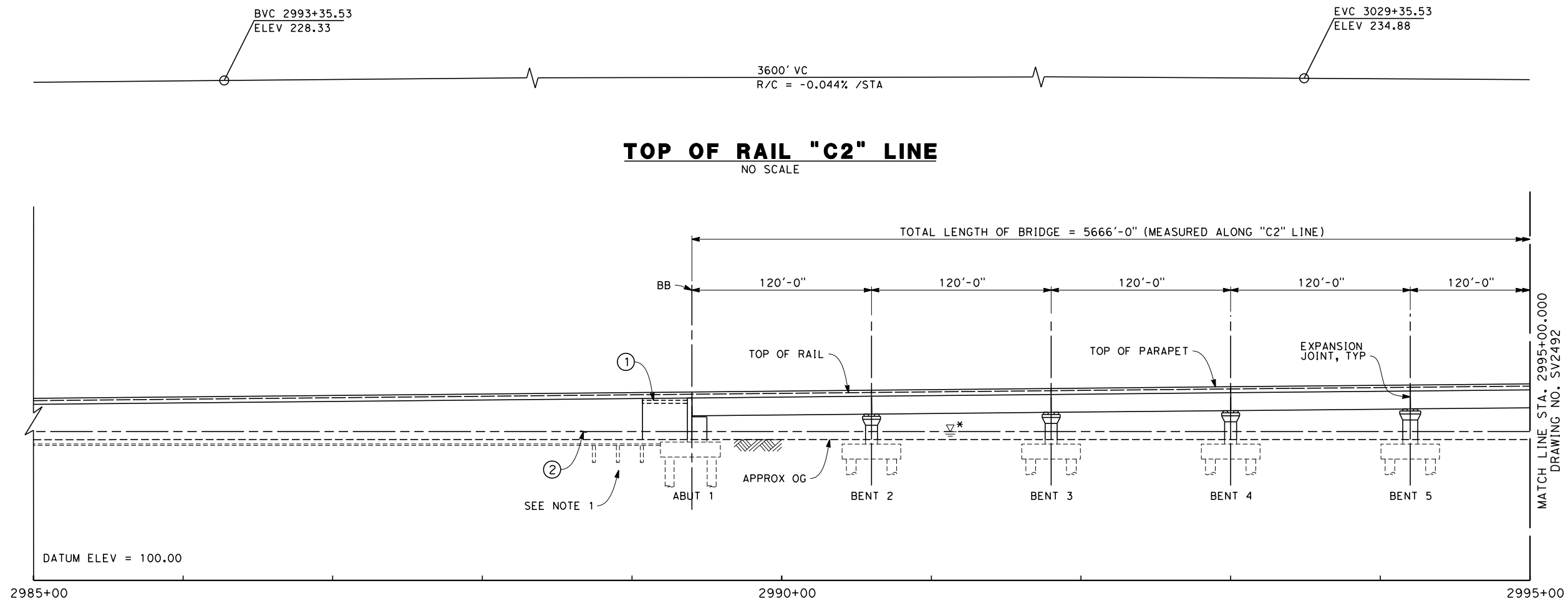
**RECORD SET 15%
 DESIGN SUBMISSION**
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN BYPASS SUBSECTION
 ALIGNMENT C2
 STATE ROUTE 43 BNSF VIADUCT
 KEY MAP

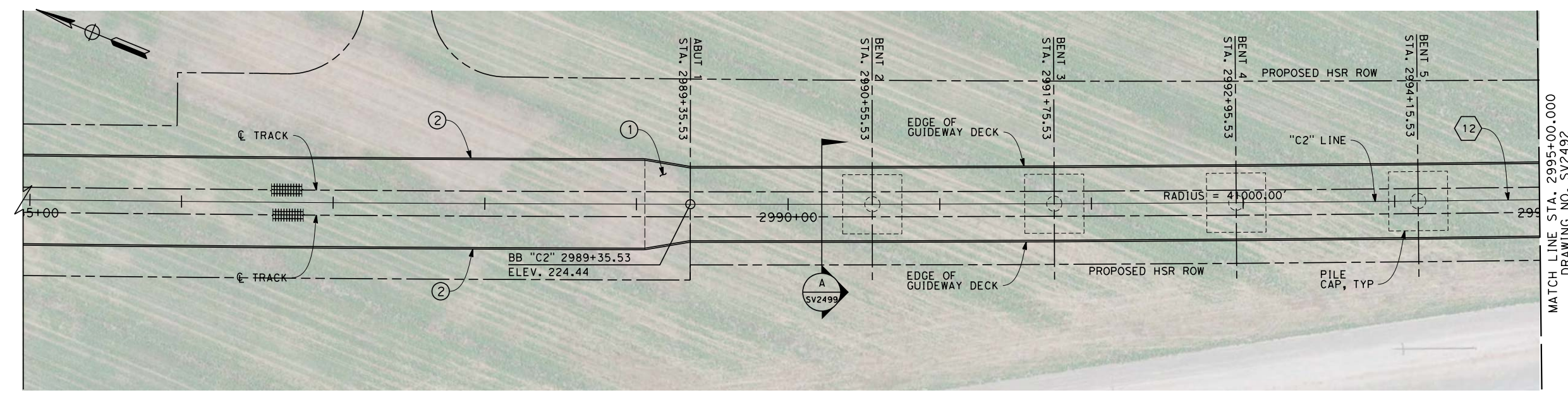
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2490
 SCALE
AS SHOWN
 SHEET NO.
1 OF 11

andrew.armstrong 2/12/2013 11:17:31 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2491-C2.dgn



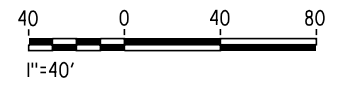
ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- ⑫
- R = 41000.00'
Δ = 01° 14' 39.4"
T = 1846.0'
L = 9734.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2491

SCALE
AS SHOWN

SHEET NO.
2 OF 11

BVC 2993+35.53
ELEV 228.33

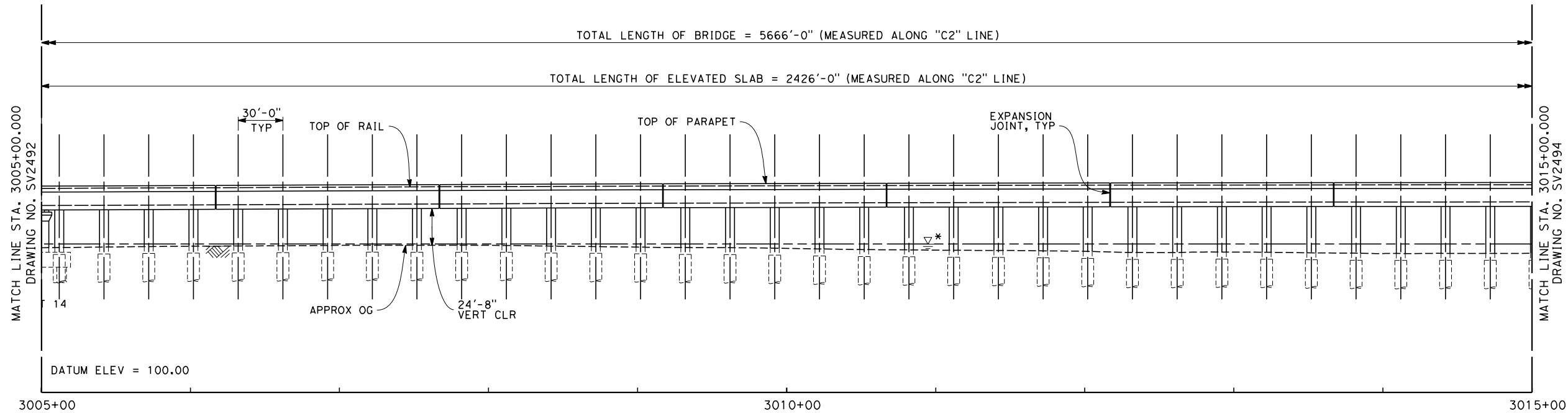
EVC 3029+35.53
ELEV 234.88

3600' VC
R/C = -0.044% /STA

TOP OF RAIL "C2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 5666'-0" (MEASURED ALONG "C2" LINE)

TOTAL LENGTH OF ELEVATED SLAB = 2426'-0" (MEASURED ALONG "C2" LINE)



ELEVATION
SCALE 1" = 40'

NOTES

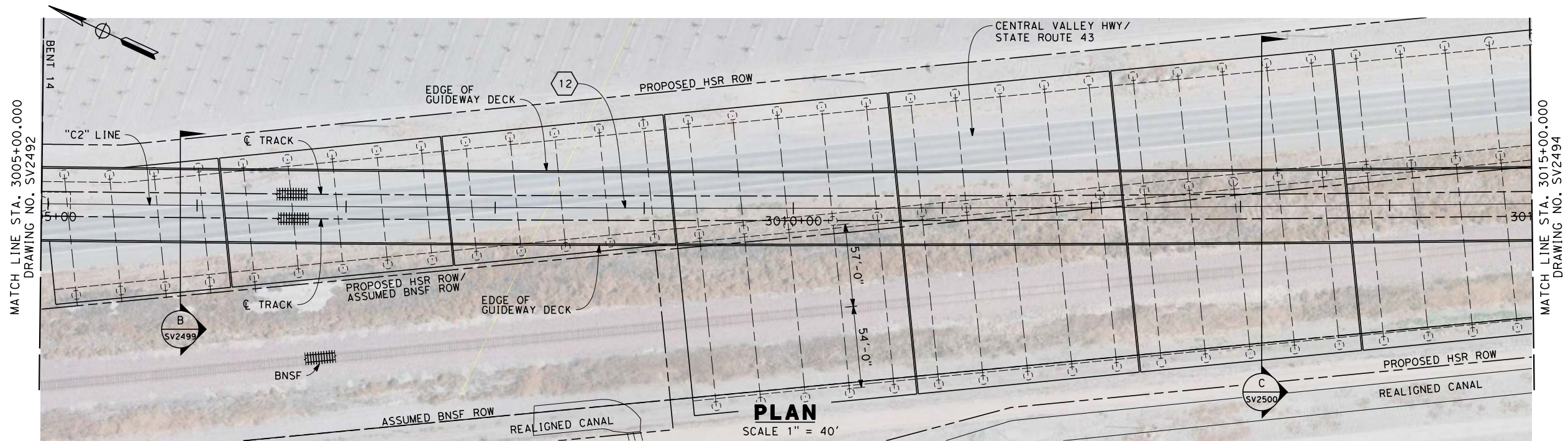
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑫
R = 41000.00'
Δ = 01° 14' 39.4"
T = 1846.0'
L = 9734.5'



PLAN
SCALE 1" = 40'



andrew.armstrong 2/12/2013 11:18:13 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2493-C2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

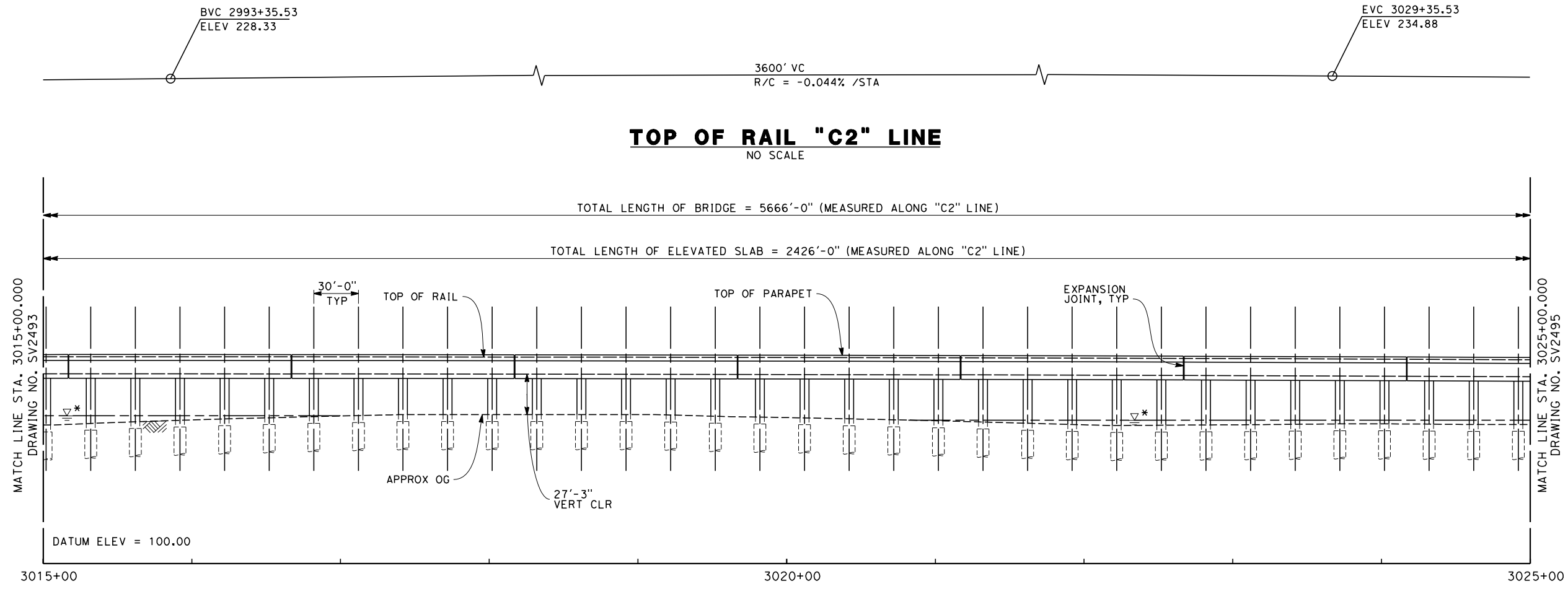
**NOT FOR
CONSTRUCTION**



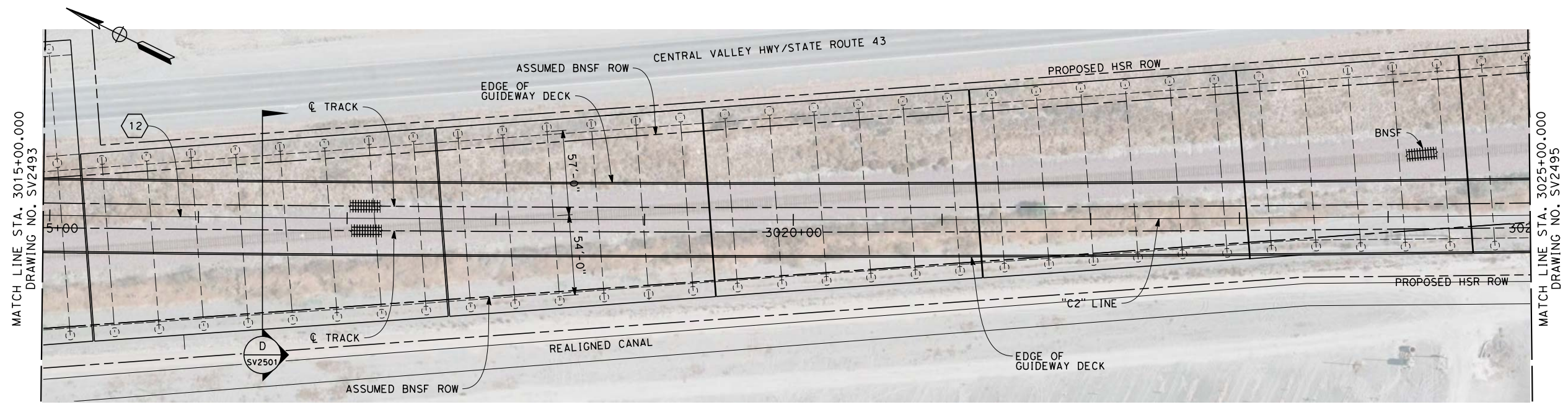
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2493
SCALE AS SHOWN
SHEET NO. 4 OF 11

