

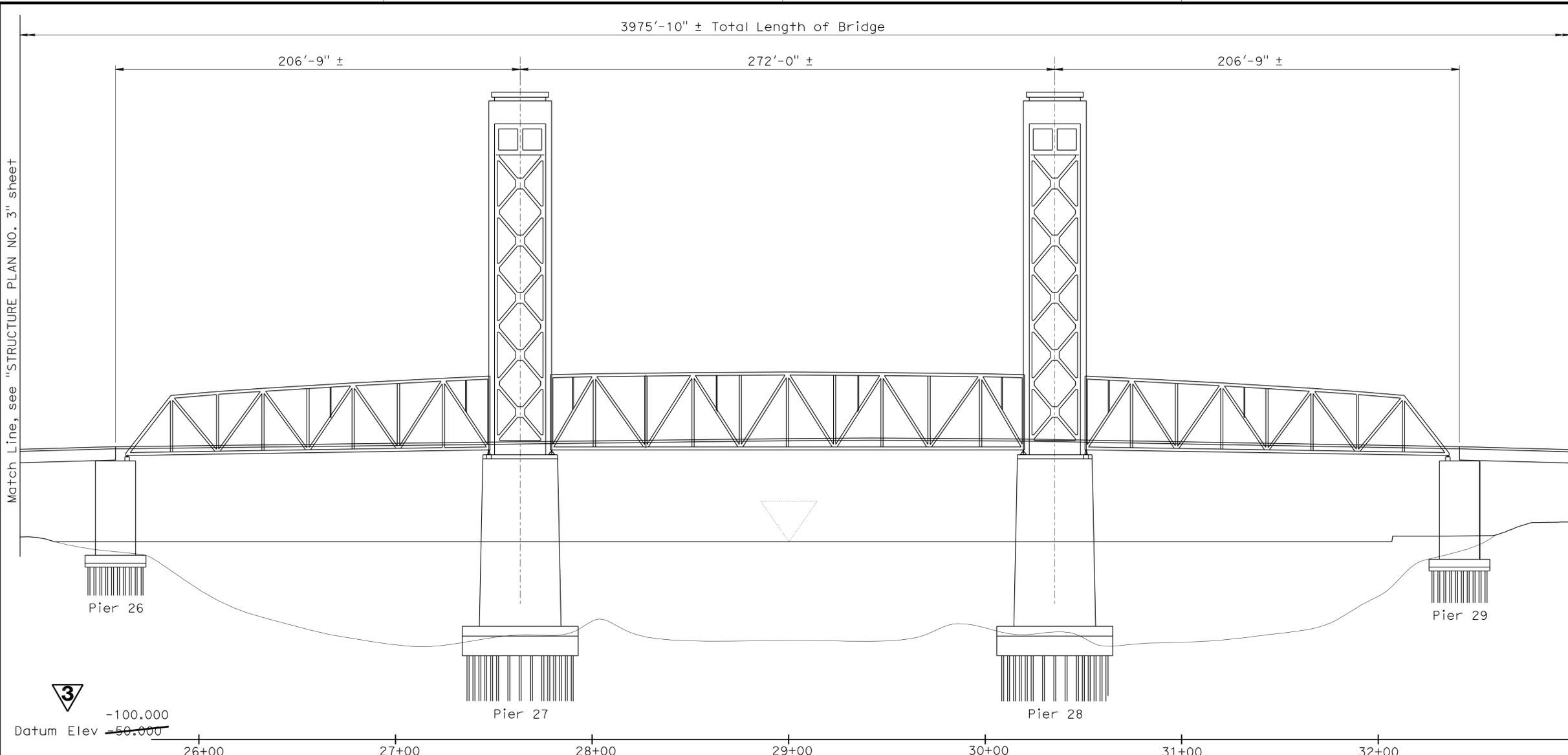
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	451	1003

FOUED ZAYATI 05-24-10
 REGISTERED CIVIL ENGINEER DATE

10-11-10
 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

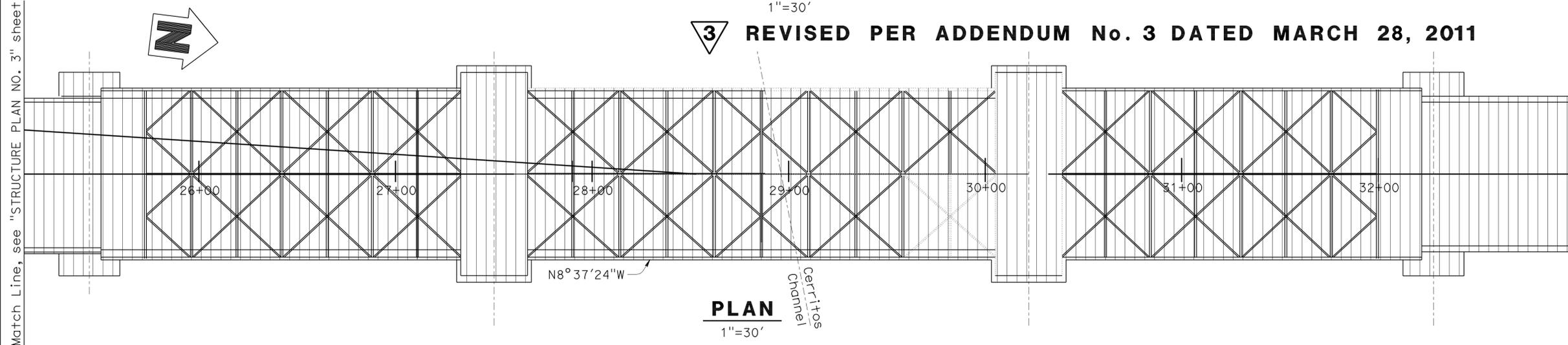
REGISTERED PROFESSIONAL ENGINEER
FOUED ZAYATI
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



ELEVATION

1"=30'

$\triangle 3$ REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011



PLAN

1"=30'

DESIGN	BY F. Zayati	CHECKED R. Bromenschenkel
DETAILS	BY T. Nguyen	CHECKED F. Zayati
QUANTITIES	BY F. Zayati	CHECKED R. Bromenschenkel

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

BRIDGE NO. 53-2618
 POST MILE 3.5/4.5

SCHUYLER HEIM BRIDGE REMOVAL
STRUCTURE PLAN NO. 4



07-17-10	05-22-10	07-16-10							
----------	----------	----------	--	--	--	--	--	--	--

Match Line, see "STRUCTURE PLAN NO. 3" sheet

Match Line, see "STRUCTURE PLAN NO. 5" sheet

LEGEND:

- Stage 2 Bridge Removal
- Stage 3 Bridge Removal

USERNAME => FPMOFT In DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:25

GENERAL NOTES

LOAD AND RESISTANCE FACTOR DESIGN

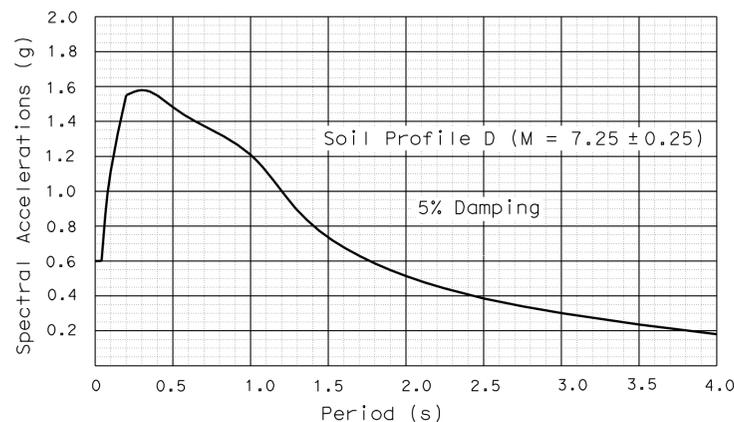
DESIGN: AASHTO LRFD Bridge Design Specifications, 3rd edition with the 2005, 2006 Interims and the California Amendments v3.06.01; except that earth retaining systems, bridge barrier and railing details taken from Standard Plans May 2006 and earlier versions, and Standard Bridge Details XS Sheets are designed using Bridge Design Specifications LFD Version April 2000 ('96 AASHTO w/Revisions by Caltrans)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.4 dated June 2006.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: 1.2xHL-93 and Low-Boy and Permit design loading.

SEISMIC LOADING: Soil profile type D adjusted for near field effects
Magnitude 7.25 +/- 0.25
Peak Rock Acceleration 0.6g

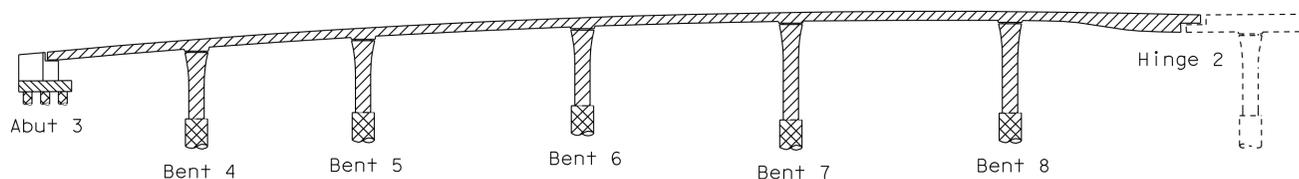


REINFORCED CONCRETE:
fy = 60 ksi
f'c = 3.6 ksi
n = 8

PRESTRESSED CONCRETE:
See prestressing notes on 'GIRDER LAYOUT" sheet.

STRUCTURAL STEEL:
fy = ASTM A709 Grade 50

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011



- Structural Concrete, Bridge (f'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge Footing (F'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge (f'c = 5.0 ksi @ 28 days)
- Cast-in-place drilled hole Piling (f'c = 4.0 ksi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

QUANTITIES

STRUCTURE EXCAVATION (TYPE A)	870	CY
STRUCTURE EXCAVATION (TYPE GC)	279,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2)	69	CY
(AERIALY DEPOSITED LEAD)		
STRUCTURE BACKFILL (BRIDGE)	335	CY
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	831	LF
120" CAST-IN-DRILLED-HOLE CONCRETE PILING	488	LF
132" CAST-IN-DRILLED-HOLE CONCRETE PILING	150	LF
132" PERMANENT STEEL CASING	150	LF
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (LONGITUDINAL)	LUMP	SUM
SEAL COURSE CONCRETE	296	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	125	CY
STRUCTURAL CONCRETE, BRIDGE	2,223	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	43	CY
PRECAST CONCRETE ISOLATION CASING	72	CY
PTFE SPHERICAL BEARING	2	EA
JOINT SEAL ASSEMBLY (MR = 100") 24"	39	LF
BAR REINFORCING STEEL (BRIDGE)	994,000	LB
HEADED BAR REINFORCEMENT	340	EA
MISCELLANEOUS METAL (BRIDGE)	6,230	LB
BRIDGE DECK DRAINAGE SYSTEM	6,250	LB
BICYCLE RAILING	540	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	1,119	LF

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE (KIP)		CASING TIP ELEVATION (ft)	DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)	PILE CUTOFF ELEVATIONS (ft)	DEPTH OF SEAL COURSE (ft)	DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
			COMPRESSION	TENSION								
ABUT 3	2.5 FT CIDH	220	440	0	NA	-71 (a)	-71	-1.75	3.0	0' to 1' 1' to 2' 2'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 4	11 FT CIDH 10 FT CIDH	1630	3380	0	-35	-106 (a)	-106	-10.0	7.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 5	11 FT CIDH 10 FT CIDH	1950	3800	0	-35	-114 (a)	-114	-10.0	7.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 6	11 FT CIDH 10 FT CIDH	2070	4060	0	-30	-113 (a)	-113	-5.0	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 7	11 FT CIDH 10 FT CIDH	1830	3700	0	-28	-111 (a)	-111	-3.0	4.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 8	11 FT CIDH 10 FT CIDH	2150	4260	0	-29	-118 (a)	-118	-4.0	4.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A

NOTE: 1. Design Tip Elevations are controlled by the following demands:
(a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Load.
2. 0' is equivalent to existing ground surface.
3. 2'+ is soil more than 2' below Original Ground Surface.

LEGEND:
DRO = Diesel Range Organics
ORO = Oil Range Organics
Non-Haz = Non-Hazardous material

INDEX TO PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	FOUNDATION PLAN NO. 1
5	FOUNDATION PLAN NO. 2
6	ABUTMENT 3 LAYOUT
7	ABUTMENT 3 DETAILS NO. 1
8	ABUTMENT 3 DETAILS NO. 2
9	ABUTMENT 3 DETAILS NO. 3
10	ABUTMENT 3 DETAILS NO. 4
11	BENTS 4, 5, 6 & 8 LAYOUT
12	BENTS 4, 5, 6, & 8 DETAILS
13	BENT 7 LAYOUT
14	BENT 7 DETAILS NO. 1
15	BENT 7 DETAILS NO. 2
16	BENT 7 DETAILS NO. 3
17	BENT 8 CRASHWALL DETAILS
18	TYPICAL SECTION
19	GIRDER LAYOUT
20	HINGE 2 DIAPHRAGM DETAILS NO. 1
21	HINGE 2 DIAPHRAGM DETAILS NO. 2
22	MISCELLANEOUS DETAILS
23	2.5 FT CIDH PILE DETAILS
24	10 FT CIDH PILE DETAILS NO. 1
25	10 FT CIDH PILE DETAILS NO. 2
26	PRECAST ISOLATION CASING DETAILS
27	ISOLATION CASING COVER DETAILS
28	PTFE BEARING DETAILS NO. 1
29	PTFE BEARING DETAILS NO. 2
30	JOINT SEAL ASSEMBLY LAYOUT
31	JOINT SEAL ASSEMBLY DETAILS NO. 1
32	JOINT SEAL ASSEMBLY DETAILS NO. 2
33	JOINT SEAL ASSEMBLY DETAILS NO. 3
34	JOINT SEAL ASSEMBLY DETAILS NO. 4
35	JOINT SEAL ASSEMBLY DETAILS NO. 5
36	DECK DRAIN DETAILS
37	STRUCTURE APPROACH DRAINAGE DETAILS
38	STRUCTURE APPROACH TYPE N(30S)
39	CONCRETE BARRIER DETAILS NO. 1
40	CONCRETE BARRIER DETAILS NO. 2
41	CONCRETE BARRIER DETAILS NO. 3
42	RAILING DETAILS NO. 1
43	RAILING DETAILS NO. 2
44	LOG OF TEST BORINGS NO. 1 OF 6
45	LOG OF TEST BORINGS NO. 2 OF 6
46	LOG OF TEST BORINGS NO. 3 OF 6
47	LOG OF TEST BORINGS NO. 4 OF 6
48	LOG OF TEST BORINGS NO. 5 OF 6
49	LOG OF TEST BORINGS NO. 6 OF 6

STANDARD PLANS DATED MAY 2006

A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B7-1	BOX GIRDER DETAILS
B7-8	DECK DRAINAGE DETAILS
B8-5	CAST-IN-PLACE PRESTRESSED GIRDER DETAILS



STANDARD PLAN SHEET No.
DETAIL No.

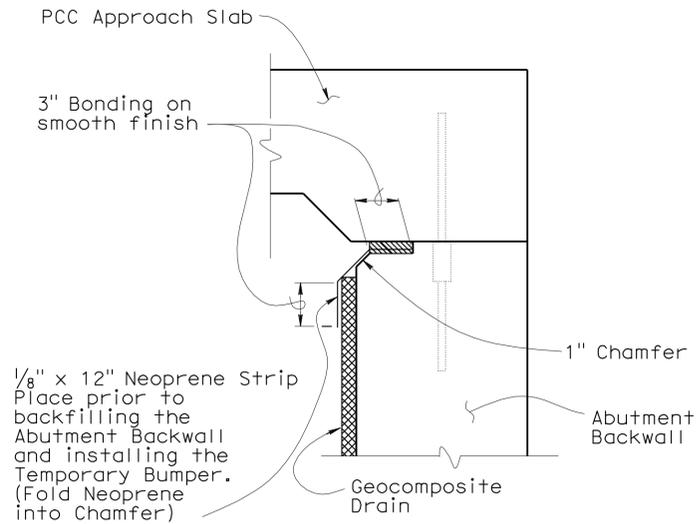
DESIGN	BY F. Zayati	CHECKED J. Lane
DETAILS	BY K. Kubo	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

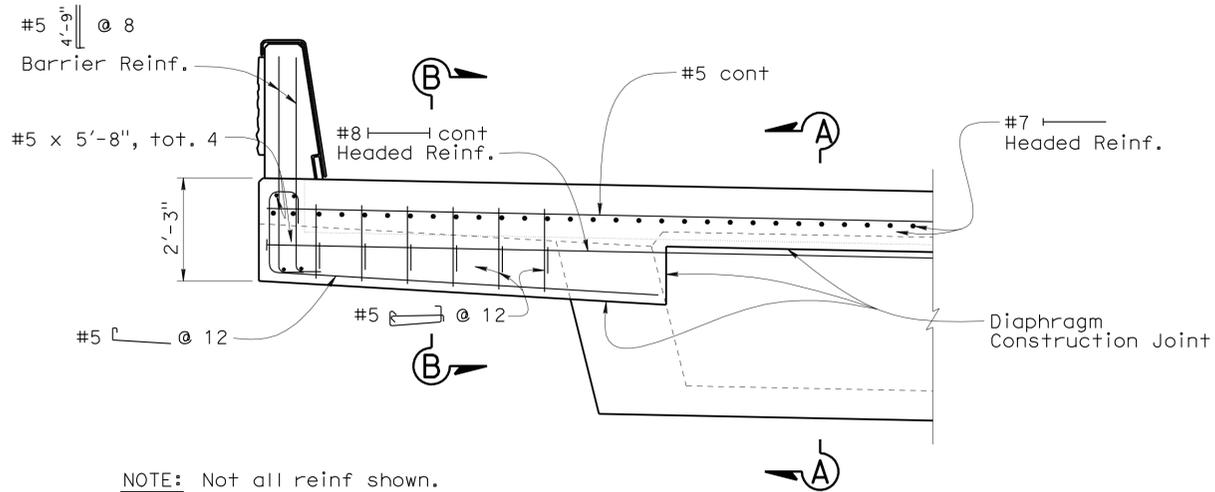
BRIDGE NO. 53-3031
POST MILE 3.74
NEW DOCK STREET OFF-RAMP
INDEX TO PLANS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	462	1003

Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

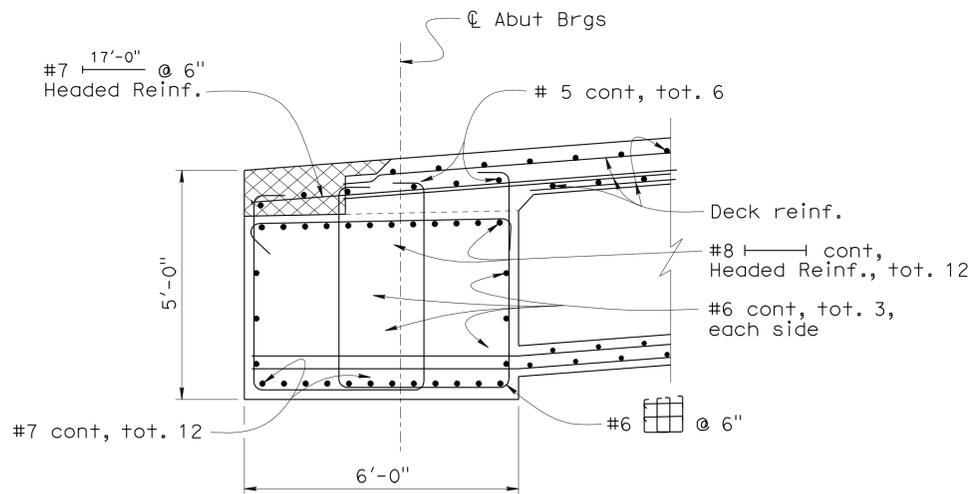


JOINT PROTECTION DETAIL
No Scale

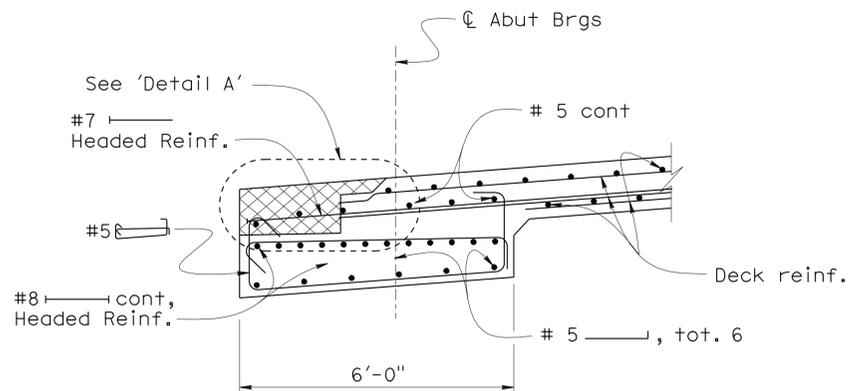


NOTE: Not all reinf shown.

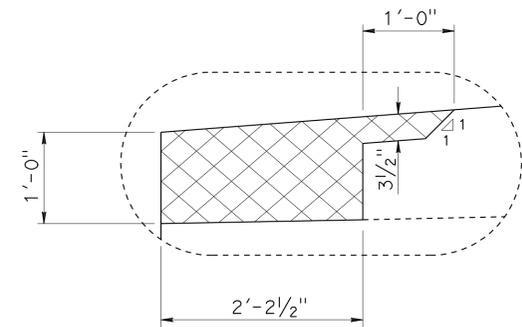
ABUTMENT DIAPHRAGM - PART ELEVATION
1/2" = 1'-0"



SECTION A-A
1/2" = 1'-0"



SECTION B-B
1/2" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL
1" = 1'-0"

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY S. Galgiani	CHECKED J. Lane
DETAILS	BY K. Kubo	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

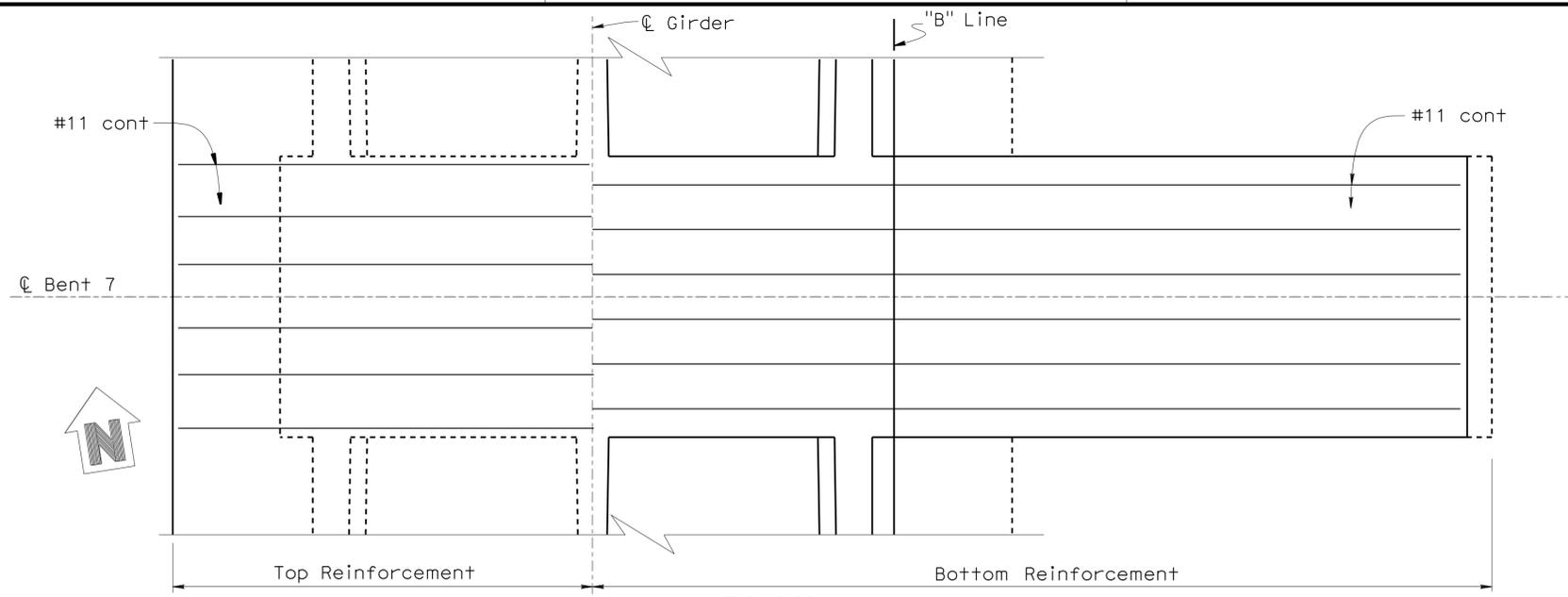
BRIDGE NO.	53-3031
POST MILE	3.74

NEW DOCK STREET OFF-RAMP
ABUTMENT 3 DETAILS NO. 3

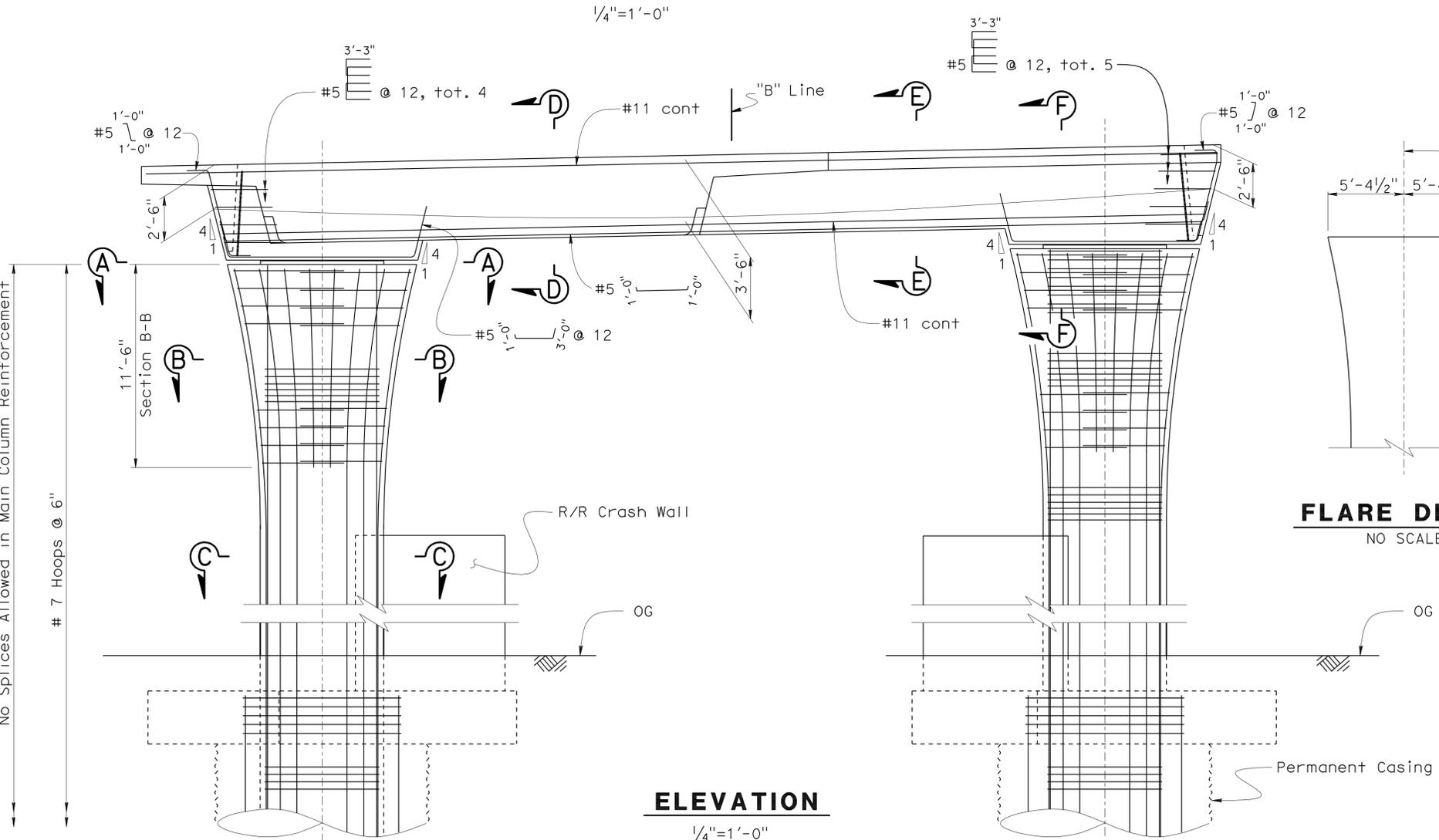
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	466	1003

PRESTRESSING NOTES
 270 KSI Low Relaxation Strand:
 $P_{jack} = 4400$ kips
 Anchor Set = $\frac{3}{8}$ in
 Concrete: $f'_c = 5.0$ psi @ 28 days
 $f'_{ci} = 3.5$ psi @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at $\lambda = 0.855$ times jacking stress.
 One end stressing shall be performed from Left End.

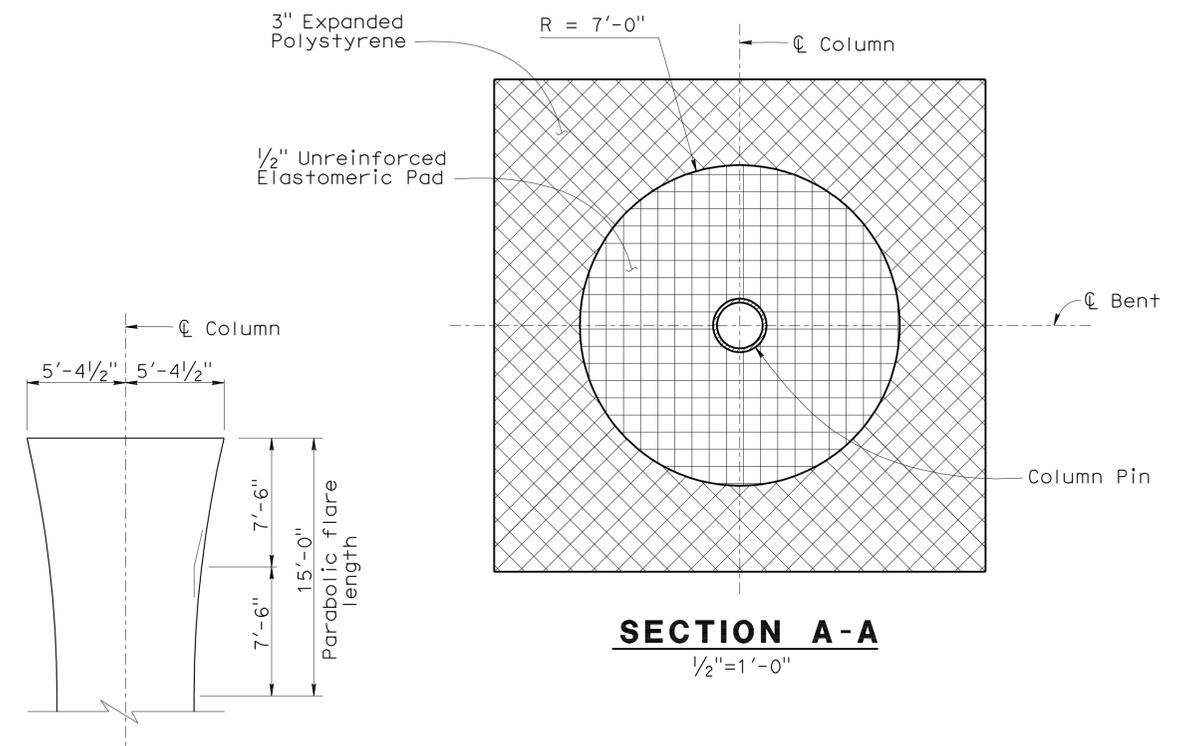
Registered Professional Engineer
Foued Zayati
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
 05-24-10
 REGISTERED CIVIL ENGINEER DATE
 10-11-10
 PLANS APPROVAL DATE



PLAN
1/4"=1'-0"



ELEVATION
1/4"=1'-0"



SECTION A-A
1/2"=1'-0"

FLARE DETAIL
NO SCALE

NOTE:
For 'Section B-B', 'Section C-C', 'Section D-D', 'Section E-E' and 'Section F-F', see "BENT 7 DETAILS No. 1" sheet.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN BY J. Lane	CHECKED V. Ramakrishnan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 53-3031	NEW DOCK STREET OFF-RAMP BENT 7 LAYOUT	
	DETAILS BY T. Nguyen	CHECKED F. Zayati			POST MILE 3.74		
	QUANTITIES BY J. Lane	CHECKED V. Ramakrishnan			CU 07-271 EA 138201		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 13 OF 49

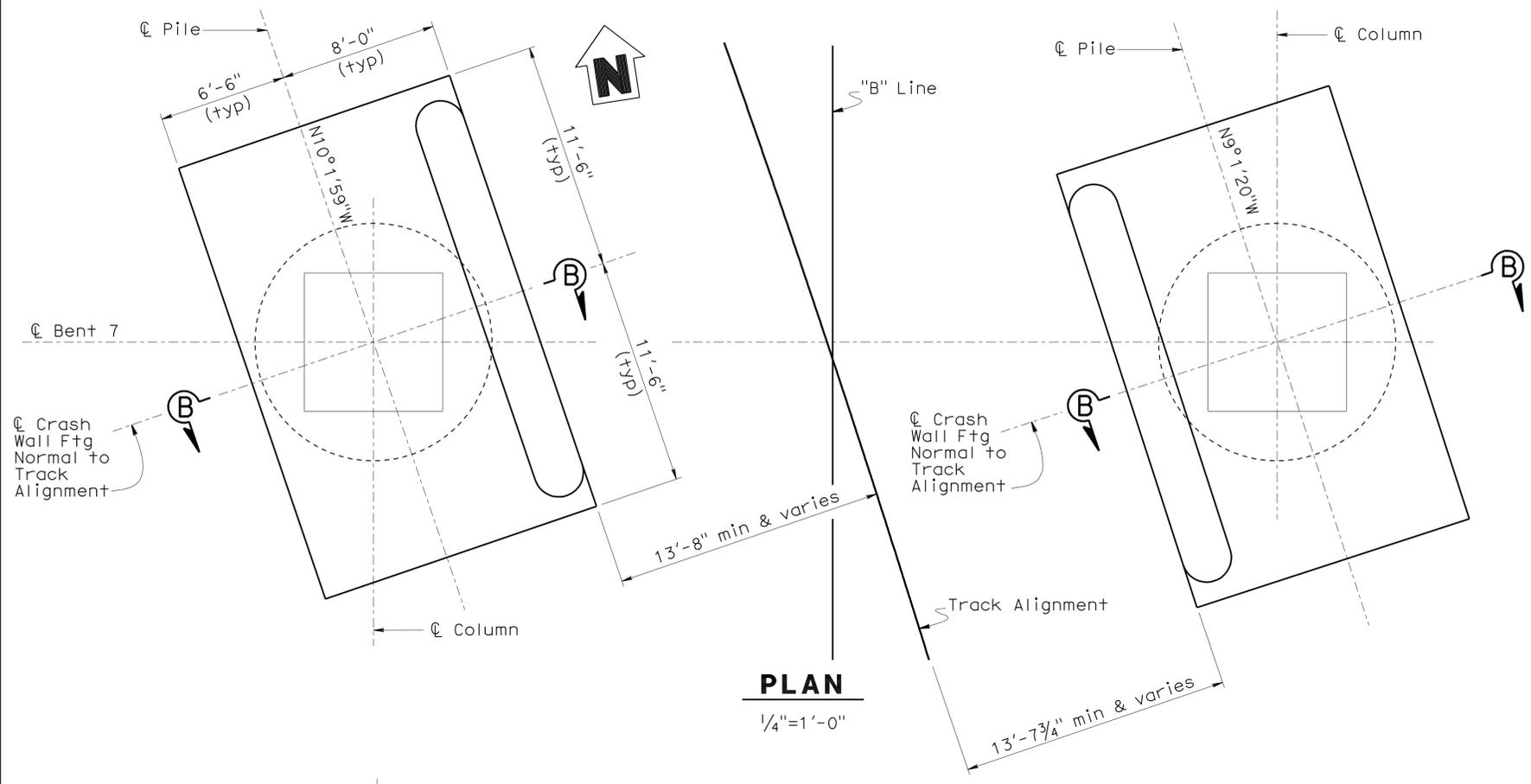
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
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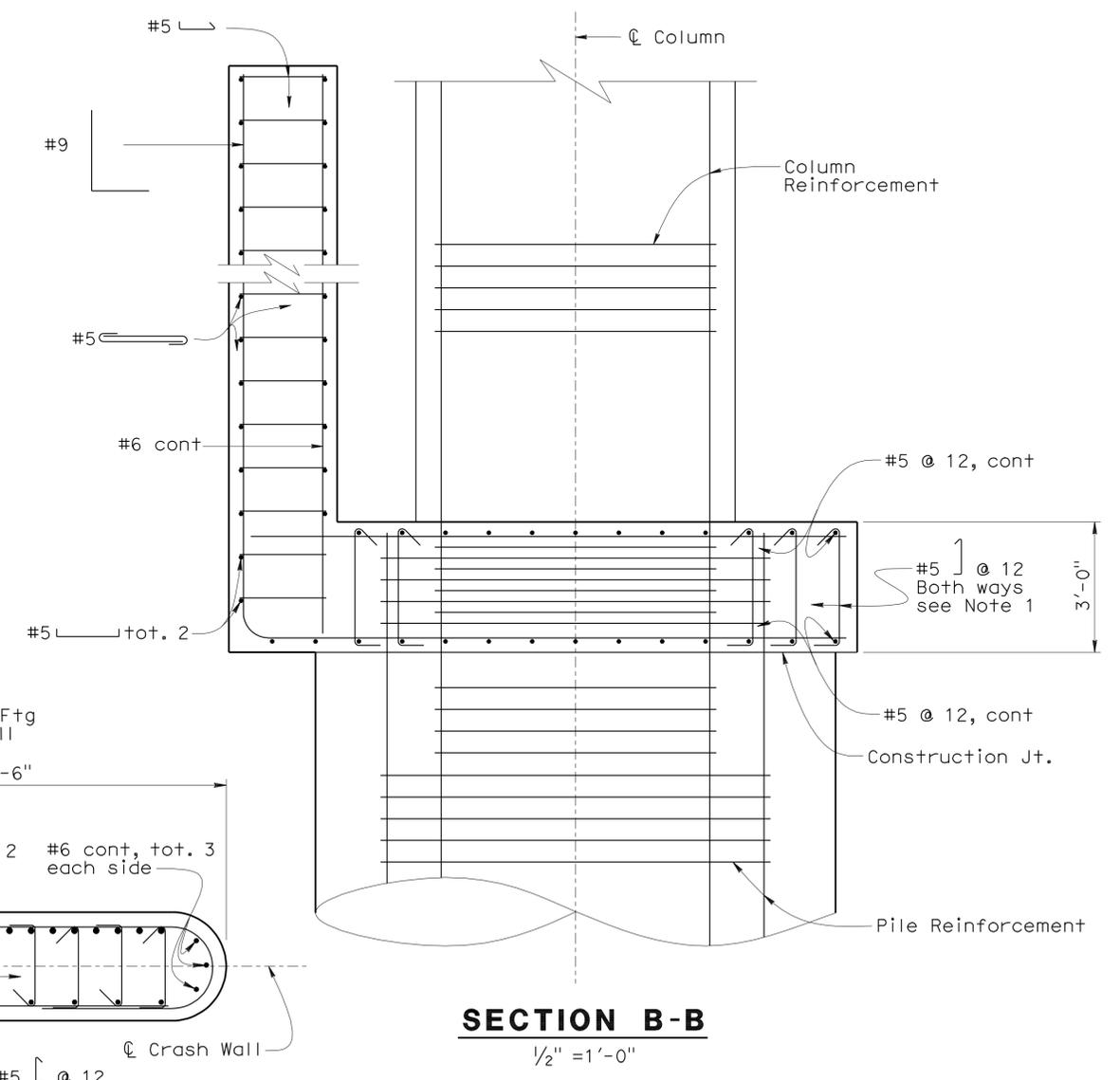
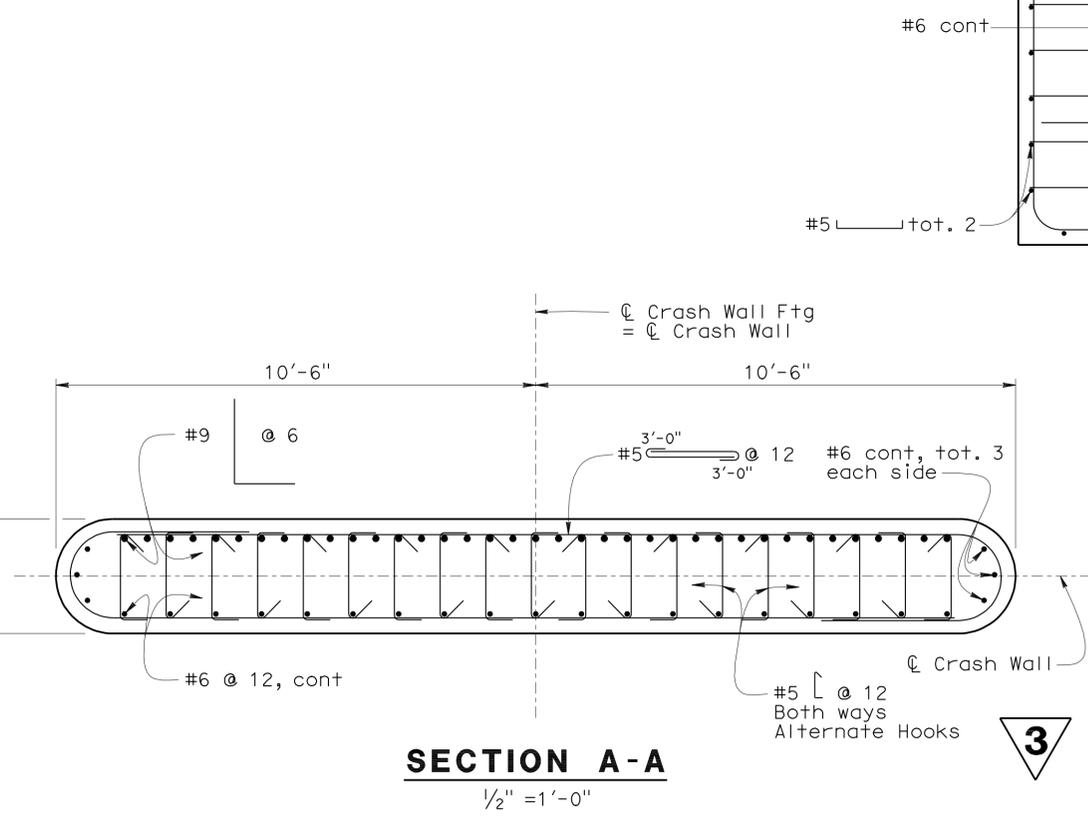
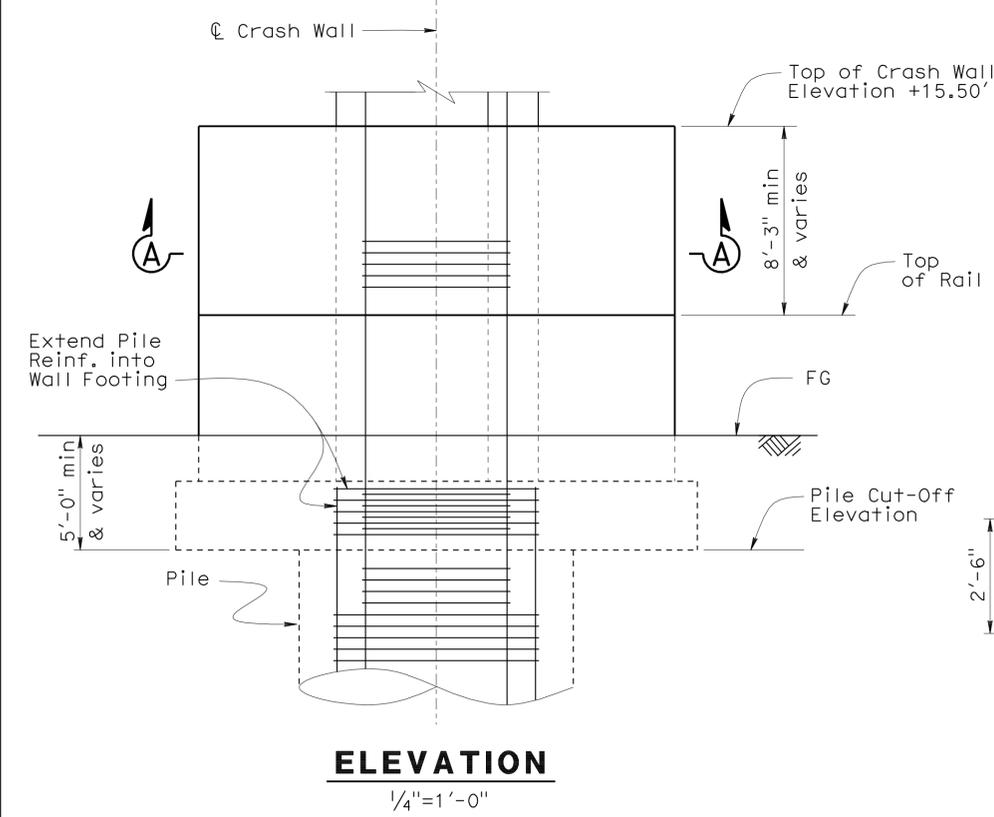
FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

05-24-10
 DATE
 PLANS APPROVAL DATE
 10-11-10

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- NOTES:**
- Omit Stirrups inside Column Cage.
 - For Column Reinforcement, see "BENTS 7 LAYOUT" sheet.
 - For Pile Reinforcement, see "10 FT CIDH PILE DETAILS No. 1" sheet.
 - for the purpose of measurement and payment, Crashwalls shall be designated as "Structural Concrete, Bridge."

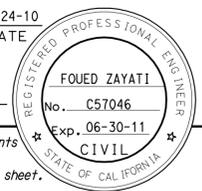


REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY J. Lane	CHECKED V. Ramakrishnan	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3031	NEW DOCK STREET OFF-RAMP BENT 7 DETAILS NO. 3	
	DETAILS	BY T. Nguyen	CHECKED F. Zayati			POST MILE	3.74		
	QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan			CU 07-271 EA 138201	REVISION DATES		05-28-10 06-30-10 07-08-10 01-06-11 11-12-08 11-12-08 07-18-09 04-22-10 05-10-10
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET	16	OF	47

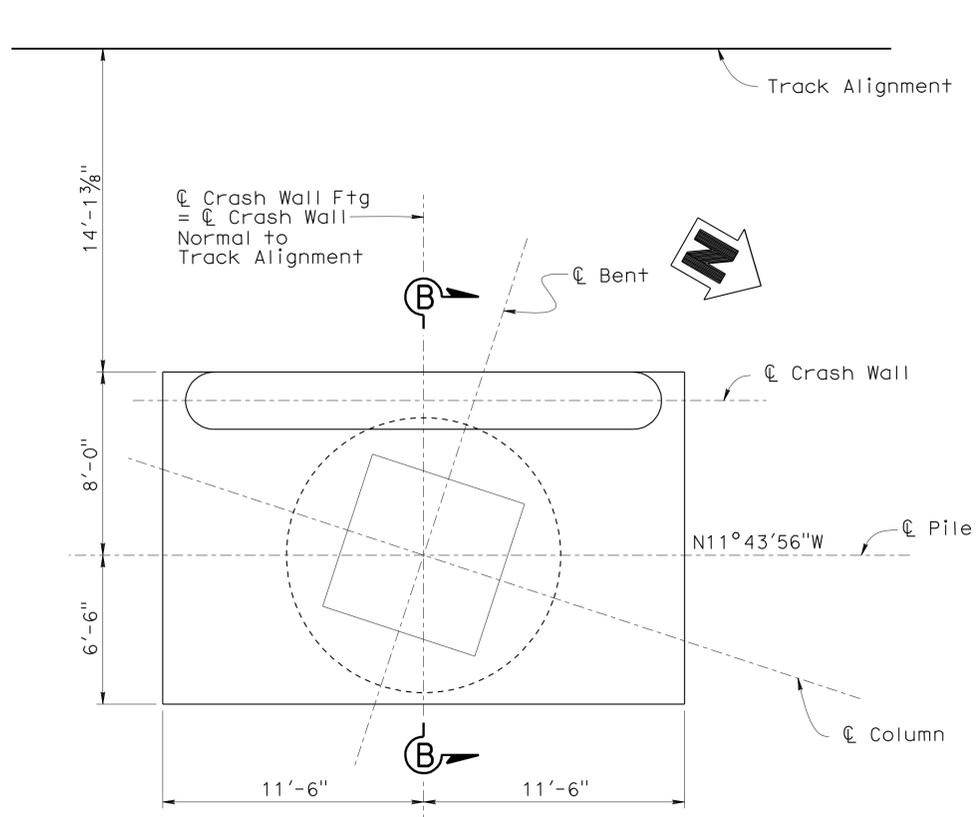
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	470	1003
FOUED ZAYATI REGISTERED CIVIL ENGINEER			05-24-10	DATE	
10-11-10 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

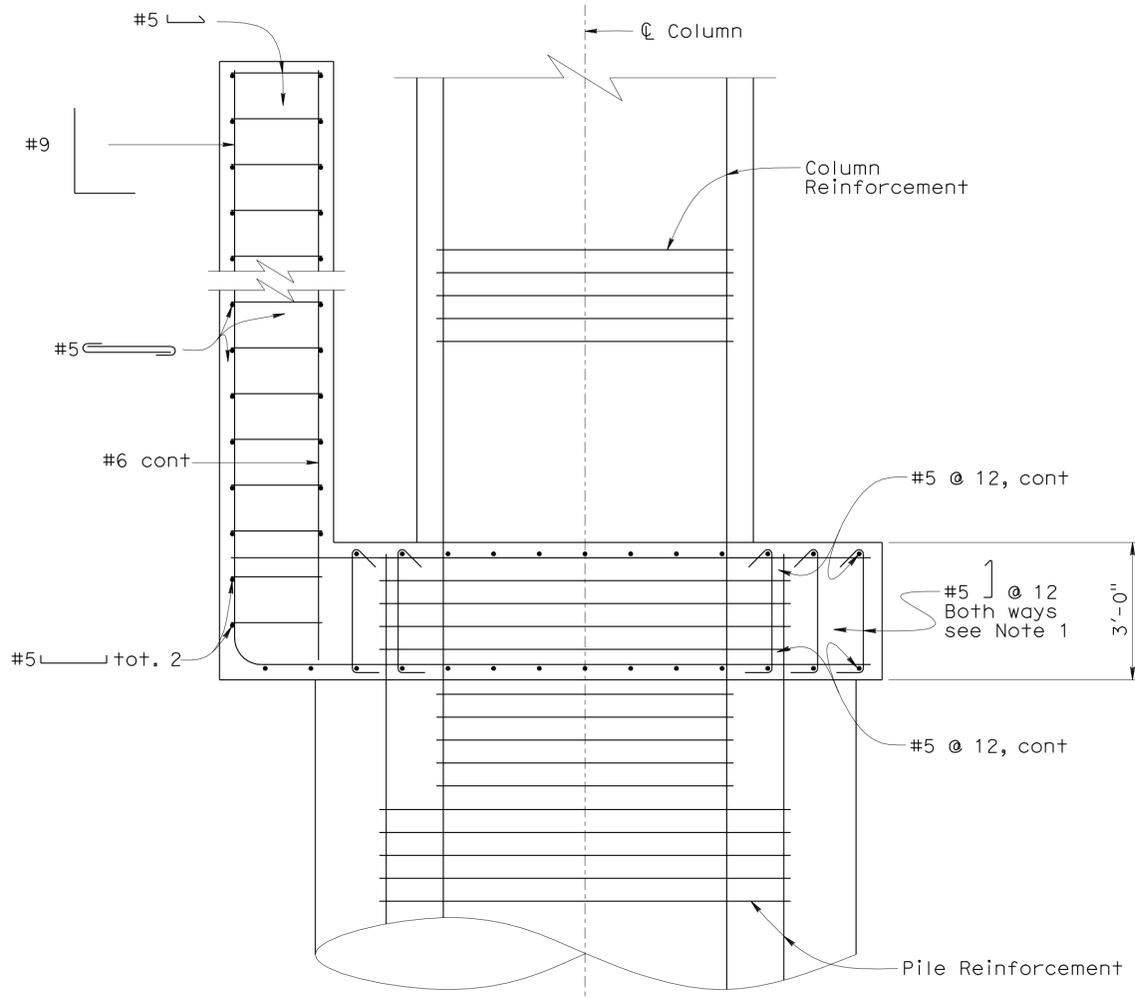


3

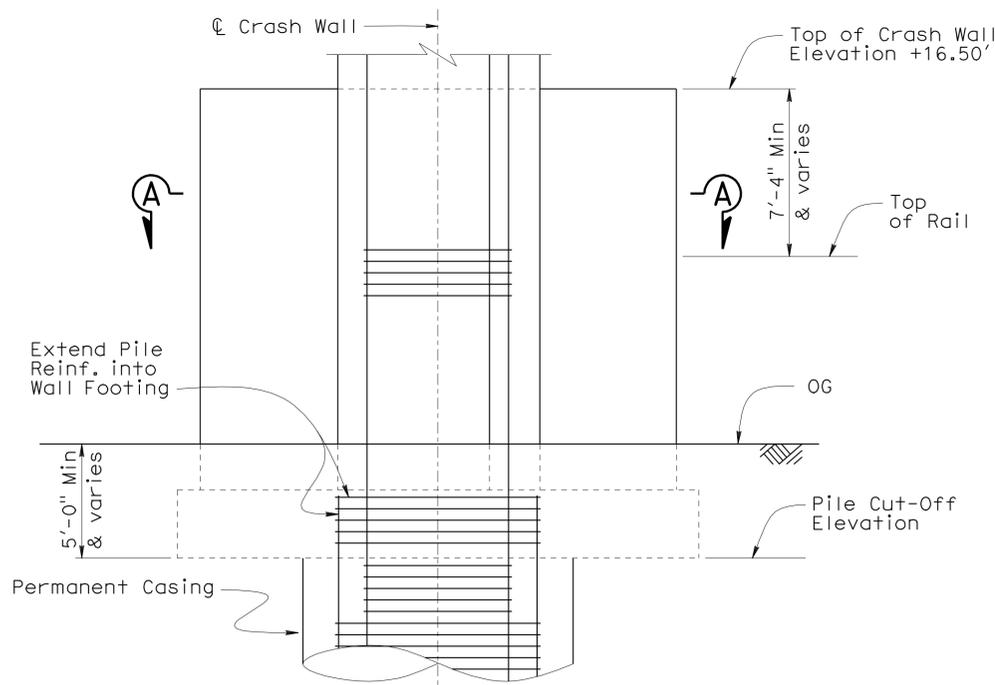
- NOTES:**
- Omit Stirrups inside Column Cage.
 - For Column Reinforcement, see "BENTS 4, 5, 6 & 8 LAYOUT" sheet.
 - For Pile Reinforcement, see "10 FT CIDH PILE DETAILS No. 1" sheet.



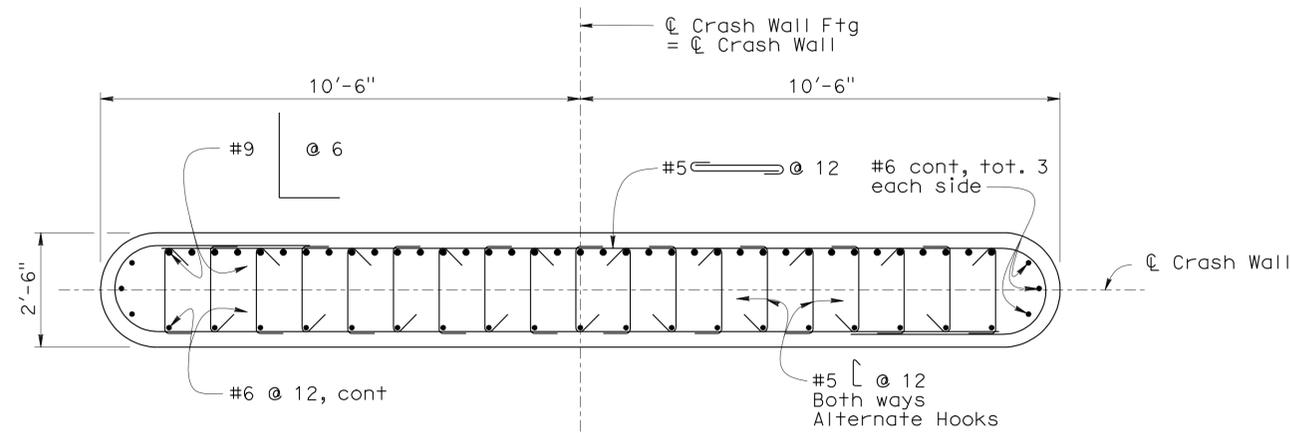
PLAN
1/4" = 1'-0"



SECTION B-B
1/2" = 1'-0"



ELEVATION
1/4" = 1'-0"



SECTION A-A
1/2" = 1'-0"

3

REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Lane	CHECKED V. Ramakrishnan
DETAILS	BY T. Nguyen	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

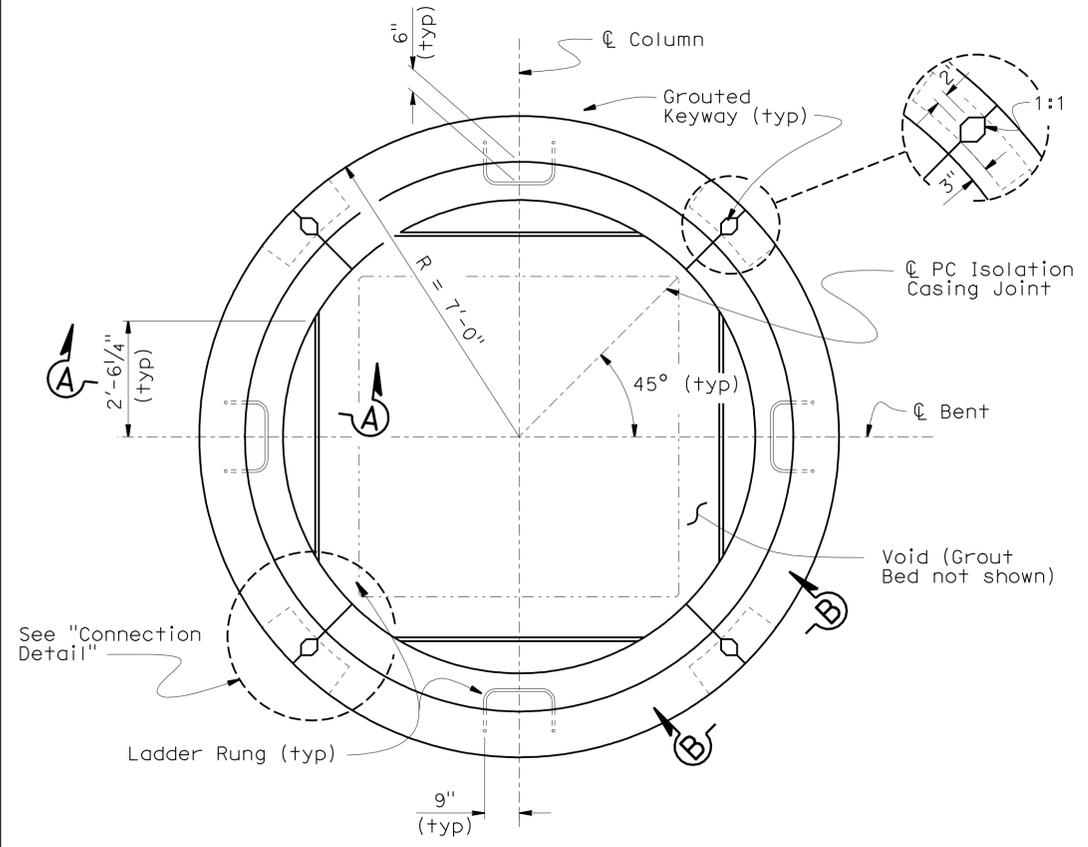
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO.	53-3031	NEW DOCK STREET OFF-RAMP BENT 8 CRASHWALL DETAILS
POST MILE	3.74	

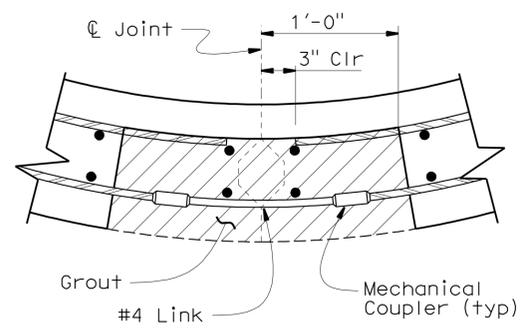
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
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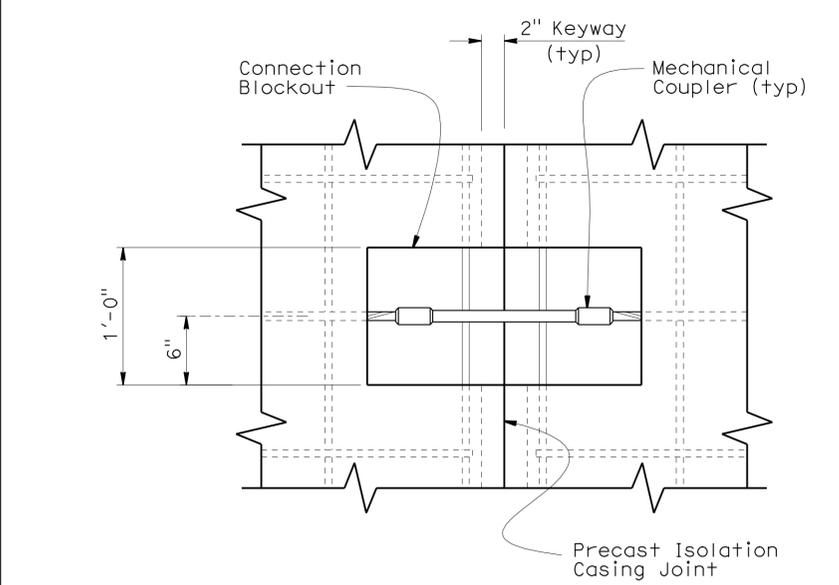
Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
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 STATE OF CALIFORNIA
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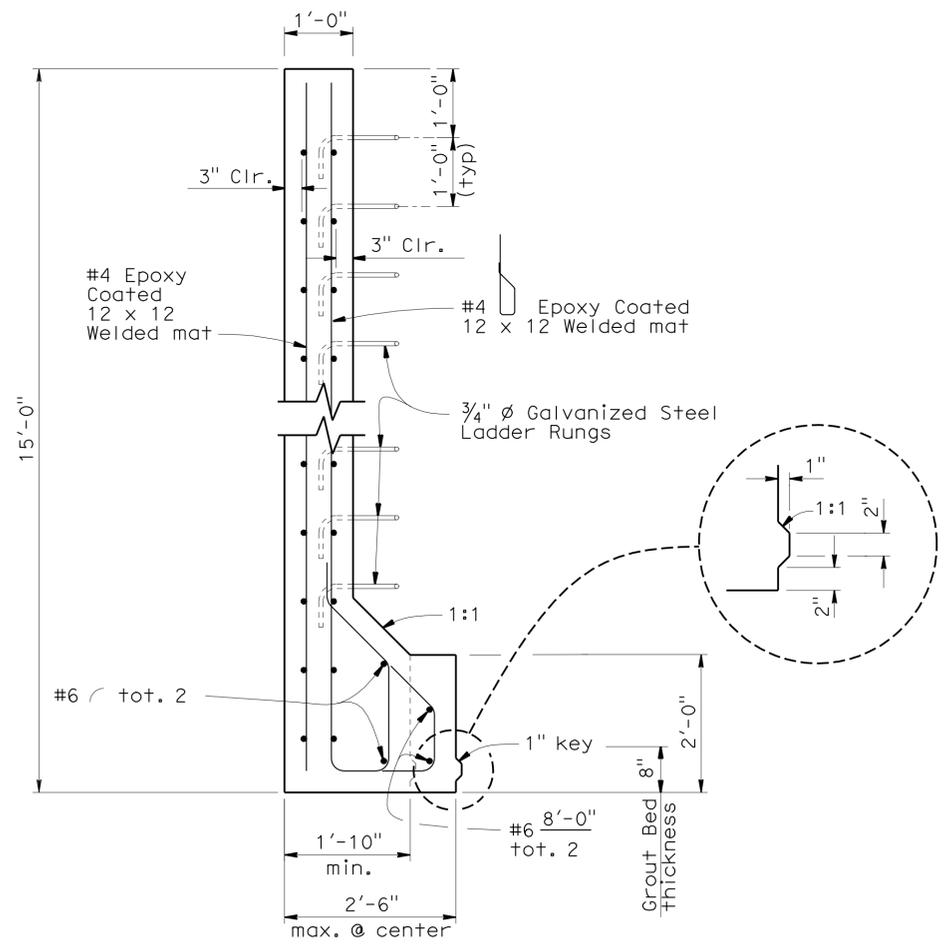
PLAN
1/2" = 1'-0"



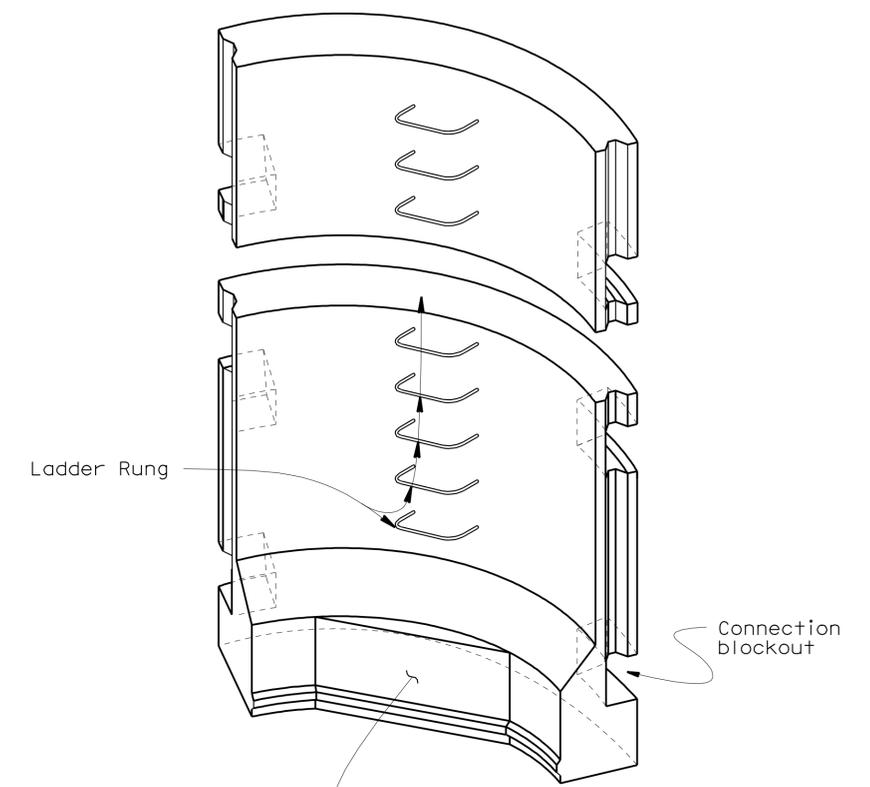
CONNECTION DETAIL
1/2" = 1'-0"



VIEW B-B
1 1/2" = 1'-0"



SECTION A-A
3/4" = 1'-0"



**ISOMETRIC VIEW
PRECAST ISOLATION CASING**
NO SCALE

NOTES:

1. All hardware to be galvanized before casting.
2. Place connections 3 feet from top, 2 feet from bottom and at mid-height of casing.
3. Align shells prior to grouting keyway and Connection Blockouts.
4. Casing to be set on grout pad to level.
5. Minimum concrete strength shall be 5000 psi
6. Casing to be plumb and centered about column.

