

DEAD LOAD DEFLECTION DIAGRAM GIRDER 1-12

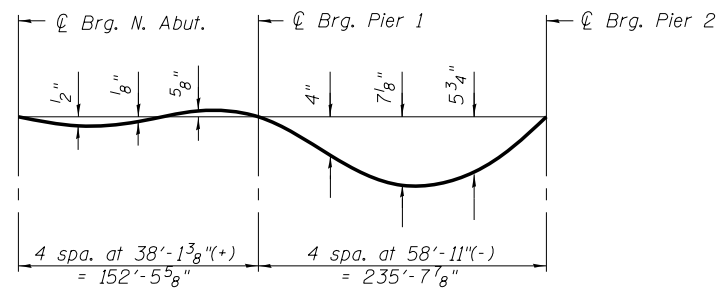
(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S12 thru S17.

DEAD LOAD DEFLECTION TABLE

Girder	1A	1B	1C	2A	2B	2C	D	E
1	3/8"	1/8"	3/4"	4 1/2"	8"	6 3/8"	150'-0"	228'-6"
2	1/4"	1/8"	3/4"	4 1/2"	7 1/8"	6 1/4"	150'-3 3/8"	228'-11 1/8"
3	1/4"	1/8"	7/8"	4 3/8"	7 3/4"	6 3/8"	150'-6 3/4"	229'-4 1/4"
4	1/4"	1/4"	7/8"	4 1/4"	7 5/8"	6"	150'-10 1/4"	229'-9 1/2"
5	1/8"	1/4"	7/8"	4 1/4"	7 1/2"	5 7/8"	151'-1 3/4"	230'-3"
6	1/8"	1/4"	7/8"	4 1/4"	7 1/2"	5 7/8"	151'-5 3/8"	230'-8 1/2"
7	1/8"	1/4"	7/8"	4 1/4"	7 3/8"	5 7/8"	151'-9 1/8"	231'-2 1/8"
8	1/4"	1/4"	3/4"	4 1/4"	7 3/8"	5 7/8"	152'-0 1/8"	231'-7 1/8"
9	1/4"	1/4"	3/4"	4 1/8"	7 3/8"	5 7/8"	152'-4 3/4"	232'-1 3/4"
10	1/4"	1/8"	3/4"	4 1/8"	7 3/8"	5 7/8"	152'-8 3/8"	232'-7 3/4"
11	3/8"	1/8"	3/4"	4 1/8"	7 3/8"	5 7/8"	153'-0 5/8"	233'-1 1/8"
12	3/8"	0"	3/8"	4"	7 1/4"	5 7/8"	152'-9 1/8"	234'-4 1/4"



DEAD LOAD DEFLECTION DIAGRAM GIRDER 13

(Includes weight of concrete only.)

Note:

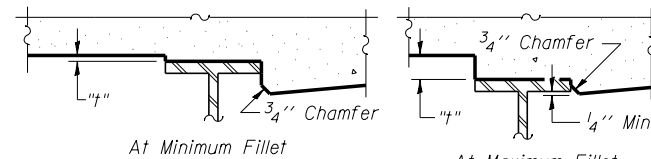
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet S17.

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+37.41	-10.25	594.45	594.45
CL. BRG. N. ABUT.	29+41.04	-10.25	594.53	594.53
1A	29+51.04	-10.25	594.74	594.75
1B	29+61.04	-10.25	594.95	594.97
1C	29+71.04	-10.25	595.16	595.18
1D	29+81.04	-10.25	595.37	595.39
1E	29+91.04	-10.25	595.58	595.60
1F	30+01.04	-10.25	595.79	595.80
1G	30+11.04	-10.25	596.00	595.99
1H	30+21.04	-10.25	596.21	596.18
1J	30+31.04	-10.25	596.42	596.38
1K	30+41.04	-10.25	596.62	596.57
1L	30+51.04	-10.25	596.83	596.77
1M	30+61.04	-10.25	597.04	596.98
1N	30+71.04	-10.25	597.25	597.20
1P	30+81.04	-10.25	597.46	597.43
CL. BRG. PIER 1	30+91.04	-10.25	597.67	597.67
2A	31+01.04	-10.25	597.88	597.93
2B	31+11.04	-10.25	598.09	598.20
2C	31+21.04	-10.25	598.30	598.48
2D	31+31.04	-10.25	598.51	598.76
2E	31+41.04	-10.25	598.72	599.05
2F	31+51.04	-10.25	598.93	599.33
2G	31+61.04	-10.25	599.14	599.61
2H	31+71.04	-10.25	599.35	599.89
2J	31+81.04	-10.25	599.56	600.15
2K	31+91.04	-10.25	599.77	600.40
2L	32+01.04	-10.25	599.98	600.64
2M	32+11.04	-10.25	600.19	600.86
2N	32+21.04	-10.25	600.40	601.07
2P	32+31.04	-10.25	600.61	601.27
2Q	32+41.04	-10.25	600.82	601.46
2R	32+51.04	-10.25	601.03	601.63
2S	32+61.04	-10.25	601.24	601.78
2T	32+71.04	-10.25	601.45	601.92
2U	32+81.04	-10.25	601.66	602.05
2V	32+91.04	-10.25	601.87	602.17
2W	33+01.04	-10.25	602.08	602.28
2X	33+11.04	-10.25	602.29	602.39
CL. BRG. PIER 2	33+19.54	-10.25	602.47	602.47
CL. JT. & PIER 2	33+21.04	-10.25	602.50	602.50

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+39.28	-3.55	594.62	594.62
CL. BRG. N. ABUT.	29+42.91	-3.53	594.70	594.70
1A	29+52.91	-3.46	594.91	594.92
1B	29+62.91	-3.40	595.12	595.14
1C	29+72.91	-3.33	595.33	595.36
1D	29+82.91	-3.27	595.54	595.57
1E	29+92.91	-3.20	595.76	595.77
1F	30+02.90	-3.14	595.97	595.98
1G	30+12.90	-3.07	596.18	596.17
1H	30+22.90	-3.00	596.39	596.37
1J	30+32.90	-2.94	596.60	596.56
1K	30+42.90	-2.87	596.81	596.76
1L	30+52.90	-2.81	597.02	596.96
1M	30+62.90	-2.74	597.23	597.17
1N	30+72.90	-2.68	597.44	597.39
1P	30+82.90	-2.61	597.66	597.62
CL. BRG. PIER 1	30+93.18	-2.54	597.87	597.87
2A	31+03.18	-2.48	598.08	598.13
2B	31+13.18	-2.41	598.30	598.40
2C	31+23.18	-2.35	598.51	598.68
2D	31+33.18	-2.28	598.72	598.96
2E	31+43.18	-2.21	598.93	599.25
2F	31+53.18	-2.15	599.14	599.53
2G	31+63.18	-2.08	599.35	599.81
2H	31+73.18	-2.02	599.56	600.09
2J	31+83.18	-1.95	599.77	600.35
2K	31+93.18	-1.89	599.98	600.60
2L	32+03.18	-1.82	600.20	600.84
2M	32+13.18	-1.75	600.41	601.07
2N	32+23.18	-1.69	600.62	601.28
2P	32+33.18	-1.62	600.83	601.48
2Q	32+43.18	-1.56	601.04	601.67
2R	32+53.18	-1.49	601.25	601.84
2S	32+63.18	-1.43	601.46	601.99
2T	32+73.18	-1.36	601.67	602.14
2U	32+83.18	-1.29	601.89	602.27
2V	32+93.18	-1.23	602.10	602.39
2W	33+03.18	-1.16	602.31	602.51
2X	33+13.18	-1.10	602.52	602.62
CL. BRG. PIER 2	33+22.10	-1.04	602.71	602.71
CL. JT. & PIER 2	33+23.60	-1.03	602.74	602.74



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-012-Top of Slab Elevations Unit 1 (1 of 6).dgn
MODEL: Default

USER NAME = ksnyder
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - TJJ/DTS
CHECKED - KWS
DRAWN - KMS
CHECKED - KWS

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (1 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S12 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	901
				CONTRACT NO. 64C08

ILLINOIS FED. AID PROJECT

P.G. E.B. I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+40.25	0.00	594.71	594.71
CL. BRG. N. ABUT.	29+43.89	0.00	594.79	594.79
1A	29+53.89	0.00	595.00	595.01
1B	29+63.89	0.00	595.21	595.23
1C	29+73.89	0.00	595.42	595.44
1D	29+83.89	0.00	595.63	595.65
1E	29+93.89	0.00	595.84	595.86
1F	30+03.89	0.00	596.05	596.06
1G	30+13.89	0.00	596.26	596.25
1H	30+23.89	0.00	596.47	596.44
1J	30+33.89	0.00	596.68	596.64
1K	30+43.89	0.00	596.89	596.83
1L	30+53.89	0.00	597.10	597.03
1M	30+63.89	0.00	597.31	597.24
1N	30+73.89	0.00	597.52	597.46
1P	30+83.89	0.00	597.73	597.69
CL. BRG. PIER 1	30+93.89	0.00	597.94	597.94
2A	31+03.89	0.00	598.15	598.20
2B	31+13.89	0.00	598.36	598.46
2C	31+23.89	0.00	598.57	598.74
2D	31+33.89	0.00	598.78	599.02
2E	31+43.89	0.00	598.99	599.30
2F	31+53.89	0.00	599.20	599.59
2G	31+63.89	0.00	599.41	599.87
2H	31+73.89	0.00	599.62	600.14
2J	31+83.89	0.00	599.83	600.40
2K	31+93.89	0.00	600.04	600.65
2L	32+03.89	0.00	600.25	600.89
2M	32+13.89	0.00	600.46	601.12
2N	32+23.89	0.00	600.67	601.33
2P	32+33.89	0.00	600.88	601.53
2Q	32+43.89	0.00	601.09	601.71
2R	32+53.89	0.00	601.30	601.88
2S	32+63.89	0.00	601.51	602.03
2T	32+73.89	0.00	601.72	602.18
2U	32+83.89	0.00	601.93	602.31
2V	32+93.89	0.00	602.14	602.43
2W	33+03.89	0.00	602.35	602.54
2X	33+13.89	0.00	602.56	602.65
CL. BRG. PIER 2	33+22.39	0.00	602.73	602.73
CL. JT. & PIER 2	33+23.89	0.00	602.77	602.77

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+41.14	3.14	594.80	594.80
CL. BRG. N. ABUT.	29+44.77	3.19	594.87	594.87
1A	29+54.77	3.32	595.09	595.10
1B	29+64.77	3.45	595.30	595.32
1C	29+74.77	3.58	595.51	595.53
1D	29+84.77	3.71	595.72	595.74
1E	29+94.77	3.85	595.94	595.95
1F	30+04.76	3.98	596.15	596.15
1G	30+14.76	4.11	596.36	596.35
1H	30+24.76	4.24	596.57	596.55
1J	30+34.76	4.37	596.79	596.74
1K	30+44.76	4.50	597.00	596.94
1L	30+54.76	4.63	597.21	597.14
1M	30+64.76	4.76	597.42	597.35
1N	30+74.76	4.89	597.64	597.58
1P	30+84.76	5.03	597.85	597.81
CL. BRG. PIER 1	30+95.32	5.16	598.07	598.07
2A	31+05.32	5.30	598.28	598.33
2B	31+15.32	5.43	598.50	598.60
2C	31+25.31	5.56	598.71	598.88
2D	31+35.31	5.69	598.92	599.16
2E	31+45.31	5.82	599.13	599.45
2F	31+55.31	5.95	599.35	599.73
2G	31+65.31	6.08	599.56	600.01
2H	31+75.31	6.21	599.77	600.29
2J	31+85.31	6.34	599.98	600.55
2K	31+95.31	6.48	600.20	600.80
2L	32+05.31	6.61	600.41	601.04
2M	32+15.31	6.74	600.62	601.27
2N	32+25.31	6.87	600.83	601.49
2P	32+35.31	7.00	601.05	601.69
2Q	32+45.30	7.13	601.26	601.88
2R	32+55.30	7.26	601.47	602.05
2S	32+65.30	7.39	601.68	602.21
2T	32+75.30	7.52	601.90	602.35
2U	32+85.30	7.66	602.11	602.49
2V	32+95.30	7.79	602.32	602.62
2W	33+05.30	7.92	602.53	602.73
2X	33+15.30	8.05	602.75	602.85
CL. BRG. PIER 2	33+24.65	8.17	602.94	602.94
CL. JT. & PIER 2	33+26.15	8.19	602.98	602.98

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+43.00	9.84	594.97	594.97
CL. BRG. N. ABUT.	29+46.63	9.91	595.05	595.05
1A	29+56.63	10.11	595.26	595.27
1B	29+66.63	10.30	595.47	595.49
1C	29+76.63	10.50	595.69	595.71
1D	29+86.63	10.69	595.90	595.92
1E	29+96.62	10.89	596.12	596.13
1F	30+06.62	11.09	596.33	596.33
1G	30+16.62	11.28	596.54	596.53
1H	30+26.62	11.48	596.76	596.73
1J	30+36.62	11.68	596.97	596.93
1K	30+46.61	11.87	597.18	597.13
1L	30+56.61	12.07	597.40	597.33
1M	30+66.61	12.27	597.60	597.53
1N	30+76.61	12.46	597.81	597.75
1P	30+86.61	12.66	598.01	597.98
CL. BRG. PIER 1	30+97.45	12.87	598.24	598.24
2A	31+07.45	13.07	598.44	598.49
2B	31+17.45	13.26	598.65	598.75
2C	31+27.45	13.46	598.85	599.02
2D	31+37.45	13.66	599.06	599.30
2E	31+47.45	13.85	599.27	599.57
2F	31+57.44	14.05	599.47	599.85
2G	31+67.44	14.25	599.68	600.13
2H	31+77.44	14.44	599.88	600.39
2J	31+87.44	14.64	600.09	600.65
2K	31+97.44	14.83	600.30	600.89
2L	32+07.43	15.03	600.50	601.12
2M	32+17.43	15.23	600.71	601.35
2N	32+27.43	15.42	600.91	601.55
2P	32+37.43	15.62	601.12	601.75
2Q	32+47.43	15.82	601.32	601.93
2R	32+57.42	16.01	601.53	602.10
2S	32+67.42	16.21	601.74	602.25
2T	32+77.42	16.41	601.94	602.40
2U	32+87.42	16.60	602.15	602.53
2V	32+97.42	16.80	602.35	602.65
2W	33+07.41	16.99	602.56	602.76
2X	33+17.41	17.19	602.77	602.87
CL. BRG. PIER 2	33+27.21	17.38	602.97	602.97
CL. JT. & PIER 2	33+28.71	17.41	603.00	603.00

NOTE:
Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-013-Top of Slab Elevations Unit 1 (2 of 6).dgn
MODEL: Default

USER NAME = ksnider
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - TJJ/DTS
CHECKED - KWS
DRAWN - KMS
CHECKED - KWS

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (2 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S13 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	902
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+44.87	16.53	594.96	594.96
CL. BRG. N. ABUT.	29+48.50	16.63	595.04	595.04
1A	29+58.49	16.89	595.24	595.25
1B	29+68.49	17.15	595.44	595.46
1C	29+78.49	17.41	595.65	595.66
1D	29+88.48	17.67	595.85	595.87
1E	29+98.48	17.94	596.06	596.07
1F	30+08.48	18.20	596.26	596.26
1G	30+18.47	18.46	596.47	596.45
1H	30+28.47	18.72	596.67	596.64
1J	30+38.47	18.98	596.88	596.83
1K	30+48.46	19.24	597.08	597.02
1L	30+58.46	19.50	597.29	597.22
1M	30+68.46	19.76	597.49	597.42
1N	30+78.45	20.03	597.69	597.64
1P	30+88.45	20.29	597.90	597.86
CL. BRG. PIER 1	30+99.59	20.58	598.13	598.13
2A	31+09.59	20.84	598.33	598.38
2B	31+19.59	21.10	598.54	598.64
2C	31+29.58	21.36	598.74	598.90
2D	31+39.58	21.62	598.95	599.18
2E	31+49.57	21.88	599.15	599.45
2F	31+59.57	22.15	599.35	599.72
2G	31+69.57	22.41	599.56	600.00
2H	31+79.56	22.67	599.76	600.26
2J	31+89.56	22.93	599.97	600.51
2K	31+99.56	23.19	600.17	600.76
2L	32+09.55	23.45	600.38	600.99
2M	32+19.55	23.71	600.58	601.21
2N	32+29.55	23.97	600.79	601.41
2P	32+39.54	24.24	600.99	601.61
2Q	32+49.54	24.50	601.20	601.79
2R	32+59.54	24.76	601.40	601.96
2S	32+69.53	25.02	601.60	602.11
2T	32+79.53	25.28	601.81	602.25
2U	32+89.53	25.54	602.01	602.39
2V	32+99.52	25.80	602.22	602.51
2W	33+09.52	26.07	602.42	602.62
2X	33+19.52	26.33	602.63	602.73
CL. BRG. PIER 2	33+29.76	26.59	602.84	602.84
CL. JT. & PIER 2	33+31.26	26.63	602.87	602.87

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+46.73	23.23	594.87	594.87
CL. BRG. N. ABUT.	29+50.36	23.35	594.94	594.94
1A	29+60.36	23.67	595.14	595.15
1B	29+70.35	24.00	595.35	595.36
1C	29+80.34	24.33	595.55	595.57
1D	29+90.34	24.65	595.75	595.77
1E	30+00.33	24.98	595.96	595.96
1F	30+10.33	25.30	596.16	596.16
1G	30+20.32	25.63	596.36	596.35
1H	30+30.32	25.96	596.57	596.53
1J	30+40.31	26.28	596.77	596.72
1K	30+50.31	26.61	596.97	596.91
1L	30+60.30	26.93	597.18	597.11
1M	30+70.30	27.26	597.38	597.31
1N	30+80.29	27.59	597.58	597.52
1P	30+90.29	27.91	597.78	597.75
CL. BRG. PIER 1	31+01.73	28.29	598.02	598.02
2A	31+11.72	28.61	598.22	598.27
2B	31+21.72	28.94	598.42	598.52
2C	31+31.71	29.26	598.63	598.79
2D	31+41.71	29.59	598.83	599.06
2E	31+51.70	29.92	599.03	599.33
2F	31+61.70	30.24	599.24	599.61
2G	31+71.69	30.57	599.44	599.88
2H	31+81.69	30.89	599.64	600.14
2J	31+91.68	31.22	599.85	600.39
2K	32+01.68	31.54	600.05	600.63
2L	32+11.67	31.87	600.25	600.86
2M	32+21.67	32.20	600.46	601.08
2N	32+31.66	32.52	600.66	601.29
2P	32+41.65	32.85	600.86	601.48
2Q	32+51.65	33.17	601.07	601.66
2R	32+61.64	33.50	601.27	601.83
2S	32+71.64	33.83	601.47	601.98
2T	32+81.63	34.15	601.68	602.12
2U	32+91.63	34.48	601.88	602.26
2V	33+01.62	34.80	602.08	602.38
2W	33+11.62	35.13	602.29	602.49
2X	33+21.61	35.46	602.49	602.60
CL. BRG. PIER 2	33+32.31	35.81	602.71	602.71
CL. JT. & PIER 2	33+33.81	35.85	602.74	602.74

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+48.59	29.93	594.77	594.77
CL. BRG. N. ABUT.	29+52.22	30.07	594.84	594.84
1A	29+62.22	30.46	595.05	595.05
1B	29+72.21	30.85	595.25	595.26
1C	29+82.20	31.24	595.45	595.47
1D	29+92.19	31.63	595.65	595.67
1E	30+02.19	32.02	595.85	595.86
1F	30+12.18	32.41	596.06	596.06
1G	30+22.17	32.80	596.26	596.24
1H	30+32.16	33.19	596.46	596.43
1J	30+42.16	33.58	596.66	596.62
1K	30+52.15	33.97	596.86	596.81
1L	30+62.14	34.36	597.07	597.00
1M	30+72.13	34.75	597.27	597.20
1N	30+82.12	35.14	597.47	597.41
1P	30+92.12	35.53	597.67	597.63
CL. BRG. PIER 1	31+03.87	35.99	597.91	597.91
2A	31+13.86	36.38	598.11	598.16
2B	31+23.85	36.77	598.31	598.41
2C	31+33.84	37.16	598.51	598.68
2D	31+43.84	37.55	598.72	598.94
2E	31+53.83	37.94	598.92	599.21
2F	31+63.82	38.33	599.12	599.49
2G	31+73.81	38.72	599.32	599.76
2H	31+83.81	39.12	599.52	600.01
2J	31+93.80	39.51	599.73	600.27
2K	32+03.79	39.90	599.93	600.51
2L	32+13.78	40.29	600.13	600.74
2M	32+23.78	40.68	600.33	600.95
2N	32+33.77	41.07	600.53	601.16
2P	32+43.76	41.46	600.73	601.35
2Q	32+53.75	41.85	600.94	601.53
2R	32+63.74	42.24	601.14	601.70
2S	32+73.74	42.63	601.34	601.85
2T	32+83.73	43.02	601.54	601.99
2U	32+93.72	43.41	601.74	602.12
2V	33+03.71	43.80	601.95	602.24
2W	33+13.71	44.19	602.15	602.36
2X	33+23.70	44.58	602.35	602.46
CL. BRG. PIER 2	33+34.87	45.02	602.57	602.57
CL. JT. & PIER 2	33+36.37	45.08	602.60	602.60

NOTE:
Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-014-Top of Slab Elevations Unit 1 (3 of 6).dgn	USER NAME = ksnider	DESIGNED - TJJ/DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - KWS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - KWS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (3 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S14 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 903
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+50.46	36.62	594.68	594.68
CL. BRG. N. ABUT.	29+54.09	36.79	594.75	594.75
1A	29+64.08	37.24	594.95	594.96
1B	29+74.07	37.70	595.15	595.16
1C	29+84.06	38.15	595.35	595.37
1D	29+94.05	38.61	595.55	595.57
1E	30+04.04	39.06	595.75	595.76
1F	30+14.03	39.52	595.95	595.95
1G	30+24.02	39.97	596.15	596.14
1H	30+34.00	40.42	596.35	596.33
1J	30+43.99	40.88	596.55	596.51
1K	30+53.98	41.33	596.75	596.70
1L	30+63.97	41.79	596.96	596.89
1M	30+73.96	42.24	597.16	597.09
1N	30+83.95	42.70	597.36	597.30
1P	30+93.94	43.15	597.56	597.52
CL. BRG. PIER 1	31+06.00	43.70	597.80	597.80
2A	31+15.99	44.15	598.00	598.04
2B	31+25.98	44.61	598.20	598.30
2C	31+35.97	45.06	598.40	598.56
2D	31+45.96	45.52	598.60	598.83
2E	31+55.95	45.97	598.80	599.10
2F	31+65.94	46.43	599.00	599.37
2G	31+75.93	46.88	599.20	599.64
2H	31+85.92	47.34	599.40	599.89
2J	31+95.91	47.79	599.60	600.14
2K	32+05.90	48.24	599.81	600.38
2L	32+15.89	48.70	600.01	600.61
2M	32+25.88	49.15	600.21	600.83
2N	32+35.87	49.61	600.40	601.03
2P	32+45.86	50.06	600.60	601.22
2Q	32+55.85	50.52	600.80	601.40
2R	32+65.84	50.97	601.01	601.56
2S	32+75.83	51.43	601.21	601.72
2T	32+85.82	51.88	601.41	601.86
2U	32+95.81	52.33	601.61	602.00
2V	33+05.80	52.79	601.82	602.12
2W	33+15.79	53.24	602.04	602.25
2X	33+25.78	53.70	602.26	602.38
CL. BRG. PIER 2	33+37.42	54.23	602.44	602.44
CL. JT. & PIER 2	33+38.92	54.30	602.47	602.47

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	29+52.32	43.32	594.58	594.58
CL. BRG. N. ABUT.	29+55.95	43.51	594.65	594.65
1A	29+65.94	44.03	594.85	594.86
1B	29+75.92	44.54	595.05	595.07
1C	29+85.91	45.06	595.25	595.27
1D	29+95.90	45.58	595.45	595.47
1E	30+05.88	46.10	595.65	595.66
1F	30+15.87	46.62	595.85	595.85
1G	30+25.86	47.14	596.05	596.04
1H	30+35.84	47.65	596.25	596.22
1J	30+45.83	48.17	596.45	596.41
1K	30+55.82	48.69	596.64	596.59
1L	30+65.80	49.21	596.84	596.77
1M	30+75.79	49.73	597.03	596.96
1N	30+85.78	50.25	597.22	597.16
1P	30+95.76	50.76	597.41	597.37
CL. BRG. PIER 1	31+08.14	51.41	597.64	597.64
2A	31+18.13	51.92	597.83	597.87
2B	31+28.11	52.44	598.01	598.11
2C	31+38.10	52.96	598.21	598.36
2D	31+48.09	53.48	598.42	598.65
2E	31+58.07	54.00	598.63	598.93
2F	31+68.06	54.52	598.85	599.21
2G	31+78.05	55.03	599.07	599.50
2H	31+88.03	55.55	599.29	599.77
2J	31+98.02	56.07	599.50	600.04
2K	32+08.01	56.59	599.70	600.28
2L	32+17.99	57.11	599.89	600.49
2M	32+27.98	57.63	600.08	600.70
2N	32+37.97	58.14	600.27	600.90
2P	32+47.95	58.66	600.47	601.08
2Q	32+57.94	59.18	600.67	601.26
2R	32+67.93	59.70	600.87	601.43
2S	32+77.91	60.22	601.07	601.59
2T	32+87.90	60.74	601.28	601.74
2U	32+97.89	61.25	601.49	601.88
2V	33+07.87	61.77	601.71	602.02
2W	33+17.86	62.29	601.96	602.17
2X	33+27.85	62.81	602.20	602.33
CL. BRG. PIER 2	33+39.98	63.44	602.31	602.31
CL. JT. & PIER 2	33+41.48	63.52	602.34	602.34

EAST GORE LINE/CROSS SLOPE BREAK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Start	29+84.83	48.00	595.18	595.20
1D	29+94.83	48.00	595.38	595.40
1E	30+04.83	48.00	595.59	595.60
1F	30+14.83	48.00	595.80	595.80
1G	30+24.83	48.00	596.01	596.00
1H	30+34.83	48.00	596.22	596.20
1J	30+44.83	48.00	596.43	596.39
1K	30+54.83	48.00	596.64	596.59
1L	30+64.83	48.00	596.85	596.79
1M	30+74.83	48.00	597.06	596.99
1N	30+84.83	48.00	597.27	597.21
1P	30+94.83	48.00	597.48	597.44
CL Brg. Pier 1	31+07.20	48.00	597.74	597.74
2A	31+17.20	48.00	597.95	597.99
2B	31+27.20	48.00	598.16	598.25
2C	31+37.20	48.00	598.37	598.53
2D	31+47.20	48.00	598.58	598.80
2E	31+57.20	48.00	598.79	599.08
2F	31+67.20	48.00	599.00	599.36
2G	31+77.20	48.00	599.21	599.64
2H	31+87.20	48.00	599.42	599.90
2J	31+97.20	48.00	599.63	600.16
2K	32+07.20	48.00	599.84	600.41
2L	32+17.20	48.00	600.05	600.65
2M	32+27.20	48.00	600.26	600.88
2N	32+37.20	48.00	600.47	601.09
2P	32+47.20	48.00	600.68	601.30
2Q	32+57.20	48.00	600.89	601.48
2R	32+67.20	48.00	601.10	601.66
2S	32+77.20	48.00	601.31	601.82
2T	32+87.20	48.00	601.52	601.97
2U	32+97.20	48.00	601.73	602.11
2V	33+07.20	48.00	601.94	602.25
2W	33+17.20	48.00	602.15	602.37
2X	33+27.20	48.00	602.35	602.48

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-015-Top of Slab Elevations Unit 1 (4 of 6).dgn
MODEL: Default

USER NAME = ksnider
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - TJJ/DTS
CHECKED - KWS
DRAWN - KMS
CHECKED - KWS

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (4 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S15 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	904
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

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WEST GORE LINE / CROSS SLOPE BREAK

* Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Start	29+84.83	49.00	595.16	595.18
1D-Mod	29+94.83	49.54	595.36	595.38
1E-Mod	30+04.83	50.07	595.56	595.57
1F-Mod	30+14.83	50.60	595.75	595.76
1G-Mod	30+24.83	51.14	595.94	595.94
1H-Mod	30+34.83	51.67	596.14	596.11
1J-Mod	30+44.83	52.21	596.33	596.29
1K-Mod	30+54.83	52.74	596.52	596.46
1L-Mod	30+64.83	53.27	596.70	596.64
1M-Mod	30+74.83	53.81	596.89	596.82
1N-Mod	30+84.83	54.34	597.07	597.02
1P-Mod	30+94.83	54.88	597.26	597.22
CL Brg. Pier 1-Mod	31+07.20	55.54	597.48	597.48
2A-Mod	31+17.20	56.07	597.66	597.71
2B-Mod	31+27.20	56.61	597.84	597.94
2C-Mod	31+37.20	57.14	598.03	598.19
2D-Mod	31+47.20	57.67	598.26	598.49
2E-Mod	31+57.20	58.21	598.49	598.79
2F-Mod	31+67.20	58.75	598.72	599.08
2G-Mod	31+77.20	59.35	598.95	599.38
2H-Mod	31+87.20	59.99	599.18	599.66
2J-Mod	31+97.20	60.68	599.41	599.94
2K-Mod	32+07.20	61.42	599.60	600.18
2L-Mod	32+17.20	62.21	599.78	600.38
2M-Mod	32+27.20	63.05	599.95	600.57
2N-Mod	32+37.20	63.94	600.13	600.76
2P-Mod	32+47.20	64.89	600.32	600.94
2Q-Mod	32+57.20	65.88	600.51	601.11
2R-Mod	32+67.20	66.92	600.70	601.27
2S-Mod	32+77.20	68.02	600.90	601.42
2T-Mod	32+87.20	69.16	601.10	601.56
2U-Mod	32+97.20	70.35	601.31	601.70
2V-Mod	33+07.20	71.60	601.52	601.84
2W-Mod	33+17.20	70.96	601.82	602.05
2X-Mod	33+27.20	70.32	602.11	602.25

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	322+87.68	-13.53	594.50	594.50
CL. BRG. N. ABUT.	322+91.37	-13.33	594.57	594.57
1A	323+01.37	-13.28	594.77	594.78
1B	323+11.37	-13.24	594.97	594.99
1C	323+21.37	-13.19	595.17	595.19
1D	323+31.37	-13.14	595.36	595.39
1E	323+41.37	-13.09	595.56	595.58
1F	323+51.37	-13.04	595.75	595.76
1G	323+61.37	-12.99	595.94	595.94
1H	323+71.37	-12.94	596.13	596.11
1J	323+81.37	-12.90	596.32	596.29
1K	323+91.37	-12.85	596.51	596.46
1L	324+01.37	-12.80	596.69	596.64
1M	324+11.37	-12.75	596.88	596.82
1N	324+21.37	-12.70	597.06	597.01
1P	324+31.37	-12.65	597.24	597.21
CL. BRG. PIER 1	324+44.09	-12.59	597.47	597.47
2A	324+54.09	-12.54	597.65	597.70
2B	324+64.09	-12.50	597.83	597.93
2C	324+74.09	-12.45	598.03	598.19
2D	324+84.09	-12.40	598.25	598.47
2E	324+94.09	-12.35	598.46	598.75
2F	325+04.03	-12.33	598.68	599.04
2G	325+13.97	-12.35	598.89	599.32
2H	325+23.91	-12.42	599.11	599.60
2J	325+33.84	-12.55	599.33	599.87
2K	325+43.78	-12.72	599.52	600.09
2L	325+53.71	-12.95	599.70	600.30
2M	325+63.64	-13.22	599.89	600.51
2N	325+73.57	-13.54	600.08	600.71
2P	325+83.50	-13.91	600.29	600.90
2Q	325+93.42	-14.34	600.49	601.09
2R	326+03.33	-14.81	600.71	601.27
2S	326+13.25	-15.33	600.93	601.44
2T	326+23.15	-15.90	601.16	601.61
2U	326+33.05	-16.52	601.38	601.76
2V	326+42.95	-17.19	601.60	601.91
2W	326+52.83	-17.91	601.87	602.10
2X	326+62.71	-18.67	602.13	602.25
CL. BRG. PIER 2	326+75.20	-19.72	602.46	602.46
CL. JT. & PIER 2	326+76.78	-19.85	602.50	602.50

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	322+89.90	-6.92	594.42	594.42
CL. BRG. N. ABUT.	322+93.59	-6.72	594.48	594.48
1A	323+03.59	-6.61	594.68	594.69
1B	323+13.59	-6.50	594.88	594.90
1C	323+23.58	-6.39	595.07	595.10
1D	323+33.58	-6.27	595.27	595.30
1E	323+43.58	-6.16	595.46	595.49
1F	323+53.58	-6.05	595.65	595.67
1G	323+63.58	-5.94	595.84	595.85
1H	323+73.58	-5.83	596.03	596.02
1J	323+83.58	-5.72	596.22	596.19
1K	323+93.58	-5.60	596.41	596.36
1L	324+03.58	-5.49	596.59	596.54
1M	324+13.58	-5.38	596.77	596.71
1N	324+23.58	-5.27	596.95	596.90
1P	324+33.58	-5.16	597.14	597.10
CL. BRG. PIER 1	324+46.63	-5.01	597.37	597.37
2A	324+56.63	-4.90	597.55	597.59
2B	324+66.63	-4.79	597.72	597.81
2C	324+76.63	-4.68	597.91	598.06
2D	324+86.63	-4.56	598.10	598.32
2E	324+96.63	-4.45	598.28	598.57
2F	325+06.60	-4.38	598.47	598.82
2G	325+16.58	-4.35	598.66	599.08
2H	325+26.56	-4.38	598.85	599.32
2J	325+36.54	-4.45	599.04	599.57
2K	325+46.51	-4.57	599.22	599.78
2L	325+56.49	-4.75	599.40	599.99
2M	325+66.46	-4.97	599.59	600.20
2N	325+76.43	-5.25	599.78	600.40
2P	325+86.40	-5.57	599.98	600.60
2Q	325+96.37	-5.94	600.19	600.78
2R	326+06.33	-6.37	600.40	600.96
2S	326+16.28	-6.84	600.63	601.14
2T	326+26.23	-7.36	600.85	601.31
2U	326+36.18	-7.93	601.09	601.48
2V	326+46.12	-8.55	601.33	601.64
2W	326+56.05	-9.23	601.57	601.80
2X	326+65.98	-9.95	601.82	601.96
CL. BRG. PIER 2	326+79.03	-10.97	602.17	602.17
CL. JT. & PIER 2	326+80.61	-11.10	602.21	602.21

* Location of screed Points for West Gore Line/Cross Slope Break are measured perpendicular from C I-74 from the same screed point on East Gore Line/ Cross Slope Break.