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2494-C2.dgn



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

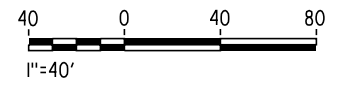
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

12

R = 41000.00'
Δ = 01° 14' 39.4"
T = 1846.0'
L = 9734.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION

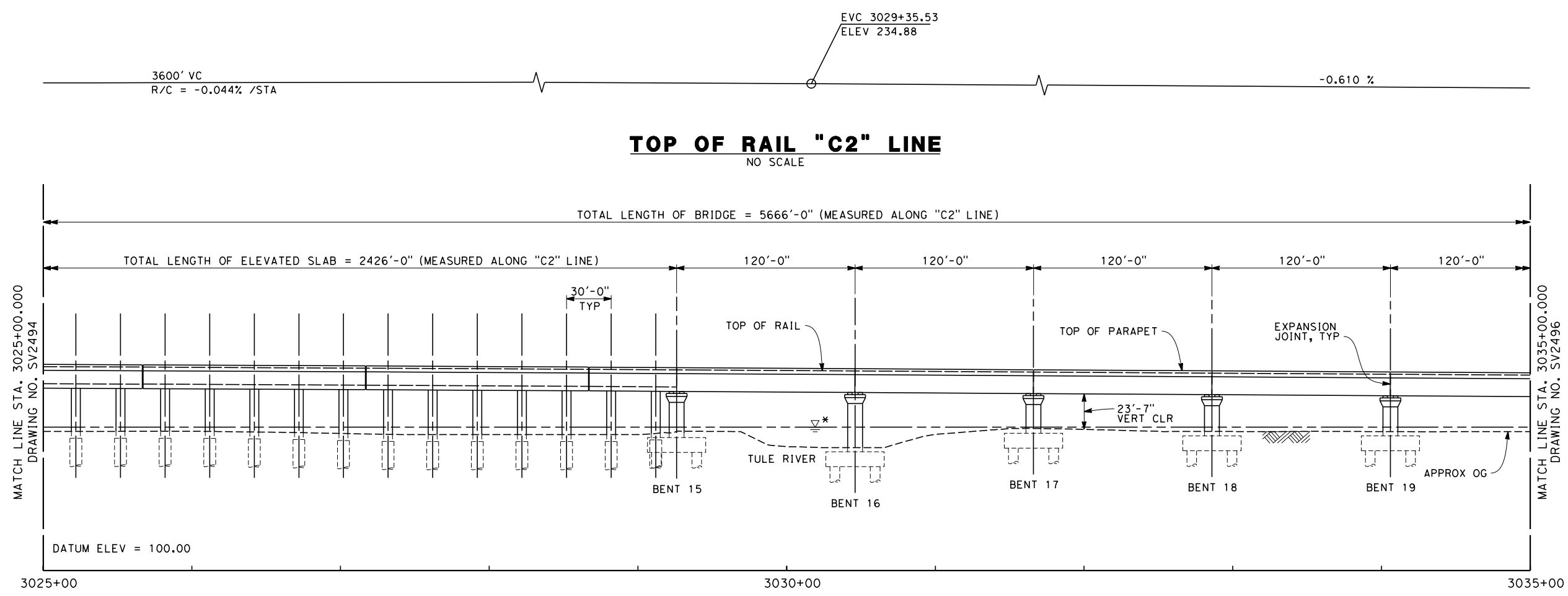
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2494

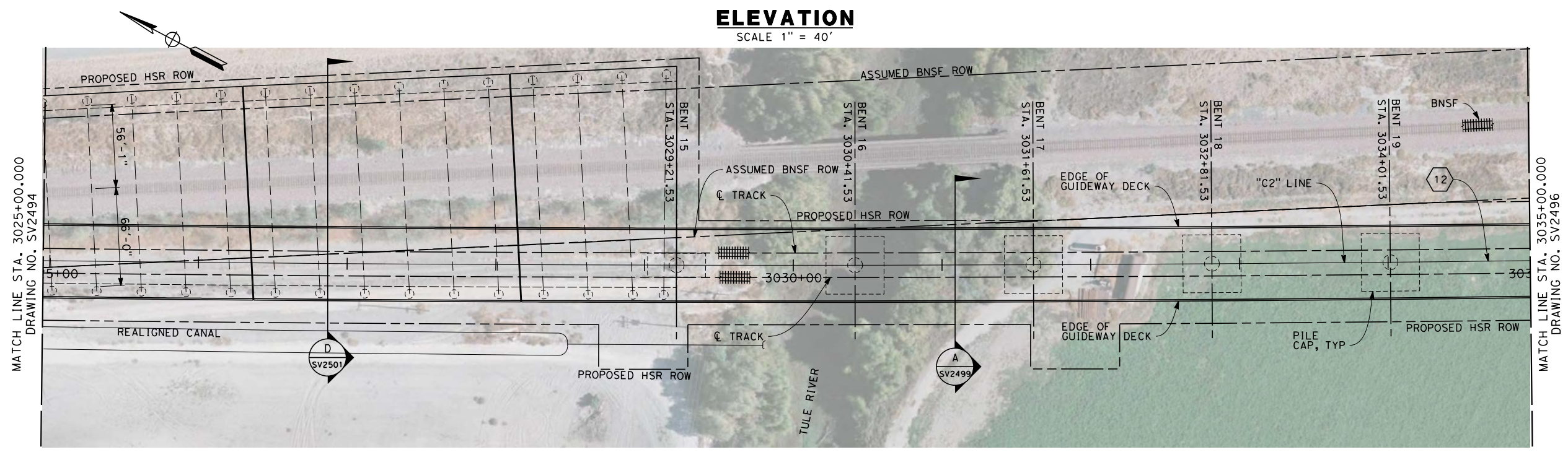
SCALE
AS SHOWN

SHEET NO.
5 OF 11

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

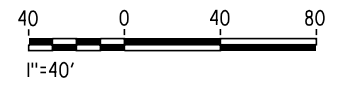
⑩

R = 41000.00'

Δ = 01° 14' 39.4"

T = 1846.0'

L = 9734.5'



c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125238\FB-SV-2495-C2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

CORCORAN BYPASS SUBSECTION

ALIGNMENT C2

STATE ROUTE 43 BNSF VIADUCT

PLAN AND ELEVATION

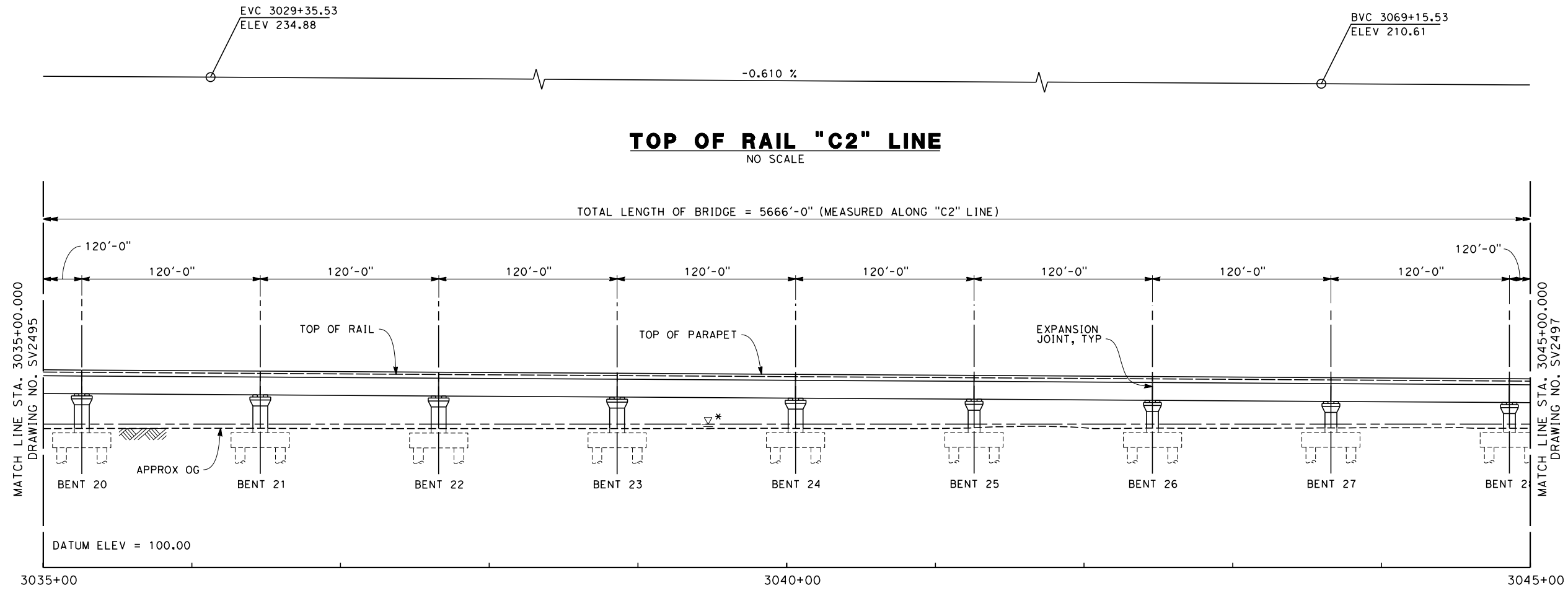
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2495

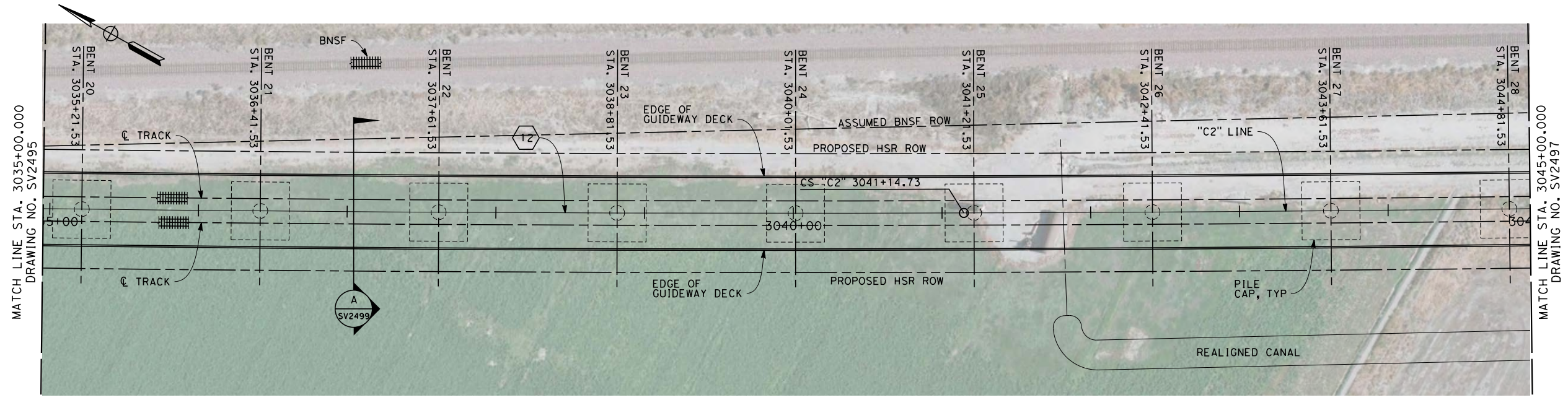
SCALE
AS SHOWN

SHEET NO.
6 OF 11

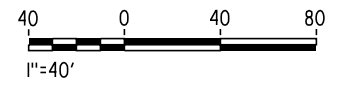
c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125238\FB-SV-2496-C2.dgn 12/28/2013 2:20:05 PM frank.palermo



- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- ⑫
- R = 41000.00'
 $\Delta = 01^\circ 14' 39.4"$
 T = 1846.0'
 L = 9734.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN BYPASS SUBSECTION
 ALIGNMENT C2
 STATE ROUTE 43 BNSF VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2496