**3 REVISED PER ADDENDUM No. 3
DATED MARCH 28, 2011**

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3031	NEW DOCK STREET OFF-RAMP PRECAST ISOLATION CASING DETAILS
	DETAILS	BY Jeff Thorne	CHECKED F. Zayati			POST MILE	3.74	
	QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan			REVISION DATES	03-18-10 03-20-10 03-22-10 04-22-10 07-08-10 08-28-10 01-06-11	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES		SHEET 26 OF 49

INDEX TO PLANS

SHEET No.	TITLE	SHEET No.	TITLE	SHEET No.	TITLE
1	GENERAL PLAN	85	GIRDER DETAILS NO. 1	169	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 4
2	INDEX TO PLANS	86	GIRDER DETAILS NO. 2	170	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 5
3	GENERAL NOTES NO. 1	87	GIRDER DETAILS NO. 3	171	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 6
4	GENERAL NOTES NO. 2	88	GIRDER DETAILS NO. 4	172	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 7
5	STRUCTURE PLAN NO. 1	89	GIRDER DETAILS NO. 5	173	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 1
6	STRUCTURE PLAN NO. 2	90	GIRDER DETAILS NO. 6	174	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 2
7	STRUCTURE PLAN NO. 3	91	HINGE 2 (STAGE 1) LAYOUT	175	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 3
8	STRUCTURE PLAN NO. 4	92	HINGE 2 DETAILS NO. 1	176	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 4
9	STRUCTURE PLAN NO. 5	93	HINGE 2 (STAGE 1) DETAILS NO. 2	177	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 5
10	STRUCTURE PLAN NO. 6	94	HINGE 2 DETAILS NO. 3	178	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 6
11	STRUCTURE PLAN NO. 7	95	HINGE 2 (STAGE 1) DETAILS NO. 4	179	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 7
12	STRUCTURE PLAN NO. 8	96	HINGE 2 (STAGE 1) DETAILS NO. 5	180	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 8
13	STRUCTURE PLAN NO. 9	97	HINGE 2 (NEW DOCK ON RAMP) DETAILS NO. 6	181	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 9
14	DECK CONTOURS NO. 1	98	HINGE 2 (NEW DOCK ON RAMP) DETAILS NO. 7	182	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 10
15	DECK CONTOURS NO. 2	99	HINGE 2 (STAGE 2) LAYOUT	183	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 11
16	DECK CONTOURS NO. 3	100	HINGE 2 (STAGE 2) DETAILS NO. 1	184	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 12
17	DECK CONTOURS NO. 4	101	HINGE 2 (STAGE 2) DETAILS NO. 2	185	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 13
18	DECK CONTOURS NO. 5	102	HINGE 2 (STAGE 2) DETAILS NO. 3	186	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 14
19	DECK CONTOURS NO. 6	103	HINGE 2 (NEW DOCK OFF RAMP) DETAILS NO. 4	187	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 15
20	DECK CONTOURS NO. 7	104	HINGE 2 (NEW DOCK OFF RAMP) DETAILS NO. 5	188	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 16
21	DECK CONTOURS NO. 8	105	HINGE 3 LAYOUT	189	HINGE JOINT SEAL ASSEMBLY DETAILS NO. 17
22	DECK CONTOURS NO. 9	106	HINGE 3 DETAILS NO. 1	190	DECK DRAIN DETAILS NO. 1
23	FOUNDATION PLAN NO. 1	107	HINGE 3 DETAILS NO. 2	191	DECK DRAIN DETAILS NO. 2
24	FOUNDATION PLAN NO. 2	108	HINGE 3 DETAILS NO. 3	192	STRUCTURE APPROACH TYPE N(30S)
25	FOUNDATION PLAN NO. 3	109	HINGE 3 DETAILS NO. 4	193	STRUCTURE APPROACH DRAINAGE DETAILS
26	FOUNDATION PLAN NO. 4	110	HINGE 3 (STAGE 1) DETAILS NO. 5	194	CONCRETE BARRIER DETAILS NO. 1
27	FOUNDATION PLAN NO. 5	111	HINGE 3 (STAGE 1) DETAILS NO. 6	195	CONCRETE BARRIER DETAILS NO. 2
28	FOUNDATION PLAN NO. 6	112	HINGE 3 (STAGE 2) DETAILS NO. 7	196	CONCRETE BARRIER DETAILS NO. 3
29	FOUNDATION PLAN NO. 7	113	HINGE 3 (STAGE 2) DETAILS NO. 8	197	CONCRETE BARRIER DETAILS NO. 4
30	FOUNDATION PLAN NO. 8	114	HINGE 4 LAYOUT	198	CONCRETE BARRIER DETAILS NO. 5
31	ABUTMENT 1 LAYOUT	115	HINGE 4 DETAILS NO. 1	199	CONCRETE BARRIER DETAILS NO. 6
32	ABUTMENT 1 DETAILS NO. 1	116	HINGE 4 DETAILS NO. 2	200	CONCRETE BARRIER DETAILS NO. 7
33	ABUTMENT 1 DETAILS NO. 2	117	HINGE 4 DETAILS NO. 3	201	RAILING DETAILS NO. 1
34	ABUTMENT 1 DETAILS NO. 3	118	HINGE 4 DETAILS NO. 4	202	RAILING DETAILS NO. 2
35	ABUTMENT 1 DETAILS NO. 4	119	HINGE 4 DETAILS NO. 5	203	RAILING DETAILS NO. 3
36	ABUTMENT 1 DETAILS NO. 5	120	HINGE 5 LAYOUT	204	RAILING DETAILS NO. 4
37	BENTS 2 & 3 LAYOUT	121	HINGE 5 DETAILS NO. 1	205	LEGEND AND ABBREVIATIONS
38	BENT 4 LAYOUT	122	HINGE 5 DETAILS NO. 2	206	SEISMIC SITE PLAN
39	BENT 5 LAYOUT	123	HINGE 5 DETAILS NO. 3	207	ENLARGED LAYOUT NO. 1, BENT 8 TO BENT 10
40	BENT 6 LAYOUT	124	HINGE 5 (STAGE 1) DETAILS NO. 4	208	ENLARGED LAYOUT NO. 2, BENT 11 TO PIER 13
41	BENT 6 DETAILS NO. 1	125	HINGE 5 (STAGE 2) DETAILS NO. 5	209	ENLARGED LAYOUT NO. 3, PIER 14 TO PIER 16
42	BENT 6 DETAILS NO. 2	126	HINGE 6 LAYOUT	210	ENLARGED LAYOUT NO. 4, BENT 17 TO BENT 20
43	BENT 6 DETAILS NO. 3	127	HINGE 6 DETAILS NO. 1	211	SEISMIC SENSOR ENCLOSURE DETAILS
44	BENT 7 LAYOUT	128	HINGE 6 DETAILS NO. 2	212	RECORDER DETAILS
45	BENT 8 LAYOUT	129	HINGE 6 DETAILS NO. 3	213	SEISMIC SENSOR ENCLOSURE LOCATION TABLE
46	BENT 9 LAYOUT	130	HINGE 6 (STAGE 1) DETAILS NO. 4	214	LOG OF TEST BORINGS NO. 1 OF 34
47	BENT 10 LAYOUT	131	HINGE 6 (STAGE 2) DETAILS NO. 5	215	LOG OF TEST BORINGS NO. 2 OF 34
48	BENT 11 LAYOUT NO. 1	132	HINGE 7 (STAGE 1) LAYOUT	216	LOG OF TEST BORINGS NO. 3 OF 34
49	BENT 11 LAYOUT NO. 2	133	HINGE 7 (STAGE 2) LAYOUT	217	LOG OF TEST BORINGS NO. 4 OF 34
50	BENT 12 LAYOUT	134	HINGE 7 DETAILS NO. 1	218	LOG OF TEST BORINGS NO. 5 OF 34
51	PIERS 13 THRU 16 LAYOUT	135	HINGE 7 DETAILS NO. 2	219	LOG OF TEST BORINGS NO. 6 OF 34
52	PIERS 13 THRU 16 DETAILS NO. 1	136	HINGE 7 DETAILS NO. 3	220	LOG OF TEST BORINGS NO. 7 OF 34
53	PIERS 13 THRU 16 DETAILS NO. 2	137	HINGE 7 (STAGE 1) DETAILS NO. 4	221	LOG OF TEST BORINGS NO. 8 OF 34
54	PIERS 13 THRU 16 DETAILS NO. 3	138	HINGE 7 (STAGE 2) DETAILS NO. 5	222	LOG OF TEST BORINGS NO. 9 OF 34
55	BENTS 17 THRU 19 LAYOUT (STAGE 1)	139	HINGE 7 DETAILS NO. 6	223	LOG OF TEST BORINGS NO. 10 OF 34
56	BENTS 17 THRU 19 LAYOUT (STAGE 2)	140	MISCELLANEOUS DETAILS	224	LOG OF TEST BORINGS NO. 11 OF 34
57	BENTS 20 THRU 22 LAYOUT (STAGE 1)	141	2.5 ft CIDH PILE DETAILS	225	LOG OF TEST BORINGS NO. 12 OF 34
58	BENTS 20 THRU 22 LAYOUT (STAGE 2)	142	10 ft CIDH PILE DETAILS NO. 1	226	LOG OF TEST BORINGS NO. 13 OF 34
59	BENT 23 LAYOUT (STAGE 1)	143	10 ft CIDH PILE DETAILS NO. 2	227	LOG OF TEST BORINGS NO. 14 OF 34
60	BENT 23 LAYOUT (STAGE 2)	144	10 ft CIDH PILE DETAILS NO. 3	228	LOG OF TEST BORINGS NO. 15 OF 34
61	BENT 24 LAYOUT (STAGE 1)	145	10 ft CIDH PILE DETAILS NO. 4	229	LOG OF TEST BORINGS NO. 16 OF 34
62	BENT DETAILS NO. 1	146	12 ft CIDH PILE DETAILS NO. 1	230	LOG OF TEST BORINGS NO. 17 OF 34
63	BENT DETAILS NO. 2	147	12 ft CIDH PILE DETAILS NO. 2	231	LOG OF TEST BORINGS NO. 18 OF 34
64	BENT DETAILS NO. 3	148	12 ft CIDH PILE DETAILS NO. 3	232	LOG OF TEST BORINGS NO. 19 OF 34
65	BENT DETAILS NO. 4	149	PILE LOAD TEST DATA	233	LOG OF TEST BORINGS NO. 20 OF 34
66	BENT DETAILS NO. 5	150	PRECAST ISOLATION CASING DETAILS	234	LOG OF TEST BORINGS NO. 21 OF 34
67	BENT DETAILS NO. 6	151	ISOLATION CASING COVER DETAILS	235	LOG OF TEST BORINGS NO. 22 OF 34
68	BENT DETAILS NO. 7	152	PTFE BEARING DETAILS NO. 1	236	LOG OF TEST BORINGS NO. 23 OF 34
69	BENT DETAILS NO. 8	153	PTFE BEARING DETAILS NO. 2	237	LOG OF TEST BORINGS NO. 24 OF 34
70	TYPICAL SECTION NO. 1	154	FENDER LAYOUT	238	LOG OF TEST BORINGS NO. 25 OF 34
71	TYPICAL SECTION NO. 2	155	FENDER DETAILS NO. 1	239	LOG OF TEST BORINGS NO. 26 OF 34
72	TYPICAL SECTION NO. 3	156	FENDER DETAILS NO. 2	240	LOG OF TEST BORINGS NO. 27 OF 34
73	TYPICAL SECTION NO. 4	157	FENDER DETAILS NO. 3	241	LOG OF TEST BORINGS NO. 28 OF 34
74	GIRDER LAYOUT NO. 1	158	FENDER DETAILS NO. 4	242	LOG OF TEST BORINGS NO. 29 OF 34
75	GIRDER LAYOUT NO. 2	159	FENDER DETAILS NO. 5	243	LOG OF TEST BORINGS NO. 30 OF 34
76	GIRDER LAYOUT NO. 3	160	FENDER DETAILS NO. 6	244	LOG OF TEST BORINGS NO. 31 OF 34
77	GIRDER LAYOUT NO. 4	161	GUIDEWAY DETAILS NO. 1	245	LOG OF TEST BORINGS NO. 32 OF 34
78	GIRDER LAYOUT NO. 5	162	GUIDEWAY DETAILS NO. 2	246	LOG OF TEST BORINGS NO. 33 OF 34
79	GIRDER LAYOUT NO. 6	163	GUIDEWAY DETAILS NO. 3	247	LOG OF TEST BORINGS NO. 34 OF 34
80	GIRDER LAYOUT NO. 7	164	JOINT SEAL ASSEMBLY LAYOUT NO. 1		
81	GIRDER LAYOUT NO. 8	165	JOINT SEAL ASSEMBLY LAYOUT NO. 2		
82	GIRDER LAYOUT NO. 9	166	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 1		
83	GIRDER LAYOUT NO. 10	167	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 2		
84	GIRDER LAYOUT NO. 11	168	ABUTMENT JOINT SEAL ASSEMBLY DETAILS NO. 3		



QUANTITIES

BRIDGE REMOVAL (PORTION), LOCATION E	LUMP	SUM
STRUCTURE EXCAVATION (TYPE A)	1,900	CY
STRUCTURE EXCAVATION (TYPE SC)	670	CY
STRUCTURE EXCAVATION (TYPE DC)	794	CY
STRUCTURE EXCAVATION (TYPE GC)	2,043,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2)	504	CY
(AERIALY DEPOSITED LEAD)		
STRUCTURE BACKFILL (BRIDGE)	1,635	CY
FURNISH 18" STEEL PIPE PILING	9,625	LF
DRIVE 18" STEEL PIPE PILE	77	EA
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	2,937	LF
96" CAST-IN-DRILLED-HOLE CONCRETE PILING	504	LF
120" CAST-IN-DRILLED-HOLE CONCRETE PILING	5,680	LF
156" CAST-IN-DRILLED-HOLE CONCRETE PILING	772	LF
132" CAST-IN-DRILLED-HOLE CONCRETE PILING	2,952	LF
144" CAST-IN-DRILLED-HOLE CONCRETE PILING	4,723	LF
132" PERMANENT STEEL CASING	1,257	LF
144" PERMANENT STEEL CASING	1,505	LF
156" PERMANENT STEEL CASING	765	LF
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (HIGH-STRENGTH BARS)		
TEMPORARY HINGE TIEDOWN ANCHOR	8	EA
SEAL COURSE CONCRETE	2,436	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	432	CY
STRUCTURAL CONCRETE, BRIDGE	57,925	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	155	CY
FRACTURED RIB TEXTURE WITH WAVE PATTERN	3,724	SOFT
PRECAST CONCRETE ISOLATION CASING	1,028	CY
FURNISH PRECAST CONCRETE FENDER MODULE	48	EA
ERECT PRECAST CONCRETE FENDER MODULE		
PTFE SPHERICAL BEARING	63	EA
JOINT SEAL ASSEMBLY (MR = 42")	110	LF
JOINT SEAL ASSEMBLY (MR = 54")	515	LF
JOINT SEAL ASSEMBLY (MR = 60")	440	LF
BAR REINFORCING STEEL (BRIDGE)	22,166,000	LB
BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	690,000	LB
HEADED BAR REINFORCEMENT	14,600	EA
TREATED LUMBER AND TIMBER	11	MFBM
PLASTIC LUMBER	127	CY
UHMW SHEATHING	12,300	SOFT
MISCELLANEOUS METAL (BRIDGE)	421,000	LB
BRIDGE DECK DRAINAGE SYSTEM	253,000	LB
BIRD RAILING	1,320	LF
BICYCLE RAILING	4,027	LF
CONCRETE BARRIER (TYPE 60A)	2,754	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	11,350	LF
SEISMIC MONITORING SYSTEM	LUMP	SUM



**REVISED PER ADDENDUM No. 3
DATED MARCH 28, 2011**

DESIGN BY F. Zayati CHECKED T. Skreslet DETAILS BY T. Nguyen CHECKED T. Skreslet QUANTITIES BY J/P Peterson CHECKED J/P Peterson	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 53-3032	SCHUYLER HEIM BRIDGE (REPLACE) INDEX TO PLANS
				POST MILE 3.58

PILE DATA TABLE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	506	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE (kip)		CASING TIP ELEVATION (ft)	DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)	PILE CUTOFF ELEVATION (ft)	DEPTH OF SEAL COURSE (ft)	DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
			COMPRESSION	TENSION								
ABUT 1	2.5 ft CIDH	278	560	0	NA	-77 (a)	-77	-1.75	3.0	0' to 1' 1' to 3.5' 3.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 2	11 ft CIDH 10 ft CIDH	2790	5,680	0	-38	-127 (a)	-127	-12.5	8.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 3	11 ft CIDH 10 ft CIDH	3140	6,280	0	-27	-136 (a)	-136	-2.0	3.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 4 (STAGE 2)	11 ft CIDH 10 ft CIDH	3300	6,570	0	-27	-149 (a)	-149	-2.0	4.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 4 (STAGE 3)	11 ft CIDH 10 ft CIDH	3300	6,570	0	-27	-149 (a)	-149	-5.0	4.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 5	11 ft CIDH 10 ft CIDH	2750	5,590	0	-27	-131 (a)	-131	-2.0	3.0	0' to 1' 1' to 2.5' 2.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 6	11 ft CIDH 10 ft CIDH	2970	5,970	0	-28	-136 (a)	-136	-3.0	4.0	0' to 1' 1' to 4.5' 4.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 7	11 ft CIDH 10 ft CIDH	3190	6,390	0	-28	-145 (a)	-145	-3.0	4.0	0' to 1' 1' to 3' 3'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 8	11 ft CIDH 10 ft CIDH	3960	7,650	0	-29	-161 (a)	-161	-4.0	4.0	0' to 1' 1' to 2' 2'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 9	11 ft CIDH 10 ft CIDH	3400	6,620	0	-29	-143 (a)	-143	-4.0	4.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 10	11 ft CIDH 10 ft CIDH	3180	6,370	0	-29	-144 (a)	-144	-4.0	4.0	0' to 1' 1' to 4.5' 4.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 11	11 ft CIDH 10 ft CIDH	3840	7,550	0	-26	-156 (a)	-156	-1.0	3.0	0' to 1' 1' to 6' 6'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 12	11 ft CIDH 10 ft CIDH	3340	6,600	0	-19	-133 (a)	-133	6.0	0.0	0' to 1' 1' to 2.5' 2.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
PIER 13	12 ft CIDH 11 ft CIDH	4910	9,230	0	-76	-181 (a)	-181	-1.0	N/A	0' to 10' 10'+	NIA Non-Haz	TYPE SC TYPE A
PIER 14	12 ft CIDH 11 ft CIDH	5260	9,940	0	-95	-200 (a)	-200	10.0	N/A	0' to 10' 10'+	NIA Non-Haz	TYPE SC TYPE A
PIER 15	12 ft CIDH 11 ft CIDH	5490	10,350	0	-95	-206 (a)	-206	10.0	N/A	0' to 10' 10'+	NIA Non-Haz	TYPE SC TYPE A
PIER 16	12 ft CIDH 11 ft CIDH	4870	9,140	0	-86	-189 (a)	-189	-1.0	N/A	0' to 10' 10'+	NIA Non-Haz	TYPE SC TYPE A
BENT 17	13 ft CIDH 12 ft CIDH	3950	7,670	0	-31	-143 (a)	-143	-6.0	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 18	13 ft CIDH 12 ft CIDH	3800	7,380	0	-30.5	-140 (a)	-140	-5.5	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 19	13 ft CIDH 12 ft CIDH	3480	6,800	0	-29.5	-138 (a)	-138	-4.5	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 20	13 ft CIDH 12 ft CIDH	3700	7,210	0	-29.5	-137 (a)	-137	-4.5	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 21	13 ft CIDH 12 ft CIDH	3390	6,620	0	-30.5	-129 (a)	-129	-5.5	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 22	13 ft CIDH 12 ft CIDH	3420	6,700	0	-30.5	-134 (a)	-134	-5.5	5.0	0' to 1' 1' to 2.5' 2.5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A
BENT 23	13 ft CIDH 12 ft CIDH	4240	8,020	0	-31.0	-142 (a)	-142	-6.0	5.0	0' to 1' 1' to 4.5' 4.5' to 5.5' 5.5'+	Lead Non-Haz DRO & ORO Non-Haz	TYPE Z-2 TYPE A TYPE DC TYPE A
BENT 24	13 ft CIDH 12 ft CIDH	4200	8,200	0	-30.5	-148 (a)	-148	-5.5	5.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A

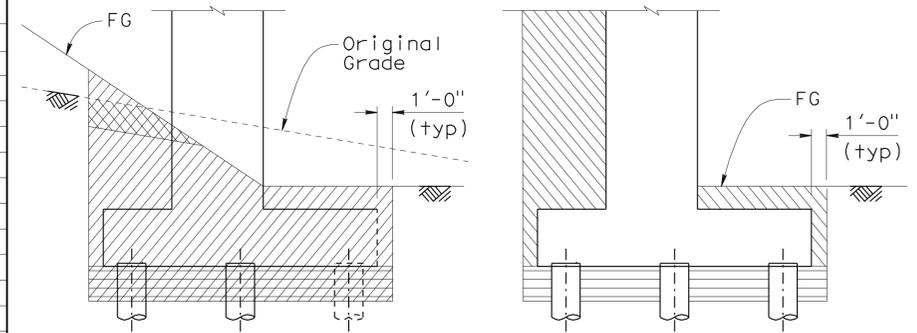


NOTES:

- Design Tip Elevation is controlled by the following demands:
 (a) Compression,
 (b) Tension,
 (c) Settlement,
 (d) Lateral Load.
- 0' is equivalent to existing ground surface.
- 3.5'+ is soil more than 3.5' below Original Ground Surface.

LEGEND:

DRO = Diesel Range Organic Compounds
 ORO = Oil Range Organic Compounds
 NIA = No Information Available
 Non-Haz = Non-Hazardous Material



- Structure Excavation, contaminated soil, see Pile Data Table for Excavation type and depth
- Structure Excavation, Type A
- Seal Course Concrete, See Pile Data Table for depth
- Structure Backfill

ABUTMENT LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL

No Scale



REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DESIGN	BY T. Skreslet	CHECKED J. Massoomi	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) GENERAL NOTES NO. 2
	DETAILS	BY T. Nguyen	CHECKED F. Zayati			POST MILE	3.58	
	QUANTITIES	BY J. Han	CHECKED J. Massoomi					

CU 07-271
 EA 138201
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

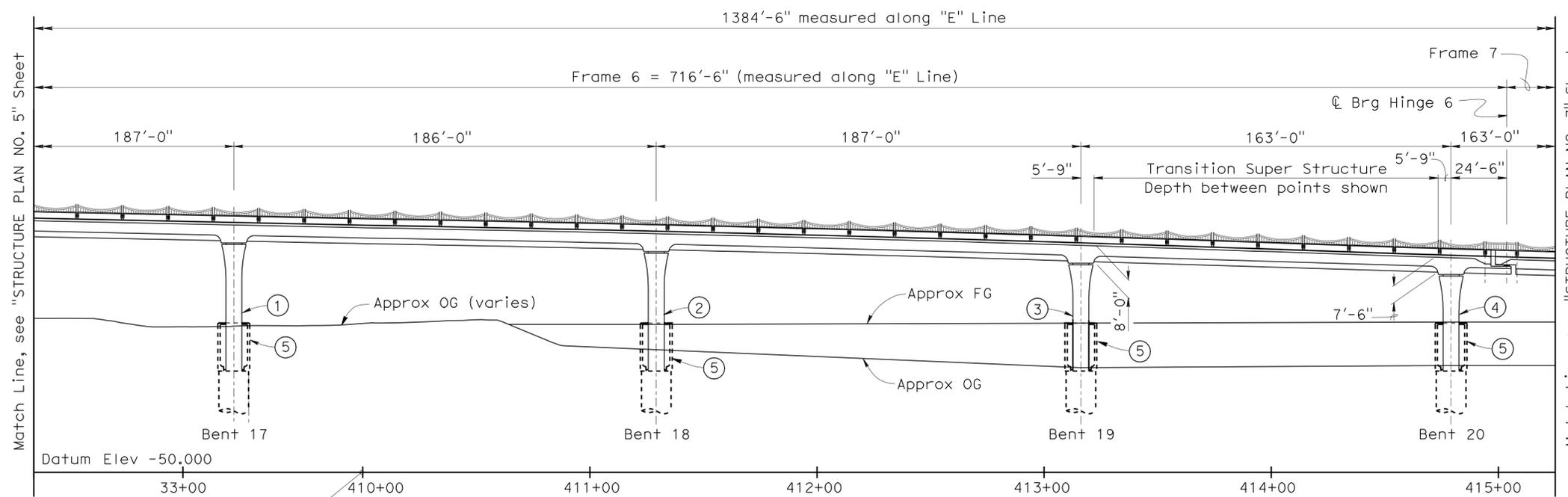
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SHEET 4 OF 247
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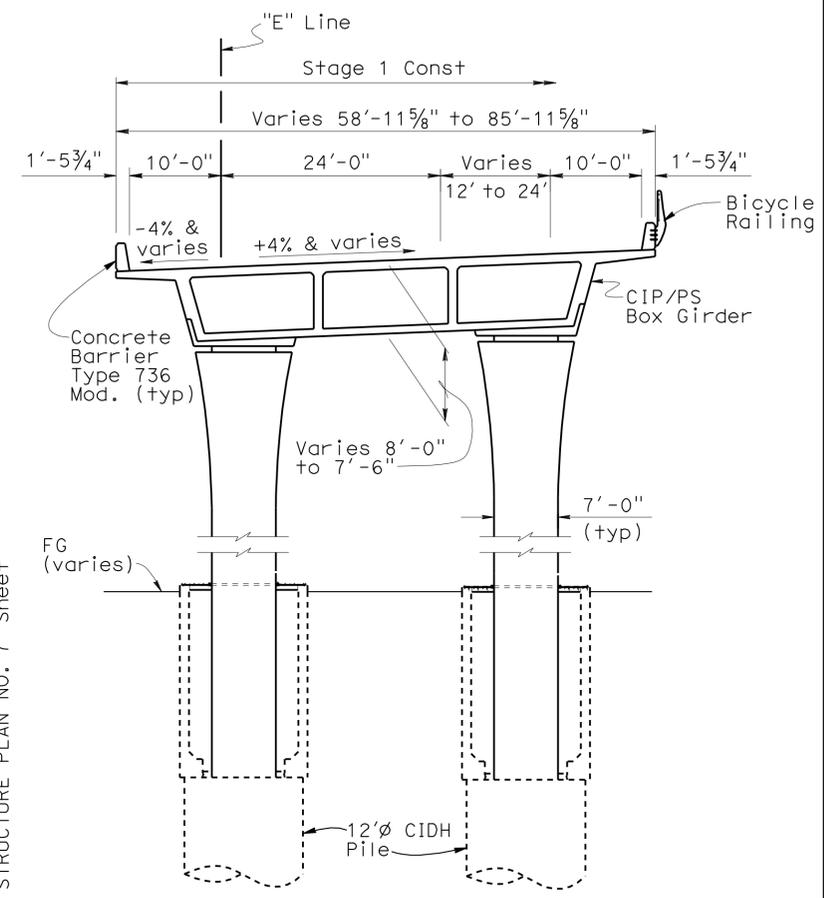
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	512	1003

FOUAD ZAYATI
 REGISTERED CIVIL ENGINEER
 DATE: 05-24-10
 PLANS APPROVAL DATE: 10-11-10

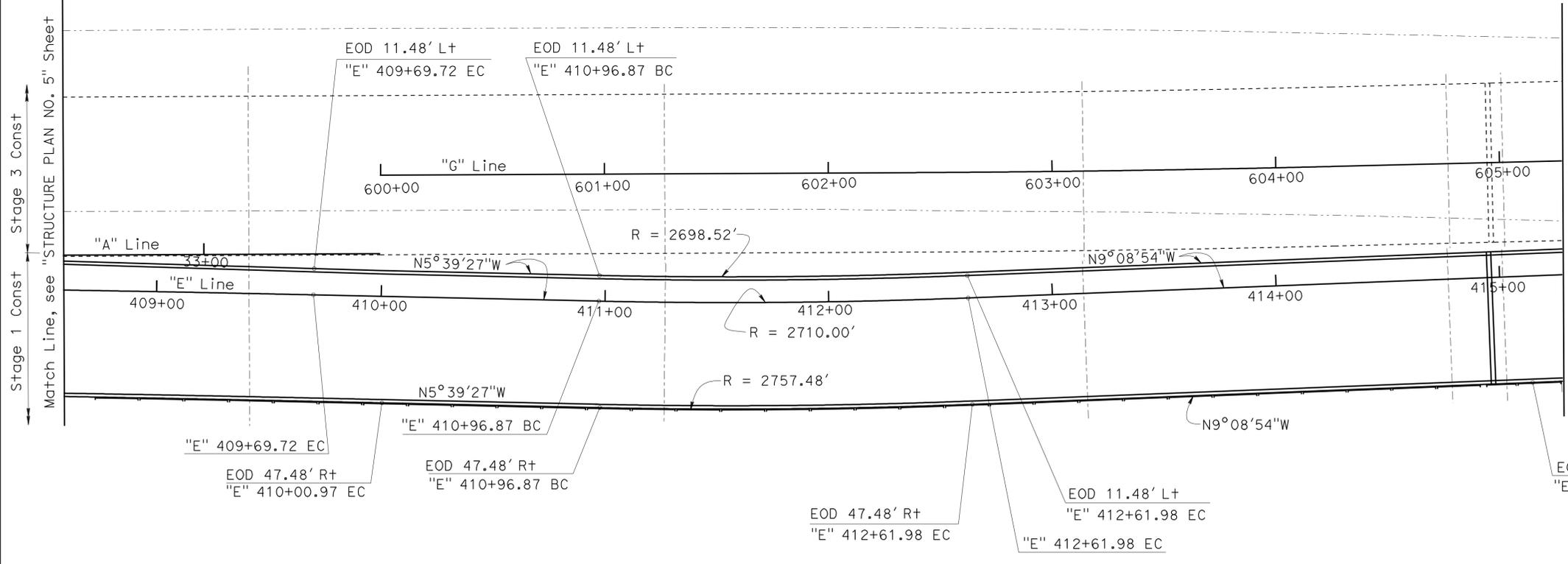
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DEVELOPED ELEVATION (Stage 1)
1"=30'



TYPICAL SECTION (Frame 6)
1"=10'



PLAN
1"=30'

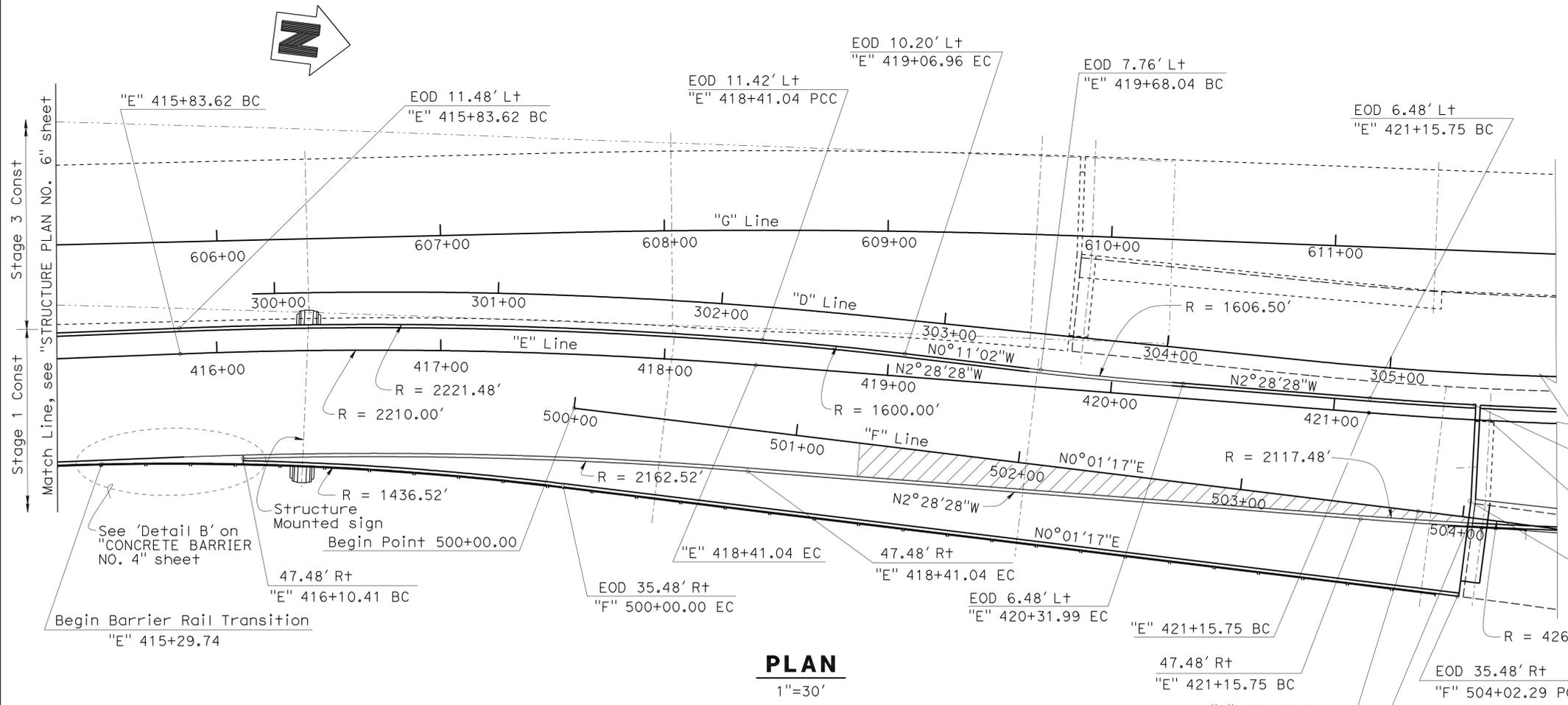
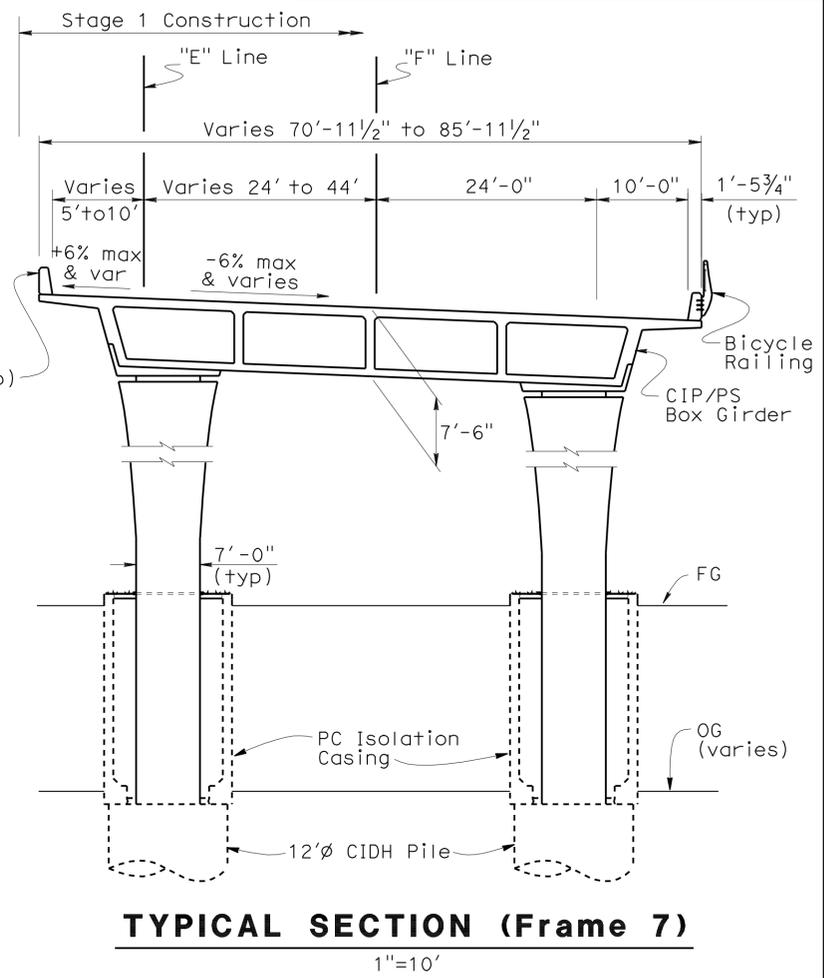
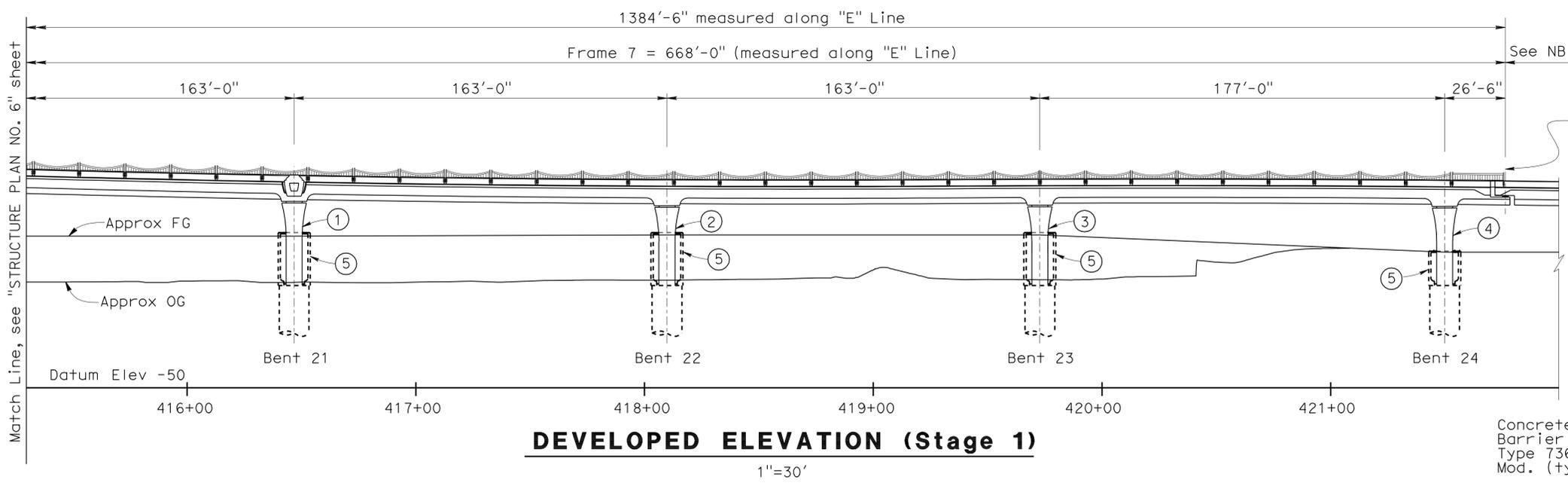
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY F. Zayati	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	SCHUYLER HEIM BRIDGE (REPLACE)	
DETAILS	BY T. Nguyen	CHECKED T. Skreslet			53-3032		STRUCTURE PLAN NO. 6
QUANTITIES	BY J/P Peterson	CHECKED J/P Peterson			POST MILE 3.58		

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
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 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 05-14-10, 06-30-10, 07-15-10, 12-21-10, 01-04-11, 05-22-08, 1-2-10, 05-13-10
 SHEET 10 OF 247

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	513	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
 05-24-10
 DATE
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



- NOTES:**
- Paint "Bent No. 21"
 - Paint "Bent No. 22"
 - Paint "Bent No. 23"
 - Paint "Bent No. 24"
 - Column Isolation Casing
- For Sign Pedestal Details, see "BENT DETAILS NO. 7" and "BENT DETAILS NO. 8" sheets
 - EOD Indicates Edge of Deck
- Indicates Deck area to receive additional concrete cover. See "GIRDER DETAILS NO. 4" sheet.

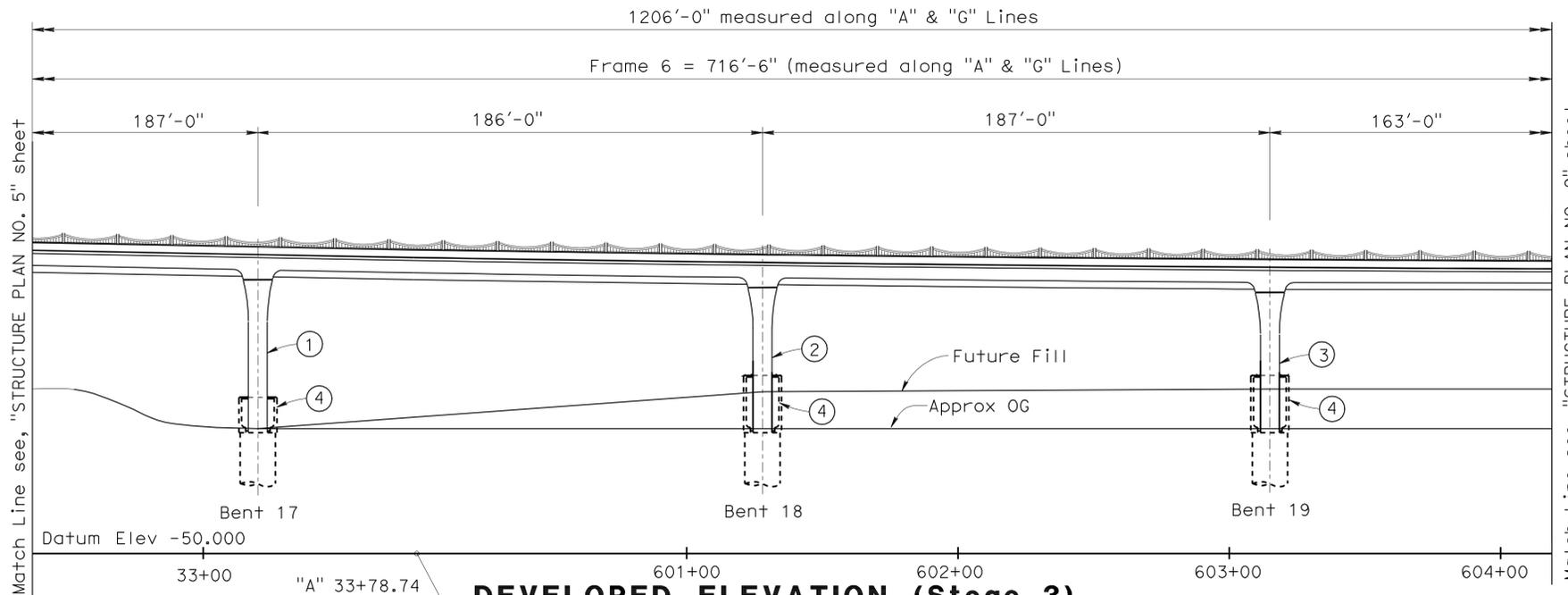
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY F. Zayati	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	SCHUYLER HEIM BRIDGE (REPLACE)		
DETAILS	BY T. Nguyen	CHECKED T. Skreslet			53-3032			
QUANTITIES	BY J/P Peterson	CHECKED J/P Peterson			POST MILE 3.58			
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)					CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 11 OF 247

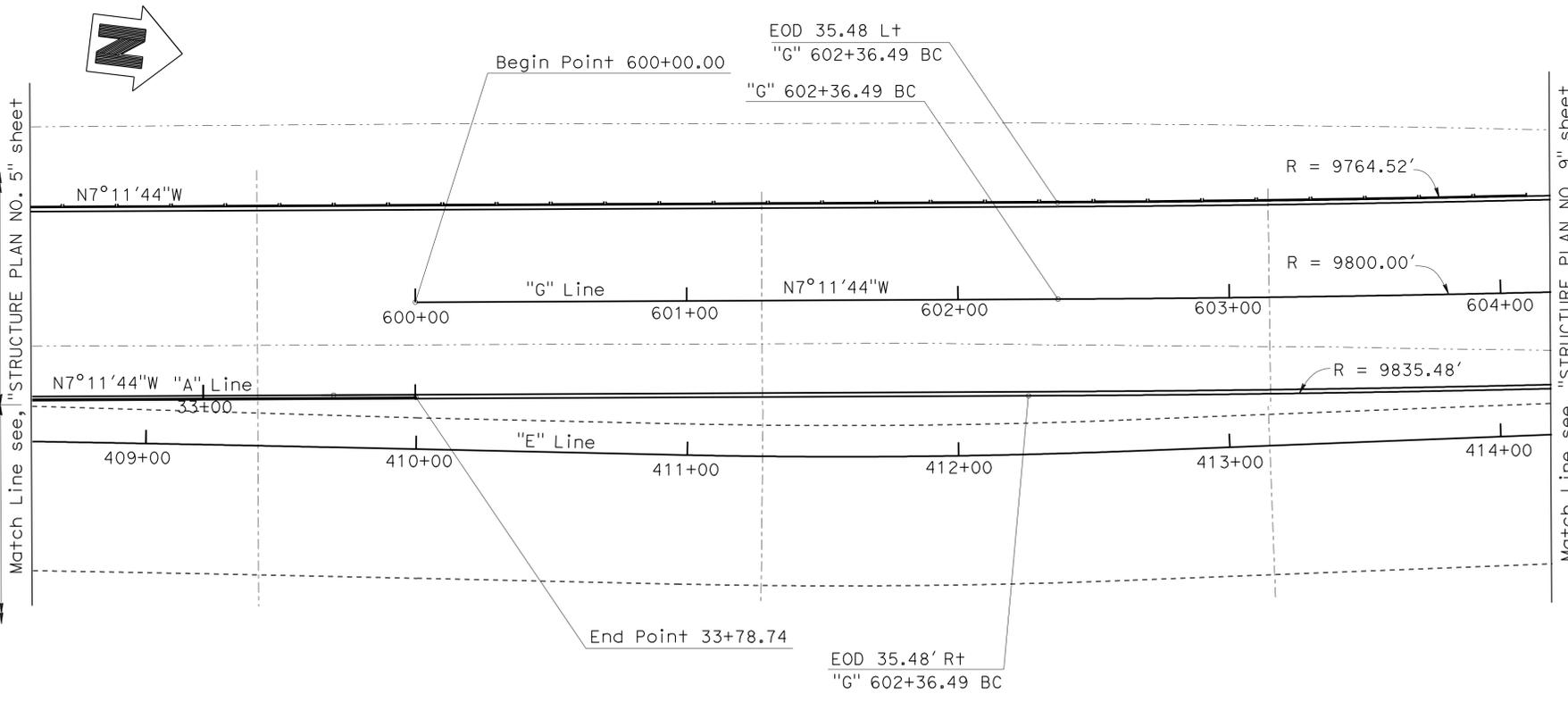
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	514	1003

FOUAD ZAYATI
 REGISTERED CIVIL ENGINEER
 DATE 05-24-10
 PLANS APPROVAL DATE 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

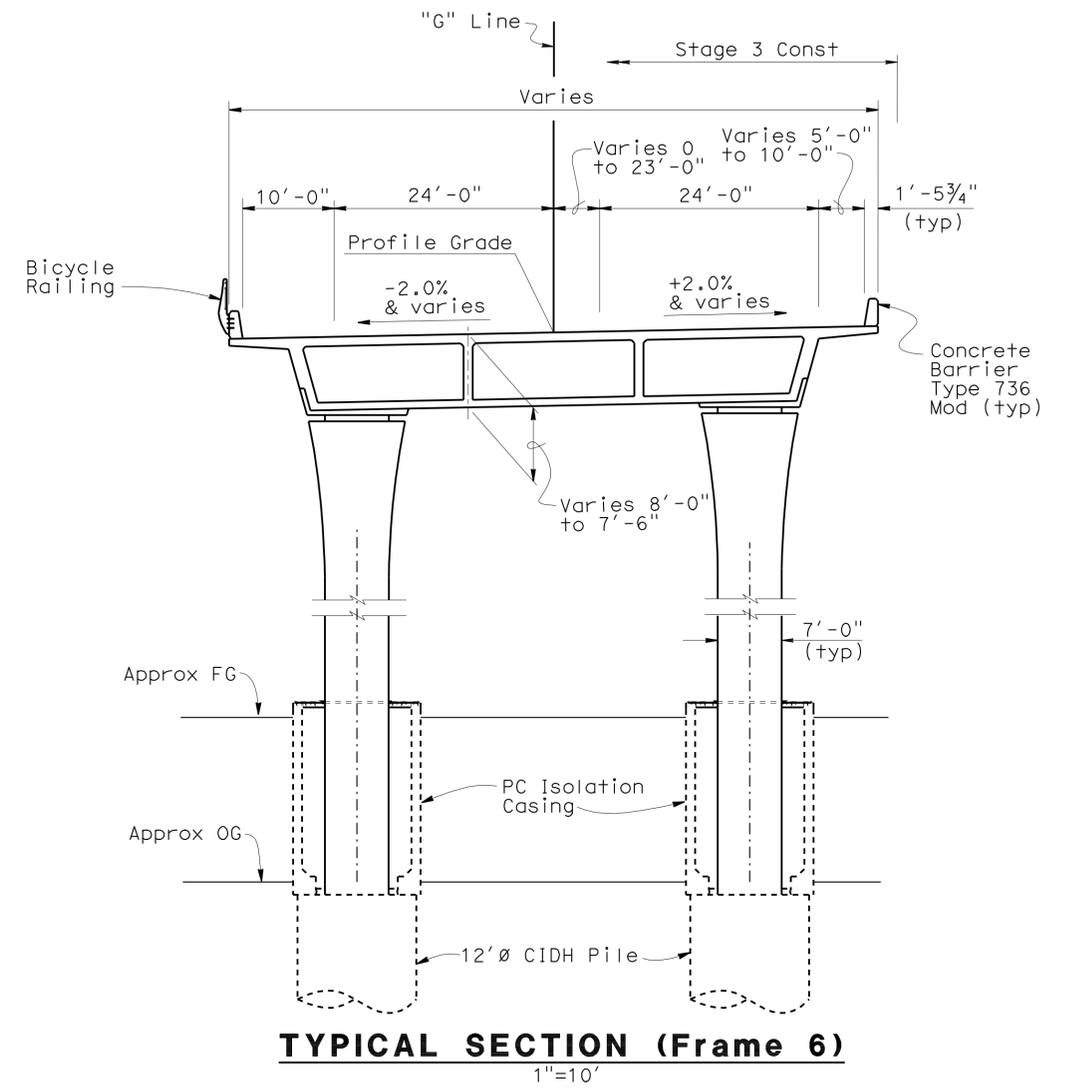
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DEVELOPED ELEVATION (Stage 3)
1"=30'



PLAN
1"=30'



TYPICAL SECTION (Frame 6)
1"=10'

- NOTES:
- ① Paint "Bent No. 17"
 - ② Paint "Bent No. 18"
 - ③ Paint "Bent No. 19"
 - ④ Column Isolation Casing
- EOD Indicates Edge of Deck

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY F. Zayati	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J/P Peterson	CHECKED J/P Peterson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO. 53-3032
POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
STRUCTURE PLAN NO. 8

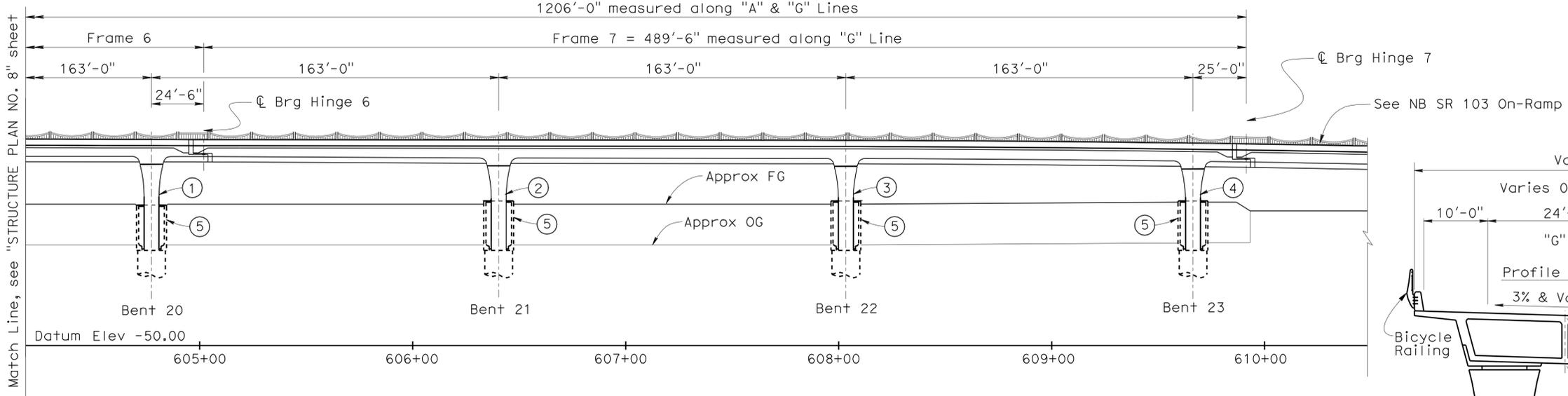
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	515	1003

FOUAD ZAYATI
 REGISTERED CIVIL ENGINEER
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

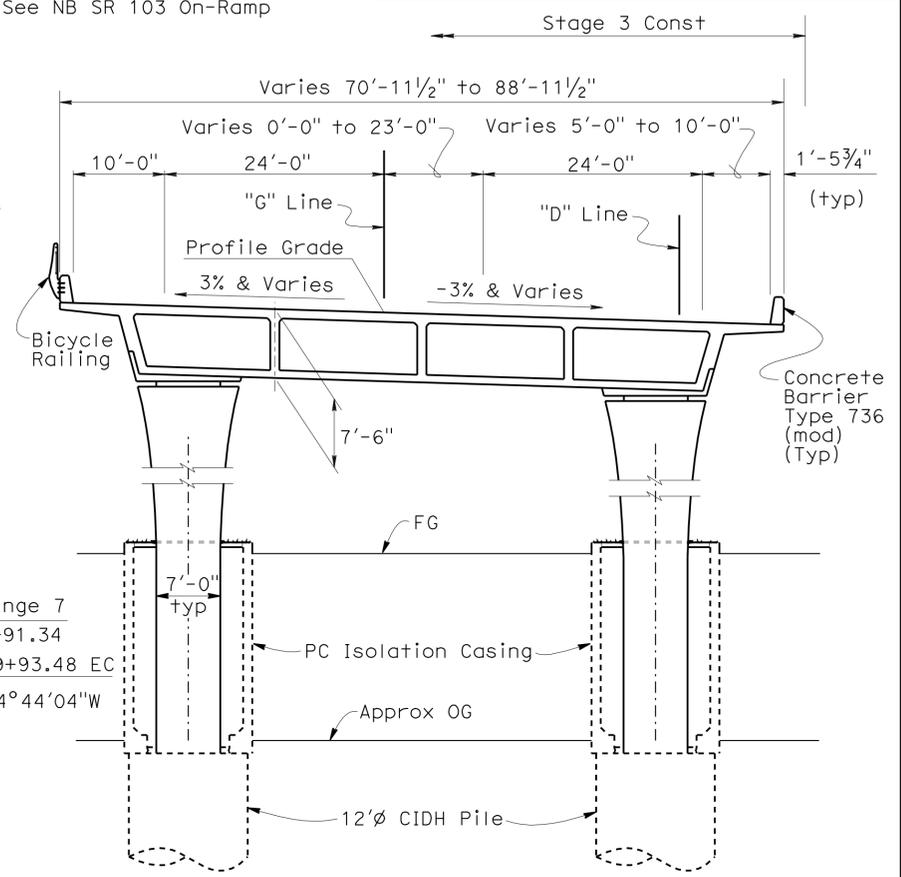
05-24-10
 DATE
 PLANS APPROVAL DATE

10-11-10
 PLANS APPROVAL DATE

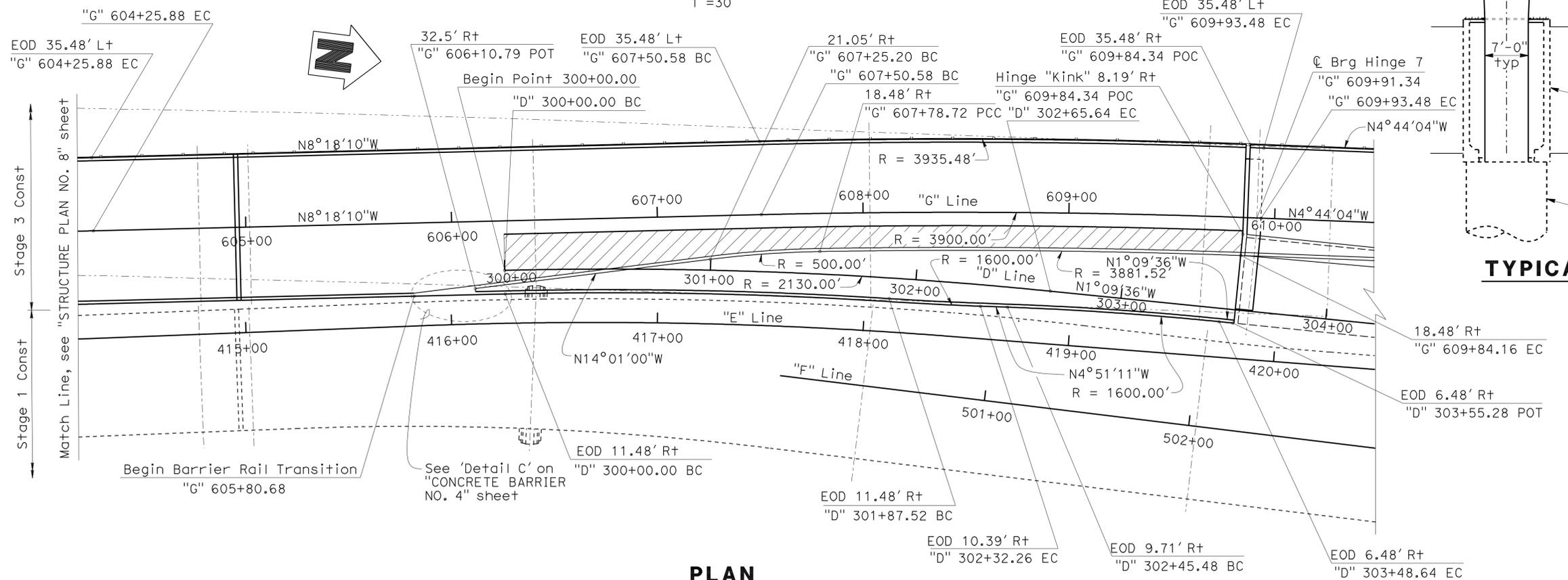
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DEVELOPED ELEVATION (Stage 3)
1"=30'