NOTE:

Stations and offsets measured from @ Ramp 6th-C, except West Gore Line / Cross Slope Break from Start of Gore to 2X-Mod.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-016-Top of Slab Elevations Unit 1 of 6
MODEL: Default

USER NAME = ksnyder
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - TJJ/DTS
CHECKED - KWS
DRAWN - KMS
CHECKED - KWS

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (5 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S16 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	905
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	322+92.12	-0.31	594.33	594.33
CL. BRG. N. ABUT.	322+95.81	-0.11	594.40	594.40
1A	323+05.81	-0.05	594.59	594.61
1B	323+15.81	0.00	594.79	594.82
1C	323+25.81	0.06	594.99	595.02
1D	323+35.81	0.12	595.18	595.22
1E	323+45.81	0.17	595.38	595.41
1F	323+55.81	0.23	595.57	595.59
1G	323+65.81	0.28	595.76	595.77
1H	323+75.80	0.34	595.95	595.95
1J	323+85.80	0.40	596.14	596.12
1K	323+95.80	0.45	596.33	596.29
1L	324+05.80	0.51	596.51	596.46
1M	324+15.80	0.57	596.70	596.64
1N	324+25.80	0.62	596.88	596.83
1P	324+35.80	0.68	597.06	597.02
CL. BRG. PIER 1	324+48.57	0.75	597.29	597.29
2A	324+58.57	0.81	597.47	597.51
2B	324+68.57	0.87	597.64	597.73
2C	324+78.57	0.92	597.81	597.97
2D	324+88.57	0.98	597.98	598.20
2E	324+98.57	1.04	598.15	598.43
2F	325+08.58	1.07	598.32	598.67
2G	325+18.58	1.08	598.49	598.91
2H	325+28.59	1.06	598.66	599.14
2J	325+38.59	1.02	598.84	599.36
2K	325+48.60	0.95	599.01	599.57
2L	325+58.60	0.86	599.19	599.78
2M	325+68.60	0.74	599.38	599.99
2N	325+78.61	0.60	599.57	600.18
2P	325+88.61	0.43	599.77	600.37
2Q	325+98.61	0.24	599.97	600.56
2R	326+08.60	0.02	600.18	600.73
2S	326+18.60	-0.22	600.39	600.90
2T	326+28.60	-0.49	600.61	601.06
2U	326+38.59	-0.79	600.83	601.22
2V	326+48.58	-1.11	601.06	601.38
2W	326+58.57	-1.45	601.29	601.53
2X	326+68.55	-1.82	601.53	601.67
CL. BRG. PIER 2	326+82.89	-2.23	601.88	601.88
CL. JT. & PIER 2	326+84.47	-2.27	601.92	601.92

RAMP 6TH-C

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	322+92.15	0.00	594.32	594.32
CL. BRG. N. ABUT.	322+95.84	0.00	594.40	594.40
1A	323+05.84	0.00	594.59	594.61
1B	323+15.84	0.00	594.79	594.82
1C	323+25.84	0.00	594.99	595.02
1D	323+35.84	0.00	595.19	595.23
1E	323+45.84	0.00	595.39	595.42
1F	323+55.84	0.00	595.58	595.61
1G	323+65.84	0.00	595.78	595.79
1H	323+75.84	0.00	595.97	595.96
1J	323+85.84	0.00	596.16	596.13
1K	323+95.84	0.00	596.34	596.31
1L	324+05.84	0.00	596.53	596.48
1M	324+15.84	0.00	596.72	596.66
1N	324+25.84	0.00	596.90	596.85
1P	324+35.84	0.00	597.08	597.05
CL. BRG. PIER 1	324+48.32	0.00	597.30	597.30
2A	324+58.32	0.00	597.48	597.52
2B	324+68.32	0.00	597.66	597.75
2C	324+78.32	0.00	597.83	597.98
2D	324+88.32	0.00	598.01	598.22
2E	324+98.32	0.00	598.18	598.46
2F	325+08.32	0.00	598.35	598.70
2G	325+18.32	0.00	598.53	598.94
2H	325+28.32	0.00	598.70	599.17
2J	325+38.32	0.00	598.88	599.40
2K	325+48.32	0.00	599.05	599.61
2L	325+58.32	0.00	599.23	599.81
2M	325+68.32	0.00	599.41	600.01
2N	325+78.32	0.00	599.59	600.20
2P	325+88.32	0.00	599.78	600.39
2Q	325+98.32	0.00	599.97	600.56
2R	326+08.32	0.00	600.17	600.73
2S	326+18.32	0.00	600.37	600.89
2T	326+28.32	0.00	600.58	601.04
2U	326+38.32	0.00	600.79	601.19
2V	326+48.32	0.00	601.01	601.33
2W	326+58.32	0.00	601.23	601.47
2X	326+68.32	0.00	601.45	601.60
2Y	326+78.32	0.00	601.68	601.73
CL. BRG. PIER 2	326+83.88	0.00	601.81	601.81
CL. JT. & PIER 2	326+85.46	0.00	601.85	601.85

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	322+94.34	6.50	594.24	594.24
CL. BRG. N. ABUT.	322+98.03	6.50	594.31	594.31
1A	323+08.03	6.50	594.51	594.52
1B	323+18.03	6.50	594.71	594.73
1C	323+28.03	6.50	594.90	594.94
1D	323+38.03	6.50	595.10	595.14
1E	323+48.03	6.50	595.29	595.33
1F	323+58.03	6.50	595.49	595.52
1G	323+68.03	6.50	595.68	595.70
1H	323+78.03	6.50	595.87	595.87
1J	323+88.03	6.50	596.06	596.04
1K	323+98.03	6.50	596.25	596.21
1L	324+08.03	6.50	596.43	596.39
1M	324+18.03	6.50	596.62	596.57
1N	324+28.03	6.50	596.80	596.75
1P	324+38.03	6.50	596.98	596.95
CL. BRG. PIER 1	324+50.50	6.50	597.21	597.21
2A	324+60.50	6.50	597.39	597.43
2B	324+70.50	6.50	597.56	597.65
2C	324+80.50	6.50	597.71	597.86
2D	324+90.50	6.50	597.87	598.08
2E	325+00.52	6.50	598.02	598.29
2F	325+10.55	6.50	598.17	598.51
2G	325+20.58	6.50	598.32	598.73
2H	325+30.62	6.50	598.47	598.94
2J	325+40.65	6.50	598.64	599.15
2K	325+50.68	6.50	598.81	599.36
2L	325+60.71	6.50	598.99	599.57
2M	325+70.75	6.50	599.17	599.77
2N	325+80.78	6.50	599.36	599.96
2P	325+90.81	6.50	599.55	600.15
2Q	326+00.84	6.50	599.74	600.32
2R	326+10.88	6.50	599.94	600.49
2S	326+20.91	6.50	600.15	600.65
2T	326+30.94	6.50	600.35	600.81
2U	326+40.97	6.50	600.57	600.96
2V	326+51.01	6.50	600.79	601.10
2W	326+61.04	6.50	601.01	601.24
2X	326+71.07	6.50	601.23	601.38
2Y	326+81.11	6.50	601.46	601.52
CL. BRG. PIER 2	326+86.78	6.50	601.60	601.60
CL. JT. & PIER 2	326+88.36	6.50	601.63	601.63

NOTE:

Stations and offsets measured from R Ramp 6th-C.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-017-Top of Slab Elevations Unit 1 of 6.dgn

USER NAME = ksnider

DESIGNED - TJJ/DTS

REVISED -

CHECKED - KWS

REVISOR -

PLOT SCALE =

DRAWN - KMS

REVISED -

PLOT DATE = 1/18/2017

CHECKED - KWS

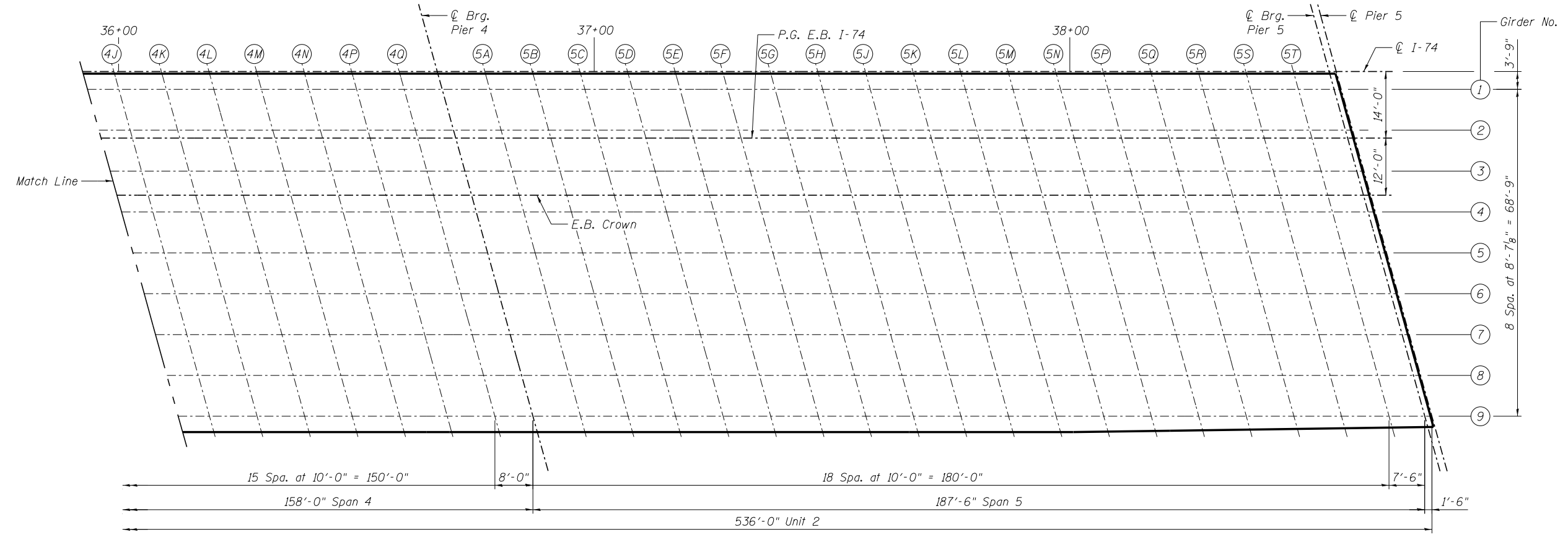
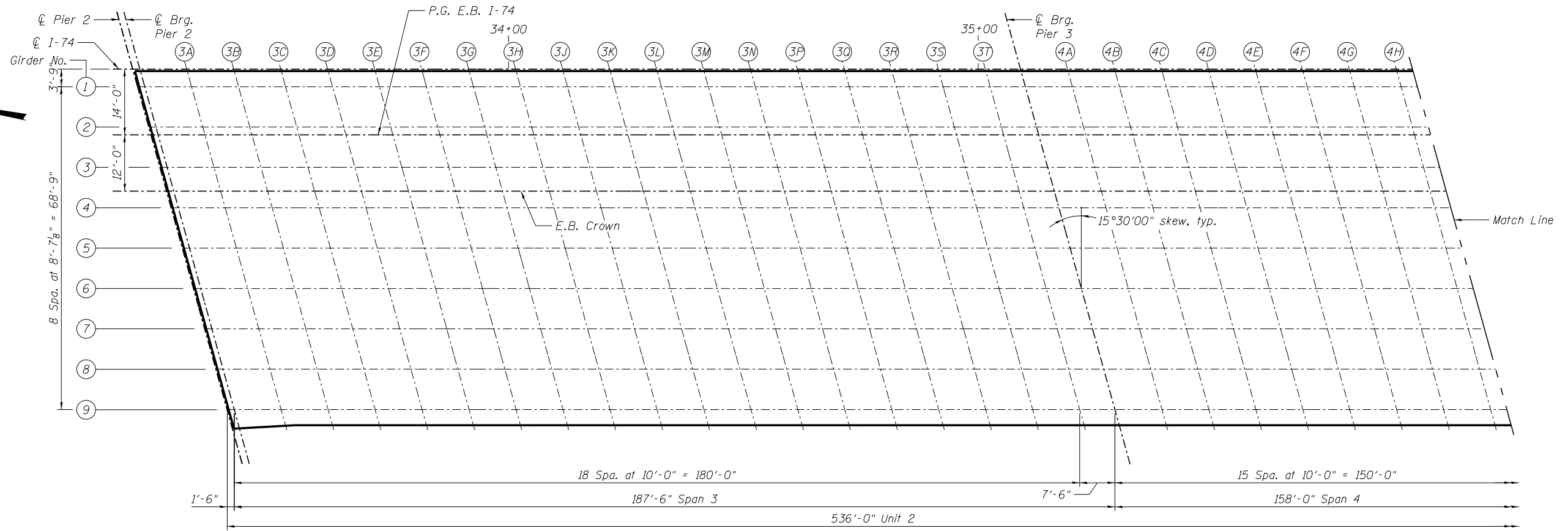
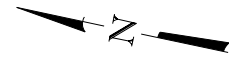
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 1 (6 of 6)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S17 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	906
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	



PLAN



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-018-Deck Elevation Plan Unit 2.dgn

USER NAME = ksnyder
DESIGNED - DTS
CHECKED - AJK
PLOT SCALE =
DRAWN - KMS
PLOT DATE = 1/18/2017
CHECKED - AJK
REVISED -

DESIGNED - DTS
CHECKED - AJK
DRAWN - KMS
CHECKED - AJK
REVISED -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK ELEVATION PLAN UNIT 2
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S18 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	907
CONTRACT NO. 64C08				

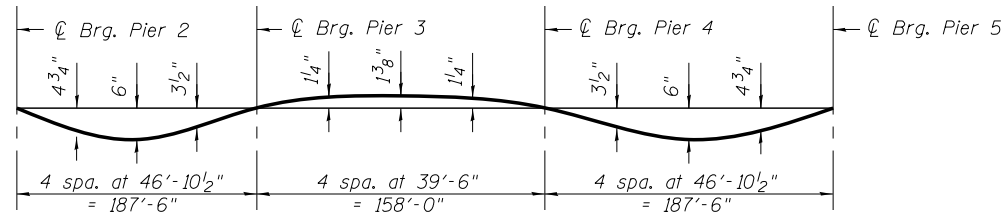
ILLINOIS FED. AID PROJECT

GIRDER 1

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+21.04	-10.25	602.50	602.50
CL. BRG. PIER 2	33+22.54	-10.25	602.53	602.53
3A	33+32.54	-10.25	602.74	602.84
3B	33+42.54	-10.25	602.95	603.14
3C	33+52.54	-10.25	603.15	603.42
3D	33+62.54	-10.25	603.35	603.69
3E	33+72.54	-10.25	603.54	603.95
3F	33+82.54	-10.25	603.73	604.18
3G	33+92.54	-10.25	603.91	604.40
3H	34+02.54	-10.25	604.09	604.60
3J	34+12.54	-10.25	604.27	604.77
3K	34+22.54	-10.25	604.44	604.93
3L	34+32.54	-10.25	604.61	605.07
3M	34+42.54	-10.25	604.78	605.19
3N	34+52.54	-10.25	604.94	605.30
3P	34+62.54	-10.25	605.10	605.39
3Q	34+72.54	-10.25	605.25	605.48
3R	34+82.54	-10.25	605.40	605.56
3S	34+92.54	-10.25	605.54	605.64
3T	35+02.54	-10.25	605.68	605.72
CL. BRG. PIER 3	35+10.04	-10.25	605.79	605.79
4A	35+20.04	-10.25	605.92	605.88
4B	35+30.04	-10.25	606.05	605.98
4C	35+40.04	-10.25	606.18	606.09
4D	35+50.04	-10.25	606.30	606.20
4E	35+60.04	-10.25	606.42	606.31
4F	35+70.04	-10.25	606.53	606.42
4G	35+80.04	-10.25	606.64	606.53
4H	35+90.04	-10.25	606.75	606.64
4J	36+00.04	-10.25	606.85	606.74
4K	36+10.04	-10.25	606.95	606.84
4L	36+20.04	-10.25	607.05	606.94
4M	36+30.04	-10.25	607.14	607.04
4N	36+40.04	-10.25	607.22	607.14
4P	36+50.04	-10.25	607.30	607.24
4Q	36+60.04	-10.25	607.38	607.35
CL. BRG. PIER 4	36+68.04	-10.25	607.44	607.44
5A	36+78.04	-10.25	607.51	607.57
5B	36+88.04	-10.25	607.58	607.69
5C	36+98.04	-10.25	607.64	607.82
5D	37+08.04	-10.25	607.70	607.95
5E	37+18.04	-10.25	607.76	608.07
5F	37+28.04	-10.25	607.81	608.18
5G	37+38.04	-10.25	607.86	608.29
5H	37+48.04	-10.25	607.91	608.38
5J	37+58.04	-10.25	607.96	608.46
5K	37+68.04	-10.25	608.01	608.52
5L	37+78.04	-10.25	608.06	608.56
5M	37+88.04	-10.25	608.11	608.60
5N	37+98.04	-10.25	608.16	608.61
5P	38+08.04	-10.25	608.21	608.61
5Q	38+18.04	-10.25	608.26	608.60
5R	38+28.04	-10.25	608.32	608.57
5S	38+38.04	-10.25	608.37	608.53
5T	38+48.04	-10.25	608.42	608.49
CL. BRG. PIER 5	38+55.54	-10.25	608.45	608.45
CL. JT. & PIER 5	38+57.04	-10.25	608.46	608.46

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+23.42	-1.66	602.72	602.72
CL. BRG. PIER 2	33+24.92	-1.66	602.76	602.76
3A	33+34.92	-1.66	602.96	603.06
3B	33+44.92	-1.66	603.17	603.36
3C	33+54.92	-1.66	603.37	603.64
3D	33+64.92	-1.66	603.56	603.91
3E	33+74.92	-1.66	603.76	604.16
3F	33+84.92	-1.66	603.94	604.40
3G	33+94.92	-1.66	604.13	604.62
3H	34+04.92	-1.66	604.31	604.81
3J	34+14.92	-1.66	604.48	604.99
3K	34+24.92	-1.66	604.66	605.14
3L	34+34.92	-1.66	604.82	605.28
3M	34+44.92	-1.66	604.99	605.40
3N	34+54.92	-1.66	605.15	605.51
3P	34+64.92	-1.66	605.30	605.60
3Q	34+74.92	-1.66	605.46	605.69
3R	34+84.92	-1.66	605.61	605.77
3S	34+94.92	-1.66	605.75	605.85
3T	35+04.92	-1.66	605.89	605.93
CL. BRG. PIER 3	35+12.42	-1.66	605.99	605.99
4A	35+22.42	-1.66	606.13	606.09
4B	35+32.42	-1.66	606.25	606.19
4C	35+42.42	-1.66	606.38	606.29
4D	35+52.42	-1.66	606.50	606.40
4E	35+62.42	-1.66	606.62	606.51
4F	35+72.42	-1.66	606.73	606.62
4G	35+82.42	-1.66	606.84	606.73
4H	35+92.42	-1.66	606.95	606.83
4J	36+02.42	-1.66	607.05	606.93
4K	36+12.42	-1.66	607.15	607.03
4L	36+22.42	-1.66	607.24	607.13
4M	36+32.42	-1.66	607.33	607.23
4N	36+42.42	-1.66	607.41	607.33
4P	36+52.42	-1.66	607.50	607.43
4Q	36+62.42	-1.66	607.57	607.54
CL. BRG. PIER 4	36+70.42	-1.66	607.63	607.63
5A	36+80.42	-1.66	607.70	607.76
5B	36+90.42	-1.66	607.77	607.88
5C	37+00.42	-1.66	607.83	608.01
5D	37+10.42	-1.66	607.89	608.14
5E	37+20.42	-1.66	607.94	608.26
5F	37+30.42	-1.66	607.99	608.37
5G	37+40.42	-1.66	608.04	608.47
5H	37+50.42	-1.66	608.10	608.56
5J	37+60.42	-1.66	608.15	608.64
5K	37+70.42	-1.66	608.20	608.70
5L	37+80.42	-1.66	608.25	608.75
5M	37+90.42	-1.66	608.30	608.78
5N	38+00.42	-1.66	608.35	608.79
5P	38+10.42	-1.66	608.40	608.79
5Q	38+20.42	-1.66	608.45	608.78
5R	38+30.42	-1.66	608.50	608.75
5S	38+40.42	-1.66	608.55	608.72
5T	38+50.42	-1.66	608.60	608.67
CL. BRG. PIER 5	38+57.92	-1.66	608.64	608.64
CL. JT. & PIER 5	38+59.42	-1.66	608.65	608.65

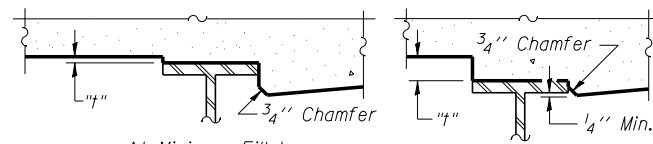


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S19 thru S22.



At Minimum Fillet

At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-019-Top of Slab Elevations Unit 2 (1 of 4).dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISIONS -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISIONS -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISIONS -
		CHECKED - AJK	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 2 (1 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S19 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	908
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

1/18/2017 11:45:24 AM c:\pwise_work\do_not_delete\dms02467\081-0178-C00AB-019-Top of Slab Elevations Unit 2 (1 of 4).dgn

P.G. E.B. I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+23.88	0.00	602.77	602.77
CL. BRG. PIER 2	33+25.38	0.00	602.80	602.80
3A	33+35.38	0.00	603.01	603.10
3B	33+45.38	0.00	603.21	603.40
3C	33+55.38	0.00	603.41	603.68
3D	33+65.38	0.00	603.61	603.95
3E	33+75.38	0.00	603.80	604.21
3F	33+85.38	0.00	603.99	604.44
3G	33+95.38	0.00	604.17	604.66
3H	34+05.38	0.00	604.35	604.85
3J	34+15.38	0.00	604.53	605.03
3K	34+25.38	0.00	604.70	605.18
3L	34+35.38	0.00	604.87	605.32
3M	34+45.38	0.00	605.03	605.44
3N	34+55.38	0.00	605.19	605.55
3P	34+65.38	0.00	605.35	605.64
3Q	34+75.38	0.00	605.50	605.73
3R	34+85.38	0.00	605.65	605.81
3S	34+95.38	0.00	605.79	605.89
3T	35+05.38	0.00	605.93	605.97
CL. BRG. PIER 3	35+12.88	0.00	606.03	606.03
4A	35+22.88	0.00	606.16	606.13
4B	35+32.88	0.00	606.29	606.23
4C	35+42.88	0.00	606.42	606.33
4D	35+52.88	0.00	606.54	606.44
4E	35+62.88	0.00	606.66	606.55
4F	35+72.88	0.00	606.77	606.66
4G	35+82.88	0.00	606.88	606.77
4H	35+92.88	0.00	606.98	606.87
4J	36+02.88	0.00	607.09	606.97
4K	36+12.88	0.00	607.18	607.07
4L	36+22.88	0.00	607.28	607.17
4M	36+32.88	0.00	607.37	607.27
4N	36+42.88	0.00	607.45	607.37
4P	36+52.88	0.00	607.53	607.47
4Q	36+62.88	0.00	607.61	607.58
CL. BRG. PIER 4	36+70.88	0.00	607.67	607.67
5A	36+80.88	0.00	607.74	607.79
5B	36+90.88	0.00	607.80	607.92
5C	37+00.88	0.00	607.87	608.04
5D	37+10.88	0.00	607.92	608.17
5E	37+20.88	0.00	607.98	608.29
5F	37+30.88	0.00	608.03	608.40
5G	37+40.88	0.00	608.08	608.51
5H	37+50.88	0.00	608.13	608.60
5J	37+60.88	0.00	608.18	608.67
5K	37+70.88	0.00	608.23	608.74
5L	37+80.88	0.00	608.28	608.78
5M	37+90.88	0.00	608.33	608.81
5N	38+00.88	0.00	608.38	608.83
5P	38+10.88	0.00	608.43	608.83
5Q	38+20.88	0.00	608.48	608.81
5R	38+30.88	0.00	608.53	608.79
5S	38+40.88	0.00	608.59	608.75
5T	38+50.88	0.00	608.64	608.71
CL. BRG. PIER 5	38+58.38	0.00	608.67	608.67
CL. JT. & PIER 5	38+59.88	0.00	608.68	608.68

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+25.80	6.94	602.95	602.95
CL. BRG. PIER 2	33+27.30	6.94	602.98	602.98
3A	33+37.30	6.94	603.18	603.28
3B	33+47.30	6.94	603.39	603.58
3C	33+57.30	6.94	603.59	603.86
3D	33+67.30	6.94	603.78	604.13
3E	33+77.30	6.94	603.97	604.38
3F	33+87.30	6.94	604.16	604.62
3G	33+97.30	6.94	604.34	604.83
3H	34+07.30	6.94	604.52	605.03
3J	34+17.30	6.94	604.70	605.20
3K	34+27.30	6.94	604.87	605.36
3L	34+37.30	6.94	605.04	605.49
3M	34+47.30	6.94	605.20	605.61
3N	34+57.30	6.94	605.36	605.72
3P	34+67.30	6.94	605.51	605.81
3Q	34+77.30	6.94	605.66	605.90
3R	34+87.30	6.94	605.81	605.97
3S	34+97.30	6.94	605.96	606.05
3T	35+07.30	6.94	606.09	606.13
CL. BRG. PIER 3	35+14.80	6.94	606.20	606.20
4A	35+24.80	6.94	606.33	606.29
4B	35+34.80	6.94	606.46	606.39
4C	35+44.80	6.94	606.58	606.49
4D	35+54.80	6.94	606.70	606.60
4E	35+64.80	6.94	606.82	606.71
4F	35+74.80	6.94	606.93	606.82
4G	35+84.80	6.94	607.04	606.92
4H	35+94.80	6.94	607.14	607.03
4J	36+04.80	6.94	607.24	607.13
4K	36+14.80	6.94	607.34	607.23
4L	36+24.80	6.94	607.43	607.33
4M	36+34.80	6.94	607.52	607.42
4N	36+44.80	6.94	607.61	607.52
4P	36+54.80	6.94	607.69	607.62
4Q	36+64.80	6.94	607.76	607.73
CL. BRG. PIER 4	36+72.80	6.94	607.82	607.82
5A	36+82.80	6.94	607.89	607.94
5B	36+92.80	6.94	607.96	608.07
5C	37+02.80	6.94	608.02	608.19
5D	37+12.80	6.94	608.07	608.32
5E	37+22.80	6.94	608.13	608.44
5F	37+32.80	6.94	608.18	608.55
5G	37+42.80	6.94	608.23	608.65
5H	37+52.80	6.94	608.28	608.75
5J	37+62.80	6.94	608.33	608.82
5K	37+72.80	6.94	608.38	608.89
5L	37+82.80	6.94	608.43	608.93
5M	37+92.80	6.94	608.48	608.96
5N	38+02.80	6.94	608.53	608.98
5P	38+12.80	6.94	608.58	608.98
5Q	38+22.80	6.94	608.63	608.96
5R	38+32.80	6.94	608.68	608.94
5S	38+42.80	6.94	608.73	608.90
5T	38+52.80	6.94	608.78	608.86
CL. BRG. PIER 5	38+60.30	6.94	608.82	608.82
CL. JT. & PIER 5	38+61.80	6.94	608.83	608.83

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+28.19	15.53	603.03	603.03
CL. BRG. PIER 2	33+29.69	15.53	603.06	603.06
3A	33+39.69	15.53	603.26	603.36
3B	33+49.69	15.53	603.47	603.65
3C	33+59.69	15.53	603.66	603.94
3D	33+69.69	15.53	603.86	604.20
3E	33+79.69	15.53	604.05	604.46
3F	33+89.69	15.53	604.23	604.69
3G	33+99.69	15.53	604.42	604.90
3H	34+09.69	15.53	604.59	605.10
3J	34+19.69	15.53	604.77	605.27
3K	34+29.69	15.53	604.94	605.43
3L	34+39.69	15.53	605.11	605.56
3M	34+49.69	15.53	605.27	605.68
3N	34+59.69	15.53	605.43	605.79
3P	34+69.69	15.53	605.58	605.88
3Q	34+79.69	15.53	605.73	605.96
3R	34+89.69	15.53	605.88	606.04
3S	34+99.69	15.53	606.02	606.12
3T	35+09.69	15.53	606.16	606.20
CL. BRG. PIER 3	35+17.19	15.53	606.26	606.26
4A	35+27.19	15.53	606.39	606.35
4B	35+37.19	15.53	606.52	606.45
4C	35+47.19	15.53	606.64	606.55
4D	35+57.19	15.53	606.76	606.66
4E	35+67.19	15.53	606.88	606.77
4F	35+77.19	15.53	606.99	606.87
4G	35+87.19	15.53	607.09	606.98
4H	35+97.19	15.53	607.20	607.08
4J	36+07.19	15.53	607.30	607.18
4K	36+17.19	15.53	607.39	607.28
4L	36+27.19	15.53	607.48	607.38
4M	36+37.19	15.53	607.57	607.47
4N	36+47.19	15.53	607.66	607.57
4P	36+57.19	15.53	607.74	607.67
4Q	36+67.19	15.53	607.81	607.78
CL. BRG. PIER 4	36+75.19	15.53	607.87	607.87
5A	36+85.19	15.53	607.94	607.99
5B	36+95.19	15.53	608.00	608.11
5C	37+05.19	15.53	608.06	608.24
5D	37+15.19	15.53	608.12	608.36
5E	37+25.19	15.53	608.17	608.48
5F	37+35.19	15.53	608.22	608.59
5G	37+45.19	15.53	608.27	608.70
5H	37+55.19	15.53	608.32	608.79
5J	37+65.19	15.53	608.37	608.87
5K	37+75.19	15.53	608.42	608.93
5L	37+85.19	15.53	608.47	608.98
5M	37+95.19	15.53	608.52	609.01
5N	38+05.19	15.53	608.57	609.02
5P	38+15.19	15.53	608.62	609.02
5Q	38+25.19	15.53	608.68	609.01
5R	38+35.19	15.53	608.73	608.98
5S	38+45.19	15.53	608.78	608.94
5T	38+55.19	15.53	608.83	608.90
CL. BRG. PIER 5	38+62.69	15.53	608.86	608.86
CL. JT. & PIER 5	38+64.19	15.53	608.87	608.87

NOTE:
Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-028-Top of Slab Elevations Unit 2 (2 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 2 (2 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S20 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	909
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+30.57	24.13	602.90	602.90
CL. BRG. PIER 2	33+32.07	24.13	602.93	602.93
3A	33+42.07	24.13	603.14	603.24
3B	33+52.07	24.13	603.34	603.53
3C	33+62.07	24.13	603.54	603.81
3D	33+72.07	24.13	603.73	604.08
3E	33+82.07	24.13	603.92	604.33
3F	33+92.07	24.13	604.11	604.56
3G	34+02.07	24.13	604.29	604.78
3H	34+12.07	24.13	604.46	604.97
3J	34+22.07	24.13	604.64	605.14
3K	34+32.07	24.13	604.81	605.30
3L	34+42.07	24.13	604.97	605.43
3M	34+52.07	24.13	605.13	605.55
3N	34+62.07	24.13	605.29	605.65
3P	34+72.07	24.13	605.44	605.74
3Q	34+82.07	24.13	605.59	605.82
3R	34+92.07	24.13	605.74	605.90
3S	35+02.07	24.13	605.88	605.98
3T	35+12.07	24.13	606.02	606.06
CL. BRG. PIER 3	35+19.57	24.13	606.12	606.12
4A	35+29.57	24.13	606.25	606.21
4B	35+39.57	24.13	606.38	606.31
4C	35+49.57	24.13	606.50	606.41
4D	35+59.57	24.13	606.62	606.52
4E	35+69.57	24.13	606.73	606.62
4F	35+79.57	24.13	606.84	606.73
4G	35+89.57	24.13	606.95	606.83
4H	35+99.57	24.13	607.05	606.94
4J	36+09.57	24.13	607.15	607.03
4K	36+19.57	24.13	607.24	607.13
4L	36+29.57	24.13	607.33	607.23
4M	36+39.57	24.13	607.42	607.32
4N	36+49.57	24.13	607.50	607.42
4P	36+59.57	24.13	607.58	607.52
4Q	36+69.57	24.13	607.66	607.62
CL. BRG. PIER 4	36+77.57	24.13	607.71	607.71
5A	36+87.57	24.13	607.78	607.83
5B	36+97.57	24.13	607.84	607.96
5C	37+07.57	24.13	607.90	608.08
5D	37+17.57	24.13	607.96	608.21
5E	37+27.57	24.13	608.01	608.32
5F	37+37.57	24.13	608.06	608.43
5G	37+47.57	24.13	608.11	608.54
5H	37+57.57	24.13	608.16	608.63
5J	37+67.57	24.13	608.21	608.71
5K	37+77.57	24.13	608.26	608.77
5L	37+87.57	24.13	608.31	608.82
5M	37+97.57	24.13	608.36	608.85
5N	38+07.57	24.13	608.41	608.86
5P	38+17.57	24.13	608.46	608.86
5Q	38+27.57	24.13	608.52	608.85
5R	38+37.57	24.13	608.57	608.82
5S	38+47.57	24.13	608.62	608.78
5T	38+57.57	24.13	608.67	608.74
CL. BRG. PIER 5	38+65.07	24.13	608.70	608.70
CL. JT. & PIER 5	38+66.57	24.13	608.71	608.71

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+32.95	32.72	602.78	602.78
CL. BRG. PIER 2	33+34.45	32.72	602.81	602.81
3A	33+44.45	32.72	603.02	603.11
3B	33+54.45	32.72	603.22	603.40
3C	33+64.45	32.72	603.41	603.69
3D	33+74.45	32.72	603.61	603.95
3E	33+84.45	32.72	603.79	604.20
3F	33+94.45	32.72	603.98	604.43
3G	34+04.45	32.72	604.16	604.65
3H	34+14.45	32.72	604.33	604.84
3J	34+24.45	32.72	604.51	605.01
3K	34+34.45	32.72	604.68	605.16
3L	34+44.45	32.72	604.84	605.30
3M	34+54.45	32.72	605.00	605.41
3N	34+64.45	32.72	605.16	605.52
3P	34+74.45	32.72	605.31	605.61
3Q	34+84.45	32.72	605.46	605.69
3R	34+94.45	32.72	605.60	605.76
3S	35+04.45	32.72	605.74	605.84
3T	35+14.45	32.72	605.88	605.92
CL. BRG. PIER 3	35+21.95	32.72	605.98	605.98
4A	35+31.95	32.72	606.11	606.07
4B	35+41.95	32.72	606.23	606.17
4C	35+51.95	32.72	606.35	606.27
4D	35+61.95	32.72	606.47	606.37
4E	35+71.95	32.72	606.59	606.48
4F	35+81.95	32.72	606.70	606.58
4G	35+91.95	32.72	606.80	606.69
4H	36+01.95	32.72	606.90	606.79
4J	36+11.95	32.72	607.00	606.89
4K	36+21.95	32.72	607.09	606.98
4L	36+31.95	32.72	607.18	607.08
4M	36+41.95	32.72	607.27	607.17
4N	36+51.95	32.72	607.35	607.27
4P	36+61.95	32.72	607.43	607.36
4Q	36+71.95	32.72	607.50	607.47
CL. BRG. PIER 4	36+79.95	32.72	607.56	607.56
5A	36+89.95	32.72	607.62	607.68
5B	36+99.95	32.72	607.69	607.80
5C	37+09.95	32.72	607.75	607.92
5D	37+19.95	32.72	607.80	608.05
5E	37+29.95	32.72	607.85	608.16
5F	37+39.95	32.72	607.90	608.28
5G	37+49.95	32.72	607.95	608.38
5H	37+59.95	32.72	608.00	608.47
5J	37+69.95	32.72	608.05	608.55
5K	37+79.95	32.72	608.10	608.61
5L	37+89.95	32.72	608.15	608.66
5M	37+99.95	32.72	608.20	608.69
5N	38+09.95	32.72	608.25	608.70
5P	38+19.95	32.72	608.31	608.70
5Q	38+29.95	32.72	608.36	608.69
5R	38+39.95	32.72	608.41	608.66
5S	38+49.95	32.72	608.46	608.62
5T	38+59.95	32.72	608.51	608.58
CL. BRG. PIER 5	38+67.45	32.72	608.55	608.55
CL. JT. & PIER 5	38+68.95	32.72	608.55	608.55

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+35.34	41.31	602.66	602.66
CL. BRG. PIER 2	33+36.84	41.31	602.69	602.69
3A	33+46.84	41.31	602.89	602.99
3B	33+56.84	41.31	603.09	603.28
3C	33+66.84	41.31	603.29	603.56
3D	33+76.84	41.31	603.48	603.83
3E	33+86.84	41.31	603.67	604.07
3F	33+96.84	41.31	603.85	604.31
3G	34+06.84	41.31	604.03	604.52
3H	34+16.84	41.31	604.20	604.71
3J	34+26.84	41.31	604.38	604.88
3K	34+36.84	41.31	604.54	605.03
3L	34+46.84	41.31	604.71	605.16
3M	34+56.84	41.31	604.87	605.28
3N	34+66.84	41.31	605.02	605.38
3P	34+76.84	41.31	605.17	605.47
3Q	34+86.84	41.31	605.32	605.55
3R	34+96.84	41.31	605.46	605.62
3S	35+06.84	41.31	605.60	605.70
3T	35+16.84	41.31	605.74	605.78
CL. BRG. PIER 3	35+24.34	41.31	605.84	605.84
4A	35+34.34	41.31	605.97	605.93
4B	35+44.34	41.31	606.09	606.02
4C	35+54.34	41.31	606.21	606.12
4D	35+64.34	41.31	606.33	606.23
4E	35+74.34	41.31	606.44	606.33
4F	35+84.34	41.31	606.55	606.44
4G	35+94.34	41.31	606.65	606.54
4H	36+04.34	41.31	606.75	606.64
4J	36+14.34	41.31	606.85	606.74
4K	36+24.34	41.31	606.94	606.83
4L	36+34.34	41.31	607.03	606.92
4M	36+44.34	41.31	607.12	607.02
4N	36+54.34	41.31	607.20	607.11
4P	36+64.34	41.31	607.27	607.21
4Q	36+74.34	41.31	607.35	607.31
CL. BRG. PIER 4	36+82.34	41.31	607.40	607.40
5A	36+92.34	41.31	607.47	607.52
5B	37+02.34	41.31	607.53	607.64
5C	37+12.34	41.31	607.59	607.76
5D	37+22.34	41.31	607.64	607.89
5E	37+32.34	41.31	607.69	608.00
5F	37+42.34	41.31	607.74	608.12
5G	37+52.34	41.31	607.79	608.22
5H	37+62.34	41.31	607.84	608.31
5J	37+72.34	41.31	607.89	608.39
5K	37+82.34	41.31	607.94	608.45
5L	37+92.34	41.31	607.99	608.50
5M	38+02.34	41.31	608.04	608.53
5N	38+12.34	41.31	608.09	608.54
5P	38+22.34	41.31	608.15	608.54
5Q	38+32.34	41.31	608.20	608.53
5R	38+42.34	41.31	608.25	608.50
5S	38+52.34	41.31	608.30	608.46
5T	38+62.34	41.31	608.35	608.42
CL. BRG. PIER 5	38+69.84	41.31	608.39	608.39
CL. JT. & PIER 5	38+71.34	41.31	608.39	608.39

NOTE:
Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME - 081-0178-C00AB-021-Top of Slab Elevations Unit 2 (3 of 4).dgn
MODEL: Default

USER NAME - ksnider
PLOT SCALE -
PLOT DATE - 1/18/2017

DESIGNED - DTS
CHECKED - AJK
DRAWN - KMS
CHECKED - AJK

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 2 (3 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S21 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	910
ILLINOIS FED. AID PROJECT			CONTRACT	

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+37.72	49.91	602.54	602.54
CL. BRG. PIER 2	33+39.22	49.91	602.57	602.57
3A	33+49.22	49.91	602.77	602.87
3B	33+59.22	49.91	602.97	603.16
3C	33+69.22	49.91	603.16	603.43
3D	33+79.22	49.91	603.35	603.70
3E	33+89.22	49.91	603.54	603.95
3F	33+99.22	49.91	603.72	604.18
3G	34+09.22	49.91	603.90	604.39
3H	34+19.22	49.91	604.07	604.58
3J	34+29.22	49.91	604.24	604.75
3K	34+39.22	49.91	604.41	604.90
3L	34+49.22	49.91	604.57	605.03
3M	34+59.22	49.91	604.73	605.15
3N	34+69.22	49.91	604.89	605.25
3P	34+79.22	49.91	605.04	605.33
3Q	34+89.22	49.91	605.18	605.41
3R	34+99.22	49.91	605.33	605.49
3S	35+09.22	49.91	605.46	605.56
3T	35+19.22	49.91	605.60	605.64
CL. BRG. PIER 3	35+26.72	49.91	605.70	605.70
4A	35+36.72	49.91	605.82	605.79
4B	35+46.72	49.91	605.95	605.88
4C	35+56.72	49.91	606.07	605.98
4D	35+66.72	49.91	606.18	606.08
4E	35+76.72	49.91	606.29	606.19
4F	35+86.72	49.91	606.40	606.29
4G	35+96.72	49.91	606.51	606.39
4H	36+06.72	49.91	606.61	606.49
4J	36+16.72	49.91	606.70	606.59
4K	36+26.72	49.91	606.79	606.68
4L	36+36.72	49.91	606.88	606.77
4M	36+46.72	49.91	606.96	606.87
4N	36+56.72	49.91	607.04	606.96
4P	36+66.72	49.91	607.12	607.06
4Q	36+76.72	49.91	607.19	607.16
CL. BRG. PIER 4	36+84.72	49.91	607.25	607.25
5A	36+94.72	49.91	607.31	607.36
5B	37+04.72	49.91	607.37	607.48
5C	37+14.72	49.91	607.43	607.61
5D	37+24.72	49.91	607.48	607.73
5E	37+34.72	49.91	607.53	607.84
5F	37+44.72	49.91	607.58	607.96
5G	37+54.72	49.91	607.63	608.06
5H	37+64.72	49.91	607.68	608.15
5J	37+74.72	49.91	607.73	608.23
5K	37+84.72	49.91	607.78	608.29
5L	37+94.72	49.91	607.83	608.34
5M	38+04.72	49.91	607.88	608.37
5N	38+14.72	49.91	607.93	608.38
5P	38+24.72	49.91	607.99	608.38
5Q	38+34.72	49.91	608.04	608.37
5R	38+44.72	49.91	608.09	608.34
5S	38+54.72	49.91	608.14	608.30
5T	38+64.72	49.91	608.19	608.26
CL. BRG. PIER 5	38+72.22	49.91	608.23	608.23
CL. JT. & PIER 5	38+73.72	49.91	608.23	608.23

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 2	33+40.10	58.50	602.41	602.41
CL. BRG. PIER 2	33+41.60	58.50	602.44	602.44
3A	33+51.60	58.50	602.64	602.74
3B	33+61.60	58.50	602.84	603.03
3C	33+71.60	58.50	603.04	603.31
3D	33+81.60	58.50	603.22	603.57
3E	33+91.60	58.50	603.41	603.82
3F	34+01.60	58.50	603.59	604.05
3G	34+11.60	58.50	603.77	604.26
3H	34+21.60	58.50	603.94	604.45
3J	34+31.60	58.50	604.11	604.62
3K	34+41.60	58.50	604.28	604.77
3L	34+51.60	58.50	604.44	604.90
3M	34+61.60	58.50	604.60	605.01
3N	34+71.60	58.50	604.75	605.11
3P	34+81.60	58.50	604.90	605.20
3Q	34+91.60	58.50	605.05	605.28
3R	35+01.60	58.50	605.19	605.35
3S	35+11.60	58.50	605.32	605.42
3T	35+21.60	58.50	605.46	605.50
CL. BRG. PIER 3	35+29.10	58.50	605.56	605.56
4A	35+39.10	58.50	605.68	605.64
4B	35+49.10	58.50	605.80	605.74
4C	35+59.10	58.50	605.92	605.84
4D	35+69.10	58.50	606.04	605.94
4E	35+79.10	58.50	606.15	606.04
4F	35+89.10	58.50	606.26	606.14
4G	35+99.10	58.50	606.36	606.24
4H	36+09.10	58.50	606.46	606.34
4J	36+19.10	58.50	606.55	606.44
4K	36+29.10	58.50	606.64	606.53
4L	36+39.10	58.50	606.73	606.62
4M	36+49.10	58.50	606.81	606.71
4N	36+59.10	58.50	606.89	606.81
4P	36+69.10	58.50	606.97	606.90
4Q	36+79.10	58.50	607.04	607.00
CL. BRG. PIER 4	36+87.10	58.50	607.09	607.09
5A	36+97.10	58.50	607.15	607.21
5B	37+07.10	58.50	607.21	607.33
5C	37+17.10	58.50	607.27	607.45
5D	37+27.10	58.50	607.32	607.57
5E	37+37.10	58.50	607.37	607.68
5F	37+47.10	58.50	607.42	607.80
5G	37+57.10	58.50	607.47	607.90
5H	37+67.10	58.50	607.52	607.99
5J	37+77.10	58.50	607.57	608.07
5K	37+87.10	58.50	607.62	608.13
5L	37+97.10	58.50	607.67	608.18
5M	38+07.10	58.50	607.72	608.21
5N	38+17.10	58.50	607.78	608.22
5P	38+27.10	58.50	607.83	608.22
5Q	38+37.10	58.50	607.88	608.21
5R	38+47.10	58.50	607.93	608.18
5S	38+57.10	58.50	607.98	608.14
5T	38+67.10	58.50	608.03	608.10
CL. BRG. PIER 5	38+74.60	58.50	608.07	608.07
CL. JT. & PIER 5	38+76.10	58.50	608.07	608.07

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-022-Top of Slab Elevations Unit 2 (4 of 4).dgn
MODEL: Default

USER NAME = ksnider
DESIGNED - DTS
CHECKED - AJK
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - DTS
CHECKED - AJK
DRAWN - KMS
CHECKED - AJK