SCALE
AS SHOWN

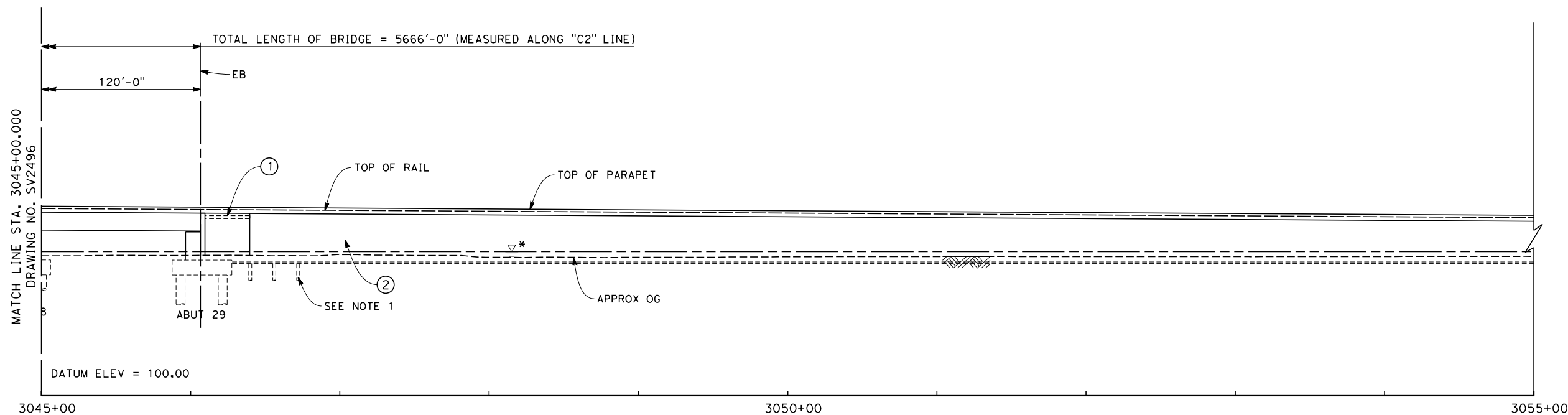
SHEET NO.
7 OF 11

EVC 3029+35.53
ELEV 234.88

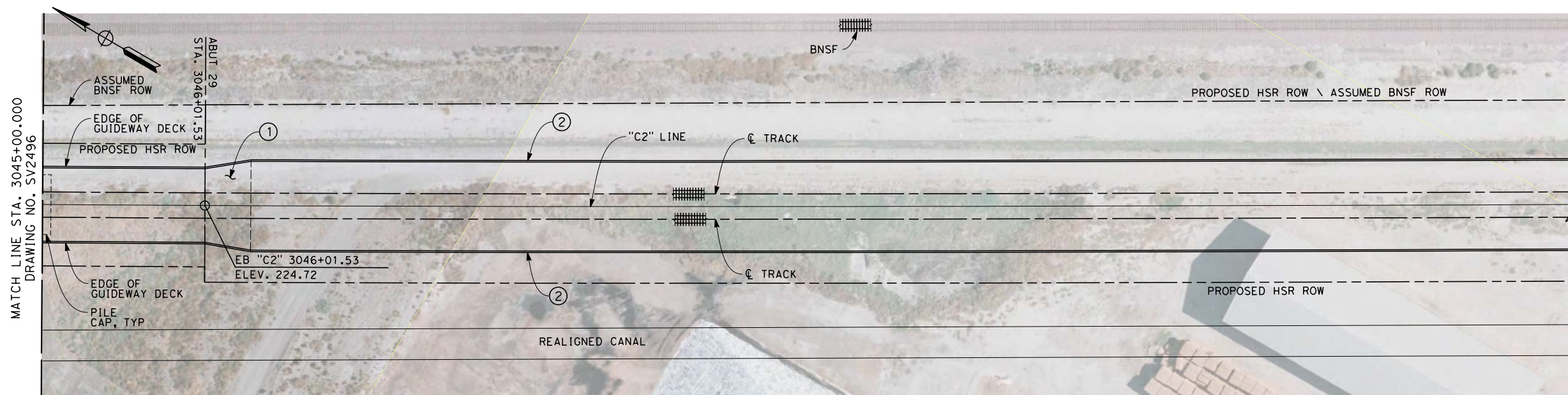
BVC 3069+15.53
ELEV 210.61

-0.610 %

TOP OF RAIL "C2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



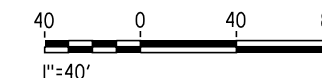
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



andrew.armstrong 2/12/2013 11:19:44 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2497-C2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

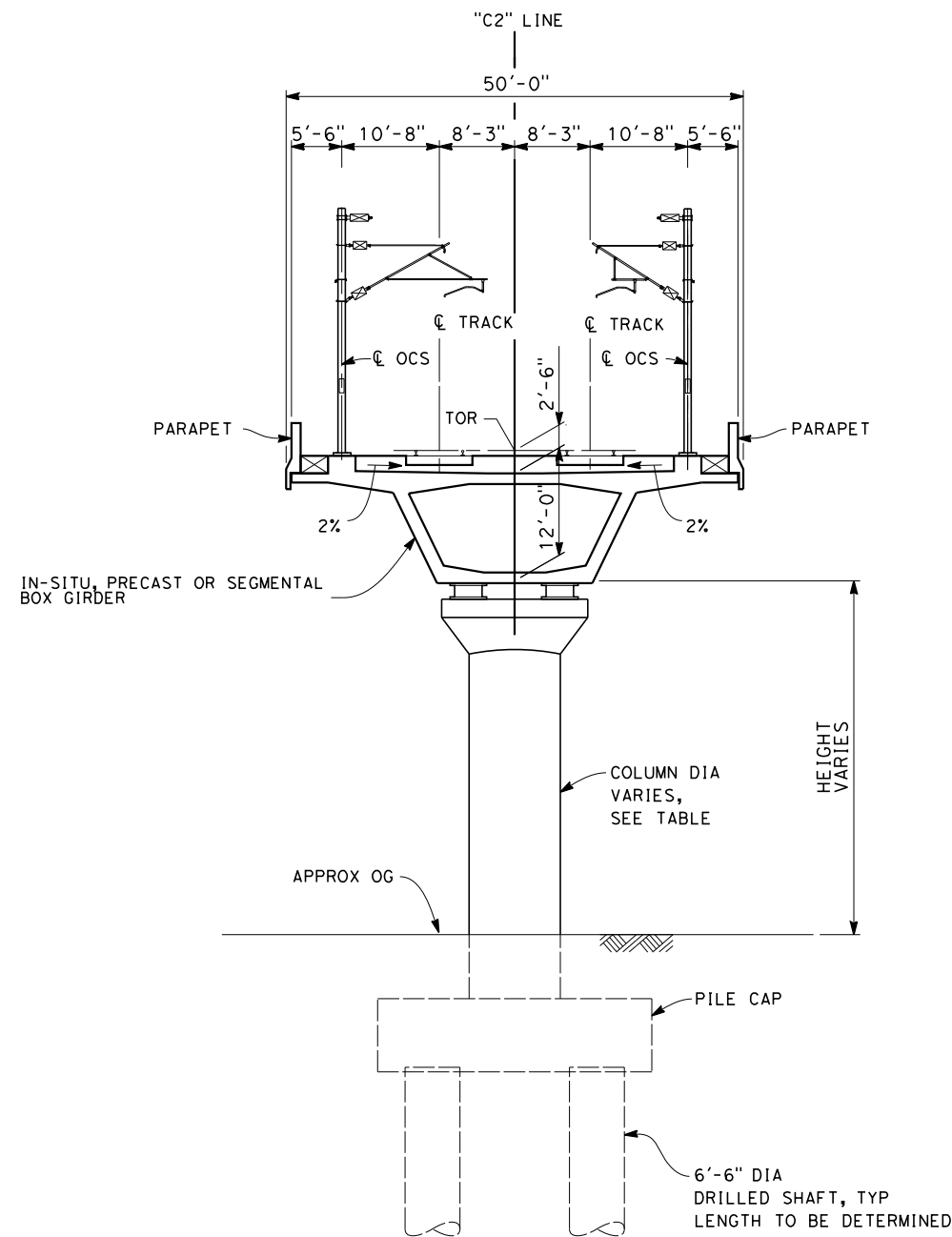
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION

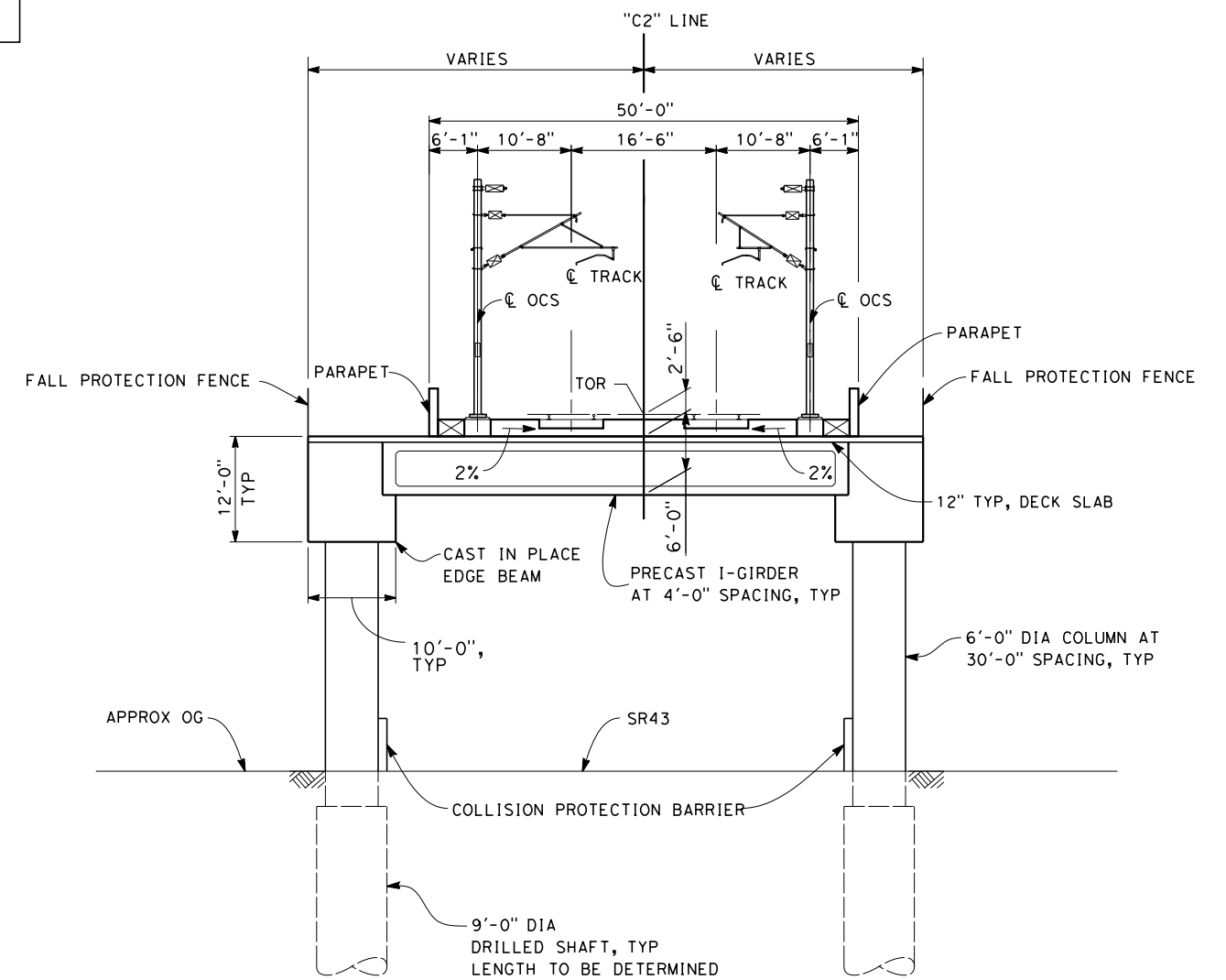
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2497
SCALE
AS SHOWN
SHEET NO.
8 OF 11

COLUMN DIAMETERS	
COLUMN HEIGHT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION A

SCALE: 1" = 10'
 STA 2989+40 THROUGH 3005+00
 STA 3029+26 THROUGH 3046+06

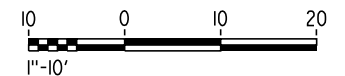


SECTION B

SCALE: 1" = 10'
 STA 3005+00 THROUGH 3009+00

NOTES:

- PIER PROTECTION IS REQUIRED WHERE COLUMN FACE IS CLOSER THAN 54 FT FROM ROADWAY.



c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2499-C2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY Y. REN
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

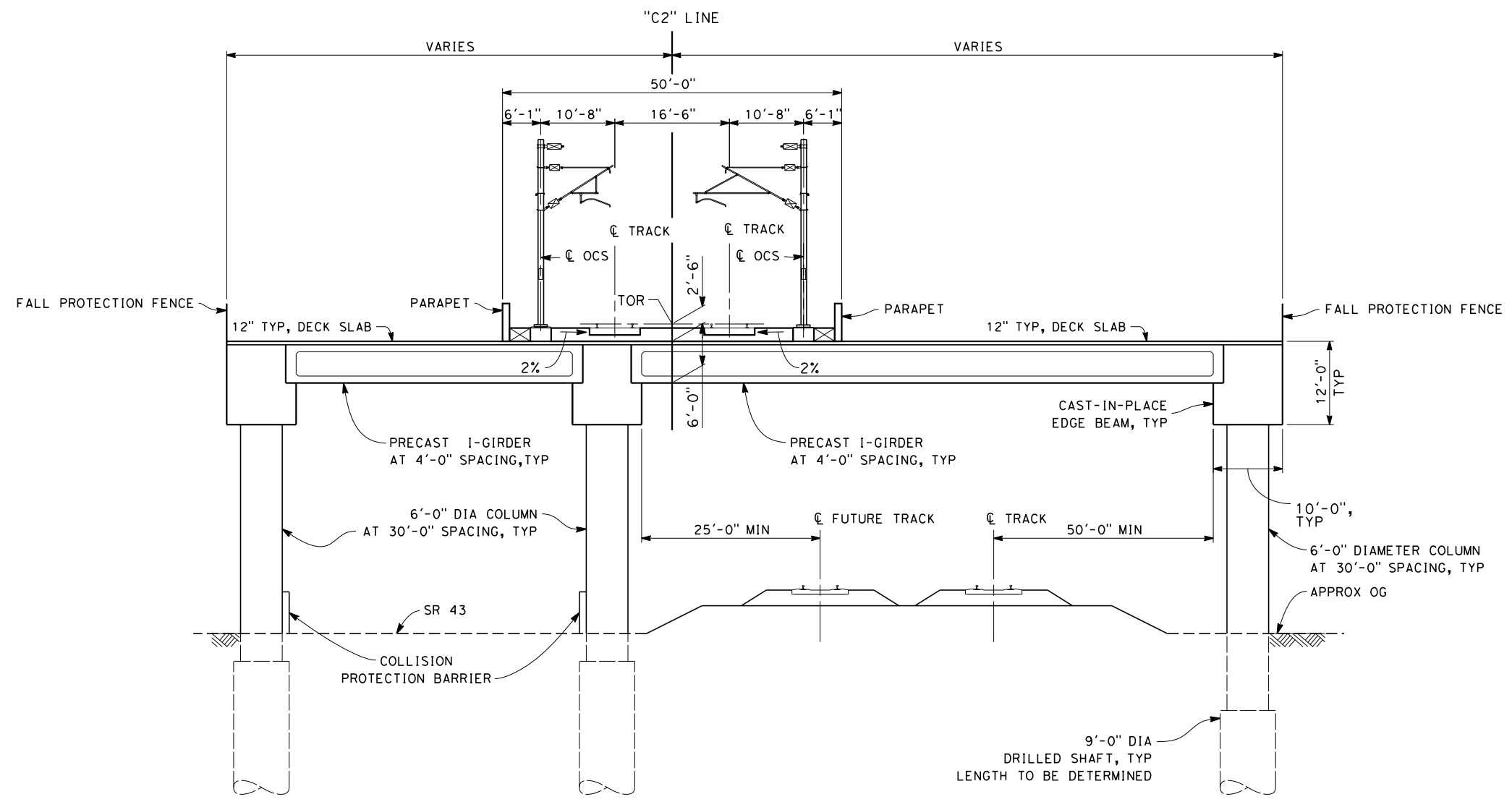
**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 CORCORAN BYPASS SUBSECTION
 ALIGNMENT C2
 STATE ROUTE 43 BNSF VIADUCT
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2499
SCALE AS SHOWN
SHEET NO. 9 OF 11