TYPICAL SECTION (Frame 7)
1"=10'



PLAN
1"=30'

- NOTES:
- Paint "Bent No. 20"
 - Paint "Bent No. 21"
 - Paint "Bent No. 22"
 - Paint "Bent No. 23"
 - Column Isolation Casing
- EOD Indicates Edge of Deck

Indicates Deck area to receive additional concrete cover. See "GIRDER DETAILS NO. 4" sheet.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY F. Zayati	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J/P Peterson	CHECKED J/P Peterson

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

BRIDGE NO. 53-3032
 POST MILE 3.58

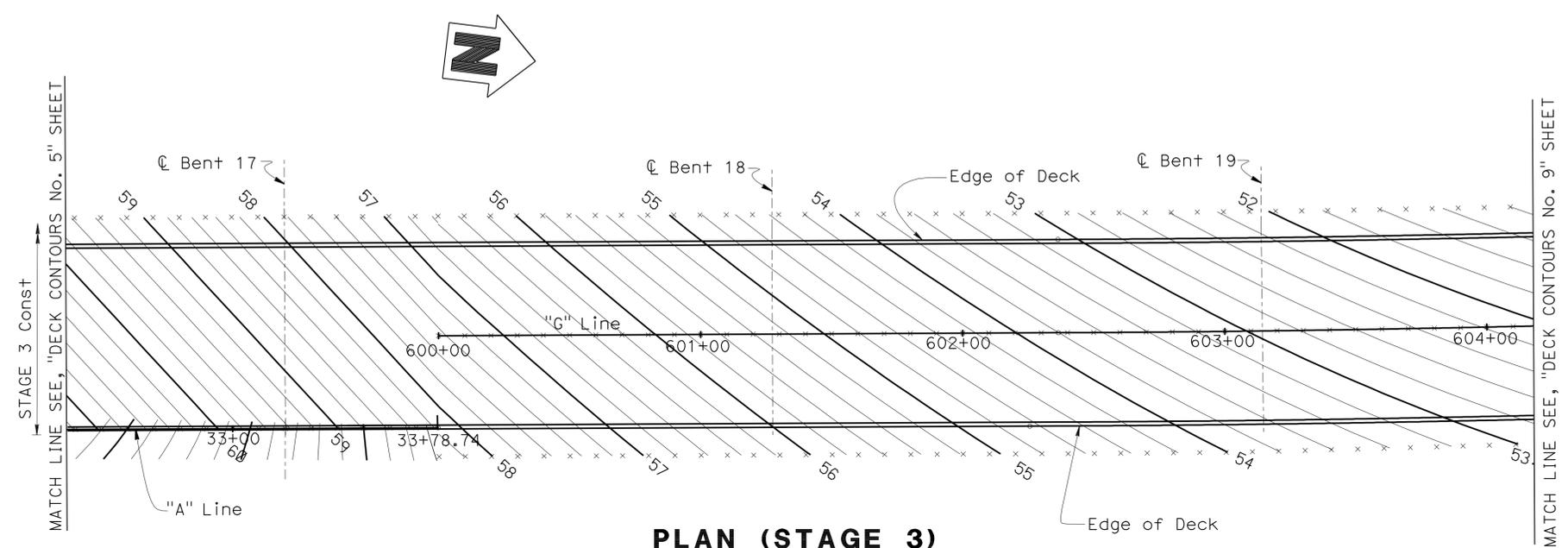
SCHUYLER HEIM BRIDGE (REPLACE)
STRUCTURE PLAN NO. 9

USERNAME => hrmjnguy DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	523	1003

Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 PLANS APPROVAL DATE 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

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PLAN (STAGE 3)
SCALE: 1" = 30'

- NOTES:
- × Indicates 10 ft intervals along Station Line
 - Contours do not include Camber
 - Contour interval = 0.2 ft

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY F. Zayati	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) DECK CONTOURS NO. 8	
	DETAILS	BY T. Nguyen	CHECKED T. Skreslet			POST MILE	3.58		
	QUANTITIES	BY J/P. Peterson	CHECKED J/P. Peterson						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 03-17-09 04-24-09 02-04-10 05-24-10 05-28-10 01-05-11	SHEET 21 OF 247

FILE => 53-3032-d-dc08.add

USERNAME => fhmnguy DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:52

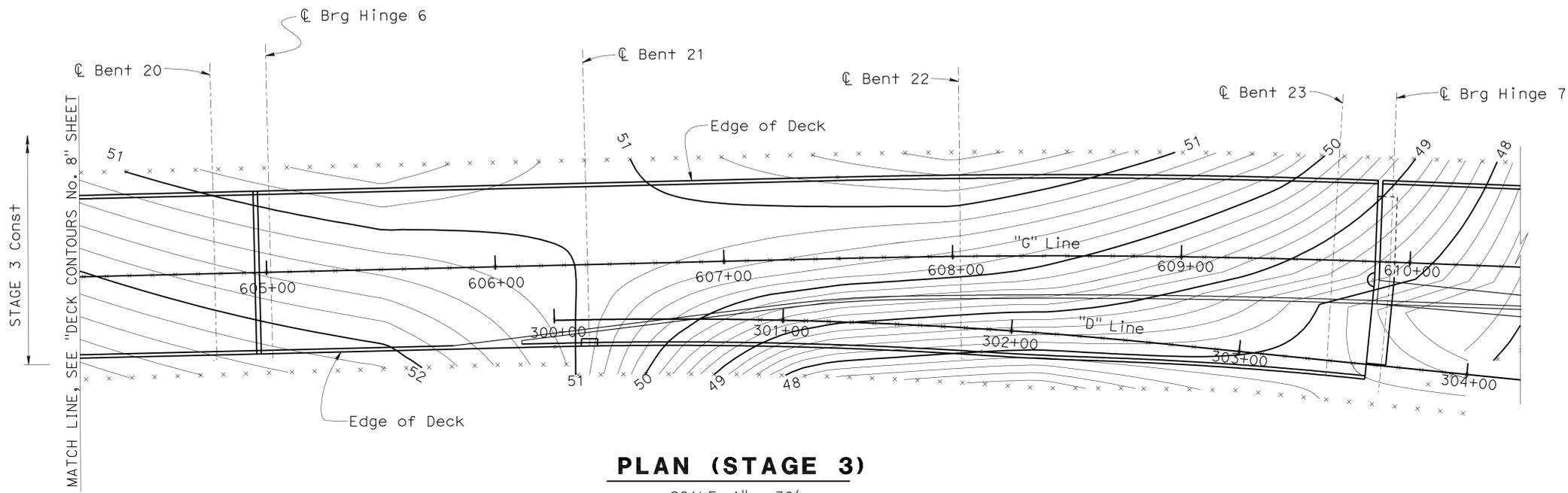
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	524	1003

Foued Zayati 05-24-10
 REGISTERED CIVIL ENGINEER DATE

10-11-10
 PLANS APPROVAL DATE

No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

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PLAN (STAGE 3)
SCALE: 1" = 30'

- NOTES:**
- x Indicates 10 ft intervals along Station Line
 - Contours do not include Camber
 - Contour interval = 0.2 ft

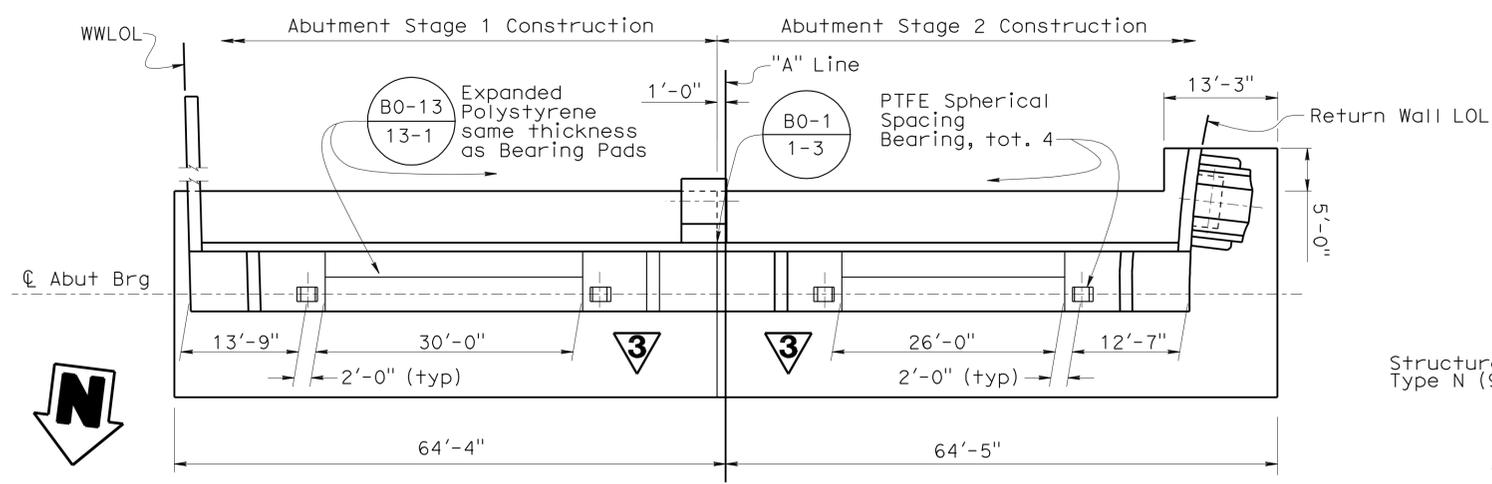
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY F. Zayati	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) DECK CONTOURS NO. 9	
	DETAILS	BY T. Nguyen	CHECKED T. Skreslet			POST MILE	3.58		
	QUANTITIES	BY J/P. Peterson	CHECKED J/P. Peterson						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 3-17-09 02-04-10 03-24-10 01-05-11	SHEET 22 OF 247

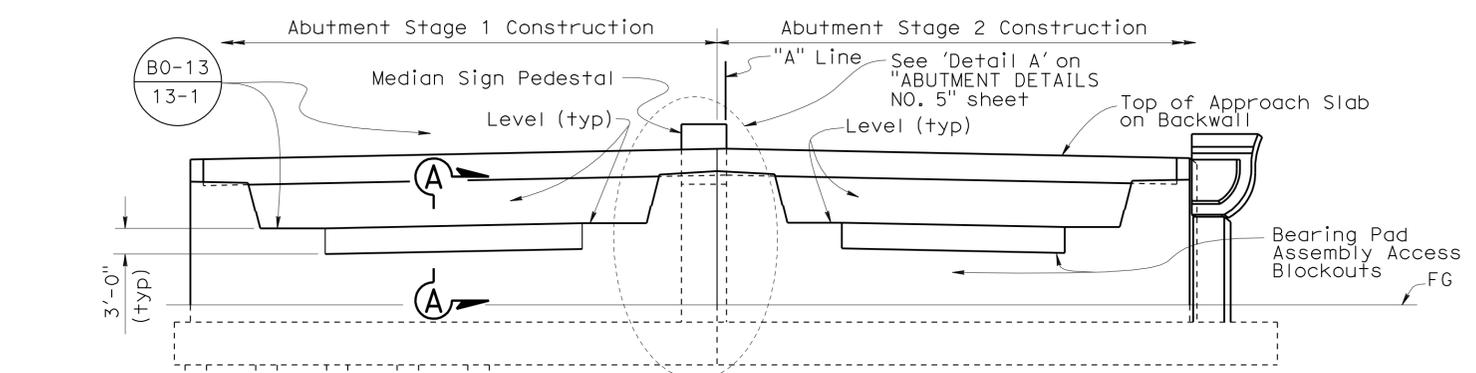
USERNAME => fhmnguye DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	533	1003

REGISTERED CIVIL ENGINEER	DATE 05-24-10
PLANS APPROVAL DATE 10-11-10	
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>	

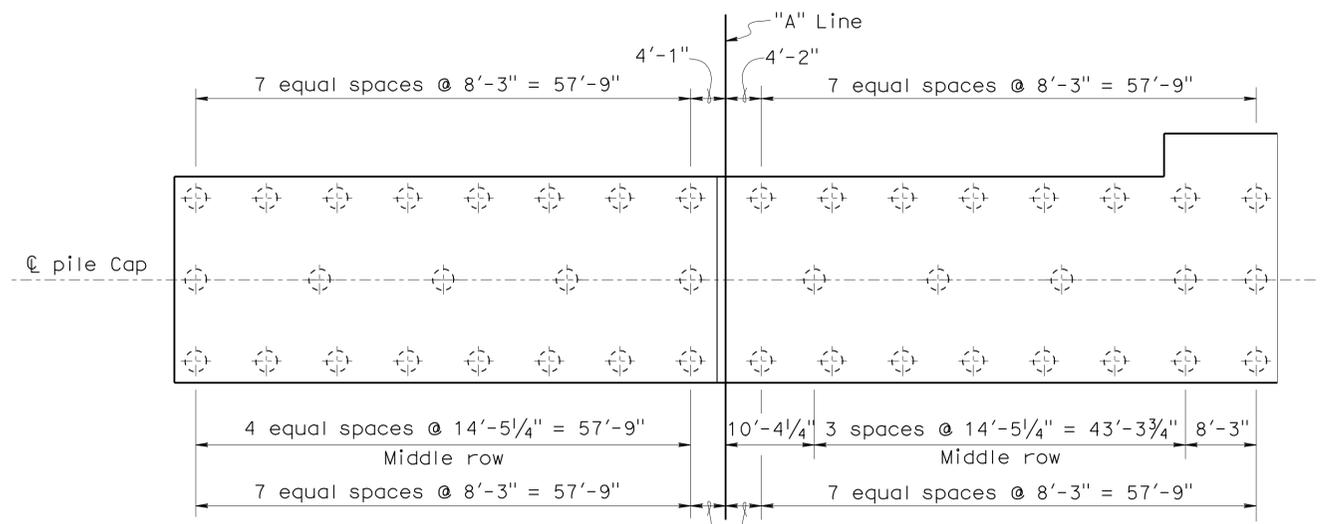


PLAN
3/32" = 1'-0"



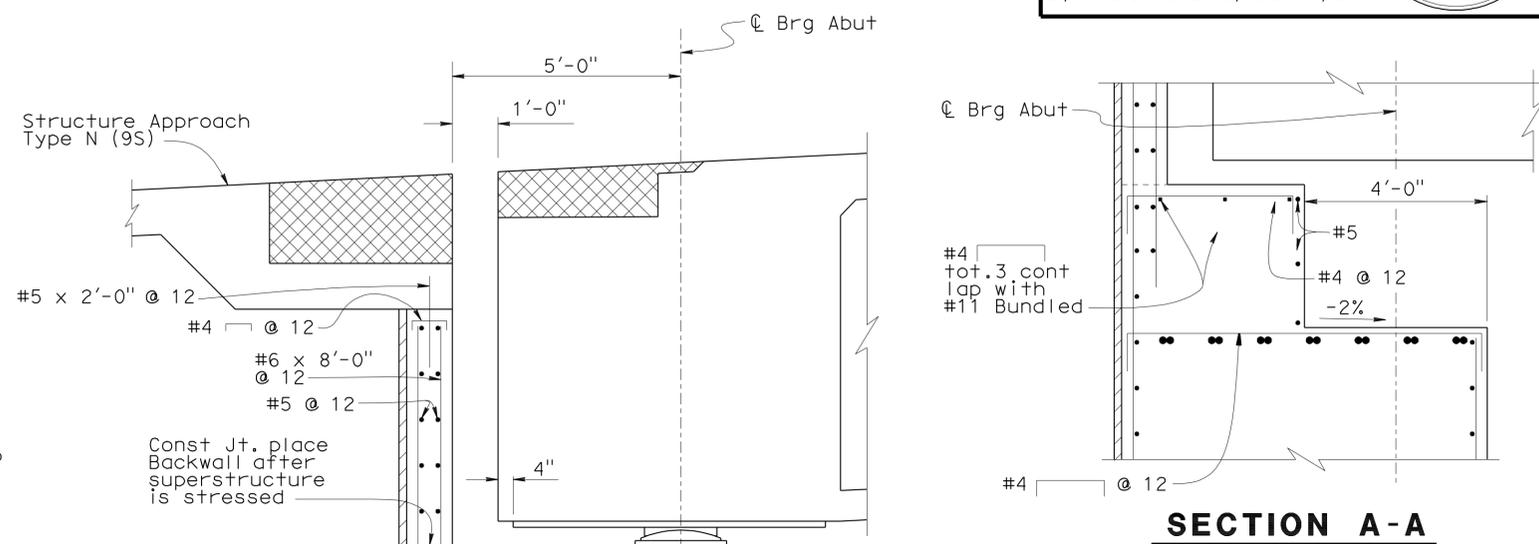
ELEVATION
3/32" = 1'-0"

- NOTES:
1. Not all Piles are shown.
 2. Concrete barriers not shown.

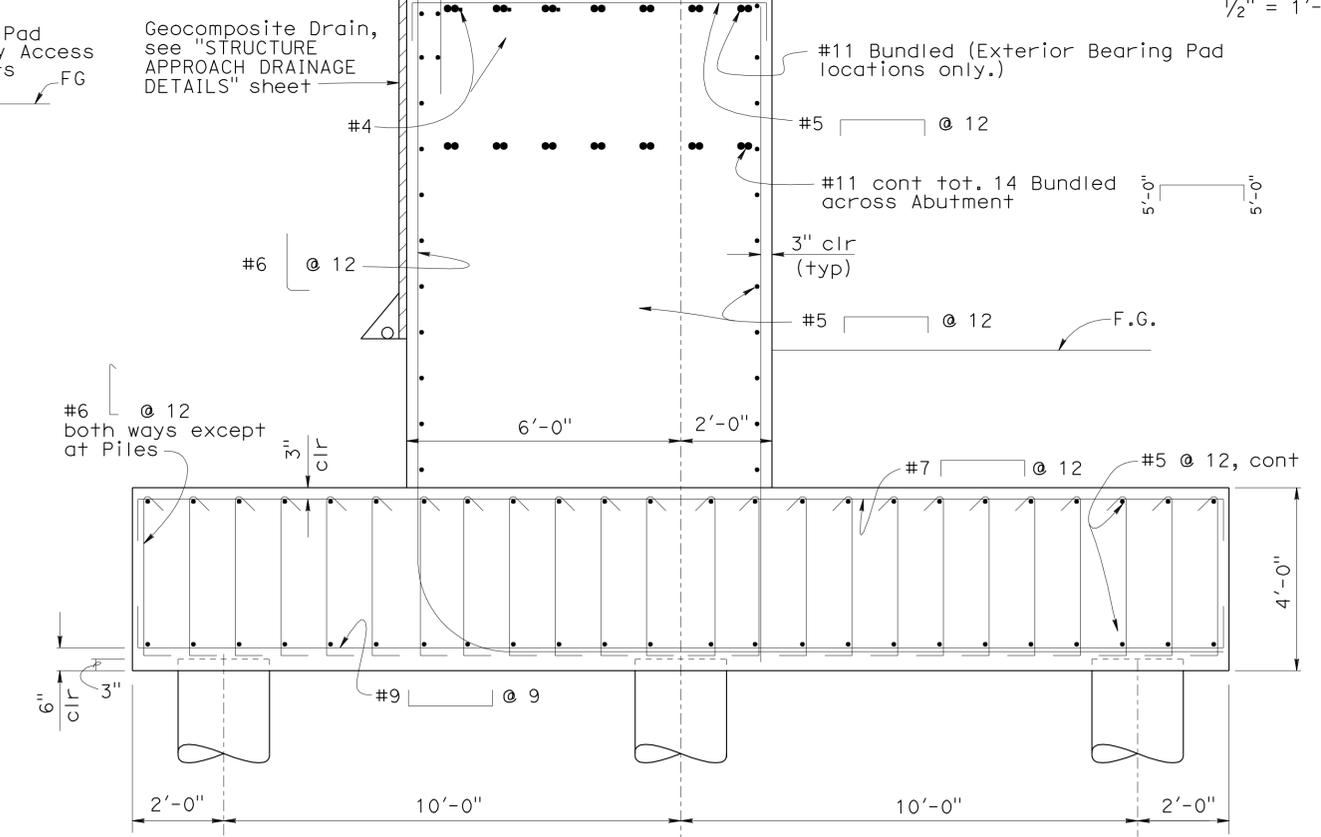


FOOTING - PLAN
3/32" = 1'-0"

- NOTES:
1. For Sign Pedestal Details, see "ABUTMENT 1 DETAILS NO. 4" and "ABUTMENT 1 DETAILS NO. 5" sheets
 2. For Joint Seal Assembly Blockout dimensions, see "JOINT SEAL ASSEMBLY DETAILS NO. 1" SHEET.
- Indicates Limits of Joint Seal Blockout.



SECTION A-A
1/2" = 1'-0"



SECTION AT BEARING PADS
1/2" = 1'-0"

3 REVISED PER ADDENDUM No. 3
DATED MARCH 28, 2011

DESIGN	BY S. Galgiani	CHECKED J. Lane
DETAILS	BY T. Nguyen	CHECKED J. Lane
QUANTITIES	BY S. Galgiani	CHECKED S. Hegazi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

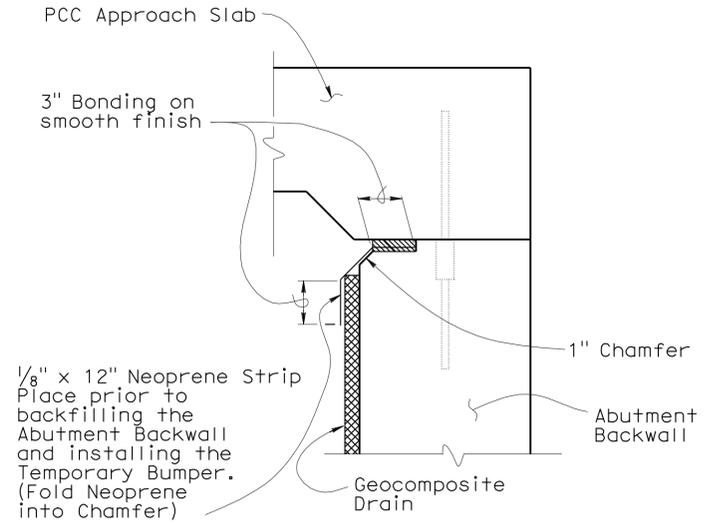
BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
ABUTMENT 1 LAYOUT

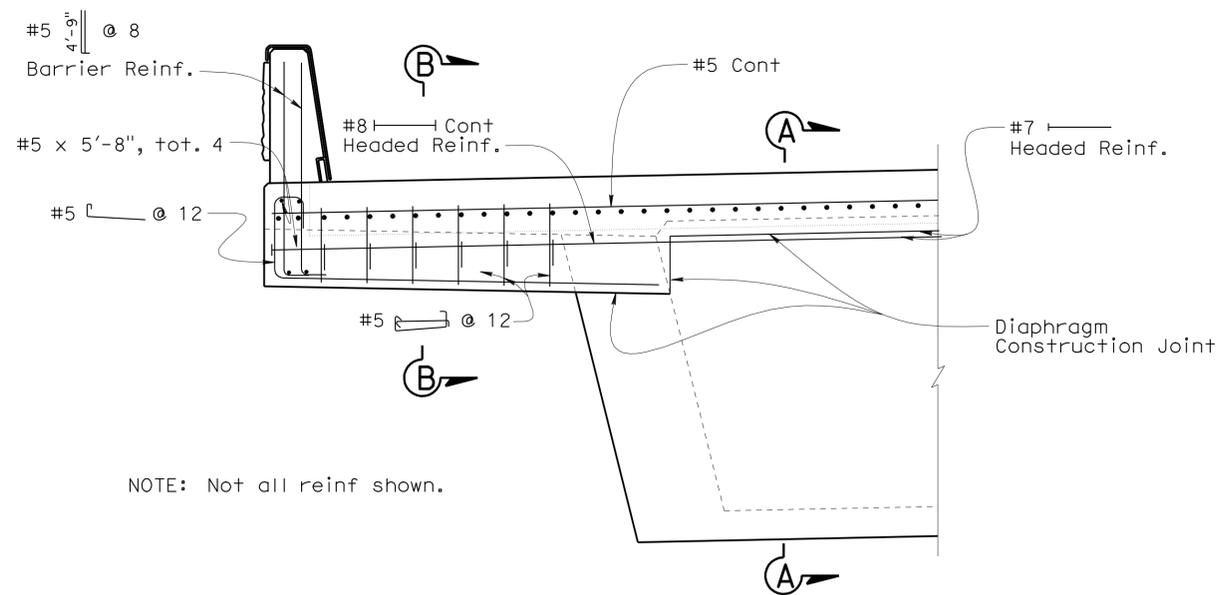
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	535	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
 DATE: 05-24-10
 PLANS APPROVAL DATE: 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

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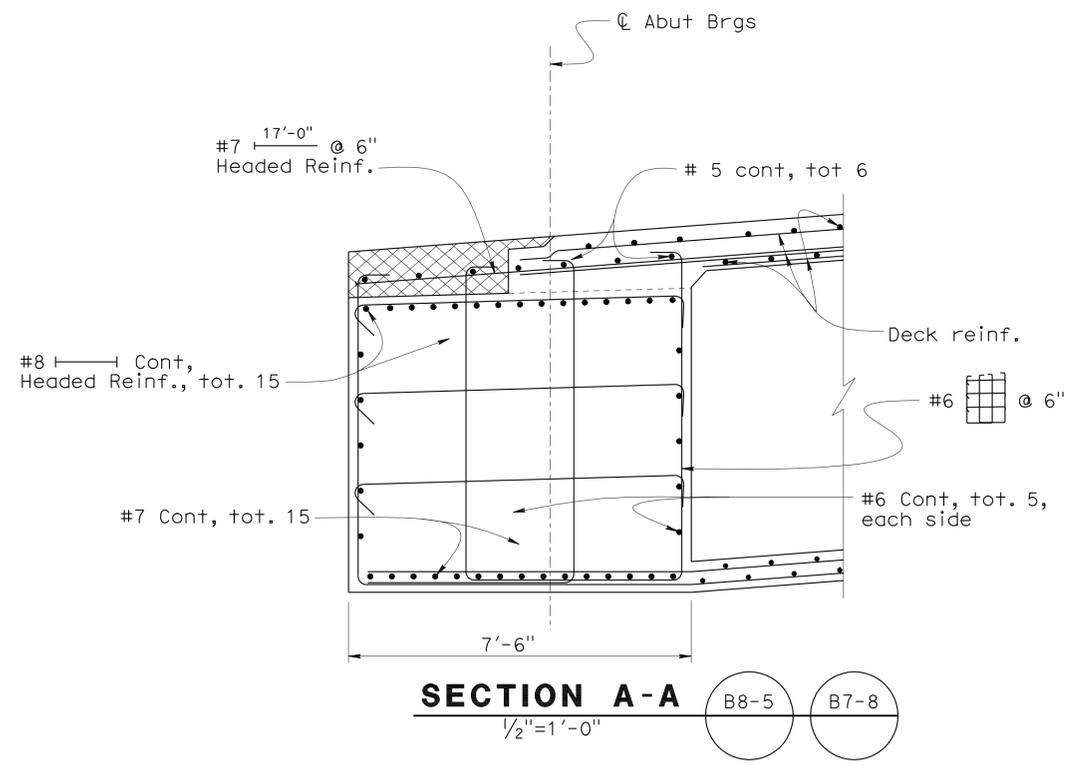


JOINT PROTECTION DETAIL
 No Scale

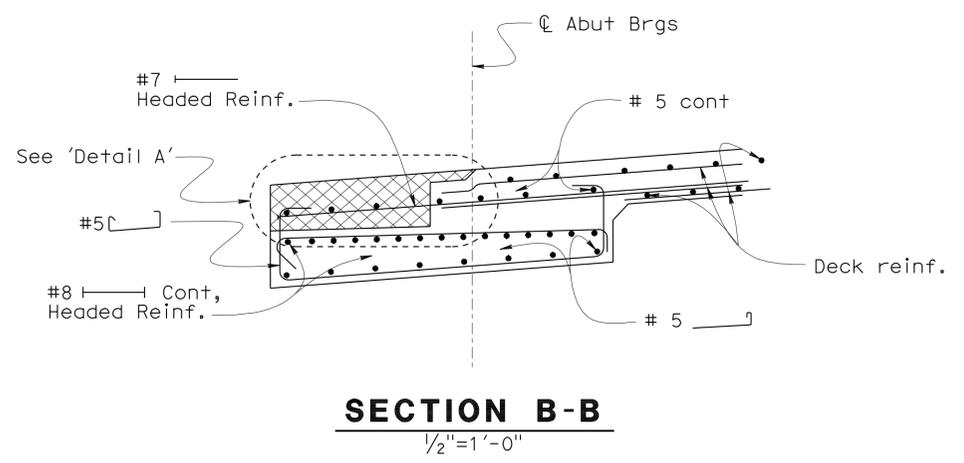


NOTE: Not all reinf shown.

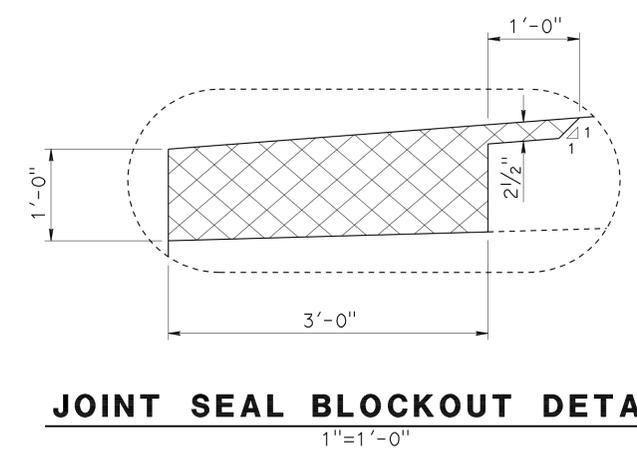
ABUTMENT DIAPHRAGM - PART ELEVATION
 1/2" = 1'-0"



SECTION A-A
 1/2" = 1'-0"
 B8-5 B7-8



SECTION B-B
 1/2" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL
 1" = 1'-0"

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY S. Galgiani	CHECKED J. Lane
DETAILS	BY K. Kubo	CHECKED J. Lane
QUANTITIES	BY S. Galgiani	CHECKED S. Hegazi

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

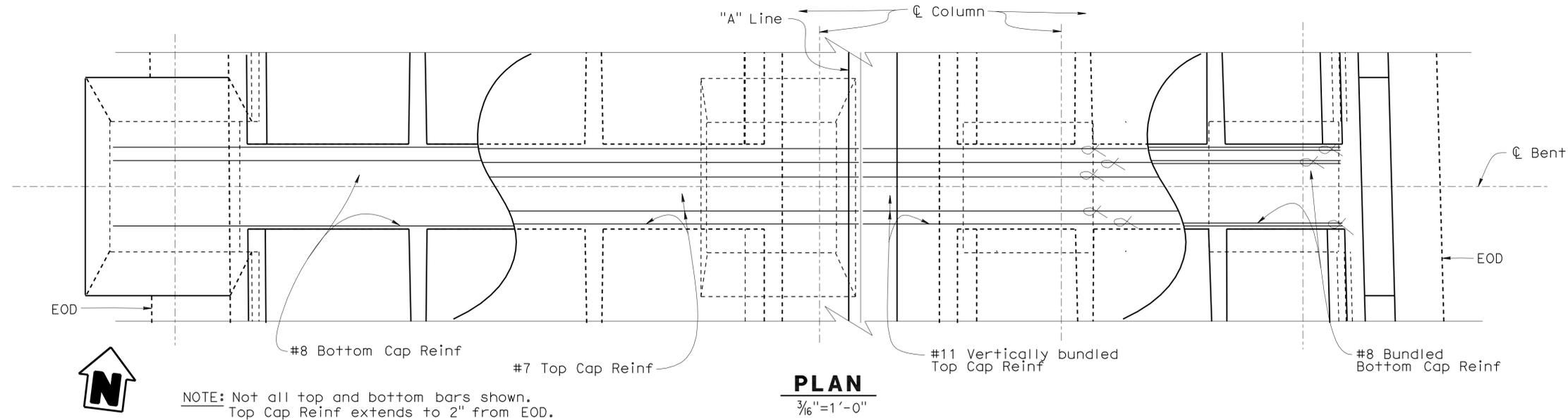
BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
ABUTMENT 1 DETAILS NO. 2

USERNAME => hrmnguye DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	540	1003

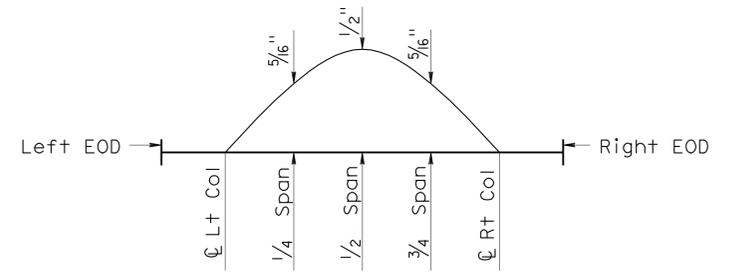
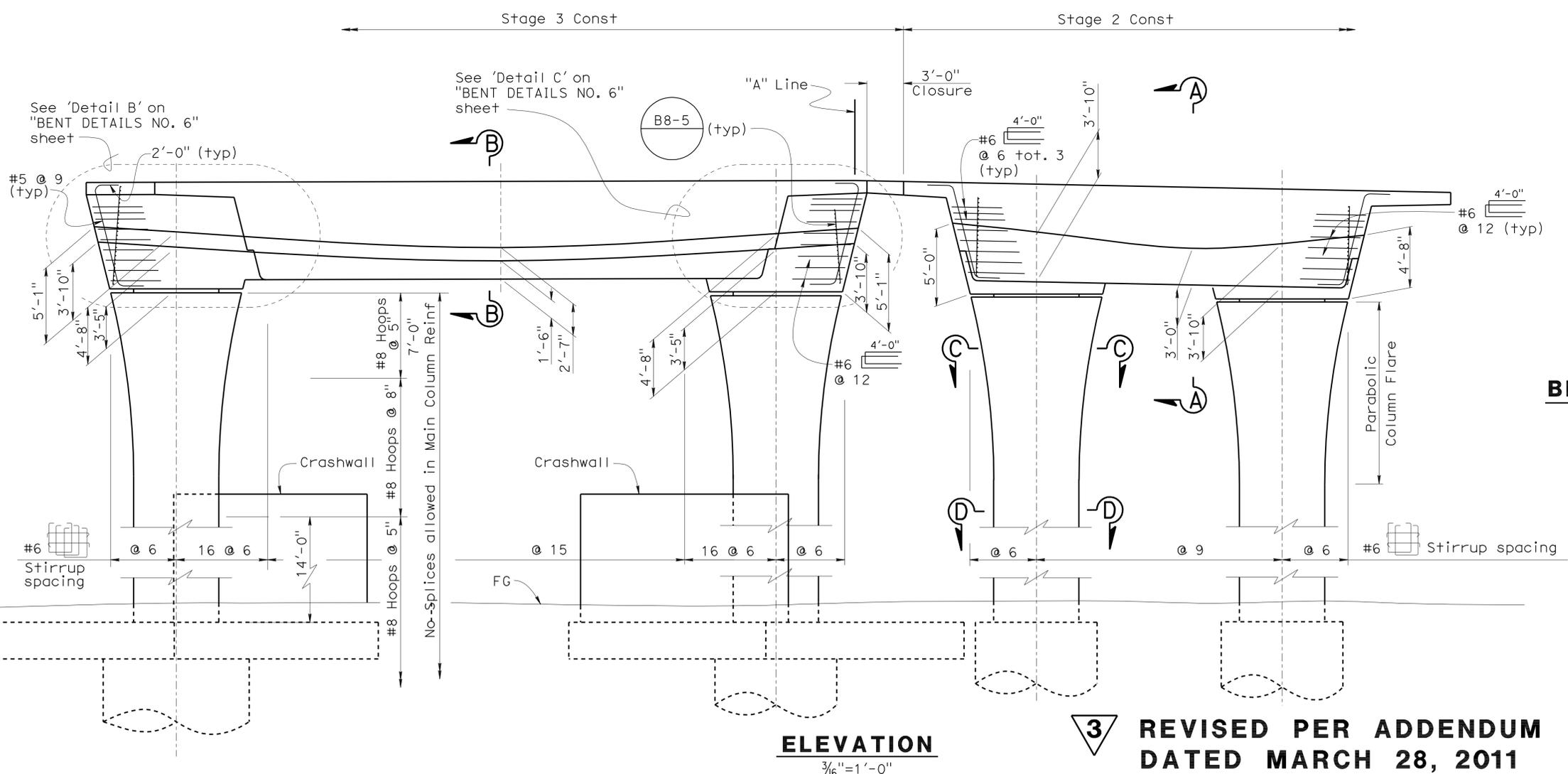
FOUED ZAYATI
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



NOTE: Not all top and bottom bars shown.
Top Cap Reinf extends to 2" from EOD.

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:
 P_{jack} (Upper Cable) Stage 2 = 5120 kips
 Anchor Set = 3/8 in
 P_{jack} (Lower Cable) Stage 2 = 4500 kips
 P_{jack} Stage 1 = 2540 kips
 Anchor Set = 3/8 in
 Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at
 ☒ Stage 1 = 0.878 times jacking stress for both Cables.
 ☒ Stage 2 = 0.923 times jacking stress for both Cables.
 One end stressing shall be performed.



- NOTES:
- For 'Section A-A', see "BENT DETAILS NO. 4" sheet. For 'Section B-B', see "BENT DETAILS NO. 5" sheet.
 - For 'Section C-C' and 'Section D-D', see "BENT DETAILS NO. 2" sheet.
 - For P/S Anchorage Zone detail, see "TYPICAL SECTION NO. 1" sheet
 - For Parabolic Column flare, see "BENT DETAILS NO. 1" sheet
 - Cable Paths are parabolic between centerline of Columns and straight all other locations.
 - Barrier Rails not shown.
 - Stirrups not shown.

3 REVISED PER ADDENDUM No. 3
DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO.	53-3032
POST MILE	3.58

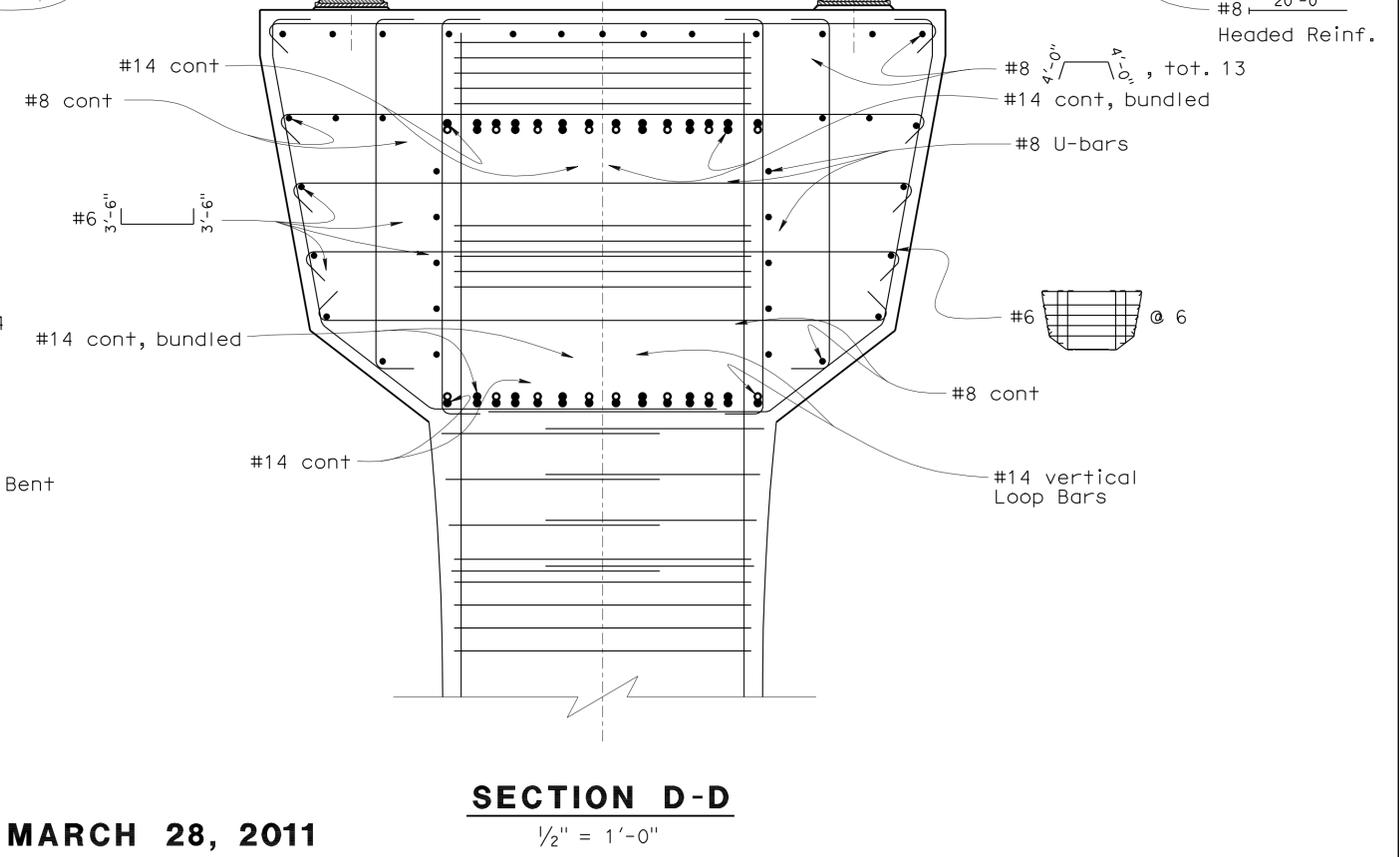
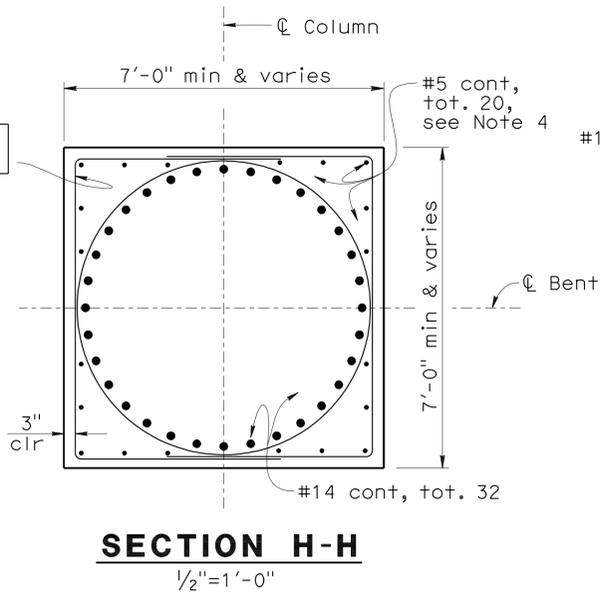
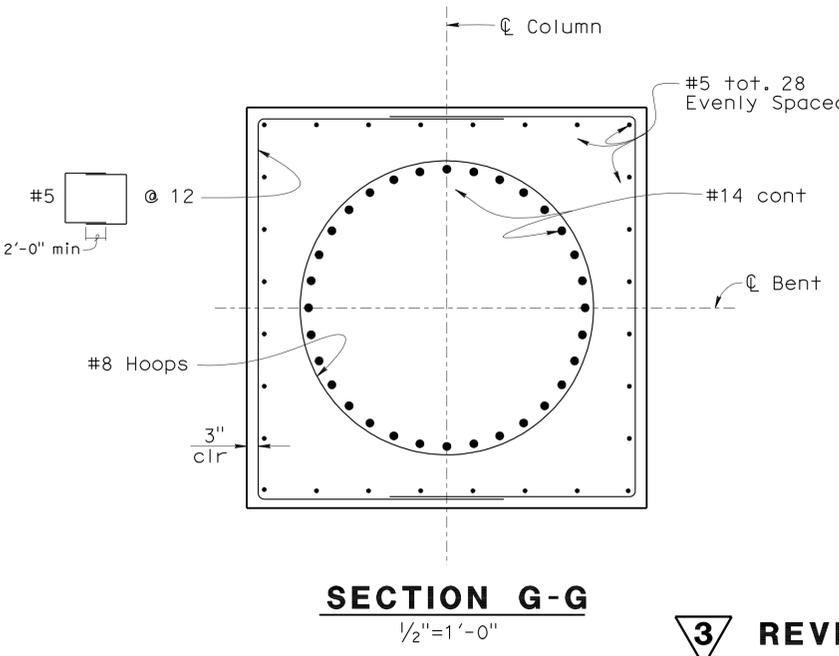
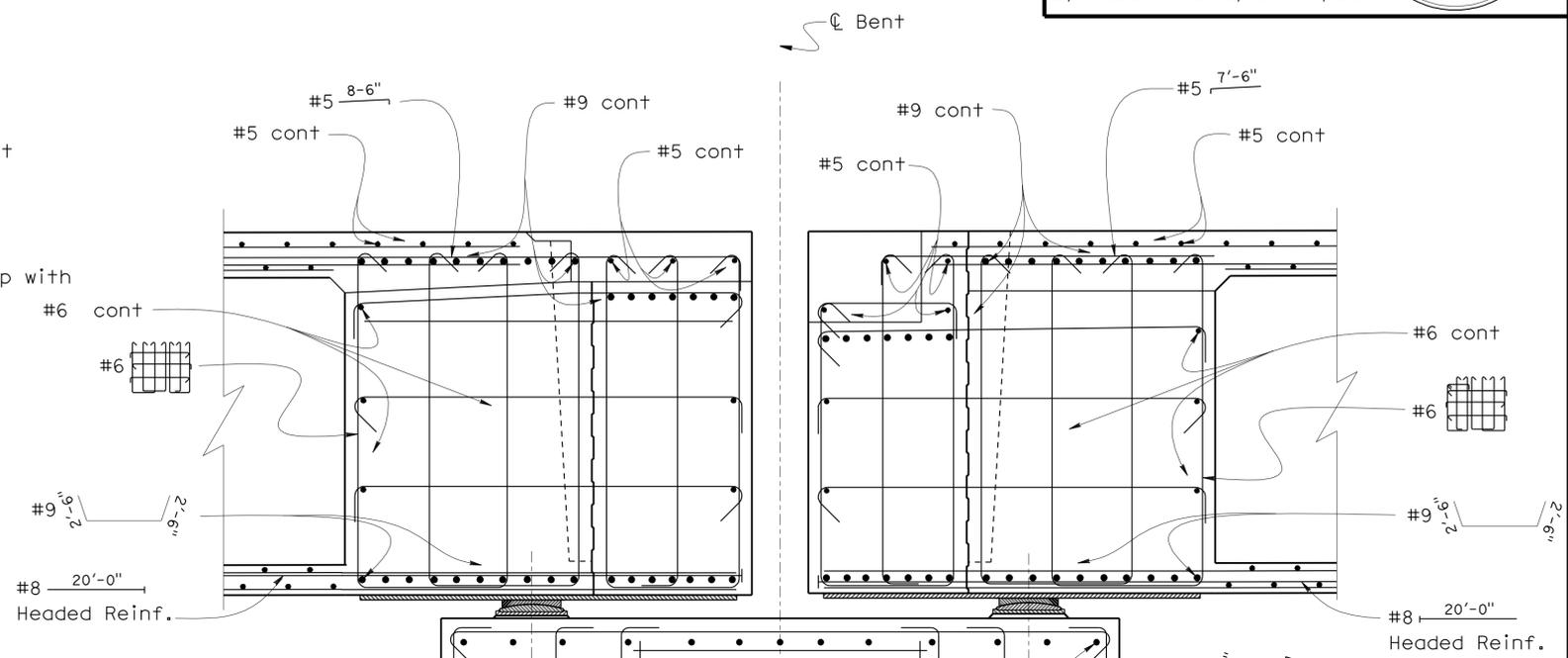
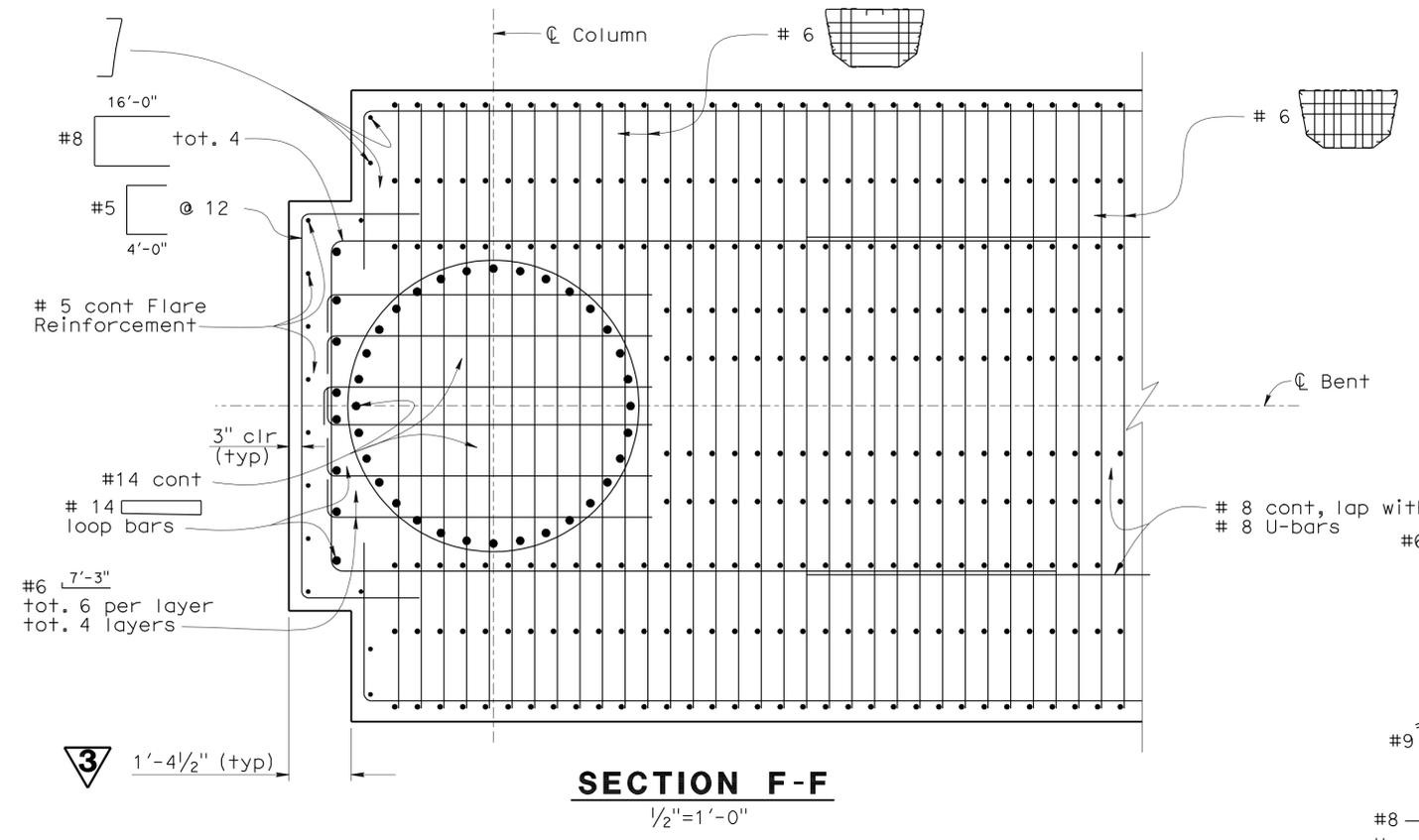
SCHUYLER HEIM BRIDGE (REPLACE)
BENT 4 LAYOUT

USERNAME => hmguyen DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	545	1003
<i>Foued Zayati</i> REGISTERED CIVIL ENGINEER			05-24-10 DATE	REGISTERED PROFESSIONAL ENGINEER No. C57046 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA	
10-11-10 PLANS APPROVAL DATE					
<i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</i>					

NOTES:

1. For 'Section D-D', 'Section F-F', 'Section G-G' and 'Section H-H', see 'BENT 6 LAYOUT' sheet.
2. Column Steel Pin not shown for clarity.
3. For Column Steel Pin, see 'BENT DETAILS NO. 4' sheet.
4. Extend #5 bars 1'-6" into top of Pile.



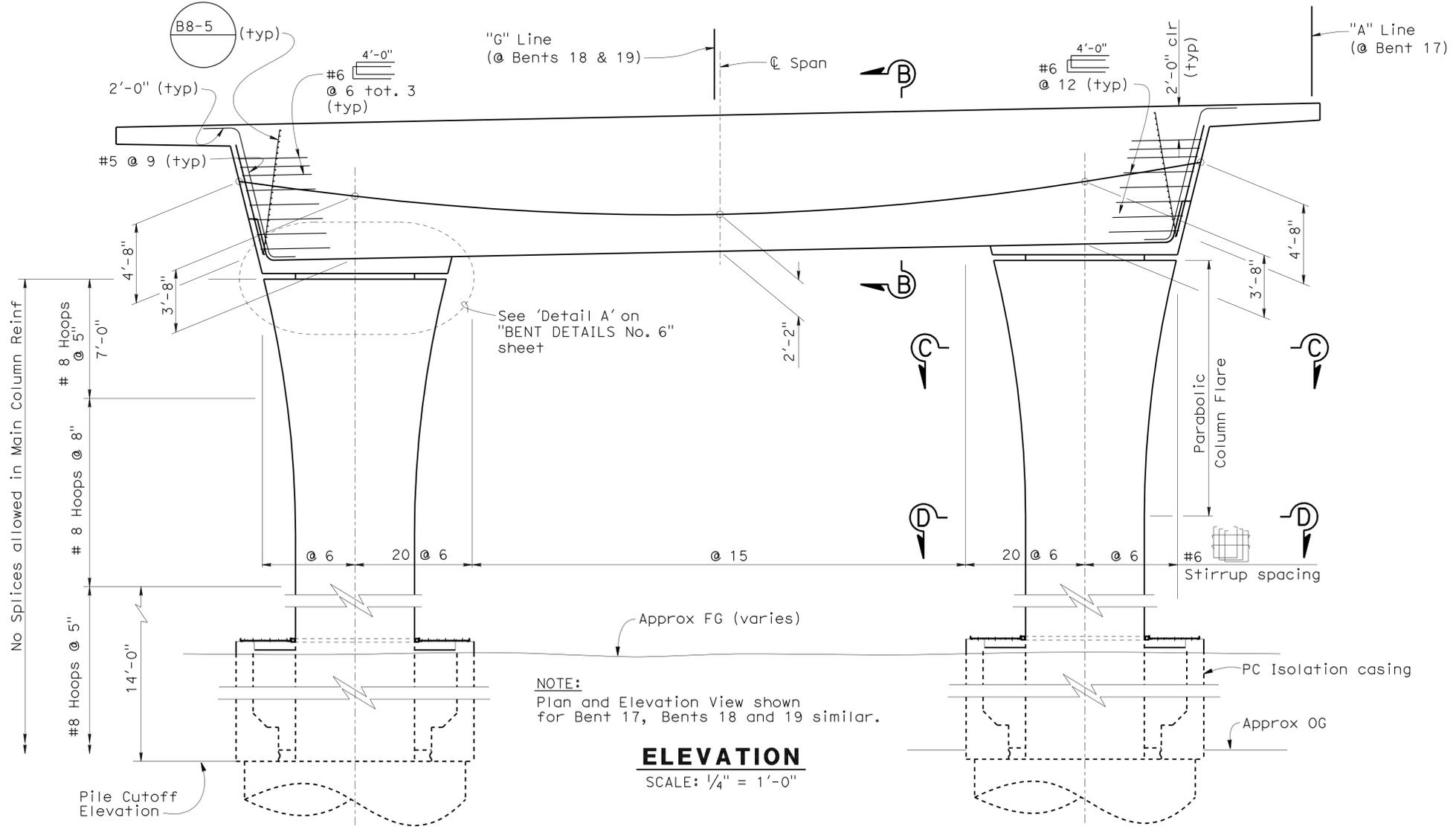
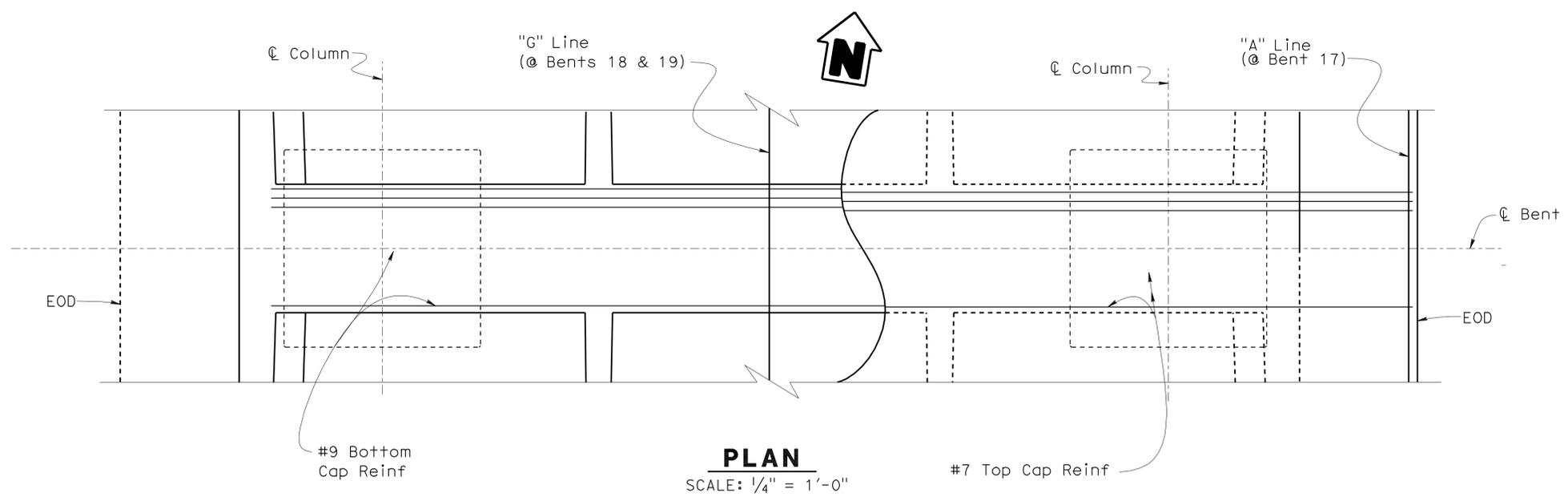
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY F. Zayati	CHECKED L. Bahia	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) BENT 6 DETAILS NO. 3	
	DETAILS	BY K. Kubo	CHECKED F. Zayati			POST MILE	3.58		
	QUANTITIES	BY J. Massoomi	CHECKED L. Han						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES 02-04-10 03-29-10 04-29-10	SHEET 43 OF 247

USERNAME => fhmortlak DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	557	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
 DATE: 05-24-10
 PLANS APPROVAL DATE: 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



PRESTRESSING NOTES

270 KSI Low Relaxation Strand:

P_{jack} (Bent 17) = 3320 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 18) = 3200 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 19) = 2770 kips
 Anchor Set = 3/8 in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at
 $\lambda = 0.892$ times jacking stress.

One end stressing shall be performed.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

- NOTES:**
- For 'Section B-B', see "BENT DETAILS No. 5" sheet.
 - For 'Section C-C' and 'Section D-D', see "BENT DETAILS No. 2" sheet.
 - For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet.
 - For Parabolic Column flare, see "BENT DETAILS No. 1" sheet.
 - Cable Paths are parabolic between centerline of Columns and straight all other locations.