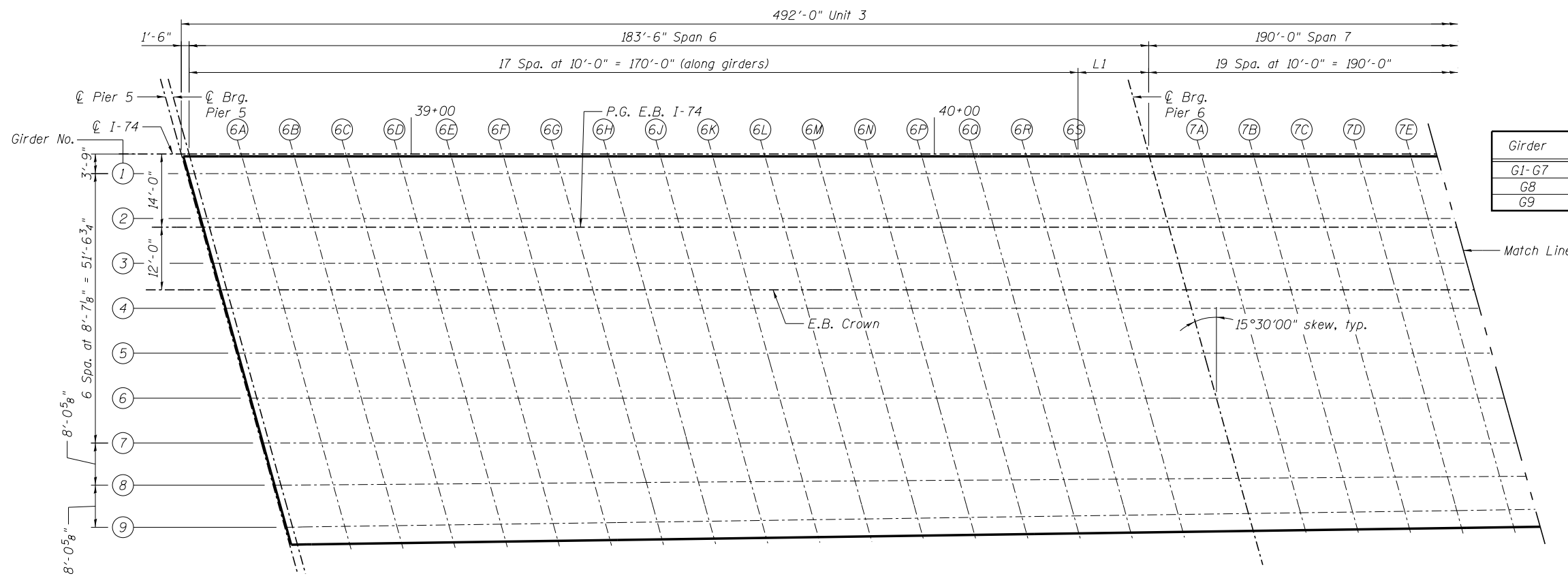
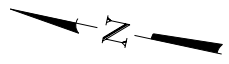
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

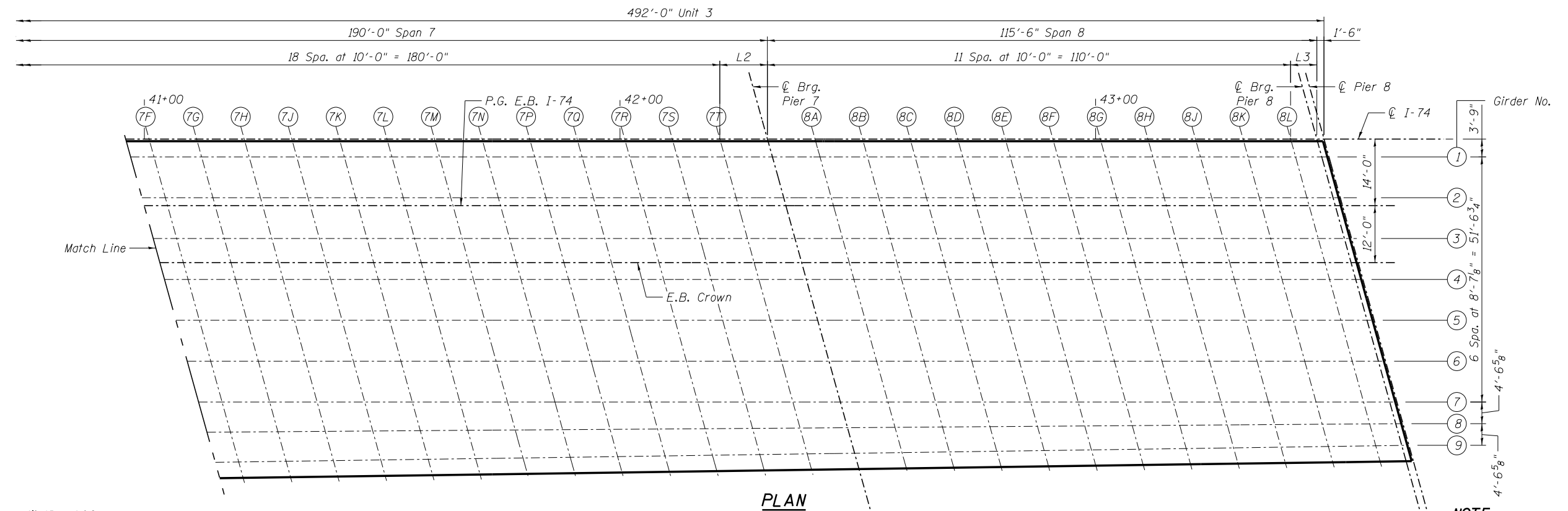
TOP OF SLAB ELEVATIONS UNIT 2 (4 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S22 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	911
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	



Girder	L1	L2	L3
G1-G7	13'-6"	10'-0"	5'-6"
G8	13'-1 ⁵ / ₈ "	9'-7 ¹ / ₂ "	5'-3 ¹ / ₄ "
G9	12'-9 ¹ / ₄ "	9'-3"	5'-0 ¹ / ₂ "



PLAN

NOTE:
1. Girder Spacing measured at C of Piers.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C000AB-023-Deck Elevation Plan Unit 3.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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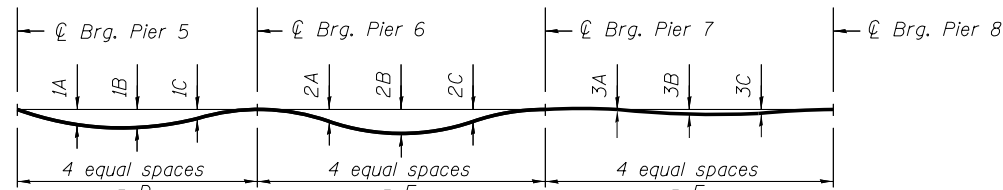
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK ELEVATION PLAN UNIT 3
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S23 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	912
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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DEAD LOAD DEFLECTION DIAGRAM

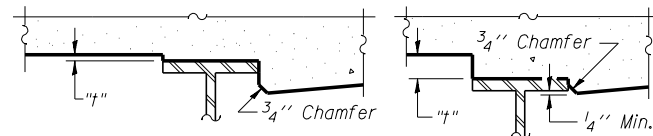
(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S24 thru S27.

DEAD LOAD DEFLECTION TABLE

Girder	IA	IB	IC	2A	2B	2C	3A	3B	3C	D	E	F
1-6	3/4"	3/4"	1 3/4"	3/4"	2"	1 1/4"	0"	1/4"	1/4"	183'-6"	190'-0"	115'-6"
7	3/8"	3/8"	1 3/4"	1/2"	1 5/8"	1"	0"	1/8"	1/4"	183'-6"	190'-0"	115'-6"
8	3"	3 5/8"	1 3/4"	3/8"	1 1/4"	7/8"	0"	1/8"	1/8"	183'-1 5/8"	189'-7 1/2"	115'-3 1/4"
9	3/8"	3 5/8"	1 3/4"	1/2"	1 5/8"	1"	0"	1/8"	1/4"	182'-9 1/4"	189'-3"	115'-0 1/2"



At Minimum Fillet

At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+57.04	-10.25	608.46	608.46
CL. BRG. PIER 5	38+58.54	-10.25	608.47	608.47
6A	38+68.54	-10.25	608.52	608.59
6B	38+78.54	-10.25	608.57	608.71
6C	38+88.54	-10.25	608.62	608.82
6D	38+98.54	-10.25	608.67	608.92
6E	39+08.54	-10.25	608.72	609.00
6F	39+18.54	-10.25	608.77	609.08
6G	39+28.54	-10.25	608.82	609.15
6H	39+38.54	-10.25	608.87	609.20
6J	39+48.54	-10.25	608.92	609.24
6K	39+58.54	-10.25	608.97	609.27
6L	39+68.54	-10.25	609.02	609.29
6M	39+78.54	-10.25	609.08	609.30
6N	39+88.54	-10.25	609.13	609.31
6P	39+98.54	-10.25	609.18	609.31
6Q	40+08.54	-10.25	609.23	609.32
6R	40+18.54	-10.25	609.28	609.33
6S	40+28.54	-10.25	609.33	609.35
CL. BRG. PIER 6	40+42.04	-10.25	609.40	609.40
7A	40+52.04	-10.25	609.45	609.44
7B	40+62.04	-10.25	609.50	609.50
7C	40+72.04	-10.25	609.55	609.57
7D	40+82.04	-10.25	609.60	609.64
7E	40+92.04	-10.25	609.65	609.72
7F	41+02.04	-10.25	609.70	609.80
7G	41+12.04	-10.25	609.75	609.87
7H	41+22.04	-10.25	609.80	609.94
7J	41+32.04	-10.25	609.85	610.01
7K	41+42.04	-10.25	609.90	610.06
7L	41+52.04	-10.25	609.95	610.11
7M	41+62.04	-10.25	610.00	610.15
7N	41+72.04	-10.25	610.05	610.18
7P	41+82.04	-10.25	610.10	610.21
7Q	41+92.04	-10.25	610.15	610.24
7R	42+02.04	-10.25	610.20	610.26
7S	42+12.04	-10.25	610.25	610.29
7T	42+22.04	-10.25	610.31	610.32
CL. BRG. PIER 7	42+32.04	-10.25	610.36	610.36
8A	42+42.04	-10.25	610.41	610.40
8B	42+52.04	-10.25	610.46	610.45
8C	42+62.04	-10.25	610.51	610.50
8D	42+72.04	-10.25	610.56	610.56
8E	42+82.04	-10.25	610.61	610.62
8F	42+92.04	-10.25	610.66	610.68
8G	43+02.04	-10.25	610.71	610.73
8H	43+12.04	-10.25	610.76	610.79
8J	43+22.04	-10.25	610.81	610.83
8K	43+32.04	-10.25	610.86	610.88
8L	43+42.04	-10.25	610.91	610.92
CL. BRG. PIER 8	43+47.54	-10.25	610.94	610.94
CL. JT. & PIER 8	43+49.04	-10.25	610.95	610.95

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+59.42	-1.66	608.65	608.65
CL. BRG. PIER 5	38+60.92	-1.66	608.65	608.65
6A	38+70.92	-1.66	608.70	608.77
6B	38+80.92	-1.66	608.75	608.89
6C	38+90.92	-1.66	608.80	609.00
6D	39+00.92	-1.66	608.86	609.10
6E	39+10.92	-1.66	608.91	609.19
6F	39+20.92	-1.66	608.96	609.27
6G	39+30.92	-1.66	609.01	609.33
6H	39+40.92	-1.66	609.06	609.38
6J	39+50.92	-1.66	609.11	609.42
6K	39+60.92	-1.66	609.16	609.45
6L	39+70.92	-1.66	609.21	609.47
6M	39+80.92	-1.66	609.26	609.48
6N	39+90.92	-1.66	609.31	609.49
6P	40+00.92	-1.66	609.36	609.49
6Q	40+10.92	-1.66	609.41	609.50
6R	40+20.92	-1.66	609.46	609.52
6S	40+30.92	-1.66	609.51	609.54
CL. BRG. PIER 6	40+44.42	-1.66	609.58	609.58
7A	40+54.42	-1.66	609.63	609.63
7B	40+64.42	-1.66	609.68	609.69
7C	40+74.42	-1.66	609.73	609.75
7D	40+84.42	-1.66	609.78	609.83
7E	40+94.42	-1.66	609.83	609.91
7F	41+04.42	-1.66	609.88	609.98
7G	41+14.42	-1.66	609.93	610.06
7H	41+24.42	-1.66	609.98	610.13
7J	41+34.42	-1.66	610.03	610.19
7K	41+44.42	-1.66	610.08	610.25
7L	41+54.42	-1.66	610.14	610.30
7M	41+64.42	-1.66	610.19	610.34
7N	41+74.42	-1.66	610.24	610.37
7P	41+84.42	-1.66	610.29	610.40
7Q	41+94.42	-1.66	610.34	610.42
7R	42+04.42	-1.66	610.39	610.45
7S	42+14.42	-1.66	610.44	610.47
7T	42+24.42	-1.66	610.49	610.50
CL. BRG. PIER 7	42+34.42	-1.66	610.54	610.54
8A	42+44.42	-1.66	610.59	610.58
8B	42+54.42	-1.66	610.64	610.63
8C	42+64.42	-1.66	610.69	610.69
8D	42+74.42	-1.66	610.74	610.75
8E	42+84.42	-1.66	610.79	610.81
8F	42+94.42	-1.66	610.84	610.86
8G	43+04.42	-1.66	610.89	610.92
8H	43+14.42	-1.66	610.94	610.97
8J	43+24.42	-1.66	610.99	611.02
8K	43+34.42	-1.66	611.04	611.06
8L	43+44.42	-1.66	611.09	611.10
CL. BRG. PIER 8	43+49.92	-1.66	611.12	611.12
CL. JT. & PIER 8	43+51.42	-1.66	611.13	611.13

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-024-Top of Slab Elevations Unit 3 (1 of 4).dgn
MODEL: Default

USER NAME = ksnyder
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - DTS
CHECKED - AJK
DRAWN - KMS
CHECKED - AJK

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 3 (1 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S24 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	913
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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P.G. E.B. I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+59.88	0.00	608.68	608.68
CL. BRG. PIER 5	38+61.38	0.00	608.69	608.69
6A	38+71.38	0.00	608.74	608.81
6B	38+81.38	0.00	608.79	608.92
6C	38+91.38	0.00	608.84	609.03
6D	39+01.38	0.00	608.89	609.13
6E	39+11.38	0.00	608.94	609.22
6F	39+21.38	0.00	608.99	609.30
6G	39+31.38	0.00	609.04	609.37
6H	39+41.38	0.00	609.09	609.42
6J	39+51.38	0.00	609.14	609.46
6K	39+61.38	0.00	609.19	609.49
6L	39+71.38	0.00	609.24	609.51
6M	39+81.38	0.00	609.29	609.52
6N	39+91.38	0.00	609.35	609.52
6P	40+01.38	0.00	609.40	609.53
6Q	40+11.38	0.00	609.45	609.54
6R	40+21.38	0.00	609.50	609.50
6S	40+31.38	0.00	609.55	609.57
CL. BRG. PIER 6	40+44.88	0.00	609.62	609.62
7A	40+54.88	0.00	609.67	609.66
7B	40+64.88	0.00	609.72	609.72
7C	40+74.88	0.00	609.77	609.79
7D	40+84.88	0.00	609.82	609.86
7E	40+94.88	0.00	609.87	609.94
7F	41+04.88	0.00	609.92	610.02
7G	41+14.88	0.00	609.97	610.09
7H	41+24.88	0.00	610.02	610.16
7J	41+34.88	0.00	610.07	610.23
7K	41+44.88	0.00	610.12	610.28
7L	41+54.88	0.00	610.17	610.33
7M	41+64.88	0.00	610.22	610.37
7N	41+74.88	0.00	610.27	610.40
7P	41+84.88	0.00	610.32	610.43
7Q	41+94.88	0.00	610.37	610.46
7R	42+04.88	0.00	610.42	610.48
7S	42+14.88	0.00	610.47	610.51
7T	42+24.88	0.00	610.52	610.54
CL. BRG. PIER 7	42+34.88	0.00	610.57	610.57
8A	42+44.88	0.00	610.63	610.62
8B	42+54.88	0.00	610.68	610.67
8C	42+64.88	0.00	610.73	610.72
8D	42+74.88	0.00	610.78	610.78
8E	42+84.88	0.00	610.83	610.84
8F	42+94.88	0.00	610.88	610.90
8G	43+04.88	0.00	610.93	610.95
8H	43+14.88	0.00	610.98	611.00
8J	43+24.88	0.00	611.03	611.05
8K	43+34.88	0.00	611.08	611.10
8L	43+44.88	0.00	611.13	611.14
CL. BRG. PIER 8	43+50.38	0.00	611.16	611.16
CL. JT. & PIER 8	43+51.88	0.00	611.17	611.17

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+61.80	6.94	608.83	608.83
CL. BRG. PIER 5	38+63.30	6.94	608.84	608.84
6A	38+73.30	6.94	608.89	608.96
6B	38+83.30	6.94	608.94	609.07
6C	38+93.30	6.94	608.99	609.18
6D	39+03.30	6.94	609.04	609.28
6E	39+13.30	6.94	609.09	609.37
6F	39+23.30	6.94	609.14	609.45
6G	39+33.30	6.94	609.19	609.51
6H	39+43.30	6.94	609.24	609.57
6J	39+53.30	6.94	609.29	609.61
6K	39+63.30	6.94	609.34	609.64
6L	39+73.30	6.94	609.39	609.66
6M	39+83.30	6.94	609.44	609.67
6N	39+93.30	6.94	609.49	609.67
6P	40+03.30	6.94	609.54	609.68
6Q	40+13.30	6.94	609.59	609.69
6R	40+23.30	6.94	609.65	609.70
6S	40+33.30	6.94	609.70	609.72
CL. BRG. PIER 6	40+46.80	6.94	609.76	609.76
7A	40+56.80	6.94	609.81	609.81
7B	40+66.80	6.94	609.86	609.87
7C	40+76.80	6.94	609.92	609.94
7D	40+86.80	6.94	609.97	610.01
7E	40+96.80	6.94	610.02	610.09
7F	41+06.80	6.94	610.07	610.17
7G	41+16.80	6.94	610.12	610.24
7H	41+26.80	6.94	610.17	610.31
7J	41+36.80	6.94	610.22	610.38
7K	41+46.80	6.94	610.27	610.43
7L	41+56.80	6.94	610.32	610.48
7M	41+66.80	6.94	610.37	610.52
7N	41+76.80	6.94	610.42	610.55
7P	41+86.80	6.94	610.47	610.58
7Q	41+96.80	6.94	610.52	610.61
7R	42+06.80	6.94	610.57	610.63
7S	42+16.80	6.94	610.62	610.66
7T	42+26.80	6.94	610.67	610.69
CL. BRG. PIER 7	42+36.80	6.94	610.72	610.72
8A	42+46.80	6.94	610.77	610.77
8B	42+56.80	6.94	610.82	610.82
8C	42+66.80	6.94	610.87	610.87
8D	42+76.80	6.94	610.93	610.93
8E	42+86.80	6.94	610.98	610.99
8F	42+96.80	6.94	611.03	611.05
8G	43+06.80	6.94	611.08	611.10
8H	43+16.80	6.94	611.13	611.15
8J	43+26.80	6.94	611.18	611.20
8K	43+36.80	6.94	611.23	611.24
8L	43+46.80	6.94	611.28	611.28
CL. BRG. PIER 8	43+52.30	6.94	611.31	611.31
CL. JT. & PIER 8	43+53.80	6.94	611.31	611.31

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+64.19	15.53	608.87	608.87
CL. BRG. PIER 5	38+65.69	15.53	608.88	608.88
6A	38+75.69	15.53	608.93	609.00
6B	38+85.69	15.53	608.98	609.12
6C	38+95.69	15.53	609.03	609.22
6D	39+05.69	15.53	609.08	609.32
6E	39+15.69	15.53	609.13	609.41
6F	39+25.69	15.53	609.18	609.49
6G	39+35.69	15.53	609.23	609.56
6H	39+45.69	15.53	609.28	609.61
6J	39+55.69	15.53	609.33	609.65
6K	39+65.69	15.53	609.38	609.68
6L	39+75.69	15.53	609.44	609.70
6M	39+85.69	15.53	609.49	609.71
6N	39+95.69	15.53	609.54	609.72
6P	40+05.69	15.53	609.59	609.72
6Q	40+15.69	15.53	609.64	609.73
6R	40+25.69	15.53	609.69	609.74
6S	40+35.69	15.53	609.74	609.76
CL. BRG. PIER 6	40+49.19	15.53	609.81	609.81
7A	40+59.19	15.53	609.86	609.85
7B	40+69.19	15.53	609.91	609.91
7C	40+79.19	15.53	609.96	609.98
7D	40+89.19	15.53	610.01	610.05
7E	40+99.19	15.53	610.06	610.13
7F	41+09.19	15.53	610.11	610.21
7G	41+19.19	15.53	610.16	610.29
7H	41+29.19	15.53	610.21	610.36
7J	41+39.19	15.53	610.26	610.42
7K	41+49.19	15.53	610.31	610.47
7L	41+59.19	15.53	610.36	610.52
7M	41+69.19	15.53	610.41	610.56
7N	41+79.19	15.53	610.46	610.60
7P	41+89.19	15.53	610.51	610.62
7Q	41+99.19	15.53	610.56	610.65
7R	42+09.19	15.53	610.61	610.67
7S	42+19.19	15.53	610.67	610.70
7T	42+29.19	15.53	610.72	610.73
CL. BRG. PIER 7	42+39.19	15.53	610.77	610.77
8A	42+49.19	15.53	610.82	610.81
8B	42+59.19	15.53	610.87	610.86
8C	42+69.19	15.53	610.92	610.92
8D	42+79.19	15.53	610.97	610.97
8E	42+89.19	15.53	611.02	611.03
8F	42+99.19	15.53	611.07	611.09
8G	43+09.19	15.53	611.12	611.14
8H	43+19.19	15.53	611.17	611.20
8J	43+29.19	15.53	611.22	611.24
8K	43+39.19	15.53	611.27	611.29
8L	43+49.19	15.53	611.32	611.33
CL. BRG. PIER 8	43+54.69	15.53	611.35	611.35
CL. JT. & PIER 8	43+56.19	15.53	611.36	611.36

NOTE:
Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-025-Top of Slab Elevations Unit 3 (2 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS UNIT 3 (2 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S25 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	914
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+66.57	24.13	608.71	608.71
CL. BRG. PIER 5	38+68.07	24.13	608.72	608.72
6A	38+78.07	24.13	608.77	608.84
6B	38+88.07	24.13	608.82	608.96
6C	38+98.07	24.13	608.87	609.07
6D	39+08.07	24.13	608.92	609.16
6E	39+18.07	24.13	608.97	609.25
6F	39+28.07	24.13	609.02	609.33
6G	39+38.07	24.13	609.07	609.40
6H	39+48.07	24.13	609.12	609.45
6J	39+58.07	24.13	609.17	609.49
6K	39+68.07	24.13	609.23	609.52
6L	39+78.07	24.13	609.28	609.54
6M	39+88.07	24.13	609.33	609.55
6N	39+98.07	24.13	609.38	609.56
6P	40+08.07	24.13	609.43	609.56
6Q	40+18.07	24.13	609.48	609.57
6R	40+28.07	24.13	609.53	609.58
6S	40+38.07	24.13	609.58	609.60
CL. BRG. PIER 6	40+51.57	24.13	609.65	609.65
7A	40+61.57	24.13	609.70	609.70
7B	40+71.57	24.13	609.75	609.75
7C	40+81.57	24.13	609.80	609.82
7D	40+91.57	24.13	609.85	609.89
7E	41+01.57	24.13	609.90	609.97
7F	41+11.57	24.13	609.95	610.05
7G	41+21.57	24.13	610.00	610.13
7H	41+31.57	24.13	610.05	610.20
7J	41+41.57	24.13	610.10	610.26
7K	41+51.57	24.13	610.15	610.31
7L	41+61.57	24.13	610.20	610.36
7M	41+71.57	24.13	610.25	610.40
7N	41+81.57	24.13	610.30	610.44
7P	41+91.57	24.13	610.35	610.46
7Q	42+01.57	24.13	610.40	610.49
7R	42+11.57	24.13	610.45	610.51
7S	42+21.57	24.13	610.51	610.54
7T	42+31.57	24.13	610.56	610.57
CL. BRG. PIER 7	42+41.57	24.13	610.61	610.61
8A	42+51.57	24.13	610.66	610.65
8B	42+61.57	24.13	610.71	610.70
8C	42+71.57	24.13	610.76	610.76
8D	42+81.57	24.13	610.81	610.81
8E	42+91.57	24.13	610.86	610.87
8F	43+01.57	24.13	610.91	610.93
8G	43+11.57	24.13	610.96	610.98
8H	43+21.57	24.13	611.01	611.04
8J	43+31.57	24.13	611.06	611.08
8K	43+41.57	24.13	611.11	611.13
8L	43+51.57	24.13	611.16	611.17
CL. BRG. PIER 8	43+57.07	24.13	611.19	611.19
CL. JT. & PIER 8	43+58.57	24.13	611.20	611.20

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+68.95	32.72	608.55	608.55
CL. BRG. PIER 5	38+70.45	32.72	608.56	608.56
6A	38+80.45	32.72	608.61	608.68
6B	38+90.45	32.72	608.66	608.80
6C	39+00.45	32.72	608.71	608.91
6D	39+10.45	32.72	608.76	609.01
6E	39+20.45	32.72	608.81	609.09
6F	39+30.45	32.72	608.86	609.17
6G	39+40.45	32.72	608.91	609.24
6H	39+50.45	32.72	608.96	609.29
6J	39+60.45	32.72	609.01	609.33
6K	39+70.45	32.72	609.07	609.36
6L	39+80.45	32.72	609.12	609.38
6M	39+90.45	32.72	609.17	609.39
6N	40+00.45	32.72	609.22	609.40
6P	40+10.45	32.72	609.27	609.40
6Q	40+20.45	32.72	609.32	609.41
6R	40+30.45	32.72	609.37	609.42
6S	40+40.45	32.72	609.42	609.45
CL. BRG. PIER 6	40+53.95	32.72	609.49	609.49
7A	40+63.95	32.72	609.54	609.54
7B	40+73.95	32.72	609.59	609.59
7C	40+83.95	32.72	609.64	609.66
7D	40+93.95	32.72	609.69	609.73
7E	41+03.95	32.72	609.74	609.81
7F	41+13.95	32.72	609.79	609.89
7G	41+23.95	32.72	609.84	609.97
7H	41+33.95	32.72	609.89	610.04
7J	41+43.95	32.72	609.94	610.10
7K	41+53.95	32.72	609.99	610.16
7L	41+63.95	32.72	610.04	610.20
7M	41+73.95	32.72	610.09	610.24
7N	41+83.95	32.72	610.14	610.28
7P	41+93.95	32.72	610.19	610.30
7Q	42+03.95	32.72	610.24	610.33
7R	42+13.95	32.72	610.29	610.35
7S	42+23.95	32.72	610.35	610.38
7T	42+33.95	32.72	610.40	610.41
CL. BRG. PIER 7	42+43.95	32.72	610.45	610.45
8A	42+53.95	32.72	610.50	610.49
8B	42+63.95	32.72	610.55	610.54
8C	42+73.95	32.72	610.60	610.60
8D	42+83.95	32.72	610.65	610.65
8E	42+93.95	32.72	610.70	610.71
8F	43+03.95	32.72	610.75	610.77
8G	43+13.95	32.72	610.80	610.83
8H	43+23.95	32.72	610.85	610.88
8J	43+33.95	32.72	610.90	610.92
8K	43+43.95	32.72	610.95	610.97
8L	43+53.95	32.72	611.00	611.01
CL. BRG. PIER 8	43+59.45	32.72	611.03	611.03
CL. JT. & PIER 8	43+60.95	32.72	611.04	611.04

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+71.34	41.31	608.39	608.39
CL. BRG. PIER 5	38+72.84	41.31	608.40	608.40
6A	38+82.84	41.31	608.45	608.52
6B	38+92.84	41.31	608.50	608.63
6C	39+02.84	41.31	608.55	608.74
6D	39+12.84	41.31	608.60	608.84
6E	39+22.84	41.31	608.65	608.93
6F	39+32.84	41.31	608.70	609.00
6G	39+42.84	41.31	608.75	609.07
6H	39+52.84	41.31	608.80	609.12
6J	39+62.84	41.31	608.85	609.16
6K	39+72.84	41.31	608.91	609.19
6L	39+82.84	41.31	608.96	609.22
6M	39+92.84	41.31	609.01	609.23
6N	40+02.84	41.31	609.06	609.24
6P	40+12.84	41.31	609.11	609.24
6Q	40+22.84	41.31	609.16	609.25
6R	40+32.84	41.31	609.21	609.27
6S	40+42.84	41.31	609.26	609.29
CL. BRG. PIER 6	40+56.34	41.31	609.33	609.33
7A	40+66.34	41.31	609.38	609.37
7B	40+76.34	41.31	609.43	609.43
7C	40+86.34	41.31	609.48	609.49
7D	40+96.34	41.31	609.53	609.56
7E	41+06.34	41.31	609.58	609.63
7F	41+16.34	41.31	609.63	609.71
7G	41+26.34	41.31	609.68	609.78
7H	41+36.34	41.31	609.73	609.85
7J	41+46.34	41.31	609.78	609.91
7K	41+56.34	41.31	609.83	609.97
7L	41+66.34	41.31	609.88	610.02
7M	41+76.34	41.31	609.93	610.06
7N	41+86.34	41.31	609.98	610.09
7P	41+96.34	41.31	610.03	610.13
7Q	42+06.34	41.31	610.08	610.16
7R	42+16.34	41.31	610.14	610.18
7S	42+26.34	41.31	610.19	610.22
7T	42+36.34	41.31	610.24	610.25
CL. BRG. PIER 7	42+46.34	41.31	610.29	610.29
8A	42+56.34	41.31	610.34	610.33
8B	42+66.34	41.31	610.39	610.38
8C	42+76.34	41.31	610.44	610.43
8D	42+86.34	41.31	610.49	610.49
8E	42+96.34	41.31	610.54	610.55
8F	43+06.34	41.31	610.59	610.60
8G	43+16.34	41.31	610.64	610.66
8H	43+26.34	41.31	610.69	610.71
8J	43+36.34	41.31	610.74	610.76
8K	43+46.34	41.31	610.79	610.80
8L	43+56.34	41.31	610.84	610.85
CL. BRG. PIER 8	43+61.84	41.31	610.87	610.87
CL. JT. & PIER 8	43+63.34	41.31	610.88	610.88

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-026-Top of Slab Elevations Unit 3 (3 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 3 (3 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S26 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	915
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+73.57	49.36	608.24	608.24
CL. BRG. PIER 5	38+75.07	49.35	608.25	608.25
6A	38+85.07	49.28	608.30	608.37
6B	38+95.07	49.21	608.35	608.48
6C	39+05.07	49.14	608.41	608.59
6D	39+15.07	49.07	608.46	608.69
6E	39+25.07	49.00	608.51	608.78
6F	39+35.07	48.93	608.56	608.86
6G	39+45.07	48.85	608.61	608.92
6H	39+55.07	48.78	608.67	608.98
6J	39+65.07	48.71	608.72	609.02
6K	39+75.07	48.64	608.77	609.05
6L	39+85.06	48.57	608.82	609.08
6M	39+95.06	48.50	608.87	609.09
6N	40+05.06	48.43	608.93	609.10
6P	40+15.06	48.36	608.98	609.11
6Q	40+25.06	48.28	609.03	609.13
6R	40+35.06	48.21	609.08	609.14
6S	40+45.06	48.14	609.13	609.16
CL. BRG. PIER 6	40+58.21	48.05	609.20	609.20
7A	40+68.21	47.98	609.25	609.25
7B	40+78.21	47.91	609.31	609.30
7C	40+88.20	47.83	609.36	609.36
7D	40+98.20	47.76	609.41	609.43
7E	41+08.20	47.69	609.46	609.50
7F	41+18.20	47.62	609.51	609.57
7G	41+28.20	47.55	609.57	609.64
7H	41+38.20	47.48	609.62	609.71
7J	41+48.20	47.41	609.67	609.77
7K	41+58.20	47.34	609.72	609.83
7L	41+68.20	47.26	609.77	609.88
7M	41+78.20	47.19	609.82	609.93
7N	41+88.20	47.12	609.88	609.97
7P	41+98.20	47.05	609.93	610.00
7Q	42+08.20	46.98	609.98	610.04
7R	42+18.20	46.91	610.03	610.07
7S	42+28.20	46.84	610.08	610.11
7T	42+38.20	46.77	610.14	610.15
CL. BRG. PIER 7	42+47.83	46.70	610.19	610.19
8A	42+57.83	46.63	610.24	610.23
8B	42+67.83	46.55	610.29	610.28
8C	42+77.83	46.48	610.34	610.34
8D	42+87.83	46.41	610.39	610.39
8E	42+97.83	46.34	610.45	610.45
8F	43+07.83	46.27	610.50	610.51
8G	43+17.83	46.20	610.55	610.56
8H	43+27.83	46.13	610.60	610.62
8J	43+37.83	46.06	610.65	610.67
8K	43+47.83	45.98	610.71	610.71
8L	43+57.83	45.91	610.76	610.76
CL. BRG. PIER 8	43+63.10	45.88	610.78	610.78
CL. JT. & PIER 8	43+64.60	45.86	610.79	610.79

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 5	38+75.80	57.42	608.09	608.09
CL. BRG. PIER 5	38+77.30	57.40	608.10	608.10
6A	38+87.30	57.25	608.15	608.22
6B	38+97.30	57.11	608.21	608.34
6C	39+07.30	56.97	608.26	608.45
6D	39+17.30	56.82	608.31	608.55
6E	39+27.30	56.68	608.37	608.64
6F	39+37.30	56.54	608.42	608.72
6G	39+47.30	56.40	608.47	608.79
6H	39+57.29	56.25	608.53	608.84
6J	39+67.29	56.11	608.58	608.89
6K	39+77.29	55.97	608.63	608.92
6L	39+87.29	55.82	608.69	608.94
6M	39+97.29	55.68	608.74	608.96
6N	40+07.29	55.54	608.79	608.97
6P	40+17.29	55.40	608.85	608.98
6Q	40+27.29	55.25	608.90	608.99
6R	40+37.28	55.11	608.95	609.01
6S	40+47.28	54.97	609.01	609.03
CL. BRG. PIER 6	40+60.07	54.78	609.08	609.08
7A	40+70.07	54.64	609.13	609.12
7B	40+80.07	54.50	609.18	609.18
7C	40+90.07	54.36	609.24	609.25
7D	41+00.07	54.21	609.29	609.32
7E	41+10.07	54.07	609.34	609.39
7F	41+20.07	53.93	609.40	609.47
7G	41+30.06	53.78	609.45	609.55
7H	41+40.06	53.64	609.50	609.62
7J	41+50.06	53.50	609.56	609.68
7K	41+60.06	53.36	609.61	609.74
7L	41+70.06	53.21	609.66	609.79
7M	41+80.06	53.07	609.72	609.84
7N	41+90.06	52.93	609.77	609.88
7P	42+00.06	52.79	609.82	609.91
7Q	42+10.05	52.64	609.88	609.95
7R	42+20.05	52.50	609.93	609.98
7S	42+30.05	52.36	609.98	610.01
7T	42+40.05	52.21	610.04	610.05
CL. BRG. PIER 7	42+49.32	52.08	610.09	610.09
8A	42+59.32	51.94	610.14	610.13
8B	42+69.32	51.80	610.19	610.19
8C	42+79.32	51.65	610.25	610.24
8D	42+89.32	51.51	610.30	610.30
8E	42+99.32	51.37	610.35	610.36
8F	43+09.32	51.22	610.41	610.42
8G	43+19.32	51.08	610.46	610.48
8H	43+29.31	50.94	610.51	610.53
8J	43+39.31	50.80	610.57	610.58
8K	43+49.31	50.65	610.62	610.63
8L	43+59.31	50.51	610.67	610.68
CL. BRG. PIER 8	43+64.36	50.44	610.70	610.70
CL. JT. & PIER 8	43+65.86	50.42	610.71	610.71

NOTE:

Offsets measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

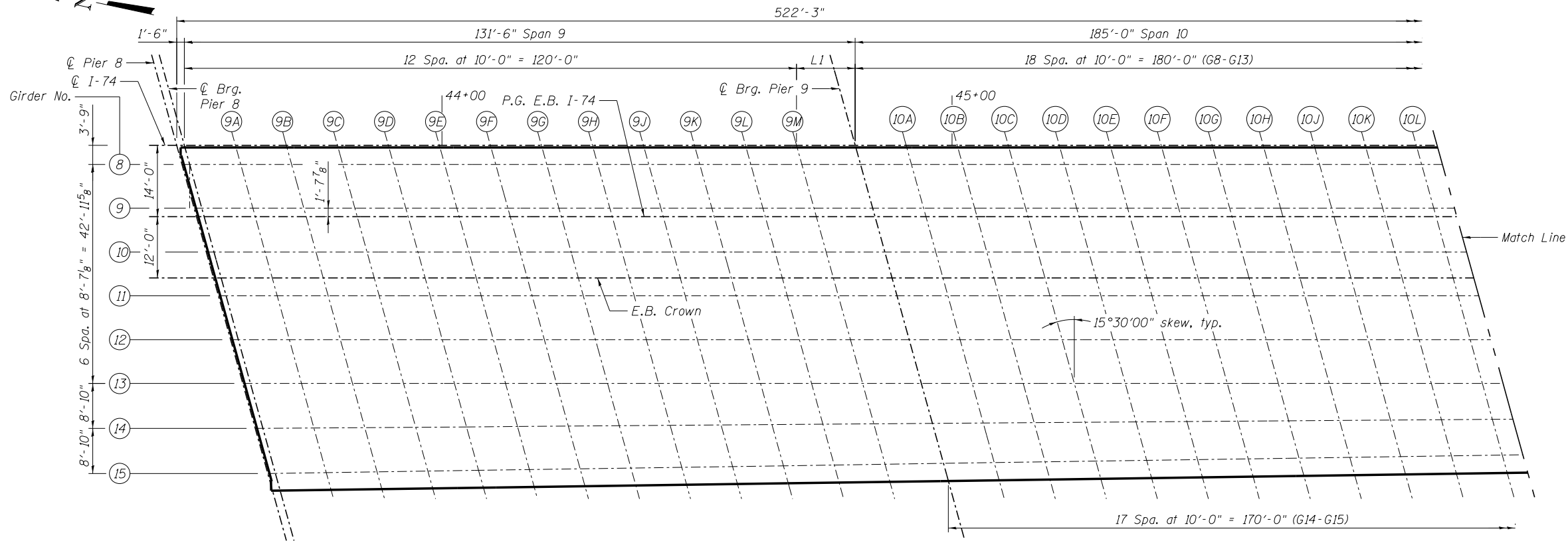
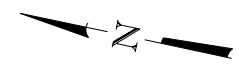
FILE NAME = 081-0178-C00AB-027-Top of Slab Elevations Unit 3 (4 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

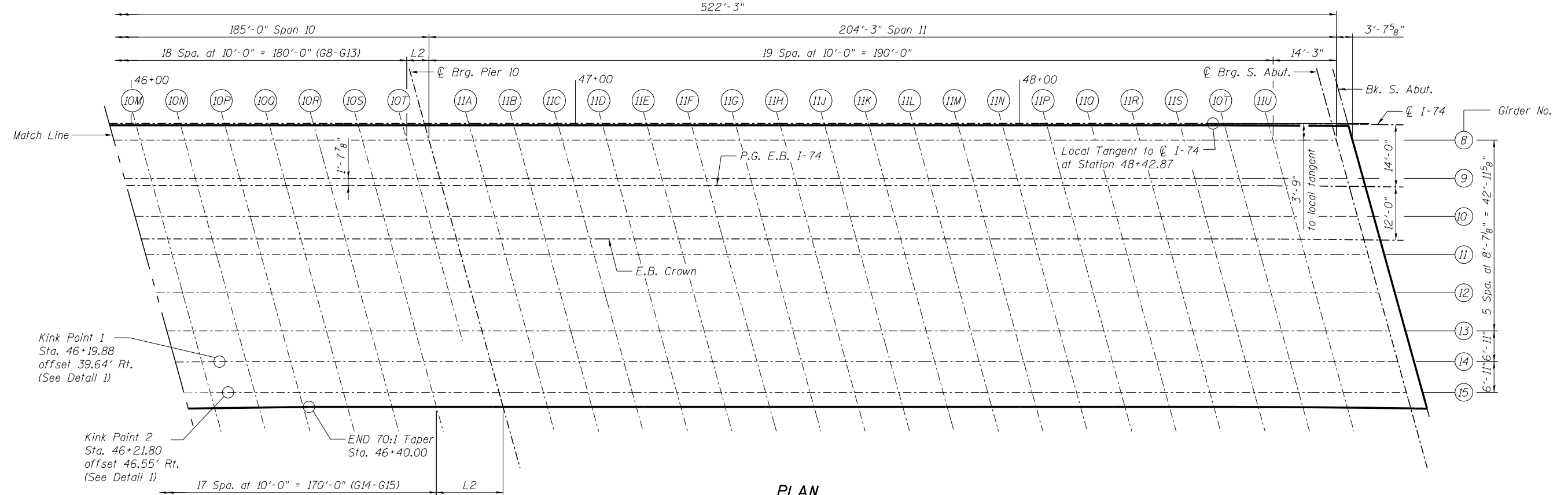
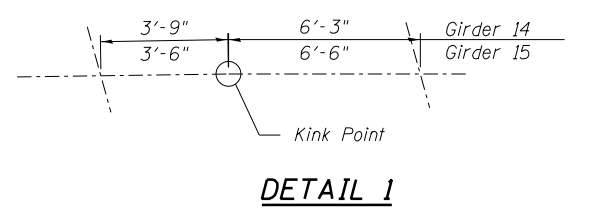
TOP OF SLAB ELEVATIONS UNIT 3 (4 of 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S27 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	916
CONTRACT NO. 64C08				
ILLINOIS FED. AID PROJECT				



Girder	L1	L2
G8-G13	11'-6"	5'-0"
G14	11'-2 ³ / ₄ "	14'-9"
G15	10'-11 ⁵ / ₈ "	14'-6"



Kink Point 1
Sta. 46+19.88
offset 39.64' Rt.
(See Detail 1)

Kink Point 2
Sta. 46+21.80
offset 46.55' Rt.
(See Detail 1)

END 70:1 Taper
Sta. 46+40.00

PLAN

NOTE:
1. Girder Spacing measured at \bar{C} of Piers.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-028-Deck Elevation Plan Unit 4.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AAY	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AAY/AJK	REVISED -

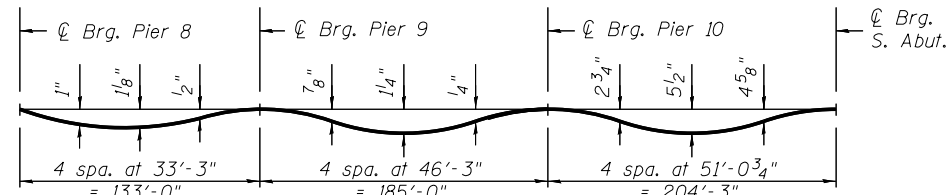
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK ELEVATION PLAN UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S28 OF S138 SHEETS

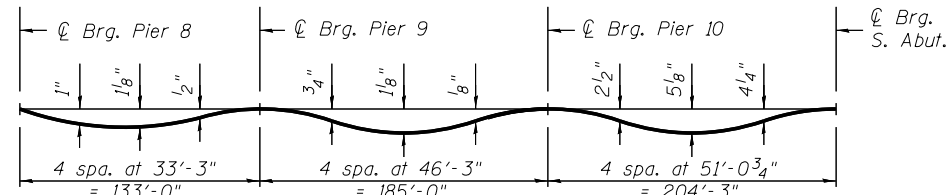
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	917
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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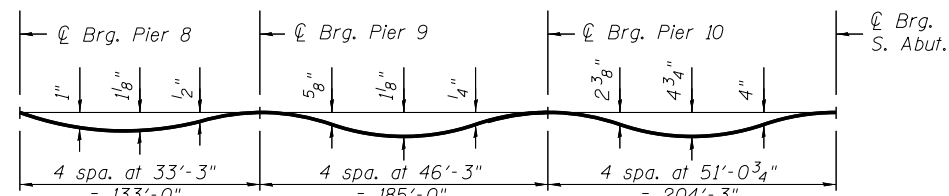
GIRDERS 8 THRU 12 DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S29 thru S31.