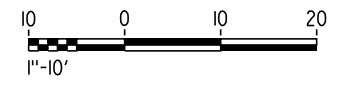
andrew.armstrong 2/12/2013 11:19:54 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2500-C2.dgn



SECTION C
SCALE: 1" = 10'

STA 3009+00 THROUGH 3015+20

- NOTES:
- PIER PROTECTION IS REQUIRED WHERE COLUMN FACE IS CLOSER THAT 54 FT FROM ROADWAY.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
Y. REN
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

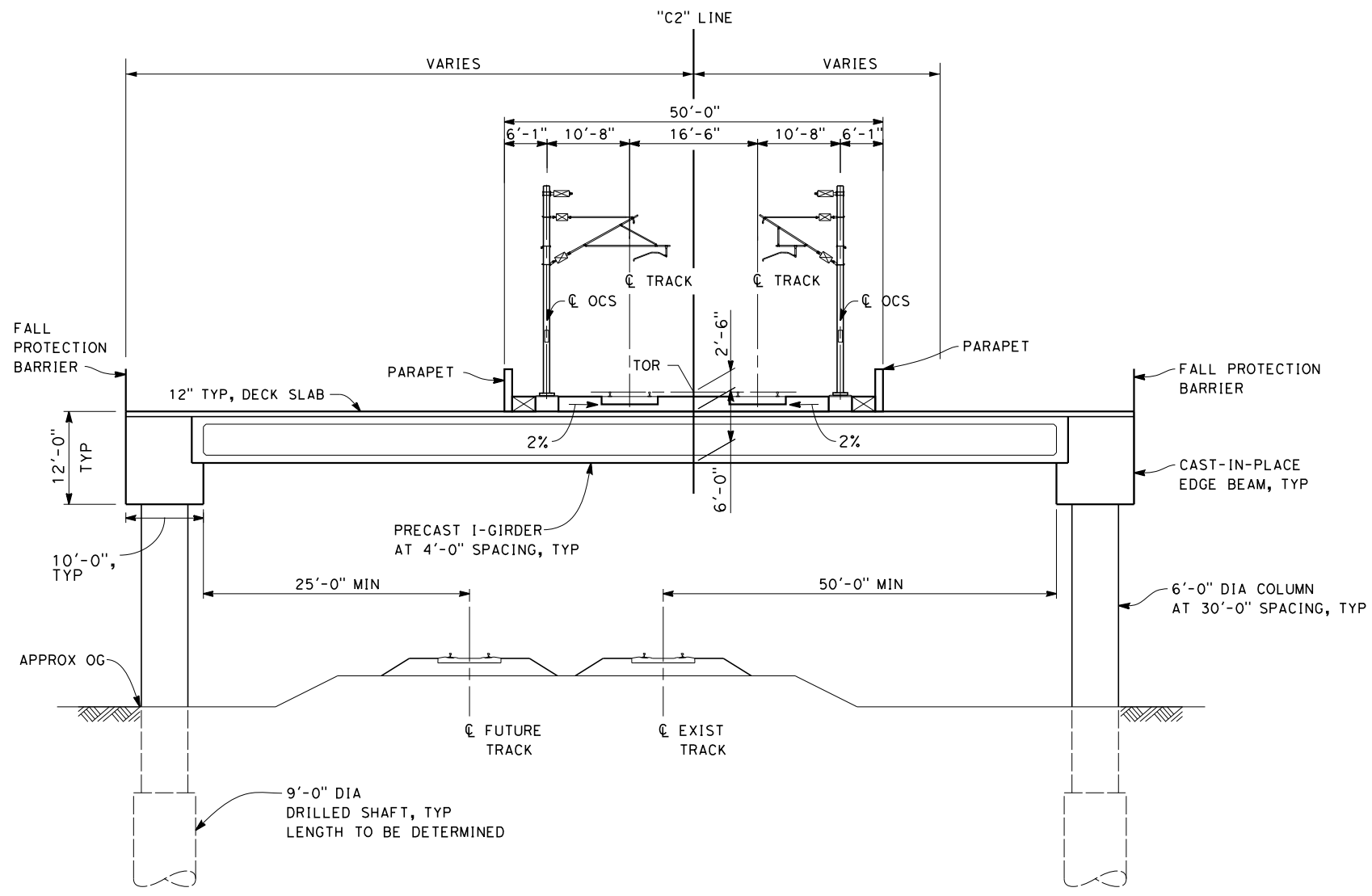
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2500
SCALE
AS SHOWN
SHEET NO.
10 OF 11

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125238\FB-SV-2501-C2.dgn



SECTION D
SCALE: 1" = 10'

STA 3015+20 THROUGH 3029+26



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
Y. REN
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2501
SCALE
AS SHOWN
SHEET NO.
11 OF 11

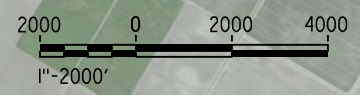
c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2580-C3.dgn



LEGEND

---+---+---+ EXISTING FREIGHT RAILROAD

--- PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
KEY MAP

CONTRACT NO.
HSR 06-0003

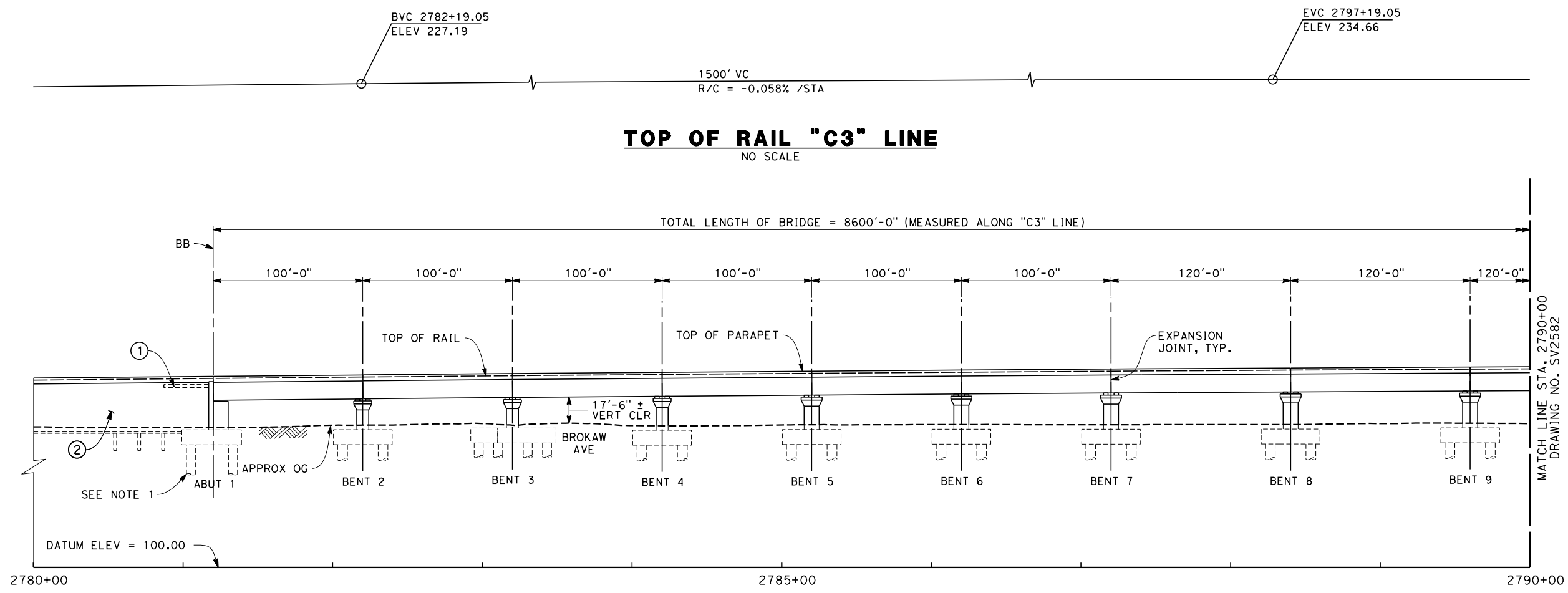
DRAWING NO.
SV2580

SCALE
AS SHOWN

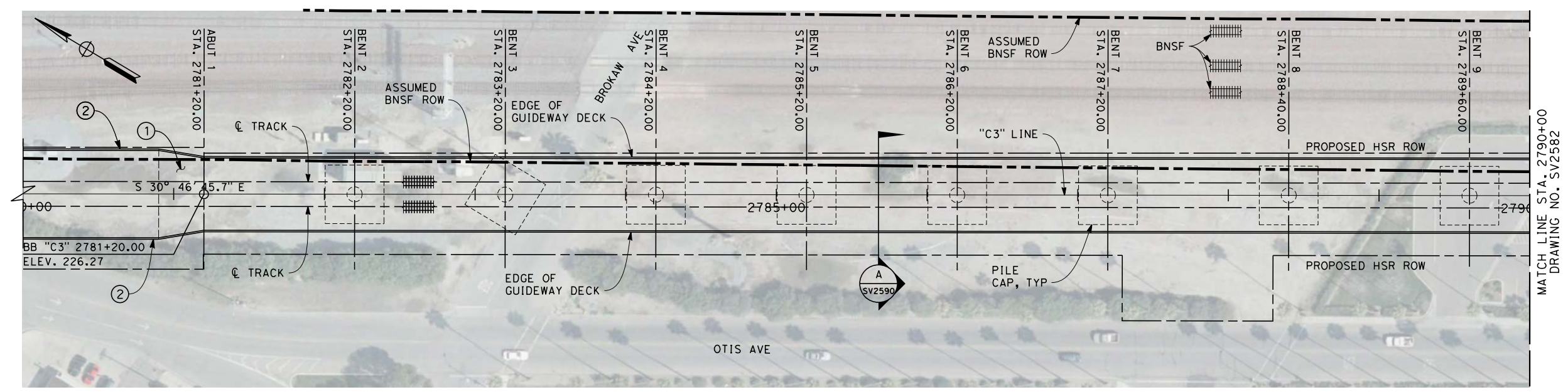
SHEET NO.
1 OF 11

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

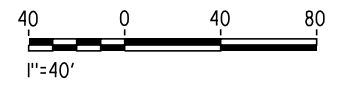
- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'



andrew.armstrong 12/12/2013 11:38:32 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2581-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

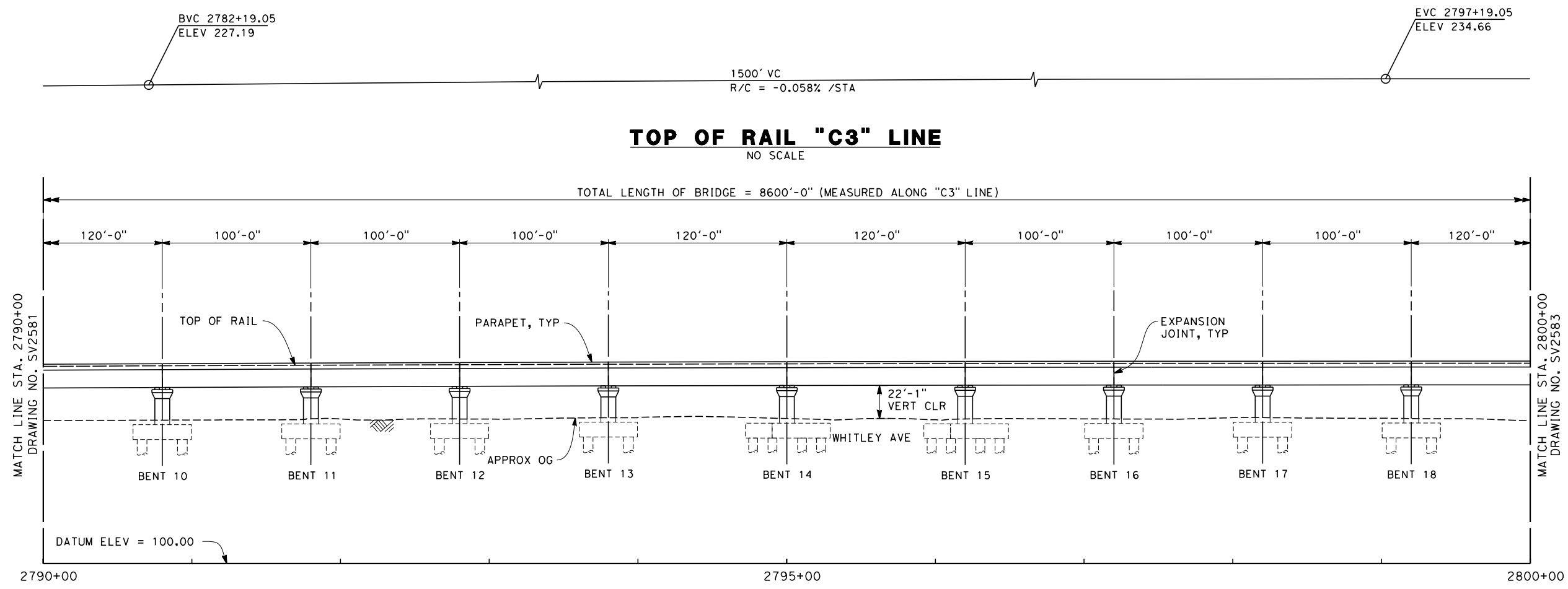
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2581

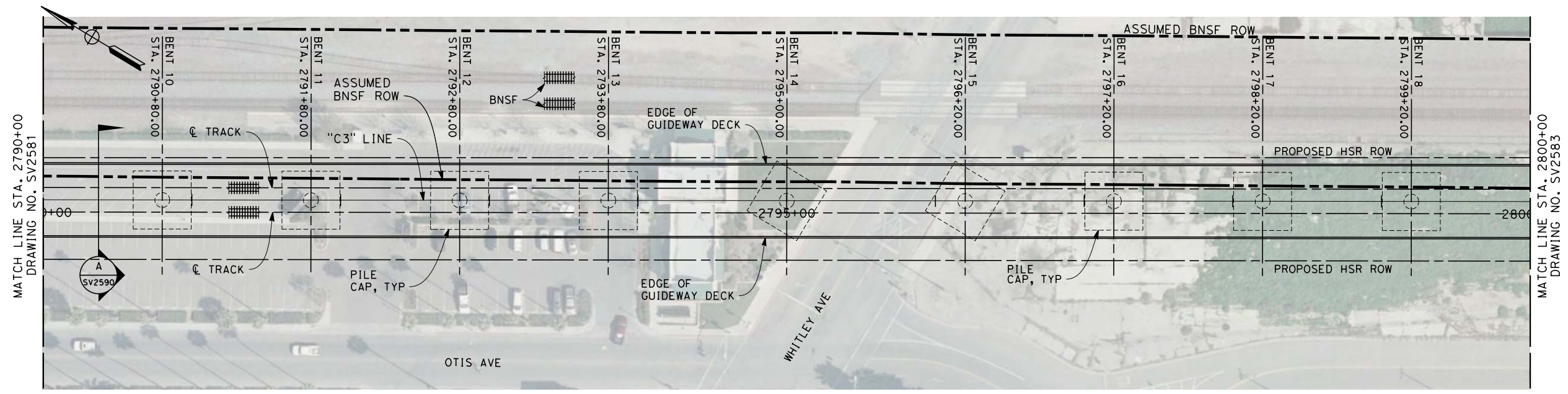
SCALE
AS SHOWN

SHEET NO.
2 OF 11

andrew.armstrong 2/12/2013 11:38:55 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2582-C3.dgn