DESIGN BY J. Massoomi	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 53-3032	SCHUYLER HEIM BRIDGE (REPLACE) BENTS 17 THRU 19 LAYOUT (STAGE 3)
DETAILS BY T. Nguyen	CHECKED T. Skreslet		POST MILE 3.58	
QUANTITIES BY J. Massoomi	CHECKED L. Han		DESIGN BRANCH 14	

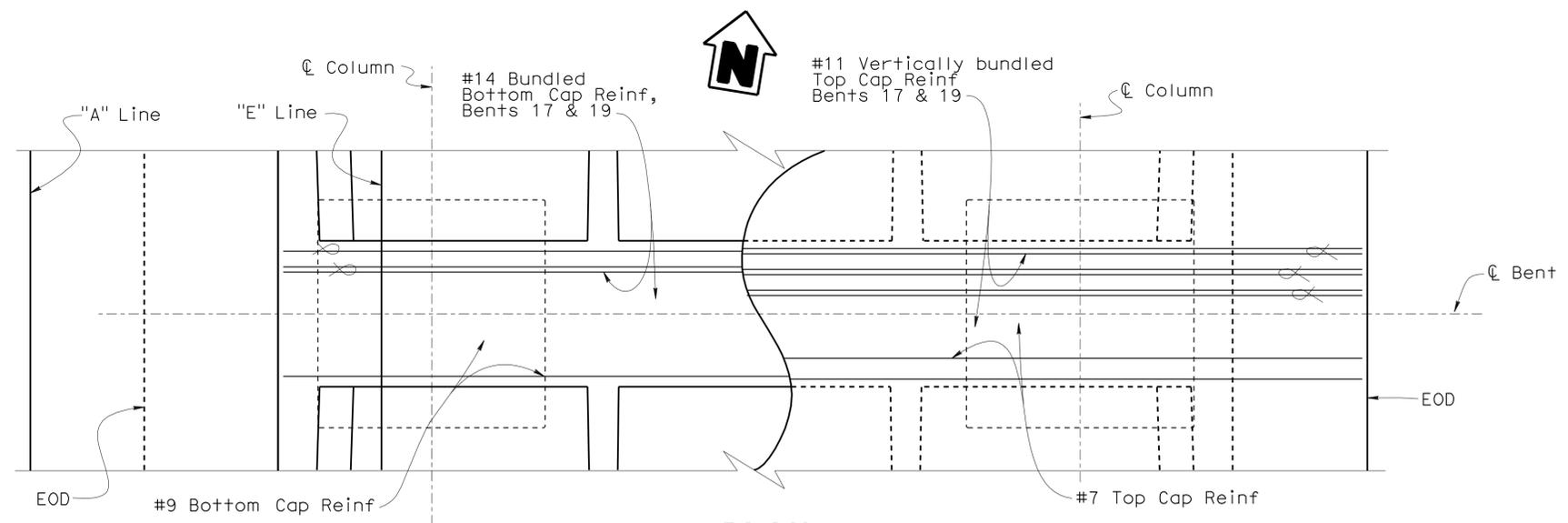
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
 CU 07-271 EA 138201
 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET 55	OF 247
03-04-10	05-08-10	4-1-10
4-13-10	05-05-10	5-18-10
05-26-10	12-16-10	

FILE => 53-3032-h-b17to19_l_o.add

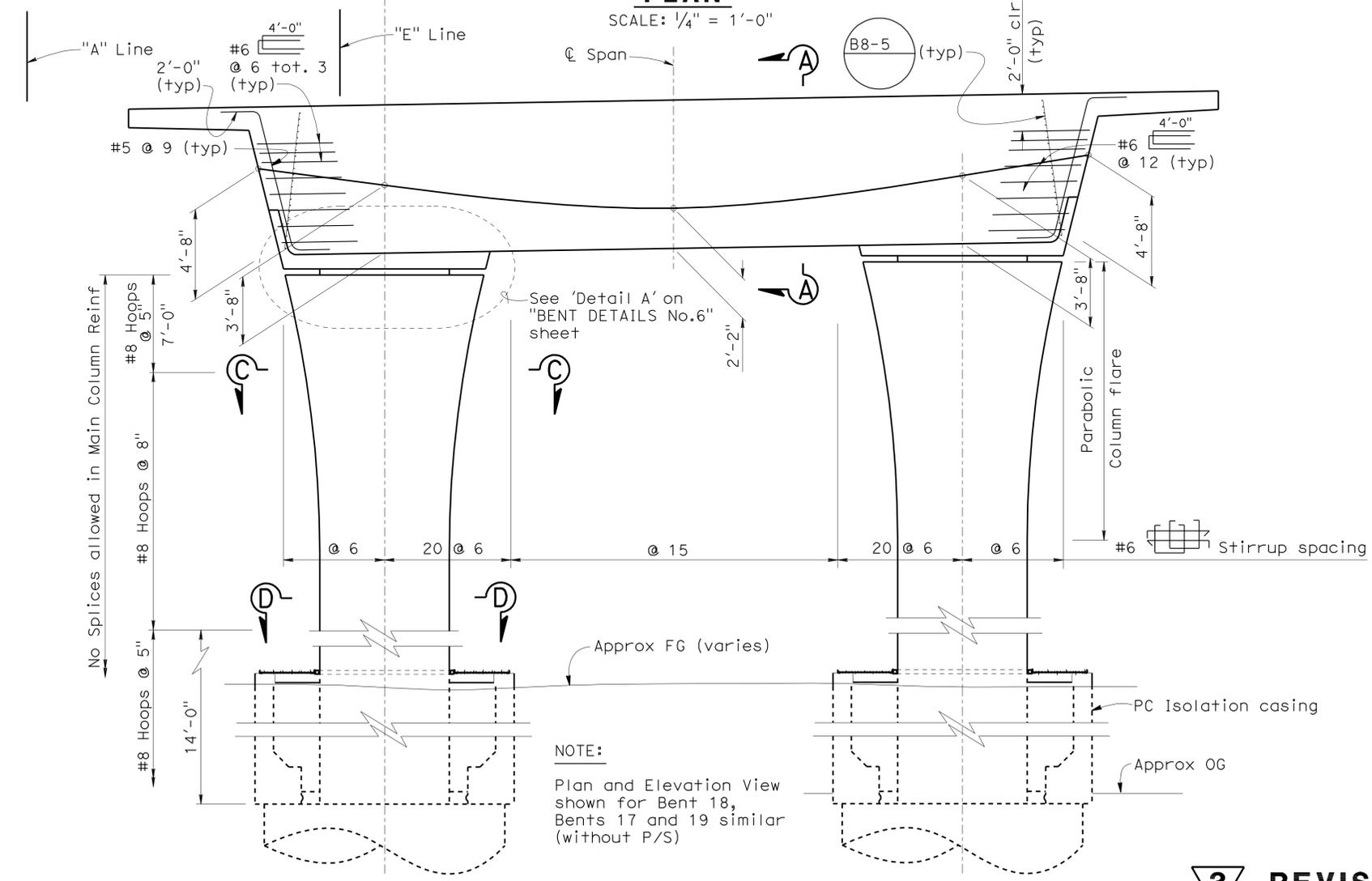
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	558	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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PLAN

SCALE: 1/4" = 1'-0"



ELEVATION

SCALE: 1/4" = 1'-0"

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:

P_{jack} (Bent 17) = 2900 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 18) = 2870 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 19) = 2490 kips
 Anchor Set = 3/8 in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at $\lambda = 0.886$ times jacking stress.

One end stressing shall be performed.

NOTES:

- For 'Section A-A', see "BENT DETAILS No. 4" sheet.
- For 'Section C-C' and 'Section D-D', see "BENT DETAILS No. 2" sheet.
- For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet
- For Parabolic Column flare, see "BENT DETAILS No. 1" sheet
- The Cable Path is parabolic between centerline of Columns and straight all other locations.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

BRIDGE NO. 53-3032
 POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
BENTS 17 THRU 19 LAYOUT (STAGE 1)

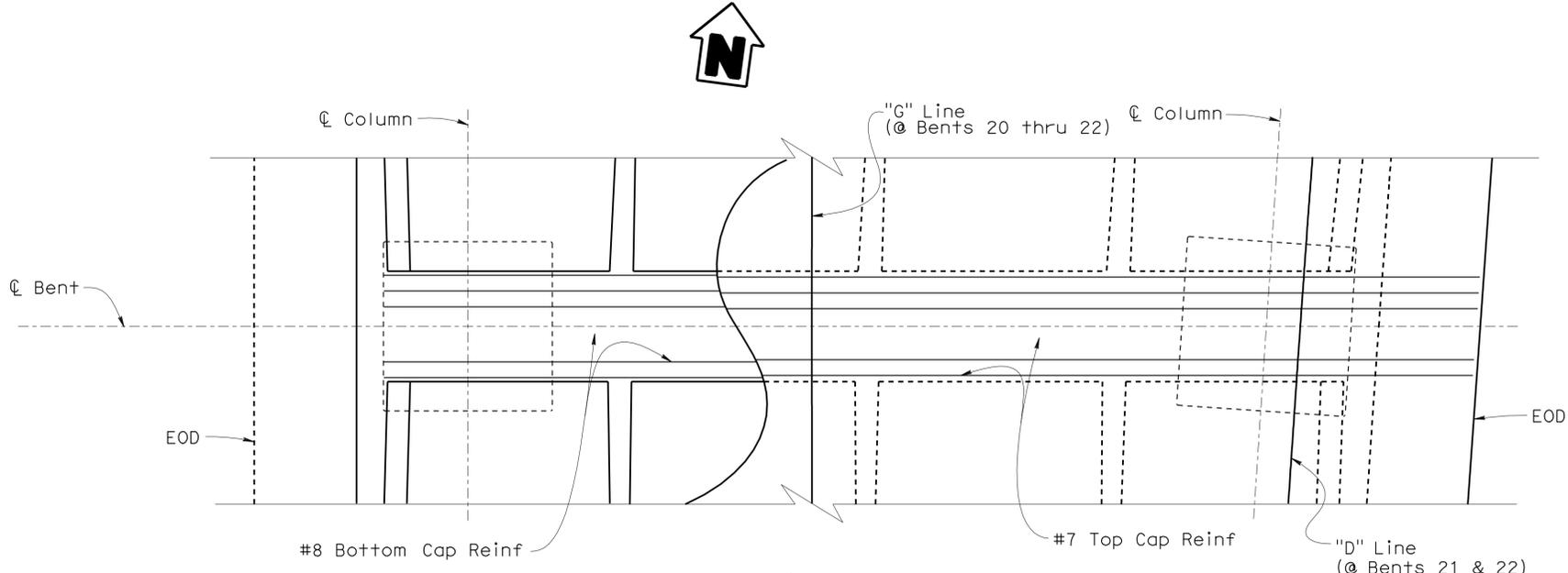
USERNAME => hrmnguye DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	559	1003

Poued Zayat REGISTERED CIVIL ENGINEER DATE 05-24-10		
10-11-10 PLANS APPROVAL DATE		
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>		

NOTES:

- For 'Section B-B', see "BENT DETAILS No. 5" sheet.
- For 'Section D-D' and 'Section E-E', see "BENT DETAILS No. 2" sheet.
- For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet.
- For Parabolic Column flare, see "BENT DETAILS No. 1" sheet.
- Cable Paths are parabolic between centerline of Columns and straight all other locations.



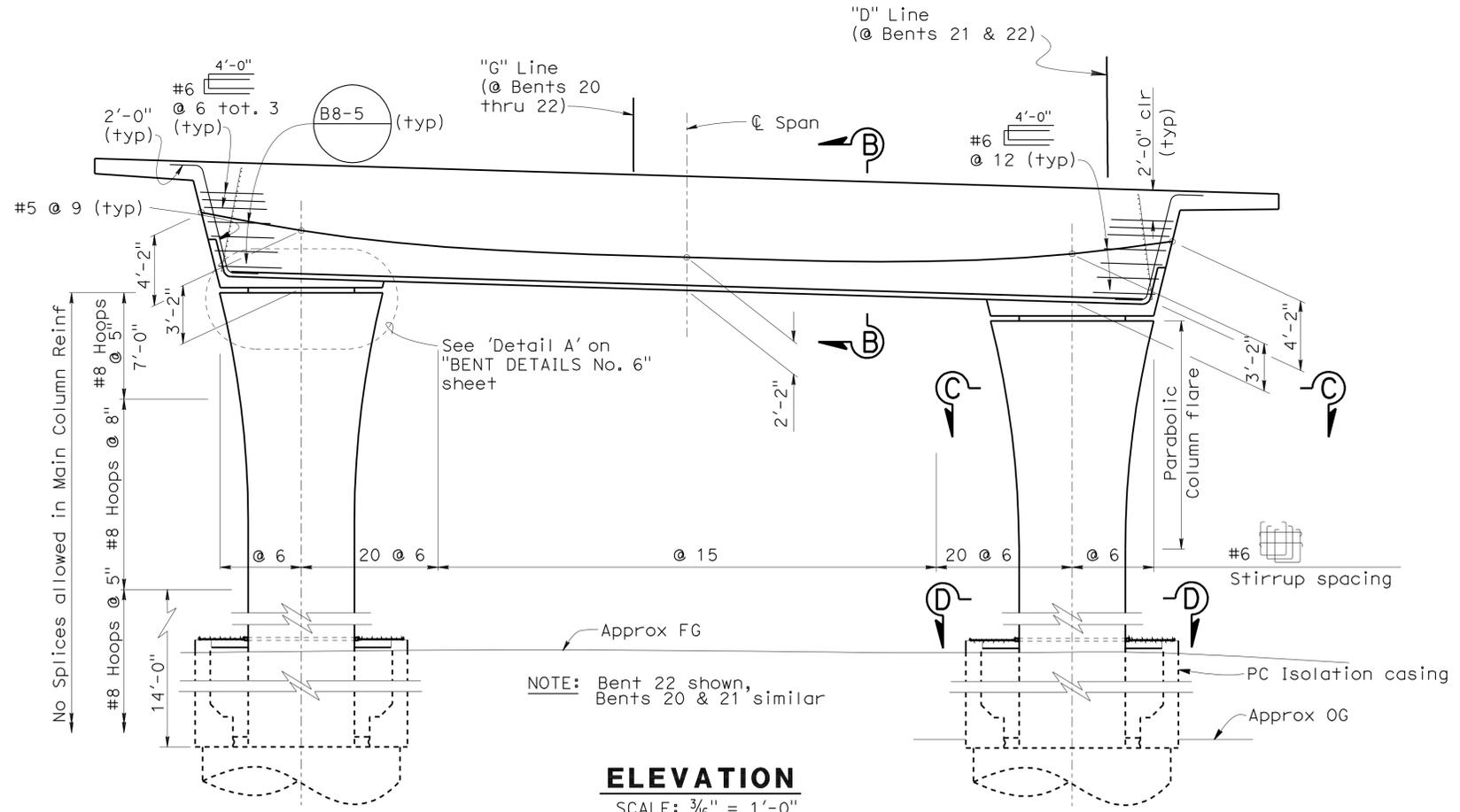
PLAN
 SCALE: 3/16" = 1'-0" **NOTE:** Not all bars shown
 Top cap Reinf extend to 2'-0" from EOD

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:

P_{jack} (Bent 20)	=	2480	kips
Anchor Set	=	3/8	in
P_{jack} (Bent 21)	=	4650	kips
Anchor Set	=	3/8	in
P_{jack} (Bent 22)	=	5700	kips
Anchor Set	=	3/8	in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing
 Contractor shall submit elongation calculations based on initial stress at
 λ = 0.891 times jacking stress.
 One end stressing shall be performed.



ELEVATION
 SCALE: 3/16" = 1'-0"

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

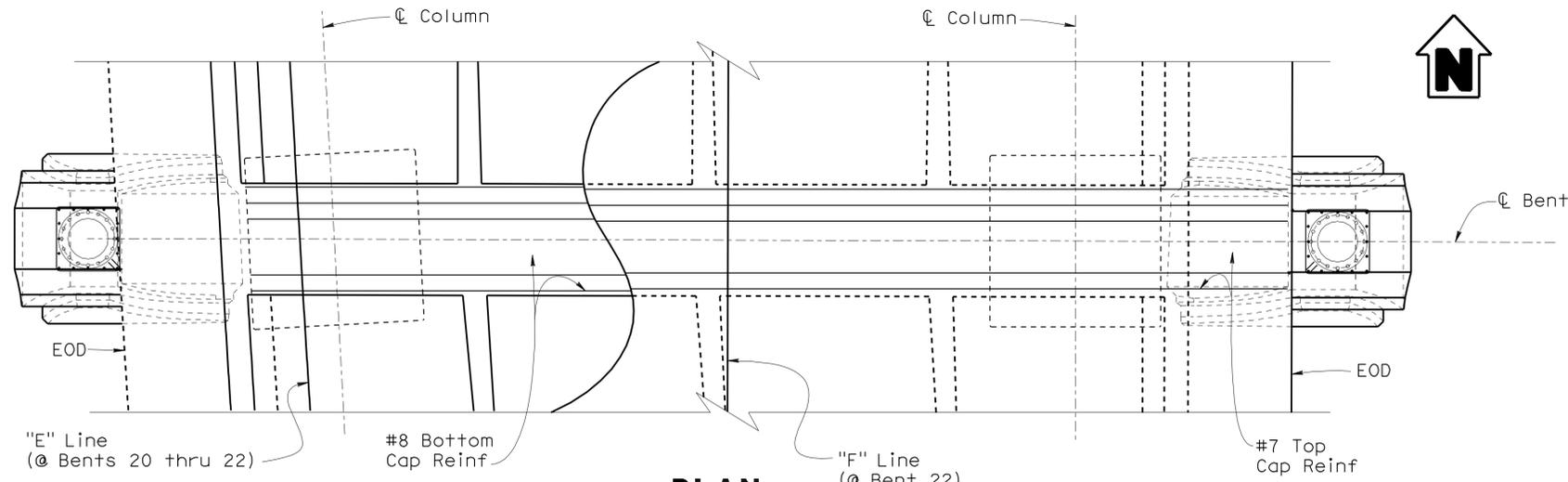
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 14

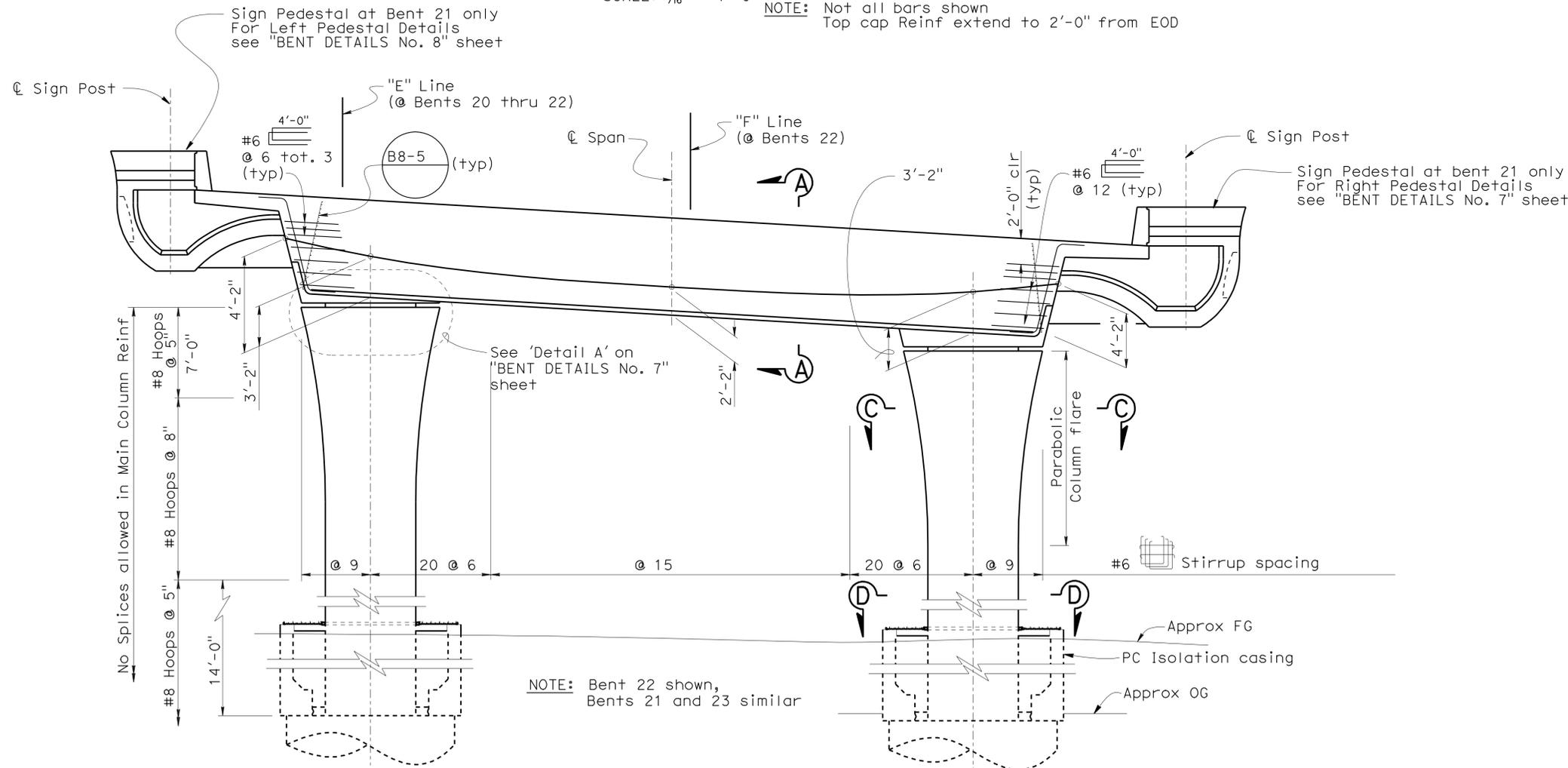
BRIDGE NO. 53-3032
 POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
BENTS 20 THRU 22 LAYOUT (STAGE 3)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	560	1003

Poued Zayat
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



PLAN
 SCALE: 3/16" = 1'-0"
 NOTE: Not all bars shown
 Top cap Reinf extend to 2'-0" from EOD



ELEVATION
 SCALE: 3/16" = 1'-0"

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:

P_{jack} (Bent 20) = 3870 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 21) = 3240 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 22) = 5200 kips
 Anchor Set = 3/8 in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at

λ = 0.890 times jacking stress.

One end stressing shall be performed.

- NOTES:**
- For 'Section A-A', see "BENT DETAILS No. 4" sheet.
 - For 'Section C-C' and 'Section D-D', see "BENT DETAILS No. 2" sheet.
 - For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet
 - For Parabolic Column flare, see "BENT DETAILS No. 1" sheet
 - Cable Paths are parabolic between centerline of Columns and straight at other locations.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

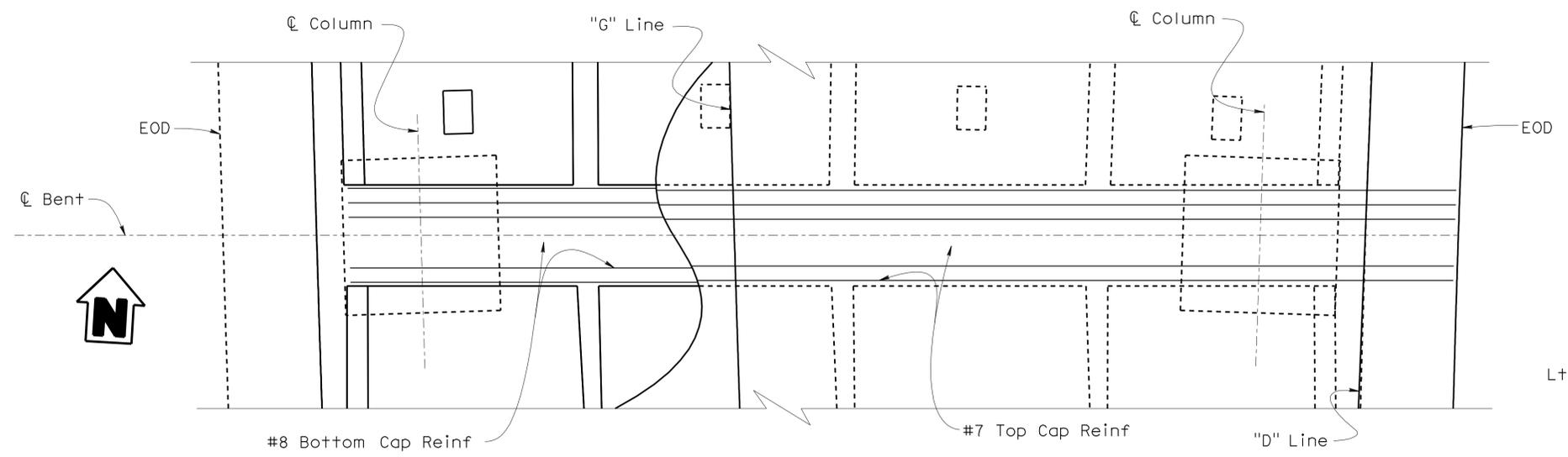
BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
BENTS 20 THRU 22 LAYOUT (STAGE 1)

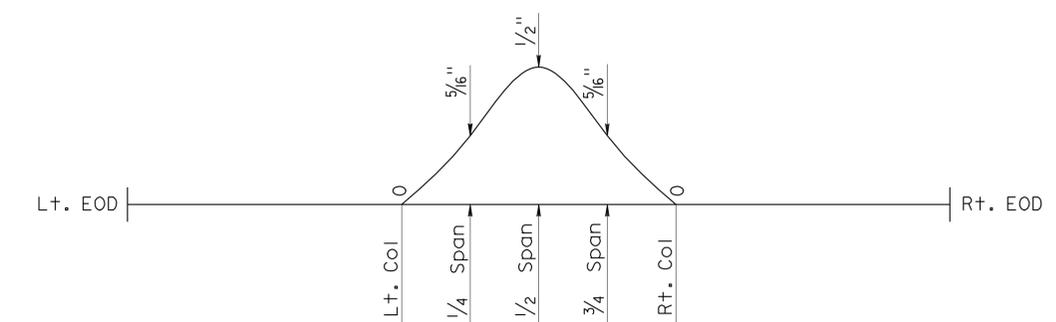
USERNAME => hrmnguy Date PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:53

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	561	1003

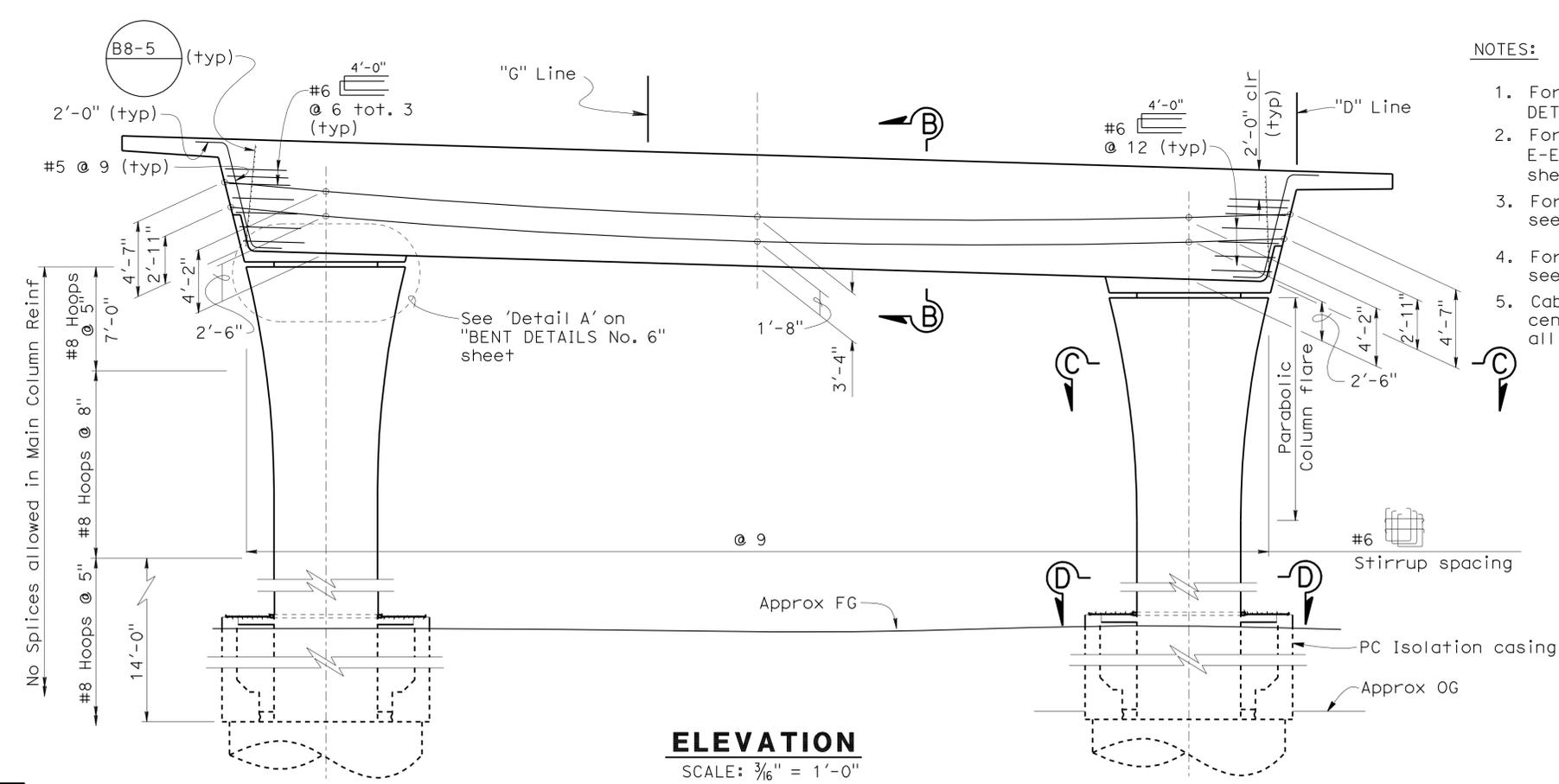
Foued Zayat
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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PLAN
 SCALE: 3/16" = 1'-0" NOTE: Not all bars shown
 Top cap Reinf extend to 2'-0" from EOD



BENT 23, STAGE 3 CAMBER DIAGRAM



ELEVATION
 SCALE: 3/16" = 1'-0"

NOTES:

1. For 'Section B-B', see "BENT DETAILS No. 5" sheet.
2. For 'Section C-C' and 'Section E-E', see "BENT DETAILS No. 2" sheet.
3. For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet.
4. For Parabolic Column flare, see "BENT DETAILS No. 1" sheet.
5. Cable Paths are parabolic between centerline of Columns and straight all other locations.

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:

P_{jack} (Bent 23, Upper Cable) = 4450 kips
 Anchor Set = 3/8 in

P_{jack} (Bent 23, Lower Cable) = 5500 kips
 Anchor Set = 3/8 in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at

λ = 0.943 times jacking stress for lower Cable.
 λ = 0.945 times jacking stress for upper Cable.

One end stressing shall be performed.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH 14

BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
BENT 23 LAYOUT (STAGE 3)

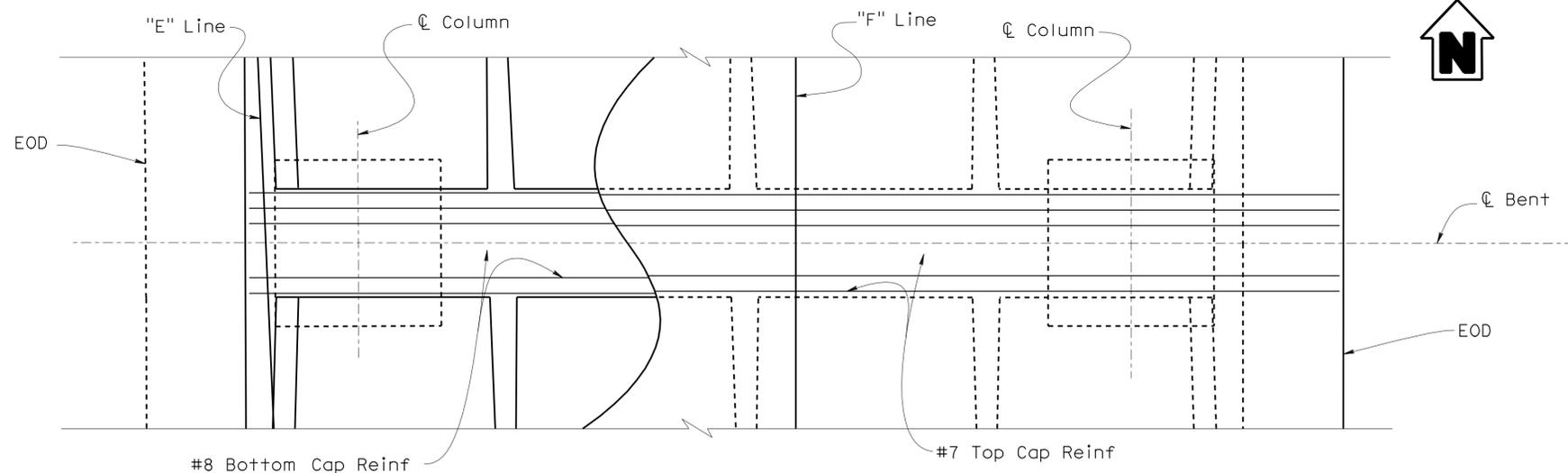
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	562	1003

Foued Zayati 05-24-10
REGISTERED CIVIL ENGINEER DATE

10-11-10
PLANS APPROVAL DATE

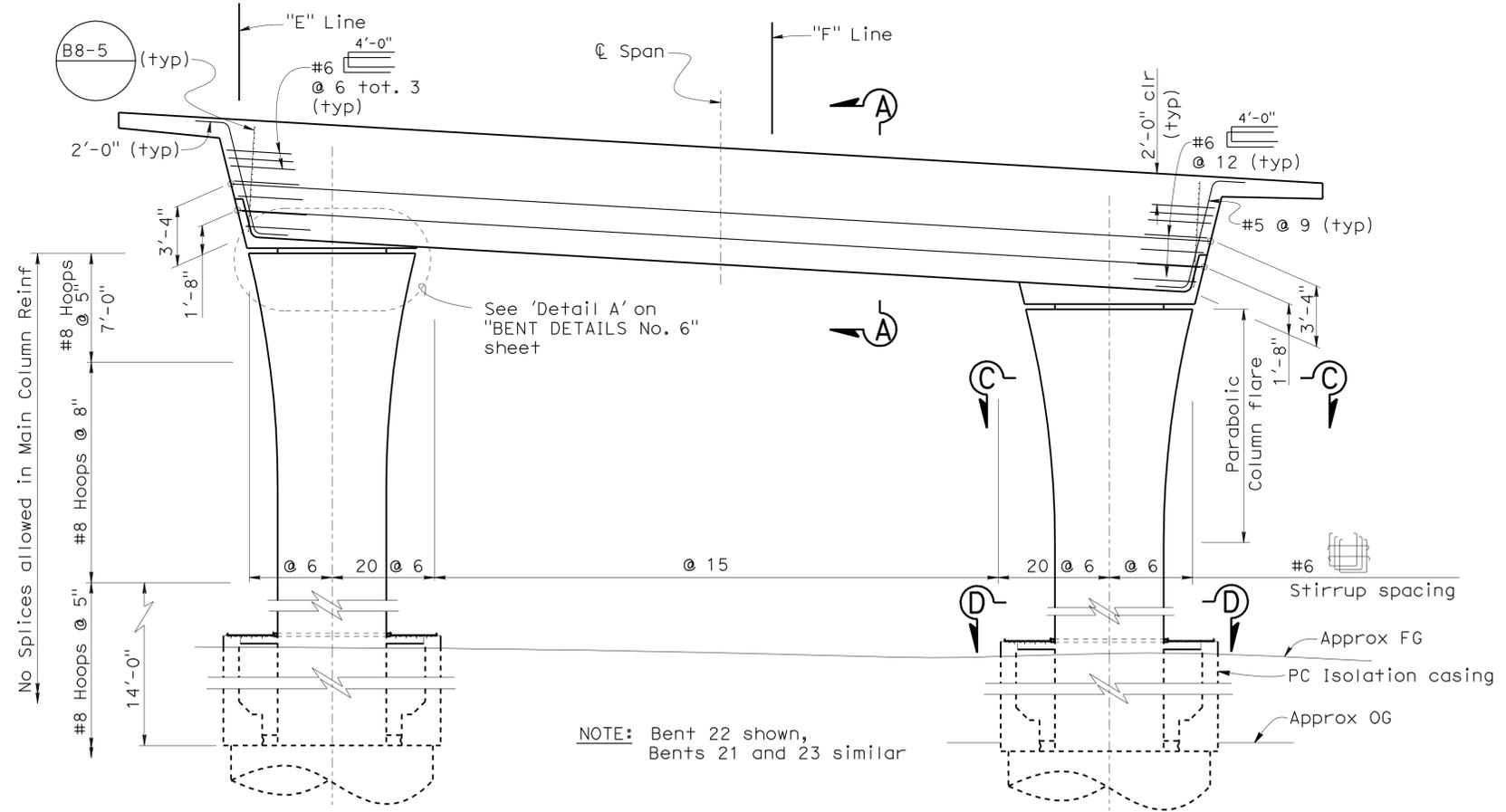
FOUED ZAYATI
No. C57046
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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PLAN
SCALE: 3/16" = 1'-0" NOTE: Not all bars shown
Top cap Reinf extend to 2'-0" from EOD

- NOTES:
1. For 'Section A-A', see "BENT DETAILS No. 4" sheet.
 2. For 'Section C-C' and 'Section D-D', see "BENT DETAILS No. 2" sheet.
 3. For P/S Anchorage Zone detail, see "TYPICAL SECTION No. 1" sheet.
 4. For Parabolic Column flare, see "BENT DETAILS NO. 1" sheet.
 5. Cable Paths are parabolic between centerline of Columns and straight all other locations.



NOTE: Bent 22 shown, Bents 21 and 23 similar

ELEVATION
SCALE: 3/16" = 1'-0"

PRESTRESSING NOTES

270 KSI Low Relaxation Strand:
 P_{jack} (Bent 23, Upper Cable) = 3630 kips
Anchor Set = 3/8 in

270 KSI Low Relaxation Strand:
 P_{jack} (Bent 23, Lower Cable) = 6000 kips
Anchor Set = 3/8 in

Concrete: f'_c = 5.0 ksi @ 28 days
 f'_{ci} = 3.5 ksi @ time of stressing

Contractor shall submit elongation calculations based on initial stress at
 $\lambda = 0.945$ times jacking stress.

One end stressing shall be performed.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY J. Massoomi	CHECKED T. Skreslet
DETAILS	BY T. Nguyen	CHECKED T. Skreslet
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

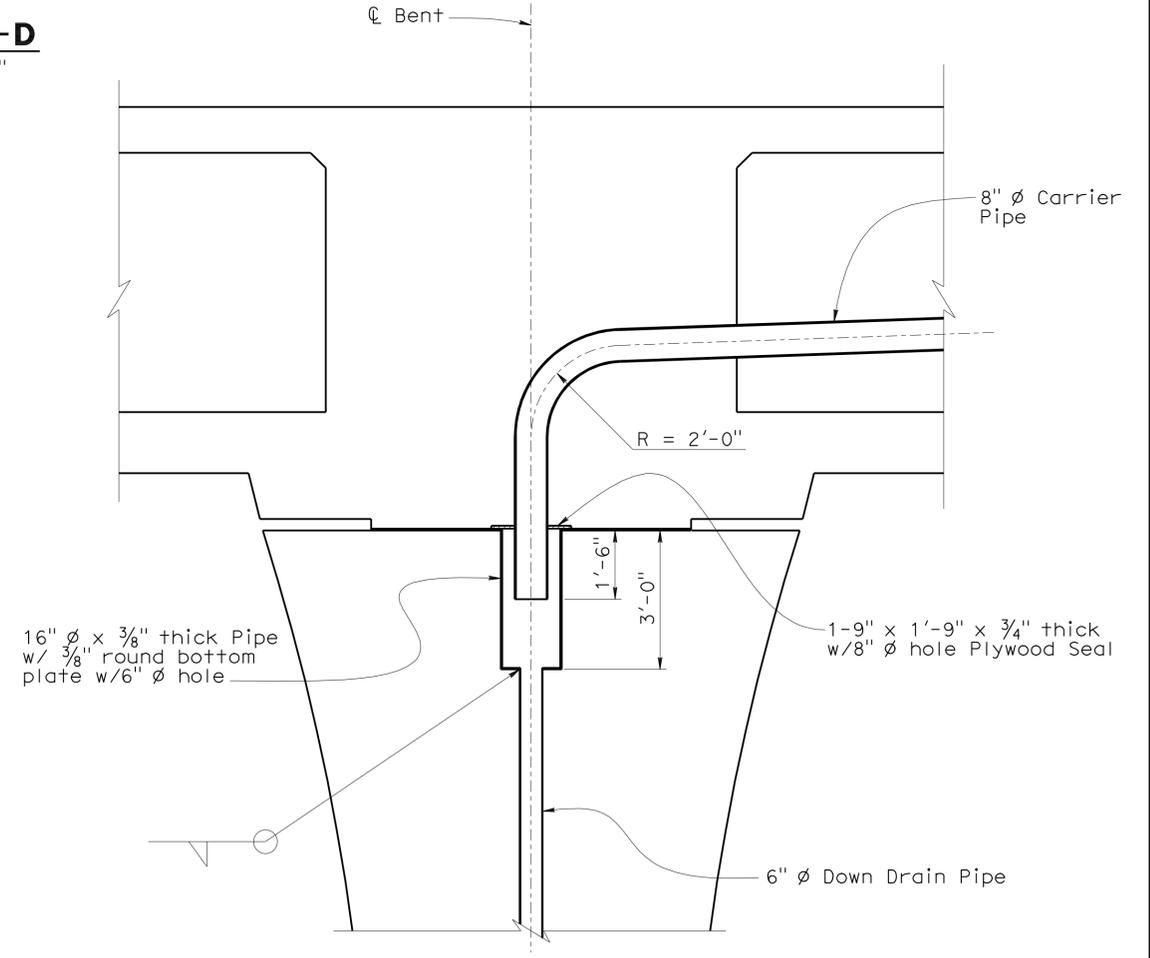
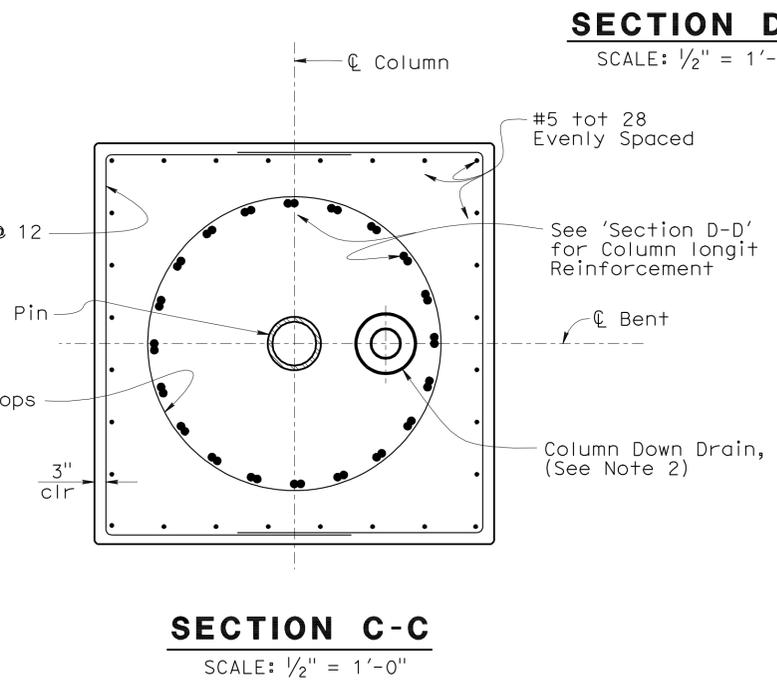
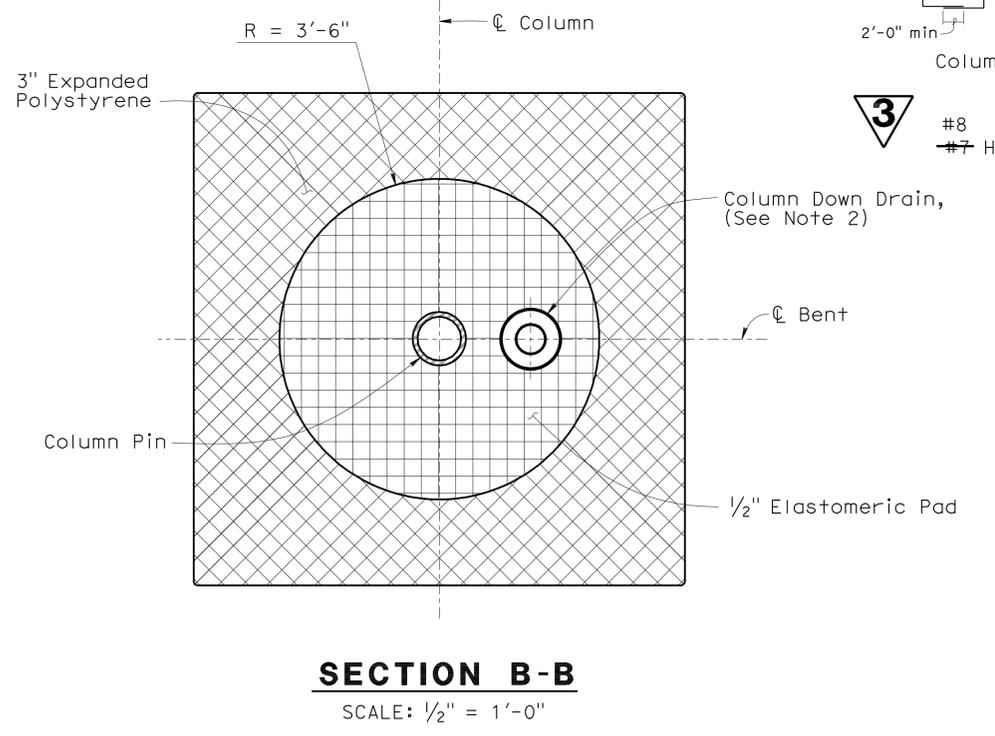
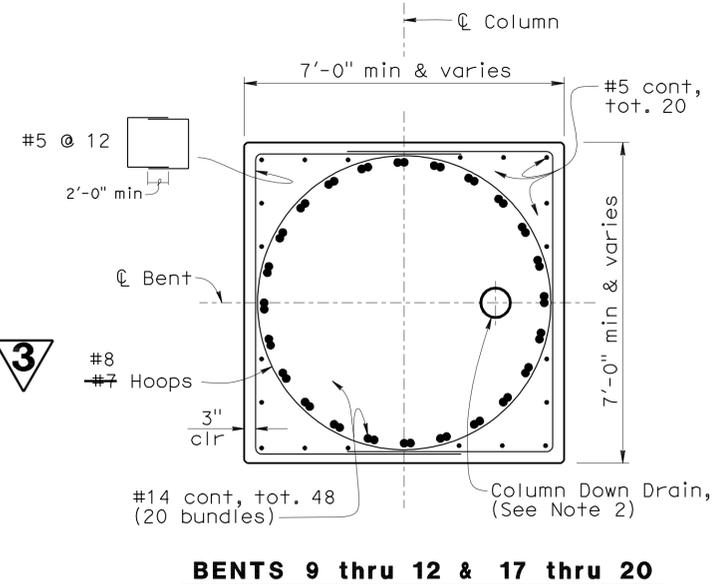
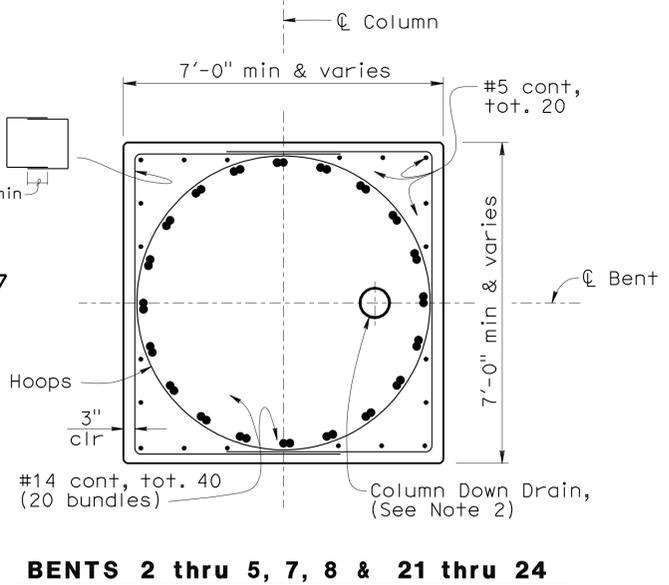
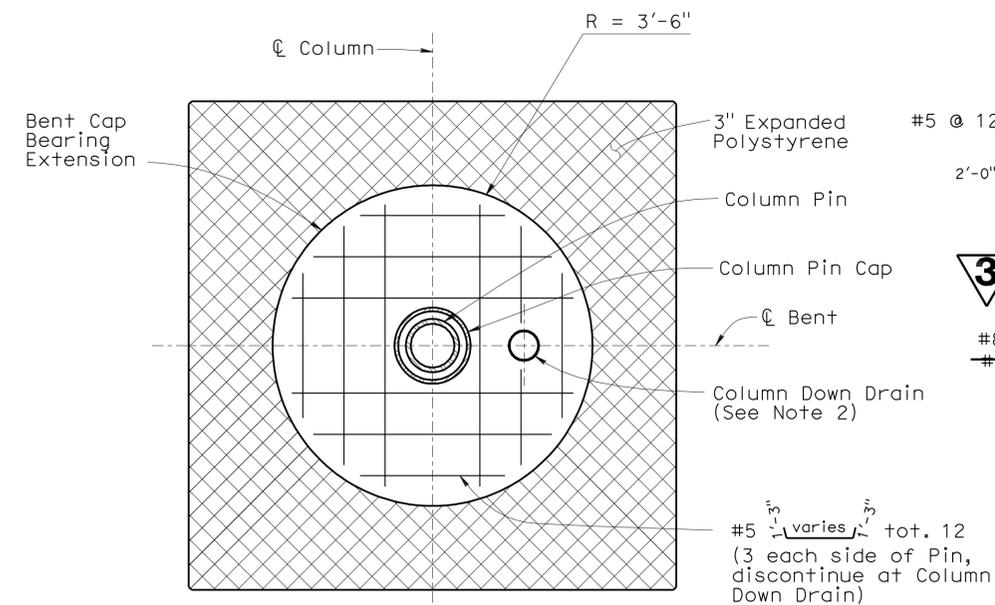
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO. 53-3032
POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
BENT 23 LAYOUT (STAGE 1)

USERNAME => s135318 DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 10:47

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	565	1003

Poued Zayati 05-24-10
 REGISTERED CIVIL ENGINEER DATE
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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- NOTES:**
- For the location of 'Sections A-A, B-B, C-C and D-D', see "BENT DETAILS No. 1" sheet.
 - For locations of columns with a Down Drain see Girder Layout sheets.

NOTE: For transverse location of Down Drain Pipe, see Girder Layout sheets.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

COLUMN DOWN DRAIN DETAIL
SCALE: 1/2" = 1'-0"

DESIGN	BY	F. Zayati	CHECKED	R. Bromenschenkel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE No.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) BENT DETAILS No. 2	
	DETAILS	BY	K. Kubo	CHECKED			F. Zayati	POST MILE		3.58
	QUANTITIES	BY	J. Massoomi	CHECKED			L. Han			

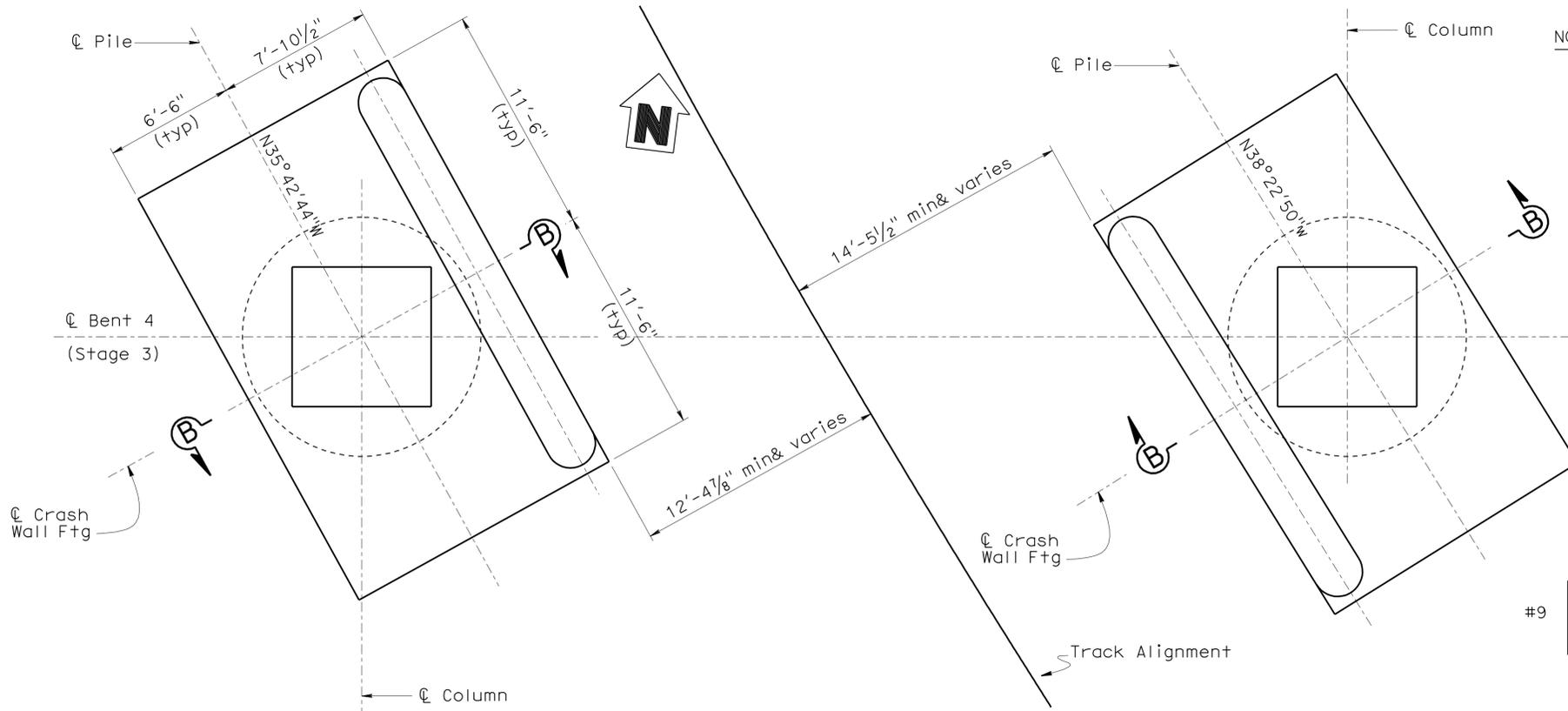
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3
 CU 07-271 EA 138201
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 01-09-10, 02-29-10, 03-01-10, 03-02-10, 03-09-10, 04-29-10, 05-04-10, 06-25-10
 SHEET 63 OF 247
 USERNAME => frcgool DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 10:55
 FILE => 53-3032-n-bd+f02.odd

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	566	1003

REGISTERED CIVIL ENGINEER
 FOUED ZAYATI
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

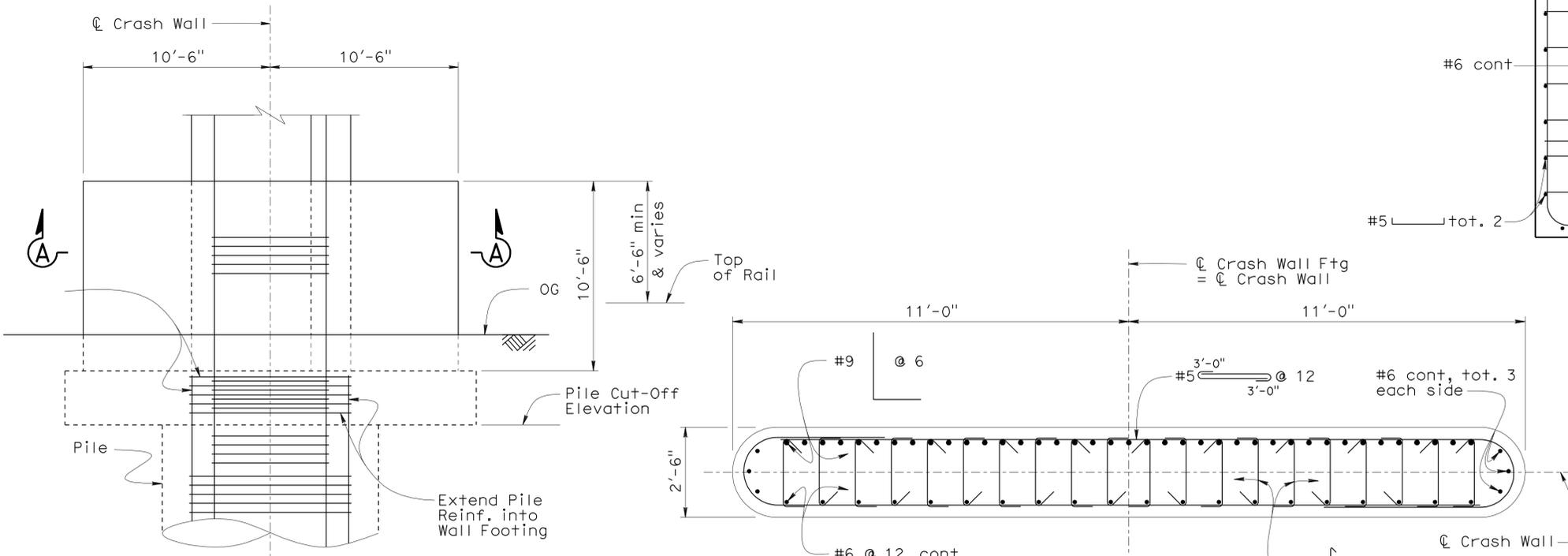
05-24-10
 REGISTERED CIVIL ENGINEER DATE
 10-11-10
 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



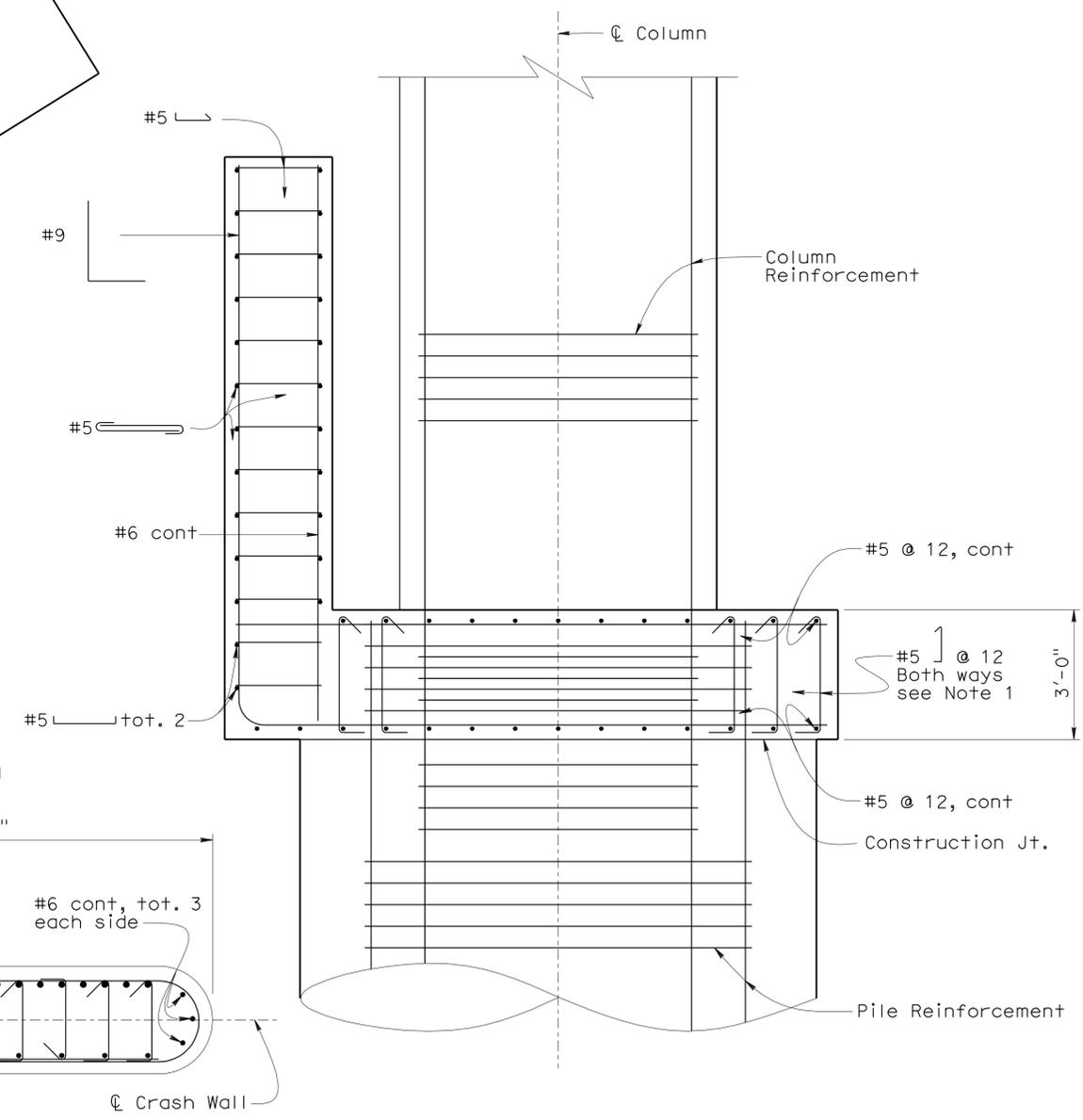
- NOTES:
- Omit Stirrups inside Column Cage.
 - For Column Reinforcement, see "BENT DETAILS No. 2" sheet.
 - For Pile Reinforcement, see "10 FT CIDH PILE DETAILS No. 1" sheet.
 - For the purpose of measurement and payment, crashwalls shall be designated as "Structural Concrete, Bridge."