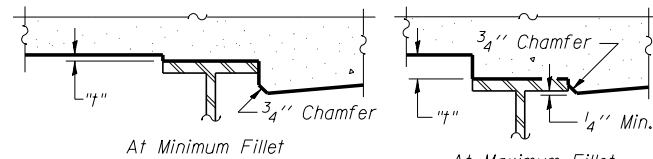
GIRDER 13 DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet S31.



GIRDER 14 & 15 DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S31 thru S32.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+49.04	-10.25	610.94	610.94
CL. BRG. PIER 8	43+50.54	-10.25	610.95	610.95
9A	43+60.54	-10.25	611.00	611.03
9B	43+70.54	-10.25	611.05	611.11
9C	43+80.54	-10.25	611.10	611.17
9D	43+90.54	-10.25	611.15	611.24
9E	44+00.54	-10.25	611.20	611.30
9F	44+10.54	-10.25	611.25	611.35
9G	44+20.54	-10.25	611.30	611.39
9H	44+30.54	-10.25	611.35	611.43
9J	44+40.54	-10.25	611.40	611.46
9K	44+50.54	-10.25	611.46	611.49
9L	44+60.54	-10.25	611.51	611.53
9M	44+70.54	-10.25	611.56	611.56
CL. BRG. PIER 9	44+82.04	-10.25	611.61	611.61
10A	44+92.04	-10.25	611.66	611.67
10B	45+02.04	-10.25	611.72	611.73
10C	45+12.04	-10.25	611.77	611.80
10D	45+22.04	-10.25	611.82	611.88
10E	45+32.04	-10.25	611.88	611.96
10F	45+42.04	-10.25	611.94	612.03
10G	45+52.04	-10.25	612.01	612.11
10H	45+62.04	-10.25	612.07	612.18
10J	45+72.04	-10.25	612.15	612.25
10K	45+82.04	-10.25	612.22	612.31
10L	45+92.04	-10.25	612.29	612.37
10M	46+02.04	-10.25	612.37	612.42
10N	46+12.04	-10.25	612.46	612.48
10P	46+22.04	-10.25	612.54	612.55
10Q	46+32.04	-10.25	612.63	612.62
10R	46+42.04	-10.25	612.72	612.70
10S	46+52.04	-10.25	612.81	612.80
10T	46+62.04	-10.25	612.91	612.90
CL. BRG. PIER 10	46+67.04	-10.25	612.96	612.96
11A	46+77.04	-10.25	613.06	613.09
11B	46+87.04	-10.25	613.16	613.23
11C	46+97.04	-10.25	613.27	613.38
11D	47+07.04	-10.25	613.38	613.55
11E	47+17.04	-10.25	613.49	613.72
11F	47+27.04	-10.25	613.61	613.89
11G	47+37.04	-10.25	613.73	614.07
11H	47+47.04	-10.25	613.85	614.24
11J	47+57.04	-10.25	613.97	614.41
11K	47+67.04	-10.25	614.10	614.56
11L	47+77.04	-10.25	614.23	614.71
11M	47+87.04	-10.25	614.36	614.85
11N	47+97.04	-10.25	614.50	614.97
11P	48+07.04	-10.25	614.64	615.08
11Q	48+17.04	-10.25	614.78	615.19
11R	48+27.04	-10.25	614.93	615.28
11S	48+37.04	-10.25	615.08	615.36
11T	48+47.05	-10.25	615.23	615.44
11U	48+57.06	-10.28	615.38	615.51
CL. BRG. S. Abut.	48+71.33	-10.38	615.60	615.60
BK. S. Abut.	48+74.96	-10.42	615.66	615.66

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+51.42	-1.66	611.13	611.13
CL. BRG. PIER 8	43+52.92	-1.66	611.13	611.13
9A	43+62.92	-1.66	611.18	611.21
9B	43+72.92	-1.66	611.24	611.29
9C	43+82.92	-1.66	611.29	611.36
9D	43+92.92	-1.66	611.34	611.42
9E	44+02.92	-1.66	611.39	611.48
9F	44+12.92	-1.66	611.44	611.53
9G	44+22.92	-1.66	611.49	611.57
9H	44+32.92	-1.66	611.54	611.61
9J	44+42.92	-1.66	611.59	611.64
9K	44+52.92	-1.66	611.64	611.68
9L	44+62.92	-1.66	611.69	611.71
9M	44+72.92	-1.66	611.74	611.75
CL. BRG. PIER 9	44+84.42	-1.66	611.80	611.80
10A	44+94.42	-1.66	611.85	611.85
10B	45+04.42	-1.66	611.90	611.92
10C	45+14.42	-1.66	611.95	611.99
10D	45+24.42	-1.66	612.01	612.06
10E	45+34.42	-1.66	612.07	612.14
10F	45+44.42	-1.66	612.13	612.22
10G	45+54.42	-1.66	612.20	612.30
10H	45+64.42	-1.66	612.26	612.37
10J	45+74.42	-1.66	612.33	612.44
10K	45+84.42	-1.66	612.41	612.50
10L	45+94.42	-1.66	612.48	612.56
10M	46+04.42	-1.66	612.56	612.62
10N	46+14.42	-1.66	612.65	612.68
10P	46+24.42	-1.66	612.73	612.75
10Q	46+34.42	-1.66	612.82	612.82
10R	46+44.42	-1.66	612.91	612.90
10S	46+54.42	-1.66	613.01	612.99
10T	46+64.42	-1.66	613.10	613.10
CL. BRG. PIER 10	46+69.42	-1.66	613.15	613.15
11A	46+79.42	-1.66	613.26	613.28
11B	46+89.42	-1.66	613.36	613.42
11C	46+99.42	-1.66	613.47	613.58
11D	47+09.42	-1.66	613.58	613.74
11E	47+19.42	-1.66	613.69	613.91
11F	47+29.42	-1.66	613.81	614.09
11G	47+39.42	-1.66	613.93	614.26
11H	47+49.42	-1.66	614.05	614.44
11J	47+59.42	-1.66	614.18	614.60
11K	47+69.42	-1.66	614.30	614.76
11L	47+79.42	-1.66	614.43	614.90
11M	47+89.42	-1.66	614.57	615.04
11N	47+99.42	-1.66	614.71	615.17
11P	48+09.42	-1.66	614.85	615.28
11Q	48+19.42	-1.66	614.99	615.39
11R	48+29.42	-1.66	615.13	615.48
11S	48+39.42	-1.66	615.28	615.56
11T	48+49.45	-1.66	615.44	615.64
11U	48+59.49	-1.70	615.59	615.71
CL. BRG. S. Abut.	48+73.80	-1.82	615.81	615.81
BK. S. Abut.	48+77.45	-1.85	615.87	615.87

NOTE:

1. Offset measured from P.G. EB I-74.

FILE NAME = 081-0178-C00AB-029-Top of Slab Elevations Unit 4 (1 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AAY/AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AAY/AJK	REVISED -

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 918
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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P.G. EB I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+51.88	0.00	611.16	611.16
CL. BRG. PIER 8	43+53.38	0.00	611.17	611.17
9A	43+63.38	0.00	611.22	611.25
9B	43+73.38	0.00	611.27	611.32
9C	43+83.38	0.00	611.32	611.39
9D	43+93.38	0.00	611.37	611.46
9E	44+03.38	0.00	611.42	611.52
9F	44+13.38	0.00	611.47	611.57
9G	44+23.38	0.00	611.52	611.61
9H	44+33.38	0.00	611.57	611.65
9J	44+43.38	0.00	611.62	611.68
9K	44+53.38	0.00	611.67	611.71
9L	44+63.38	0.00	611.73	611.75
9M	44+73.38	0.00	611.78	611.78
CL. BRG. PIER 9	44+84.88	0.00	611.83	611.83
10A	44+94.88	0.00	611.88	611.89
10B	45+04.88	0.00	611.93	611.95
10C	45+14.88	0.00	611.99	612.02
10D	45+24.88	0.00	612.04	612.10
10E	45+34.88	0.00	612.10	612.18
10F	45+44.88	0.00	612.17	612.26
10G	45+54.88	0.00	612.23	612.33
10H	45+64.88	0.00	612.30	612.41
10J	45+74.88	0.00	612.37	612.48
10K	45+84.88	0.00	612.44	612.54
10L	45+94.88	0.00	612.52	612.60
10M	46+04.88	0.00	612.60	612.66
10N	46+14.88	0.00	612.68	612.72
10P	46+24.88	0.00	612.77	612.78
10Q	46+34.88	0.00	612.86	612.86
10R	46+44.88	0.00	612.95	612.94
10S	46+54.88	0.00	613.04	613.03
10T	46+64.88	0.00	613.14	613.14
CL. BRG. PIER 10	46+69.88	0.00	613.19	613.19
11A	46+79.88	0.00	613.29	613.32
11B	46+89.88	0.00	613.40	613.46
11C	46+99.88	0.00	613.51	613.61
11D	47+09.88	0.00	613.62	613.78
11E	47+19.88	0.00	613.73	613.95
11F	47+29.88	0.00	613.85	614.13
11G	47+39.88	0.00	613.97	614.30
11H	47+49.88	0.00	614.09	614.47
11J	47+59.88	0.00	614.21	614.64
11K	47+69.88	0.00	614.34	614.80
11L	47+79.88	0.00	614.47	614.94
11M	47+89.88	0.00	614.61	615.08
11N	47+99.88	0.00	614.75	615.21
11P	48+09.88	0.00	614.89	615.32
11Q	48+19.88	0.00	615.03	615.43
11R	48+29.88	0.00	615.17	615.52
11S	48+39.88	0.00	615.32	615.60
11T	48+49.88	0.00	615.47	615.68
11U	48+59.88	0.00	615.63	615.76
CL. BRG. S. Abut.	48+74.32	0.00	615.86	615.86
BK. S. Abut.	48+77.98	0.00	615.92	615.92

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+53.80	6.94	611.31	611.31
CL. BRG. PIER 8	43+55.30	6.94	611.32	611.32
9A	43+65.30	6.94	611.37	611.40
9B	43+75.30	6.94	611.42	611.47
9C	43+85.30	6.94	611.47	611.54
9D	43+95.30	6.94	611.52	611.61
9E	44+05.30	6.94	611.57	611.67
9F	44+15.30	6.94	611.62	611.72
9G	44+25.30	6.94	611.67	611.76
9H	44+35.30	6.94	611.72	611.80
9J	44+45.30	6.94	611.77	611.83
9K	44+55.30	6.94	611.82	611.86
9L	44+65.30	6.94	611.87	611.89
9M	44+75.30	6.94	611.92	611.93
CL. BRG. PIER 9	44+86.80	6.94	611.98	611.98
10A	44+96.80	6.94	612.03	612.04
10B	45+06.80	6.94	612.08	612.10
10C	45+16.80	6.94	612.14	612.17
10D	45+26.80	6.94	612.19	612.25
10E	45+36.80	6.94	612.25	612.33
10F	45+46.80	6.94	612.32	612.41
10G	45+56.80	6.94	612.38	612.49
10H	45+66.80	6.94	612.45	612.56
10J	45+76.80	6.94	612.52	612.63
10K	45+86.80	6.94	612.60	612.69
10L	45+96.80	6.94	612.68	612.75
10M	46+06.80	6.94	612.76	612.81
10N	46+16.80	6.94	612.84	612.87
10P	46+26.80	6.94	612.93	612.94
10Q	46+36.80	6.94	613.01	613.01
10R	46+46.80	6.94	613.08	613.07
10S	46+56.80	6.94	613.15	613.13
10T	46+66.80	6.94	613.22	613.21
CL. BRG. PIER 10	46+71.80	6.94	613.26	613.26
11A	46+81.80	6.94	613.33	613.36
11B	46+91.80	6.94	613.41	613.47
11C	47+01.80	6.94	613.49	613.60
11D	47+11.80	6.94	613.58	613.74
11E	47+21.80	6.94	613.66	613.89
11F	47+31.80	6.94	613.76	614.04
11G	47+41.80	6.94	613.85	614.19
11H	47+51.80	6.94	613.96	614.35
11J	47+61.80	6.94	614.08	614.51
11K	47+71.80	6.94	614.20	614.66
11L	47+81.80	6.94	614.32	614.80
11M	47+91.80	6.94	614.45	614.93
11N	48+01.80	6.94	614.58	615.05
11P	48+11.80	6.94	614.71	615.15
11Q	48+21.80	6.94	614.85	615.25
11R	48+31.80	6.94	614.98	615.33
11S	48+41.80	6.94	615.12	615.41
11T	48+51.87	6.92	615.27	615.48
11U	48+61.94	6.88	615.42	615.54
CL. BRG. S. Abut.	48+76.29	6.75	615.64	615.64
BK. S. Abut.	48+79.95	6.71	615.70	615.70

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+56.19	15.53	611.35	611.35
CL. BRG. PIER 8	43+57.69	15.53	611.36	611.36
9A	43+67.69	15.53	611.41	611.44
9B	43+77.69	15.53	611.46	611.52
9C	43+87.69	15.53	611.51	611.59
9D	43+97.69	15.53	611.56	611.65
9E	44+07.69	15.53	611.61	611.71
9F	44+17.69	15.53	611.66	611.76
9G	44+27.69	15.53	611.71	611.80
9H	44+37.69	15.53	611.76	611.84
9J	44+47.69	15.53	611.82	611.87
9K	44+57.69	15.53	611.87	611.90
9L	44+67.69	15.53	611.92	611.94
9M	44+77.69	15.53	611.97	611.97
CL. BRG. PIER 9	44+89.19	15.53	612.02	612.02
10A	44+99.19	15.53	612.08	612.08
10B	45+09.19	15.53	612.13	612.14
10C	45+19.19	15.53	612.18	612.22
10D	45+29.19	15.53	612.24	612.29
10E	45+39.19	15.53	612.30	612.37
10F	45+49.19	15.53	612.36	612.45
10G	45+59.19	15.53	612.43	612.53
10H	45+69.19	15.53	612.50	612.61
10J	45+79.19	15.53	612.57	612.68
10K	45+89.19	15.53	612.65	612.74
10L	45+99.19	15.53	612.72	612.80
10M	46+09.19	15.53	612.81	612.86
10N	46+19.19	15.53	612.89	612.92
10P	46+29.19	15.53	612.98	612.99
10Q	46+39.19	15.53	613.06	613.05
10R	46+49.19	15.53	613.10	613.09
10S	46+59.19	15.53	613.15	613.14
10T	46+69.19	15.53	613.20	613.20
CL. BRG. PIER 10	46+74.19	15.53	613.23	613.23
11A	46+84.19	15.53	613.29	613.32
11B	46+94.19	15.53	613.35	613.41
11C	47+04.19	15.53	613.41	613.52
11D	47+14.19	15.53	613.48	613.64
11E	47+24.19	15.53	613.55	613.77
11F	47+34.19	15.53	613.62	613.90
11G	47+44.19	15.53	613.70	614.04
11H	47+54.19	15.53	613.81	614.19
11J	47+64.19	15.53	613.91	614.34
11K	47+74.19	15.53	614.02	614.48
11L	47+84.19	15.53	614.13	614.61
11M	47+94.19	15.53	614.25	614.73
11N	48+04.19	15.53	614.37	614.84
11P	48+14.19	15.53	614.49	614.93
11Q	48+24.19	15.53	614.61	615.02
11R	48+34.19	15.53	614.74	615.09
11S	48+44.21	15.53	614.87	615.16
11T	48+54.30	15.51	615.01	615.22
11U	48+64.40	15.45	615.15	615.27
CL. BRG. S. Abut.	48+78.79	15.32	615.35	615.35
BK. S. Abut.	48+82.46	15.27	615.41	615.41

NOTE:

1. Offset measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME - 081-0178-C00AB-030-Top of Slab Elevations Unit 4 (2 of 4).dgn	USER NAME - ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK/AA	REVISED -
MODEL: Default	PLOT SCALE -	DRAWN - KMS	REVISED -
	PLOT DATE - 1/18/2017	CHECKED - AJK/AA	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 4 (2 OF 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S30 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 919
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+58.57	24.13	611.19	611.19
CL. BRG. PIER 8	43+60.07	24.13	611.20	611.20
9A	43+70.07	24.13	611.25	611.28
9B	43+80.07	24.13	611.30	611.36
9C	43+90.07	24.13	611.35	611.43
9D	44+00.07	24.13	611.40	611.49
9E	44+10.07	24.13	611.45	611.55
9F	44+20.07	24.13	611.50	611.60
9G	44+30.07	24.13	611.55	611.64
9H	44+40.07	24.13	611.60	611.68
9J	44+50.07	24.13	611.66	611.71
9K	44+60.07	24.13	611.71	611.74
9L	44+70.07	24.13	611.76	611.78
9M	44+80.07	24.13	611.81	611.81
CL. BRG. PIER 9	44+91.57	24.13	611.86	611.86
10A	45+01.57	24.13	611.92	611.92
10B	45+11.57	24.13	611.97	611.98
10C	45+21.57	24.13	612.02	612.06
10D	45+31.57	24.13	612.08	612.14
10E	45+41.57	24.13	612.14	612.22
10F	45+51.57	24.13	612.21	612.30
10G	45+61.57	24.13	612.27	612.38
10H	45+71.57	24.13	612.34	612.45
10J	45+81.57	24.13	612.42	612.52
10K	45+91.57	24.13	612.49	612.59
10L	46+01.57	24.13	612.57	612.65
10M	46+11.57	24.13	612.65	612.71
10N	46+21.57	24.13	612.74	612.77
10P	46+31.57	24.13	612.83	612.84
10Q	46+41.57	24.13	612.90	612.89
10R	46+51.57	24.13	612.94	612.93
10S	46+61.57	24.13	612.99	612.98
10T	46+71.57	24.13	613.05	613.04
CL. BRG. PIER 10	46+76.57	24.13	613.07	613.07
11A	46+86.57	24.13	613.13	613.16
11B	46+96.57	24.13	613.19	613.25
11C	47+06.57	24.13	613.26	613.36
11D	47+16.57	24.13	613.32	613.48
11E	47+26.57	24.13	613.39	613.61
11F	47+36.57	24.13	613.46	613.74
11G	47+46.57	24.13	613.55	613.88
11H	47+56.57	24.13	613.64	614.02
11J	47+66.57	24.13	613.74	614.16
11K	47+76.57	24.13	613.84	614.29
11L	47+86.57	24.13	613.94	614.40
11M	47+96.57	24.13	614.04	614.51
11N	48+06.57	24.13	614.15	614.61
11P	48+16.57	24.13	614.26	614.70
11Q	48+26.57	24.13	614.38	614.77
11R	48+36.57	24.13	614.49	614.84
11S	48+46.62	24.12	614.62	614.90
11T	48+56.75	24.09	614.74	614.95
11U	48+66.88	24.03	614.87	615.00
CL. BRG. S. Abut.	48+81.31	23.88	615.06	615.06
BK. S. Abut.	48+84.99	23.83	615.11	615.11

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+60.95	32.72	611.03	611.03
CL. BRG. PIER 8	43+62.45	32.72	611.04	611.04
9A	43+72.45	32.72	611.09	611.12
9B	43+82.45	32.72	611.14	611.20
9C	43+92.45	32.72	611.19	611.27
9D	44+02.45	32.72	611.24	611.34
9E	44+12.45	32.72	611.29	611.39
9F	44+22.45	32.72	611.34	611.44
9G	44+32.45	32.72	611.39	611.49
9H	44+42.45	32.72	611.45	611.52
9J	44+52.45	32.72	611.50	611.56
9K	44+62.45	32.72	611.55	611.59
9L	44+72.45	32.72	611.60	611.62
9M	44+82.45	32.72	611.65	611.66
CL. BRG. PIER 9	44+93.95	32.72	611.71	611.71
10A	45+03.95	32.72	611.76	611.76
10B	45+13.95	32.72	611.81	611.82
10C	45+23.95	32.72	611.87	611.89
10D	45+33.95	32.72	611.92	611.97
10E	45+43.95	32.72	611.99	612.05
10F	45+53.95	32.72	612.05	612.13
10G	45+63.95	32.72	612.12	612.21
10H	45+73.95	32.72	612.19	612.29
10J	45+83.95	32.72	612.26	612.36
10K	45+93.95	32.72	612.34	612.43
10L	46+03.95	32.72	612.42	612.49
10M	46+13.95	32.72	612.50	612.55
10N	46+23.95	32.72	612.59	612.62
10P	46+33.95	32.72	612.68	612.69
10Q	46+43.95	32.72	612.73	612.73
10R	46+53.95	32.72	612.78	612.77
10S	46+63.95	32.72	612.83	612.82
10T	46+73.95	32.72	612.89	612.88
CL. BRG. PIER 10	46+78.95	32.72	612.92	612.92
11A	46+88.95	32.72	612.97	613.00
11B	46+98.95	32.72	613.04	613.09
11C	47+08.95	32.72	613.10	613.20
11D	47+18.95	32.72	613.17	613.32
11E	47+28.95	32.72	613.24	613.44
11F	47+38.95	32.72	613.31	613.57
11G	47+48.95	32.72	613.39	613.70
11H	47+58.95	32.72	613.47	613.83
11J	47+68.95	32.72	613.56	613.95
11K	47+78.95	32.72	613.65	614.07
11L	47+88.95	32.72	613.74	614.17
11M	47+98.95	32.72	613.83	614.27
11N	48+08.95	32.72	613.93	614.36
11P	48+18.95	32.72	614.03	614.44
11Q	48+28.95	32.72	614.14	614.50
11R	48+38.95	32.72	614.24	614.56
11S	48+49.06	32.71	614.35	614.62
11T	48+59.21	32.67	614.47	614.66
11U	48+69.37	32.60	614.59	614.71
CL. BRG. S. Abut.	48+83.84	32.44	614.77	614.77
BK. S. Abut.	48+87.53	32.39	614.82	614.82

GIRDER 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+63.40	41.55	610.87	610.87
CL. BRG. PIER 8	43+64.90	41.54	610.88	610.88
9A	43+74.90	41.47	610.93	610.96
9B	43+84.90	41.39	610.98	611.04
9C	43+94.90	41.32	611.03	611.11
9D	44+04.90	41.24	611.08	611.18
9E	44+14.90	41.17	611.14	611.24
9F	44+24.90	41.09	611.19	611.29
9G	44+34.90	41.02	611.24	611.33
9H	44+44.90	40.94	611.29	611.37
9J	44+54.90	40.87	611.34	611.41
9K	44+64.90	40.79	611.40	611.44
9L	44+74.90	40.72	611.45	611.47
9M	44+84.90	40.65	611.50	611.51
CL. BRG. PIER 9	44+96.13	40.56	611.56	611.56
10A	45+06.13	40.49	611.61	611.61
10B	45+16.13	40.41	611.67	611.68
10C	45+26.13	40.34	611.73	611.75
10D	45+36.13	40.26	611.79	611.83
10E	45+46.13	40.19	611.85	611.91
10F	45+56.13	40.11	611.92	611.99
10G	45+66.13	40.04	611.99	612.07
10H	45+76.13	39.97	612.06	612.15
10J	45+86.13	39.89	612.14	612.23
10K	45+96.13	39.82	612.21	612.30
10L	46+06.13	39.74	612.30	612.37
10M	46+16.13	39.67	612.38	612.43
10N	46+26.12	39.64	612.47	612.50
10P	46+36.12	39.64	612.56	612.57
10Q	46+46.12	39.64	612.61	612.61
10R	46+56.12	39.64	612.65	612.65
10S	46+66.12	39.64	612.71	612.70
CL. BRG. PIER 10	46+80.87	39.64	612.79	612.79
11A	46+90.87	39.64	612.85	612.87
11B	47+00.87	39.64	612.91	612.96
11C	47+10.87	39.64	612.97	613.06
11D	47+20.87	39.64	613.04	613.18
11E	47+30.87	39.64	613.11	613.30
11F	47+40.87	39.64	613.19	613.43
11G	47+50.87	39.64	613.26	613.55
11H	47+60.87	39.64	613.33	613.67
11J	47+70.87	39.64	613.41	613.78
11K	47+80.87	39.64	613.49	613.89
11L	47+90.87	39.64	613.57	613.98
11M	48+00.87	39.64	613.66	614.07
11N	48+10.87	39.64	613.75	614.15
11P	48+20.87	39.64	613.84	614.22
11Q	48+30.87	39.64	613.94	614.29
11R	48+40.87	39.64	614.04	614.34
11S	48+51.02	39.63	614.14	614.39
11T	48+61.20	39.58	614.25	614.43
11U	48+71.39	39.50	614.36	614.47
CL. BRG. S. Abut.	48+85.89	39.33	614.53	614.53
BK. S. Abut.	48+89.59	39.28	614.57	614.57

NOTE:

1. Offset measured from P.G. EB I-74.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

FILE NAME = 081-0178-C00AB-031-Top of Slab Elevations Unit 4 (3 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK/AA	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK/AA	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS UNIT 4 (3 OF 4)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S31 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	920
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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11:46:27 AM

1/18/2017

GIRDER 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL. JT. & PIER 8	43+65.85	50.36	610.71	610.71
CL. BRG. PIER 8	43+67.35	50.34	610.71	610.71
9A	43+77.35	50.19	610.77	610.80
9B	43+87.35	50.04	610.82	610.88
9C	43+97.34	49.89	610.87	610.95
9D	44+07.34	49.75	610.93	611.02
9E	44+17.34	49.60	610.98	611.08
9F	44+27.34	49.45	611.03	611.13
9G	44+37.34	49.30	611.09	611.18
9H	44+47.34	49.15	611.14	611.22
9J	44+57.34	49.00	611.19	611.25
9K	44+67.34	48.85	611.25	611.29
9L	44+77.34	48.70	611.30	611.32
9M	44+87.34	48.55	611.35	611.36
CL. BRG. PIER 9	44+98.30	48.40	611.41	611.41
10A	45+08.30	48.24	611.47	611.47
10B	45+18.30	48.09	611.53	611.54
10C	45+28.30	47.94	611.59	611.62
10D	45+38.30	47.80	611.65	611.70
10E	45+48.30	47.65	611.72	611.79
10F	45+58.30	47.50	611.78	611.87
10G	45+68.30	47.35	611.86	611.96
10H	45+78.30	47.20	611.93	612.04
10J	45+88.30	47.05	612.01	612.11
10K	45+98.30	46.90	612.09	612.19
10L	46+08.30	46.75	612.17	612.26
10M	46+18.30	46.60	612.26	612.32
10N	46+28.29	46.55	612.35	612.39
10P	46+38.29	46.55	612.43	612.45
10Q	46+48.29	46.55	612.48	612.48
10R	46+58.29	46.55	612.53	612.52
10S	46+68.29	46.55	612.58	612.57
CL. BRG. PIER 10	46+82.79	46.55	612.66	612.66
11A	46+92.79	46.55	612.72	612.74
11B	47+02.79	46.55	612.78	612.83
11C	47+12.79	46.55	612.85	612.94
11D	47+22.79	46.55	612.92	613.05
11E	47+32.79	46.55	612.99	613.18
11F	47+42.79	46.55	613.06	613.30
11G	47+52.79	46.55	613.12	613.41
11H	47+62.79	46.55	613.19	613.52
11J	47+72.79	46.55	613.26	613.63
11K	47+82.79	46.55	613.33	613.72
11L	47+92.79	46.55	613.41	613.81
11M	48+02.79	46.55	613.48	613.90
11N	48+12.79	46.55	613.57	613.97
11P	48+22.79	46.55	613.65	614.03
11Q	48+32.79	46.55	613.74	614.09
11R	48+42.79	46.55	613.83	614.13
11S	48+53.00	46.54	613.92	614.17
11T	48+63.21	46.48	614.02	614.21
11U	48+73.41	46.40	614.13	614.24
CL. BRG. S. Abut.	48+87.95	46.22	614.28	614.28
BK. S. Abut.	48+91.66	46.16	614.33	614.33



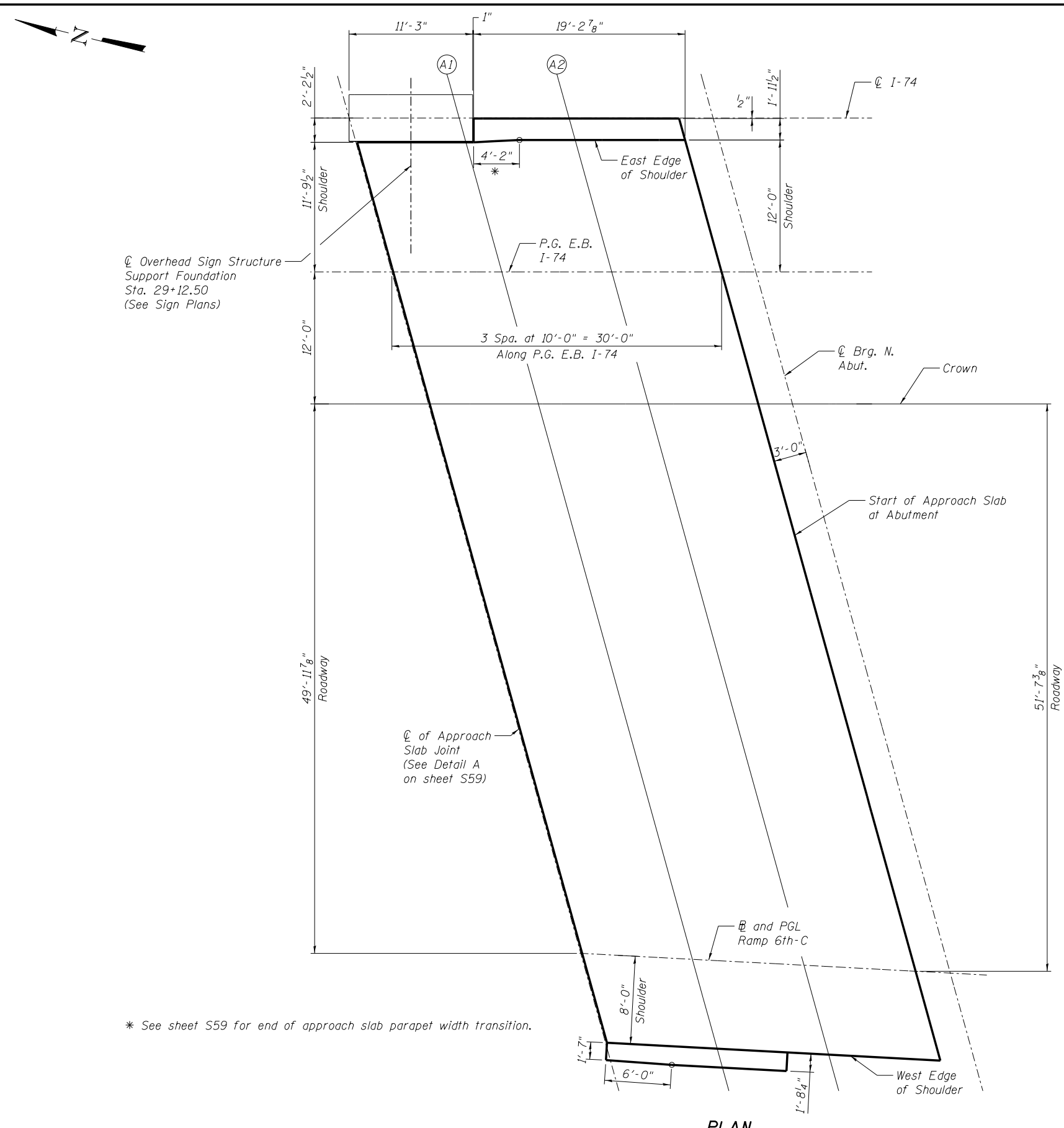
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

E-S 7-1-10

NOTE:

1. Offset measured from P.G. EB I-74.

FILE NAME = 081-0178-C00AB-032-Top of Slab Elevations Unit 4 (4 of 4).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS UNIT 4 (4 OF 4) STRUCTURE NO. 081-0178 (EASTBOUND)	F.A.I. RTE. = 74	SECTION = 81-1HVBR	COUNTY = ROCK ISLAND	TOTAL SHEETS = 1504	SHEET NO. = 921	
MODEL: Default	PLOT SCALE =	DRAWN - KMS	REVISED -			SHEET NO. S32 OF S138 SHEETS		CONTRACT NO. 64C08		ILLINOIS FED. AID PROJECT	
	PLOT DATE = 1/18/2017	CHECKED - AJK/AY	REVISED -								



☐ Overhead Sign Structure Support Foundation Sta. 29+12.50 (See Sign Plans)

* See sheet S59 for end of approach slab parapet width transition.

PLAN

NOTE:
1. Offset measured from P.G. EB I-74.

EAST EDGE OF SHOULDER

Location	Station (Along ☐ I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
☐ of Approach Slab Joint	29+07.50	-11.79	593.79
A1	29+17.50	-11.79	594.00
A2	29+27.44	-12.00	594.21
Start of Approach Slab at Abut.	29+37.44	-12.00	594.42

P.G. E.B. I-74

Location	Station (Along ☐ I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
☐ of Approach Slab Joint	29+10.77	0.00	594.10
A1	29+20.77	0.00	594.31
A2	29+30.77	0.00	594.52
Start of Approach Slab at Abut.	29+40.77	0.00	594.73

CROWN

Location	Station (Along ☐ I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
☐ of Approach Slab Joint	29+14.10	12.00	594.41
A1	29+24.10	12.00	594.62
A2	29+34.10	12.00	594.83
Start of Approach Slab at Abut.	29+44.10	12.00	595.04

RAMP 6TH-C

Location	Station (Along ☐ I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
☐ of Approach Slab Joint	29+27.96	61.98	593.70
A1	29+38.11	62.53	593.90
A2	29+48.26	63.07	594.10
Start of Approach Slab at Abut.	29+58.41	63.61	594.31

WEST EDGE OF SHOULDER

Location	Station (Along ☐ I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
☐ of Approach Slab Joint	29+30.22	70.12	593.58
A1	29+40.37	70.66	593.79
A2	29+50.52	71.20	593.99
Start of Approach Slab at Abut.	29+60.67	71.74	594.19

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-033-North Approach Slab Elevations.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

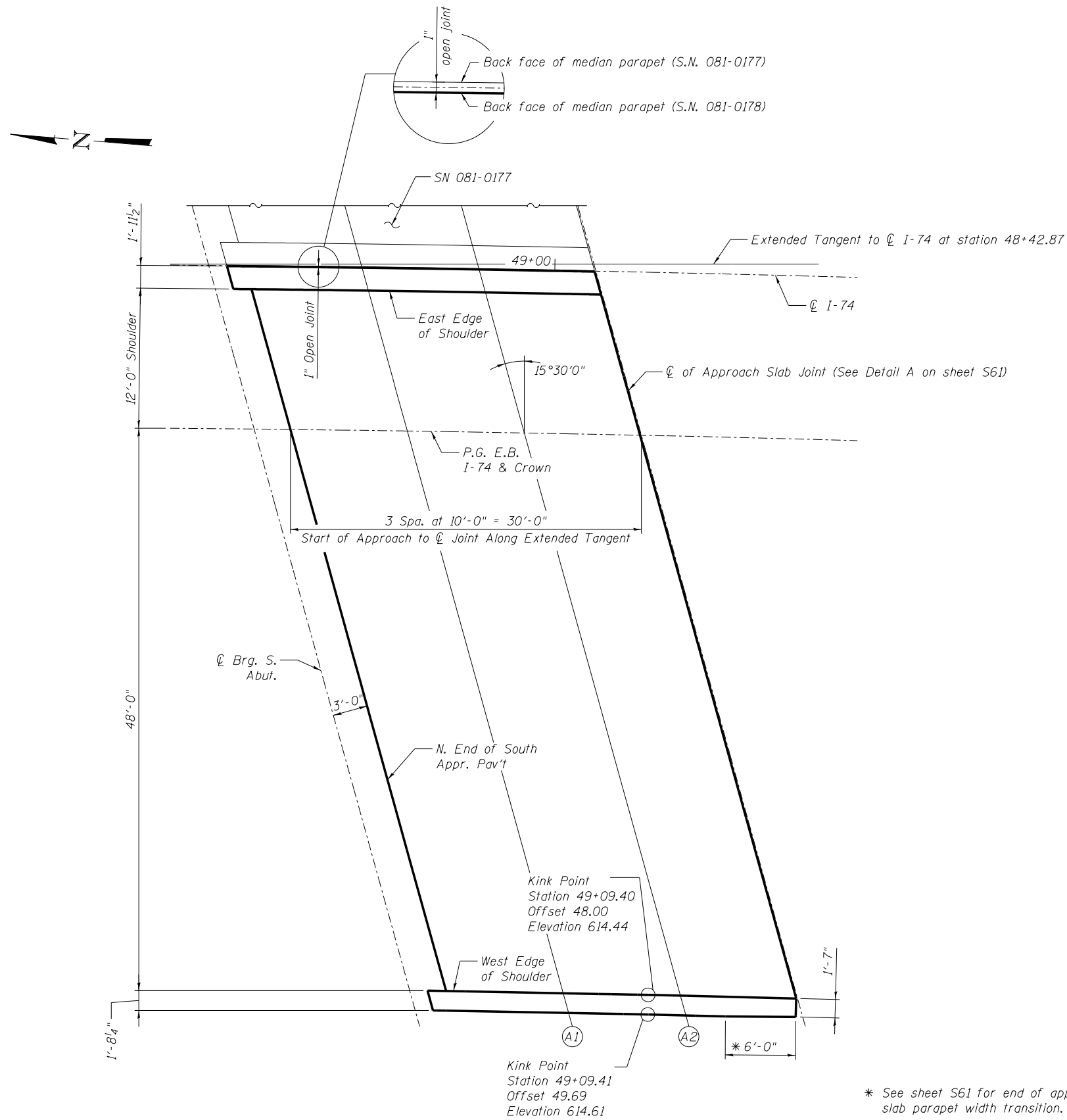
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S33 OF S138 SHEETS

F.A.I. RTE. = 74	SECTION = 81-1HVBR	COUNTY = ROCK ISLAND	TOTAL SHEETS = 1504	SHEET NO. = 922
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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PLAN

* See sheet S61 for end of approach slab parapet width transition.