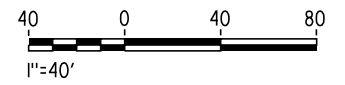


ELEVATION
SCALE 1" = 40'



- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

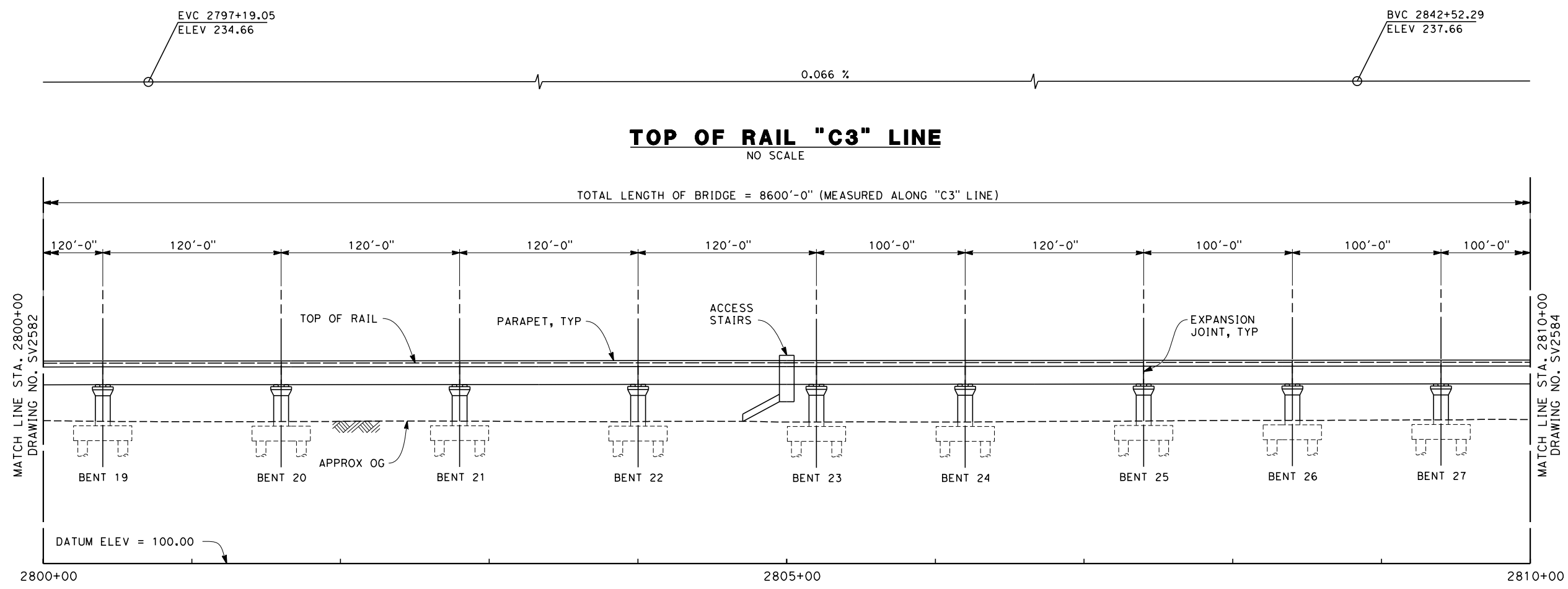
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2582

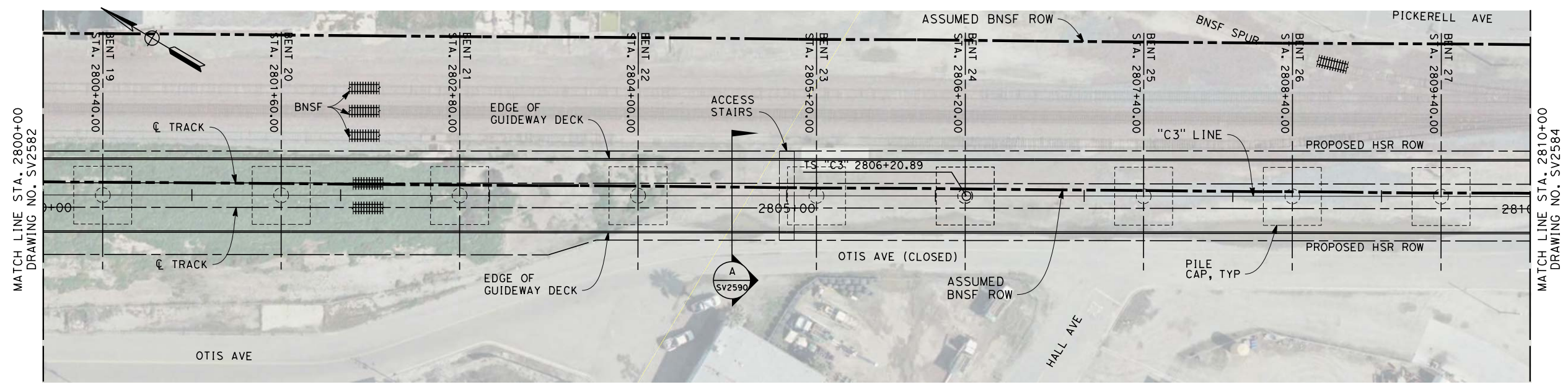
SCALE
AS SHOWN

SHEET NO.
3 OF 11

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2583-C3.dgn



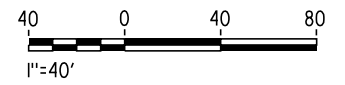
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

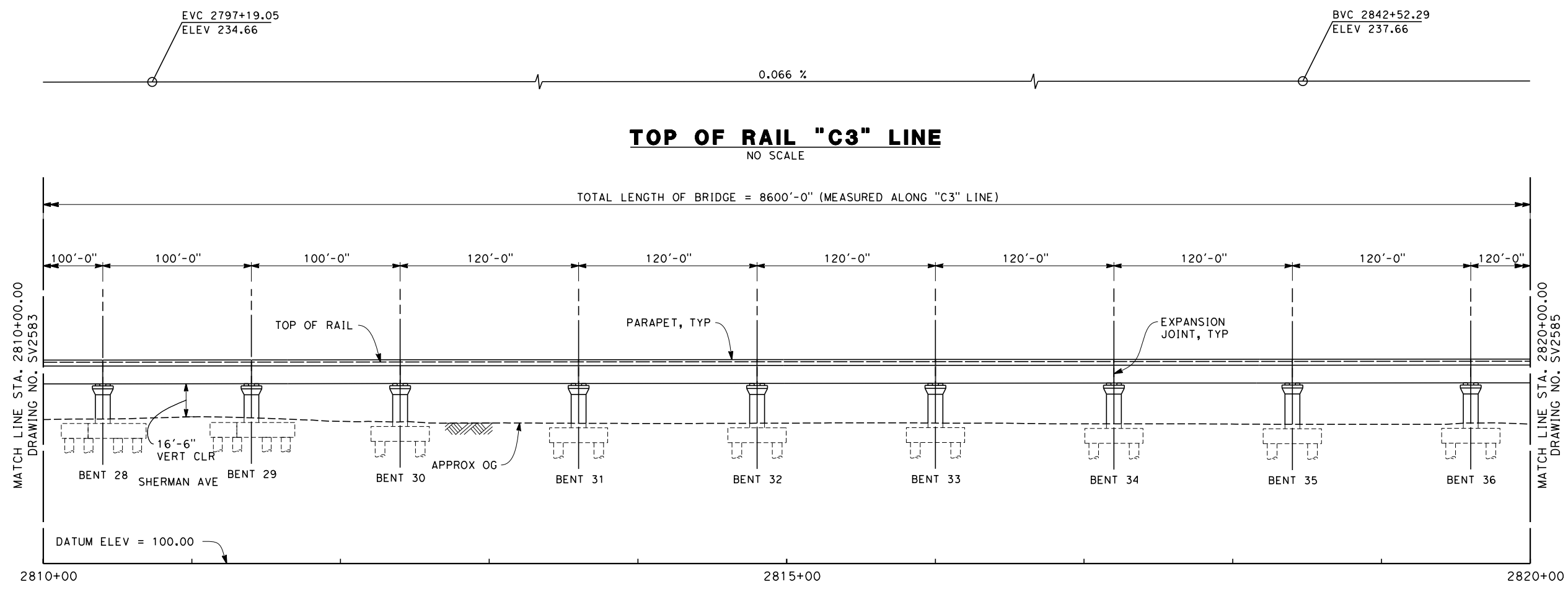
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2583

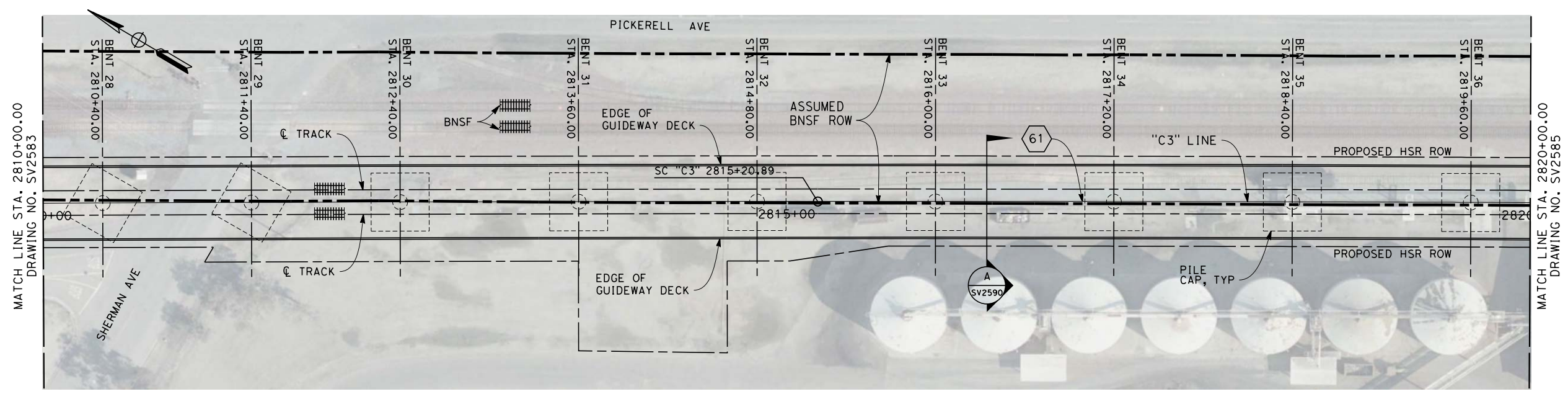
SCALE
AS SHOWN

SHEET NO.
4 OF 11

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

①

R = 116500.0'

Δ = 0° 54' 02.5"

T = 915.7'

L = 1831.4'

Scale: 40 0 40 80
1"=40'

andrew.armstrong 2/12/2013 11:39:39 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2584-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

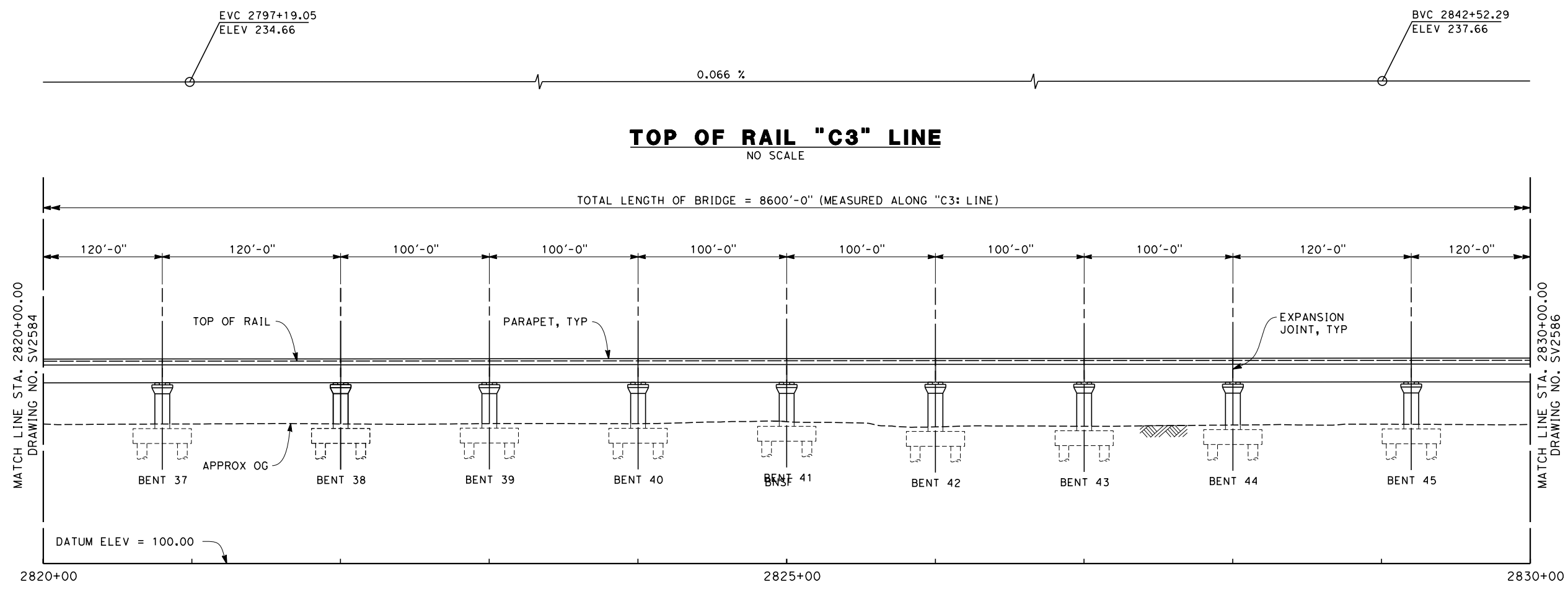
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2584