PLAN
SCALE: 1/4" = 1'-0"



ELEVATION A-A
SCALE: 1/4" = 1'-0"

REVISD PER ADDENDUM No. 3 DATED MARCH 28, 2011



SECTION B-B
SCALE: 1/2" = 1'-0"

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY F. Zayati	CHECKED R. Bromenschenkel	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) BENT DETAILS NO. 3
	DETAILS	BY K. Kubo	CHECKED F. Zayati			POST MILE	3.58	
	QUANTITIES	BY J. Massoomi	CHECKED L. Han					

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

CU 07-271
 EA 138201

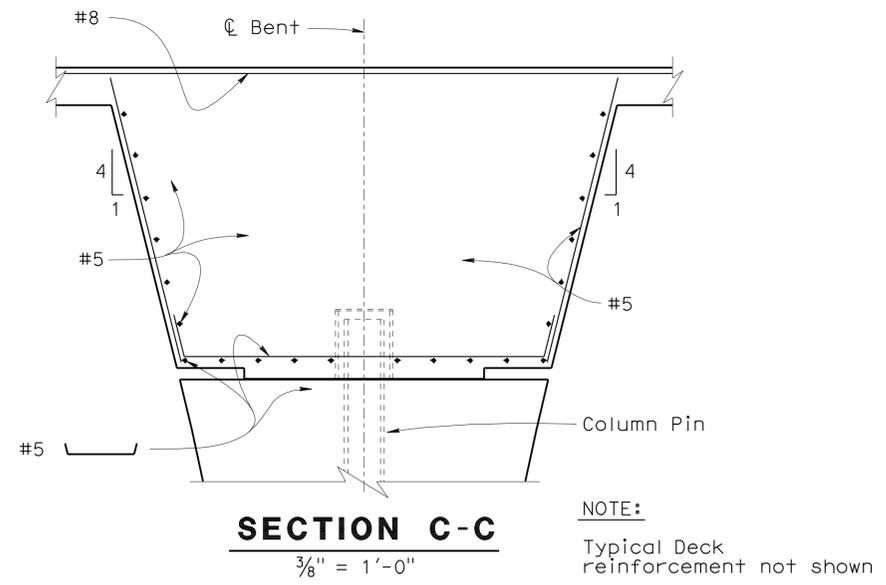
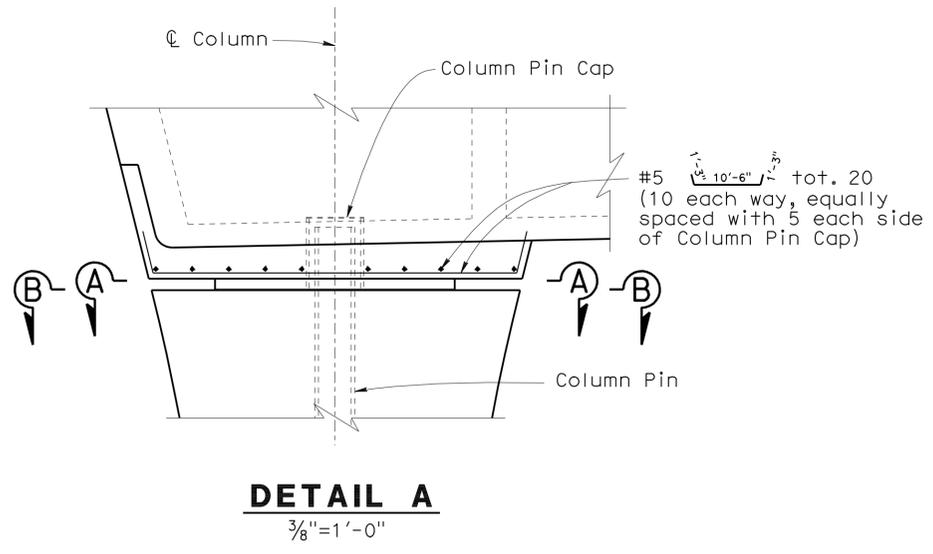
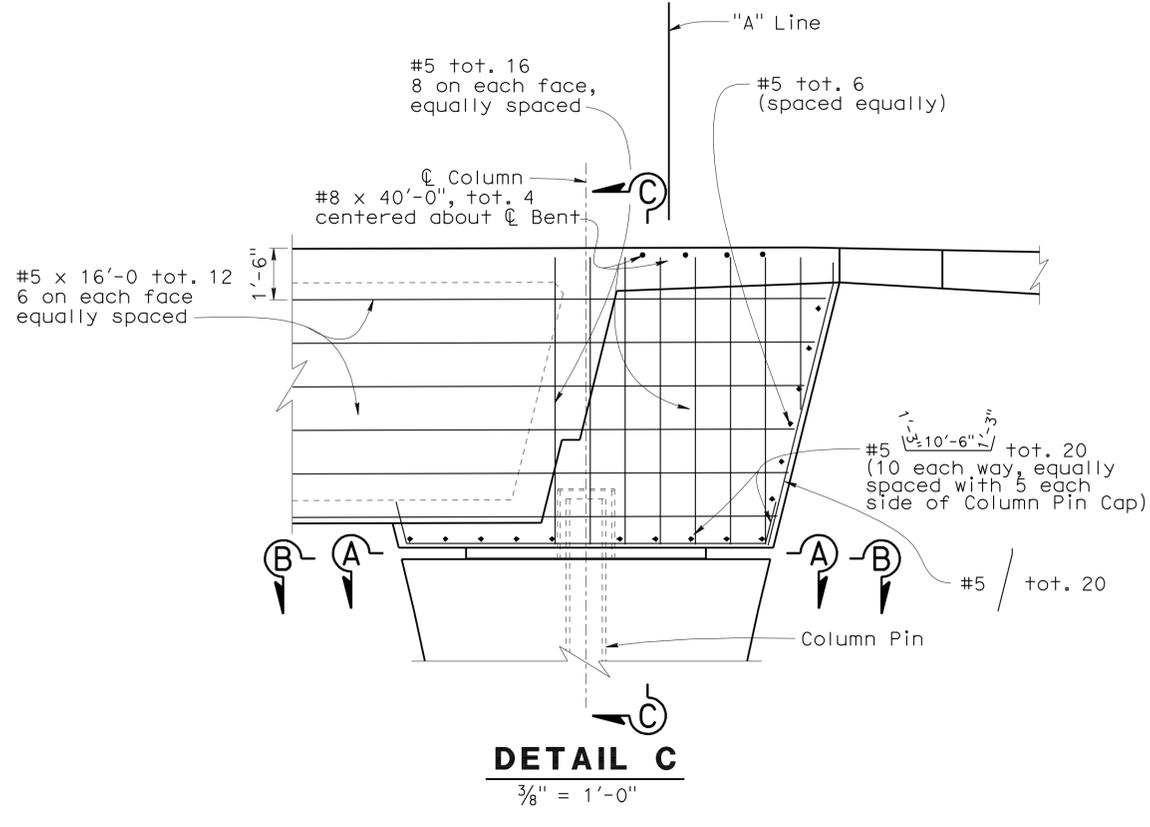
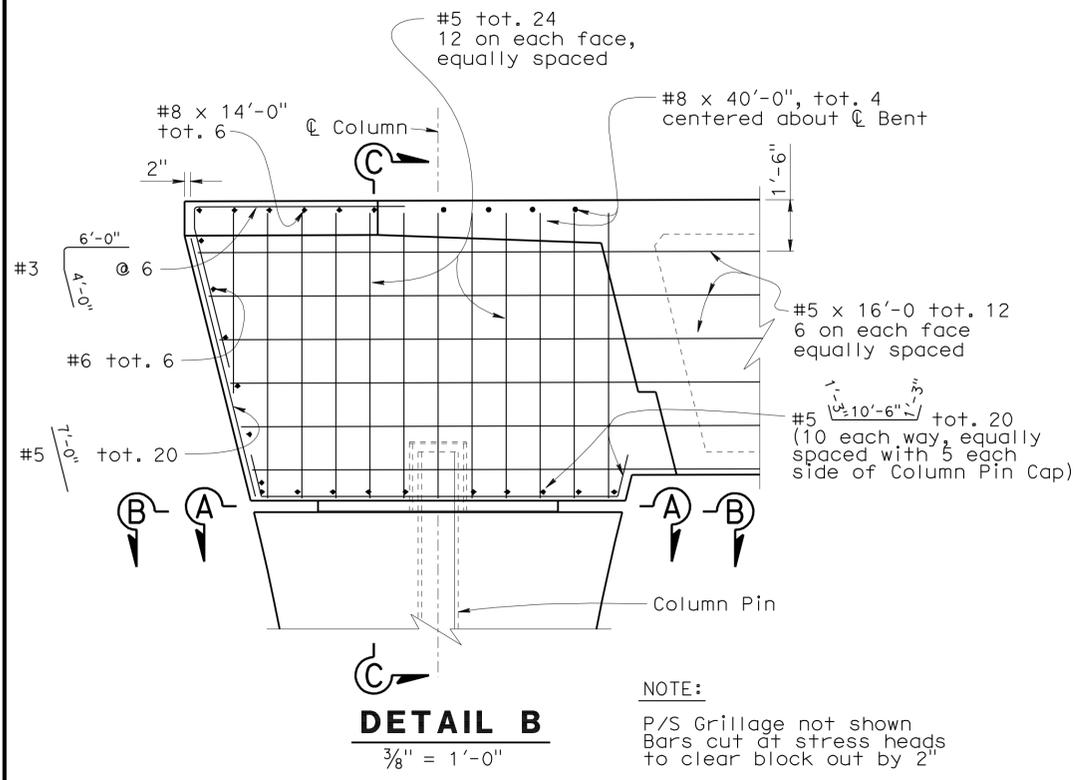
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	01-09-10	02-04-10	02-26-10	03-03-10	04-29-10	06-29-10	07-08-10
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SHEET 64 OF 247

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.57/4.6, 0.0/1.1	569	1003
Foued Zayati REGISTERED CIVIL ENGINEER DATE 05-24-10					
10-11-10 PLANS APPROVAL DATE					
<i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</i>					

3



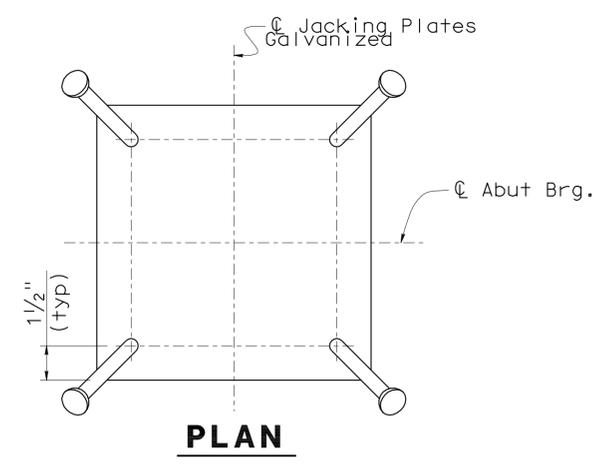
- NOTES:
1. For location of 'Detail B' and 'Detail C', see "BENT 4 LAYOUT" sheet.
 2. For location of 'Section A-A' and 'Section B-B', see "BENT DETAILS NO. 2" sheet.
 3. For Column Pin Details, see "BENT DETAILS NO. 3" sheet.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

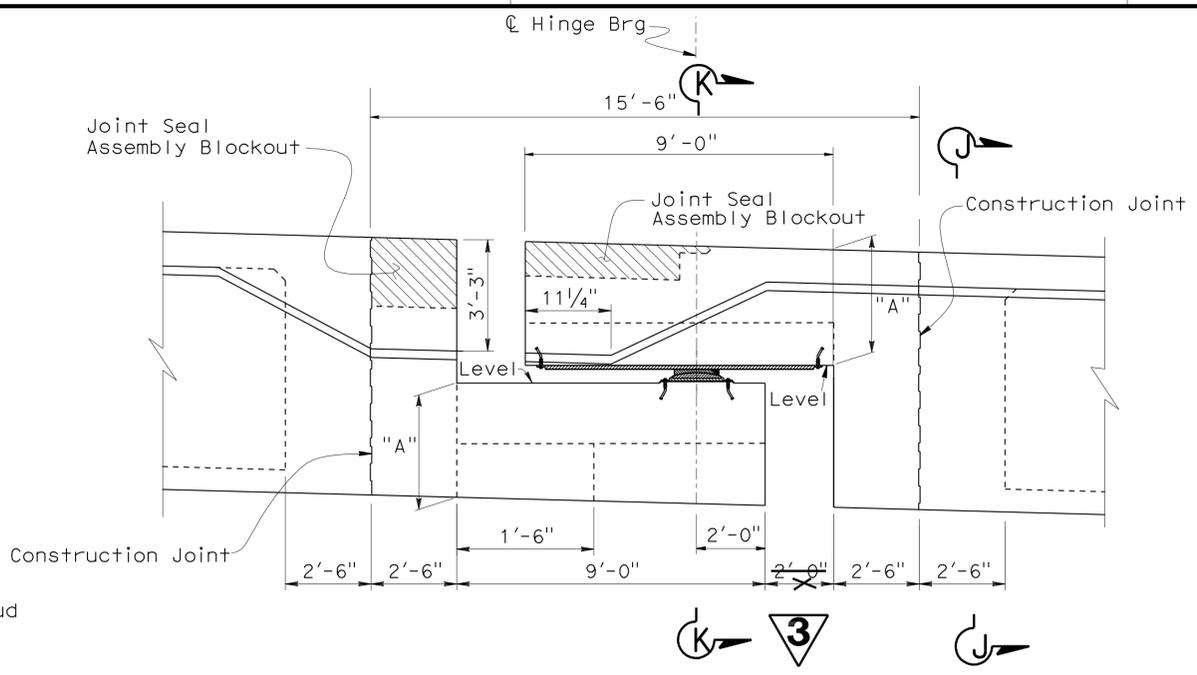
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY J. Massoomi	CHECKED T. Skreslet	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE) BENT DETAILS NO.6
	DETAILS	BY L. Xiong	CHECKED T. Skreslet			POST MILE	3.58	
	QUANTITIES	BY J. Massoomi	CHECKED L. Han			CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	

USERNAME => s135318 DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 10:48

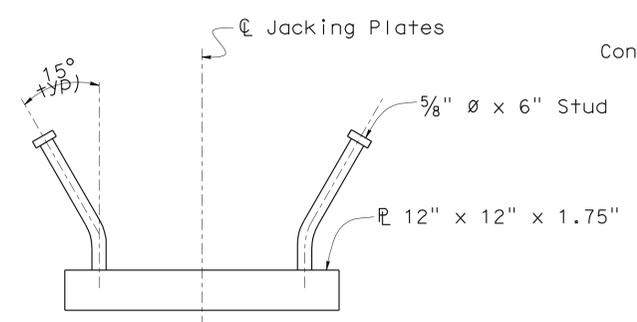
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574/4.6, 0.0/1.1	629	1003
Foued Zayati REGISTERED CIVIL ENGINEER DATE 05-24-10			10-11-10 PLANS APPROVAL DATE		
No. C57046 Exp. 06-30-11 CIVIL			REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA		
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PLAN

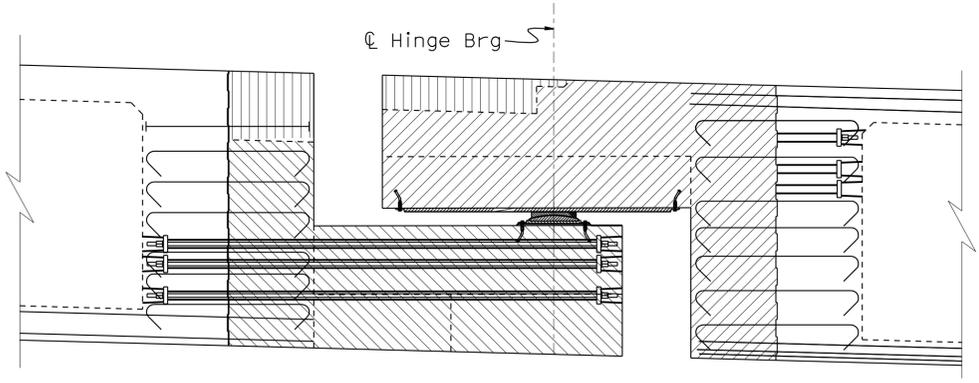


LONGITUDINAL ELEVATION
3/8" = 1'-0"

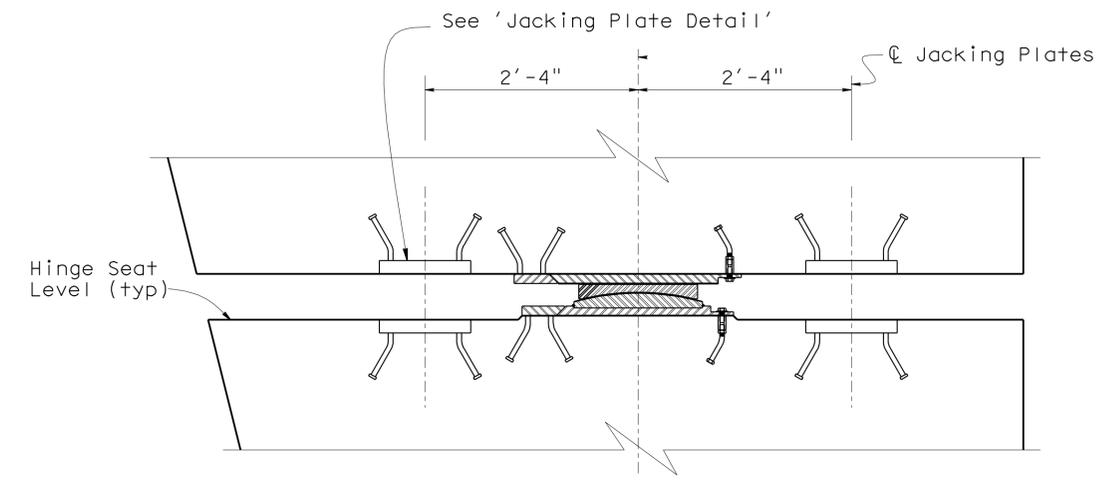


ELEVATION

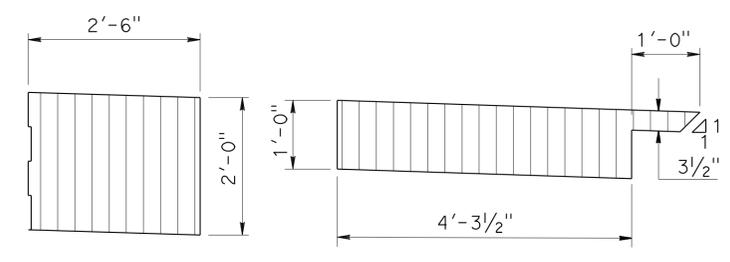
JACKING PLATE DETAIL
3" = 1'-0"



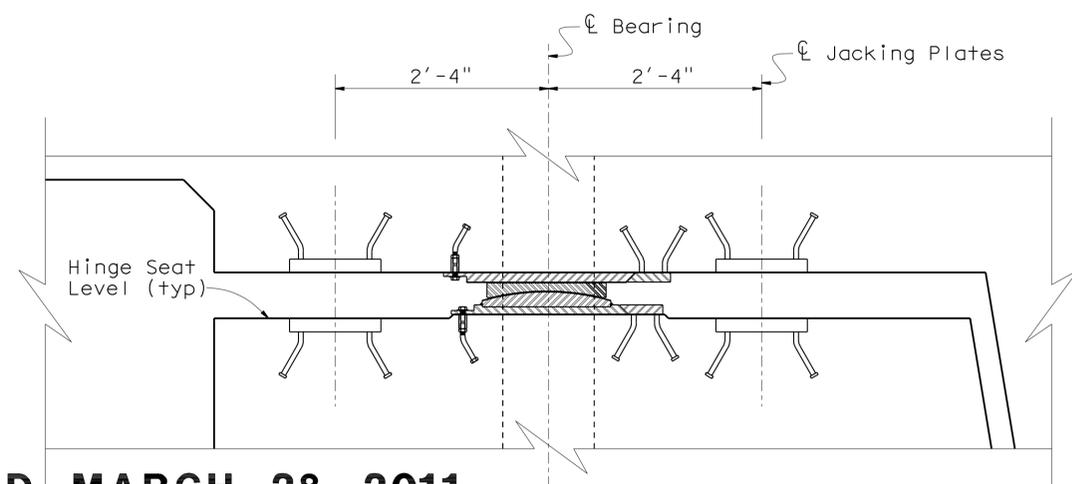
HINGE DETAIL
3/4" = 1'-0"



DETAIL A
1" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL
3/4" = 1'-0"



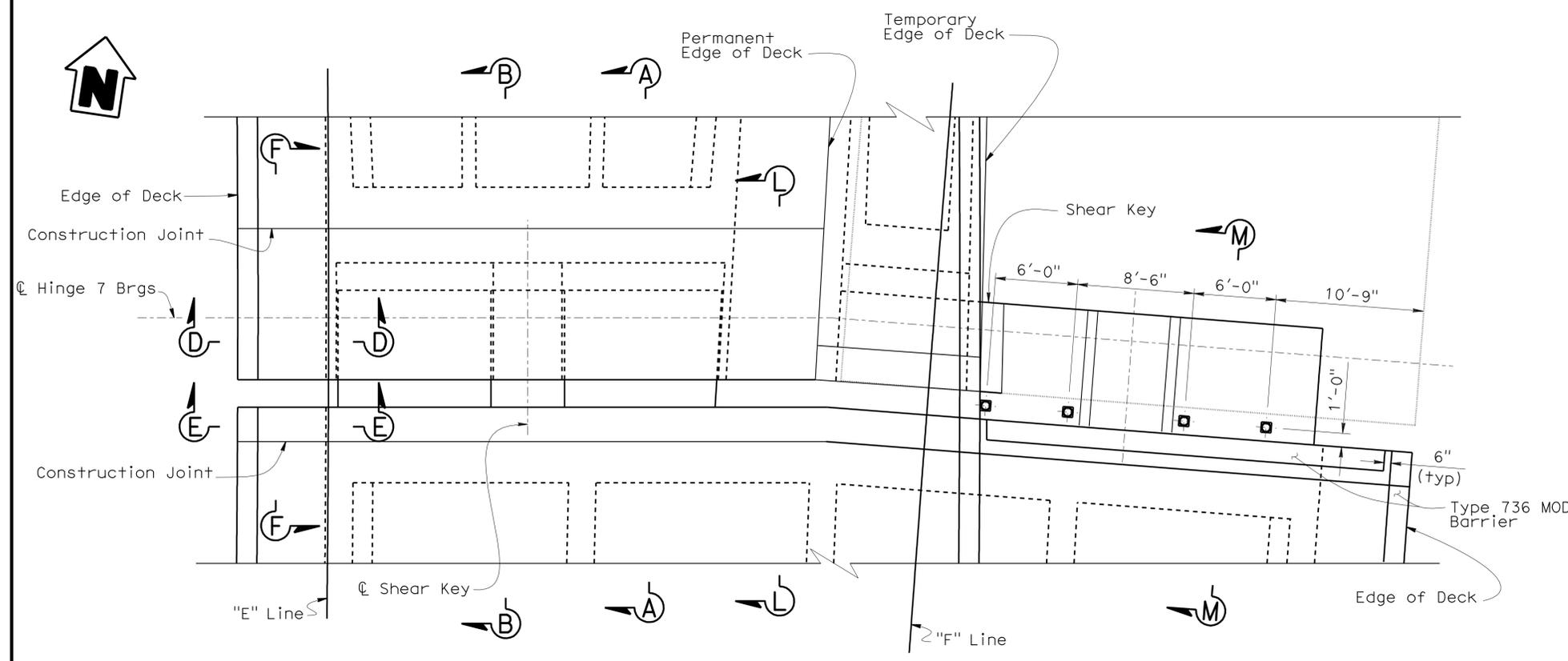
DETAIL B
1" = 1'-0"

- Indicates Blockout and Closure Pour for Joint Seal Assemblies.
- Indicates CIP concrete to be placed after both frames have been stressed.
- Indicates CIP concrete to be placed after seat side of the Hinge is constructed and Bearings are properly positioned.

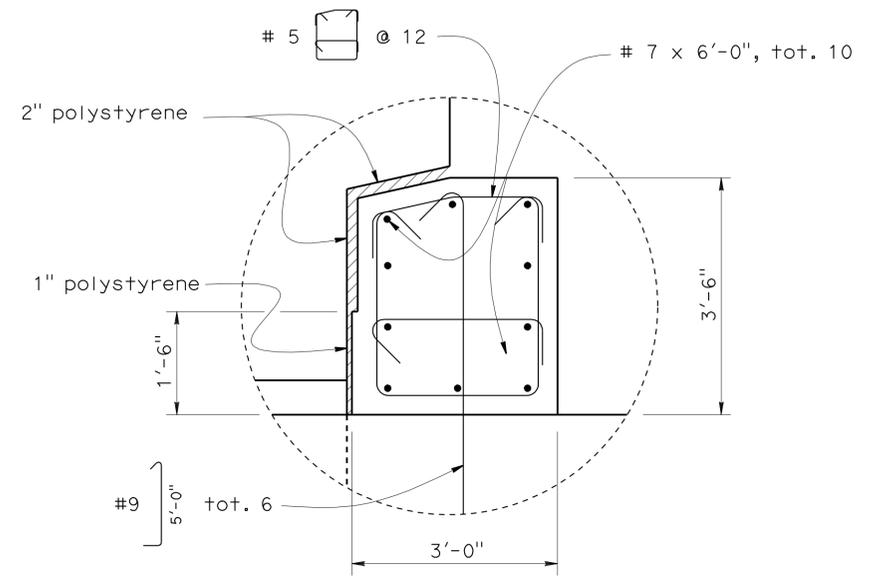
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY Ahmed M. M. Ibrahim	CHECKED F. Zayati	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE)	
	DETAILS	BY T. Nguyen	CHECKED F. Zayati			POST MILE	3.58		HINGE 6 DETAILS NO. 1
	QUANTITIES	BY M. Friedheim	CHECKED N. Tachta			REVISION DATES	09-23-09 12-08-09 04-16-10 04-28-10 05-23-10		
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0	1	2	3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 127 OF 247		

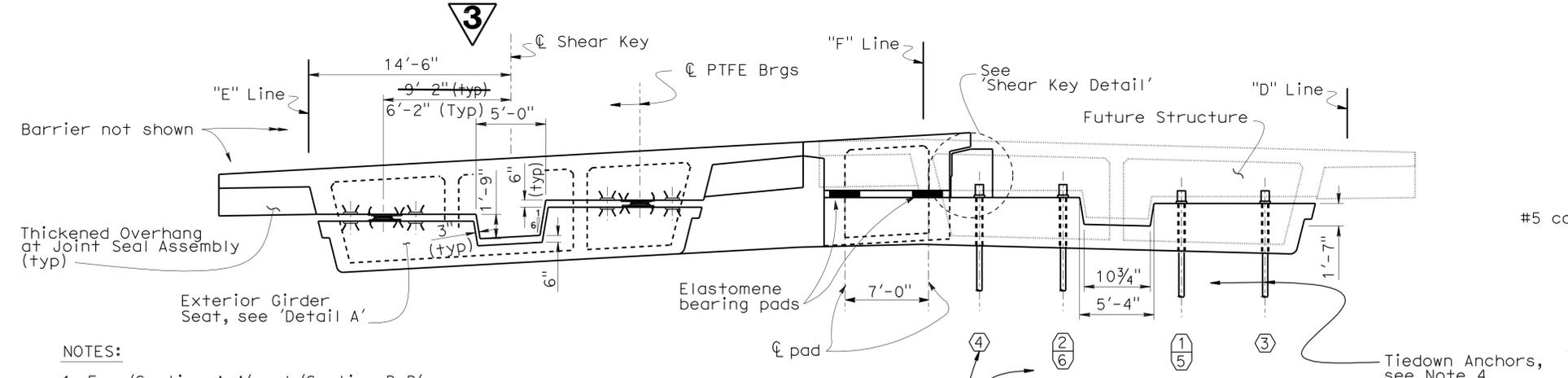
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	634	1003
Foued Zayati REGISTERED CIVIL ENGINEER			05-24-10 DATE		
10-11-10			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



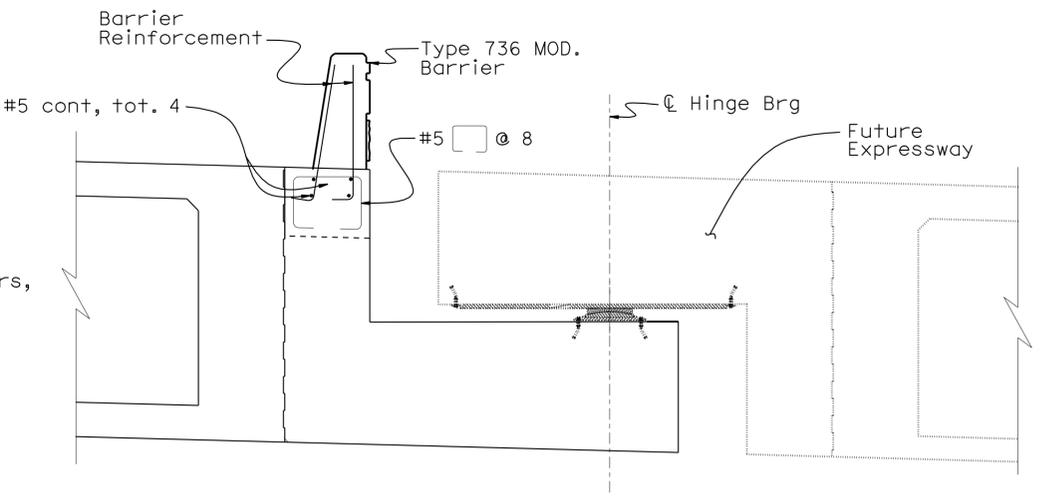
PLAN
3/16" = 1'-0"



SHEAR KEY DETAIL
3/4" = 1'-0"



ELEVATION
3/16" = 1'-0"



SECTION M-M
3/8" = 1'-0"

- NOTES:**
- For 'Section A-A' and 'Section B-B', see "HINGE 7 (STAGE 1) DETAILS NO. 2" sheet.
 - For 'Section D-D', 'Section E-E' and 'Section F-F', see "HINGE 7 DETAILS NO. 3" sheet.
 - For 'Section L-L', see "HINGE 7 DETAIL NO. 6" sheet.
 - For 'Detail A', see "HINGE 7 DETAILS NO. 1" sheet.
 - See "HINGE 7 DETAILS NO. 6" sheet for Tiedown Anchor details.
 - Apply 50% of lockoff load in steps 1 and 2.
 - Apply full lockoff load in steps 3 and 4.
 - Apply balance of lockoff force in steps 5 and 6.

3 3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY Ahmed M. M. Ibrahim	CHECKED F. Zayati
DETAILS	BY T. Nguyen	CHECKED F. Zayati
QUANTITIES	BY M. Friedheim	CHECKED N. Tachta

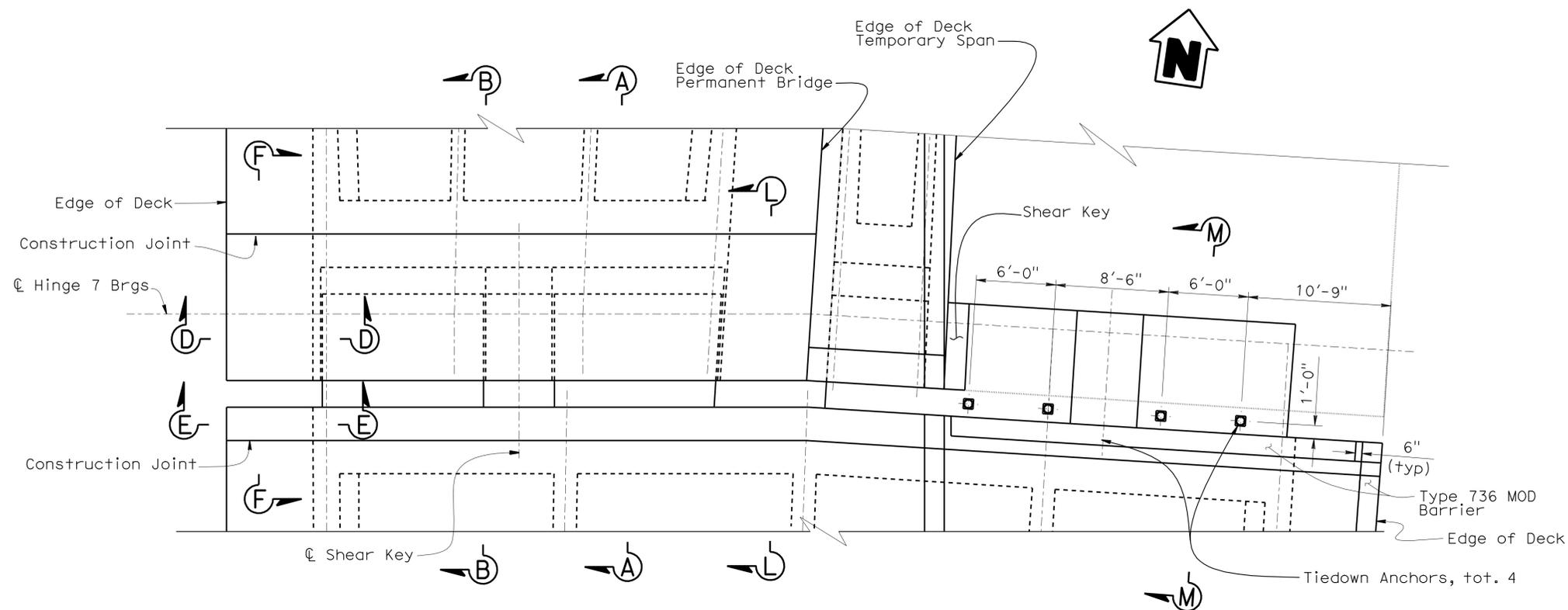
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

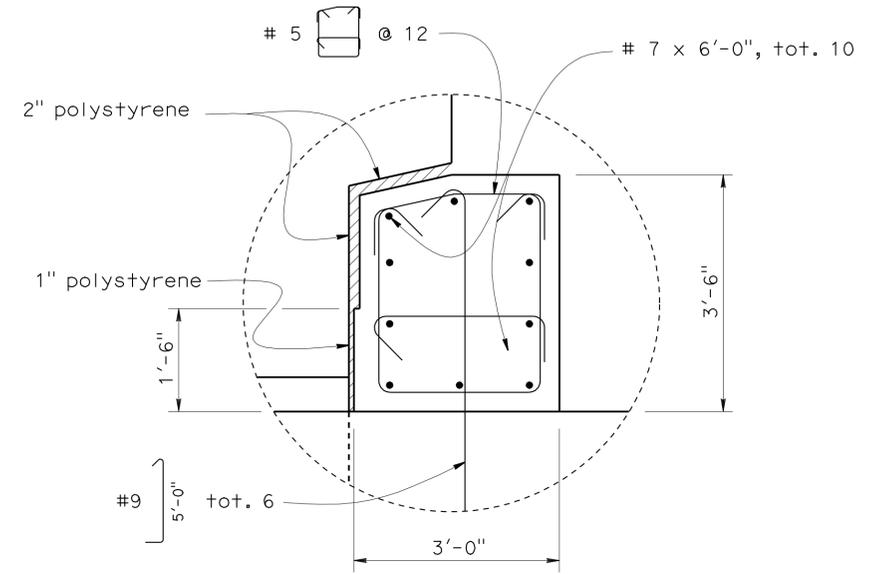
BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
HINGE 7 (STAGE 1) LAYOUT

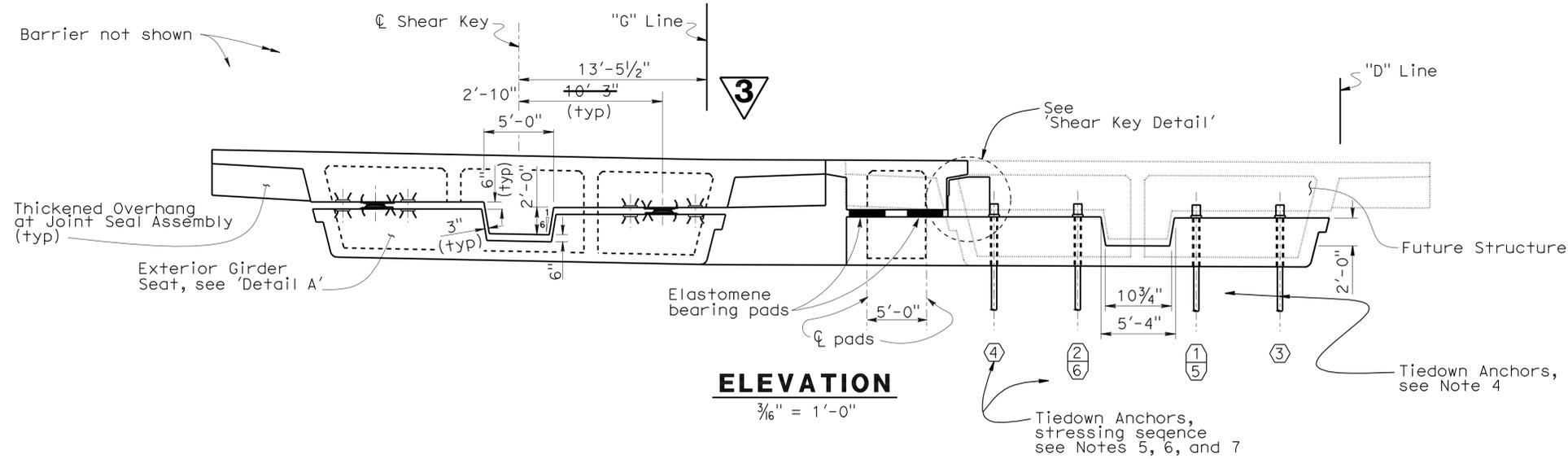
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	635	1003
Foued Zayati REGISTERED CIVIL ENGINEER DATE 05-24-10					
10-11-10 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.</small>					



PLAN
3/16" = 1'-0"



SHEAR KEY DETAIL
3/4" = 1'-0"



ELEVATION
3/16" = 1'-0"

NOTES:

- For 'Section A-A' and 'Section B-B', see "HINGE 7 (STAGE 1) DETAILS NO. 2" sheet.
- For 'Section D-D', 'Section E-E' and 'Section F-F', see "HINGE 7 DETAILS NO. 3" sheet.
- For 'Section L-L', see "HINGE 7 DETAIL NO. 6" sheet.
- For 'Detail A', see "HINGE 7 DETAILS NO. 1" sheet.
- See "HINGE 7 DETAILS NO. 6" sheet for Tiedown Anchor details.
- Apply 50% of lockoff load in steps 1 and 2.
- Apply full lockoff load in steps 3 and 4.
- Apply balance of lockoff force in steps 5 and 6.
- for 'Section M-M', See "HINGE 7 (STAGE 1) LAYOUT" sheet.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY Ahmed M. M. Ibrahim	CHECKED F. Zayati
DETAILS	BY T. Nguyen	CHECKED F. Zayati
QUANTITIES	BY M. Friedheim	CHECKED N. Tachta

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

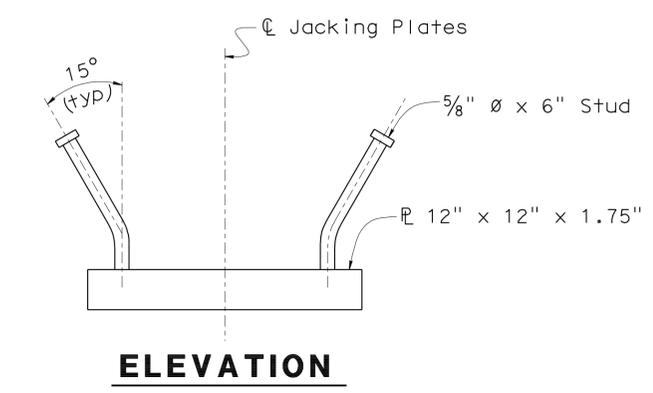
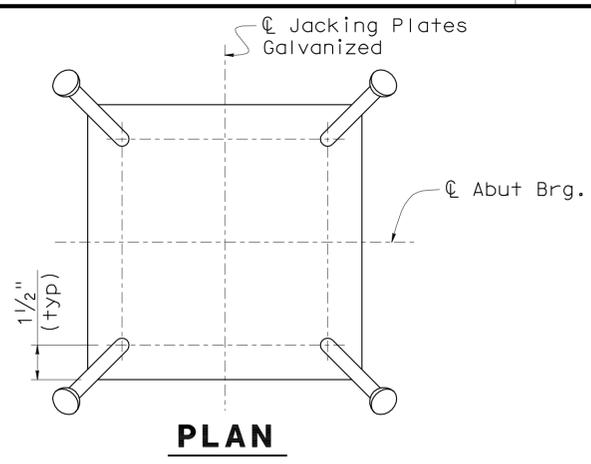
BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
HINGE 7 (STAGE 3) LAYOUT

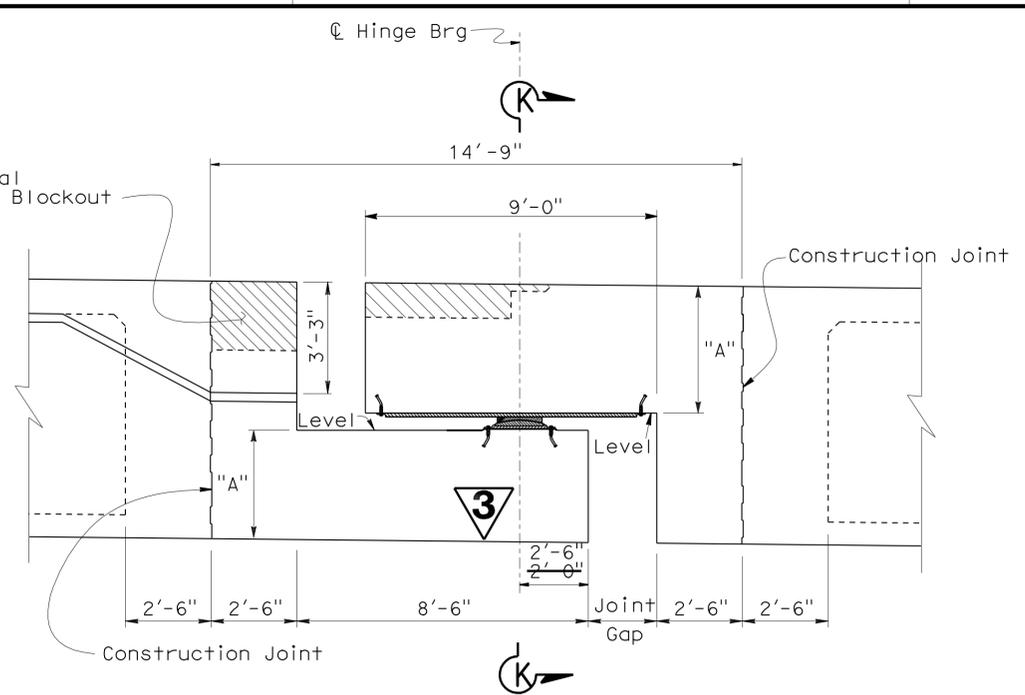
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	636	1003

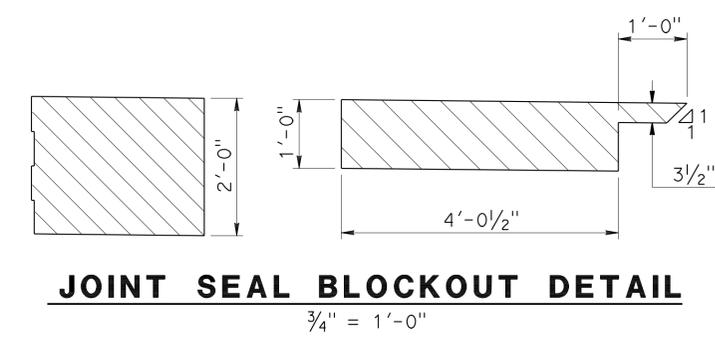
Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



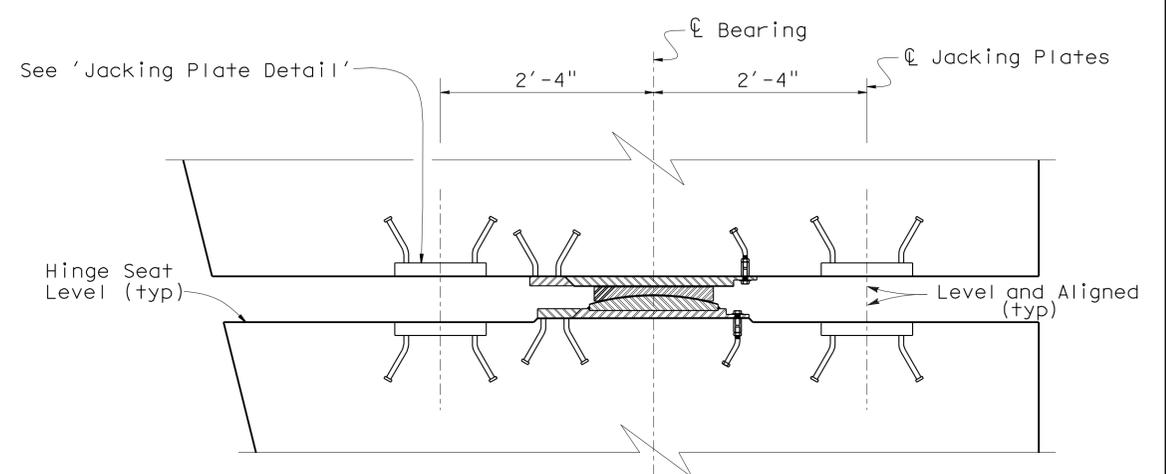
JACKING PLATE DETAIL
3" = 1'-0"



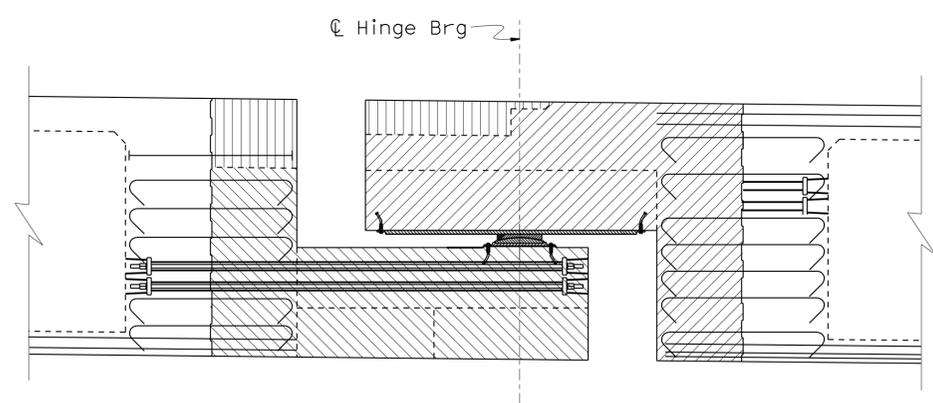
LONGITUDINAL ELEVATION
3/8" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL
3/4" = 1'-0"



DETAIL A
1" = 1'-0"



HINGE DETAILS
3/8" = 1'-0"

- Indicates Blockout and Closure Pour for Joint Seal Assemblies.
- Indicates CIP concrete to be placed after both frames have been stressed. (f'c=6.0dsi @ 28 days)
- Indicates CIP concrete to be placed after seat side of the Hinge is constructed and Bearings are properly positioned. (f'c=6.0dsi @ 28 days)

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

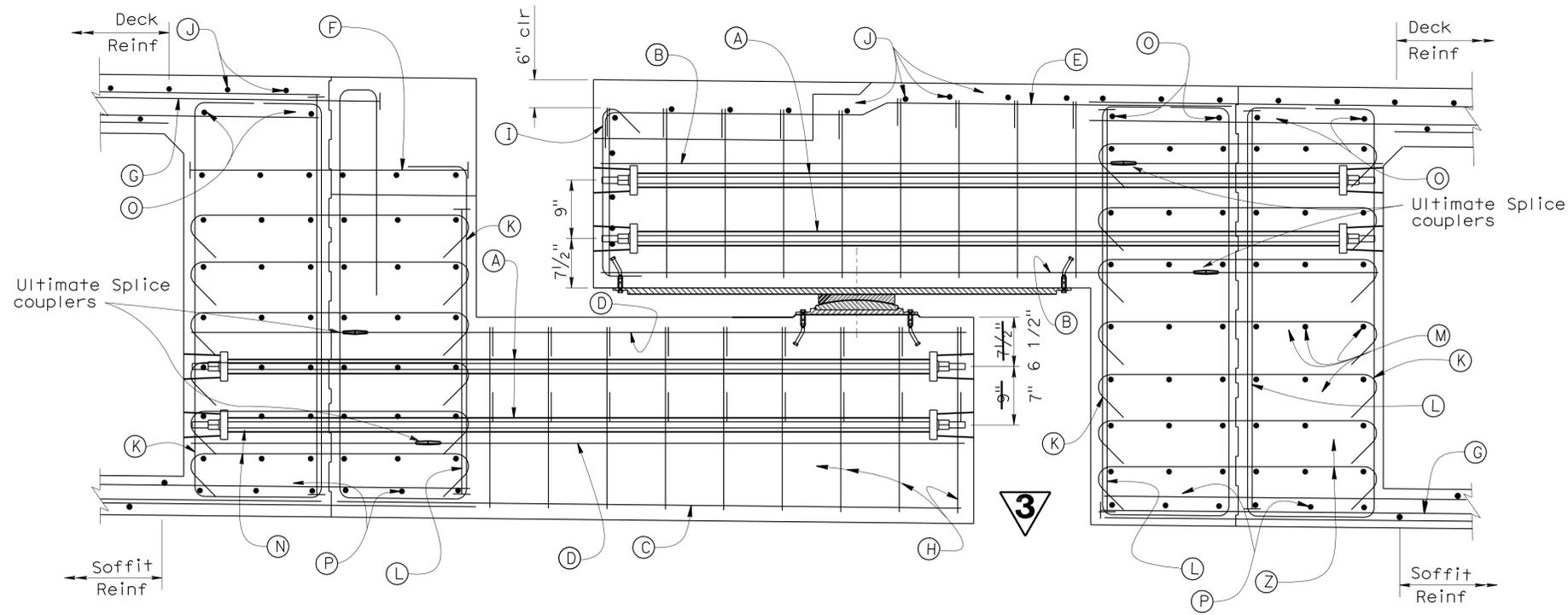
- NOTES:
- For 'Section K-K', see "HINGE 7 (STAGE 1) DETAILS NO. 4" sheet.
 - For location of 'Detail A', see "HINGE 7 (STAGE 1) LAYOUT" and "HINGE 7 (STAGE 2) LAYOUT" sheets.
 - For Access Opening Door details, see "HINGE 2 DETAILS NO. 1" sheet.
 - "A" is measured @ ⊕ bearings

DESIGN	BY	Ahmed M. M. Ibrahim	CHECKED	F. Zayati	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE)							
	DETAILS	BY	T. Nguyen	CHECKED			F. Zayati	POST MILE		3.58	HINGE 7 DETAILS NO. 1					
QUANTITIES	BY	M. Friedheim	CHECKED	N. Tachta	CU 07-271 EA 138201	REVISION DATES	03-22-09	03-25-09	12-08-09	04-28-10	5-4-10	05-25-10	SHEET	134	OF	247

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => 53-3032-1-p-jhinge7-det01.add

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	637	1003
FOUED ZAYATI		05-24-10	REGISTERED CIVIL ENGINEER DATE		
10-11-10		PLANS APPROVAL DATE			
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



SECTION A-A
3/4" = 1'-0"

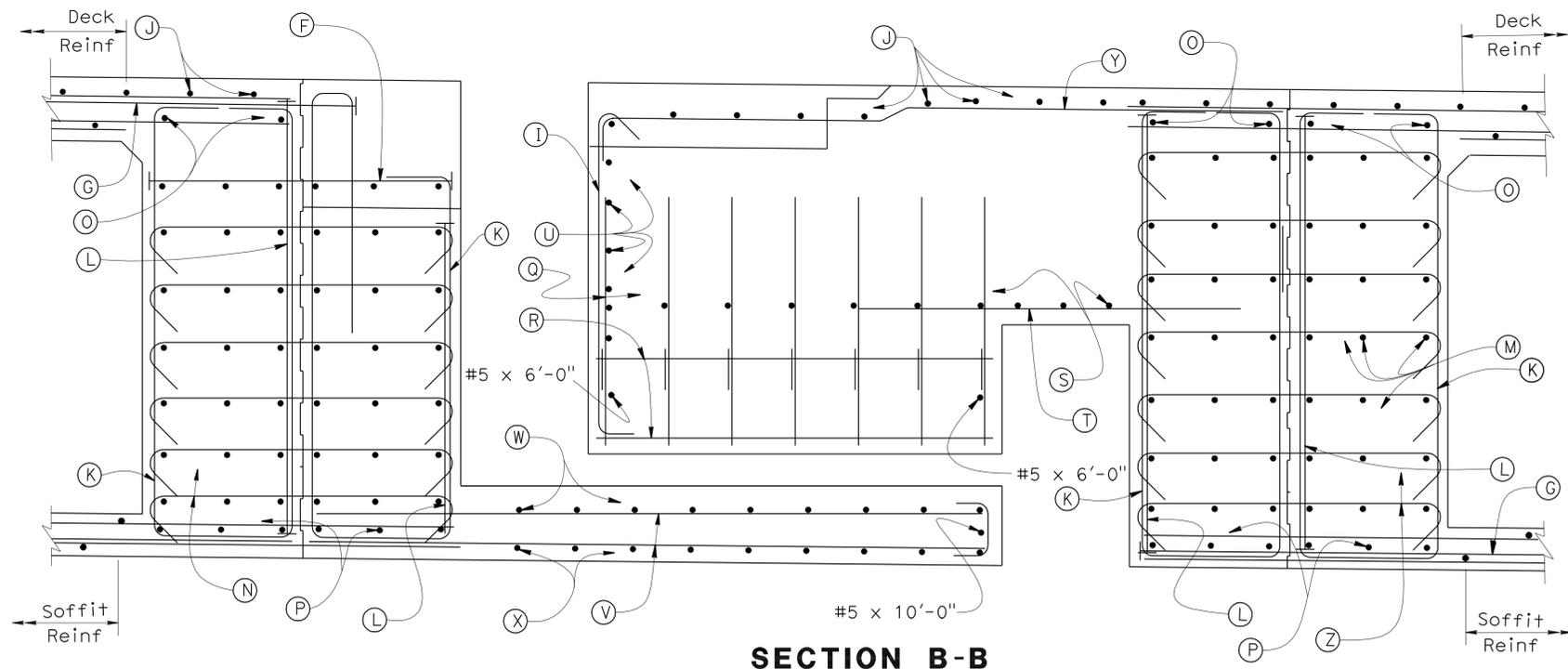
PRESTRESSING NOTES

- 150 KSI HS bars: 6.0
- Concrete: $f' = 5.0$ ksi @ 28 days
 $f'_{ci} = 4.5$ ksi @ time of stressing
- Stress all HS bars using an alternating stressing sequence to a lockoff stress equal to 70% of Ultimate stress.
- Stress HS bars from inside structure bays
- Falsework shall not be released prior to stressing all HS bars.



LEGEND

- (A) 1 3/4" dia. HS Stress bars
- (B) #11 tot. 13
- (C) #6 cont, tot. 6 per Bearing
- (D) #11 tot. 11
- (E) #6 _____, tot. 6 per Bearing
- (F) #10 _____ @ 6
- (G) #10 _____ @ 6
- (H) #7 _____ or _____ @ 12, at each Bearing Seat
- (I) #5] @ 12
- (J) #5 @ 12, cont
- (K) #6 _____ @ 12 (typ)
- (L) #10 _____ @ 6 (typ)
- (M) #5 cont, tot. 6 per layer, tot. 7 layers
- (N) #5 _____ tot. 6, @ 12 (typ)
- (O) #5 cont, tot. 4 (typ)
- (P) #5 _____ tot. 12
- (Q) #6 _____ @ 12
- (R) #5 x 6'-9", tot. 8
- (S) #8 _____ @ 12
- (T) #5 x 5'-0", @ 12
- (U) #5 cont, tot. 4
- (V) #5 @ 12, cont
- (W) #5 x 10'-0", @ 12
- (X) #5 _____ @ 12
- (Y) #5 _____ @ 12
- (Z) #5 _____ tot. 7, @ 12 (typ)



SECTION B-B
3/4" = 1'-0"

NOTES:
For Location of 'Section A-A' and 'Section B-B', see "HINGE 7 (STAGE 1) LAYOUT" and "HINGE 7 (STAGE 2) LAYOUT" sheets.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY Ahmed M. M. Ibrahim	CHECKED F. Zayati
DETAILS	BY T. Nguyen	CHECKED F. Zayati
QUANTITIES	BY M. Friedheim	CHECKED N. Tachta

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

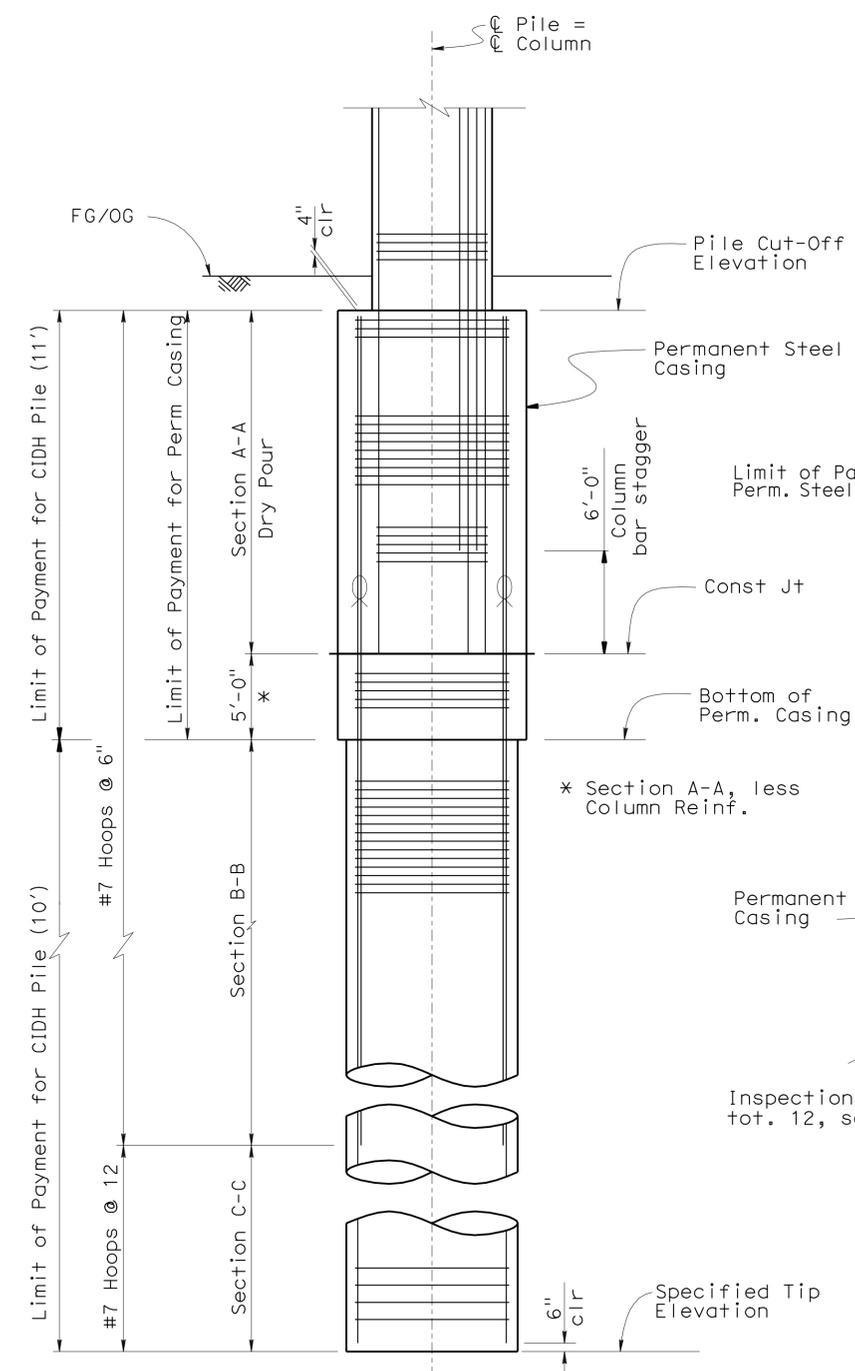
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO. 53-3032
POST MILE 3.58

SCHUYLER HEIM BRIDGE (REPLACE)
HINGE 7 DETAILS NO. 2

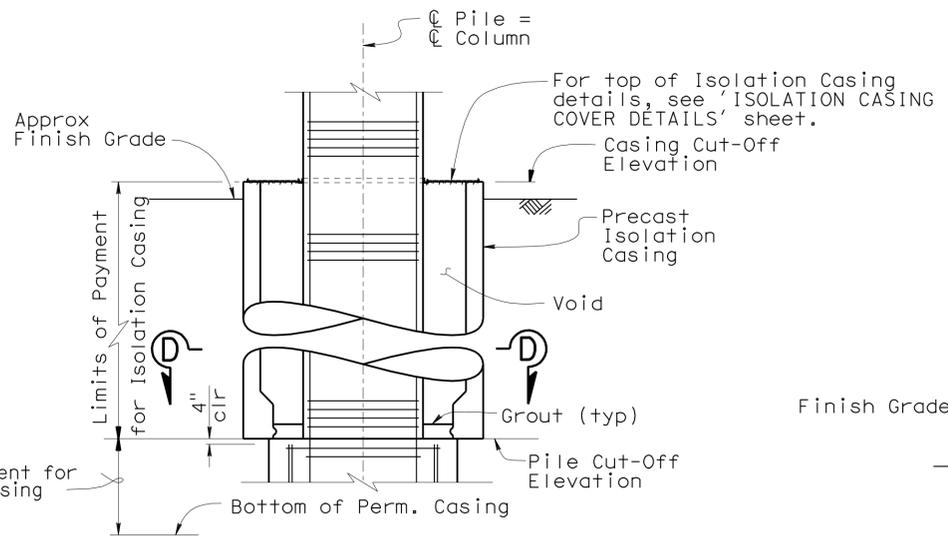
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	644	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
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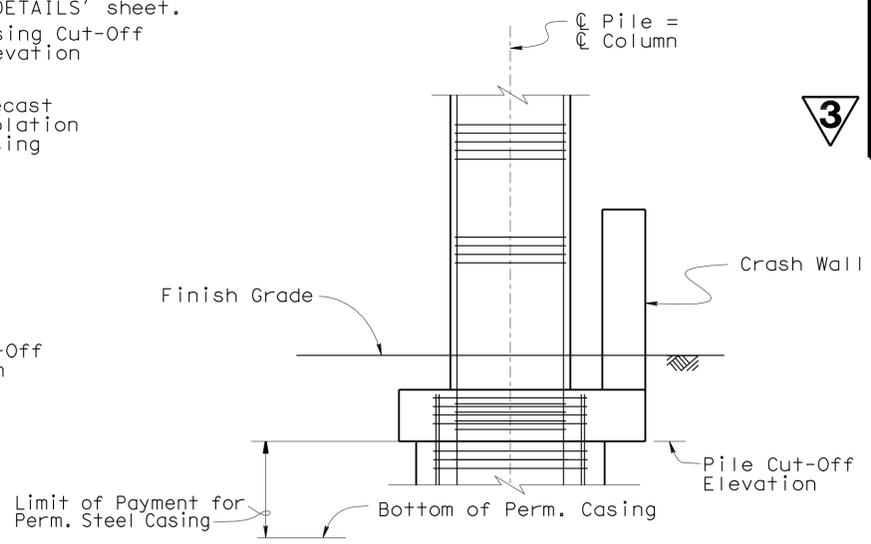


ELEVATION
3/8"=1'-0"

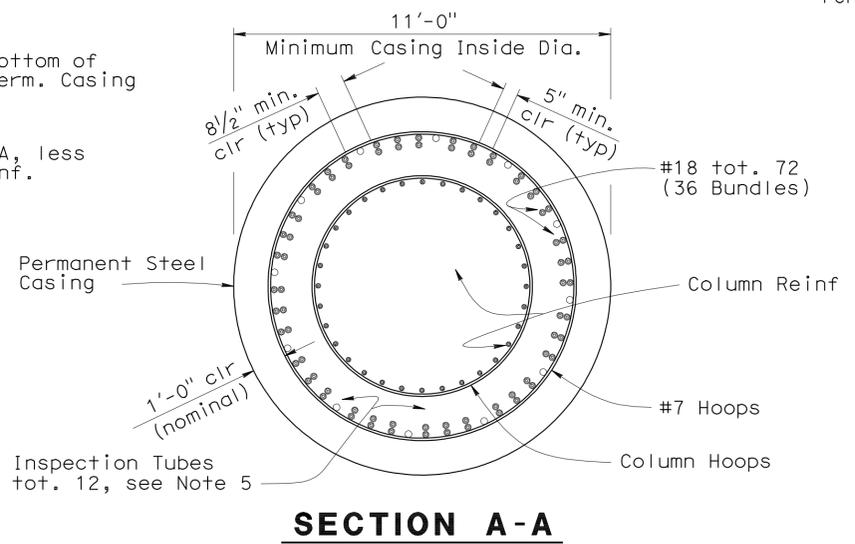
Location	Section B-B Length
Bents 2-7, 10 and 11(except easterly piles)*, 12	50'-0"



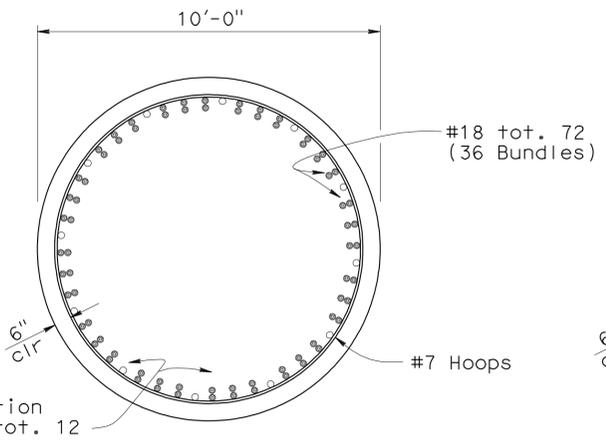
BENT 2 DETAIL
3/16"=1'-0"



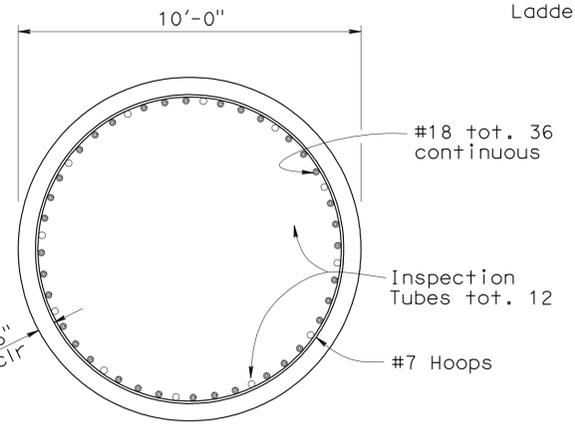
BENT 4 (STAGE 3) DETAIL
3/16"=1'-0"