NOTE:

1. Offset measured from P.G. EB I-74.

EAST EDGE OF SHOULDER

Location	Station (Along CL I-74)	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't	48+73.99	-12.00	615.61
A1	48+84.03	-12.00	615.78
A2	48+94.08	-12.00	615.94
CL of Approach Slab Joint	49+04.14	-12.00	616.11

P.G. E.B. I-74 & CROWN

Location	Station (Along CL I-74)	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't	48+77.47	0.00	615.91
A1	48+87.55	0.00	616.07
A2	48+97.65	0.00	616.24
CL of Approach Slab Joint	49+07.75	0.00	616.41

WEST EDGE OF SHOULDER

Location	Station (Along CL I-74)	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't	48+91.68	48.00	614.25
A1	49+01.95	48.01	614.36
A2	49+12.22	48.00	614.47
CL of Approach Slab Joint	49+22.50	48.00	614.58

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 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-034-South Approach Slab Elevations.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AAY	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AAY	REVISED -

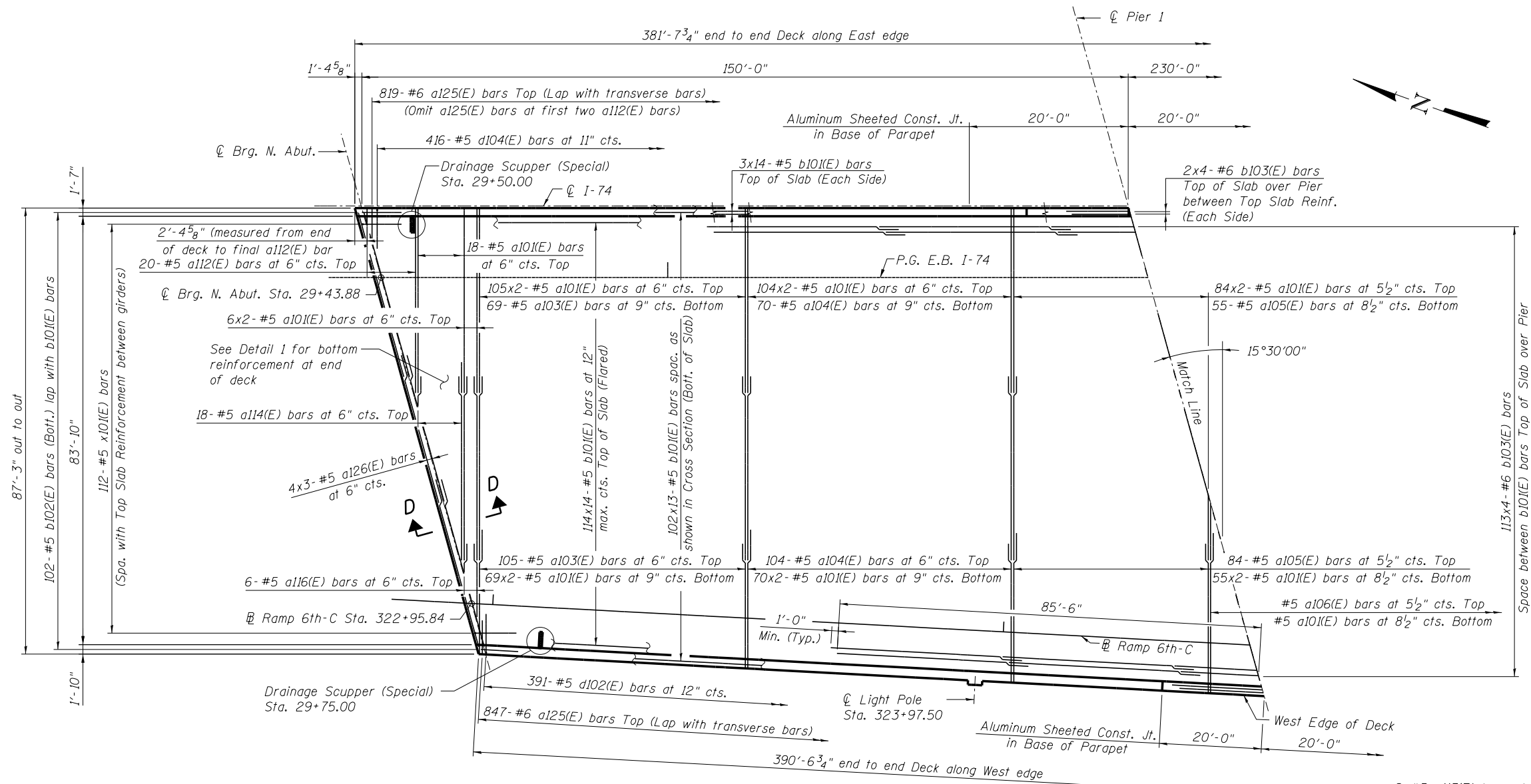
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SOUTH APPROACH SLAB ELEVATIONS
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S34 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 923
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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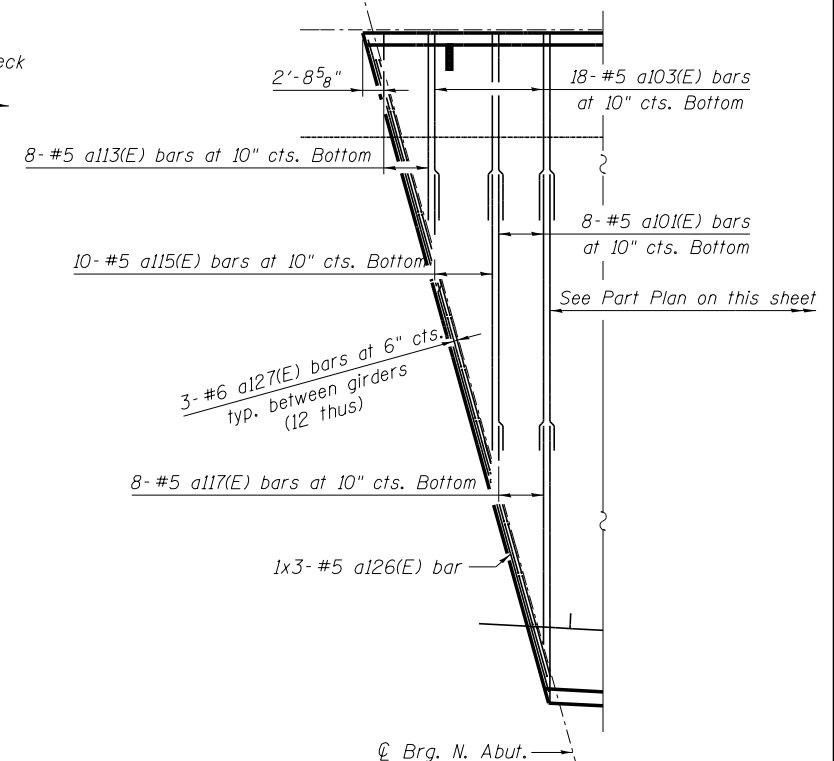
MINIMUM BAR LAP

(Slab)
 #5 bar = 3'-3"
 #6 bar = 3'-10"

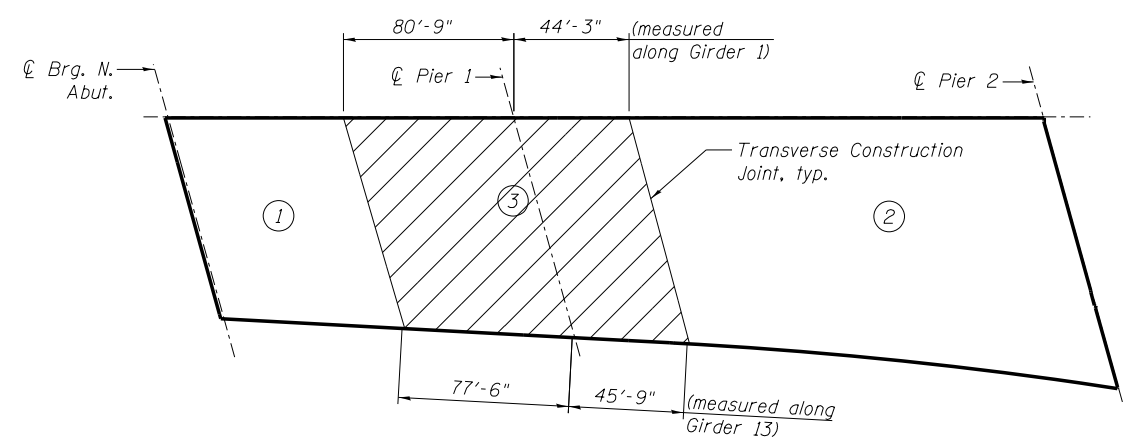
PART PLAN

NOTES:

- See Sheets S52 thru S55 for superstructure details and Bill of Materials.
- See Sheet S41 for Deck Cross Section.
- Bars indicated this 30x17-#5 etc. indicates 30 lines of bars with 17 lengths per line.
- See Sheet S69 for Drainage Scupper details.
- Top transverse bars laps shown, for Bottom bars lap see Deck Cross Section.
- Dimensions at N. Abut. are based on Rolled Rail Strip Seal Joint. If Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet S63.
- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 - A) At least 72 hours shall have elapsed from the end of the previous pour.
 - B) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
- The Contractor is alerted that camber and dead load deflection values were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence could result in changes to camber and deck elevations. These changes shall be submitted to the Engineer for review and approval.
- For section D-D, see sheet S52.
- For bars located in skewed ends of deck, see sheet S54 for cutting diagram.



DETAIL 1
 (Longitudinal bars not shown for clarity)



REQUIRED DECK POUR SEQUENCE

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-035-Deck Reinforcement Plan Unit 1 (1 of 2).dgn	USER NAME = ksnyder	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH/DMS	REVISED -
		CHECKED - AJK	REVISED -

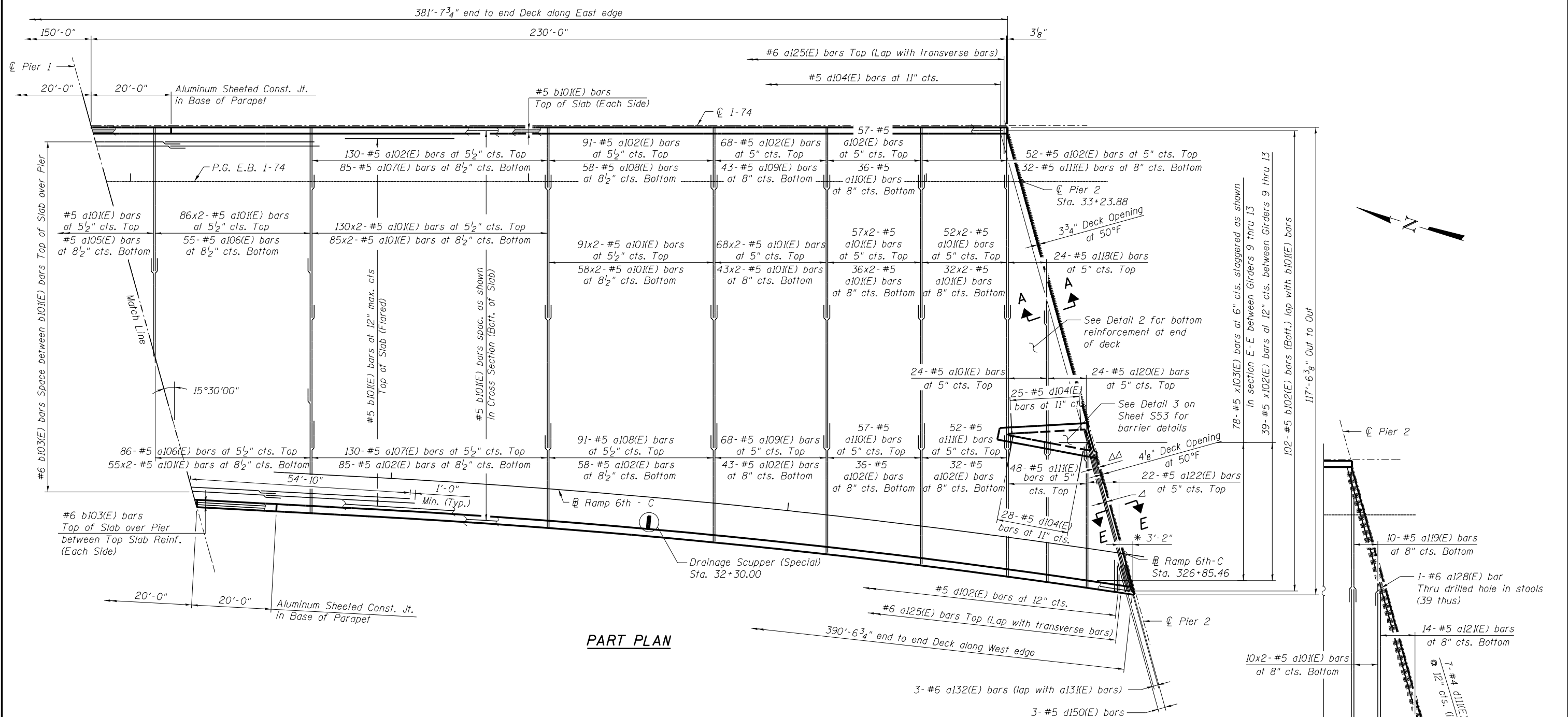
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REINFORCEMENT PLAN UNIT 1 (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

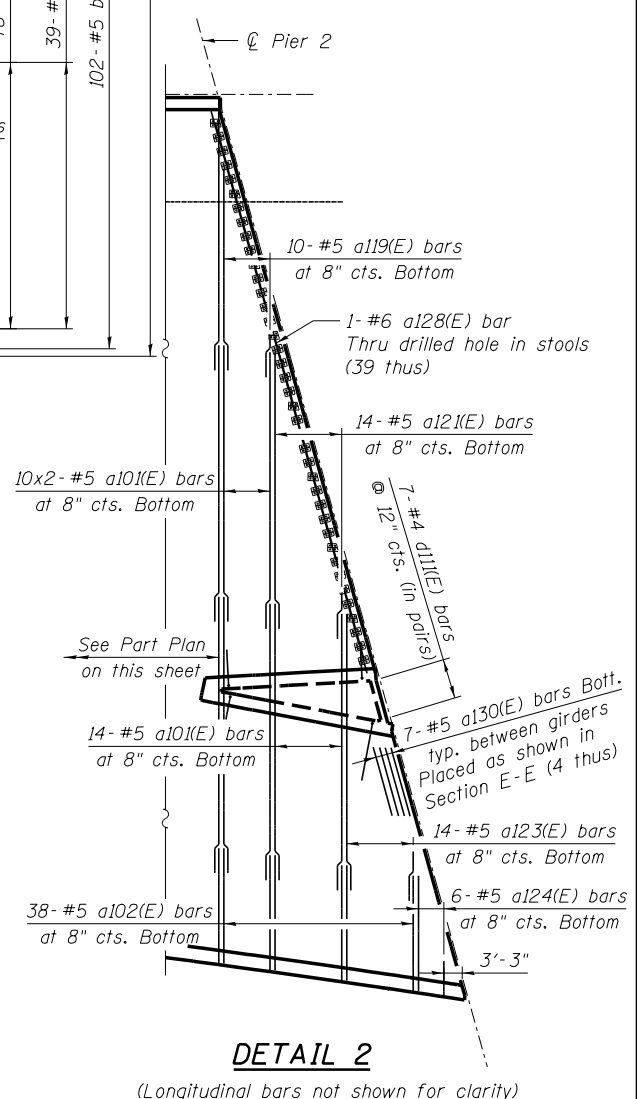
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	924
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

SHEET NO. S35 OF S138 SHEETS

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PART PLAN



DETAIL 2
(Longitudinal bars not shown for clarity)

- NOTES:**
1. See Sheets S52 thru S55 for superstructure details and Bill of Materials.
 2. See Sheet S41 for Deck Cross Section.
 3. Bars indicated this 30x17-#5 etc. indicates 30 lines of bars with 17 lengths per line.
 4. See Sheet S69 for Drainage Scupper details.
 5. Top transverse bar laps shown, for Bottom bar laps see Deck Cross Section.
 6. For section A-A, see sheet S64.
 7. For section E-E, see sheet S52.
 8. Deck opening dimensions are measured from end of deck to center pier at 50°F.

MINIMUM BAR LAP
(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"

* Measured from last a122(E) bar to edge of deck at gutterline.
Δ 3x2-#5 a131(E) bars at 6" cts. top. Place as shown in Section E-E
ΔΔ 3-#5 d151(E) bars



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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-036-Deck Reinforcement Plan Unit 1 (2 of 2).dgn	USER NAME = ksnider	DESIGNED - DMS/DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - A.J.K./TPS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH/DMS/DTS	REVISED -
		CHECKED - A.J.K./TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

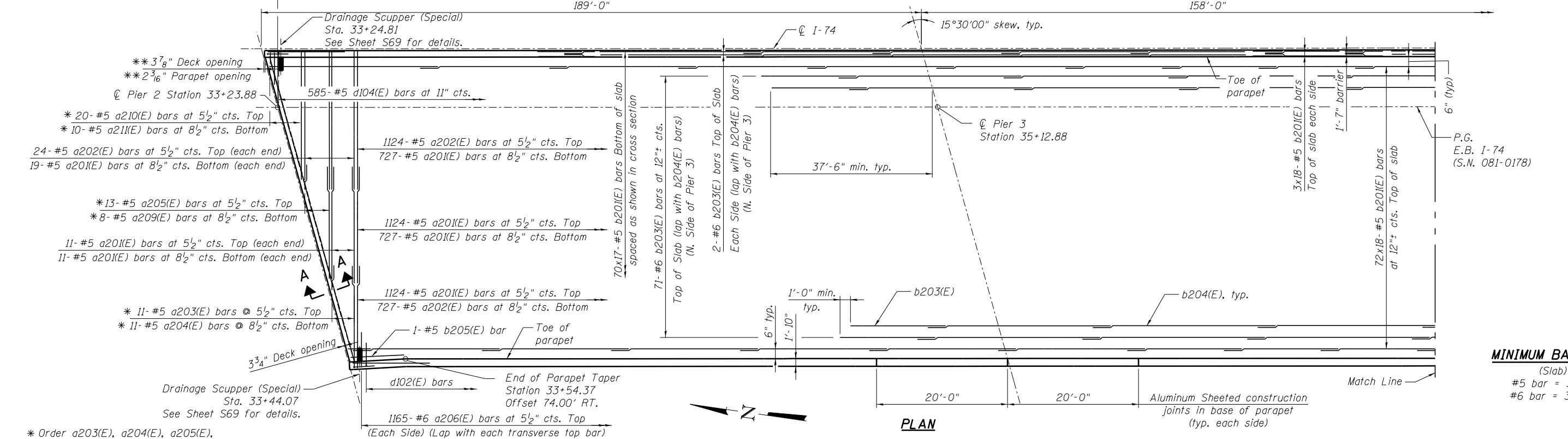
DECK REINFORCEMENT PLAN UNIT 1 (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S36 OF S138 SHEETS

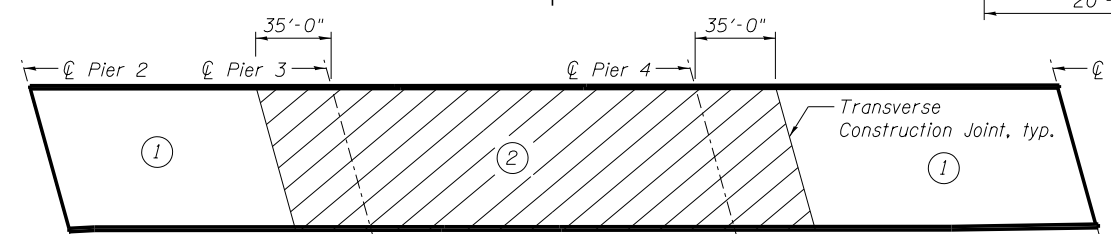
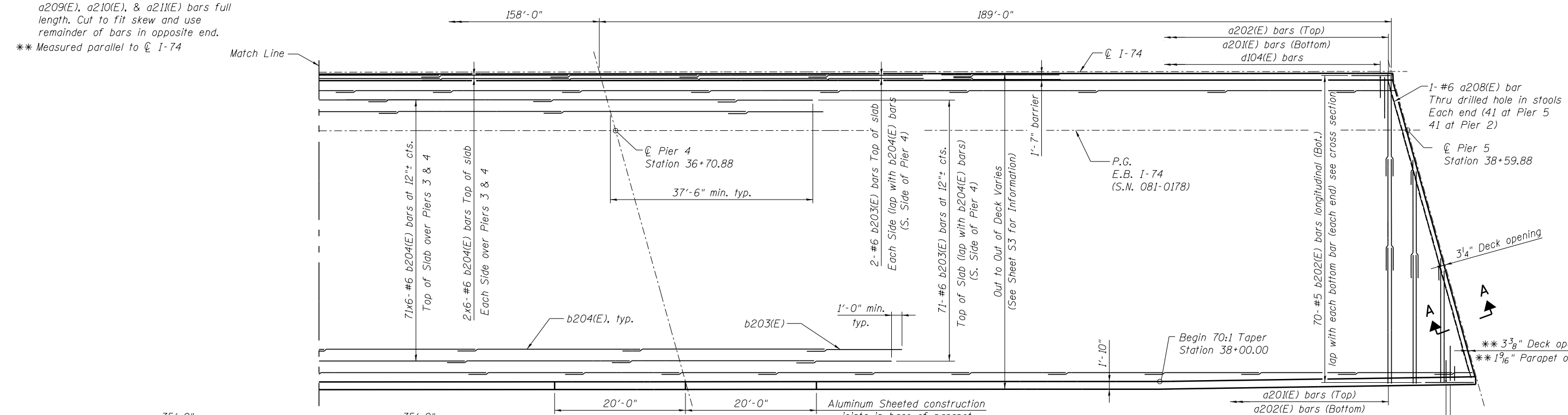
F.A.I. R.T.E. = 74	SECTION = 81-1HVBR	COUNTY = ROCK ISLAND	TOTAL SHEETS = 1504	SHEET NO. = 925
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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535'-4³/₄" End to End of Deck (Measured along P.G. E.B. I-74)



MINIMUM BAR LAP
(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"



NOTES:

- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 - At least 72 hours shall have elapsed from the end of the previous pour.
 - The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
- The Contractor is alerted that camber and dead load deflection values were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence could result in changes to camber and deck elevations. These changes shall be submitted to the Engineer for review and approval.
- See Sheets S52 thru S55 for superstructure details and Bill of Materials.
- See sheet S42 for Deck Cross Section.
- Bars indicated thus: 70x17- #5 etc. indicates 70 lines of bars with 17 lengths per line.
- See Sheet S64 for Section A-A.
- See Sheets S46 & S47 for parapet reinforcement.
- Deck opening dimensions are measured from end of deck to centerline of pier at 50°F.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-037-Deck Reinforcement Plan Unit 2.dgn	USER NAME = ksnider	DESIGNED - JDS/AJK/DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AMB/TPS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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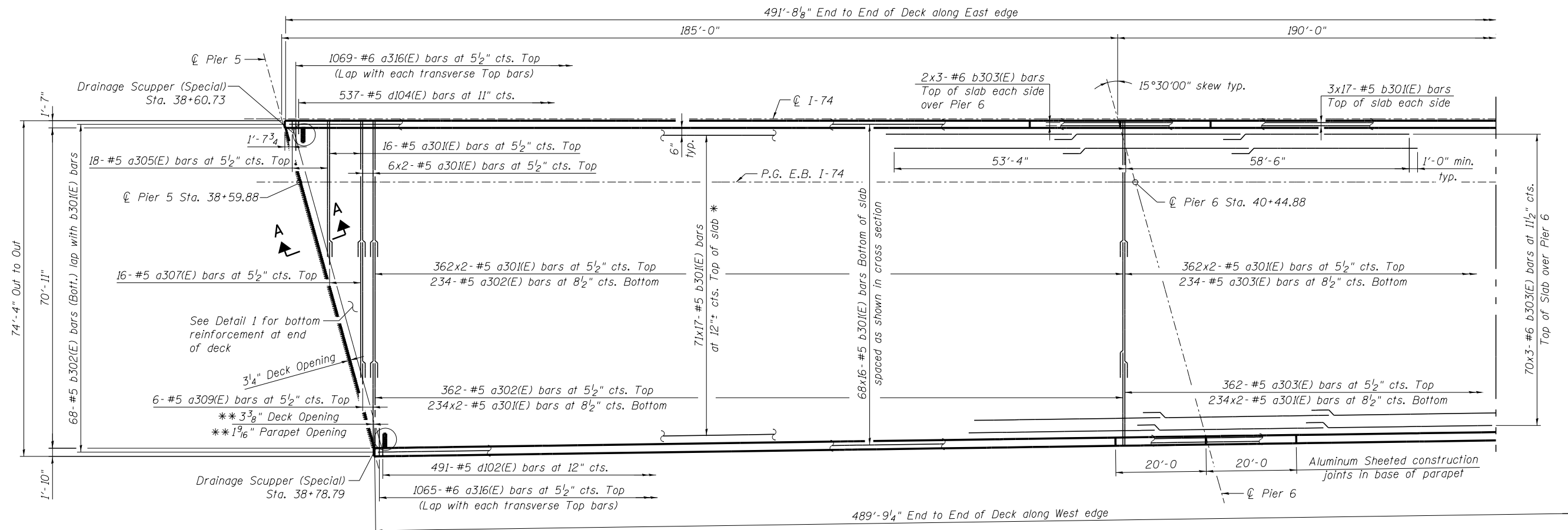
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK REINFORCEMENT PLAN UNIT 2
STRUCTURE NO. 081-0178 (EASTBOUND)**

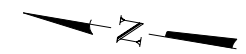
SHEET NO. S37 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	926
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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PART PLAN

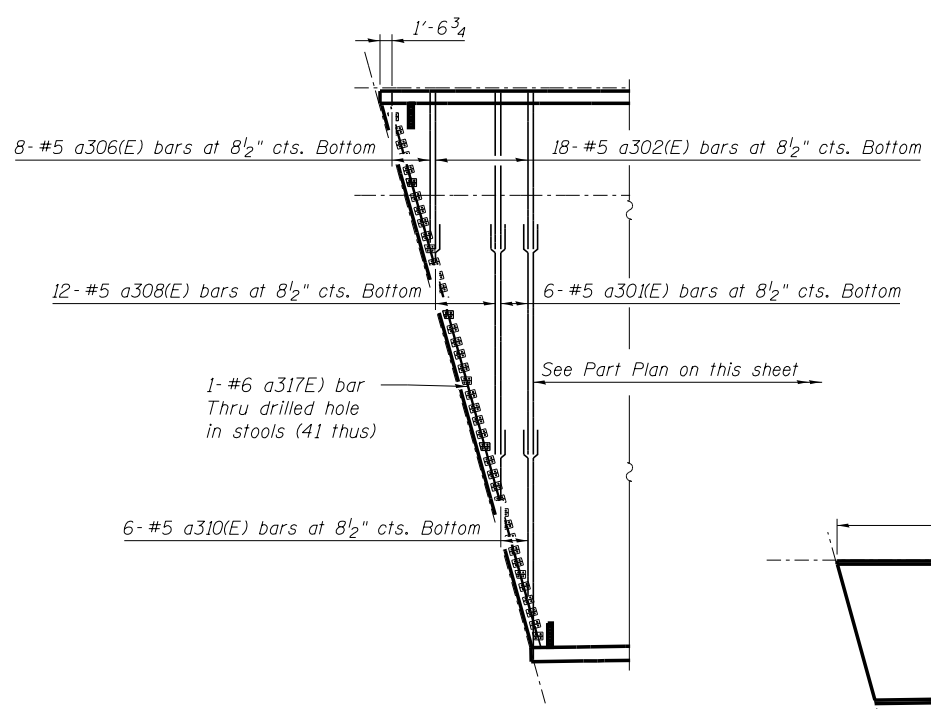


- * Bars at 12" cts. at Pier 5.
- Bars at 11 1/2" cts. at Pier 6.
- Bars at 11" cts. at Pier 7.
- Bars at 10 3/4" cts. at Pier 8.
- ** Measured parallel to \angle I-74

MINIMUM BAR LAP
(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"

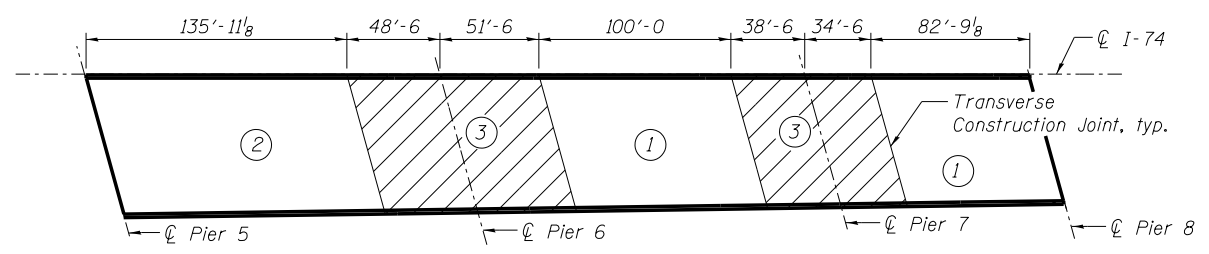
NOTES:

1. When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 - A) At least 72 hours shall have elapsed from the end of the previous pour.
 - B) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
2. The Contractor is alerted that camber and dead load deflection values were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence could result in changes to camber and deck elevations. These changes shall be submitted to the engineer for approval.
3. See Sheets S52 thru S55 for superstructure details and Bill of Materials.
4. See Sheet S42 for Deck Cross Section.
5. Bars indicated thus: 66x17-#5 etc. indicates 66 lines of bars with 17 lengths per line.
6. See Sheet S64 for Section A-A.
7. See Sheets S48 & S49 for parapet reinforcement.
8. The south segment of pour 1 shall be placed prior to the north segment of pour 1.
9. See sheet S54 for cutting diagram.
10. Deck opening dimensions are measured from end of deck to \angle pier at 50°F.



DETAIL 1

(Longitudinal bars not shown for clarity)



REQUIRED DECK POUR SEQUENCE

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-038-Deck Reinforcement Plan Unit 3	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AMB	REVISED -

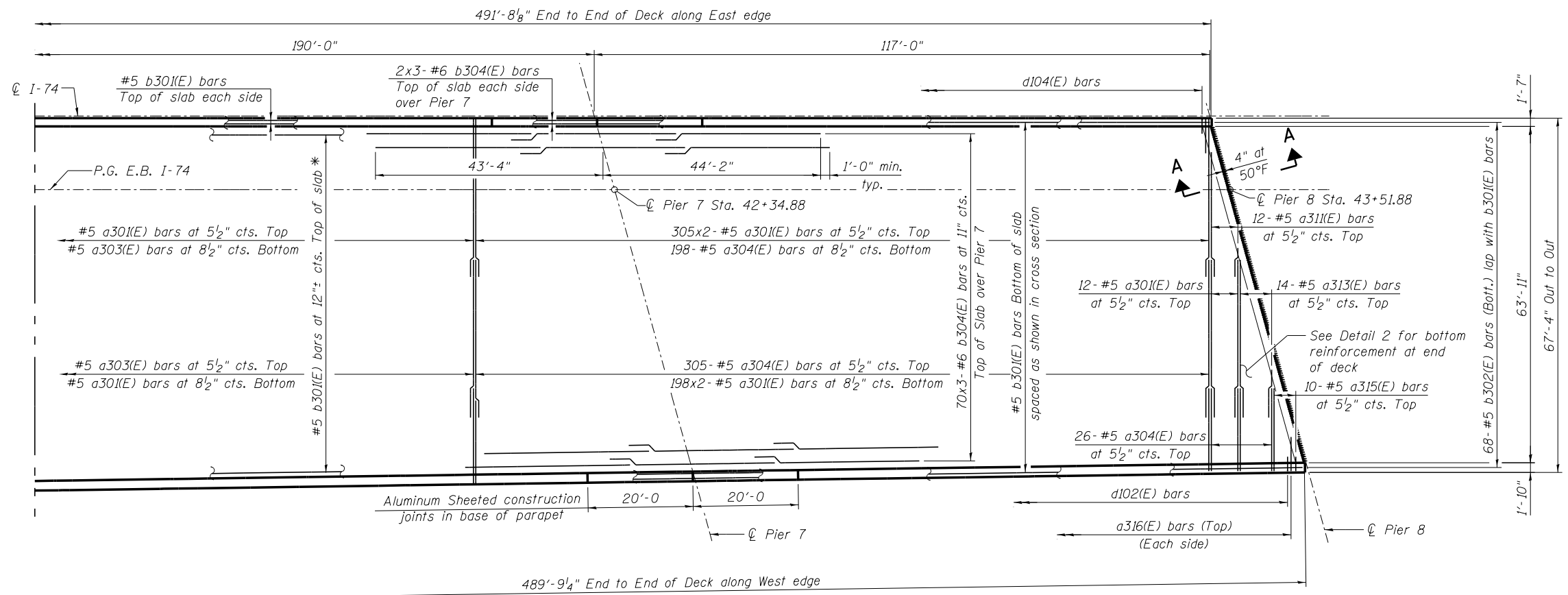
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK REINFORCEMENT PLAN UNIT 3 (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S38 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 927
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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PART PLAN

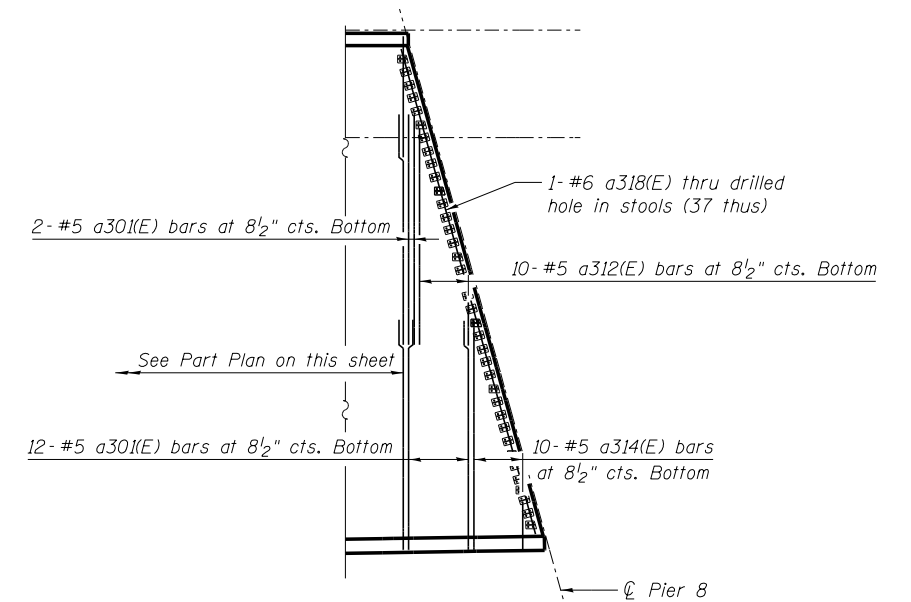
*Bars at 12" cts. at Pier 5.
Bars at 11 1/2" cts. at Pier 6.
Bars at 11" cts. at Pier 7.
Bars at 10 3/4" cts. at Pier 8.

MINIMUM BAR LAP

(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"

NOTES:

1. See sheets S52 thru S55 for superstructure details and Bill of Materials.
2. See sheet S42 for Deck Cross Sections.
3. Bars indicated thus: 66x17- #5 etc, indicates 66 lines of bars with 17 lengths per line.
4. For section A-A, see sheet S64.
5. Deck opening dimensions are measured from end of deck to ☉ pier at 50°F.



DETAIL 2
(Longitudinal bars not shown for clarity)



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-039-Deck Reinforcement Plan Unit 3
MODEL: Default

USER NAME = ksnider
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - DMS
CHECKED - AJK
DRAWN - KMS
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REVISED -
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REVISED -

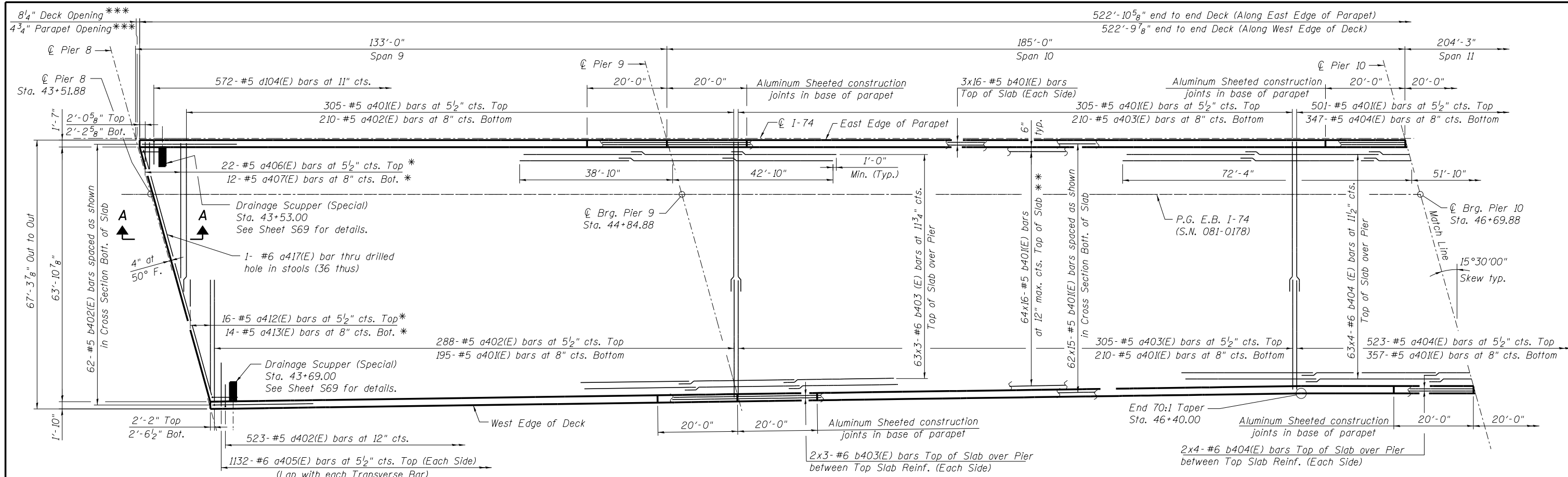
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK REINFORCEMENT PLAN UNIT 3 (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S39 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	928
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT



MINIMUM BAR LAP

(Slab)
 #5 bar = 3'-3"
 #6 bar = 3'-10"

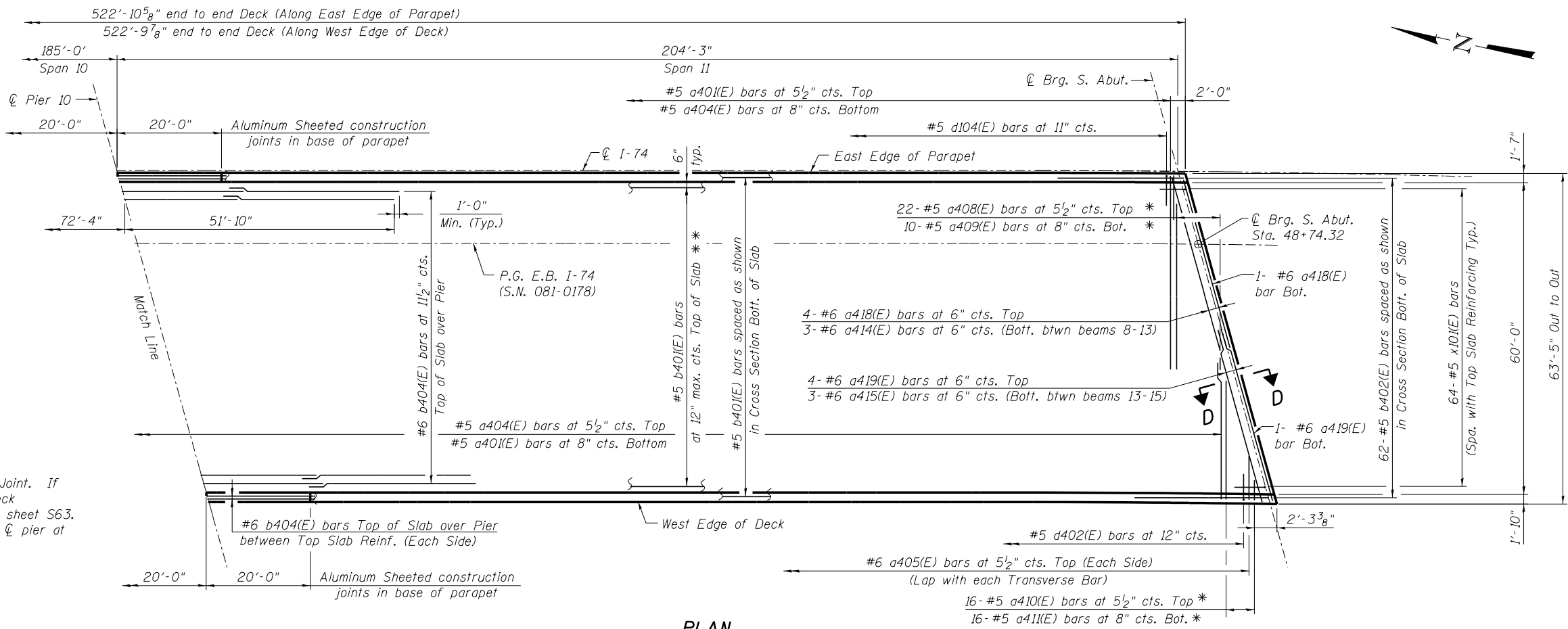
* Order a406(E) thru a413(E) bars full length. Cut to fit skew and place bars, from longest to shortest, at spacing shown within bar callout. See cutting diagram on sheet S55.