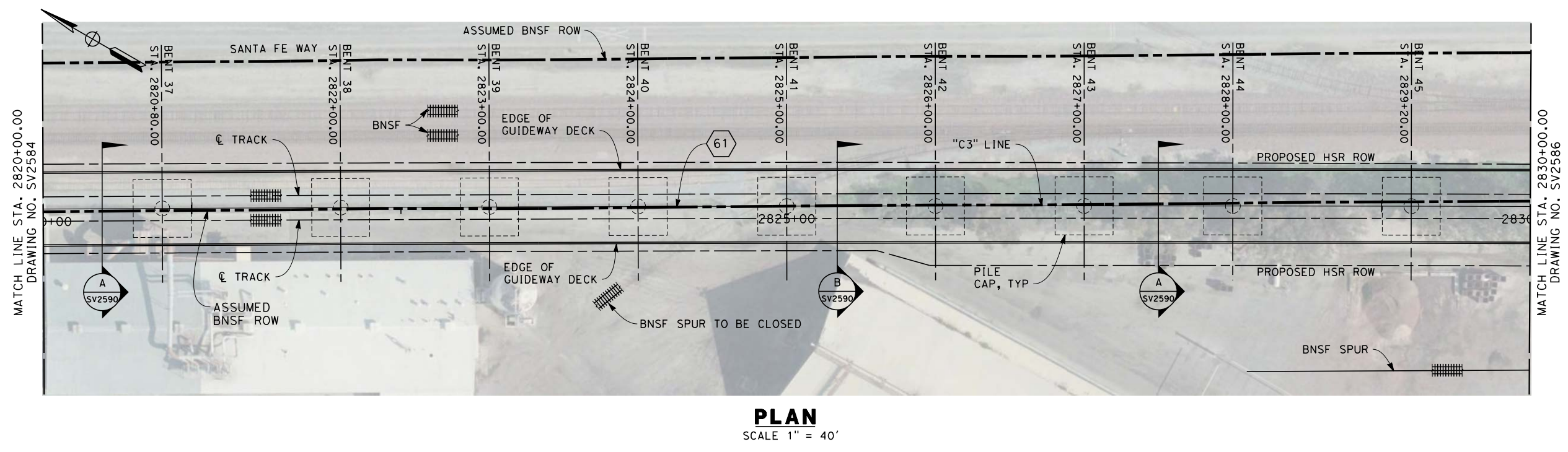
SCALE
AS SHOWN

SHEET NO.
5 OF 11

andrew.armstrong 2/12/2013 11:40:05 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2585-C3.dgn



- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- ①
R = 116500.0'
Δ = 0° 54' 02.5"
T = 915.7'
L = 1831.4'
- 40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2585

SCALE
AS SHOWN

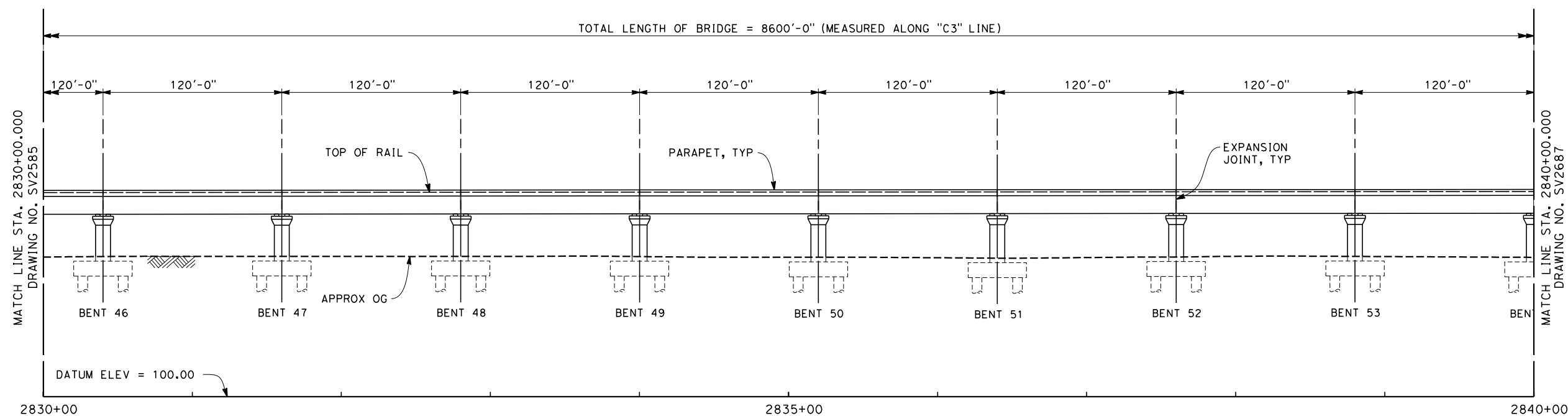
SHEET NO.
6 OF 11

EVC 2797+19.05
ELEV 234.66

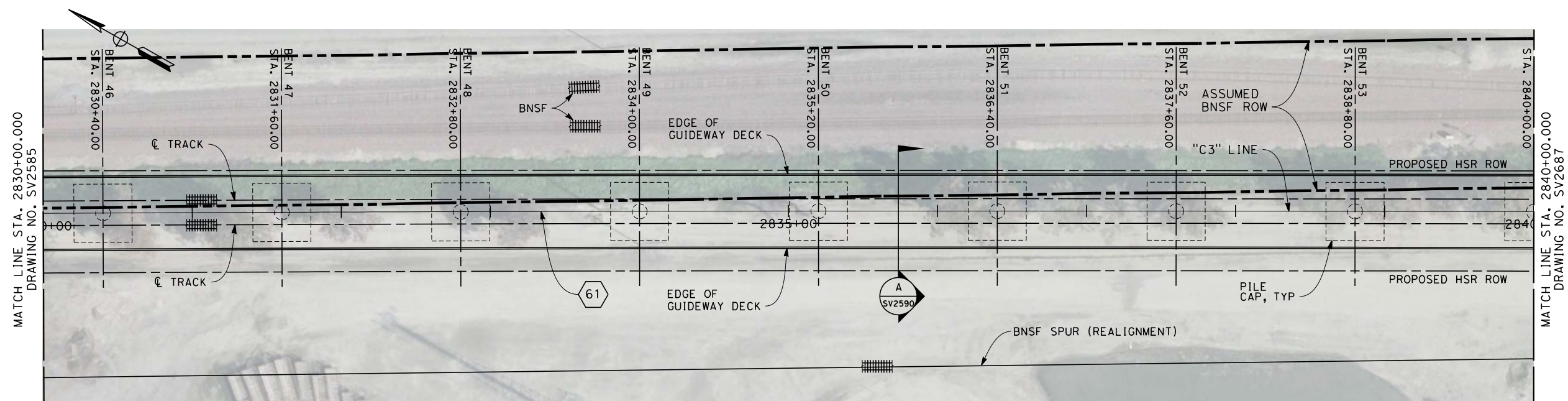
BVC 2842+52.29
ELEV 237.66

0.066 %

TOP OF RAIL "C3" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

61

R = 116500.0'

Δ = 0° 54' 02.5"

T = 915.7'

L = 1831.4'

40 0 40 80
1"=40'

andrew.armstrong 2/12/2013 11:40:48 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2586-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2586

SCALE
AS SHOWN

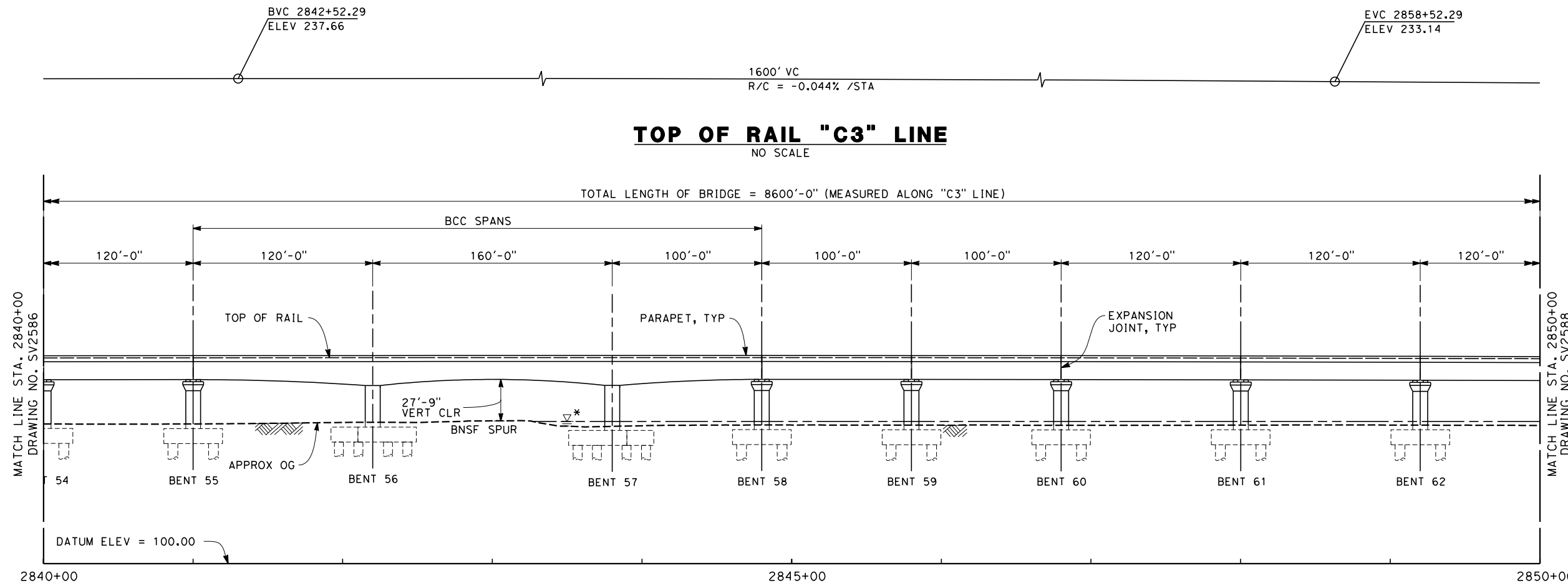
SHEET NO.
7 OF 11

NOTES

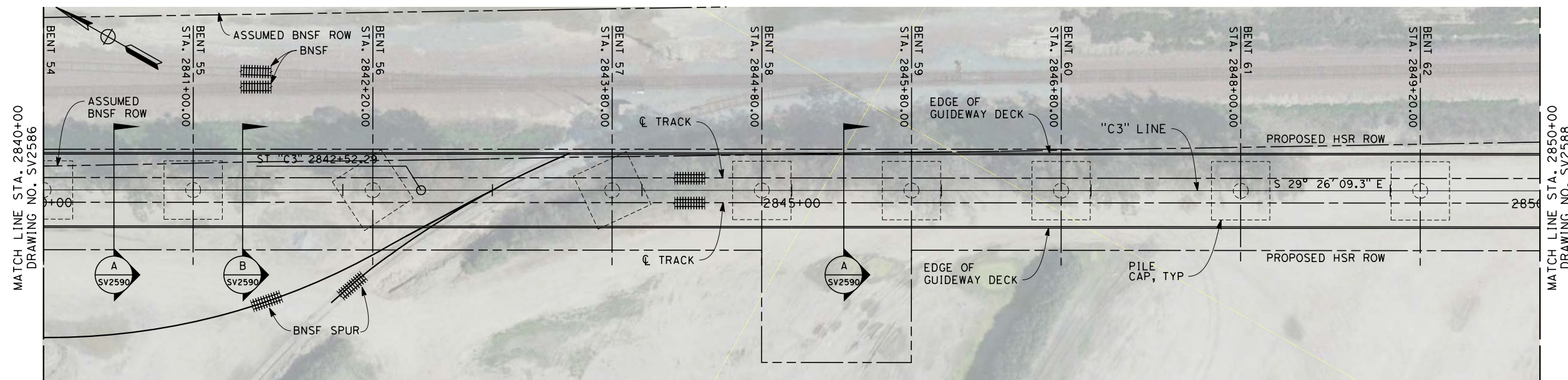
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

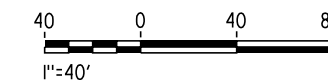
- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'



c:\pwworking\hmm\external\frank.palermo01-ar.com\d0125237\FB-SV-2587-C3.dgn 12/28/2013 2:12:51 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
F. PALERMO
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 CORCORAN SUBSECTION
 ALIGNMENT C3
 BOSWELL SPUR VIADUCT
 PLAN AND ELEVATION

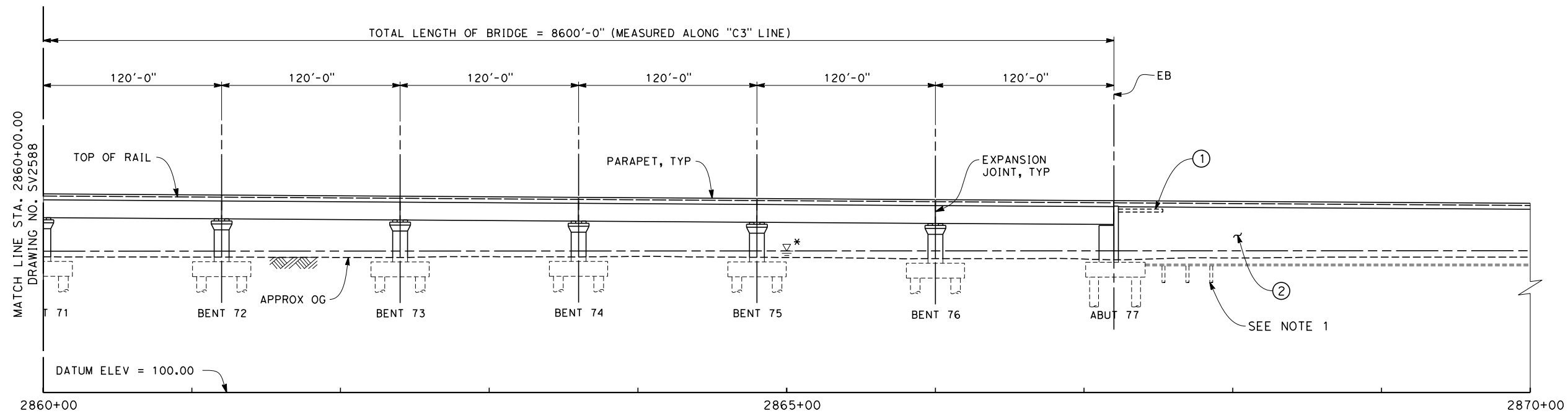
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2587
 SCALE
AS SHOWN
 SHEET NO.
8 OF 11