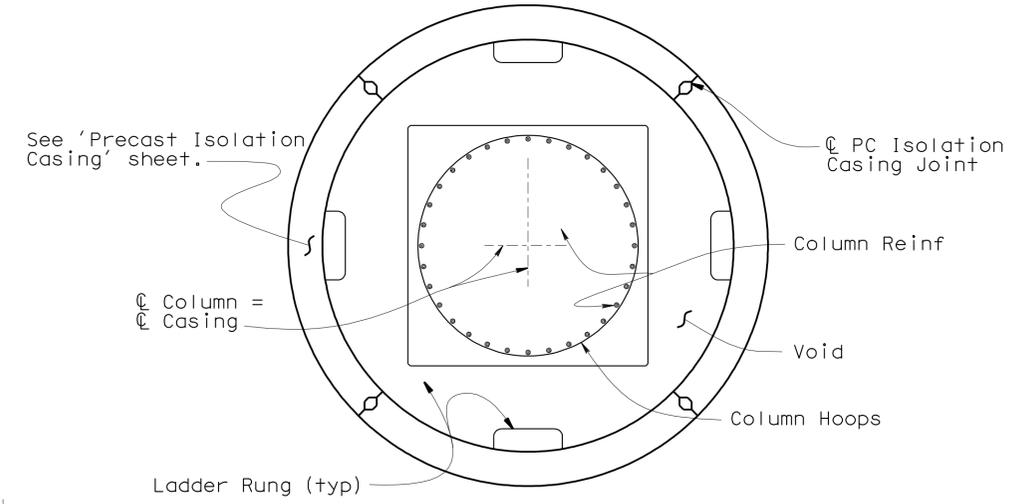
SECTION A-A
3/8"=1'-0"



SECTION B-B
3/8"=1'-0"



SECTION C-C
3/8"=1'-0"



SECTION D-D
3/8"=1'-0"

- NOTES:**
- For Column Reinf details, see "TYPICAL BENT LAYOUT" sheet.
 - For Pile Cut-Off data, see "INDEX TO PLANS" sheet.
 - All hoops are "Ultimate" butt splice continuous.
 - Only staggered "Ultimate" butt splices are allowed in Pile longitudinal reinforcement.
 - Inspection tubes may be removed above construction joint after testing and acceptance of pile.
- Denotes bundled bars

3 REVISED PER ADDENDUM No. 3
DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY J. Thorne	CHECKED F. Zayati
QUANTITIES	BY J. Massoomi	CHECKED L. Han

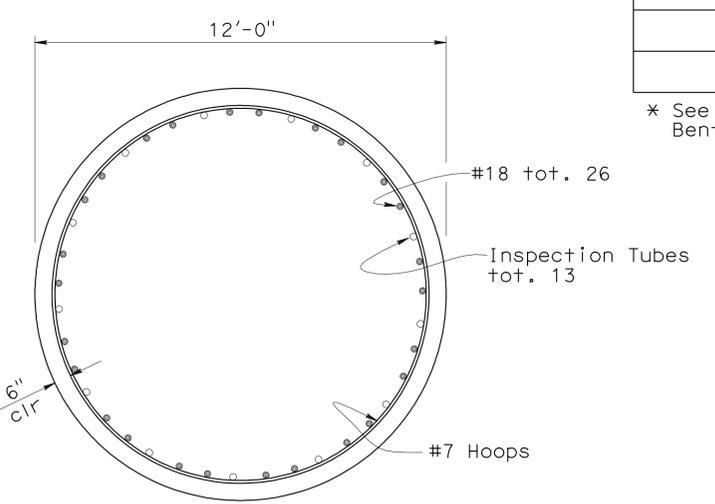
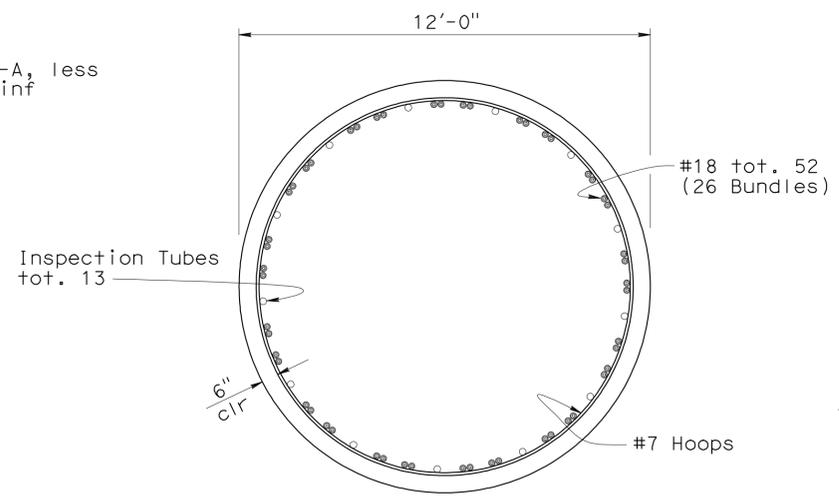
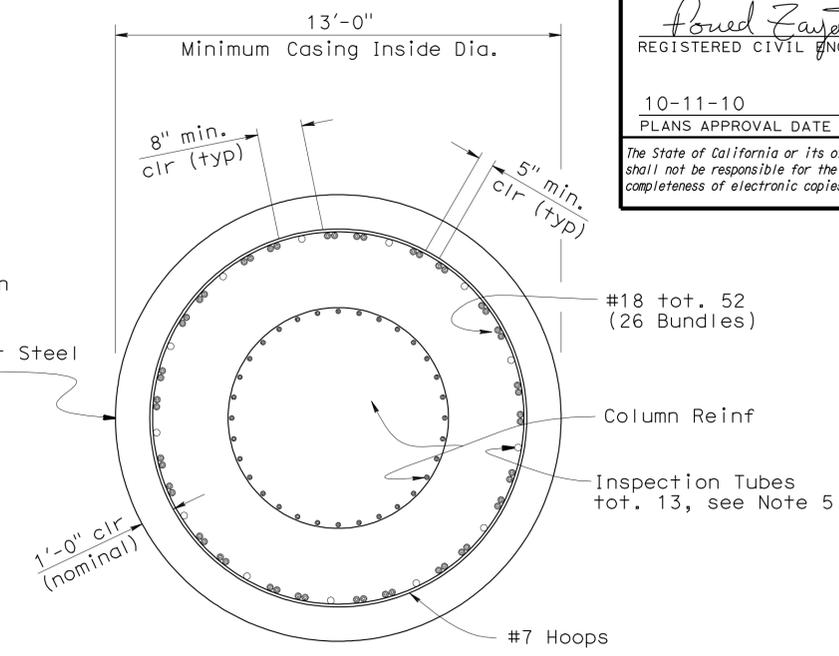
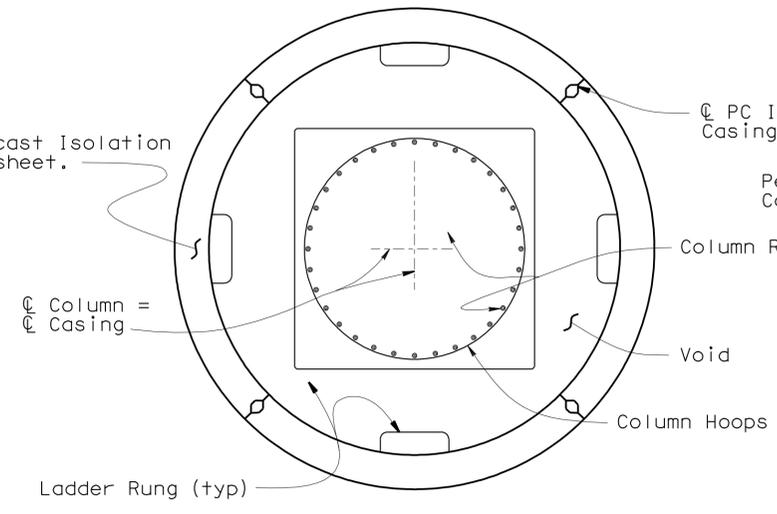
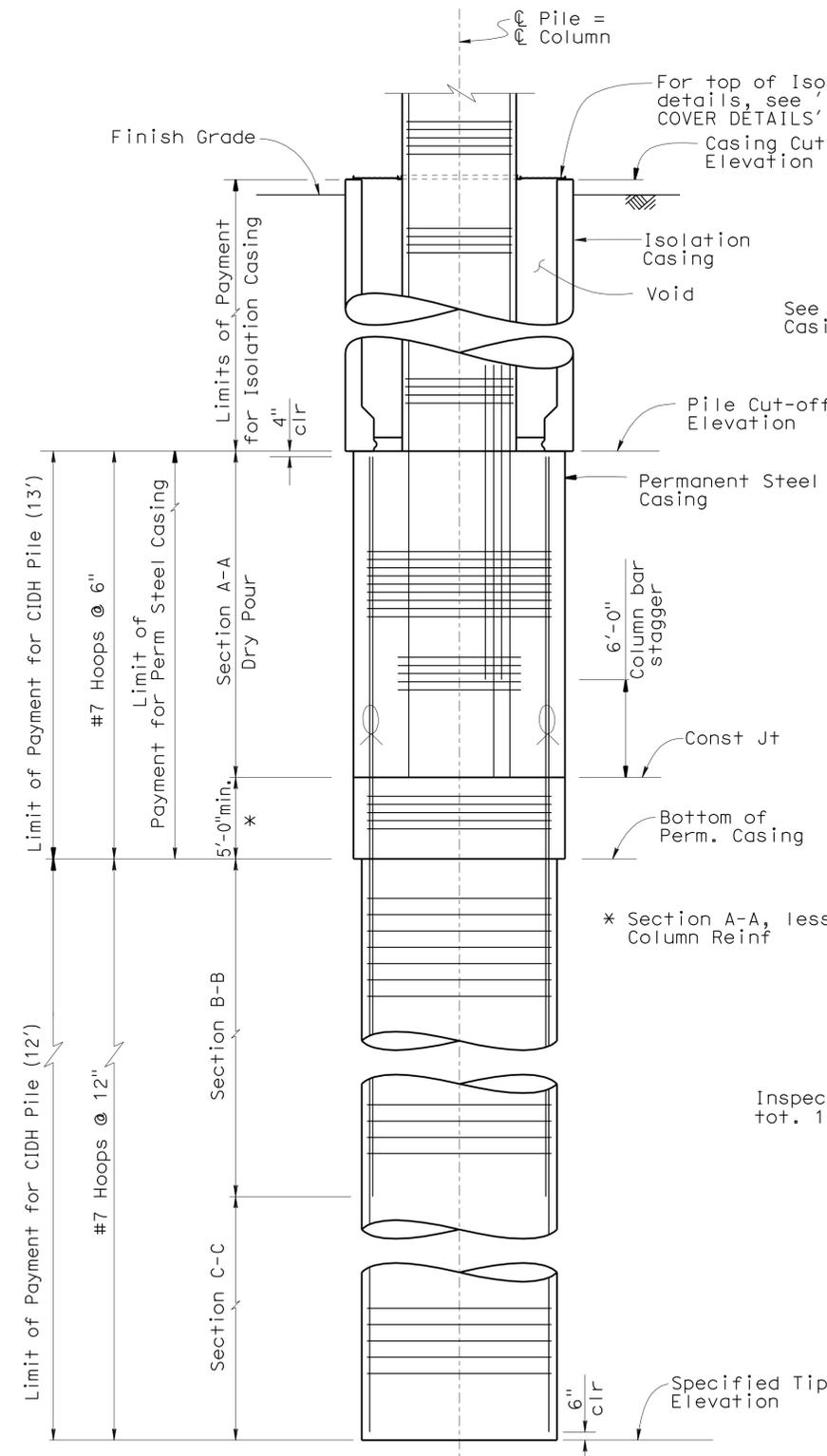
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
10 FT CIDH PILE DETAILS NO. 1

USERNAME => s135318 DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 10:48



Location	Section B-B Length
Bent 17 (except easterly pile)*	30'-0"
Bent 18	50'-0"
Bents 19 - 24	70'-0"

* See "12 FT CIDH PILE DETAILS NO. 3" sheet for Bent 17 eastern most pile.

NOTES:

1. For Column Reinf details, see "TYPICAL BENT LAYOUT" sheet.
2. For Pile Cut-Off data, see "INDEX TO PLANS" sheet.
3. All hoops are "Ultimate" butt splice continuous.
4. Only staggered "Ultimate" butt splices are allowed in Pile longitudinal reinforcement.
5. Inspection tubes may be removed above construction joint after testing and acceptance of pile.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY J. Thorne	CHECKED F. Zayati
QUANTITIES	BY J. Massoomi	CHECKED L. Han

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

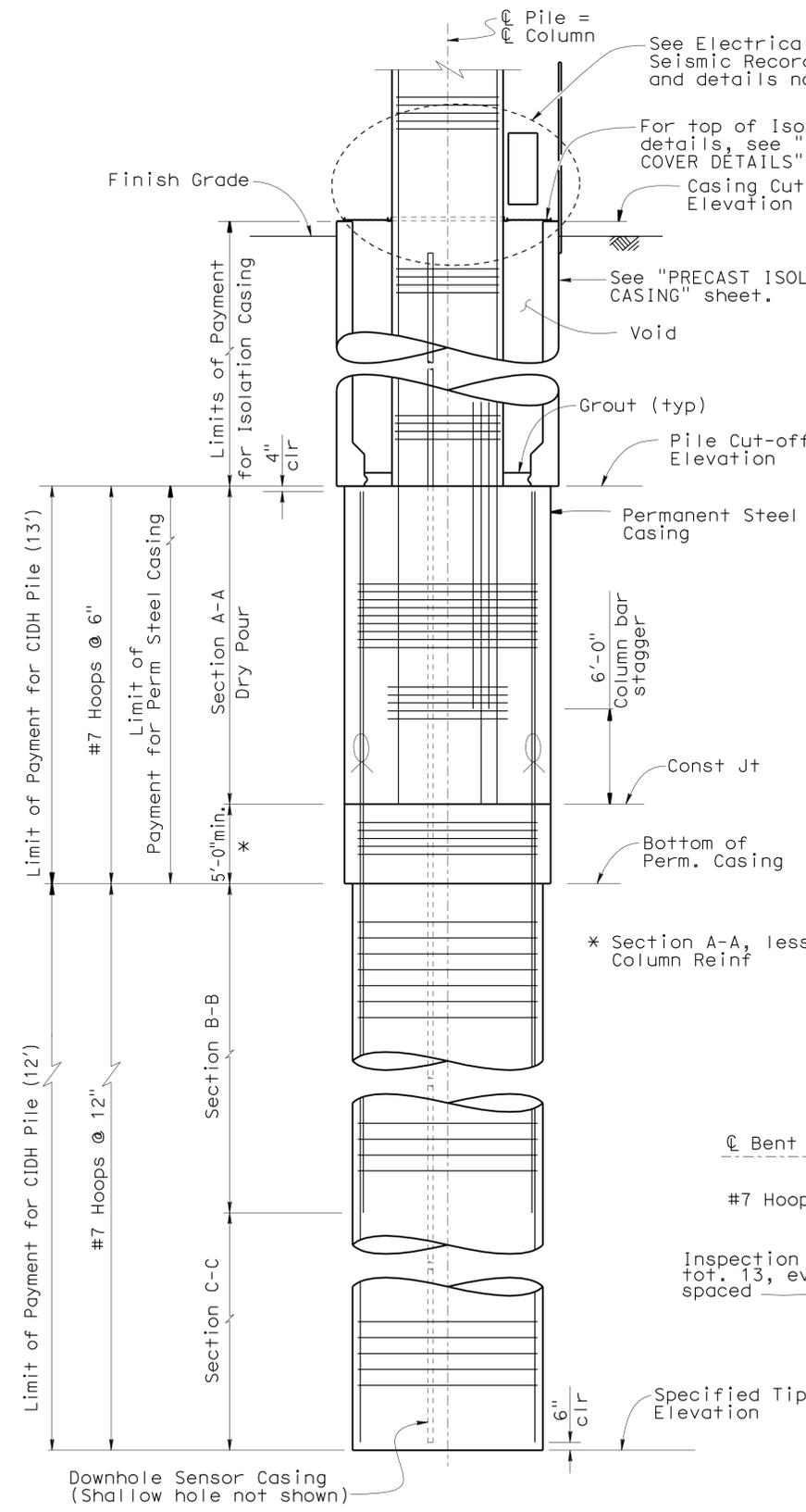
BRIDGE NO. 53-3032
POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
12 FT CIDH PILE DETAILS NO. 2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	650	1003

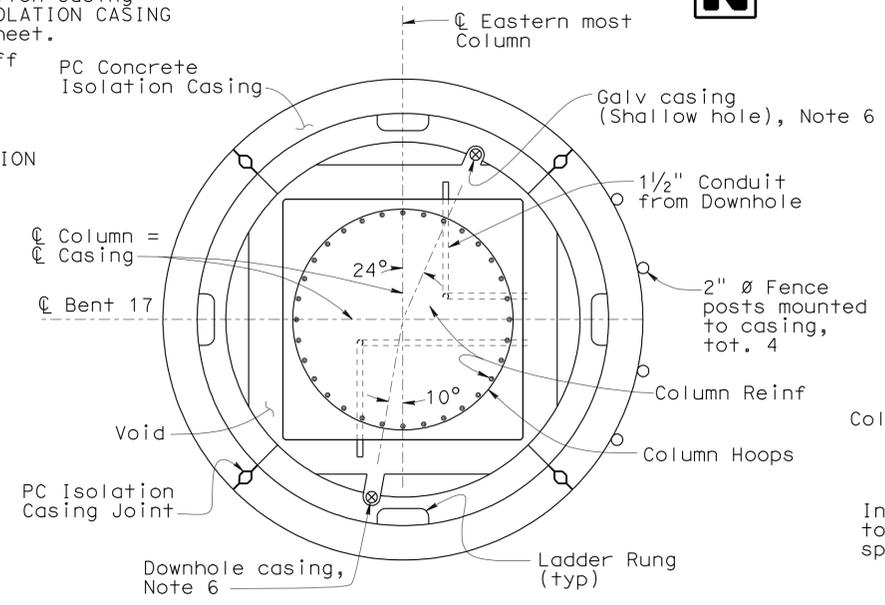
3
 Registered Civil Engineer
 FOUED ZAYATI
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

10-11-10
 PLANS APPROVAL DATE
 05-24-10
 DATE

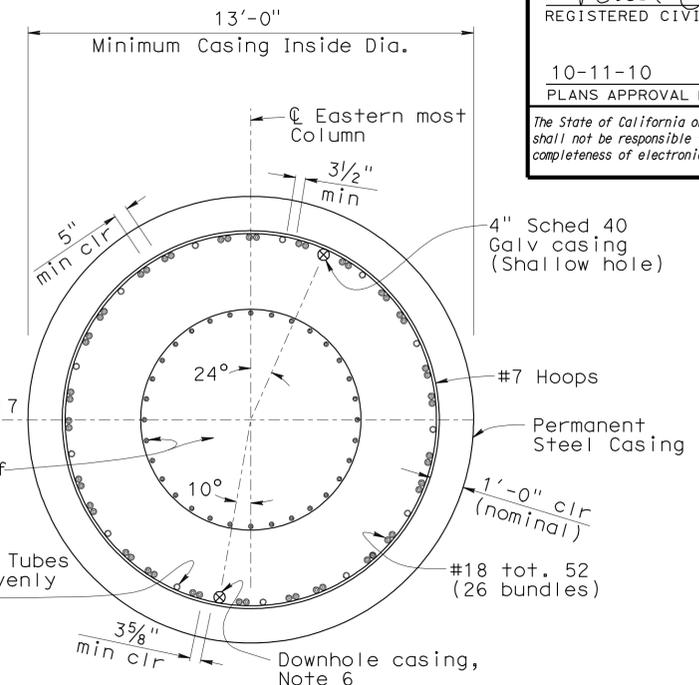
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



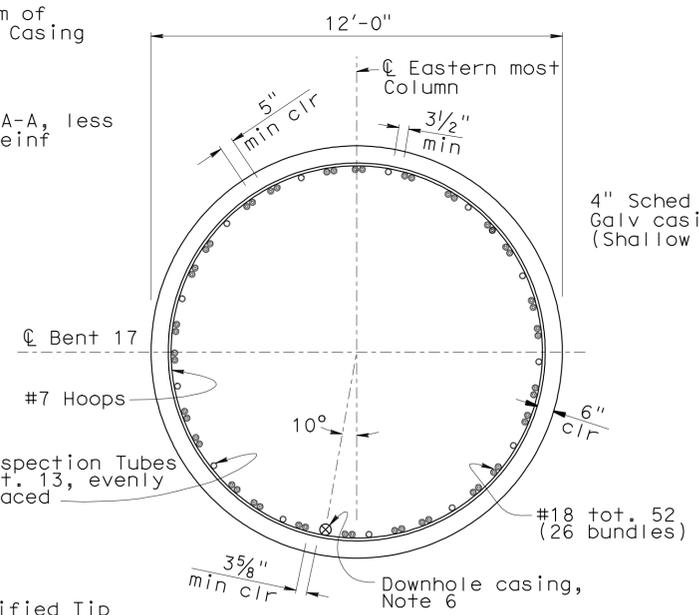
ELEVATION
3/8" = 1'-0"



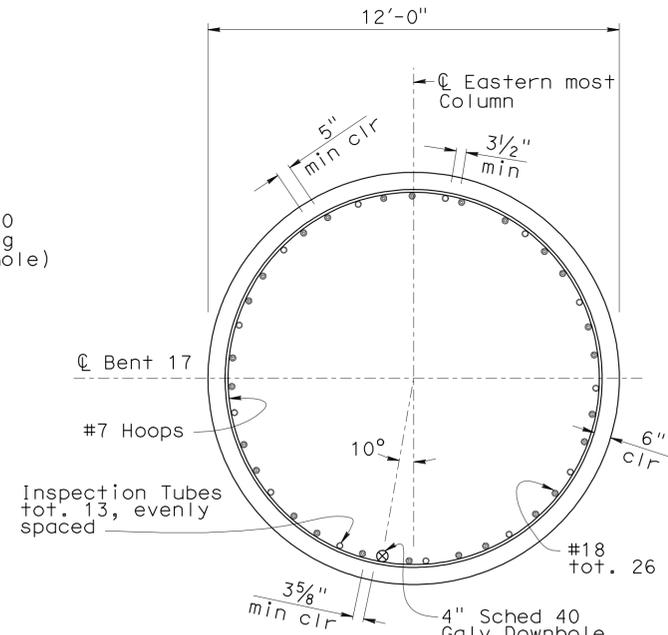
ISOLATION CASING
3/8" = 1'-0"



SECTION A-A
3/8" = 1'-0"



SECTION B-B
3/8" = 1'-0"



SECTION C-C
3/8" = 1'-0"

Location	Section B-B Length
Bent 17 - Easterly Pile	30'-0"

NOTES:

- For Column Reinf details, see "TYPICAL BENT LAYOUT" sheet.
 - For Pile Cut-Off data, see "INDEX TO PLANS" sheet.
 - All hoops are "Ultimate" butt splice continuous.
 - Only staggered "Ultimate" butt splices are allowed in Pile longitudinal reinforcement.
 - Inspection tubes may be removed above construction joint after testing and acceptance of pile.
 - For 'Downhole Casings' details, see "RECORDER DETAILS" sheet.
- ⊗ Denotes bundled reinforcement

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY J. Thorne	CHECKED F. Zayati
QUANTITIES	BY J. Massoomi	CHECKED L. Han

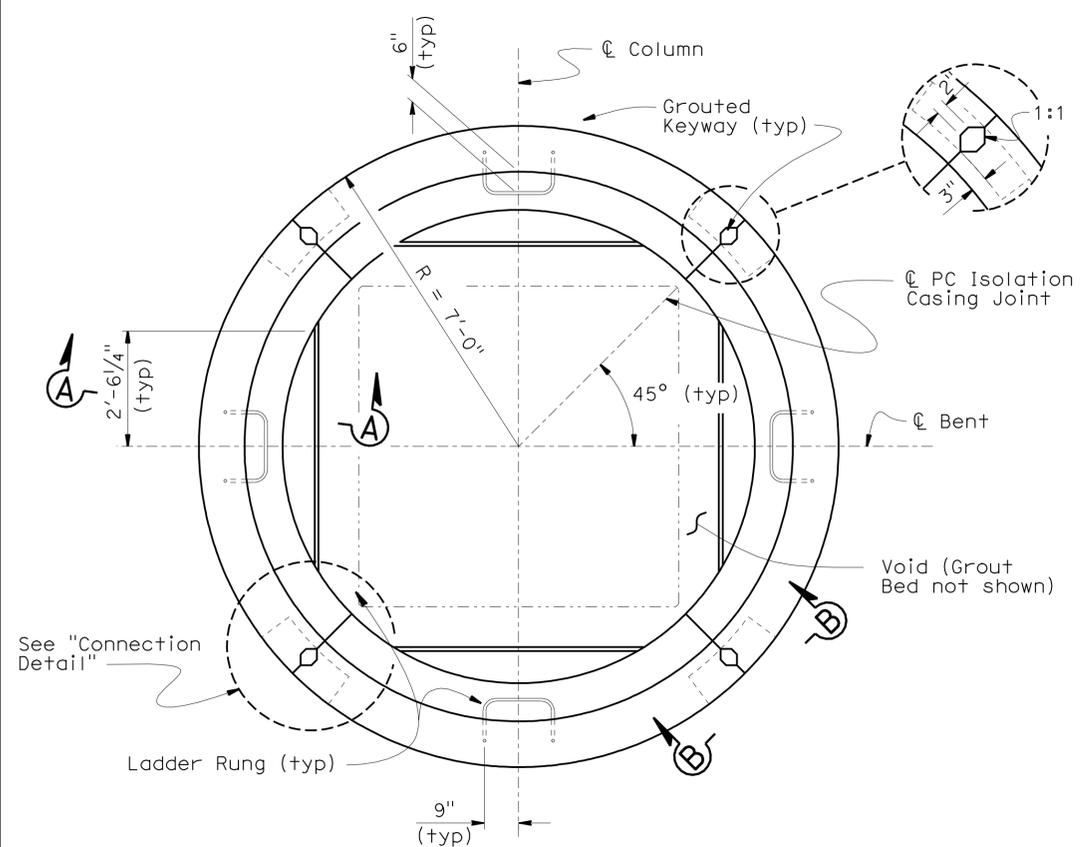
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO.	53-3032
POST MILE	3.58

SCHUYLER HEIM BRIDGE (REPLACE)
12 FT CIDH PILE DETAILS NO. 3

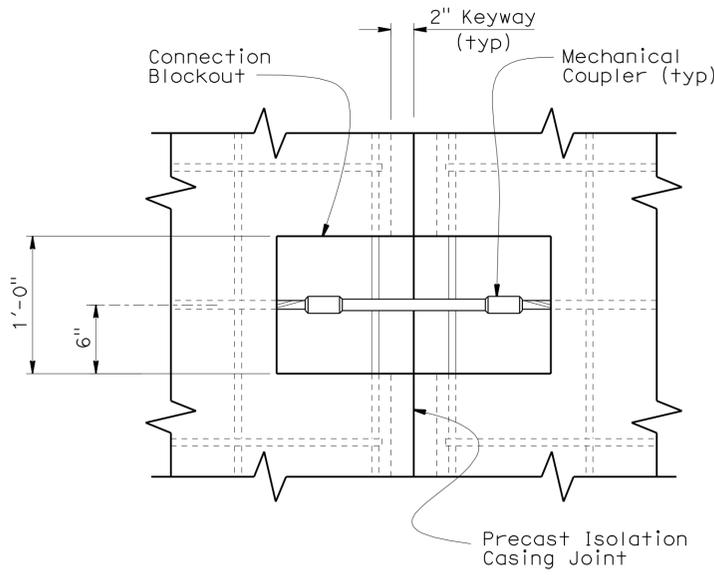
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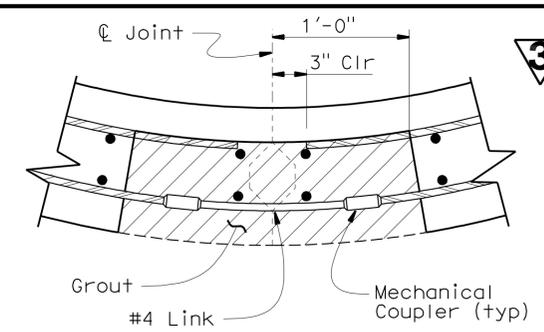
PLAN
1/2"=1'-0"

Location	Column*	H (ft)
Bent 2	All	15
Bent 17	1, 2	13
Bent 17	3	17
Bent 17	4	21
Bents 18 - 20	All	21
Bents 21 - 22	All	23
Bent 23	1, 2, 3	23
Bent 23	4	17
Bent 24	All	15

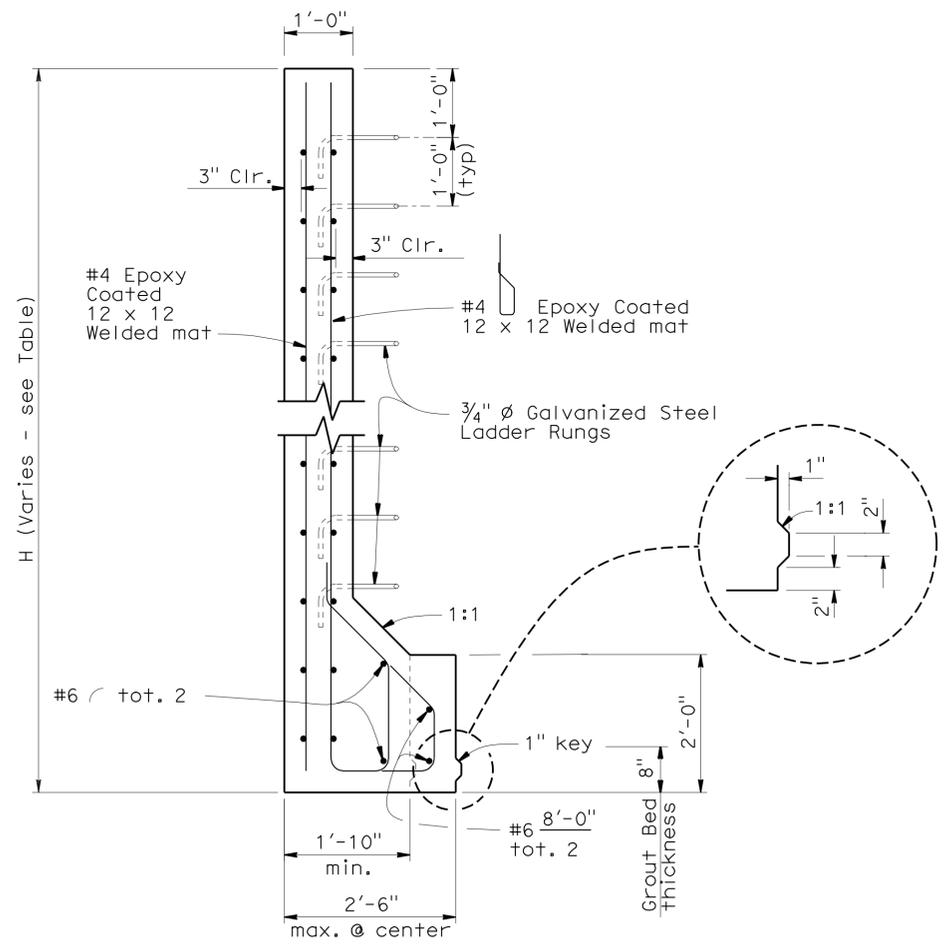
* Column 1 is the left most column.
Column 2 is the the next column.



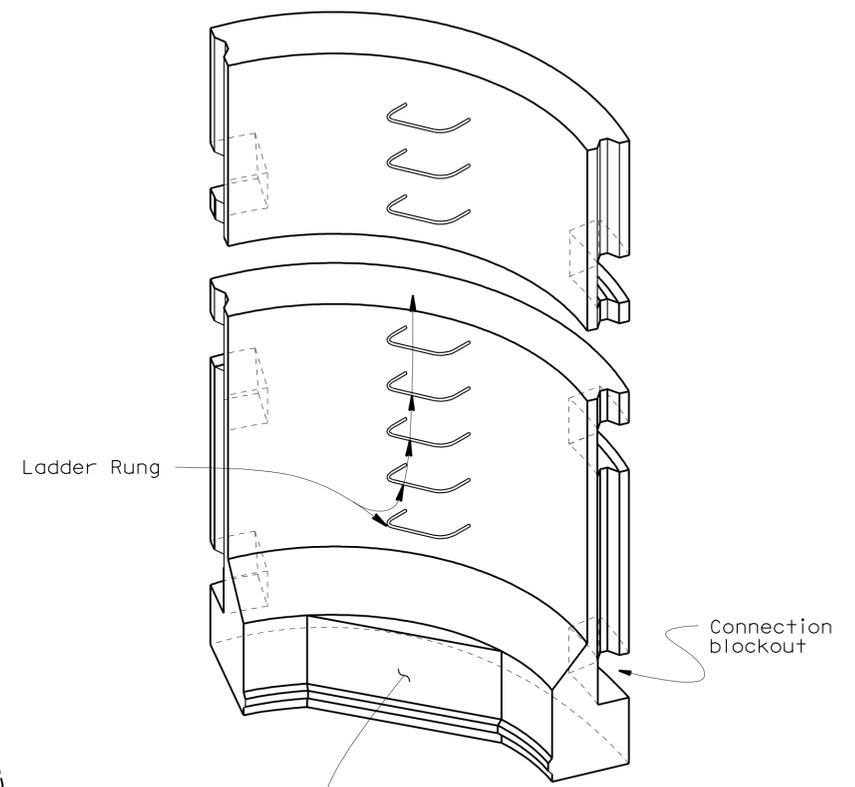
VIEW B-B
1/2"=1'-0"



CONNECTION DETAIL
1 1/2"=1'-0"



SECTION A-A
3/4"=1'-0"



ISOMETRIC VIEW PRECAST ISOLATION CASING
No Scale

NOTES:

1. All hardware to be galvanized before casting.
2. Place connections 3 feet from top, 2 feet from bottom and at mid-height of casing.
3. Align shells prior to grouting Keyway and Connection Blockouts.
4. Casing to be set on grout pad to level.
5. Minimum concrete strength shall be 5000 psi
6. Casing to be plumb and centered about column.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY Jeff Thorne	CHECKED F. Zayati
QUANTITIES	BY R. Bromenschenkel	CHECKED F. Zayati

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

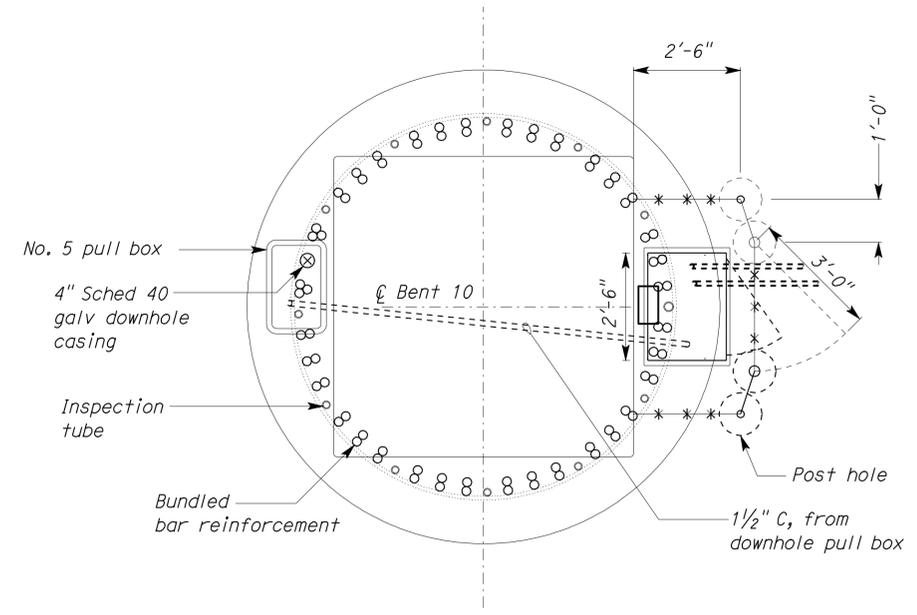
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO. 53-3032
POST MILE 3.58
SCHUYLER HEIM BRIDGE (REPLACE)
PRECAST ISOLATION CASING DETAILS

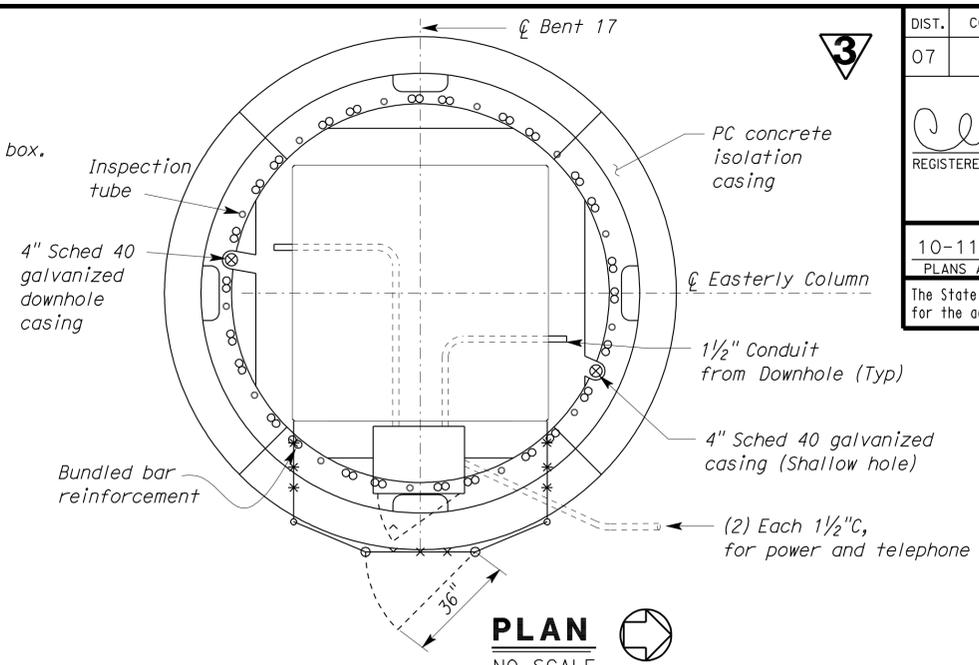
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	714	1003
				REGISTERED ELECTRICAL ENGINEER DATE 4-13-10 PLANS APPROVAL DATE 10-11-10	
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

Notes:

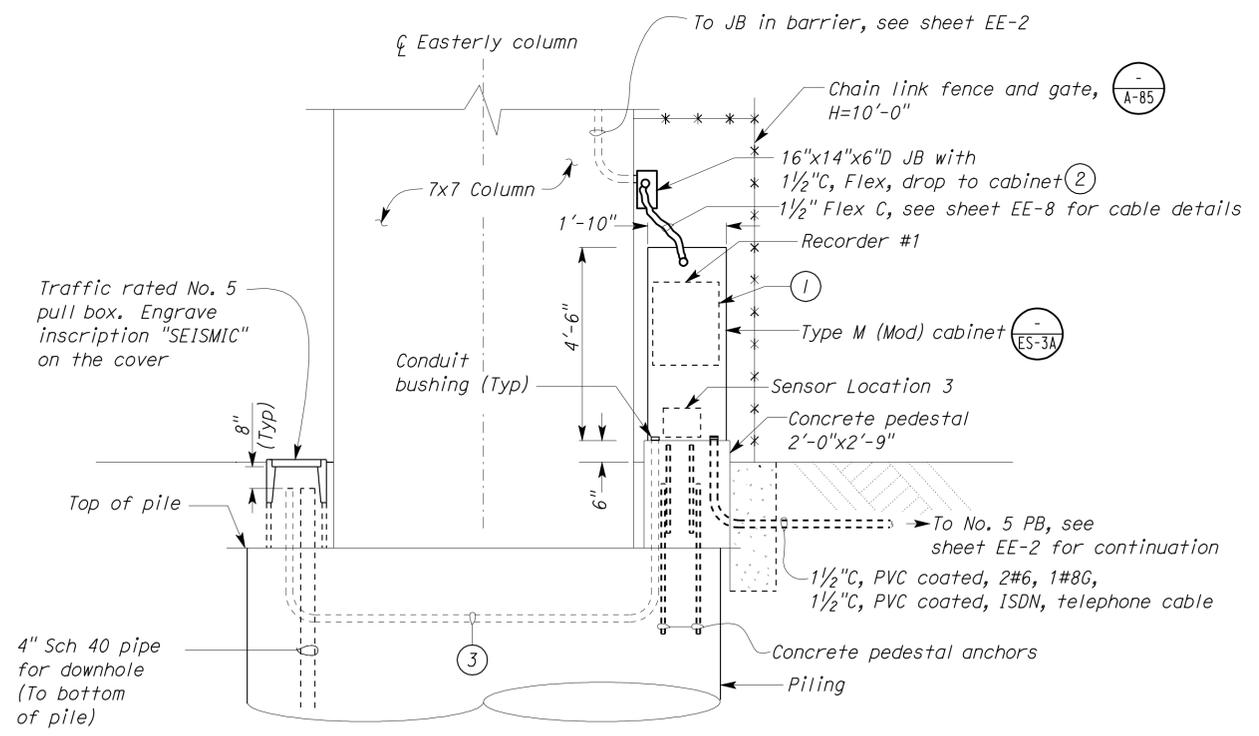
- Install duplex and telephone outlet inside lower 12" of cabinet.
- Install drain fitting in bottom of junction box.
- Install pull rope in conduits.



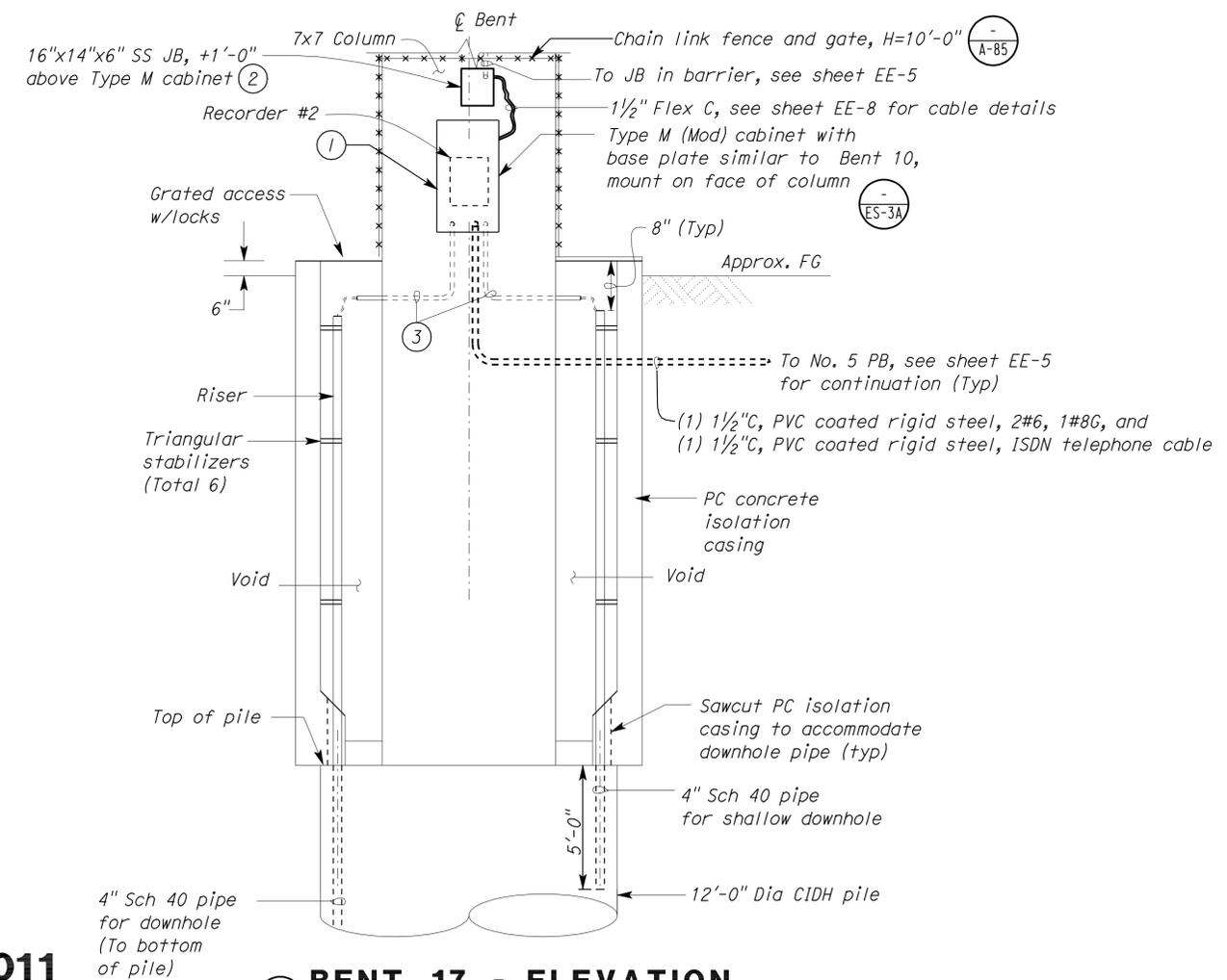
PLAN
NO SCALE



PLAN
NO SCALE



1 BENT 10 ELEVATION
NO SCALE



2 BENT 17 - ELEVATION
NO SCALE

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

THIS DRAWING ACCURATE FOR ELECTRICAL WORK ONLY.

DESIGN	BY Johnny Wu	CHECKED Tech Ngov
DETAILS	BY Linda Monson	CHECKED Johnny Wu
QUANTITIES	BY Johnny Wu	CHECKED Tech Ngov

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
ELECTRICAL-MECHANICAL-WATER AND WASTEWATER DESIGN

BRIDGE NO.	53-3032	SCHUYLER HEIM BRIDGE (REPLACE)
POST MILE	3.58	
SEISMIC MONITORING SYSTEM		RECORDER DETAILS

SHEET EE-7 OF 247

GENERAL NOTES

LOAD AND RESISTANCE FACTOR DESIGN

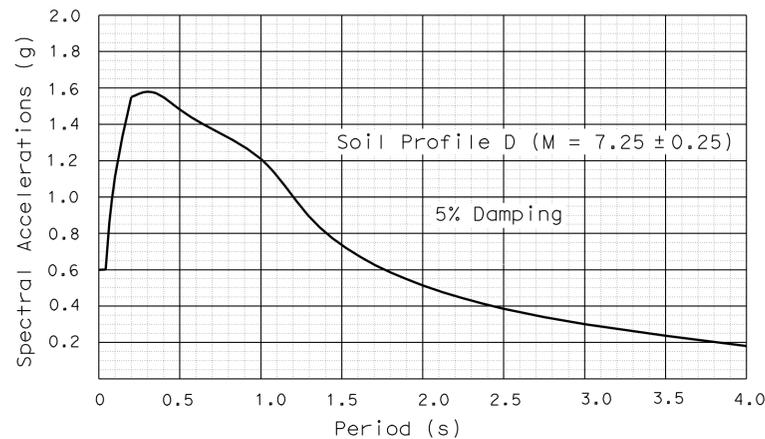
DESIGN: AASHTO LRFD Bridge Design Specifications, 3rd edition with the 2005, 2006 Interims and the California Amendments v3.06.01; except that earth retaining systems, bridge barrier and railing details taken from Standard Plans May 2006 and earlier versions, and Standard Bridge Details XS Sheets are designed using Bridge Design Specifications LFD Version April 2000 ('96 AASHTO w/Revisions by Caltrans)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.4 dated June 2006.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: 1.2*HL-93 and Low-Boy and Permit design loading.

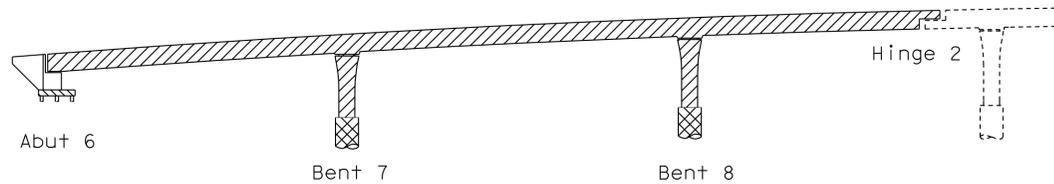
SEISMIC LOADING: Soil profile type D adjusted for near field effects
Magnitude 7.25 +/- 0.25
Peak Rock Acceleration 0.6g



REINFORCED CONCRETE:
fy = 60 ksi
f'c = 3.6 ksi
n = 8

PRESTRESSED CONCRETE:
See 'Prestressing Notes' on "GIRDER LAYOUT" sheet.

STRUCTURAL STEEL:
fy = ASTM A709 Grade 50



- Structural Concrete, Bridge (f'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge Footing (P'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge (f'c = 5.0 ksi @ 28 days)
- Cast-In-Place Drilled Hole Pilingn (f'c = 3.6 ksi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

No Scale

QUANTITIES

STRUCTURE EXCAVATION (TYPE A)	660	CY
STRUCTURE EXCAVATION (TYPE GC)	308,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2)	43	CY
(AERIALY DEPOSITED LEAD)		
STRUCTURE BACKFILL (BRIDGE)	455	CY
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	822	LF
120" CAST-IN-DRILLED-HOLE CONCRETE PILING	206	LF
132" CAST-IN-DRILLED-HOLE CONCRETE PILING	50	LF
132" PERMANENT STEEL CASING	50	LF
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
SEAL COURSE CONCRETE	195	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	120	CY
STRUCTURAL CONCRETE, BRIDGE	1,335	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	39	CY
PRECAST CONCRETE ISOLATION CASING	26	CY
PTFE SPHERICAL BEARING	2	EA
JOINT SEAL ASSEMBLY (MR = 24")	37	LF
BAR REINFORCING STEEL (BRIDGE)	494,000	LB
HEADED BAR REINFORCEMENT	149	EA
MISCELLANEOUS METAL (BRIDGE)	1,060	LB
BRIDGE DECK DRAINAGE SYSTEM	3,730	LB
BICYCLE RAILING	396	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	848	LF

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

PILE DATA TABLE

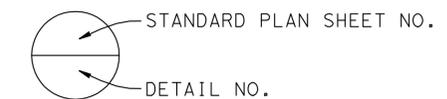
LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE (KIP)		CASING TIP ELEVATION (ft)	DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)	PILE CUTOFF ELEVATIONS (ft)	DEPTH OF SEAL COURSE (ft)	DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
			COMPRESSION	TENSION								
ABUT 6	2.5 FT CIDH	220	520	0	NA	-71 (a)	-71	2.75	0.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 7	11 FT CIDH 10 FT CIDH	2790	5660	0	-35	-137 (a)	-137	-10.0	7.0	0' to 1' 1'+	Lead Non-Haz	TYPE Z-2 TYPE A
BENT 8	11 FT CIDH 10 FT CIDH	2690	5310	0	-29	-133 (a)	-133	-4.0	4.0	0' to 1' 1' to 5' 5'+	Lead DRO & ORO Non-Haz	TYPE Z-2 TYPE DC TYPE A

- NOTES: 1. Design Tip Elevations are controlled by the following demands:
(a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Load.
2. 0' is equivalent to existing ground surface.
3. 1'+ is soil more than 1' below Existing Ground Surface.

- LEGEND:
- DRO = Diesel Range Organics
ORO = Oil Range Organics
Non-Haz = Non-Hazardous material

STANDARD PLANS DATED MAY 2006

- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B7-1 BOX GIRDER DETAILS
- B7-8 DECK DRAINAGE DETAILS
- B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS



INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	FOUNDATION PLAN
5	ABUTMENT 6 LAYOUT
6	ABUTMENT 6 DETAILS NO. 1
7	ABUTMENT 6 DETAILS NO. 2
8	ABUTMENT 6 DETAILS NO. 3
9	ABUTMENT 6 DETAILS NO. 4
10	TYPICAL BENT LAYOUT
11	TYPICAL BENT DETAILS
12	TYPICAL SECTION
13	GIRDER LAYOUT
14	HINGE 2 DIAPHRAGM DETAILS
15	MISCELLANEOUS DETAILS
16	2.5 FT PIPE PILE DETAILS
17	10 FT CIDH PILE DETAILS
18	PRECAST ISOLATION CASING DETAILS
19	ISOLATION CASING COVER DETAILS
20	PTFE BEARING DETAILS NO. 1
21	PTFE BEARING DETAILS NO. 2
22	JOINT SEAL ASSEMBLY LAYOUT
23	JOINT SEAL ASSEMBLY DETAILS NO. 1
24	JOINT SEAL ASSEMBLY DETAILS NO. 2
25	JOINT SEAL ASSEMBLY DETAILS NO. 3
26	JOINT SEAL ASSEMBLY DETAILS NO. 4
27	JOINT SEAL ASSEMBLY DETAILS NO. 5
28	DECK DRAIN DETAILS
29	STRUCTURE APPROACH TYPE N(30S)
30	STRUCTURE APPROACH DRAINAGE DETAILS
31	CONCRETE BARRIER DETAILS NO. 1
32	CONCRETE BARRIER DETAILS NO. 2
33	CONCRETE BARRIER DETAILS NO. 3
34	RAILING DETAILS NO. 1
35	RAILING DETAILS NO. 2
36	LOG OF TEST BORINGS NO. 1 OF 5
37	LOG OF TEST BORINGS NO. 2 OF 5
38	LOG OF TEST BORINGS NO. 3 OF 5
39	LOG OF TEST BORINGS NO. 4 OF 5
40	LOG OF TEST BORINGS NO. 5 OF 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	751	1003

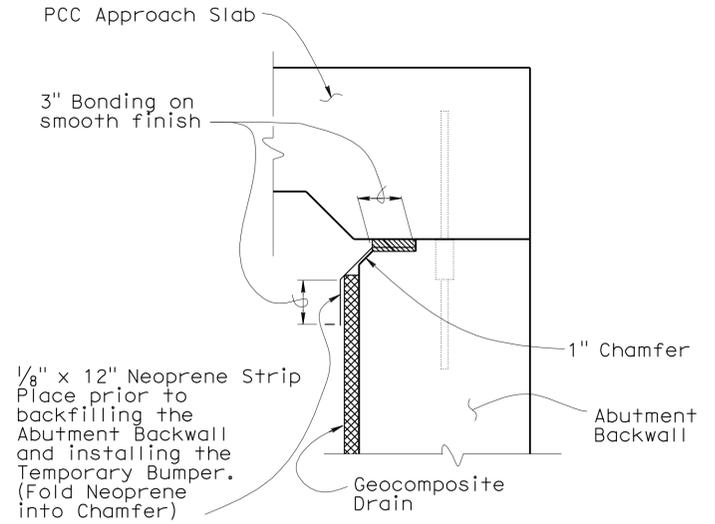
FOUED ZAYATI 05-24-10
REGISTERED CIVIL ENGINEER DATE

10-11-10
PLANS APPROVAL DATE

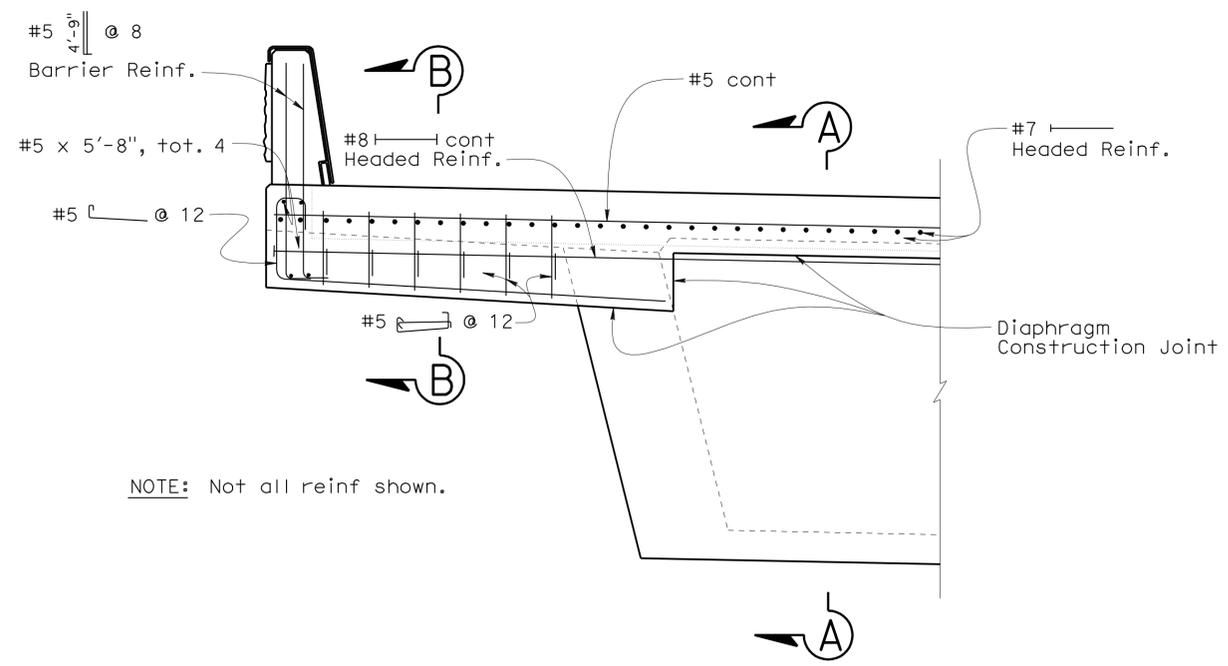
FOUED ZAYATI
No. C57046
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	757	1003
FOUED ZAYATI REGISTERED CIVIL ENGINEER DATE 05-24-10			REGISTERED PROFESSIONAL ENGINEER No. C57046 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA		
PLANS APPROVAL DATE 10-11-10 <i>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</i>					

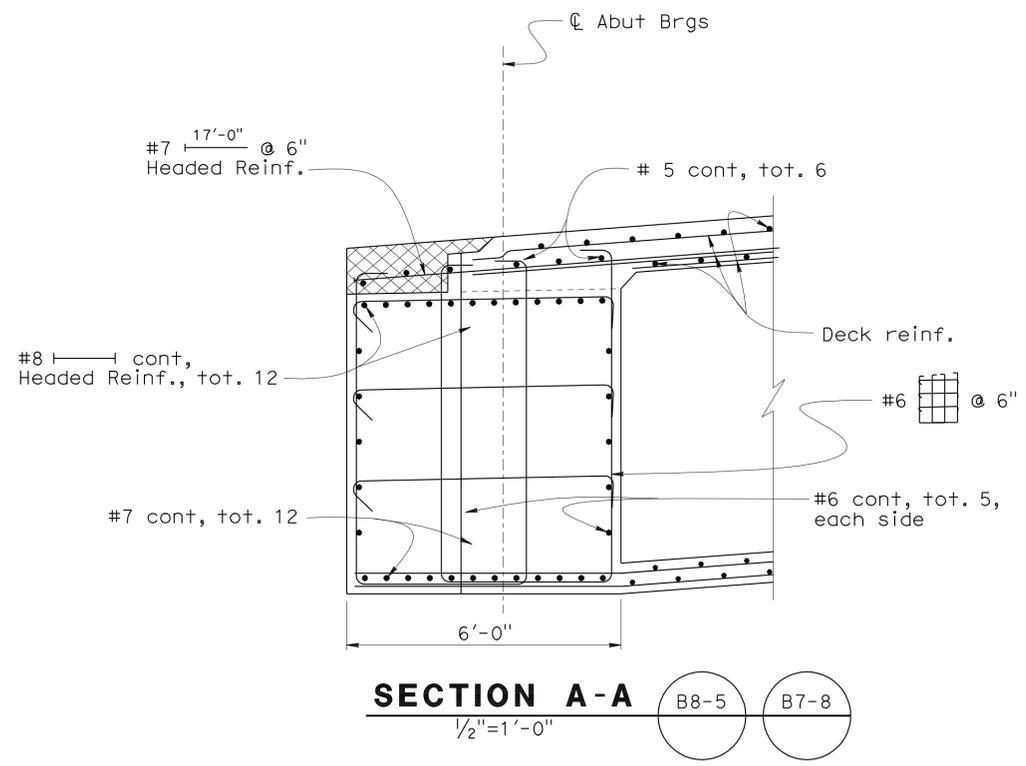


JOINT PROTECTION DETAIL
No Scale

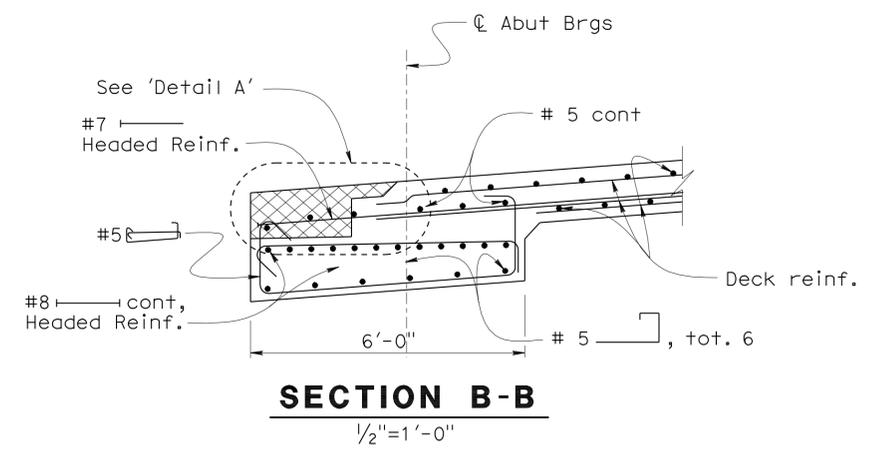


NOTE: Not all reinf shown.