** Bars at 12" cts. at Pier 8.
 Bars at 11 3/4" cts. at Pier 9.
 Bars at 11 1/2" cts. at Pier 10.
 Bars at 11 1/4" cts. at S. Abut.

*** Measured parallel to I-74

NOTES:

1. See Sheets S52 thru S55 for superstructure details and Bill of Materials.
2. See sheet S43 for Deck Cross Section.
3. Bars indicated thus: 60x3-#5 etc. indicates 60 lines of bars with 3 lengths per line.
4. See Sheet S64 for Section A-A.
5. See Sheet S52 for Section D-D.
6. See Sheets S50 & S51 for parapet reinforcement.
7. Dimensions at S. Abut. are based on Rolled Rail Strip Seal Joint. If Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet S63.
8. Deck opening dimensions are measured from end of deck to center pier at 50°F.



PLAN

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-048-Deck Reinforcement Plan Unit 4.dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

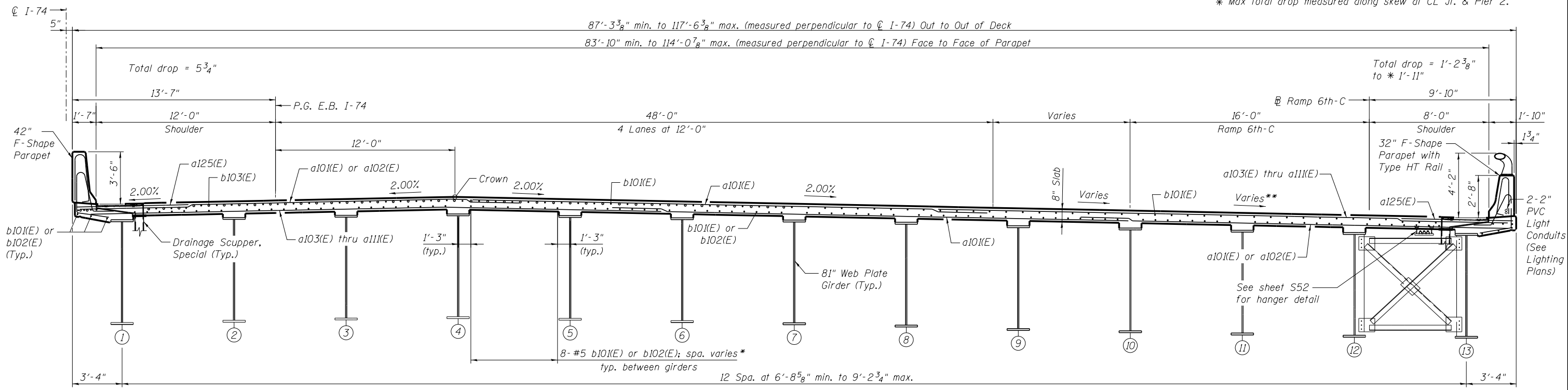
**DECK REINFORCEMENT PLAN UNIT 4
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S40 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 929
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

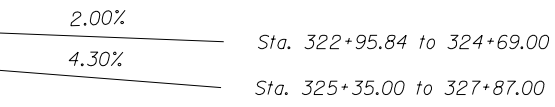
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* Max total drop measured along skew at CL Jt. & Pier 2.



DECK CROSS SECTION
(Looking South)

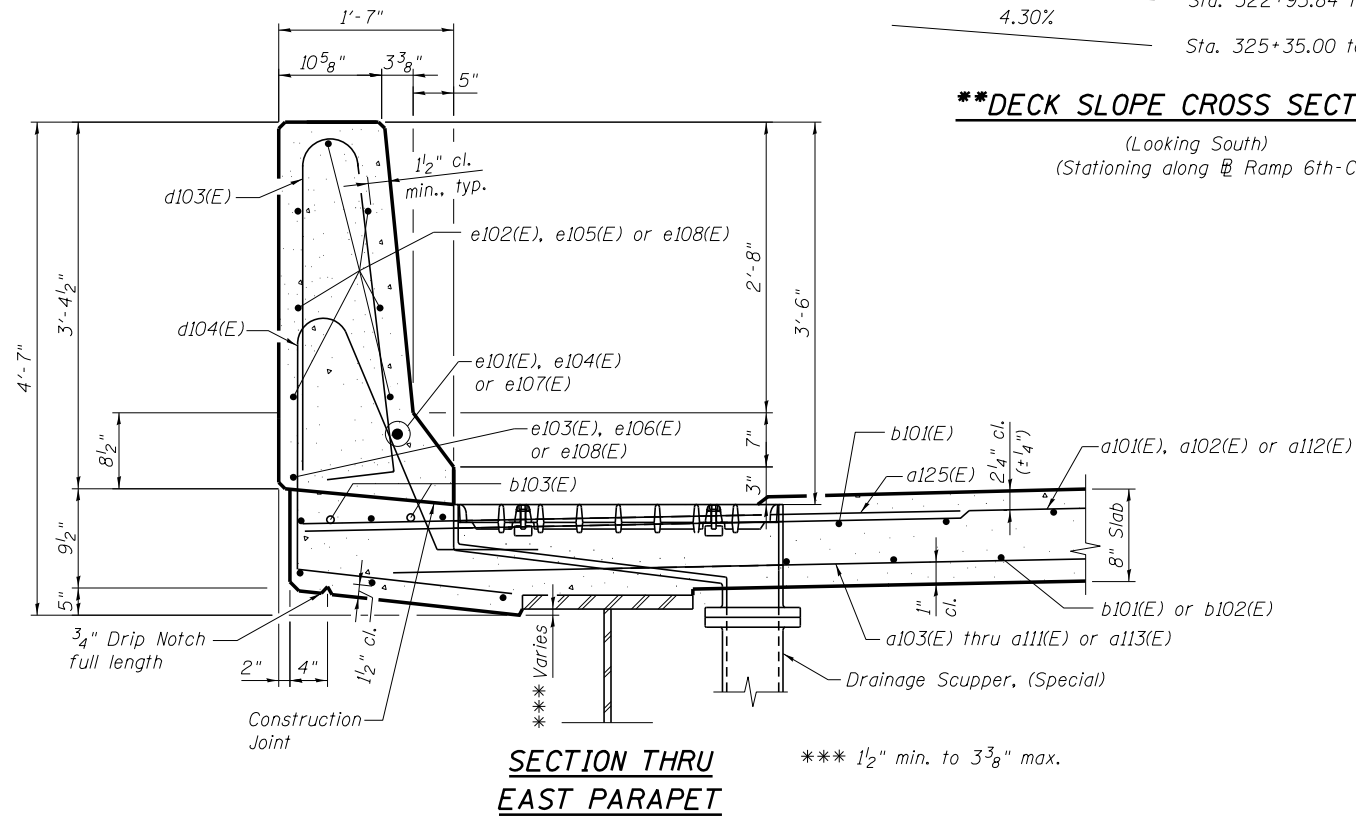
* Spacing 11 1/2" at Pier 2, 8 7/8" at Pier 1 and 7 1/4" at North Abut.



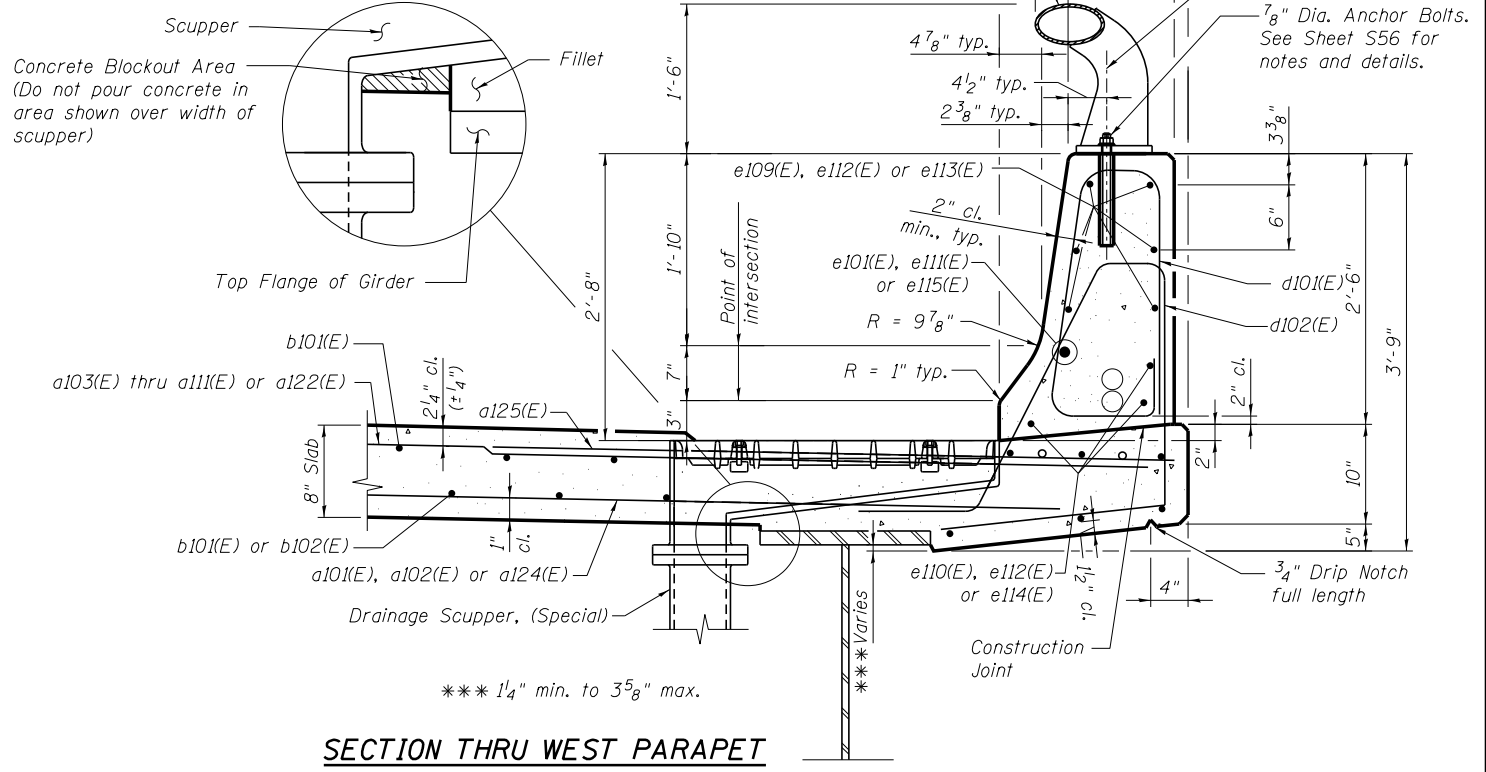
****DECK SLOPE CROSS SECTIONS**
(Looking South)
(Stationing along Ramp 6th-C)

MINIMUM BAR LAP

(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"



SECTION THRU EAST PARAPET



SECTION THRU WEST PARAPET

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-041-Deck Cross Section Unit 1.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - A.J.K	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - DMS	REVISED -
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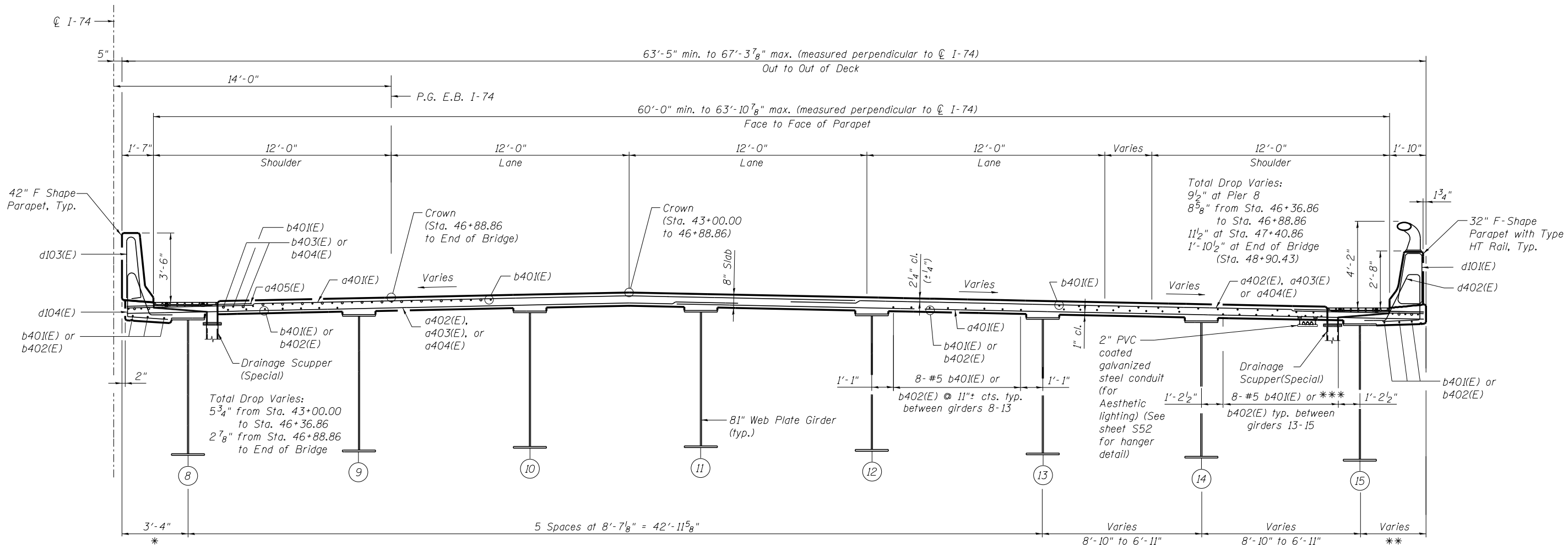
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK CROSS SECTION UNIT 1
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S41 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	930
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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* Constant 3'-4" from Pier 8 to station 48+42.87. Reduces to 3'-2 3/8" at S. Abut along curve.

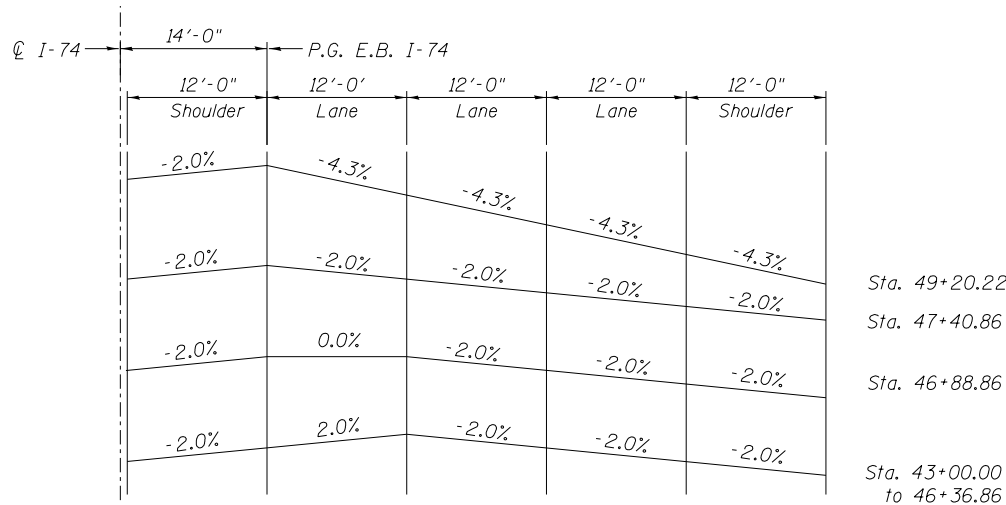
NEAR PIER

DECK CROSS SECTION
(Looking South)

NEAR MIDSPAN

** Varies from 3'-4 3/8" at pier 8 to 3'-6 1/2" at Sta. 46+21.80 to 3'-3 3/8" at Sta. 46+40.00. Constant 3'-3 3/8" to Sta. 48+42.91. Increased to 3'-7 3/4" at S. Abut. along curve.

*** Spacing between Girders 13-15 is :
11" @ Pier 8,
9 1/4" @ Pier 9,
7 3/4" from Kink to South Abutment



DECK SLOPE CROSS SECTION
(Looking South)

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

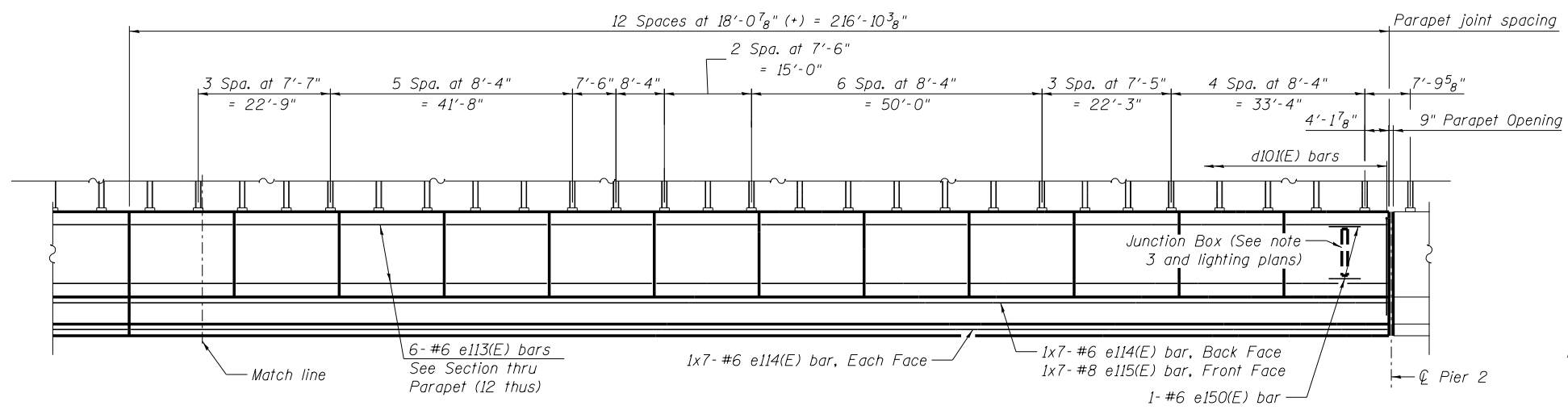
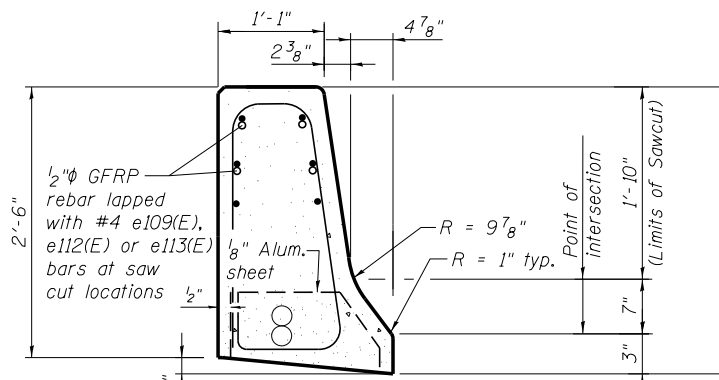
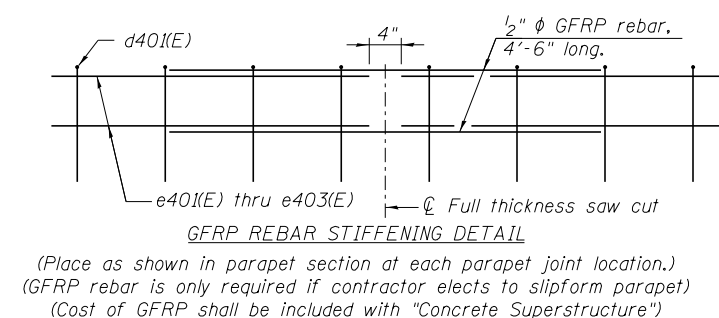
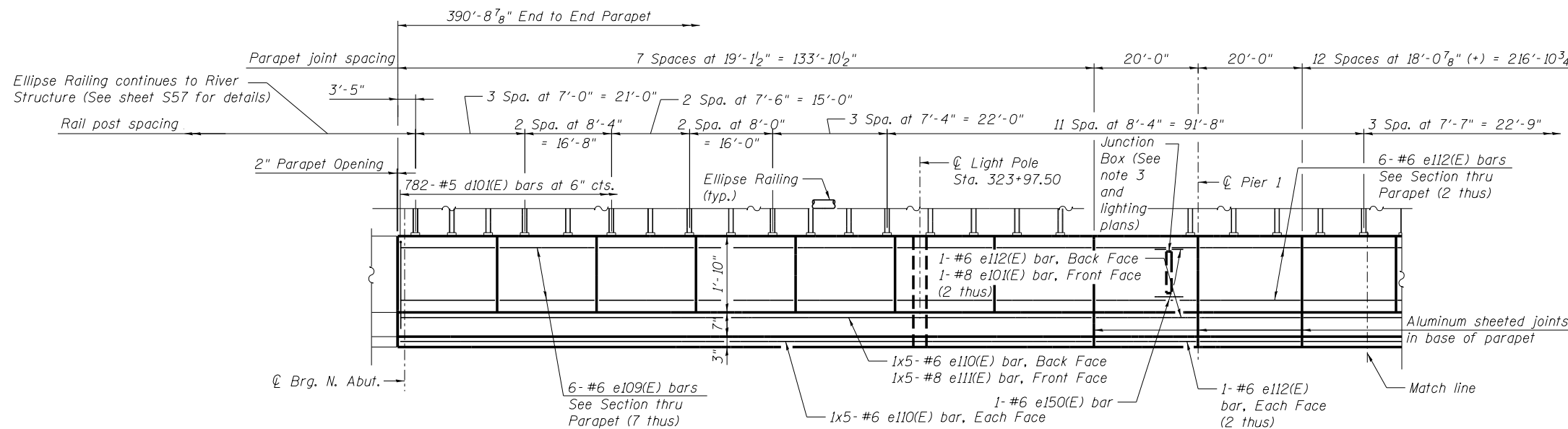
FILE NAME = 081-0178-C004B-043-Deck Cross Section Unit 4.dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Plot sheet	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTION UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)

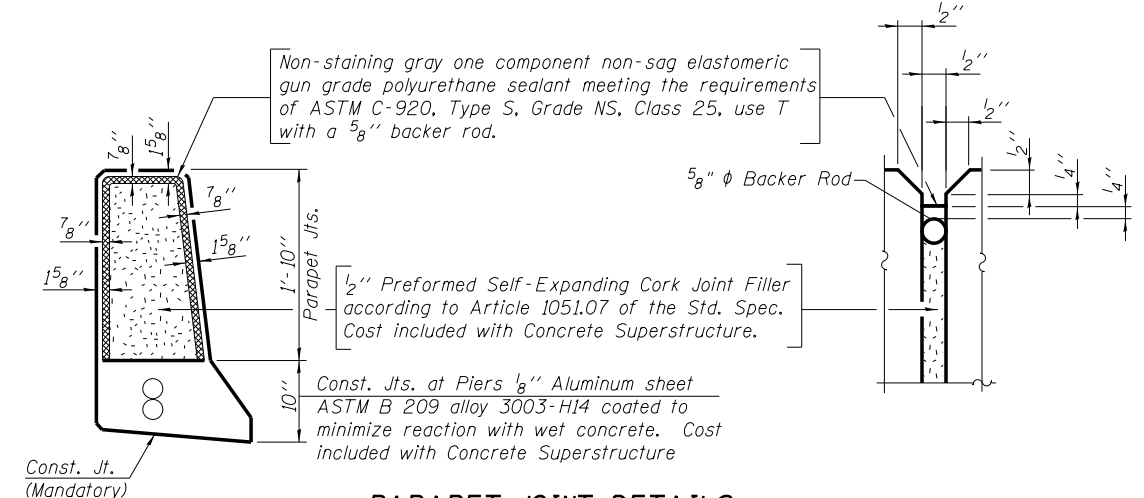
SHEET NO. S43 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	932
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	



INSIDE ELEVATION OF WEST PARAPET
(Reflected View Shown)

MINIMUM BAR LAP
(Parapet)
#6 bar = 3'-0"
#8 bar = 5'-2"



PARAPET JOINT DETAILS
(For Conventional Concrete Placement)

- NOTES:**
- All dimensions shown are along the toe of the parapet (gutterline).
 - Bars indicated thus 1x4- #8 etc. indicates 1 line of bars with 4 lengths per line.
 - 1 front face bar and 1 vertical bar may be cut to allow for junction box installation.

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FILE NAME = 081-0178-C00AB-044-West Parapet Details Unit 1.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - JDS	REVISED -
		CHECKED - AJK	REVISED -

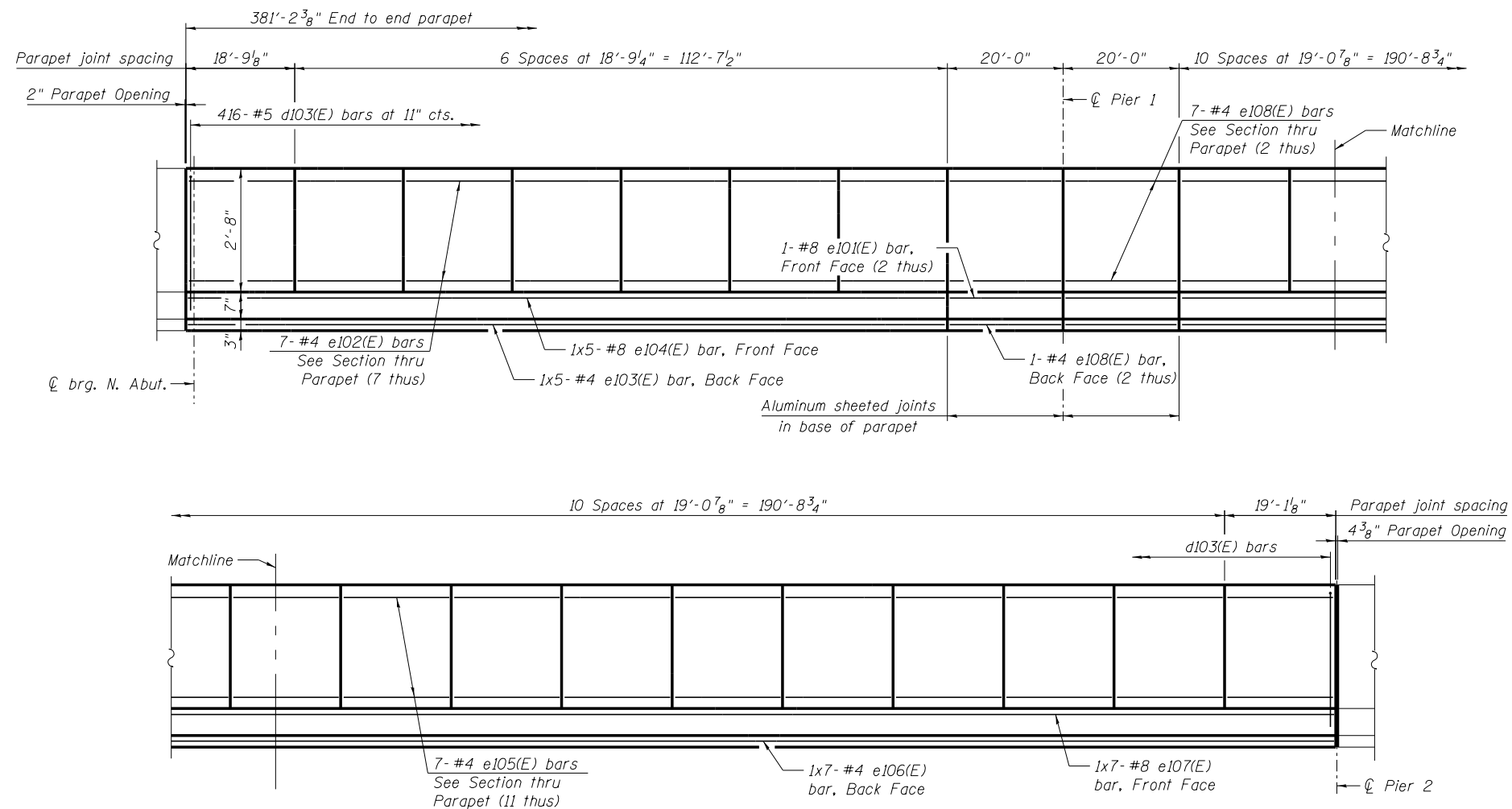
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST PARAPET DETAILS UNIT 1
STRUCTURE NO. 081-0178 (EASTBOUND)

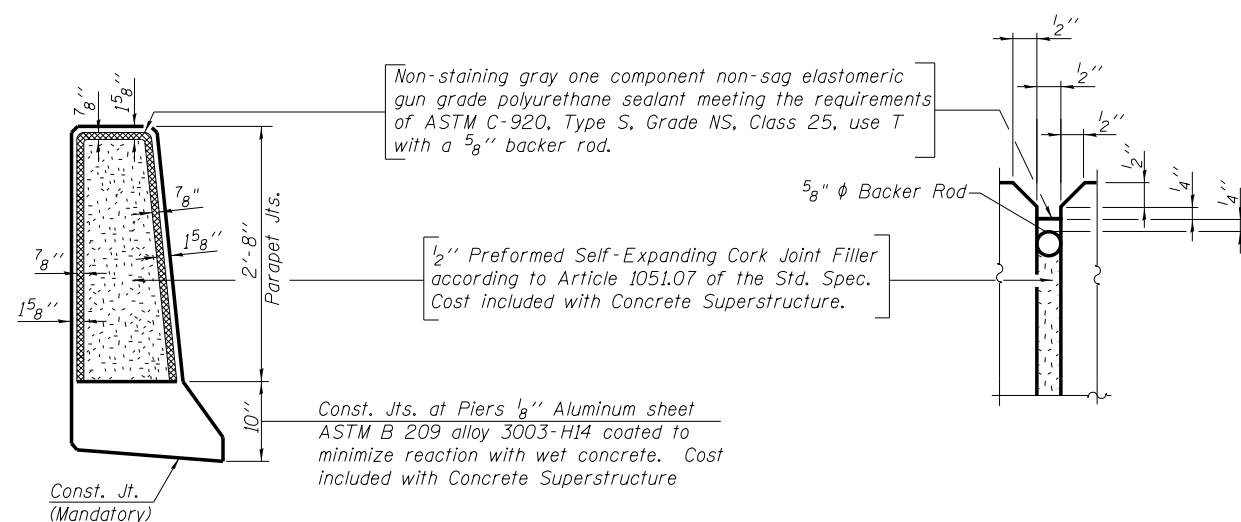
SHEET NO. S44 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	933
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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INSIDE ELEVATION OF EAST PARAPET



PARAPET JOINT DETAILS

MINIMUM BAR LAP

(Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"

NOTES:

- All dimensions shown are along the toe of the parapet (gutterline).
- Bars indicated thus 1x4- #8 etc. indicates 1 line of bars with 4 lengths per line.

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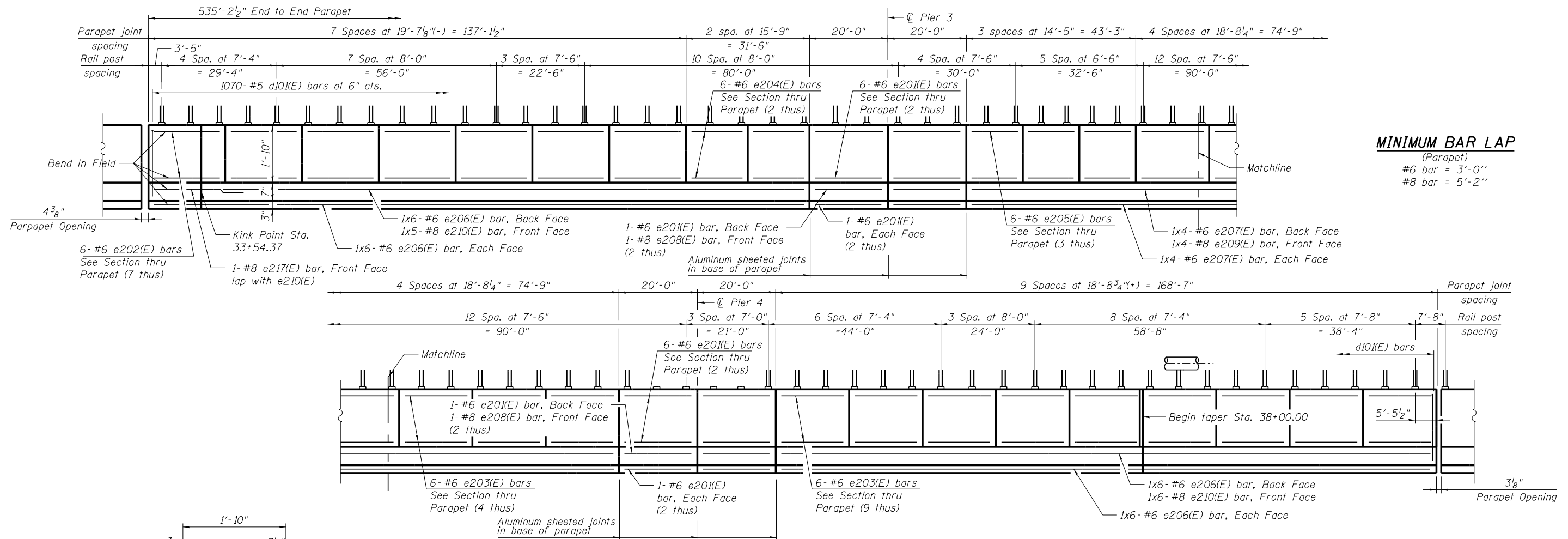
FILE NAME = 081-0178-C004B-045-Median Parapet Details Unit 1.dwg	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - DMS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MEDIAN PARAPET DETAILS UNIT 1
 STRUCTURE NO. 081-0178 (EASTBOUND)**

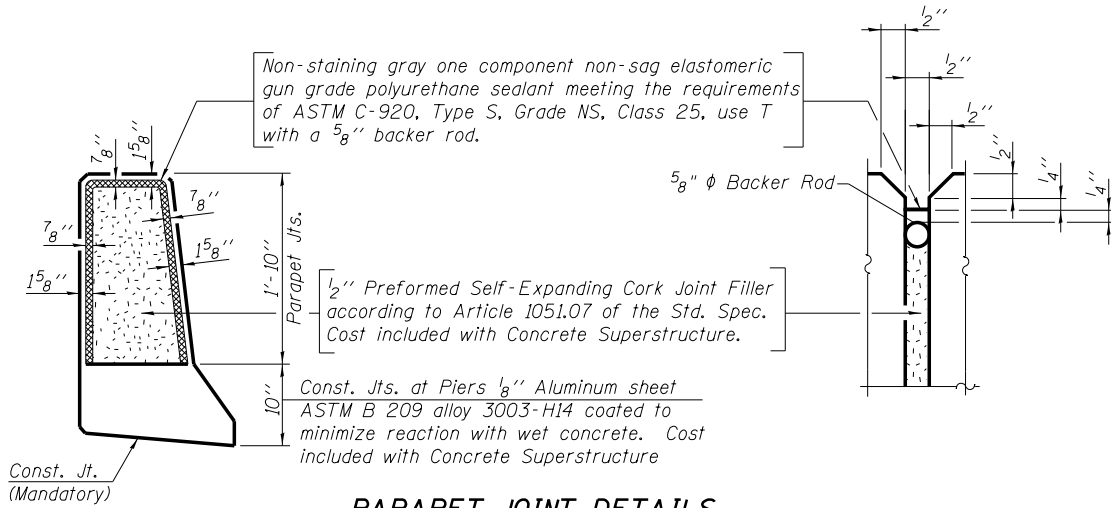
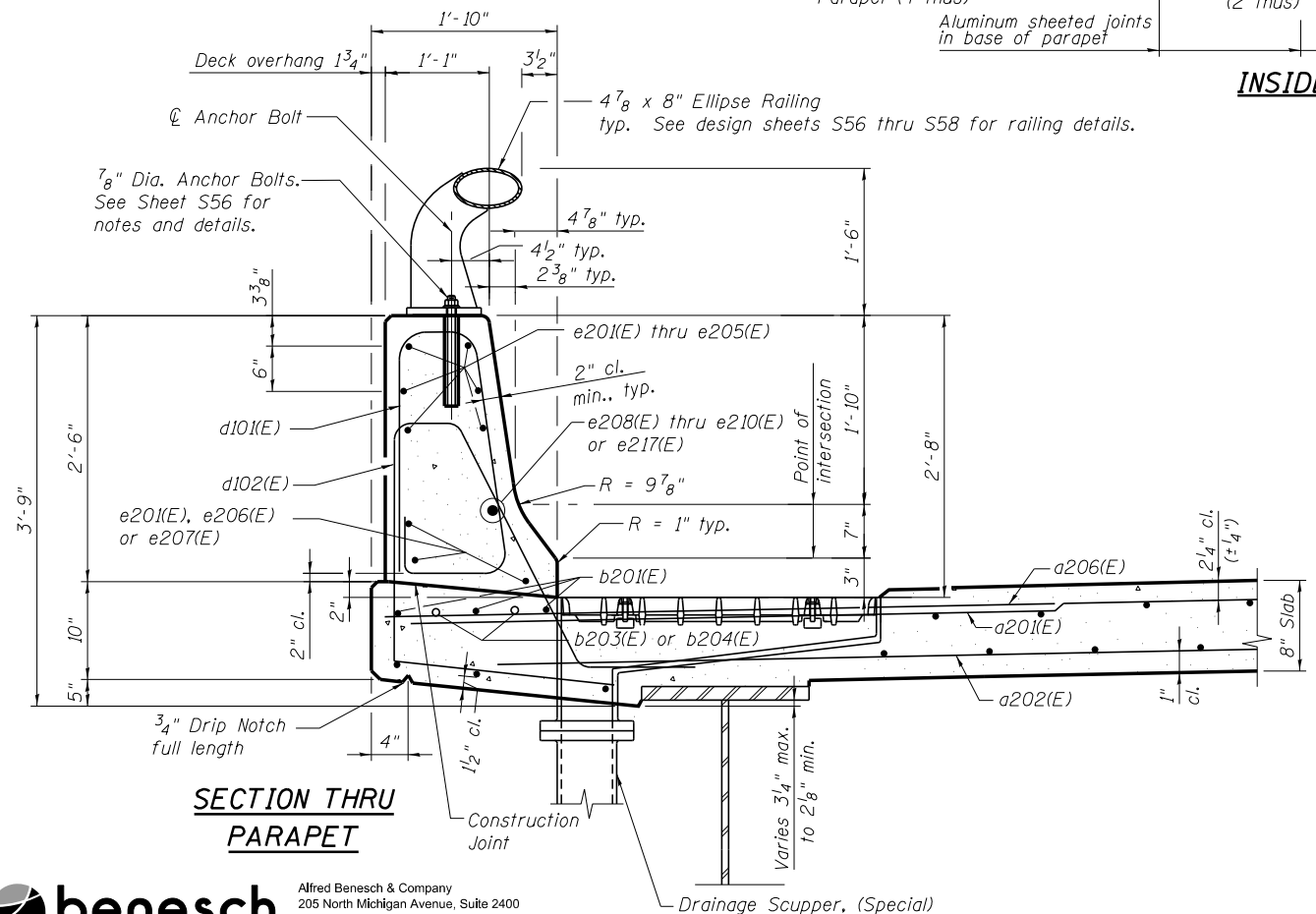
SHEET NO. S45 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	934
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	



MINIMUM BAR LAP
 (Parapet)
 #6 bar = 3'-0"
 #8 bar = 5'-2"

INSIDE ELEVATION OF PARAPET
 (Reflected View Shown)



PARAPET JOINT DETAILS
 (For Conventional Concrete Placement)

- NOTES:**
1. All dimensions shown are along toe of parapet.
 2. Bars indicated thus 1x6-#8 etc. indicates 1 line of bars with 6 lengths per line.
 3. See sheet S44 for slipforming detail and note.