EVC 2858+52.29
ELEV 233.14

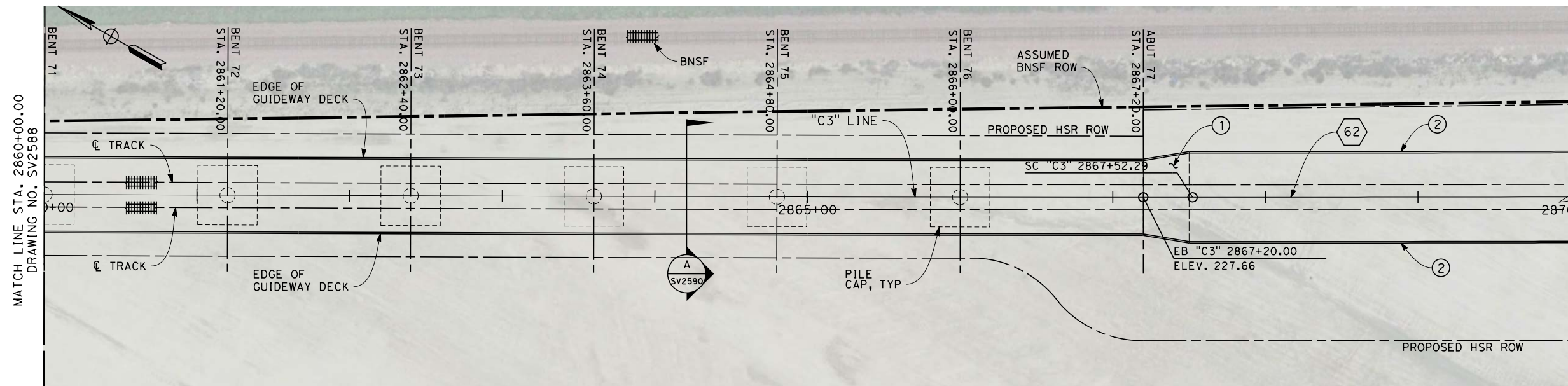
BVC 2897+18.31
ELEV 208.73

-0.631 %

TOP OF RAIL "C3" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⬡ 62
R = 125000.0'
Δ = 0° 32' 04.1"
T = 583.0'
L = 1166.0'



12/28/2013 1:44:16 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125237\FB-SV-2589-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

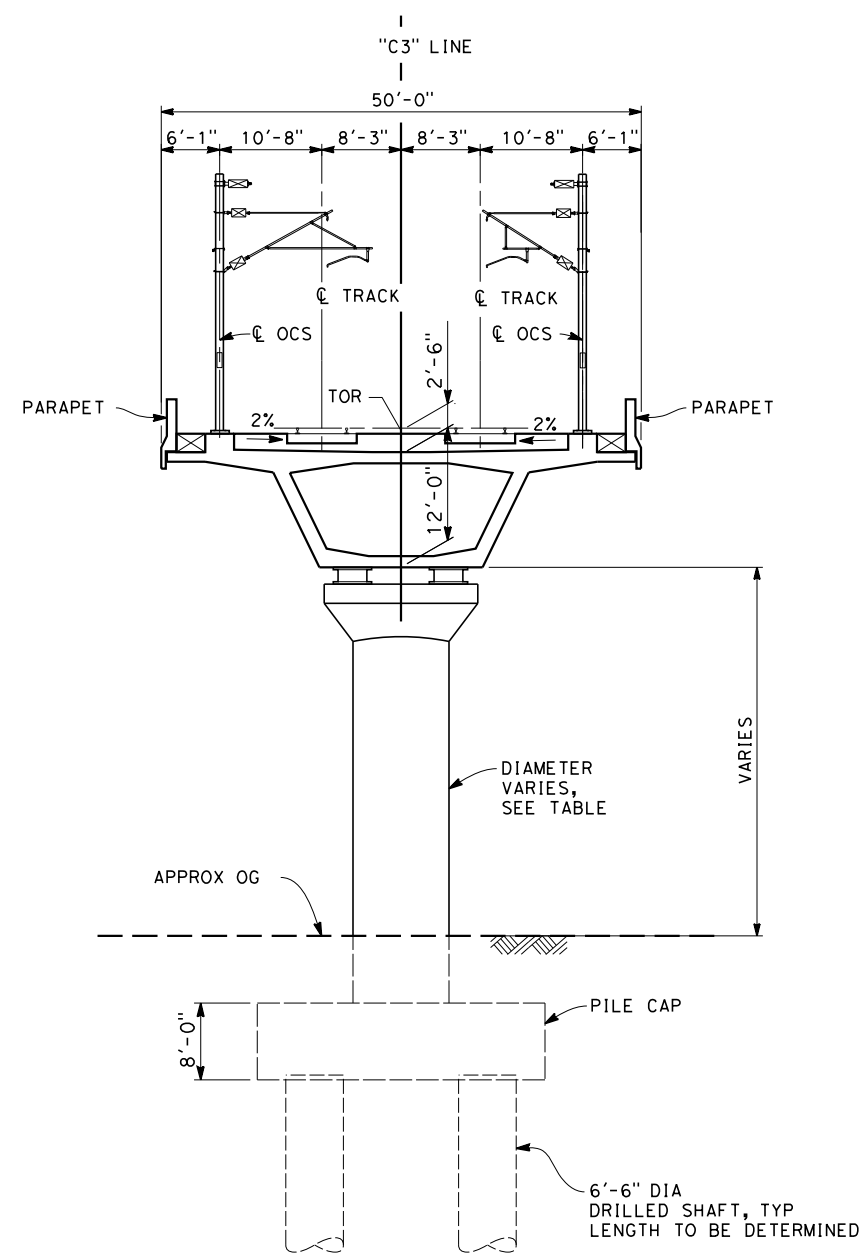
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
CORCORAN SUBSECTION
ALIGNMENT C3
BOSWELL SPUR VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2589
SCALE
AS SHOWN
SHEET NO.
10 OF 11

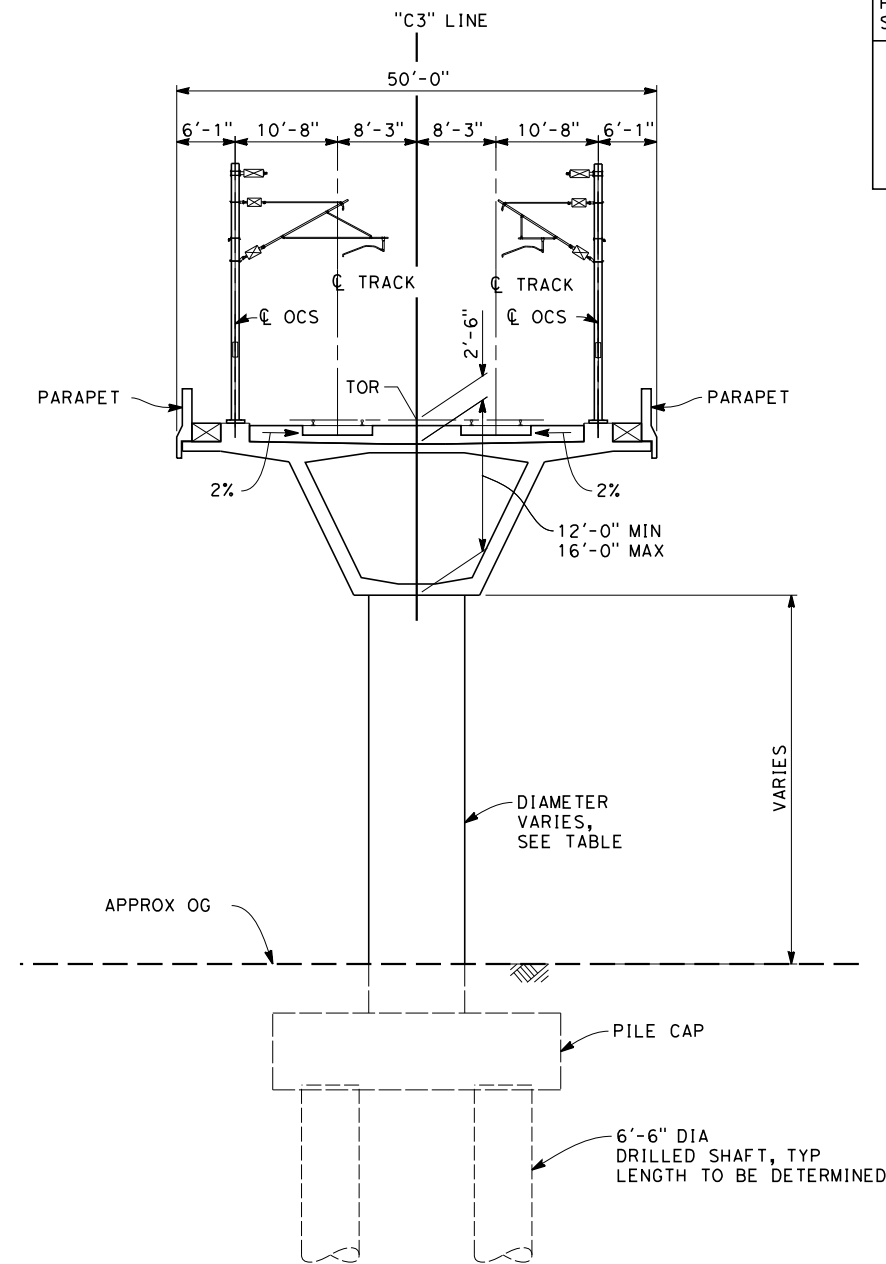
COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION A

SCALE: 1" = 10'

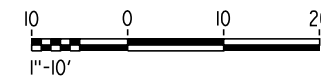
STA 2781+20 THROUGH 2823+00
 STA 2827+00 THROUGH 2841+00
 STA 2844+80 THROUGH 2867+20



SECTION B

SCALE: 1" = 10'

STA 2823+00 THROUGH 2827+00
 STA 2841+00 THROUGH 2844+80



andrew.armstrong 2/12/2013 11:42:48 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2590-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

CORCORAN SUBSECTION
 ALIGNMENT C3
 BOSWELL SPUR VIADUCT
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2590
SCALE AS SHOWN
SHEET NO. 11 OF 11

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2595-C3.dgn



LEGEND

- EXISTING FREIGHT RAILROAD
- PROPOSED CHST

2000 0 2000 4000
1"=2000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
F. PALERMO