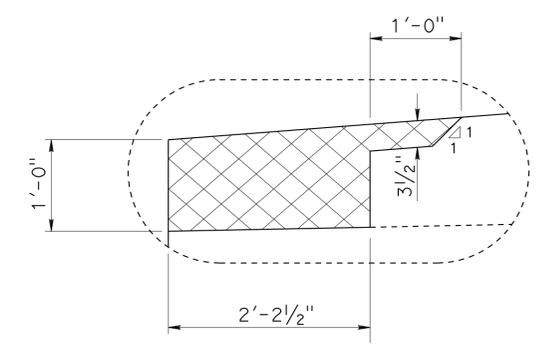
ABUTMENT DIAPHRAGM - PART ELEVATION
1/2" = 1'-0"



SECTION A-A
1/2" = 1'-0" (B8-5, B7-8)



SECTION B-B
1/2" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL
1" = 1'-0"

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

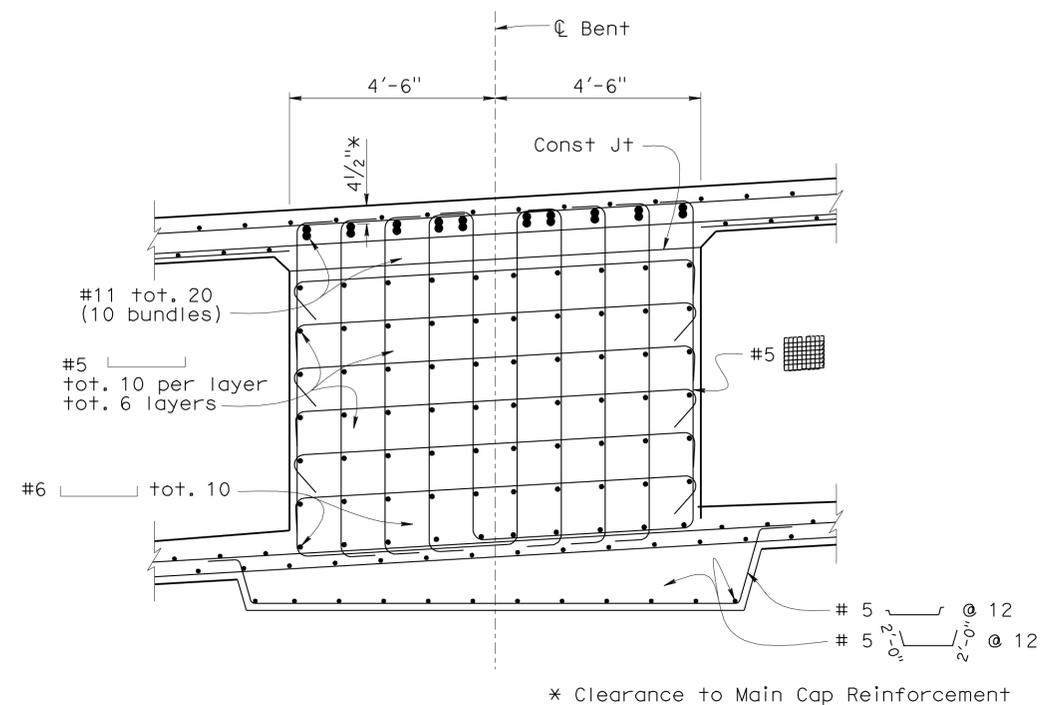
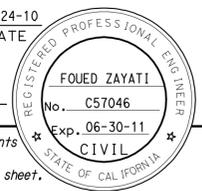
DESIGN	BY F. Zayati	CHECKED J. Lane
DETAILS	BY L. Xiong	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramkrishnan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

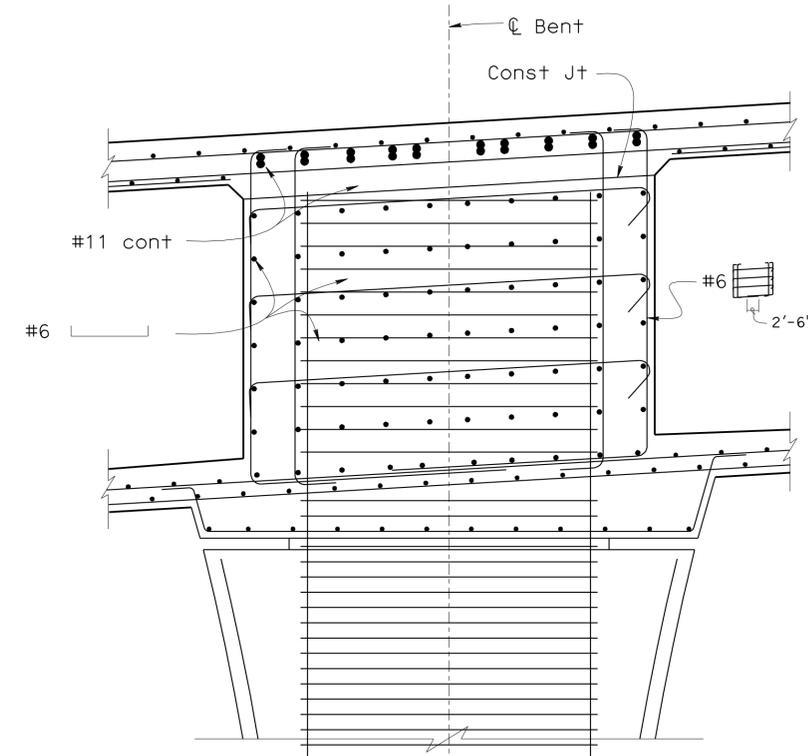
BRIDGE NO.	53-3033	NEW DOCK STREET ON-RAMP ABUTMENT 7 DETAILS NO. 3
POST MILE	0.01	

3

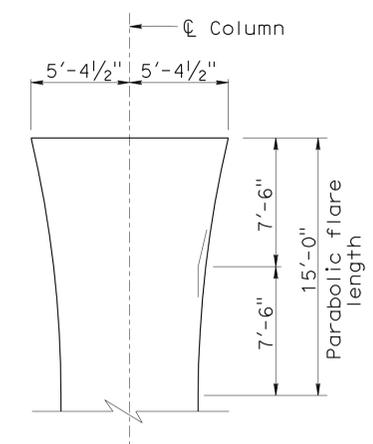
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	760	1003
Foued Zayati REGISTERED CIVIL ENGINEER			05-24-10 DATE		
10-11-10 PLANS APPROVAL DATE					
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SECTION D-D
1/2"=1'-0"



SECTION E-E
1/2"=1'-0"



FLARE DETAIL
No Scale

NOTE:
For location of 'Section D-D' and 'Section E-E', see "TYPICAL BENT LAYOUT" sheet.

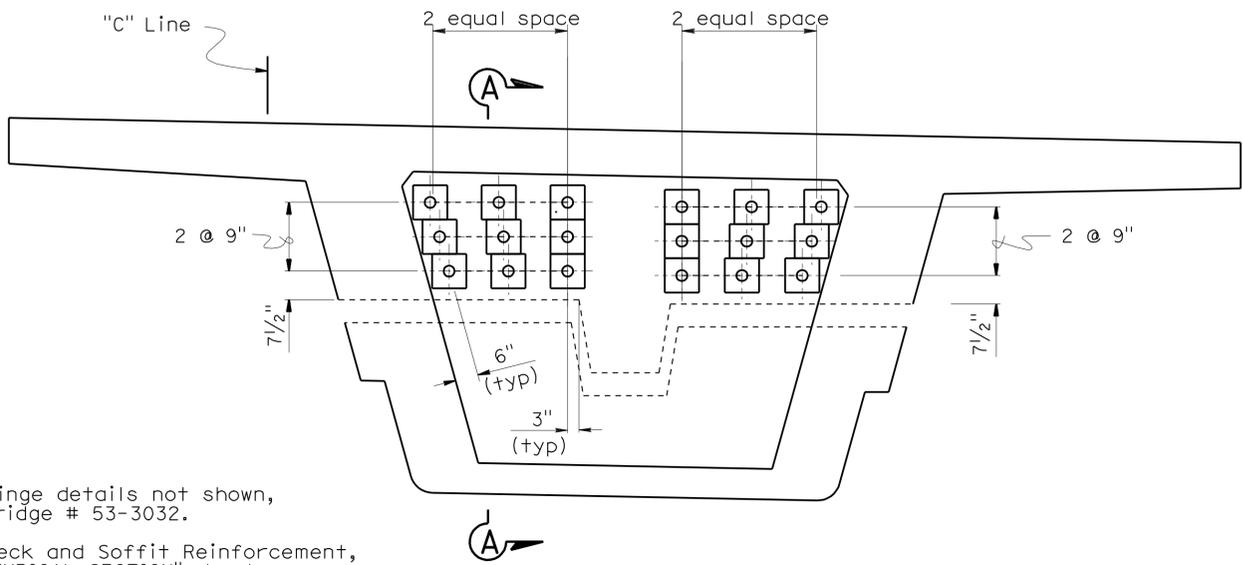
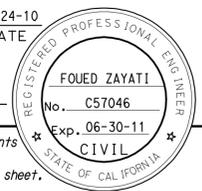
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY F. Zayati	CHECKED L. Bahia	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	NEW DOCK STREET ON-RAMP BENT 8 DETAILS
	DETAILS	BY K. Kubo	CHECKED F. Zayati			53-3033	
	QUANTITIES	BY J. Lane	CHECKED V. Ramkrishnan			POST MILE 0.01	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS					CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
					0 1 2 3	REVISION DATES	
					FILE => 53-3033-n-bdf.add	06-18-08 12-06-09 05-11-10 01-07-11 SHEET 11 OF 40	

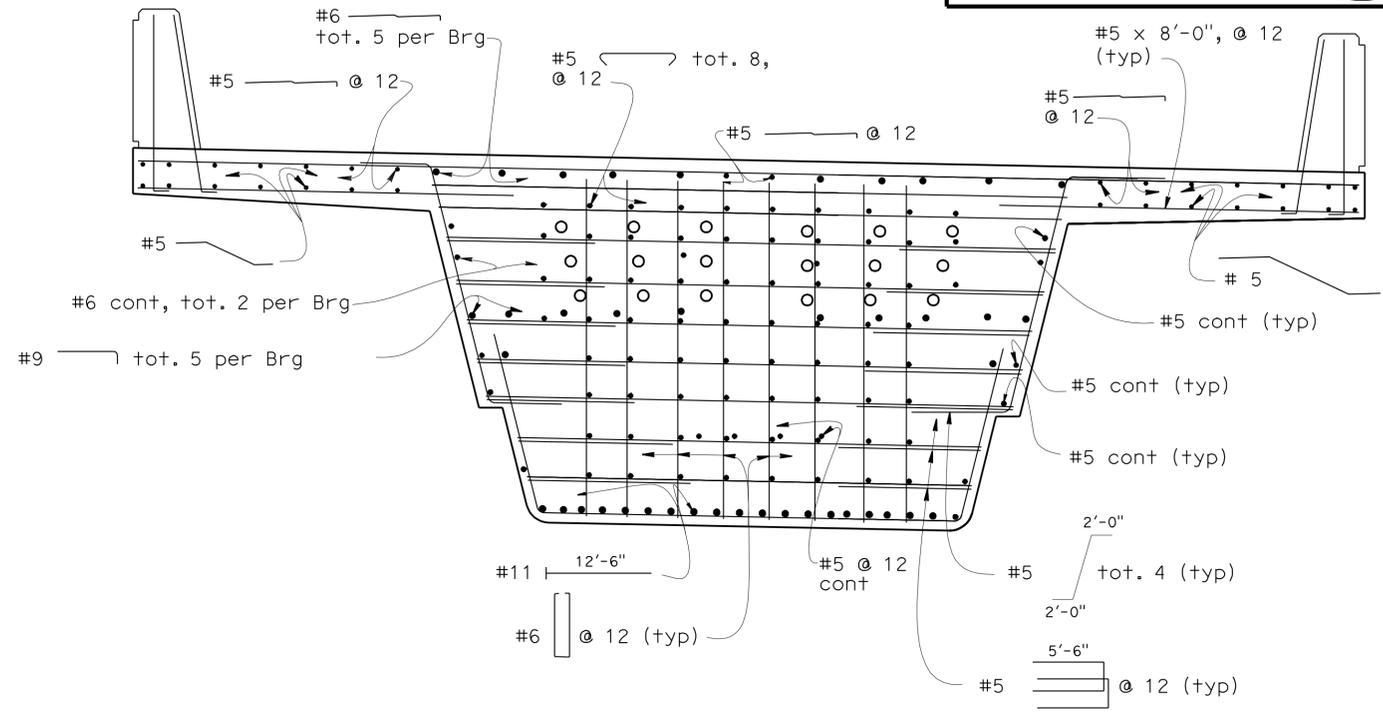
USERNAME => hprince DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:20

3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	763	1003
FOUED ZAYATI REGISTERED CIVIL ENGINEER			05-24-10	DATE	
10-11-10 PLANS APPROVAL DATE					
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

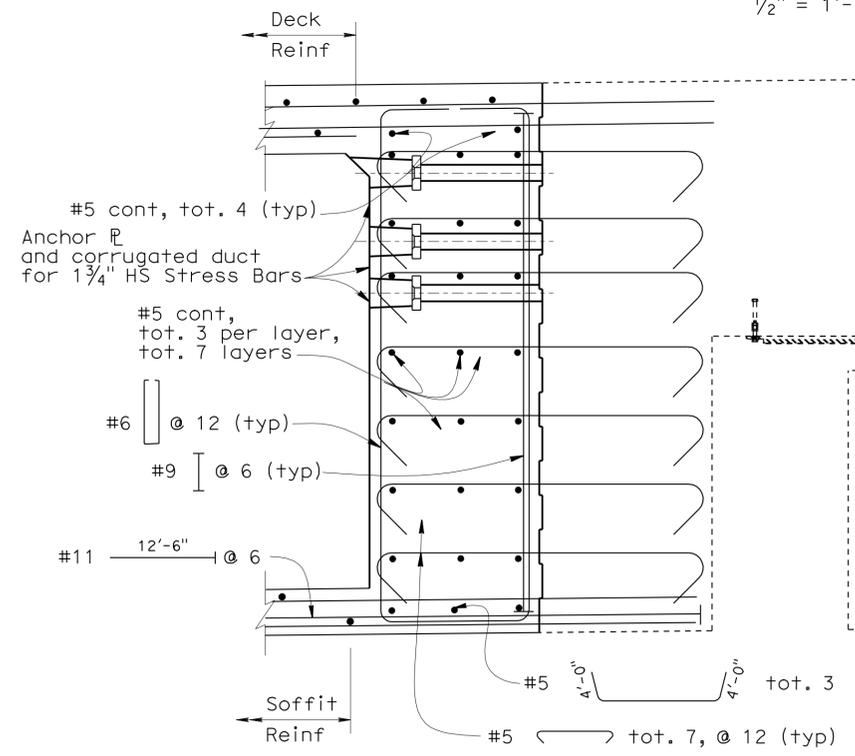


ELEVATION
1/2" = 1'-0"

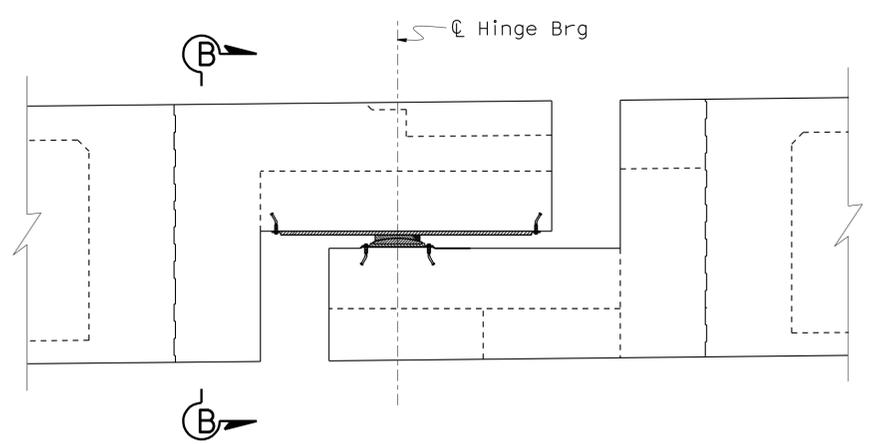


SECTION B-B
1/2" = 1'-0"

- NOTES:
1. For Hinge details not shown, see Bridge # 53-3032.
 2. For Deck and Soffit Reinforcement, see "TYPICAL SECTION" sheet.



SECTION A-A
3/4" = 1'-0"



LONGITUDINAL ELEVATION
3/8" = 1'-0"

3

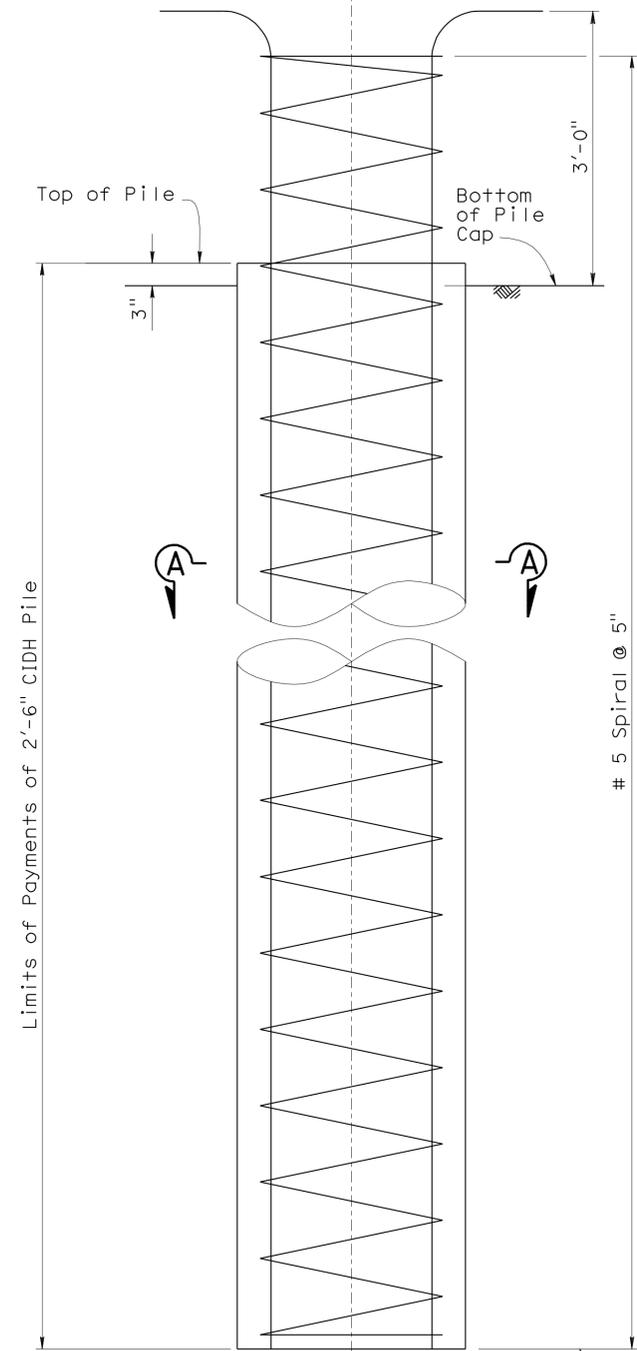
REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN BY F. Zayati CHECKED R. Bromenschenkel DETAILS BY T. Nguyen CHECKED F. Zayati QUANTITIES BY J/P. Peterson CHECKED J/P. Peterson	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 53-3033 POST MILE 0.01	NEW DOCK STREET ON-RAMP HINGE 2 DIAPHRAGM DETAILS
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 14 OF 40
	FILE => 53-3033-1-hingedet.add	REVISION DATES 01-08-10 03-25-10 04-12-10 04-14-10 05-18-10 01-07-11		

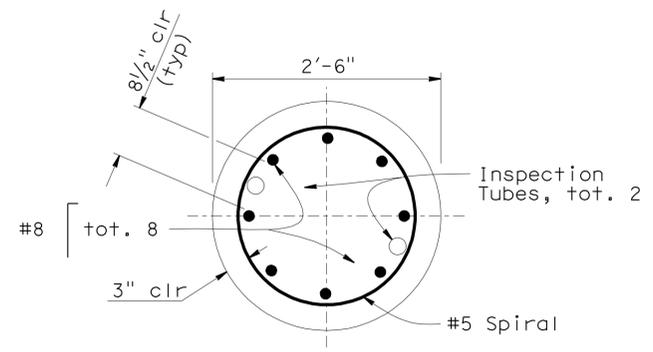
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3

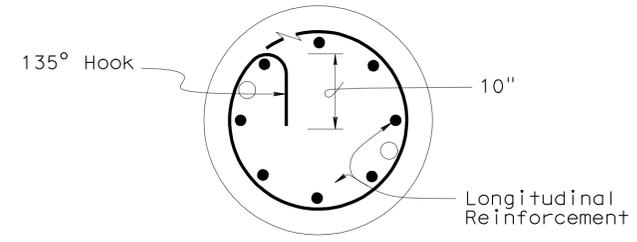
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	765	1003
<i>Foued Zayati</i> REGISTERED CIVIL ENGINEER			05-24-10 DATE	REGISTERED PROFESSIONAL ENGINEER FOUED ZAYATI No. C57046 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA	
10-11-10			PLANS APPROVAL DATE		
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ELEVATION
1"=1'-0"



SECTION A-A
1"=1'-0"



PILE SPIRAL DETAIL
No Scale

NOTES:

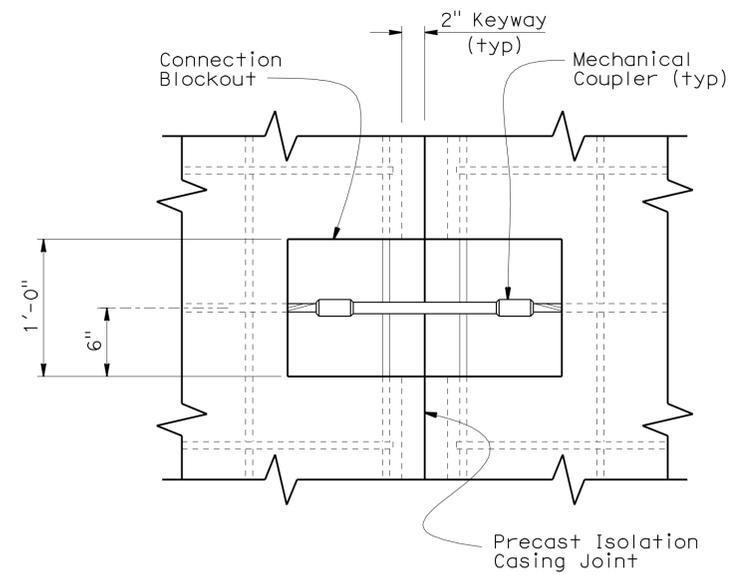
1. For Lapped Splices, Spiral Reinforcement shall be lapped at least 80 diameters.
2. Spiral Reinforcement at Lapped Splices and at ends shall be terminated by a 135 degree hook around a longitudinal bar.
3. No Splices allowed in Pile Longitudinal Reinforcement.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

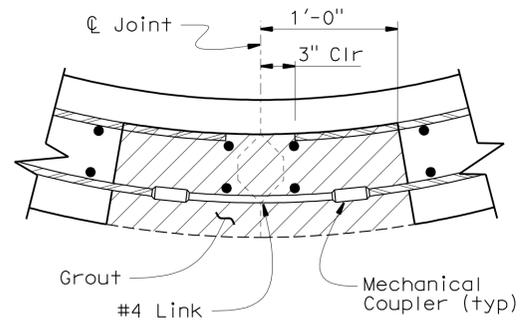
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY S. Galgiani	CHECKED F. Zayati	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3033	NEW DOCK STREET ON-RAMP 2.5 FT CIDH PILE DETAILS	
	DETAILS	BY T. Nguyen	CHECKED F. Zayati			POST MILE	0.01		
	QUANTITIES	BY J. Lane	CHECKED V. Ramkrishnan			CU 07-271 EA 138201	REVISION DATES		03-12-08 06-18-08 12-11-09 01-16-10 05-14-10 05-11-10 05-17-10 05-24-10 07-12-10 12-13-10
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS								DISREGARD PRINTS BEARING EARLIER REVISION DATES	SHEET 16 OF 40

USERNAME => hrr1ghf DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 10:51

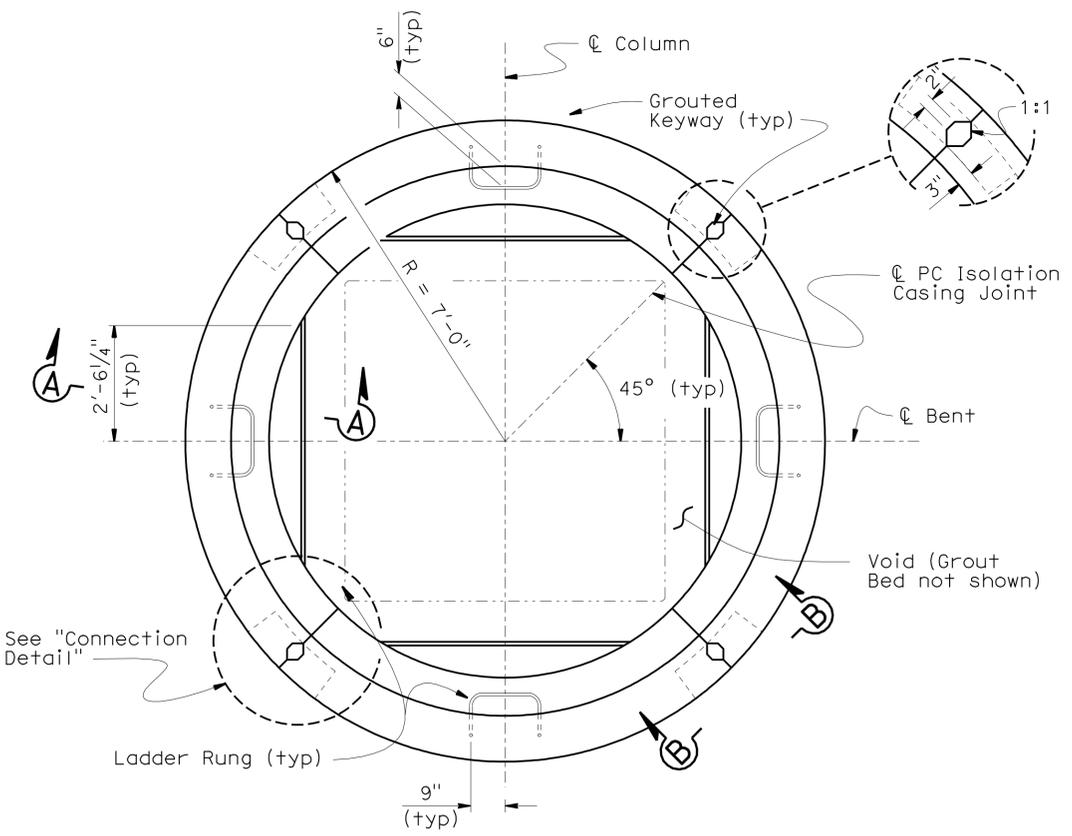
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	767	1003
FOUED ZAYATI REGISTERED CIVIL ENGINEER DATE 05-24-10				10-11-10 PLANS APPROVAL DATE	
REGISTERED PROFESSIONAL ENGINEER FOUED ZAYATI No. C57046 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA				The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.	



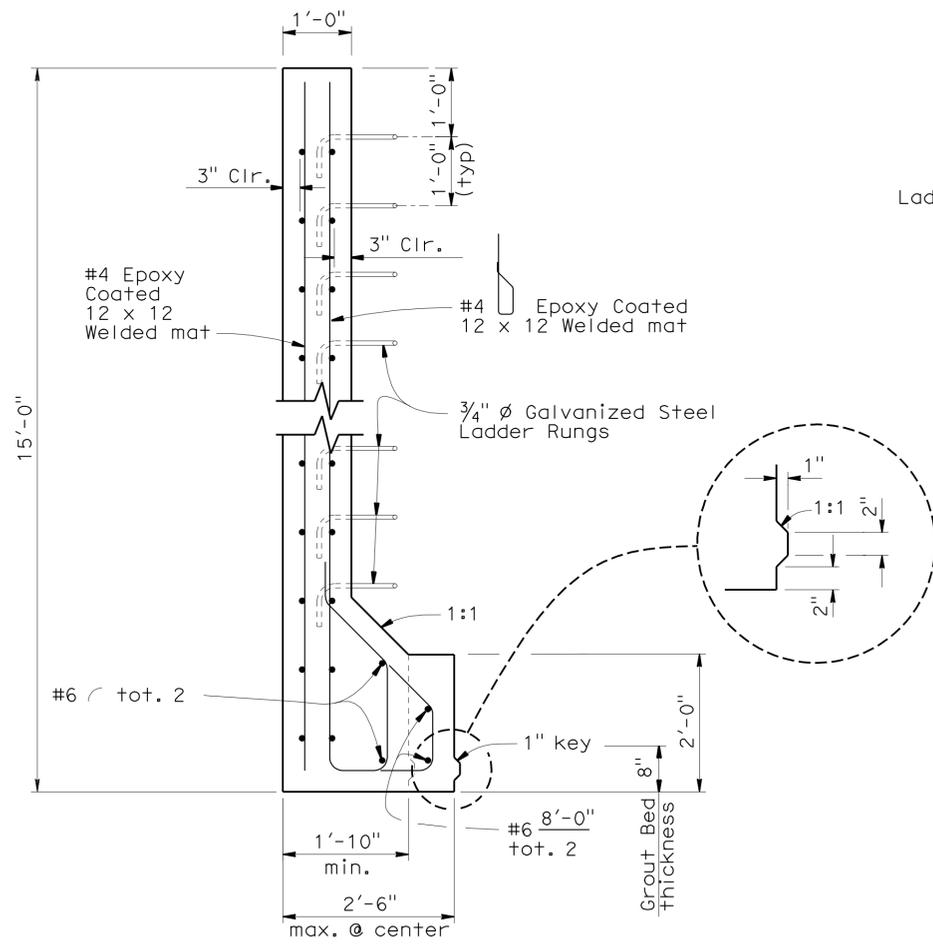
VIEW B-B
1/2"=1'-0"



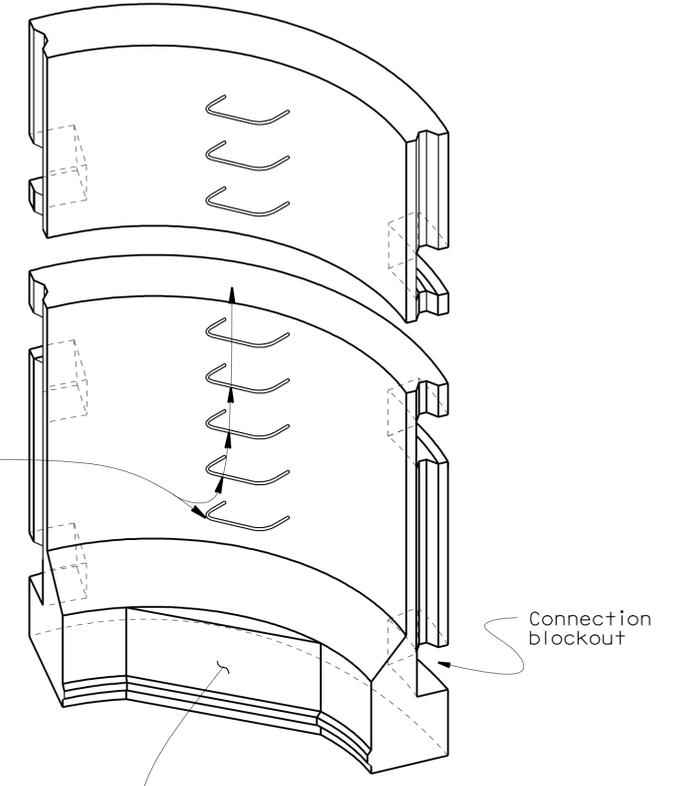
CONNECTION DETAIL
1/2"=1'-0"



PLAN
1/2"=1'-0"



SECTION A-A
3/4"=1'-0"



ISOMETRIC VIEW PRECAST ISOLATION CASING
No Scale

NOTES:

1. All hardware to be galvanized before casting.
2. Place connections 3 feet from top, 2 feet from bottom and at mid-height of casing.
3. Align shells prior to grouting Keyway and Connection Blockouts.
4. Casing to be set on grout pad to level.
5. Minimum concrete strength shall be 5000 psi
6. Casing to be plumb and centered about column.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY Jeff Thorne	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO.	53-3033
POST MILE	0.01

NEW DOCK STREET ON-RAMP
PRECAST ISOLATION CASING DETAILS

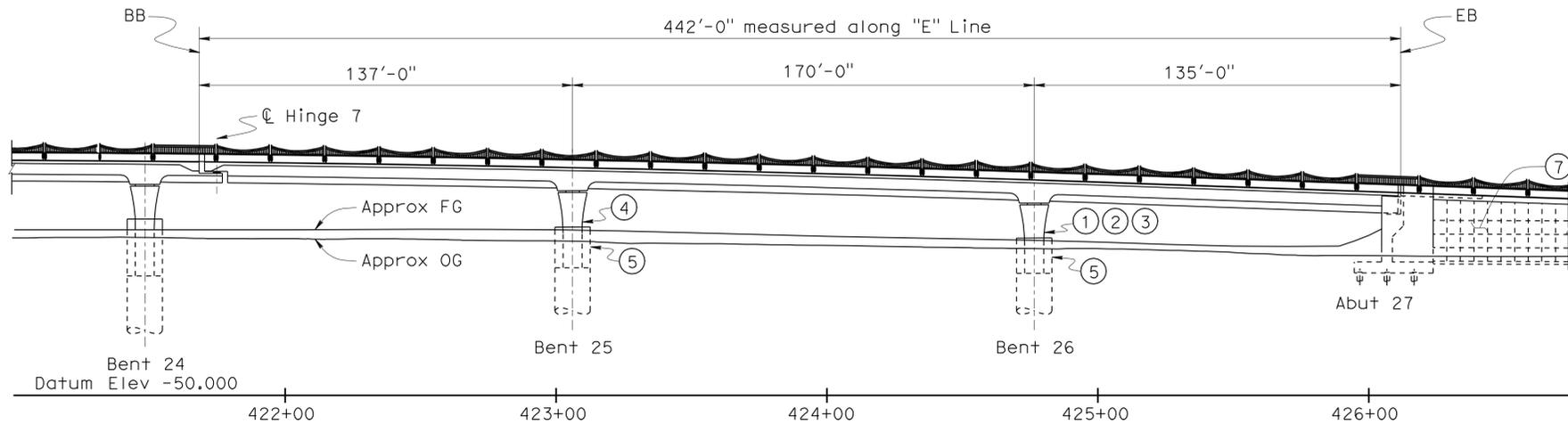
USERNAME => fpp115 DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:18

BC 419+30.00
Elev 36.80
0.30%

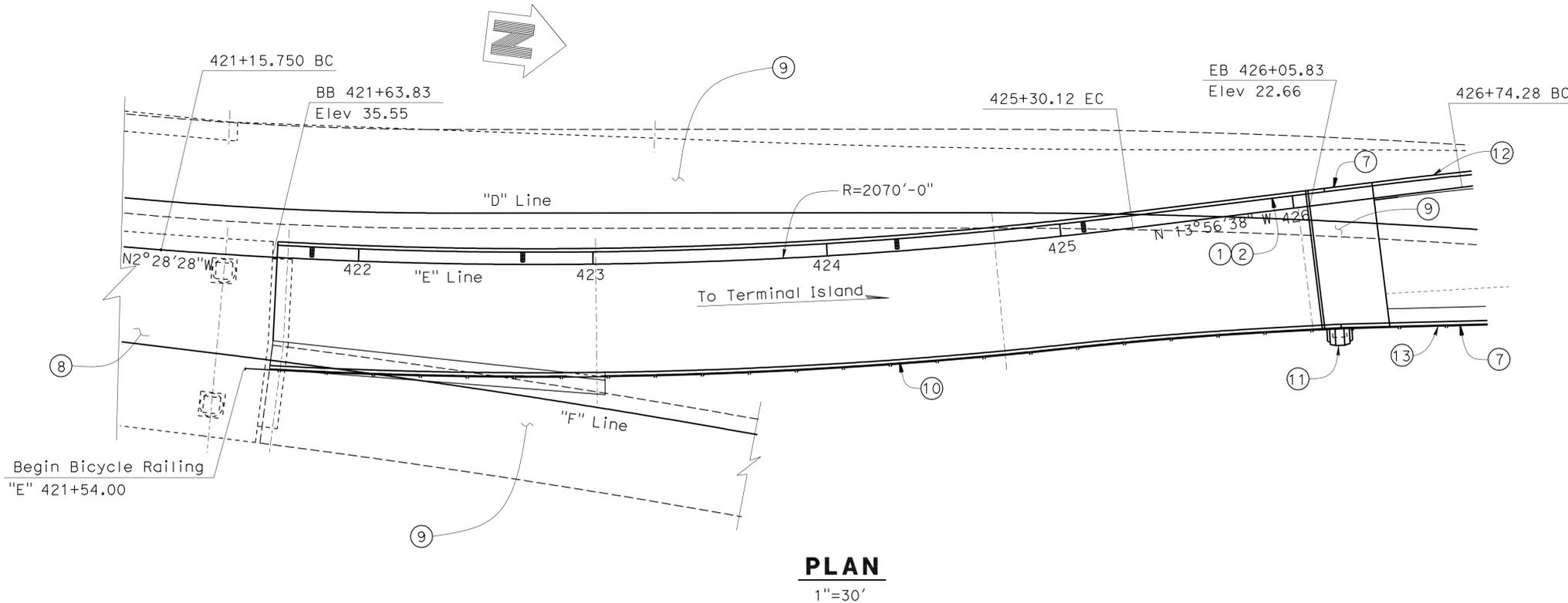
EC 425+30.00
Elev 25.70
-4.00%

600' VC R/C = -0.717% /Sta

PROFILE GRADE
No Scale



DEVELOPED ELEVATION
1"=30'



PLAN
1"=30'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	790	1003

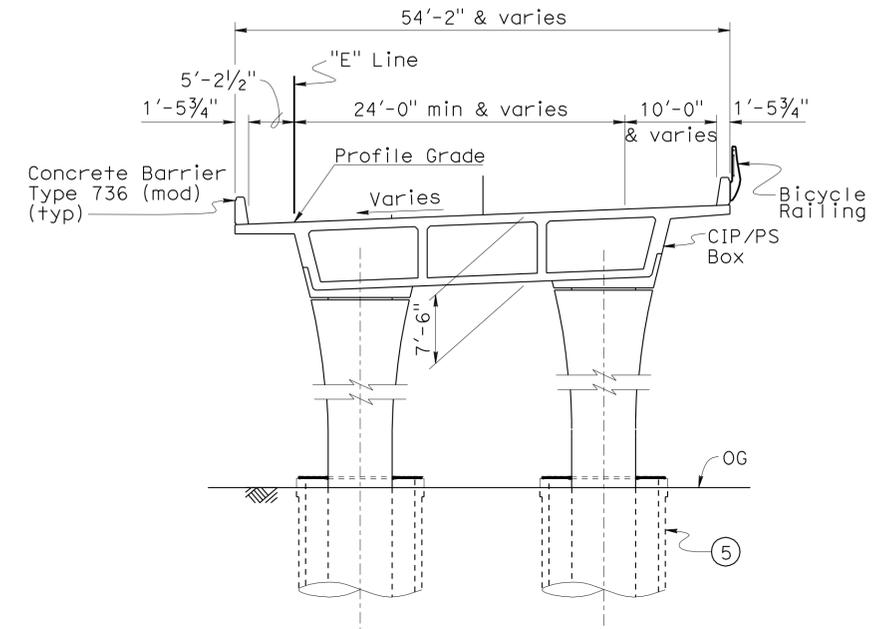
Poued Zayat
REGISTERED CIVIL ENGINEER DATE 05-24-10

10-11-10
PLANS APPROVAL DATE

FOUED ZAYATI
No. C57046
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

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3



TYPICAL SECTION
1"=10'

NOTES:

- ① Paint "SB SR103 Off-Ramp"
 - ② Paint "Bridge No. 53-3034K"
 - ③ Paint "Bent No. 26"
 - ④ Paint "Bent No. 25"
 - ⑤ Column Isolation/Permanent Casing
 - ⑥ Structure Approach Slab, Type N(30S)
 - ⑦ MSE Retaining Wall, see Wall Plans
 - ⑧ See "Schuyler Heim Bridge" Plans, Bridge # 53-3032
 - ⑨ SR 47 Expressway Structures (by others)
 - ⑩ See Girder Layout sheets for Edge of Deck Layout.
 - ⑪ Structure mounted sign pedestal
 - ⑫ E1 MSE Wall No. 53E0149, see wall plans.
 - ⑬ E2 MSE Wall No. 53E0150, see wall plans.
- Indicates Deck Drain

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

<i>Poued Zayat</i> DESIGN ENGINEER	DESIGN BY L. Bahia	CHECKED V. Ramakrishnan	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: 1.2*HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 53-3034K	NB SR-103 OFF-RAMP GENERAL PLAN
	DETAILS BY T. Nguyen	CHECKED F. Zayati	LAYOUT BY F. Zayati	CHECKED V. Ramakrishnan			POST MILE 0.01	
	QUANTITIES BY J. Lane	CHECKED V. Ramakrishnan	SPECIFICATIONS BY X	PLANS AND SPECS COMPARED X				

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

CU 07-271 EA 138201

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
06-30-10 07-04-10 07-14-10 01-06-11 3-28-09 05-17-10 5-28-10	1	47

FILE => 53-3034k-g-gp.add

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.07-24-06)

GENERAL NOTES

LOAD AND RESISTANCE FACTOR DESIGN

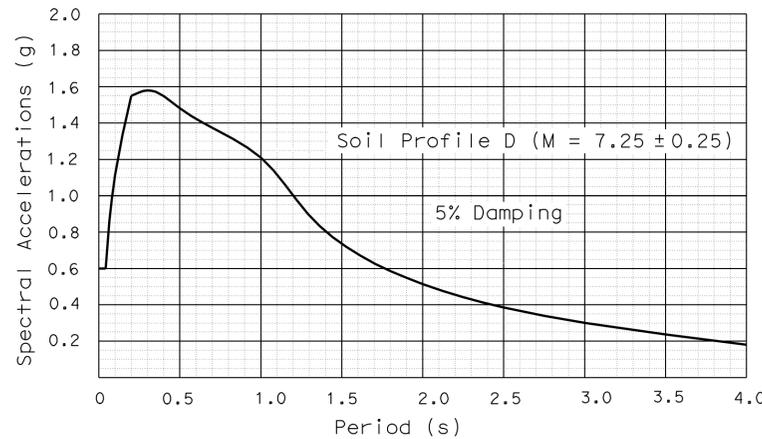
DESIGN: AASHTO LRFD Bridge Design Specifications, 3rd edition with the 2005, 2006 Interims and the California Amendments v3.06.01; except that earth retaining systems, bridge barrier and railing details taken from Standard Plans May 2006 and earlier versions, and Standard Bridge Details XS Sheets are designed using Bridge Design Specifications LFD Version April 2000 ('96 AASHTO w/Revisions by Caltrans)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.4 dated June 2006.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: 1.2*HL-93 and Low-Boy and Permit design loading.

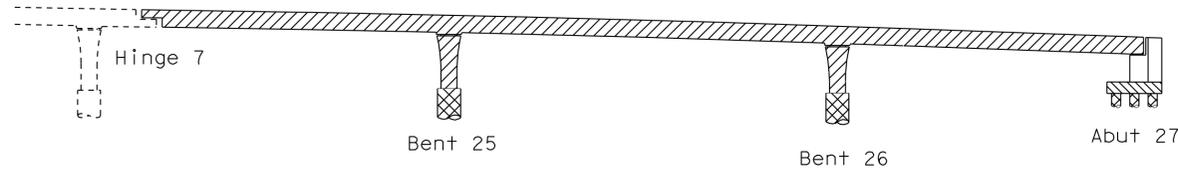
SEISMIC LOADING: Soil profile type D adjusted for near field effects
Magnitude 7.25 +/- 0.25
Peak Rock Acceleration 0.6g



CONCRETE:
fy = 60 ksi
f'c = 3.6 ksi
n = 8

PRESTRESSED CONCRETE:
See prestressing notes.

STRUCTURAL STEEL:
fy = ASTM A709 Grade 50



- Structural Concrete, Bridge (f'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge Footing (f'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge (f'c = 4.0 ksi @ 28 days)
- Cast-In-Drilled Hole Piling (f'c = 3.6 ksi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

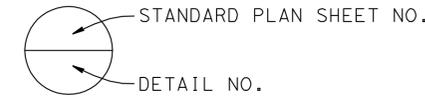
No Scale

QUANTITIES

STRUCTURE EXCAVATION (TYPE A)	250	CY
STRUCTURE EXCAVATION (TYPE DC)	278	CY
STRUCTURE EXCAVATION (TYPE GC)	402,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	99	CY
STRUCTURE BACKFILL (BRIDGE)	730	CY
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,599	LF
156" CAST-IN-DRILLED-HOLE CONCRETE PILING	100	LF
144" CAST-IN-DRILLED-HOLE CONCRETE PILING	396	LF
156" PERMANENT STEEL CASING	100	LF
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
SEAL COURSE CONCRETE	452	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	224	CY
STRUCTURAL CONCRETE, BRIDGE	2,675	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	63	CY
PRECAST CONCRETE ISOLATION CASING	98	CY
PTFE SPHERICAL BEARING	2	EA
JOINT SEAL ASSEMBLY (MR = 33")	59	LF
BAR REINFORCING STEEL (BRIDGE)	857,000	LB
HEADED BAR REINFORCEMENT	130	EA
MISCELLANEOUS METAL (BRIDGE)	14,900	LB
BRIDGE DECK DRAINAGE SYSTEM	11,000	LB
BICYCLE RAILING	472	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	946	LF

STANDARD PLANS DATED MAY 2006

- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B7-1 BOX GIRDER DETAILS
- B7-8 DECK DRAINAGE DETAILS
- B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS



PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE (KIP)		CASING TIP ELEVATION (ft)	DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)	PILE CUTOFF ELEVATIONS (ft)	DEPTH OF SEAL COURSE (ft)	DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
			COMPRESSION	TENSION								
BENT 25	13 FT CIDH 12 FT CIDH	3440	6490	0	-25	-133 (a)	-133	0.0	4.0	0' to 1'	Lead	TYPE Z-2
										1' to 2'	DRO & ORO	TYPE DC
										2'+	Non-Haz	TYPE A
BENT 26	13 FT CIDH 12 FT CIDH	3480	5090	0	-28	-118 (a)	-118	-3.0	7.0	0' to 1'	Lead	TYPE Z-2
										1' to 7'	Non-Haz	TYPE A
										7' to 9'	SVOCs	TYPE SC
ABUT 27	2.5 FT CIDH	230	460	0	NA	-74 (a)	-74	-4.75	4.0	0' to 1'	Lead	TYPE Z-2
										1' to 4'	Non-Haz	TYPE A
										4' to 6'	Lead & VOCs	TYPE Z-2
										6'+	Non-Haz	TYPE A

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

NOTES:

- Design Tip Elevations are controlled by the following demands:
(a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Load.
- 0' is equivalent to existing ground surface.
- 2'+ is soil more than 2' below Existion Ground Surface.

LEGEND:

DRO = Diesel Range Organics
ORO = Oil Range Organics
SVOCs = Semi-Volatile Organic Compounds
Non-Haz = Non-Hazardous material

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	FOUNDATION PLAN NO. 1
5	FOUNDATION PLAN NO. 2
6	ABUTMENT 27 LAYOUT
7	ABUTMENT 27 DETAILS NO. 1
8	ABUTMENT 27 DETAILS NO. 2
9	ABUTMENT 27 DETAILS NO. 3
10	ABUTMENT 27 DETAILS NO. 4
11	ABUTMENT 27 DETAILS NO. 5
12	BENT 25 LAYOUT
13	BENT 26 LAYOUT
14	TYPICAL BENT DETAILS
15	TYPICAL SECTION NO. 1
16	TYPICAL SECTION NO. 2
17	GIRDER LAYOUT NO. 1
18	GIRDER LAYOUT NO. 2
19	GIRDER REINFORCEMENT NO. 1
20	GIRDER REINFORCEMENT NO. 2
21	HINGE 7 DIAPHRAGM DETAILS NO. 1
22	HINGE 7 DIAPHRAGM DETAILS NO. 2
23	MISCELLANEOUS DETAILS
24	2.5 FT CIDH PILE DETAILS
25	12 FT CIDH PILE DETAILS
26	PRECAST ISOLATION CASING DETAILS
27	ISOLATION CASING COVER DETAILS
28	PTFE BEARING DETAILS NO. 1
29	PTFE BEARING DETAILS NO. 2
30	JOINT SEAL ASSEMBLY LAYOUT
31	JOINT SEAL ASSEMBLY DETAILS NO. 1
32	JOINT SEAL ASSEMBLY DETAILS NO. 2
33	JOINT SEAL ASSEMBLY DETAILS NO. 3
34	JOINT SEAL ASSEMBLY DETAILS NO. 4
35	JOINT SEAL ASSEMBLY DETAILS NO. 5
36	DECK DRAIN DETAILS
37	STRUCTURE APPROACH TYPE N(30S)
38	STRUCTURE APPROACH DRAINAGE DETAILS
39	CONCRETE BARRIER DETAILS NO.1
40	CONCRETE BARRIER DETAILS NO.2
41	CONCRETE BARRIER DETAILS NO.3
42	RAILING DETAILS NO. 1
43	RAILING DETAILS NO. 2
44	LOG OF TEST BORINGS NO. 1 OF 4
45	LOG OF TEST BORINGS NO. 2 OF 4
46	LOG OF TEST BORINGS NO. 3 OF 4
47	LOG OF TEST BORINGS NO. 4 OF 4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	791	1003

Foued Zayat
REGISTERED CIVIL ENGINEER DATE 05-24-10

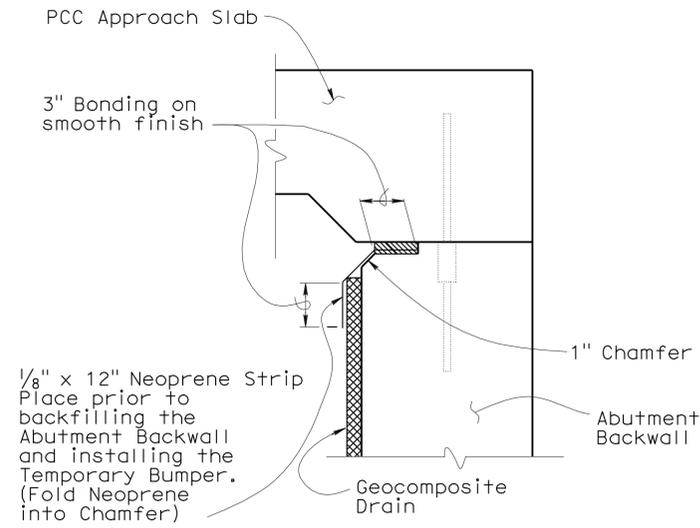
10-11-10
PLANS APPROVAL DATE

FOUED ZAYATI
No. C57046
Exp. 06-30-11
CIVIL
STATE OF CALIFORNIA

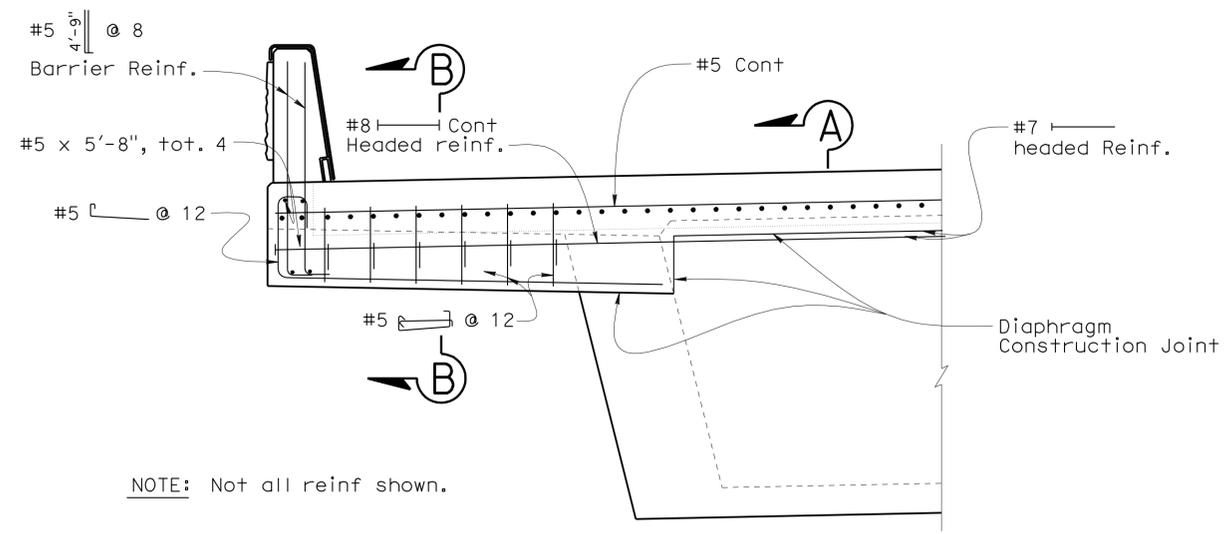
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	798	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



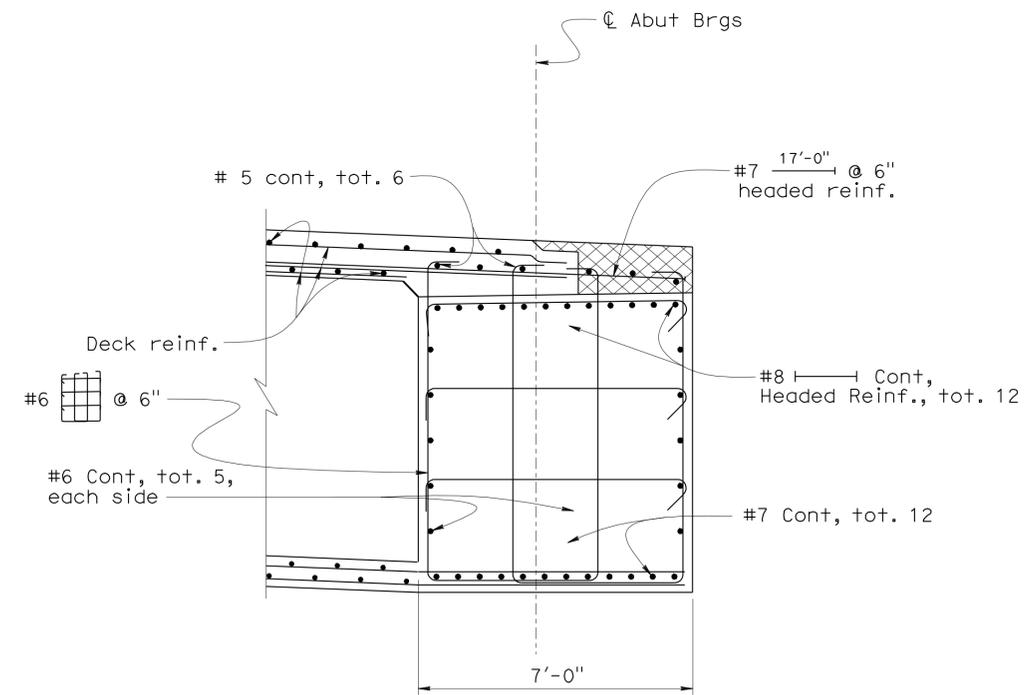
JOINT PROTECTION DETAIL
No Scale



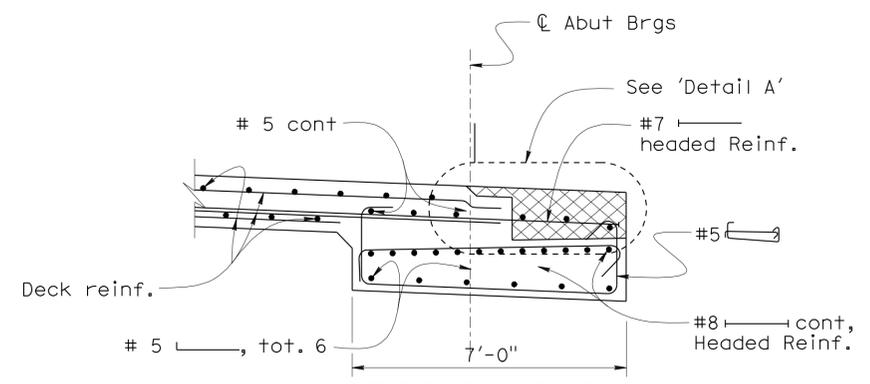
NOTE: Not all reinf shown.