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FILE NAME = 081-0178-C00AB-046-West Parapet Details Unit 2.dgn	USER NAME = ksnyder	DESIGNED - JDS/DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK/TPS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK/TPS	REVISED -

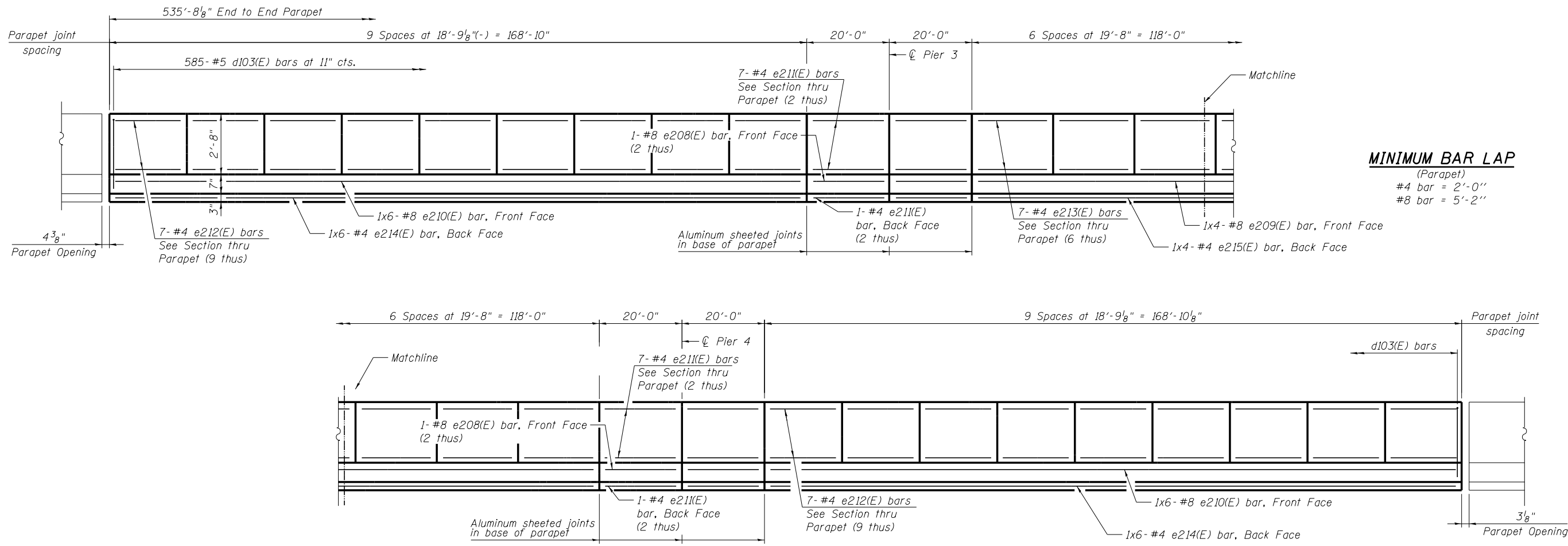
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST PARAPET DETAILS UNIT 2
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S46 OF S138 SHEETS

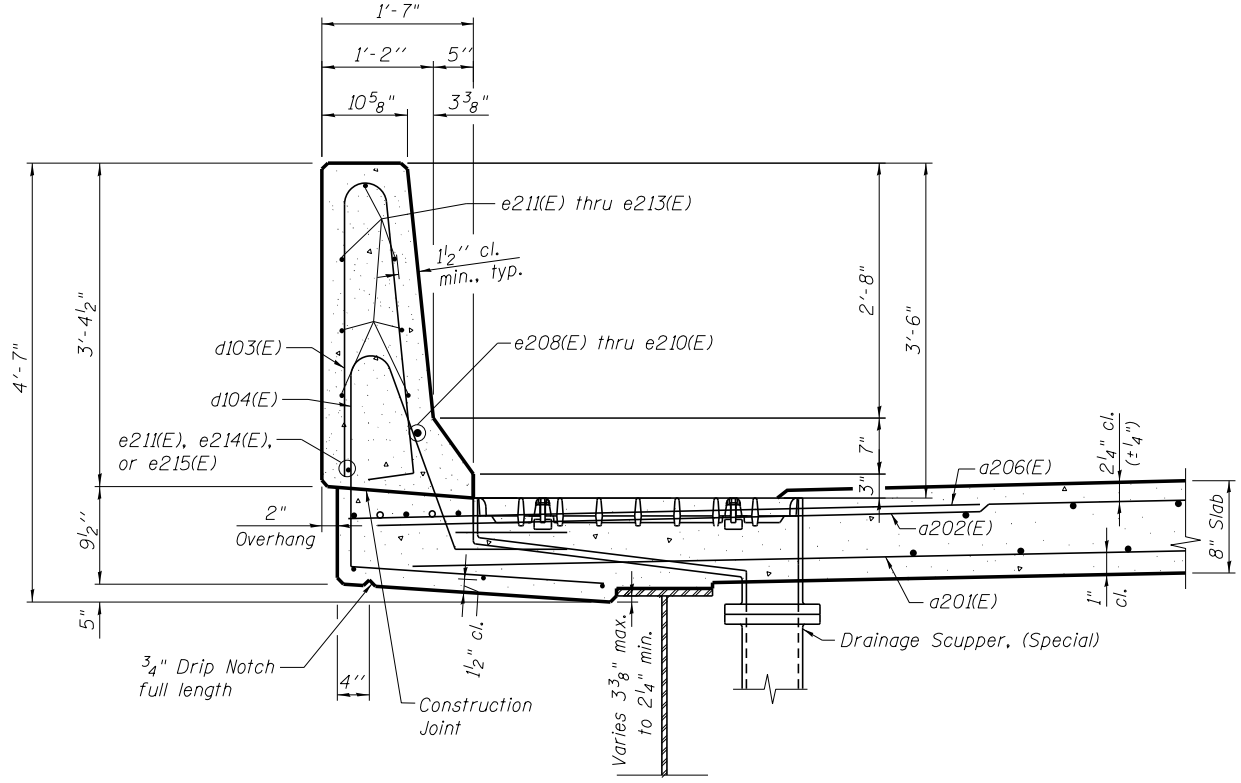
F.A.I. RTE. = 74	SECTION = 81-1HVBR	COUNTY = ROCK ISLAND	TOTAL SHEETS = 1504	SHEET NO. = 935
				CONTRACT NO. 64C08
ILLINOIS FED. AID PROJECT				

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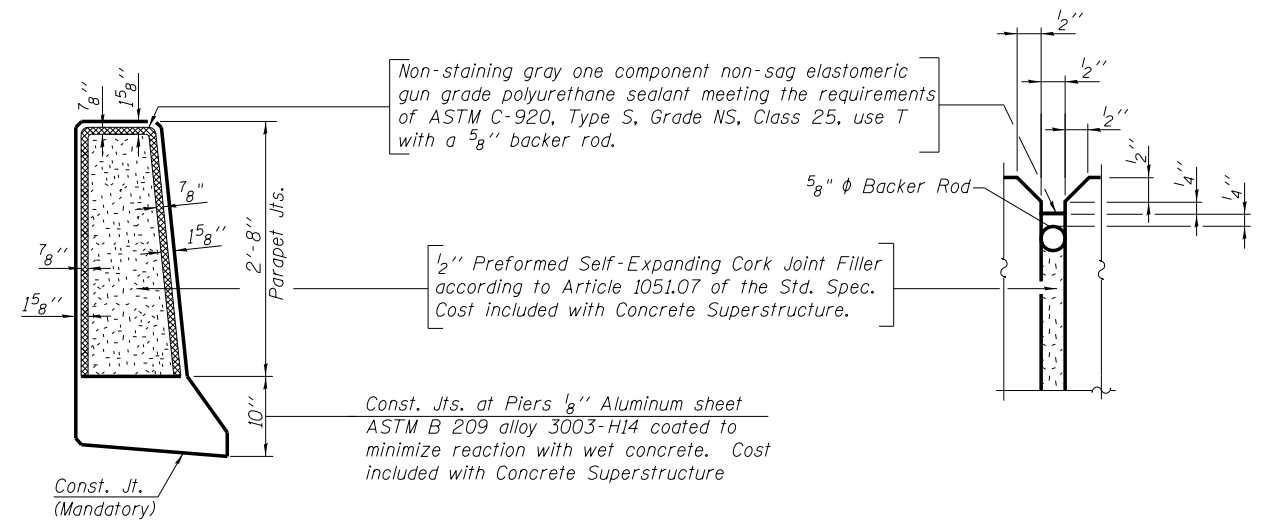


MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"

INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET



PARAPET JOINT DETAILS

NOTES:

1. All dimensions shown are along toe of parapet.
2. Bars indicated thus 1x6-#8 etc. indicates 1 line of bars with 6 lengths per line.

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FILE NAME = 081-0178-C00AB-047-Median Parapet Details Unit 2.dwg	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK/TPS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK/TPS	REVISED -

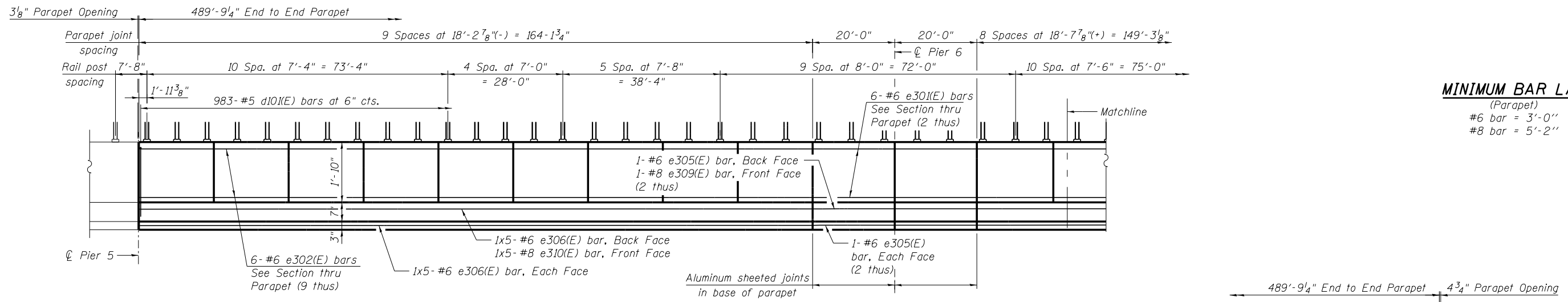
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MEDIAN PARAPET DETAILS UNIT 2
STRUCTURE NO. 081-0178 (EASTBOUND)

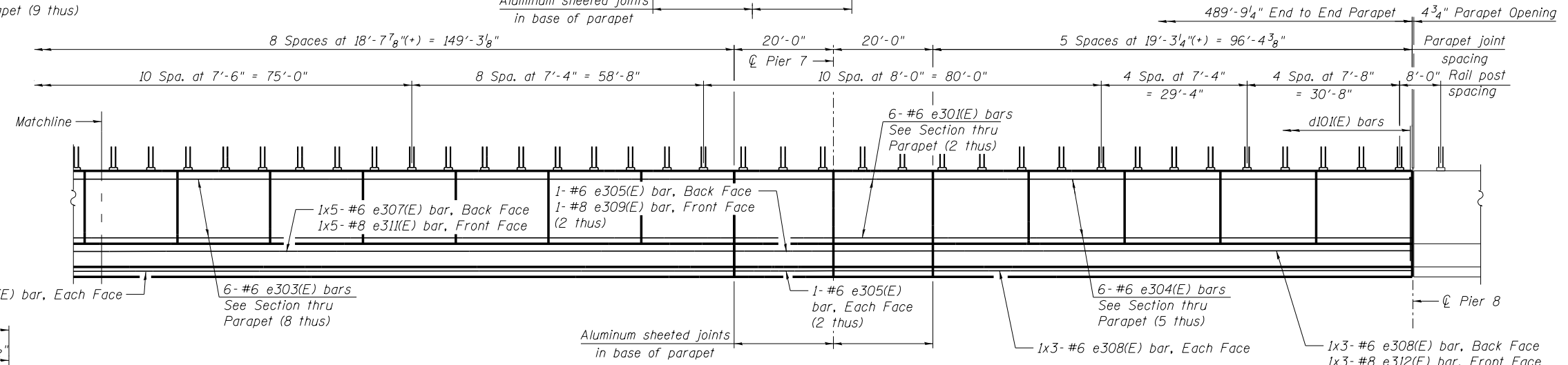
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	936
			CONTRACT NO. 64C08	
ILLINOIS FED. AID PROJECT				

SHEET NO. S47 OF S138 SHEETS

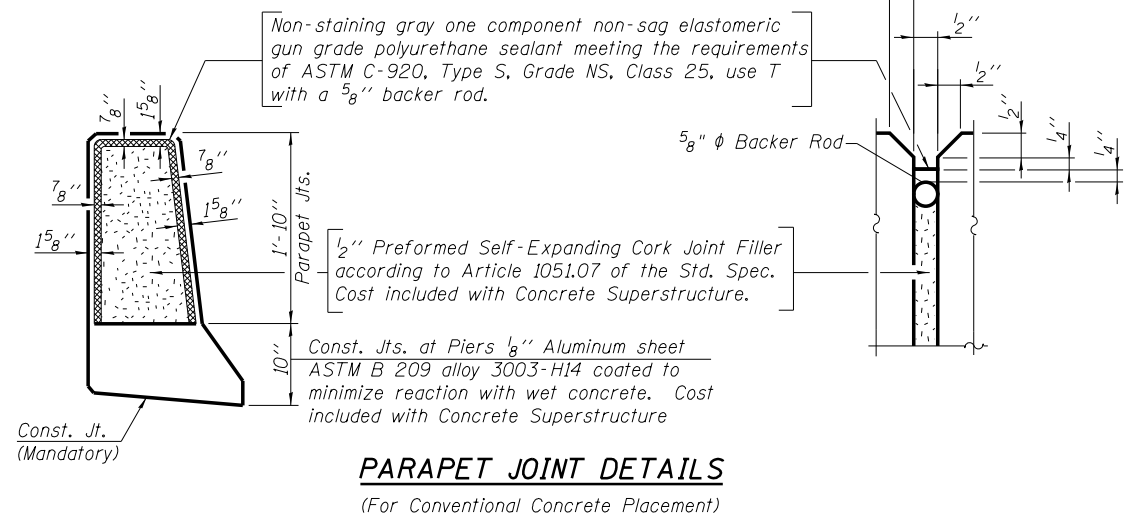
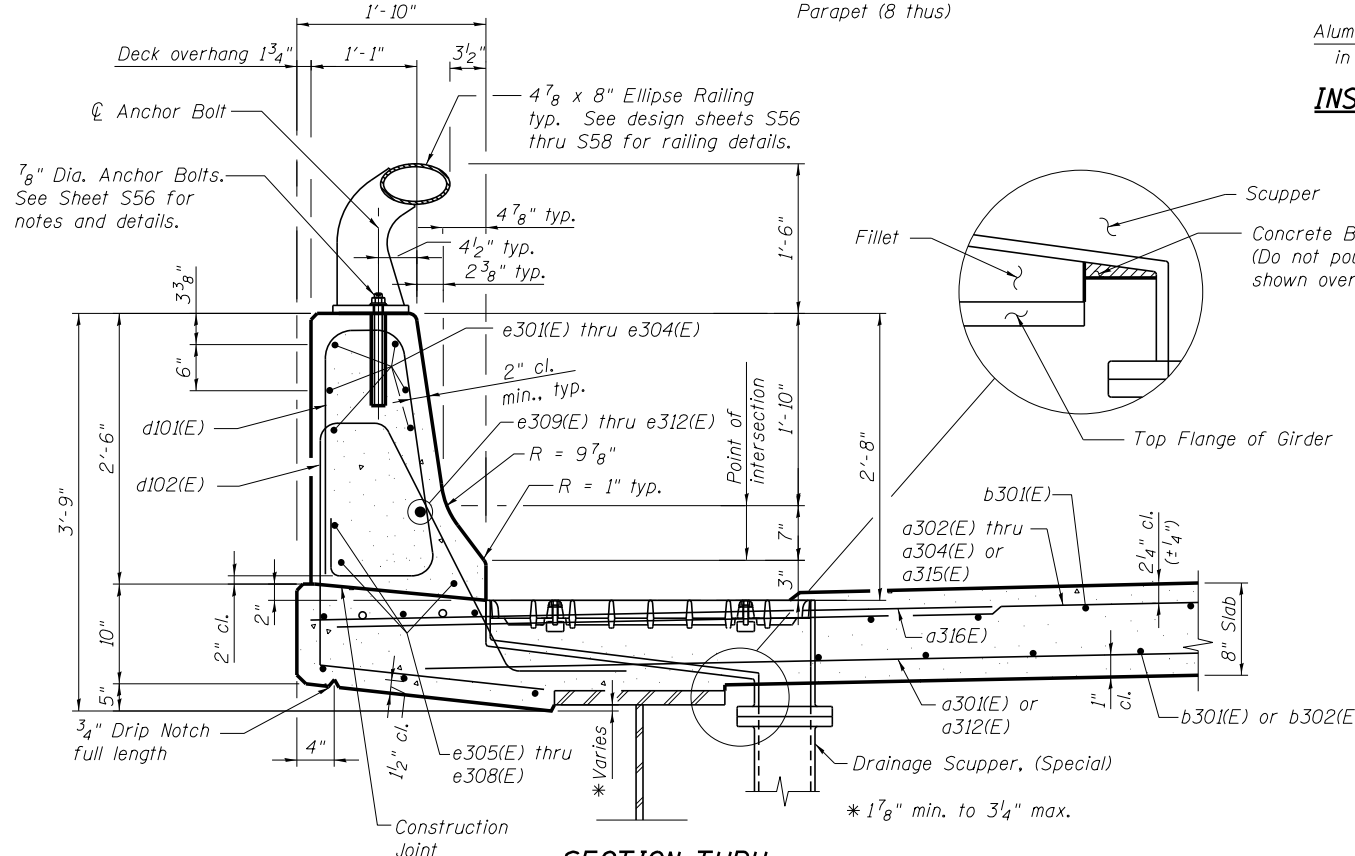
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MINIMUM BAR LAP
 (Parapet)
 #6 bar = 3'-0"
 #8 bar = 5'-2"



INSIDE ELEVATION OF PARAPET
 (Reflected View Shown)



- NOTES:**
- All dimensions shown are along the toe of the parapet (gutterline).
 - Bars indicated thus 1x4-#8 etc. indicates 1 line of bars with 4 lengths per line.
 - For slipforming details, see sheet S44.

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FILE NAME = 081-0178-C004B-048-West Parapet Details Unit 3.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

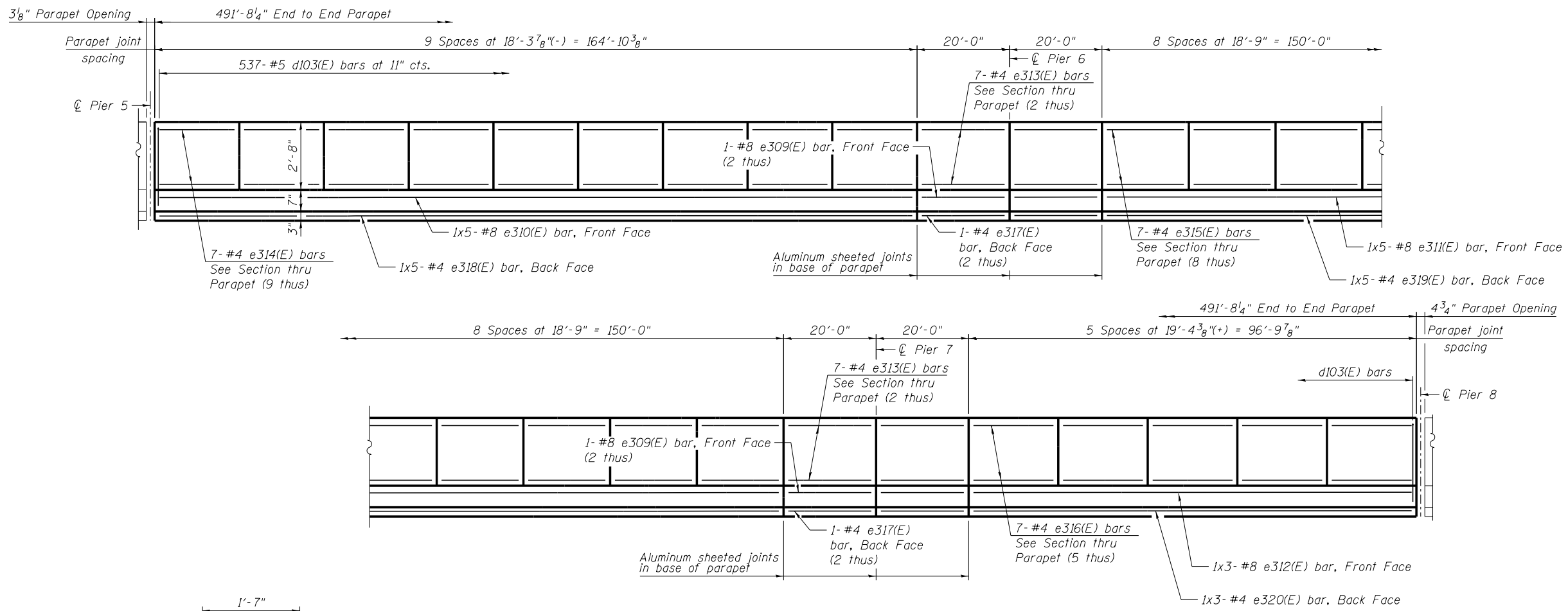
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST PARAPET DETAILS UNIT 3
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S48 OF S138 SHEETS

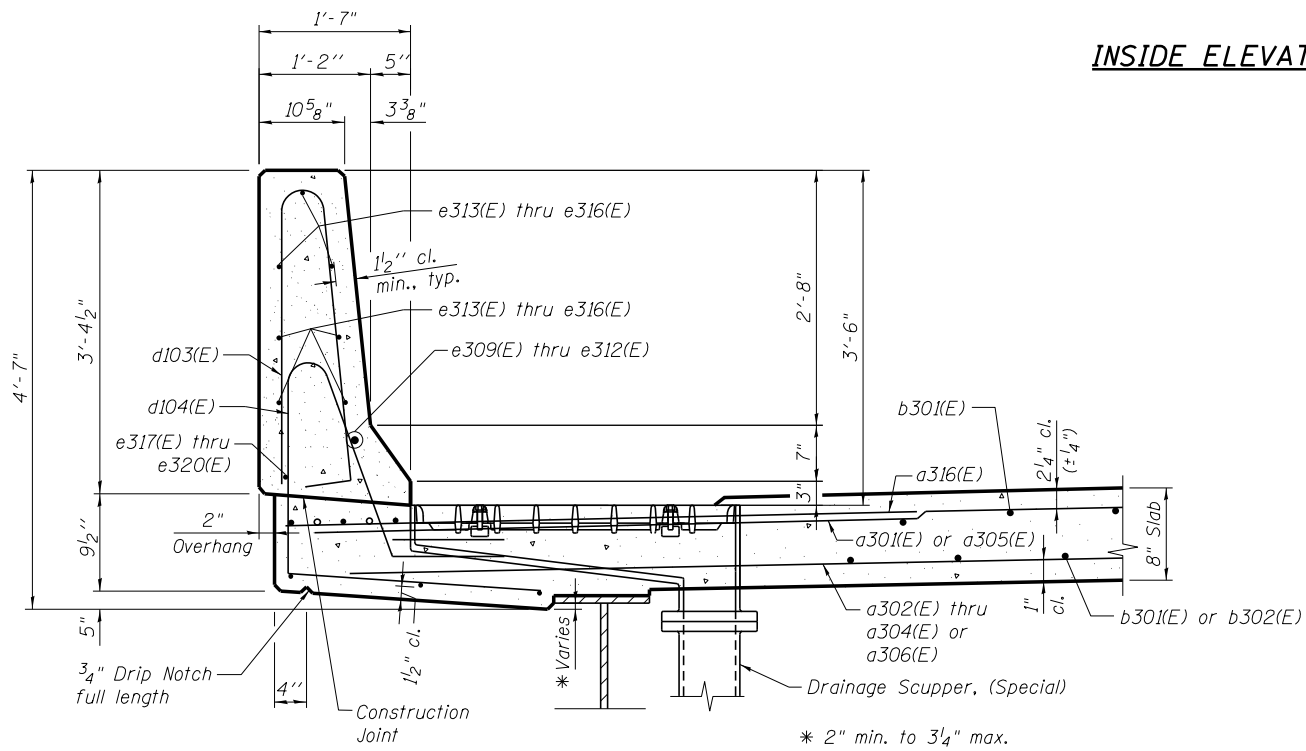
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	937
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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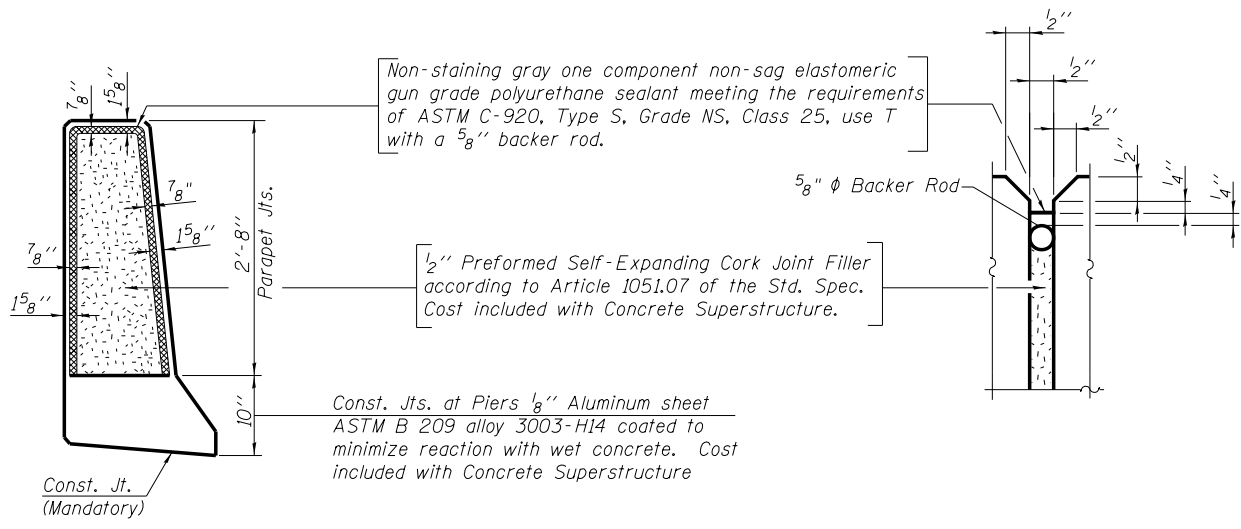


MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"

INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET



PARAPET JOINT DETAILS
 (For Conventional Concrete Placement)

NOTES:

- All dimensions shown are along the toe of the parapet (gutterline)
- Bars indicated thus 1x4-#8 etc. indicates 1 line of bars with 4 lengths per line.

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FILE NAME = 081-0178-C00AB-049-Median Parapet Details Unit 3.dwg	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

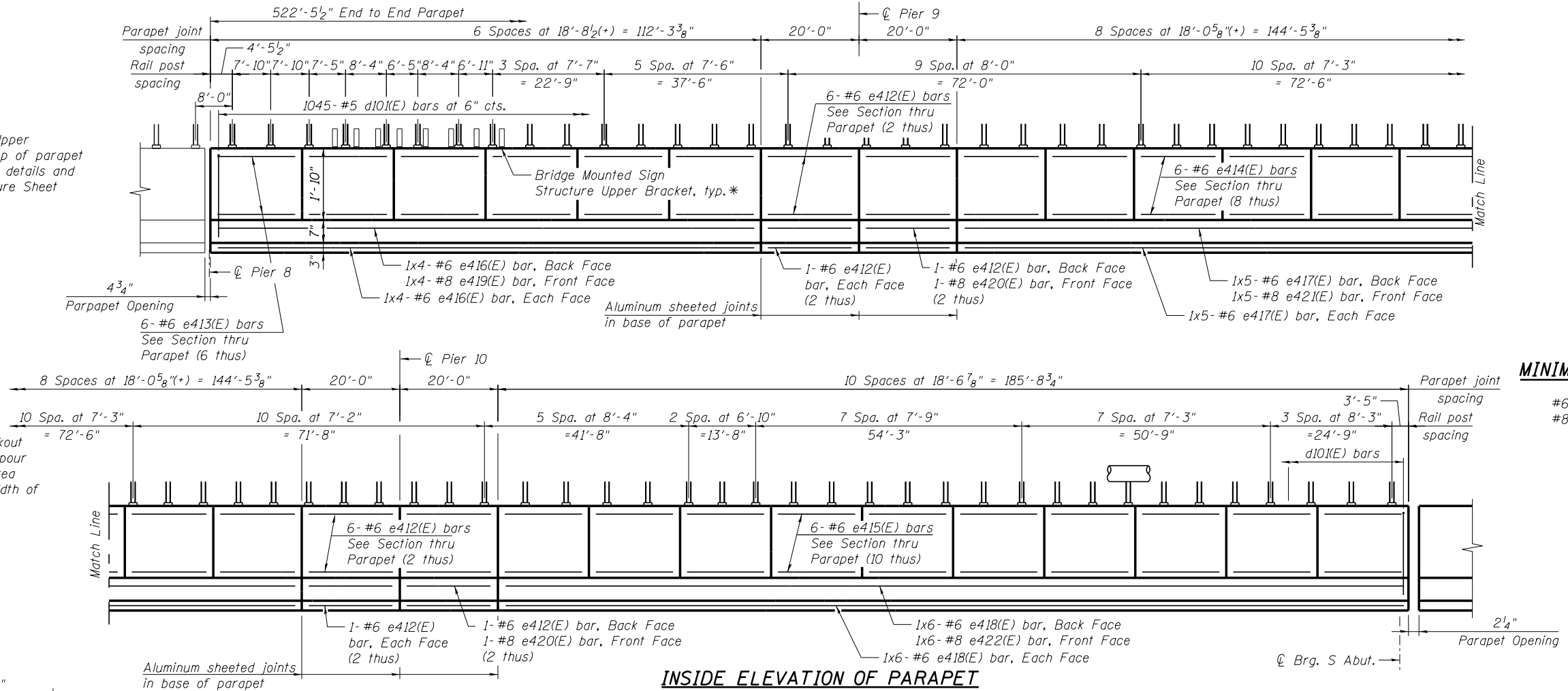
MEDIAN PARAPET DETAILS UNIT 3
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S49 OF S138 SHEETS

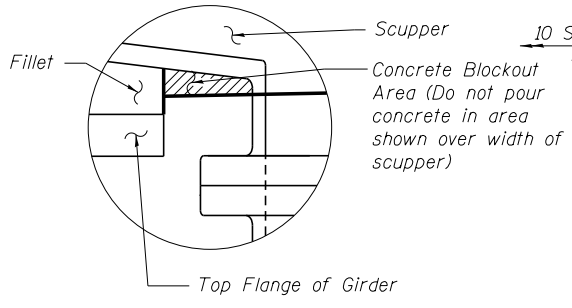
F.A.I. RTE. = 74	SECTION = 81-1HVBR	COUNTY = ROCK ISLAND	TOTAL SHEETS = 1504	SHEET NO. = 938
				CONTRACT NO. 64C08
ILLINOIS FED. AID PROJECT				

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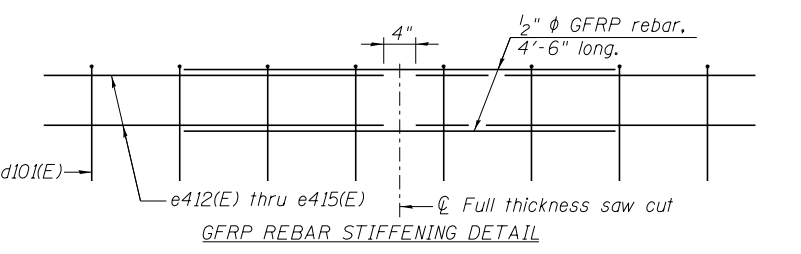
* Bridge Mounted Sign Structure Upper Brackets must be installed on top of parapet prior to railing installation. See details and Note 6 on Overhead Sign Structure Sheet OSS-28.



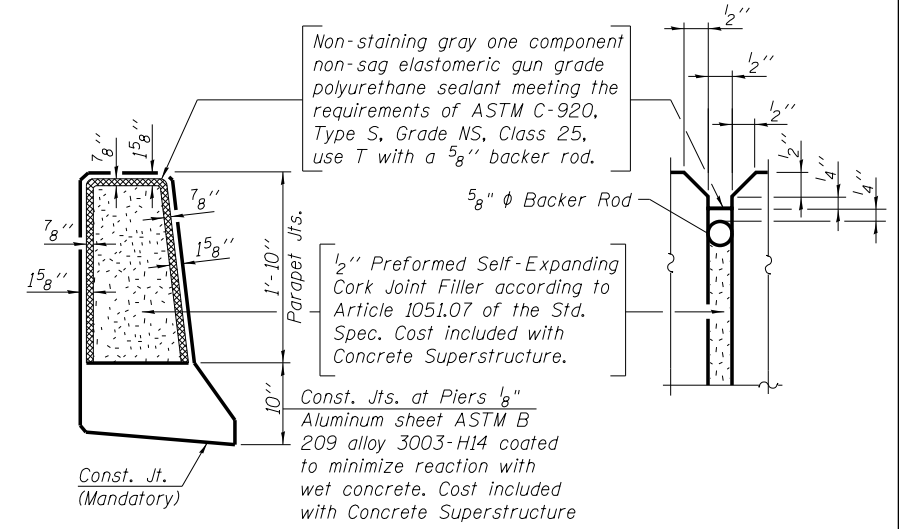
MINIMUM BAR LAP
(Parapet)
#6 bar = 3'-0"
#8 bar = 5'-2"



Detail 1

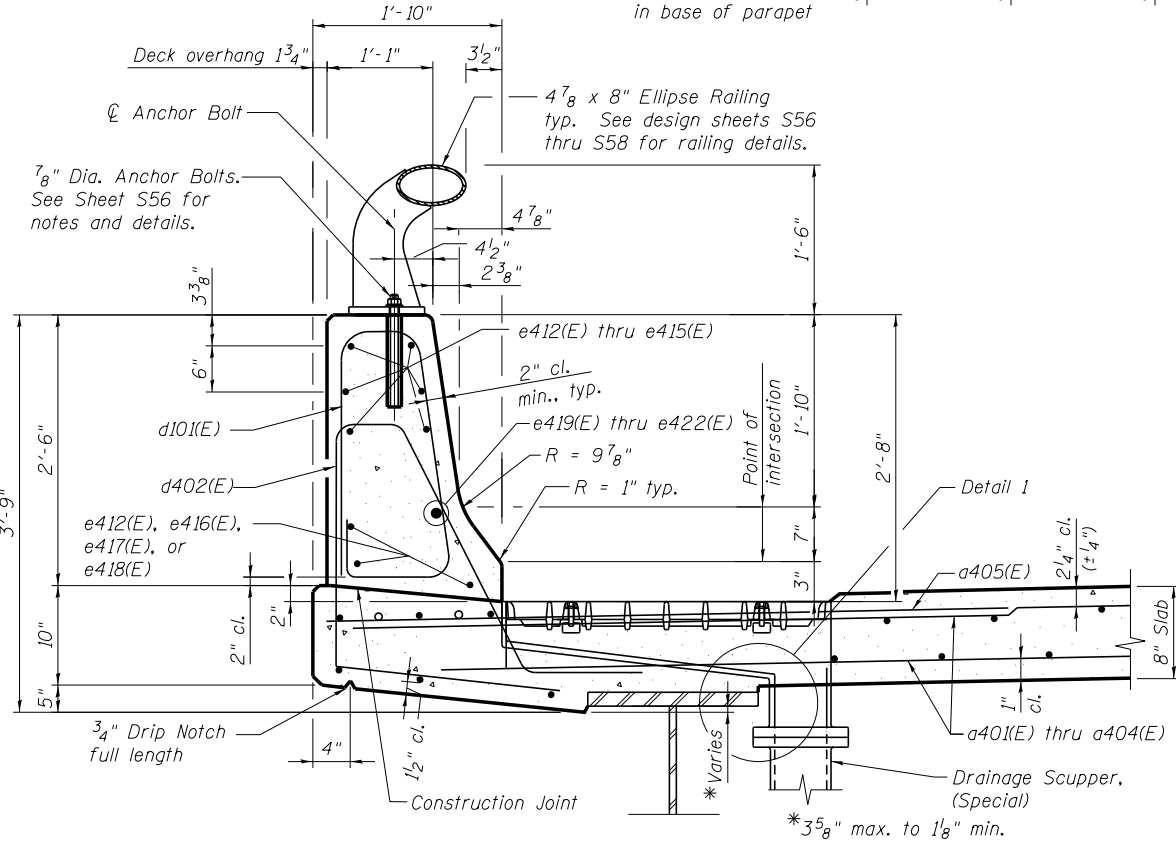


GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location.)
(GFRP rebar is only required if contractor elects to slipform parapet.)
(Cost of GFRP shall be included with "Concrete Superstructure")



PARAPET JOINT DETAILS
(For Conventional Concrete Placement)

NOTES:
1. All dimensions shown are along toe of parapet.
2. Bars indicated thus 1x5-#8 etc. indicates 1 line of bars with 5 lengths per line.