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

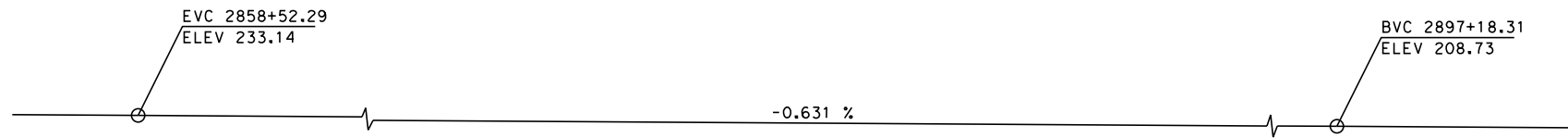
CORCORAN SUBSECTION
ALIGNMENT C3
SWEET CANAL BRIDGE
KEY MAP

CONTRACT NO.
HSR 06-0003

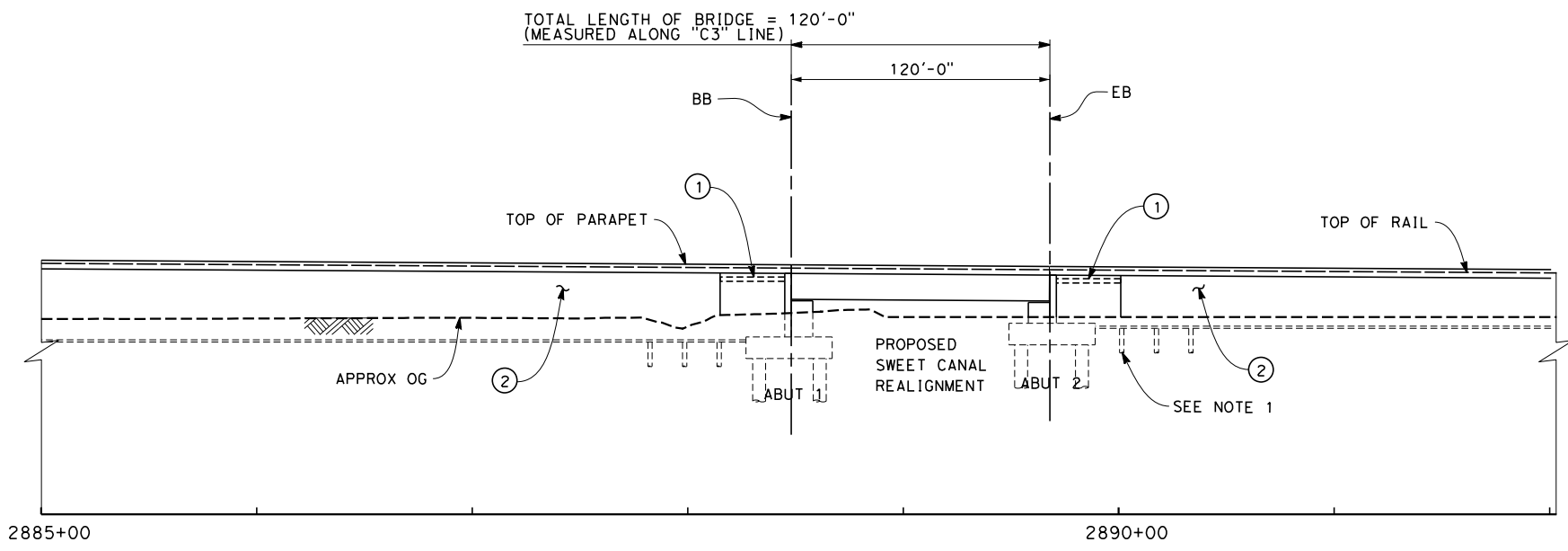
DRAWING NO.
SV2595

SCALE
AS SHOWN

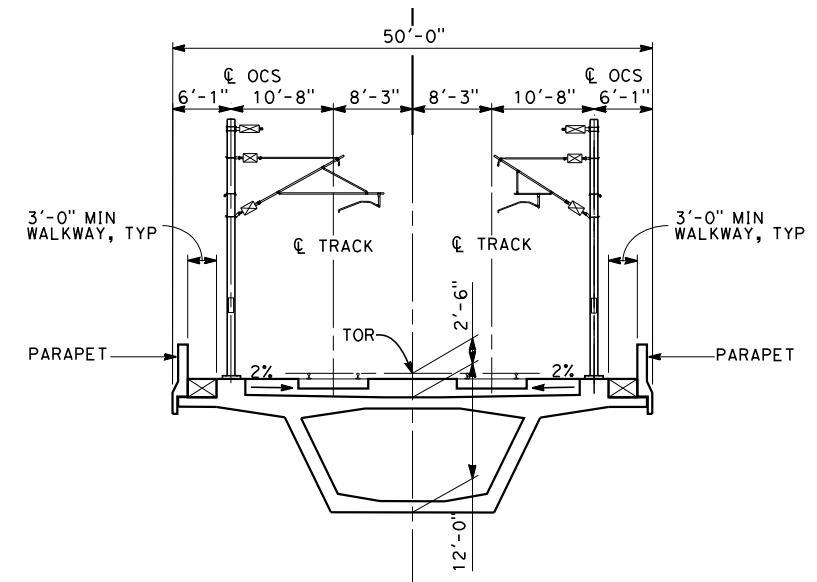
SHEET NO.
1 OF 2



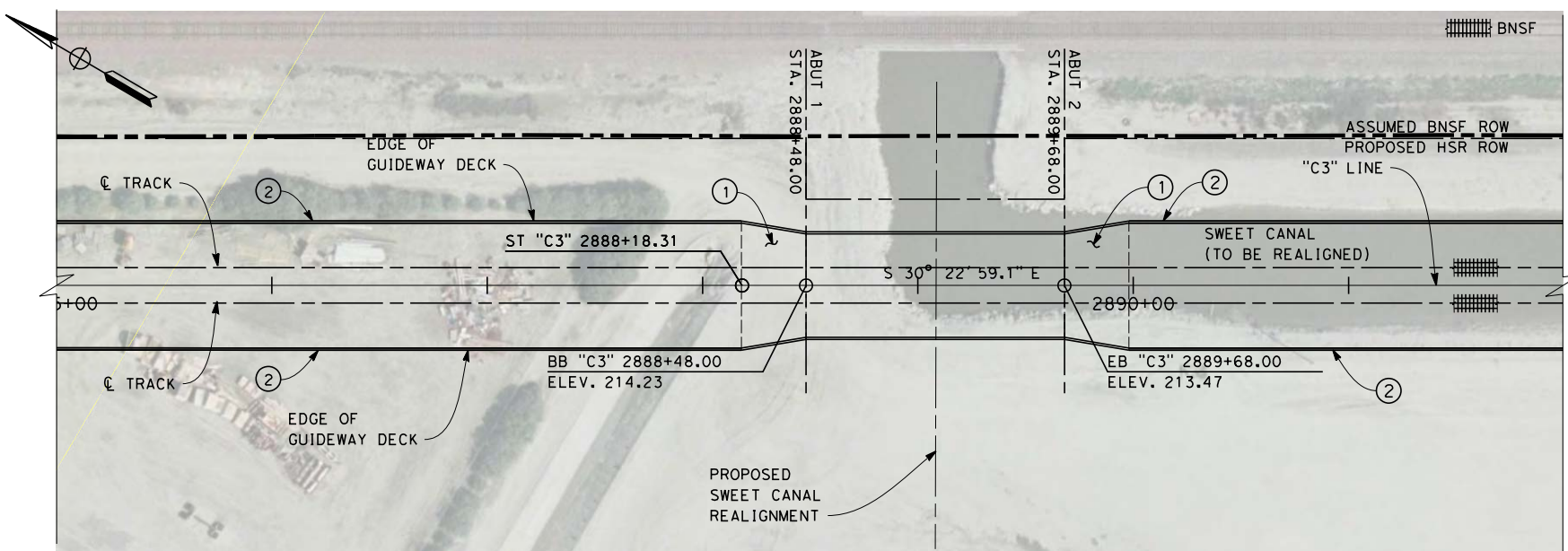
TOP OF RAIL "C3" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



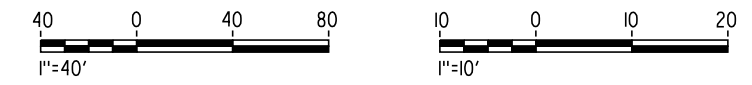
TYPICAL SECTION
SCALE: 1"=10'



PLAN
SCALE 1" = 40'

- NOTES:
1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
 2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALLS
 - ▤▤▤▤▤ INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



andrew.armstrong 2/12/2013 11:43:45 AM c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2596-C3.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
CORCORAN SUBSECTION
ALIGNMENT C3
SWEET CANAL BRIDGE
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2596
SCALE
AS SHOWN
SHEET NO.
2 OF 2

c:\pwworking\hmm\external\andrew.armstrong-arup.com\d0125237\FB-SV-2598-C3.dgn



LEGEND

- EXISTING FREIGHT RAILROAD
- PROPOSED CHST

2000 0 2000 4000
1"=2000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SHEIKH
DRAWN BY
J. REILLY
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

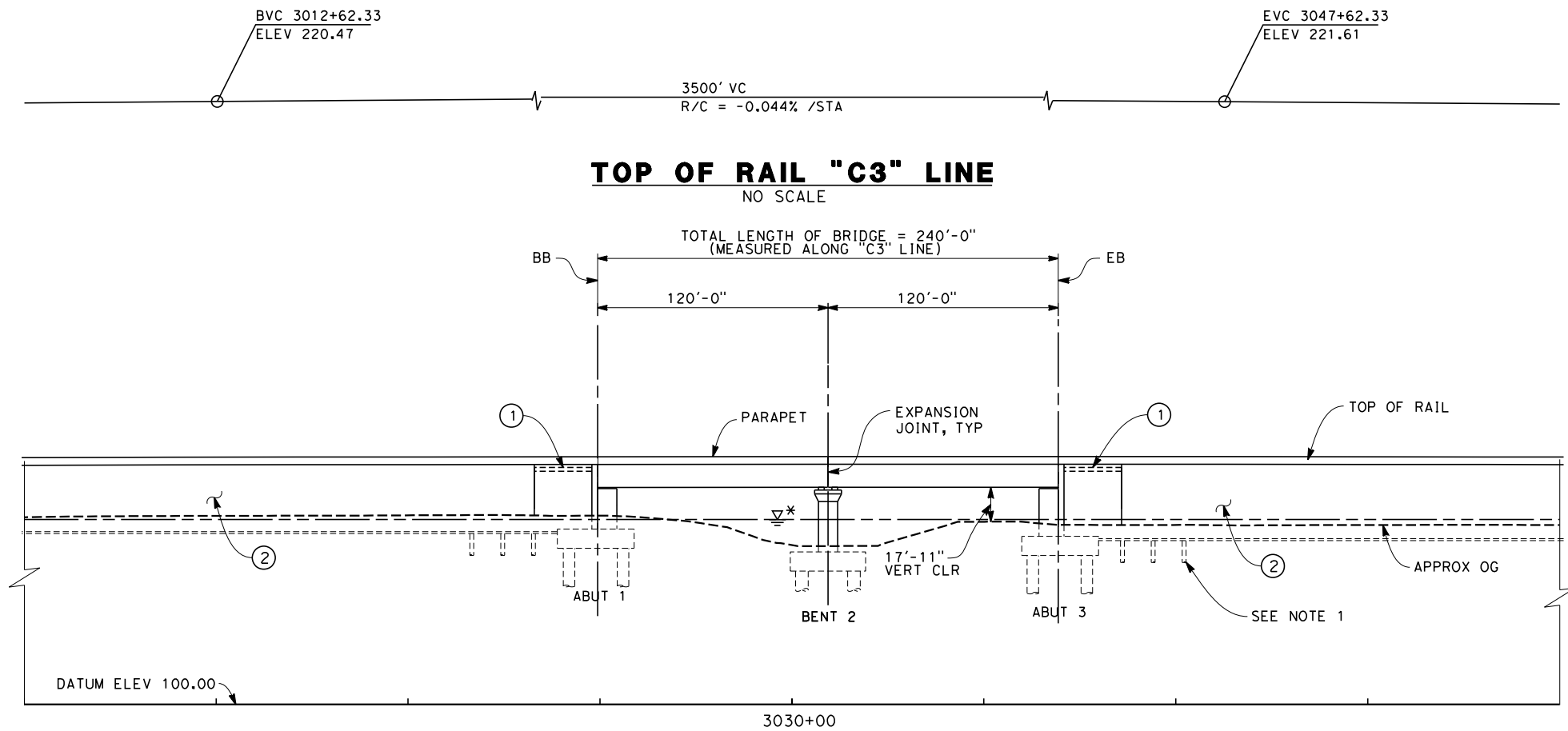
**NOT FOR
CONSTRUCTION**



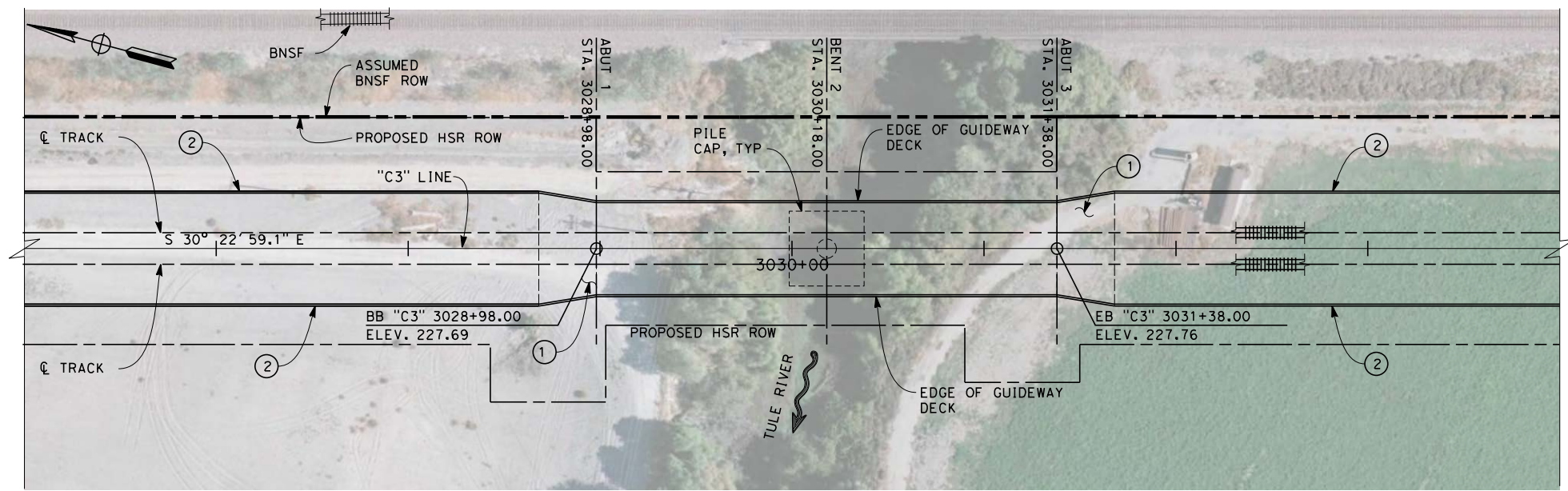
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

CORCORAN SUBSECTION
ALIGNMENT C3
TULE RIVER BRIDGE
KEY MAP

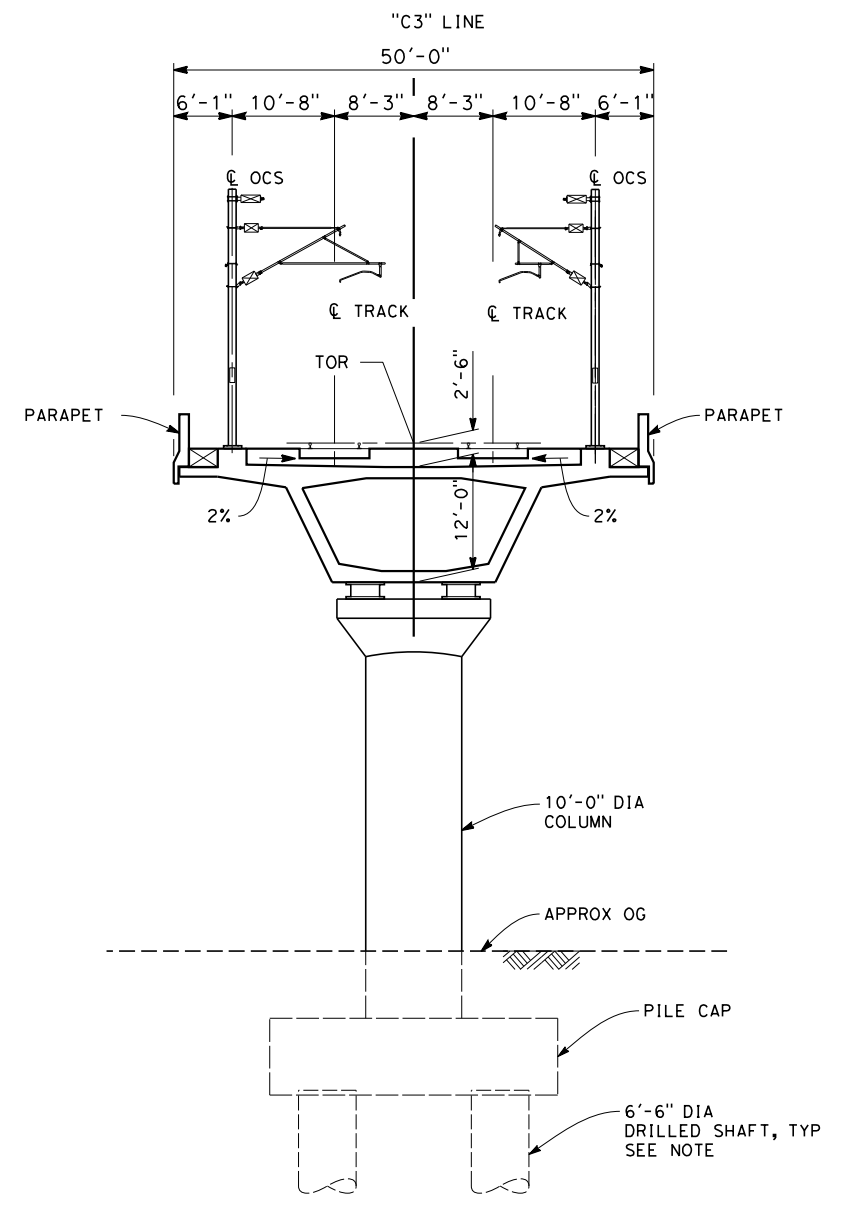
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2598
SCALE
AS SHOWN
SHEET NO.
1 OF 2



ELEVATION
SCALE 1" = 40'

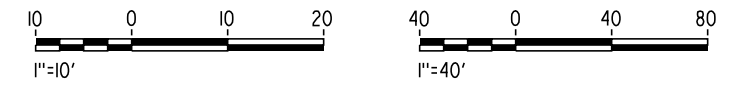


PLAN
SCALE 1" = 40'



TYPICAL SECTION
SCALE: 1" = 10'

- NOTES:
- ALL PILES NOT SHOWN
 - PILE LENGTH TO BE DETERMINED
- LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT"



12/28/2013 1:26:35 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\d0125237\FB-SV-2599-C3.dgn frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
S. SHEIKH

DRAWN BY
J. REILLY

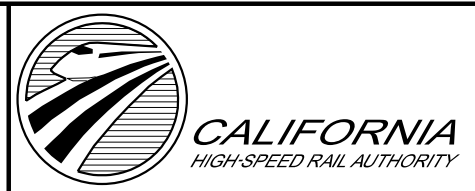
CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

CORCORAN SUBSECTION
ALIGNMENT C3
TULE RIVER BRIDGE
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2599

SCALE
AS SHOWN

SHEET NO.
2 OF 2