ABUTMENT DIAPHRAGM - PART ELEVATION

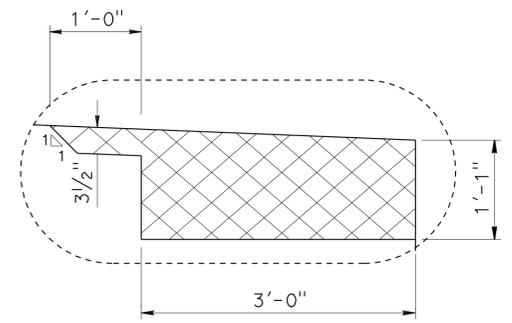
1/2" = 1'-0"



SECTION A-A
1/2" = 1'-0"
B8-5 B7-8



SECTION B-B
1/2" = 1'-0"



JOINT SEAL BLOCKOUT DETAIL

1" = 1'-0"

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY F. Zayati	CHECKED S. Galgiani
DETAILS	BY K. Kubo	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
 DESIGN BRANCH **14**

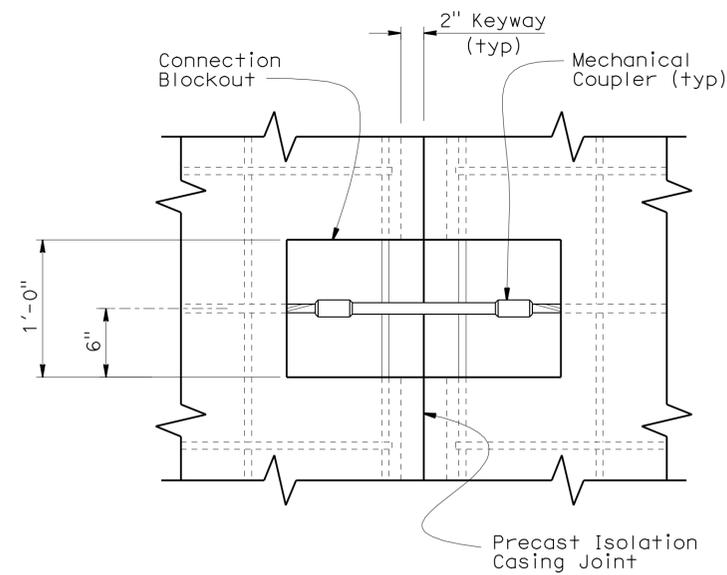
BRIDGE NO.	53-3034K
POST MILE	0.01

NB SR-103 OFF-RAMP
ABUTMENT 27 DETAILS NO. 3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574.6, 0.0/1.1	815	1003

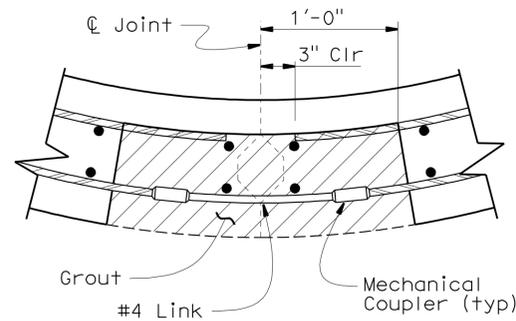
Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 PLANS APPROVAL DATE 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



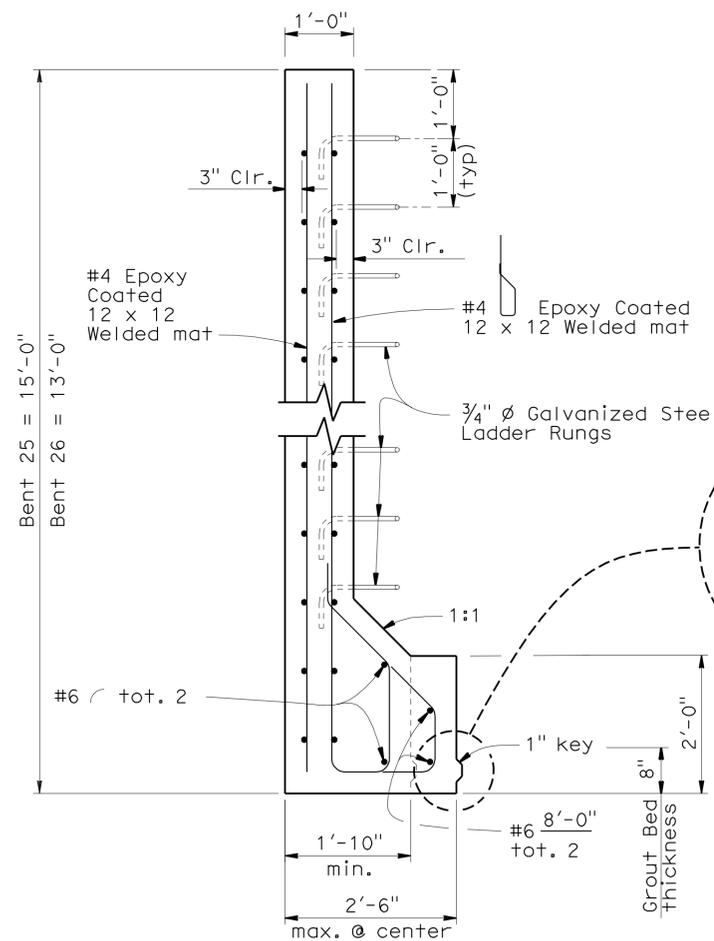
VIEW B-B

1/2"=1'-0"



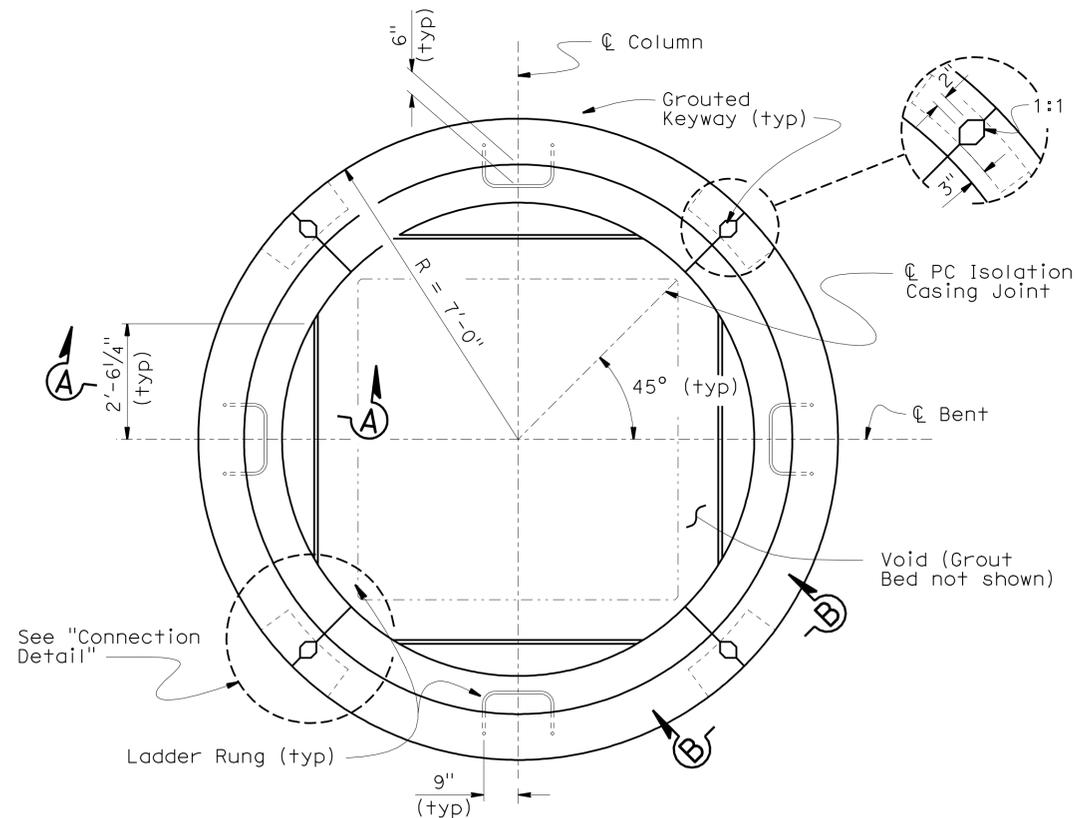
CONNECTION DETAIL

1/2"=1'-0"



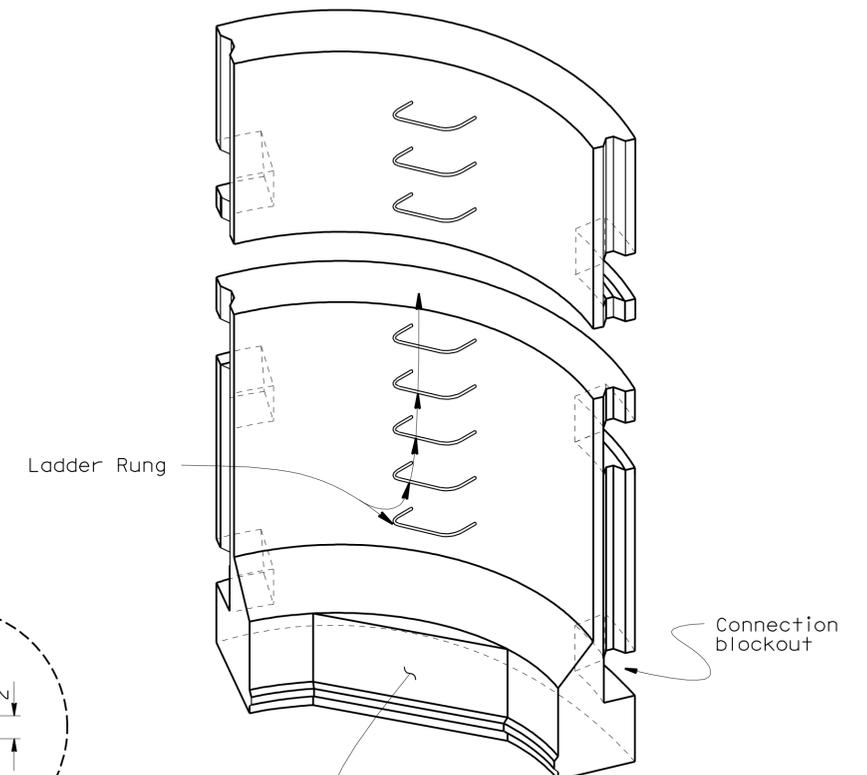
SECTION A-A

3/4"=1'-0"



PLAN

1/2"=1'-0"



ISOMETRIC VIEW PRECAST ISOLATION CASING

No Scale

NOTES:

1. All hardware to be galvanized before casting.
2. Place connections 3 feet from top, 2 feet from bottom and at mid-height of casing.
3. Align shells prior to grouting Keyway and Connection Blockouts.
4. Casing to be set on grout pad to level.
5. Minimum concrete strength shall be 5000 psi
6. Casing to be plumb and centered about column.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY Jeff Thorne	CHECKED F. Zayati
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 14

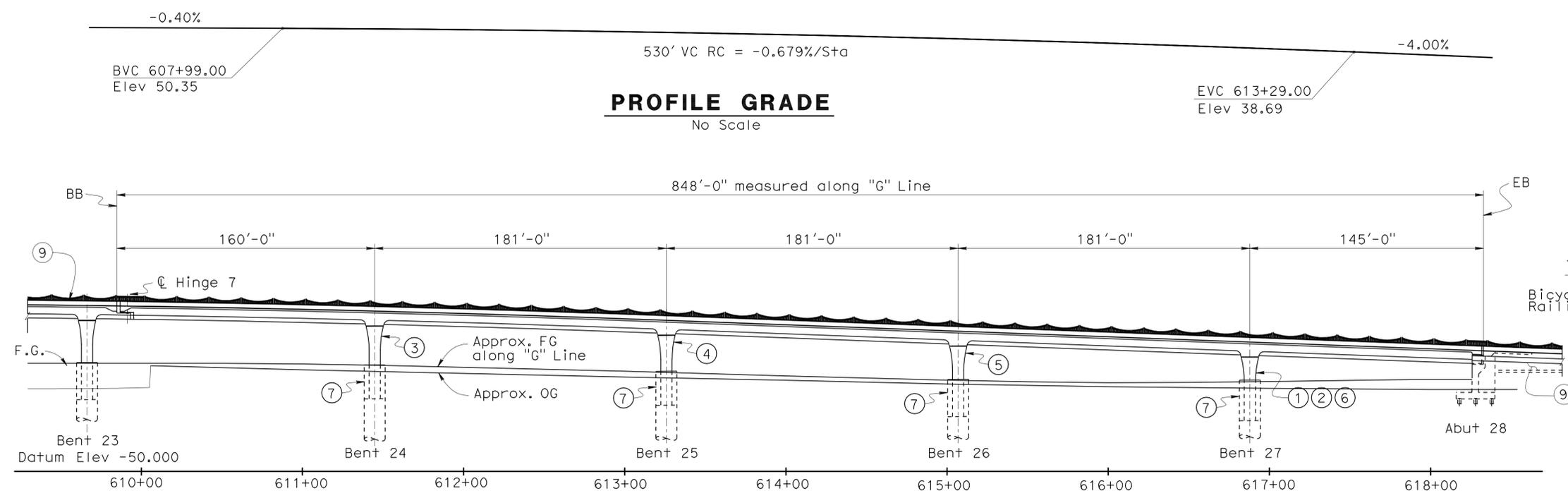
BRIDGE NO.	53-3034K
POST MILE	0.01

NB SR-103 OFF-RAMP
PRECAST ISOLATION CASING DETAILS

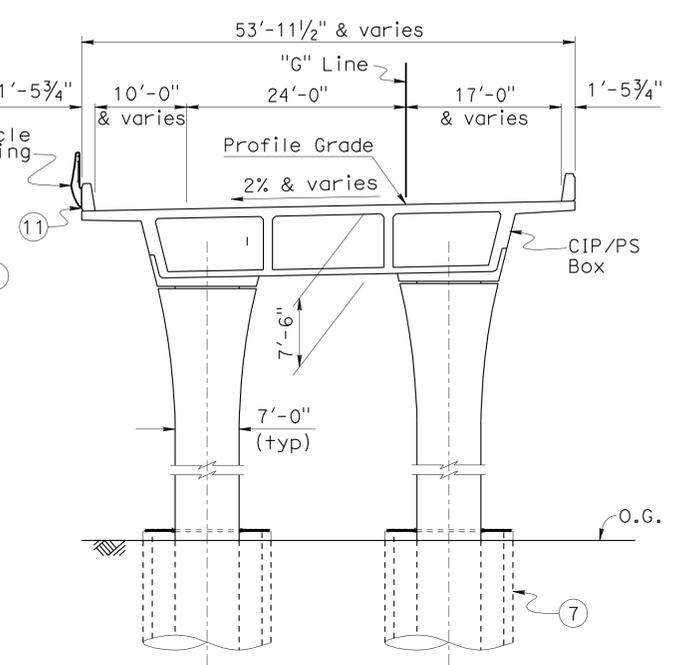
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574/0.011	837	1003

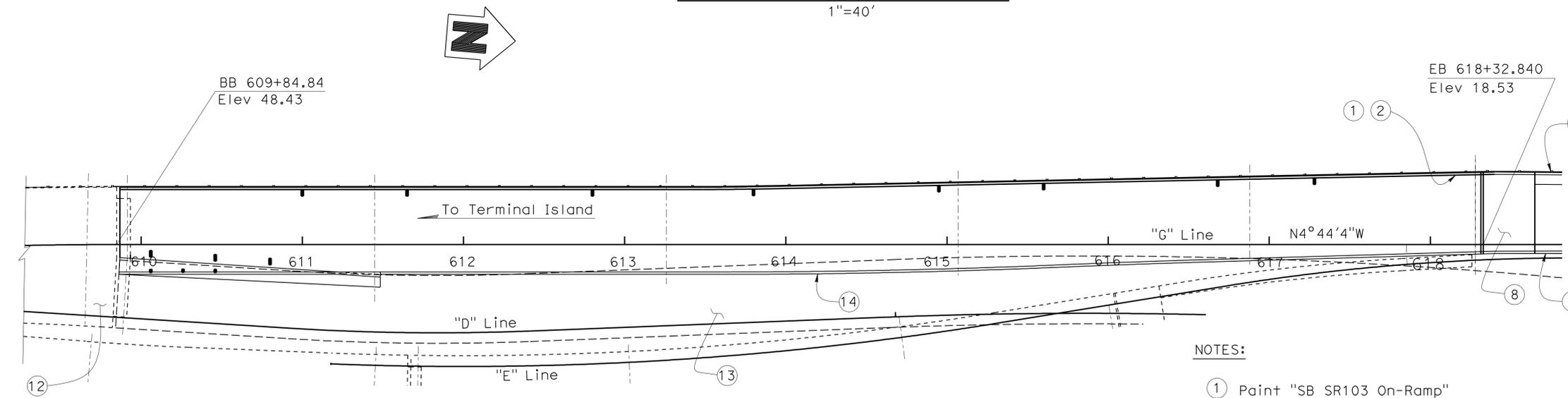
Poued Zayat
 REGISTERED CIVIL ENGINEER
 DATE 05-24-10
 PLANS APPROVAL DATE 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



DEVELOPED ELEVATION
1"=40'



TYPICAL SECTION
1"=10'



PLAN
1"=40'

NOTES:

- ① Paint "SB SR103 On-Ramp"
 - ② Paint "Bridge No. 53-3035S"
 - ③ Paint Bent No. 24
 - ④ Paint Bent No. 25
 - ⑤ Paint Bent No. 26
 - ⑥ Paint Bent No. 27
 - ⑦ Column Isolation Casing
 - ⑧ Structure Approach Slab, Type N(30S)
 - ⑨ G2 Retaining Wall, See wall plans.
 - ⑩ G1 MSE Wall No. 53E0151, see wall plans.
 - ⑪ Concrete Barrier, Type 736 (mod)
 - ⑫ See "Schuyler Heim Bridge" Plans, Bridge # 53-3032
 - ⑬ SR47 Expressway Structure (by others)
 - ⑭ see girder layout sheets for edge of deck layout
- Indicates Deck Drain Type A
 - Indicates Deck Drain Type B

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

 DESIGN ENGINEER	DESIGN	BY V. Ramkrishnan	CHECKED L. Bahia	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	53-3035S	SB SR103 ON-RAMP GENERAL PLAN
	DETAILS	BY T. Nguyen/K. Kubo	CHECKED V. Ramkrishnan	LAYOUT	BY F. Zayati			POST MILE	0.01	
	QUANTITIES	BY V. Ramkrishnan	CHECKED J. Lane	SPECIFICATIONS	BY X					

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 CU 07-271 EA 138201 DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 04-28-10, 05-04-10, 5-21-10, 07-15-10, 01-07-11, 07-31-08, 10-22-08, 11-04-09, 03-28-10

SHEET 1 OF 50
 FILE => 53-3035s-o-gp.add
 STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.07-24-06)

GENERAL NOTES

LOAD AND RESISTANCE FACTOR DESIGN

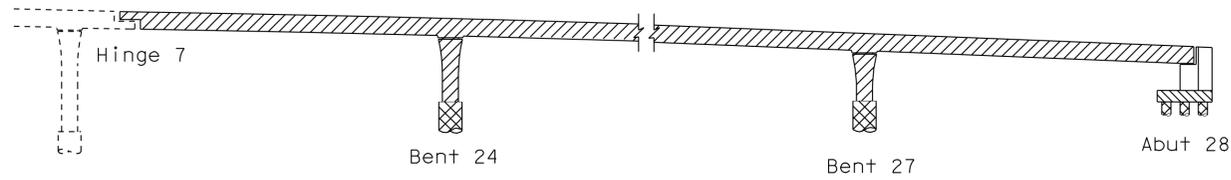
DESIGN: AASHTO LRFD Bridge Design Specifications, 3rd edition with the 2005, 2006 Interims and the California Amendments v3.06.01; except that earth retaining systems, bridge barrier and railing details taken from Standard Plans May 2006 and earlier versions, and Standard Bridge Details XS Sheets are designed using Bridge Design Specifications LFD Version April 2000 ('96 AASHTO w/Revisions by Caltrans)

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.4 dated June 2006.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: 1.2*HL-93 and Low-Boy and Permit design loading.

SEISMIC LOADING: Soil profile type D adjusted for near field effects
Magnitude 7.25 +/- 0.25
Peak Rock Acceleration 0.6g



- Structural Concrete, Bridge (f'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge Footing (F'c = 3.6 ksi @ 28days)
- Structural Concrete, Bridge (f'c = 4.0 ksi @ 28 days)
- Cast-in-place drilled hole Piling (f'c = 3.6 ksi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

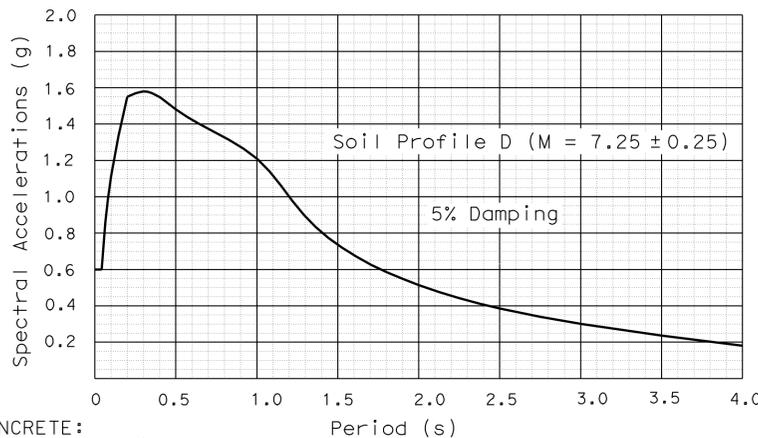
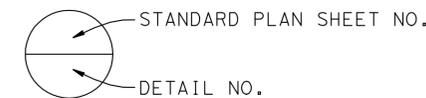
No Scale

QUANTITIES

STRUCTURE EXCAVATION (TYPE A)	1,930	CY
STRUCTURE EXCAVATION (TYPE DC)	15	CY
STRUCTURE EXCAVATION (TYPE SC)	30	CY
STRUCTURE EXCAVATION (TYPE GC)	452,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2)	113	CY
(AERIALY DEPOSITED LEAD)		
STRUCTURE BACKFILL (BRIDGE)	700	CY
30" CAST-IN-DRILLED-HOLE CONCRETE PILING	1312	LF
156" CAST-IN-DRILLED-HOLE CONCRETE PILING	200	LF
144" CAST-IN-DRILLED-HOLE CONCRETE PILING	774	LF
156" PERMANENT STEEL CASING	200	LF
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
PRESTRESSING CAST-IN-PLACE CONCRETE (TRANSVERSE)	LUMP	SUM
SEAL COURSE CONCRETE	731	CY
STRUCTURAL CONCRETE, BRIDGE FOOTING	192	CY
STRUCTURAL CONCRETE, BRIDGE	4,370	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	56	CY
PRECAST CONCRETE ISOLATION CASING	298	CY
PTFE SPHERICAL BEARING	2	EA
JOINT SEAL ASSEMBLY (MR = 33")	51	LF
BAR REINFORCING STEEL (BRIDGE)	1,677,000	LB
HEADED BAR REINFORCEMENT	276	EA
MISCELLANEOUS METAL (BRIDGE)	30,000	LB
BRIDGE DECK DRAINAGE SYSTEM	24,000	LB
BICYCLE RAILING	853	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	1,754	LF

STANDARD PLANS DATED MAY 2006

- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B7-1 BOX GIRDER DETAILS
- B7-8 DECK DRAINAGE DETAILS
- B8-5 CAST-IN-PLACE PRESTRESSED GIRDER DETAILS



CONCRETE:
fy = 60 ksi
f'c = 3.6 ksi
n = 8

PRESTRESSED CONCRETE:
See prestressing notes on "GIRDER LAYOUT NO. 2" sheet.

STRUCTURAL STEEL:
fy = ASTM A709 Grade 50

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE (KIP)		CASING TIP ELEVATION (ft)	DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)	PILE CUTOFF ELEVATIONS (ft)	DEPTH OF SEAL COURSE (ft)	DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
			COMPRESSION	TENSION								
BENT 24	13 FT CIDH 12 FT CIDH	3710	8070	0	-30.5	-151 (a)	-151	-5.5	5.0	0' to 1'	Lead	TYPE Z-2
										1'+	Non-Haz	TYPE A
BENT 25	13 FT CIDH 12 FT CIDH	3860	5780	0	-34.5	-130 (a)	-130	-9.5	7.0	0' to 1'	Lead	TYPE Z-2
										1' to 2'	DRO & ORO	TYPE DC
BENT 26	13 FT CIDH 12 FT CIDH	4420	5700	0	-40.5	-128 (a)	-128	-15.5	9.0	2'+	Non-Haz	TYPE A
										0' to 1'	Lead	TYPE Z-2
BENT 27	13 FT CIDH 12 FT CIDH	4060	5660	0	-43.3	-127 (a)	-127	-18.3	10.0	1' to 7'	Non-Haz	TYPE A
										7' to 9'	SVOCs	TYPE SC
ABUT 28	2.5 FT CIDH	220	440	0	NA	-67 (a)	-67	-4.75	5.0	9'+	Non-Haz	TYPE A
										0' to 1'	Lead	TYPE Z-2
										1'+	Non-Haz	TYPE A
										0' to 1'	Lead	TYPE Z-2
										1'+	Non-Haz	TYPE A

NOTES:

- Design Tip Elevations are controlled by the following demands:
(a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Load.
- 0' is equivalent to existing ground surface.
- 1'+ is soil more than 2' below Existion Ground Surface.

LEGEND:

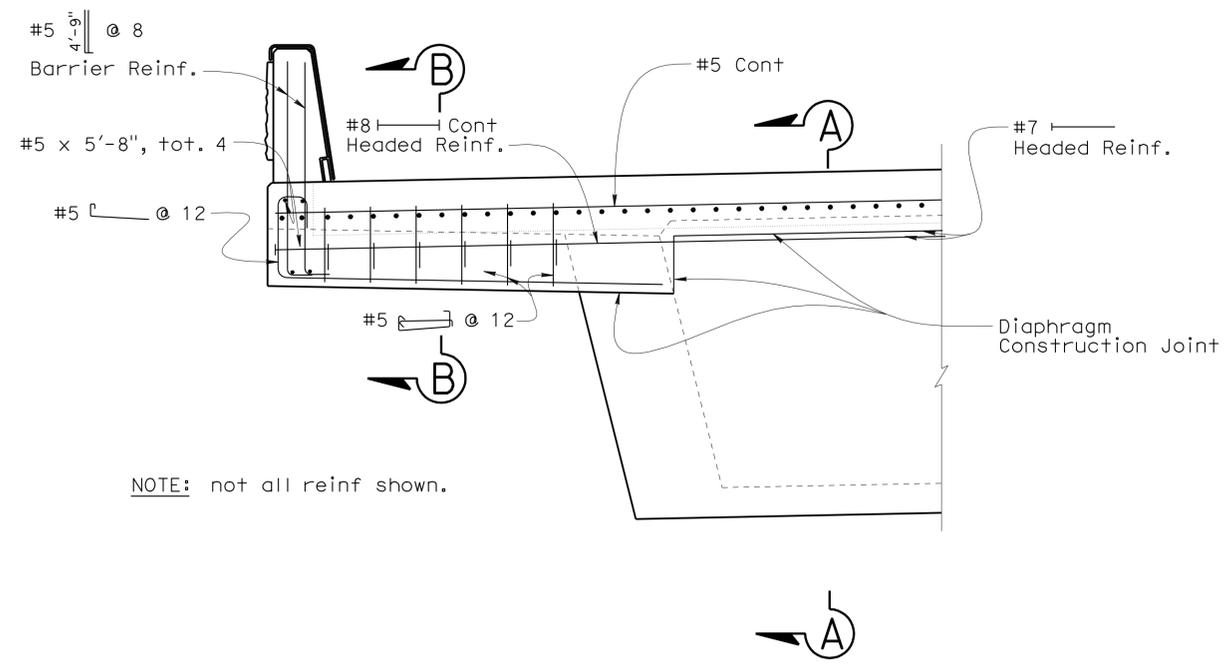
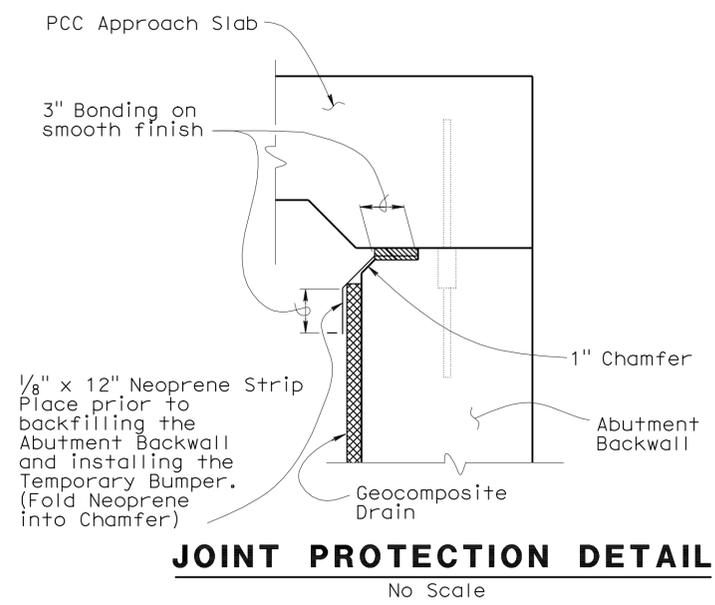
DRO = Diesel Range Organics
ORO = Oil Range Organics
SVOCs = Semi-Volatile Organic Compounds
Non-Haz = Non-Hazardous material

INDEX TO PLANS

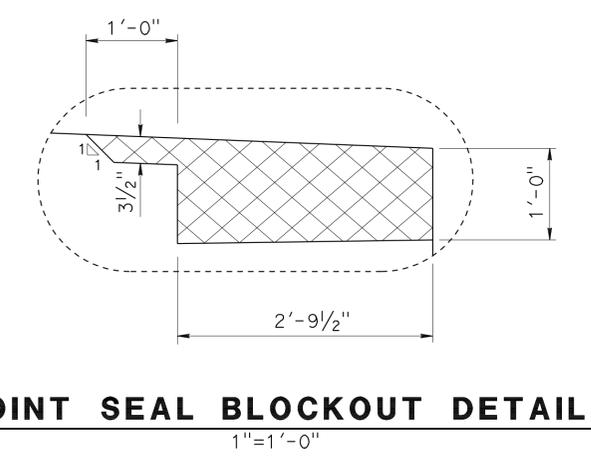
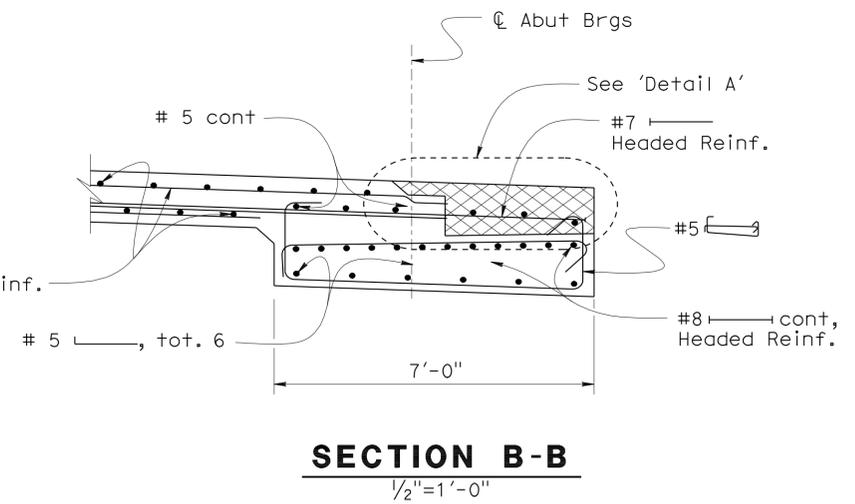
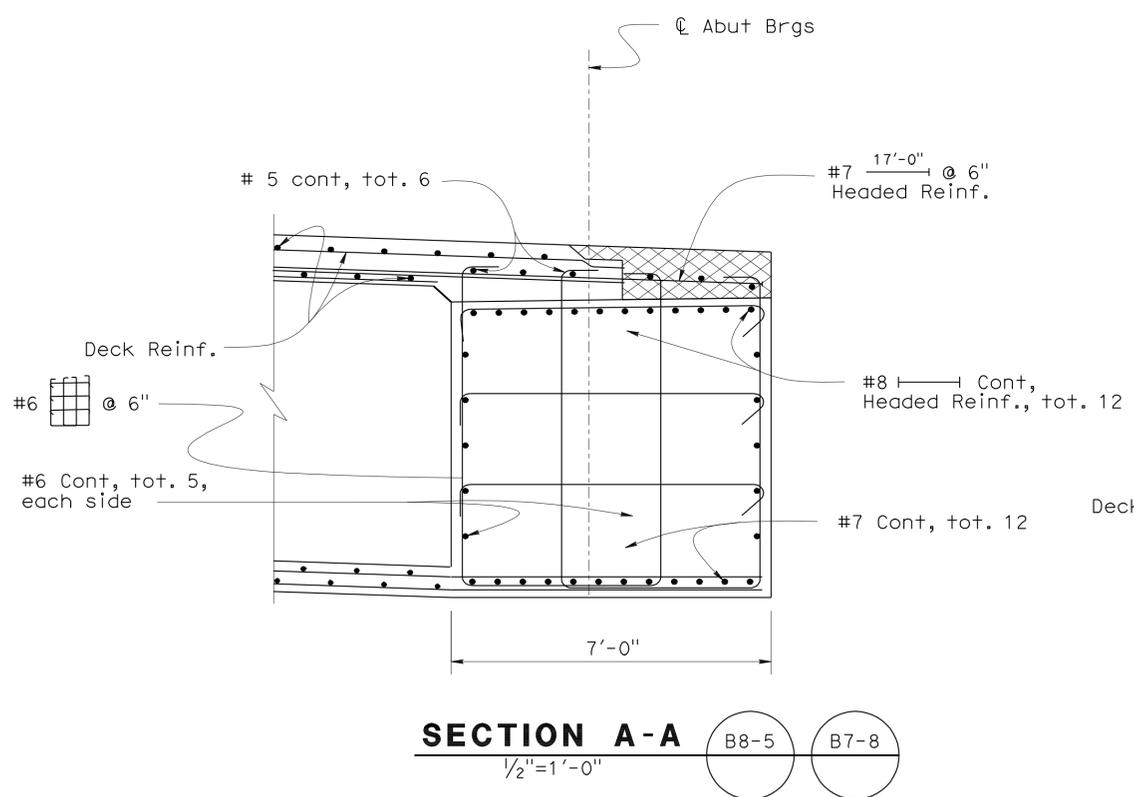
SHEET NO.	TITLE
1	GENERAL PLAN
2	INDEX TO PLANS
3	DECK CONTOURS
4	FOUNDATION PLAN NO. 1
5	FOUNDATION PLAN NO. 2
6	ABUTMENT 28 LAYOUT
7	ABUTMENT 28 DETAILS NO. 1
8	ABUTMENT 28 DETAILS NO. 2
9	ABUTMENT 28 DETAILS NO. 3
10	ABUTMENT 28 DETAILS NO. 4
11	BENT 24 LAYOUT
12	BENT 25 THRU 27 LAYOUT
13	TYPICAL BENT DETAILS
14	TYPICAL SECTION NO. 1
15	TYPICAL SECTION NO. 2
16	GIRDER LAYOUT NO.1
17	GIRDER LAYOUT NO.2
18	GIRDER LAYOUT NO.3
19	GIRDER REINFORCEMENT NO. 1
20	GIRDER REINFORCEMENT NO. 2
21	HINGE 7 DIAPHRAGM DETAILS NO. 1
22	HINGE 7 DIAPHRAGM DETAILS NO. 2
23	MISCELLANEOUS DETAILS
24	2.5 FT CIDH PILE DETAILS
25	12 FT CIDH PILE DETAILS
26	PRECAST ISOLATION CASING DETAILS
27	ISOLATION CASING COVER DETAILS
28	PTFE BEARING DETAILS NO. 1
29	PTFE BEARING DETAILS NO. 2
30	JOINT SEAL ASSEMBLY LAYOUT
31	JOINT SEAL ASSEMBLY DETAILS NO. 1
32	JOINT SEAL ASSEMBLY DETAILS NO. 2
33	JOINT SEAL ASSEMBLY DETAILS NO. 3
34	JOINT SEAL ASSEMBLY DETAILS NO. 4
35	JOINT SEAL ASSEMBLY DETAILS NO. 5
36	DECK DRAIN DETAILS NO. 1
37	DECK DRAIN DETAILS NO. 2
38	STRUCTURE APPROACH TYPE N(30S)
39	STRUCTURE APPROACH DRAINAGE DETAILS
40	CONCRETE BARRIER DETAILS NO.1
41	CONCRETE BARRIER DETAILS NO.2
42	CONCRETE BARRIER DETAILS NO.3
43	RAILING DETAILS NO. 1
44	RAILING DETAILS NO. 2
45	LOG OF TEST BORINGS NO. 1 OF 6
46	LOG OF TEST BORINGS NO. 2 OF 6
47	LOG OF TEST BORINGS NO. 3 OF 6
48	LOG OF TEST BORINGS NO. 4 OF 6
49	LOG OF TEST BORINGS NO. 5 OF 6
50	LOG OF TEST BORINGS NO. 6 OF 6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	845	1003

3
 Foued Zayati
 REGISTERED CIVIL ENGINEER DATE 05-24-10
 10-11-10
 PLANS APPROVAL DATE
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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NOTE: not all reinf shown.

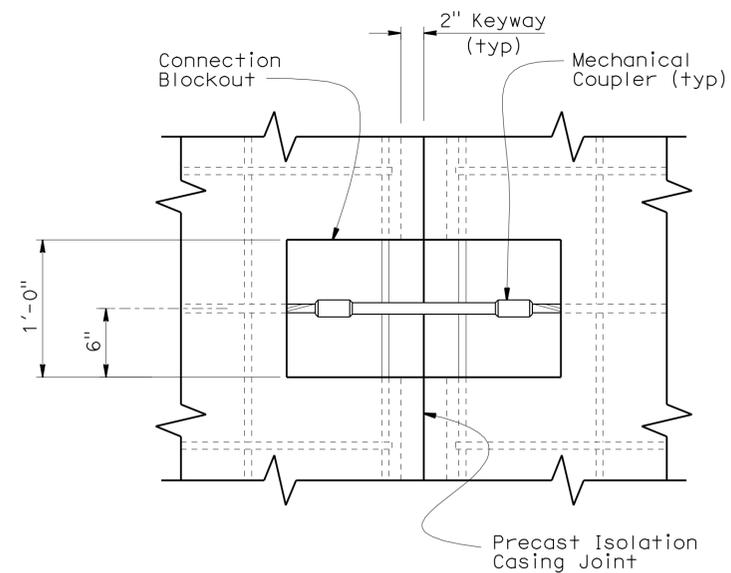


3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

DESIGN BY F. Zayati CHECKED S. Galgiani DETAILS BY K. Kubo CHECKED F. Zayati QUANTITIES BY V. Ramakrishnan CHECKED J. Lane	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO. 53-3035S POST MILE 0.01	SB SR-103 ON-RAMP ABUTMENT 28 DETAILS NO. 3	
	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 05-28-08 01-09-10 05-18-10 01-05-11	SHEET 9 OF 50
	STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)				USERNAME => HRT1GHT DATE PLOTTED => 24-MAR-2011 TIME PLOTTED => 11:02

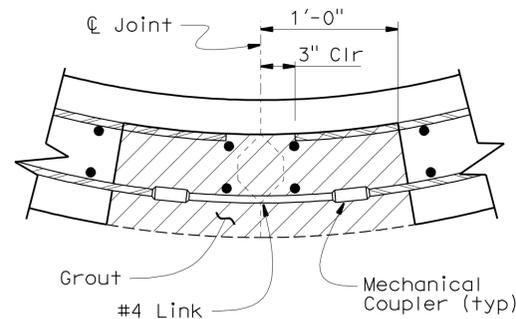
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.574/6, 0.0/1.1	862	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
 DATE 05-24-10
 PLANS APPROVAL DATE 10-11-10
 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA



VIEW B-B

1/2"=1'-0"

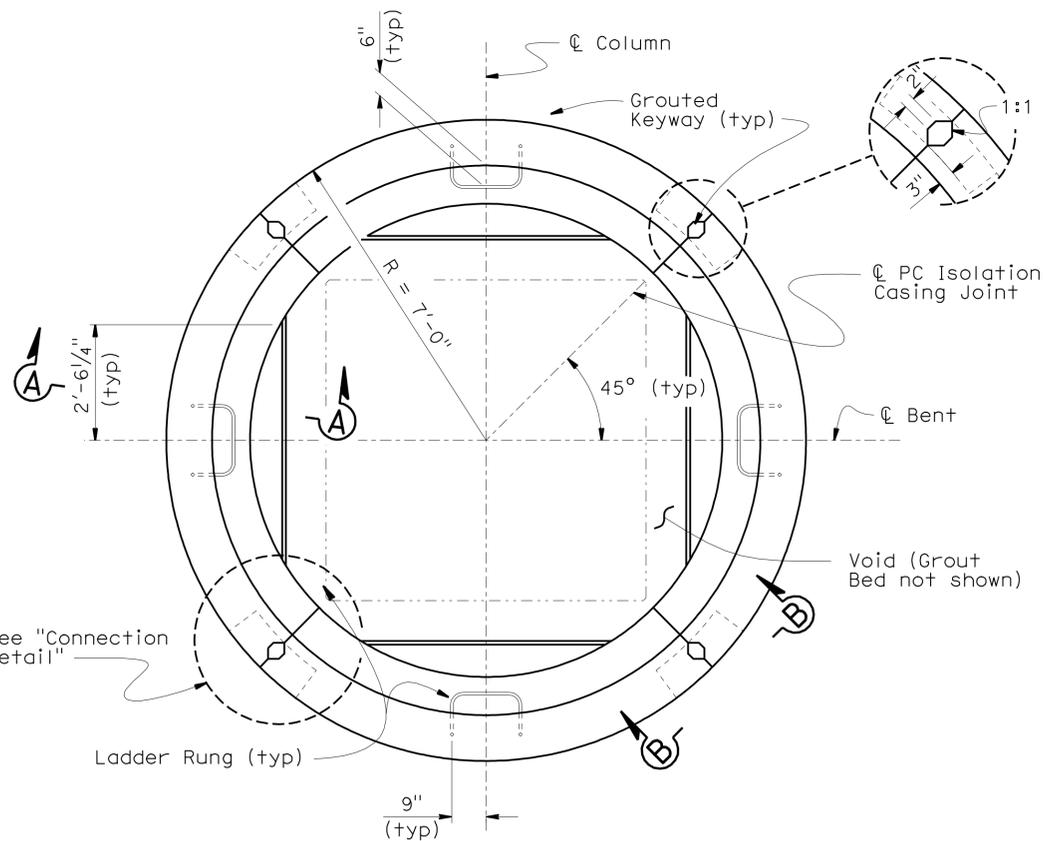


CONNECTION DETAIL

1/2"=1'-0"

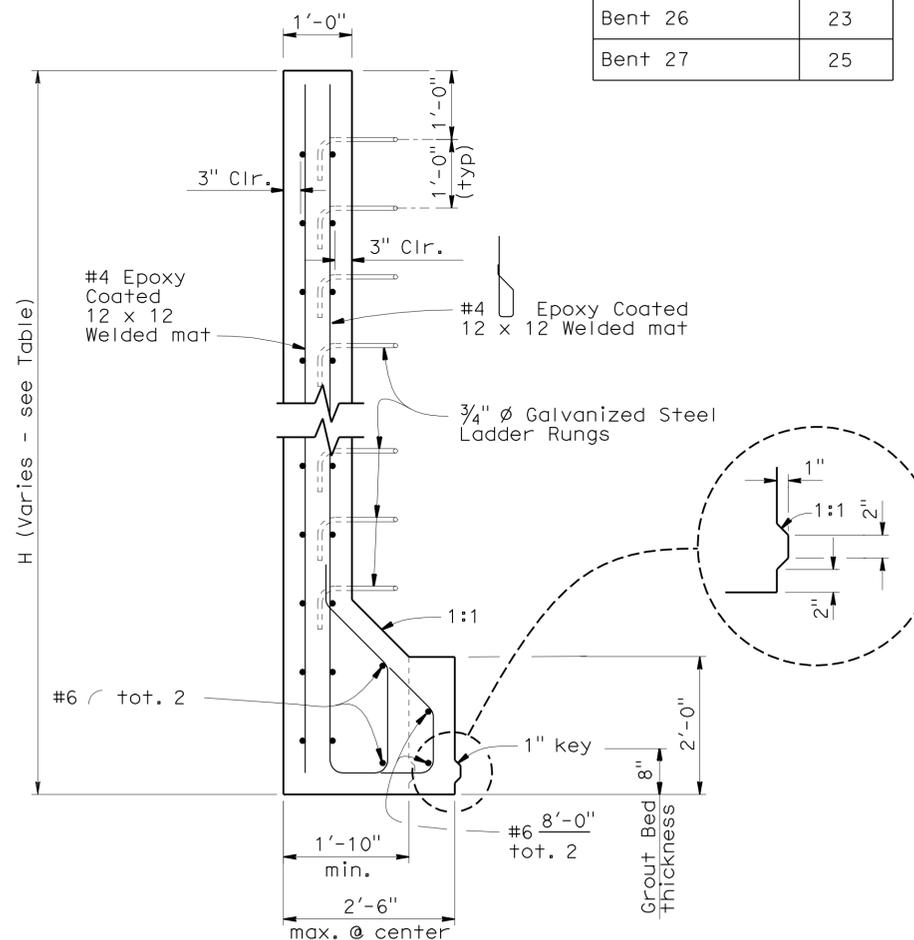
3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

Location	H (ft)
Bents 24 & 25	21
Bent 26	23
Bent 27	25



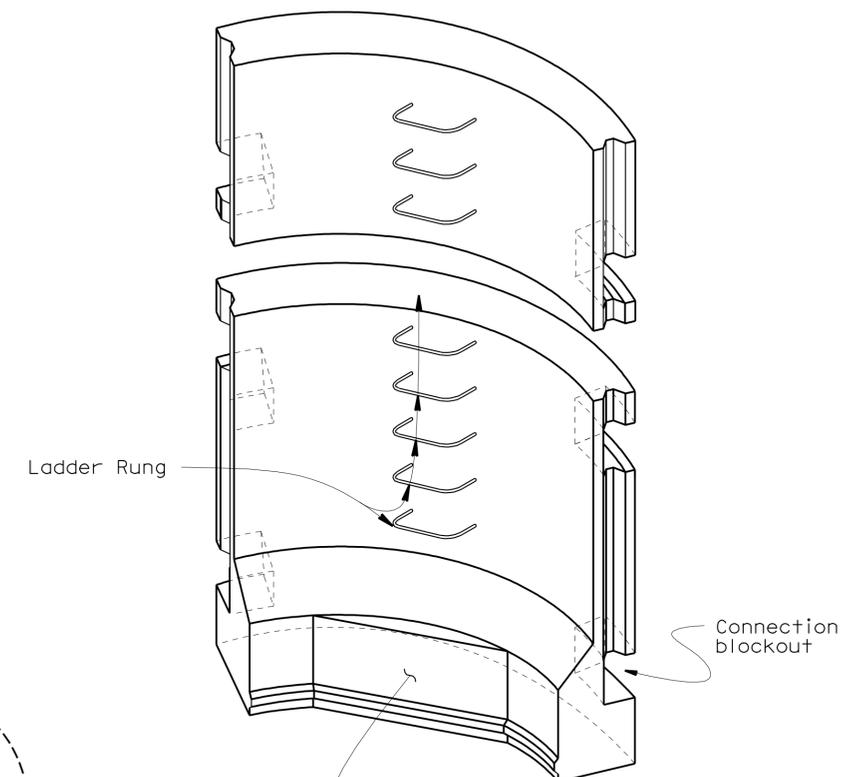
PLAN

1/2"=1'-0"



SECTION A-A

3/4"=1'-0"



ISOMETRIC VIEW PRECAST ISOLATION CASING

No Scale

NOTES:

1. All hardware to be galvanized before casting.
2. Place connections 3 feet from top, 2 feet from bottom and at mid-height of casing.
3. Align shells prior to grouting Keyway and Connection Blockouts.
4. Casing to be set on grout pad to level.
5. Minimum concrete strength shall be 5000 psi
6. Casing to be plumb and centered about column.

DESIGN	BY R. Bromenschenkel	CHECKED F. Zayati
DETAILS	BY Jeff Thorne	CHECKED F. Zayati
QUANTITIES	BY V. Ramakrishnan	CHECKED J. Lane

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

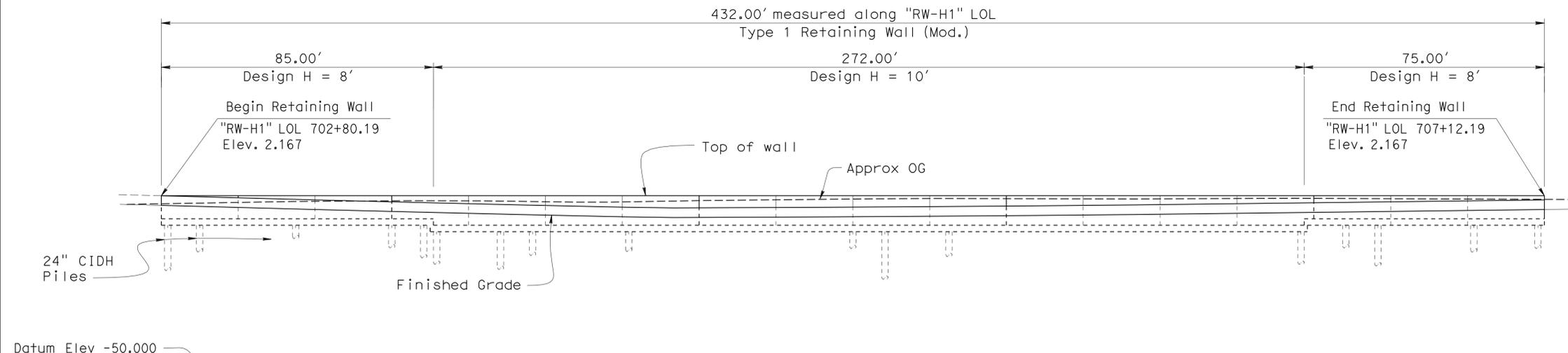
DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH **14**

BRIDGE NO.
53-3035S
POST MILE
0.01

SB SR-103 ON-RAMP
PRECAST ISOLATION CASING DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.5/4.6, 0.0/1.1	994	1003

FOUED ZAYATI
 REGISTERED CIVIL ENGINEER
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 No. C57046
 Exp. 06-30-11
 CIVIL
 STATE OF CALIFORNIA
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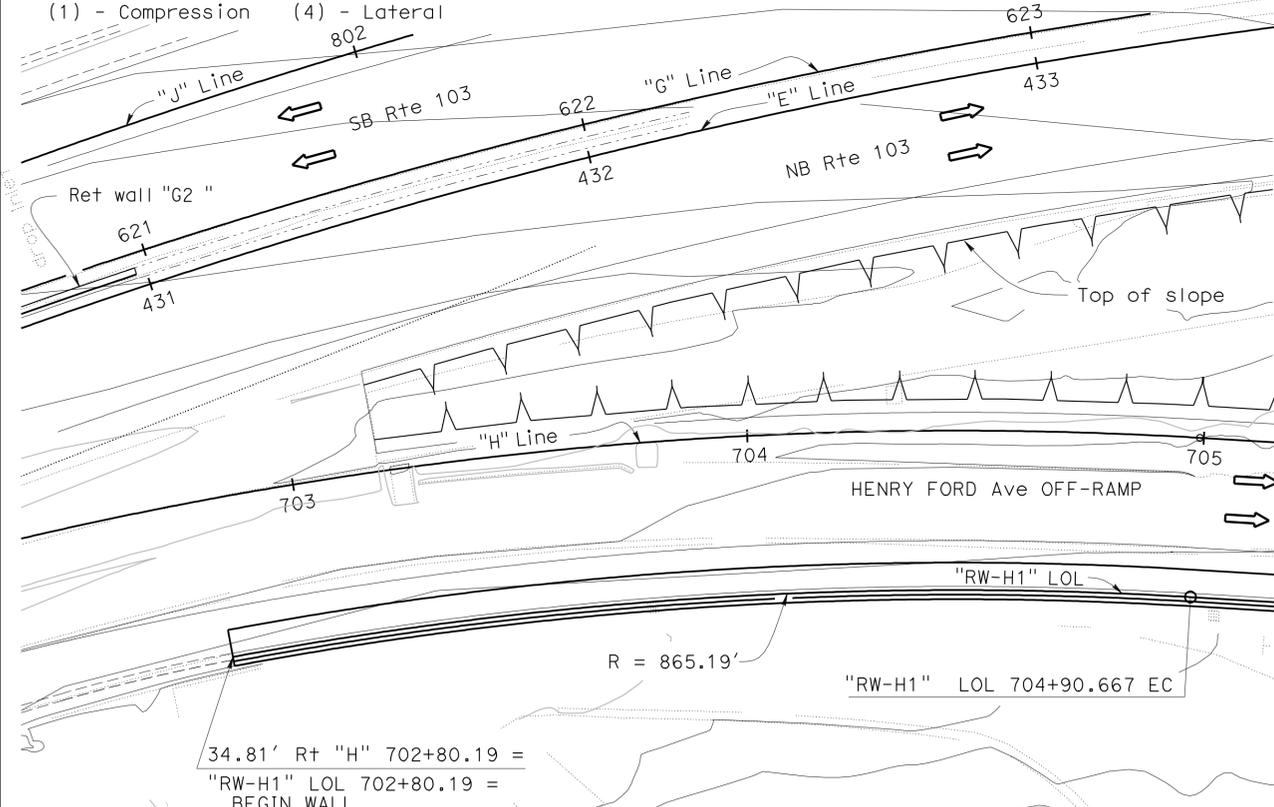


MIRRORED DEVELOPED ELEVATION

1" = 20'

NOTE: Top of wall elevation consistent at 2.167' for entire wall length.

Location	Pile Type	Design Loading (Service)	Nominal Resistance (kip)		Design Tip Elevation (ft)	Specified Tip Elevation (ft)
			Compression	Tension		
Retaining Wall "H1"	24" CIDH	90 kips	180	0	-56 (1) -42 (4)	-56



QUANTITIES

STRUCTURE EXCAVATION (TYPE A)	1,565	CY
STRUCTURE EXCAVATION (TYPE DC)	251	CY
STRUCTURE EXCAVATION (TYPE GC)	651,000	GAL
STRUCTURE EXCAVATION (TYPE Z-2)	32	CY
(AERIALY DEPOSITED LEAD)		
STRUCTURE BACKFILL (RETAINING WALL)	600	CY
24" CAST-IN-DRILLED-HOLE CONCRETE PILING	4,175	LF
SEAL COURSE CONCRETE	768	CY
STRUCTURAL CONCRETE, RETAINING WALL	410	CY
BAR REINFORCING STEEL (RETAINING WALL)	159,000	LB
CONCRETE BARRIER (TYPE 600)	432	LF

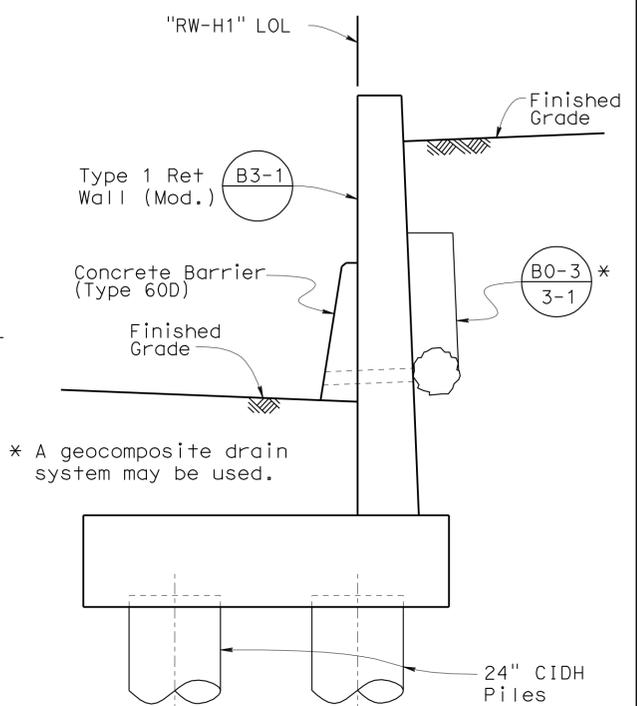
* A geocomposite drain system may be used.

HAZARDOUS SOIL DATA

DEPTH OF CONTAMINATED SOIL	CONTAMINANTS	EXCAVATION TYPE
0' to 1'	Lead	TYPE Z-2
1' to 3'	DRO & ORO	TYPE DC
3' +	Non-Haz	TYPE A

LEGEND:

0' = Existing ground Surface
 3' + = Soil more than 3' Below Existing Ground Surface
 DRO = Diesel Range Organics
 ORO = Oil Range Organics
 Non-Haz = Non-Hazardous material



TYPICAL SECTION

1/2" = 1'-0"

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	STRUCTURE PLAN NO. 1
3	STRUCTURE PLAN NO. 2
4	STRUCTURE PLAN NO. 3
5	FOUNDATION PLAN
6	WALL DETAILS
7	LOG OF TEST BORINGS NO. 1 OF 4
8	LOG OF TEST BORINGS NO. 2 OF 4
9	LOG OF TEST BORINGS NO. 3 OF 4
10	LOG OF TEST BORINGS NO. 4 OF 4

STANDARD PLANS DATED MAY 2006

A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
B0-3	BRIDGE DETAILS
B3-1	RETAINING WALL TYPE 1
B3-8	RETAINING WALL DETAILS NO. 1
	STANDARD PLAN SHEET NO.
	DETAIL NO.

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

PLAN

1" = 20'

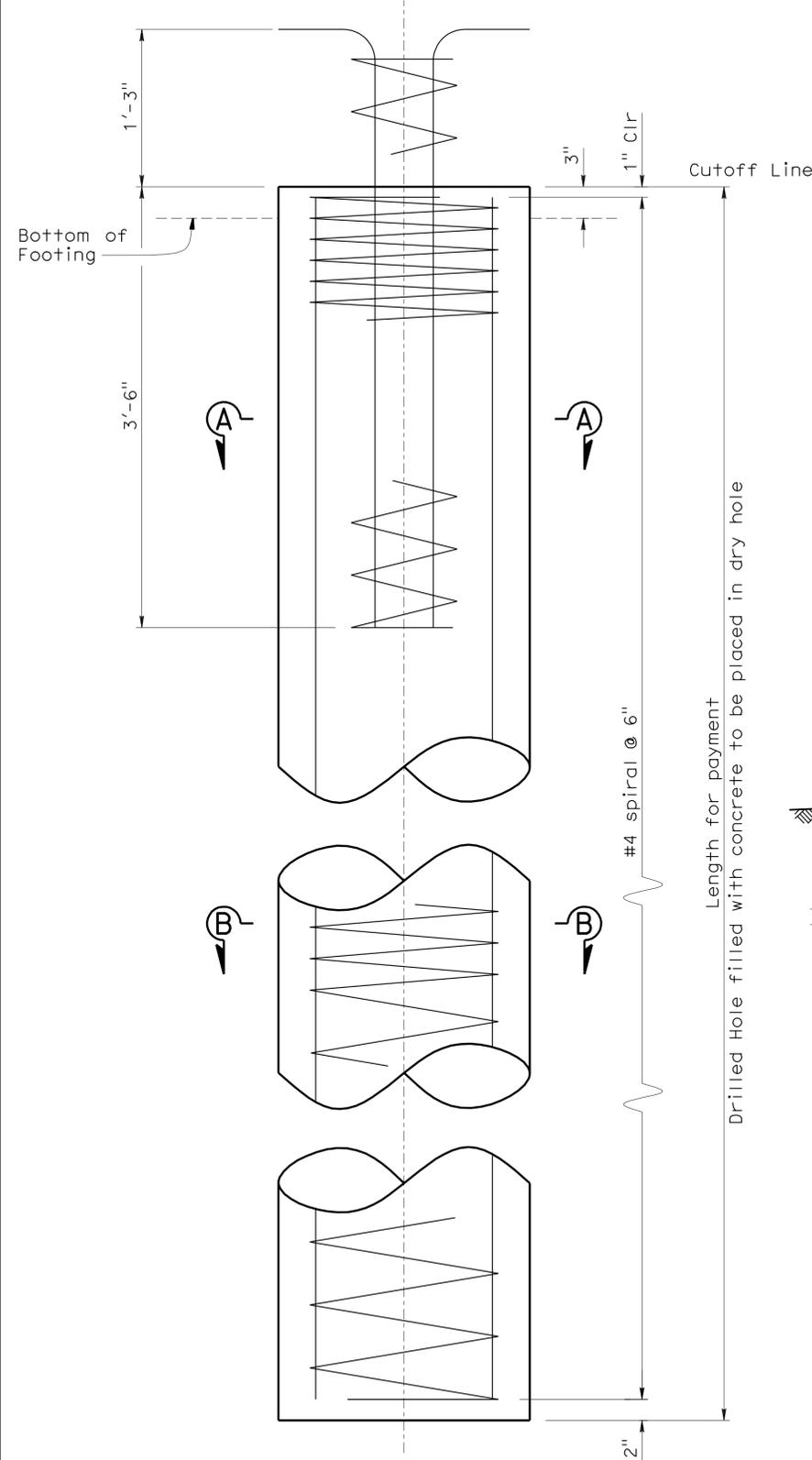
DESIGN ENGINEER

DESIGN	BY S. Galgiani	CHECKED F. Zayati	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY J.D. Thorne	CHECKED S. Galgiani	LAYOUT	BY S. Galgiani
QUANTITIES	BY J. Lane	CHECKED V. Ramakrishnan	SPECIFICATIONS	BY J. Strootman

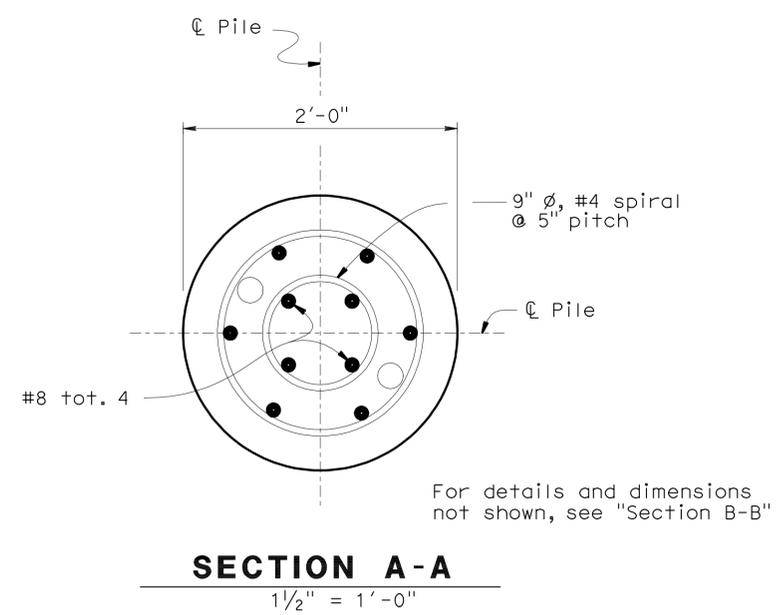
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
 STRUCTURE DESIGN
DESIGN BRANCH 14

BRIDGE NO.	POST MILE	REVISION DATES	SHEET	OF
53-RWH1	0.14	04-08-10 05-18-10 05-28-10 07-06-10 08-26-10 01-07-11	1	10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
07	LA	47,103	3.57/4.6, 0.0/1.1	999	1003
FOUED ZAYATI REGISTERED CIVIL ENGINEER No. C57046 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA		05-24-10 DATE 10-11-10 PLANS APPROVAL DATE The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.			

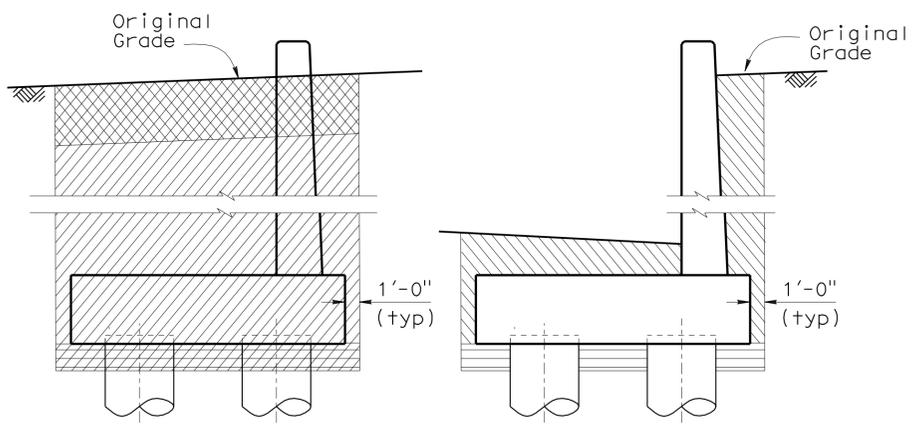


PILE ELEVATION
1/2" = 1'-0"

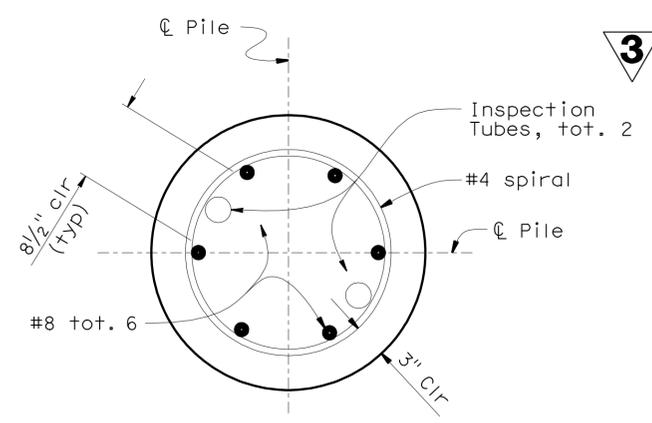


SECTION A-A
1/2" = 1'-0"

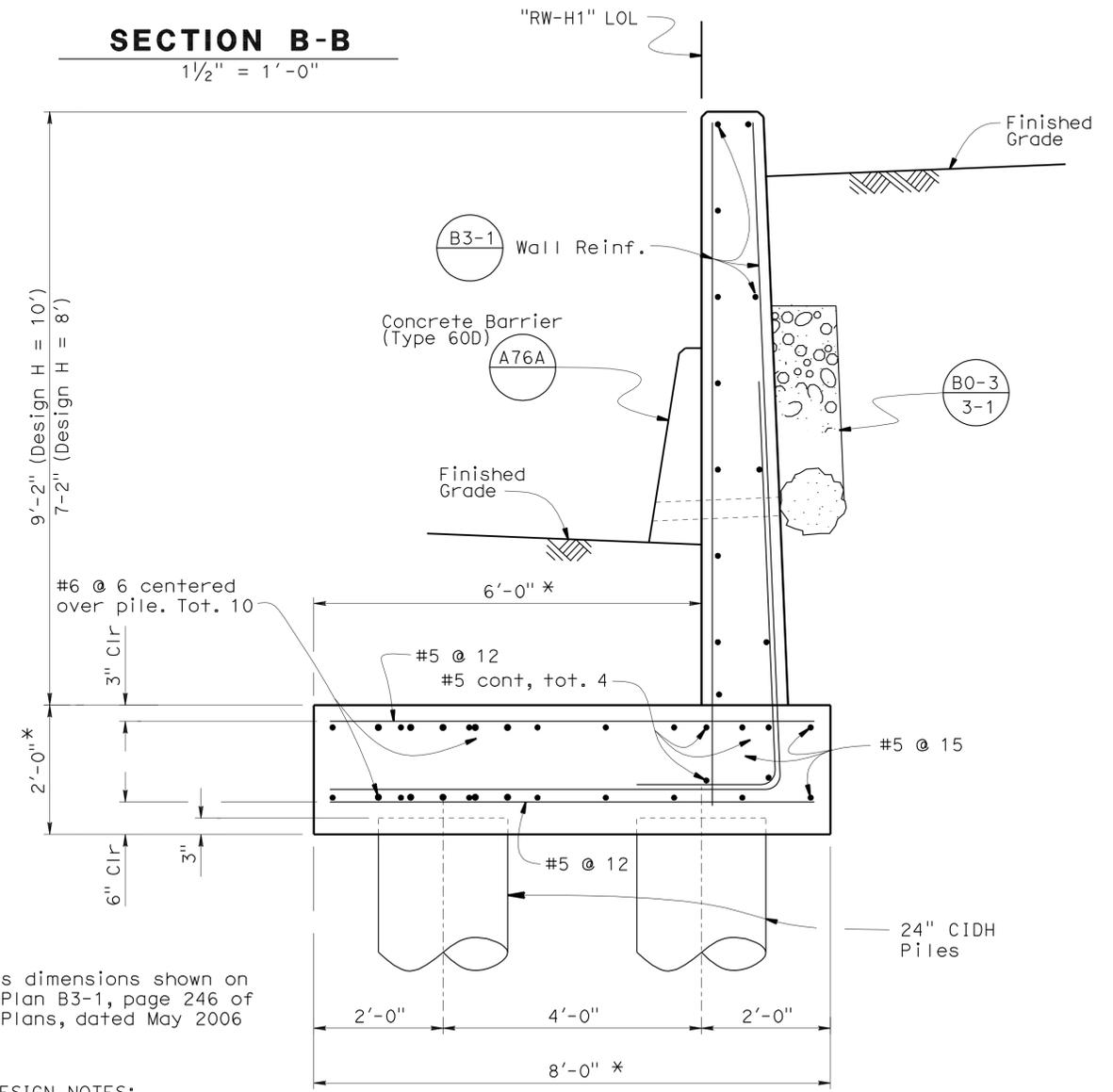
NOTE:
Lap splices in spiral pile reinforcement shall be lapped at least 80 bar diameters. Spiral pile reinforcement at splices and at ends shall be terminated with 135° hook with a 6" tail hooked around a longitudinal bar.



LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL
No Scale



SECTION B-B
1/2" = 1'-0"



TYPICAL SECTION B3-1
3/4" = 1'-0"

DESIGN NOTES:
f_y = 60,000 psi
f'c = 4,000 psi

3 REVISED PER ADDENDUM No. 3 DATED MARCH 28, 2011

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)	DESIGN	BY S. Galgiani	CHECKED F. Zayati	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 14	BRIDGE NO.	RETAINING WALL H1					
	DETAILS	BY J. Thorne	CHECKED S. Galgiani			53-RWH1	WALL DETAILS					
	QUANTITIES	BY V. Ramakrishnan	CHECKED J. Lane			POST MILE 0.14						
				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	CU 07-271 EA 138201	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES					SHEET 6 OF 10