SECTION THRU PARAPET

SLIPFORMED PARAPET JOINT DETAILS
(Ellipse railing not shown for clarity)

1. All dimensions shall remain the same as shown on superstructure details.
2. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-050-West Parapet Details Unit 4.dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - AJK	REVISED -

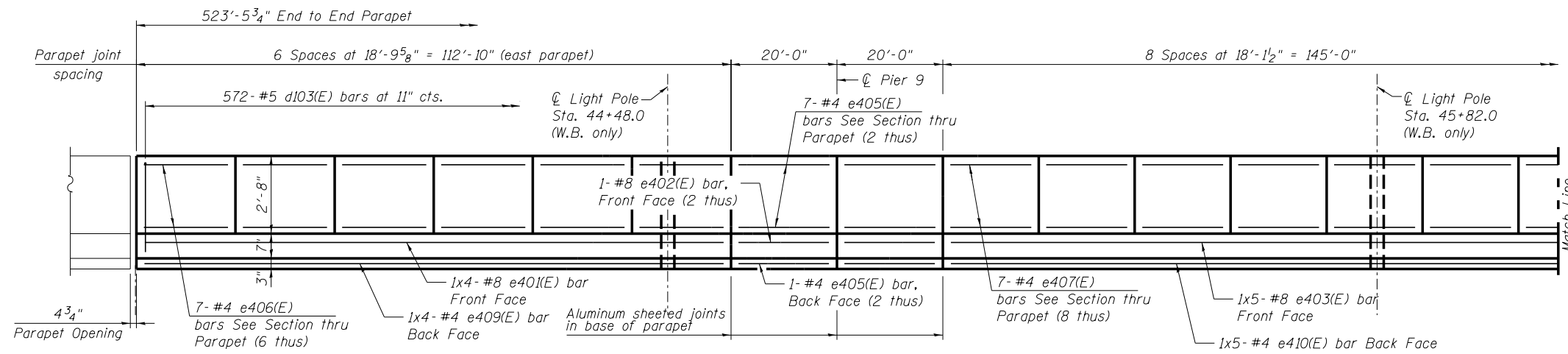
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST PARAPET DETAILS UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)

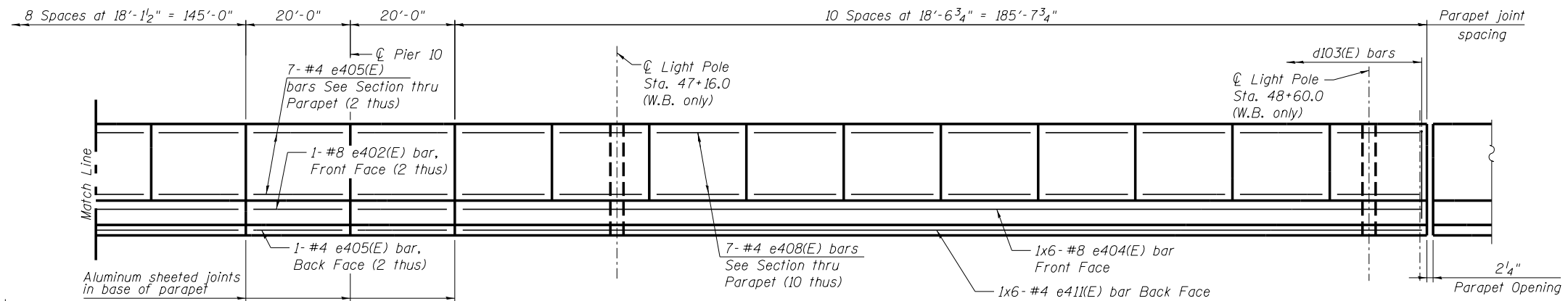
SHEET NO. 550 OF 5138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	939
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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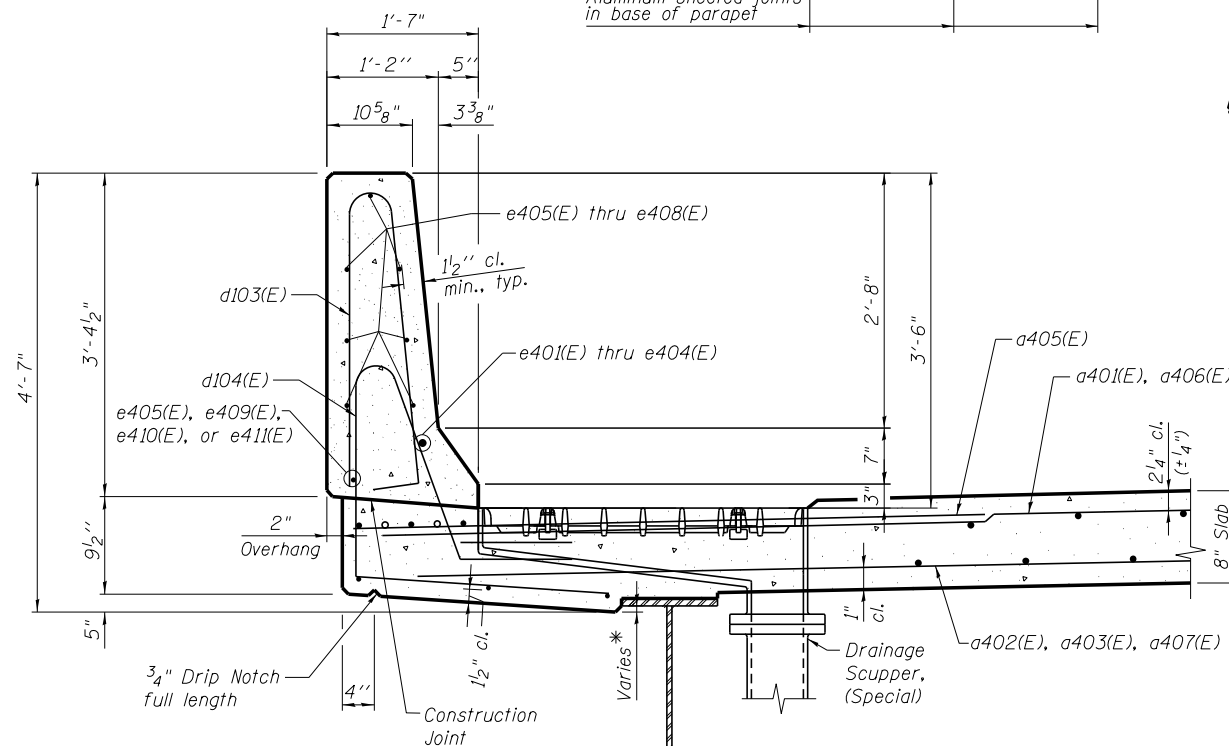


MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"



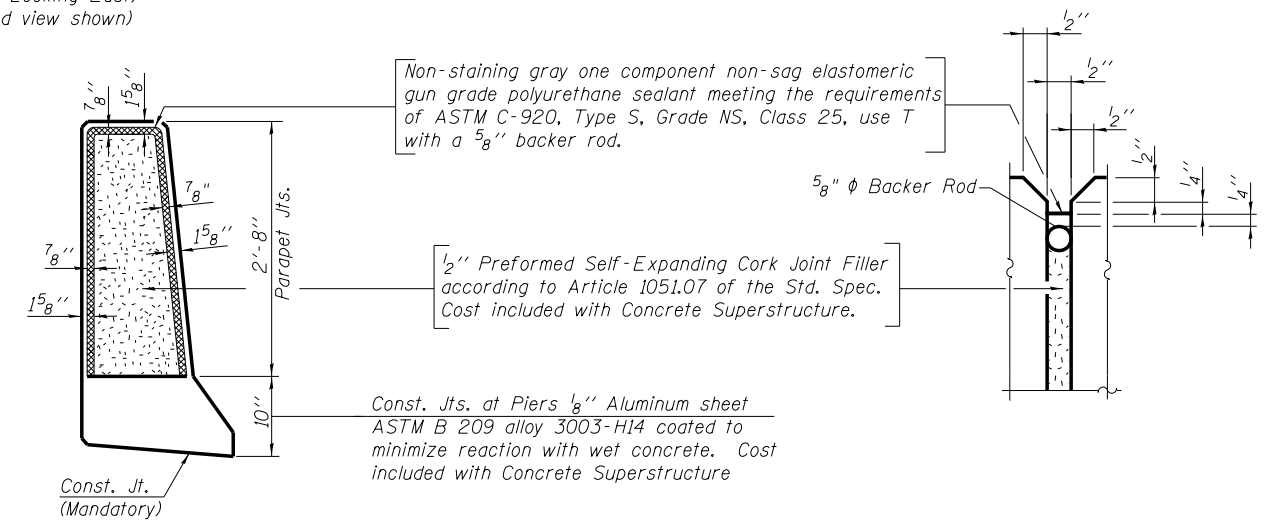
ELEVATION OF MEDIAN PARAPET

(E.B. Median Parapet Shown - Looking East)
 (W.B. Median Parapet Reflected view shown)



SECTION THRU PARAPET

* 3 1/2" max, 1 5/8" min.



PARAPET JOINT DETAILS

NOTES:

- All dimensions shown are along toe of parapet.
- Bars indicated thus 1x5-#8 etc. indicates 1 line of bars with 5 lengths per line.

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FILE NAME = 081-0178-C00AB-051-Median Parapet Details Unit 4.dwg	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MEDIAN PARAPET DETAILS UNIT 4
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S51 OF S138 SHEETS

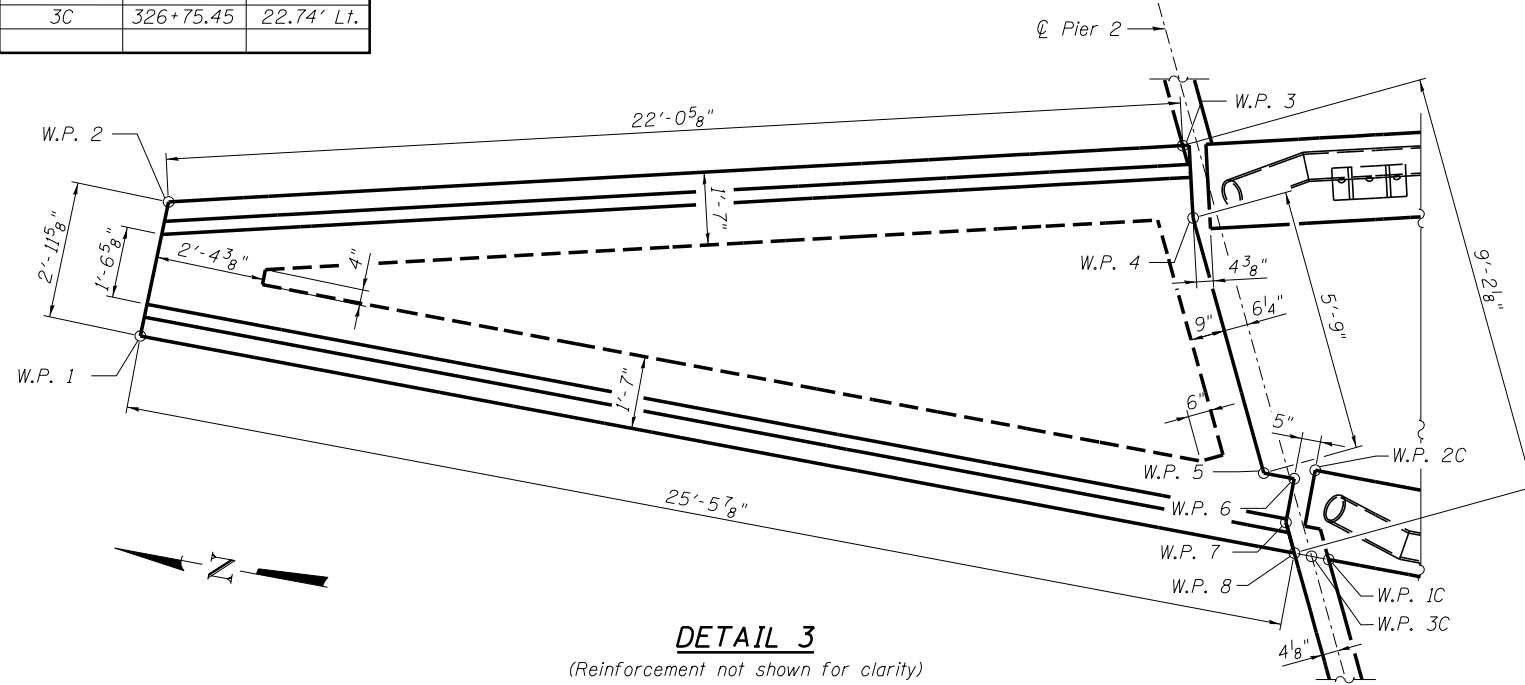
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	940
			CONTRACT NO. 64C08	
ILLINOIS FED. AID PROJECT				

Work Points

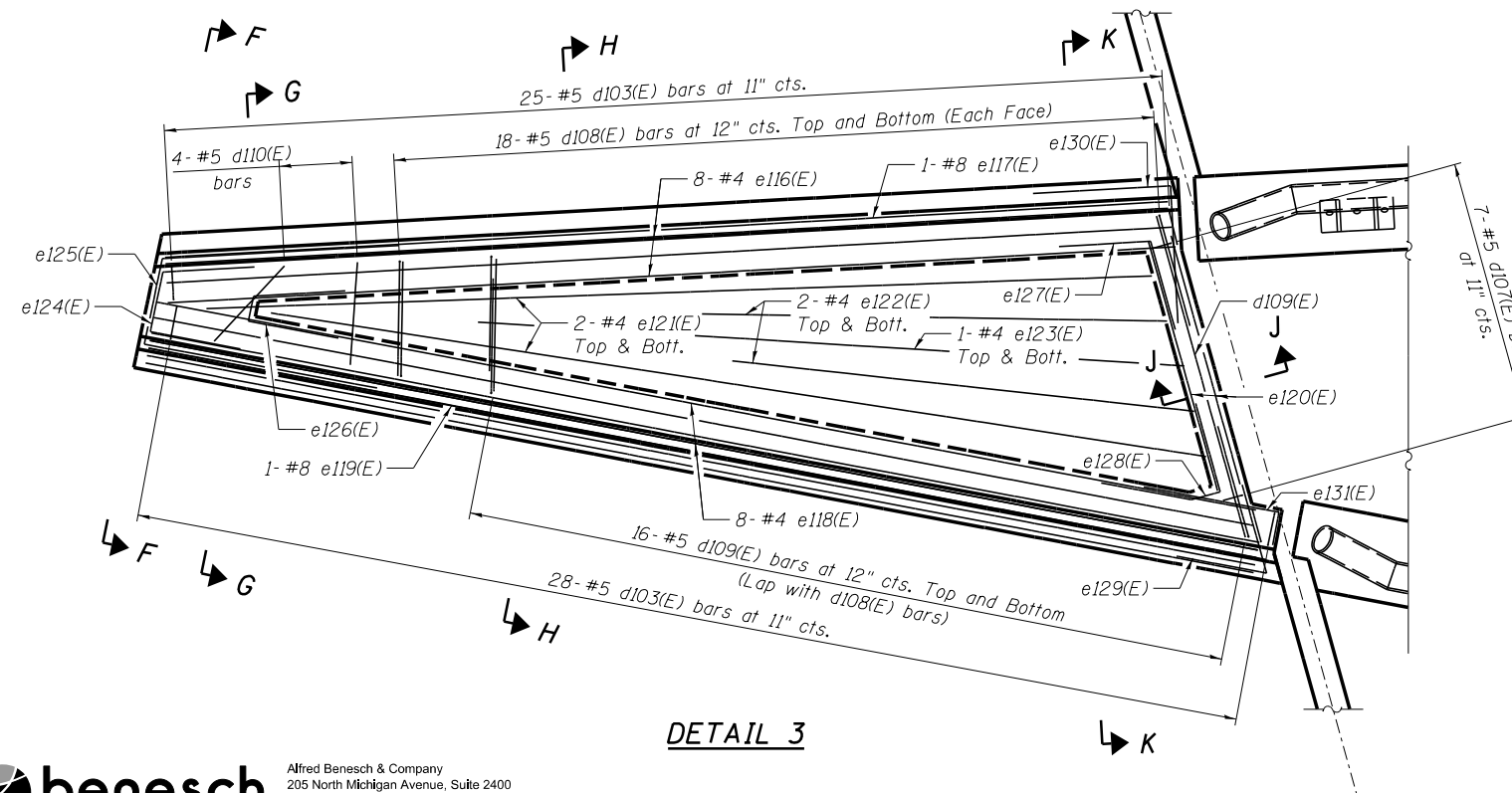
W.P.	Station	Offset
1	33+17.79	78.91' Rt.
2	33+18.40	76.00' Rt.
3	33+40.42	74.78' Rt.
4	33+40.64	76.35' Rt.
5	33+42.18	81.89' Rt.
6	33+42.83	82.01' Rt.
7	33+42.66	82.96' Rt.
8	33+42.84	83.62' Rt.
1C	326+75.82	22.74' Lt.
2C	326+75.26	24.60' Lt.
3C	326+75.45	22.74' Lt.

MINIMUM BAR LAP

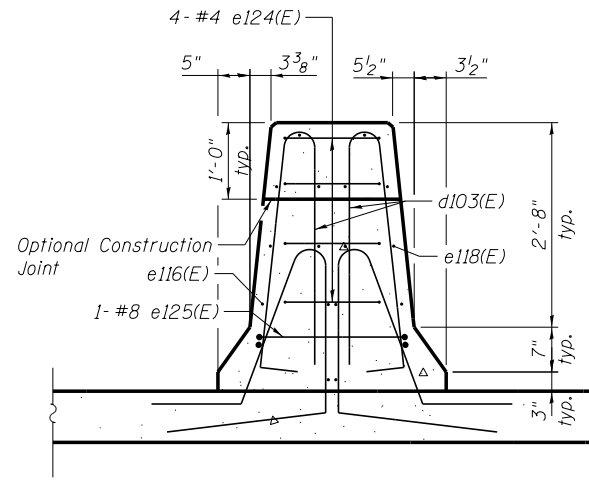
(Parapet)
 #4 bar = 2'-0"
 #5 bar = 2'-6"
 #8 bar = 5'-2"



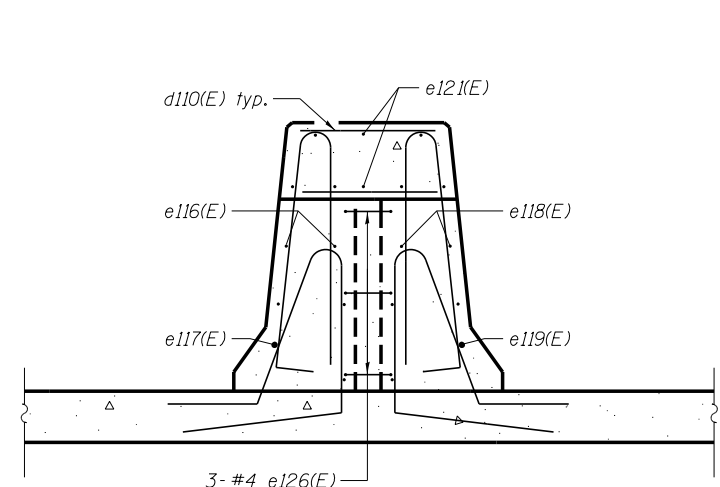
DETAIL 3
 (Reinforcement not shown for clarity)



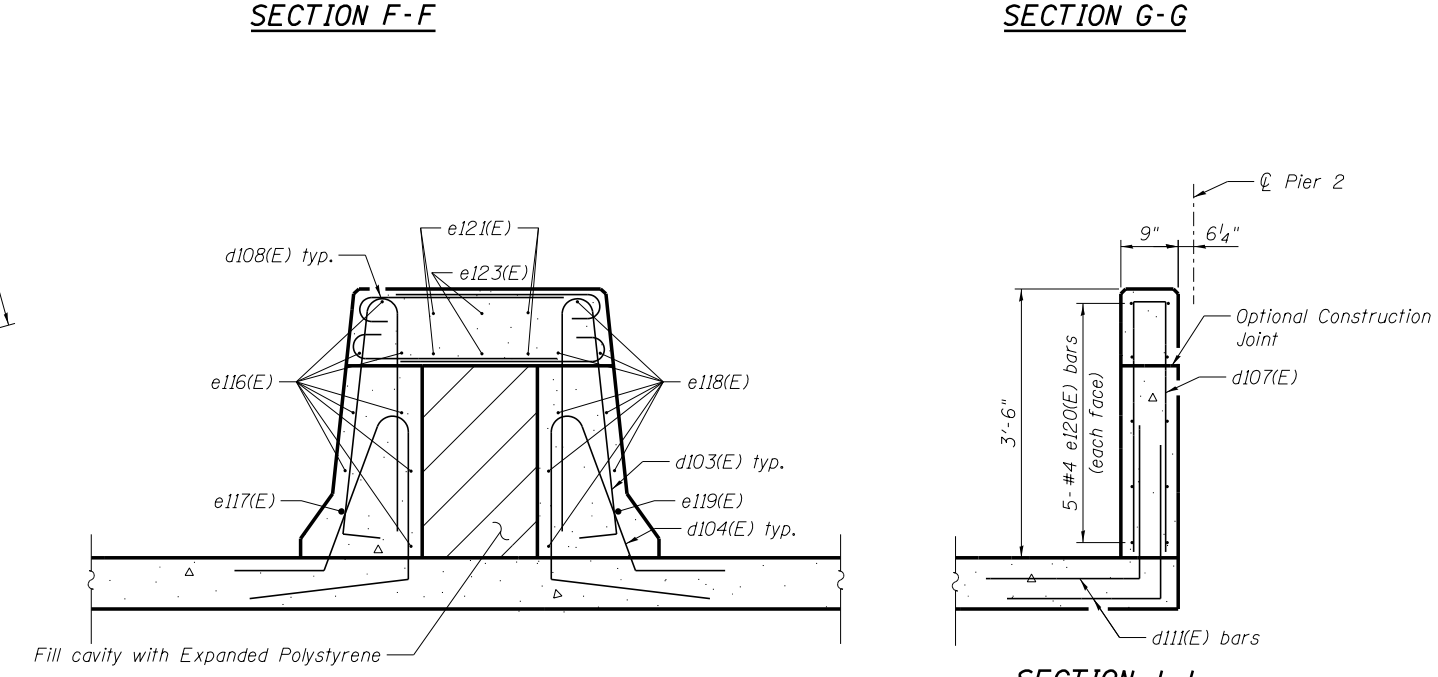
DETAIL 3



SECTION F-F



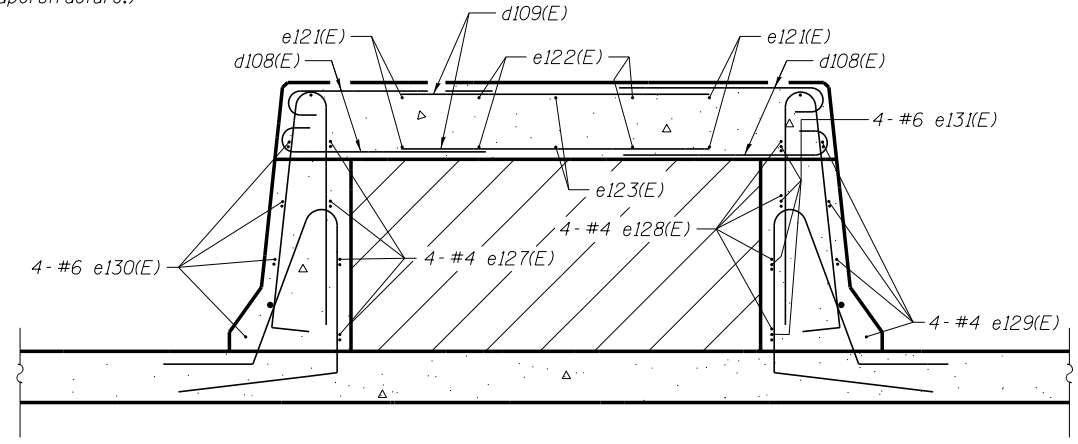
SECTION G-G



SECTION H-H

(Expanded Polystyrene (EPS) to be in accordance with ASTM E2430 or ASTM C578 with a minimum compressive strength of 5 psi. Cost of EPS shall be included with concrete superstructure.)

SECTION J-J



SECTION K-K

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 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-053-Superstructure Details (2 of 2).dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - DMS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS (2 OF 2)
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S53 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	942
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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SUPERSTRUCTURE
BILL OF MATERIAL - UNIT 1

Bar	No.	Size	Length	Shape
a101(E)	2656	#5	36'-0"	—
a102(E)	690	#5	15'-0"	—
a103(E)	192	#5	24'-3"	—
a104(E)	174	#5	27'-0"	—
a105(E)	139	#5	29'-1"	—
a106(E)	141	#5	31'-2"	—
a107(E)	215	#5	23'-1"	—
a108(E)	149	#5	26'-9"	—
a109(E)	111	#5	29'-8"	—
a110(E)	93	#5	32'-6"	—
a111(E)	132	#5	35'-4"	—
a112(E)	10	#5	38'-7"	—
a113(E)	4	#5	28'-2"	—
a114(E)	9	#5	41'-10"	—
a115(E)	5	#5	46'-2"	—
a116(E)	3	#5	19'-11"	—
a117(E)	4	#5	36'-0"	—
a118(E)	12	#5	41'-9"	—
a119(E)	5	#5	31'-7"	—
a120(E)	12	#5	40'-0"	—
a121(E)	7	#5	41'-11"	—
a122(E)	11	#5	38'-0"	—
a123(E)	7	#5	42'-5"	—
a124(E)	3	#5	19'-6"	—
a125(E)	1666	#6	6'-6"	—
a126(E)	15	#5	32'-4"	—
a127(E)	36	#6	7'-10"	—
a128(E)	39	#6	3'-3"	—
a129(E)	24	#5	2'-0"	—
a130(E)	28	#5	9'-3"	—
a131(E)	6	#5	23'-3"	—
a132(E)	3	#6	7'-6"	—
b101(E)	3006	#5	30'-11"	—
b102(E)	204	#5	17'-1"	—
b103(E)	468	#6	38'-3"	—
d101(E)	782	#5	7'-9"	—
d102(E)	391	#5	7'-11"	—
d103(E)	469	#5	6'-10"	—
d104(E)	469	#5	7'-9"	—
d105(E)	5	#6	8'-11"	—
d106(E)	3	#6	4'-3"	—
d107(E)	7	#5	6'-9"	—
d108(E)	72	#5	3'-1"	—
d109(E)	8	#5	9'-3"	—
d110(E)	4	#5	2'-3"	—
d111(E)	14	#5	4'-0"	—
d150(E)	3	#5	8'-4"	—
d151(E)	3	#5	8'-1"	—

SUPERSTRUCTURE
BILL OF MATERIAL - UNIT 1

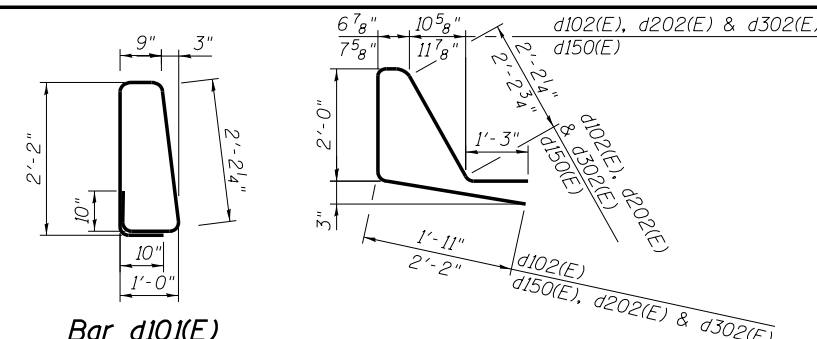
Bar	No.	Size	Length	Shape
e101(E)	4	#8	19'-8"	—
e102(E)	49	#4	18'-5"	—
e103(E)	5	#4	27'-11"	—
e104(E)	5	#8	30'-5"	—
e105(E)	77	#4	18'-8"	—
e106(E)	7	#4	31'-9"	—
e107(E)	7	#8	34'-5"	—
e108(E)	16	#4	19'-8"	—
e109(E)	42	#6	18'-9"	—
e110(E)	15	#6	29'-2"	—
e111(E)	5	#8	30'-10"	—
e112(E)	18	#6	19'-8"	—
e113(E)	72	#6	17'-9"	—
e114(E)	21	#6	33'-7"	—
e115(E)	7	#8	35'-5"	—
e116(E)	8	#4	21'-8"	—
e117(E)	1	#8	21'-8"	—
e118(E)	8	#4	25'-2"	—
e119(E)	1	#8	25'-2"	—
e120(E)	10	#4	6'-0"	—
e121(E)	4	#4	20'-7"	—
e122(E)	4	#4	10'-1"	—
e123(E)	2	#4	15'-5"	—
e124(E)	4	#4	5'-4"	—
e125(E)	1	#8	12'-3"	—
e126(E)	3	#4	4'-7"	—
e127(E)	4	#4	4'-0"	—
e128(E)	4	#4	4'-8"	—
e129(E)	4	#4	4'-0"	—
e130(E)	4	#6	6'-0"	—
e131(E)	4	#6	3'-8"	—
e150(E)	4	#6	8'-4"	—
x101(E)	112	#5	6'-5"	—
x102(E)	39	#5	9'-7"	—
x103(E)	78	#5	6'-11"	—
Concrete Superstructure			Cu. Yd.	1,170.2
Reinforcement Bars, Epoxy Coated			Pound	328,240

SUPERSTRUCTURE
BILL OF MATERIAL - UNIT 2

Bar	No.	Size	Length	Shape
a201(E)	3743	#5	25'-0"	—
a202(E)	1875	#5	33'-0"	—
a203(E)	11	#5	27'-6"	—
a204(E)	11	#5	35'-6"	—
a205(E)	13	#5	30'-6"	—
a206(E)	2330	#6	6'-6"	—
a207(E)	16	#5	2'-0"	—
a208(E)	82	#6	3'-4"	—
a209(E)	8	#5	29'-2"	—
a210(E)	20	#5	34'-9"	—
a211(E)	10	#5	24'-11"	—
b201(E)	2594	#5	32'-10"	—
b202(E)	140	#5	17'-9"	—
b203(E)	150	#6	25'-0"	—
b204(E)	450	#6	35'-3"	—
b205(E)	1	#5	13'-0"	—
d101(E)	1070	#5	7'-9"	—
d202(E)	535	#5	8'-2"	—
d103(E)	585	#5	6'-10"	—
d104(E)	585	#5	7'-9"	—
e201(E)	36	#6	19'-8"	—
e202(E)	42	#6	19'-3"	—
e203(E)	78	#6	18'-4"	—
e204(E)	12	#6	15'-5"	—
e205(E)	18	#6	14'-1"	—
e206(E)	36	#6	30'-8"	—
e207(E)	12	#6	31'-8"	—
e208(E)	8	#8	19'-8"	—
e209(E)	8	#8	33'-4"	—
e210(E)	23	#8	32'-6"	—
e211(E)	32	#4	19'-8"	—
e212(E)	126	#4	18'-5"	—
e213(E)	42	#4	19'-4"	—
e214(E)	12	#4	29'-10"	—
e215(E)	4	#4	30'-11"	—
e217(E)	1	#8	32'-6"	—
Concrete Superstructure			Cu. Yd.	1,211.9
Reinforcement Bars, Epoxy Coated			Pound	344,060

SUPERSTRUCTURE
BILL OF MATERIAL - UNIT 3

Bar	No.	Size	Length	Shape
a129(E)	16	#5	2'-0"	—
a301(E)	3450	#5	30'-0"	—
a302(E)	614	#5	20'-5"	—
a303(E)	596	#5	18'-1"	—
a304(E)	529	#5	15'-9"	—
a305(E)	9	#5	32'-0"	—
a306(E)	4	#5	21'-3"	—
a307(E)	8	#5	35'-0"	—
a308(E)	6	#5	34'-11"	—
a309(E)	3	#5	17'-7"	—
a310(E)	3	#5	30'-9"	—
a311(E)	6	#5	29'-2"	—
a312(E)	5	#5	33'-9"	—
a313(E)	7	#5	39'-1"	—
a314(E)	5	#5	36'-0"	—
a315(E)	5	#5	18'-6"	—
a316(E)	2134	#6	6'-6"	—
a317(E)	41	#6	3'-2"	—
a318(E)	37	#6	2'-11"	—
b301(E)	2397	#5	32'-0"	—
b302(E)	136	#5	17'-2"	—
b303(E)	222	#6	40'-2"	—
b304(E)	222	#6	32'-1"	—
d101(E)	983	#5	7'-9"	—
d302(E)	491	#5	8'-2"	—
d103(E)	537	#5	6'-10"	—
d104(E)	537	#5	7'-9"	—
e301(E)	24	#6	19'-8"	—
e302(E)	54	#6	17'-10"	—
e303(E)	48	#6	18'-3"	—
e304(E)	30	#6	18'-11"	—
e305(E)	12	#6	19'-8"	—
e306(E)	15	#6	35'-3"	—
e307(E)	15	#6	32'-4"	—
e308(E)	9	#6	34'-2"	—
e309(E)	8	#8	19'-8"	—
e310(E)	10	#8	37'-1"	—
e311(E)	10	#8	34'-1"	—
e312(E)	6	#8	35'-8"	—
e313(E)	28	#4	19'-8"	—
e314(E)	63	#4	17'-11"	—
e315(E)	56	#4	18'-5"	—
e316(E)	35	#4	19'-0"	—
e317(E)	4	#4	19'-8"	—
e318(E)	5	#4	34'-6"	—
e319(E)	5	#4	31'-7"	—
e320(E)	3	#4	33'-6"	—
Concrete Superstructure			Cu. Yd.	1,055.9
Reinforcement Bars, Epoxy Coated			Pound	303,140

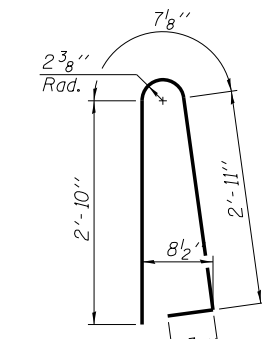


Bar d101(E)

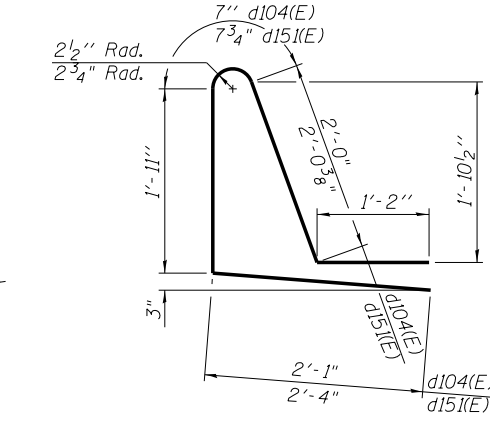
All dimensions are out to out.

Bars d102(E), d150(E), d202(E) & d302(E)

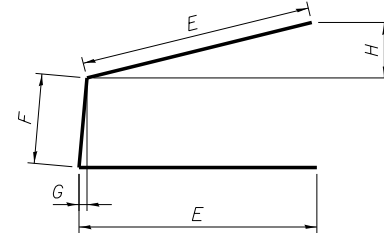
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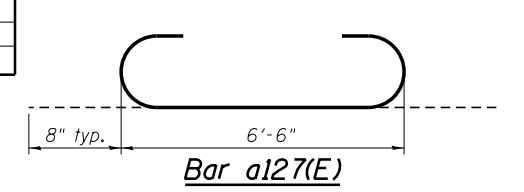
Bar d103(E)



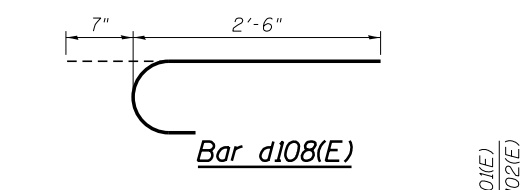
Bars d104(E) & d151(E)



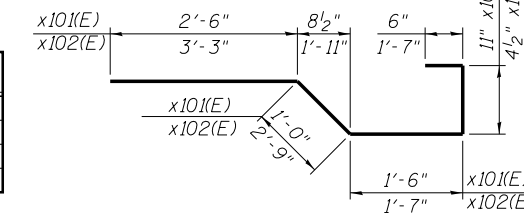
Bar	E	F	G	H
e124(E)	2'-0"	1'-4"	1/4"	5 7/8"
e125(E)	5'-2"	1'-11"	1/2"	1'-2 7/8"
e126(E)	2'-0"	7"	1/8"	5 3/4"
e128(E)	2'-0"	7 7/8"	0"	1'-9 1/2"



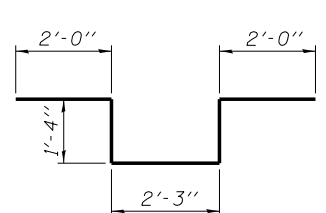
Bar a127(E)



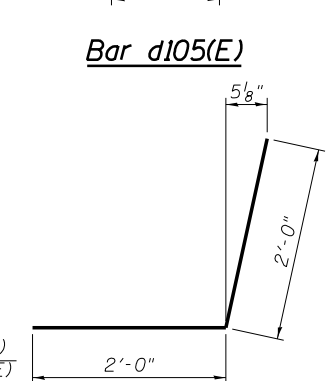
Bar d108(E)



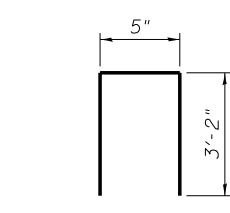
Bars x101(E) & x102(E)



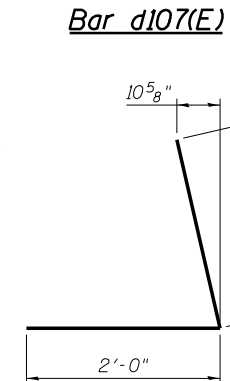
Bar d105(E)



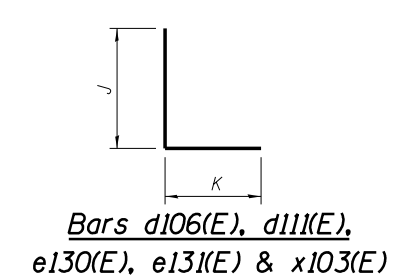
Bar e127(E)



Bar d107(E)



Bar e129(E)



Bars d106(E), d111(E), e130(E), e131(E) & x103(E)

Bar	J	K
d106(E)	2'-3"	2'-0"
d111(E)	2'-0"	2'-0"
e130(E)	3'-0"	3'-0"
e131(E)	3'-0"	8"
x103(E)	5'-0"	1'-11"

Cutting Diagram
(See table for bar designations)



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

DESIGNED - JDS/DTS	REVISED -
CHECKED - AMB/TPS	REVISED -
DRAWN - DMS	REVISED -
CHECKED - AJK/TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REINFORCING BAR DETAILS AND BILL OF MATERIAL UNITS 1-3
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. 554 OF 5138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	943
CONTRACT NO. 64C08				
ILLINOIS FED. AID PROJECT				

FILE NAME - 081-0178-C004B-054-Reinforcement Details and Bill of Material.dgn
MODEL: Default

USER NAME - ksnider
PLOT SCALE -
PLOT DATE - 1/18/2017

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1/18/2017 11:49:44 AM

**SUPERSTRUCTURE
BILL OF MATERIAL
UNIT 4**

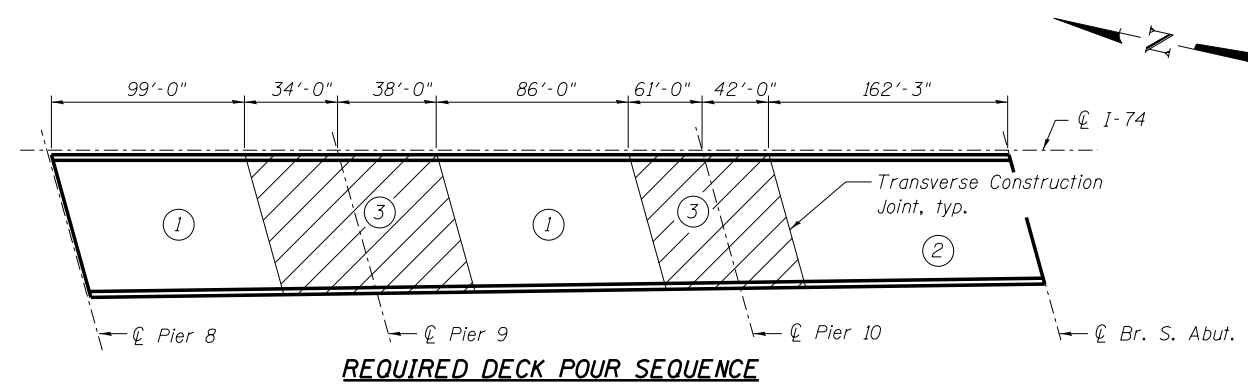
Bar	No.	Size	Length	Shape
a401(E)	1873	#5	36'-10"	—
a402(E)	498	#5	33'-4"	—
a403(E)	515	#5	31'-4"	—
a404(E)	870	#5	29'-4"	—
a405(E)	2264	#5	6'-6"	—
a406(E)	11	#5	38'-8"	—
a407(E)	6	#5	32'-1"	—
a408(E)	11	#5	37'-11"	—
a409(E)	5	#5	34'-5"	—
a410(E)	8	#5	27'-8"	—
a411(E)	8	#5	38'-11"	—
a412(E)	8	#5	37'-8"	—
a413(E)	7	#5	39'-9"	—
a414(E)	15	#6	9'-11"	U
a415(E)	6	#6	8'-3"	U
a416(E)	16	#5	2'-0"	—
a417(E)	36	#6	2'-11"	—
a418(E)	5	#6	36'-10"	—
a419(E)	5	#6	33'-4"	—

b401(E)	2050	#5	35'-9"	—
b402(E)	124	#5	21'-2"	—
b403(E)	201	#6	30'-0"	—
b404(E)	268	#6	34'-2"	—

d101(E)	1045	#5	7'-9"	D
d103(E)	572	#5	6'-10"	A
d104(E)	572	#5	7'-9"	A
d402(E)	523	#5	8'-2"	A

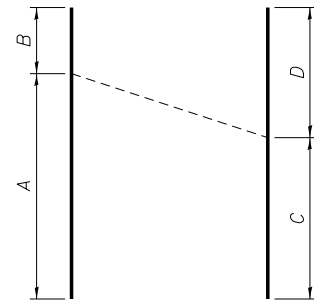
e401(E)	4	#8	32'-0"	—
e402(E)	4	#8	19'-8"	—
e403(E)	5	#8	33'-2"	—
e404(E)	6	#8	35'-3"	—
e405(E)	32	#4	19'-8"	—
e406(E)	42	#4	18'-6"	—
e407(E)	56	#4	17'-10"	—
e408(E)	70	#4	18'-3"	—
e409(E)	4	#4	29'-8"	—
e410(E)	5	#4	30'-7"	—
e411(E)	6	#4	32'-7"	—
e412(E)	36	#6	19'-8"	—
e413(E)	36	#6	18'-5"	—
e414(E)	48	#6	17'-9"	—
e415(E)	60	#6	18'-3"	—
e416(E)	12	#6	30'-6"	—
e417(E)	15	#6	31'-3"	—
e418(E)	18	#6	33'-5"	—
e419(E)	4	#8	32'-0"	—
e420(E)	4	#8	19'-8"	—
e421(E)	5	#8	33'-0"	—
e422(E)	6	#8	35'-3"	—

x101(E)	64	#5	6'-5"	U
Concrete Superstructure Reinforcement Bars, Epoxy Coated	Cu. Yd.	1,049.9		
	Pound	288,550		



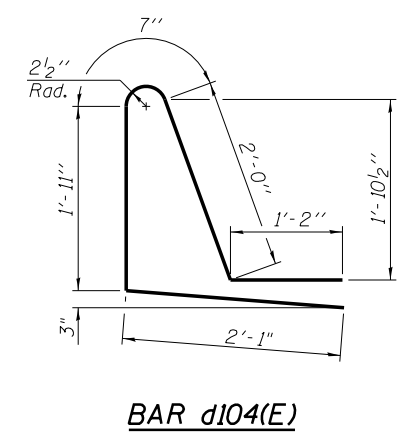
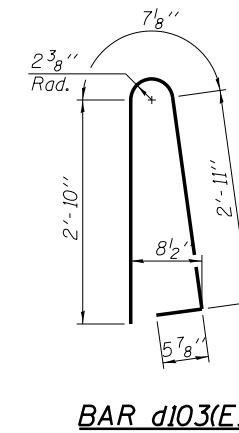
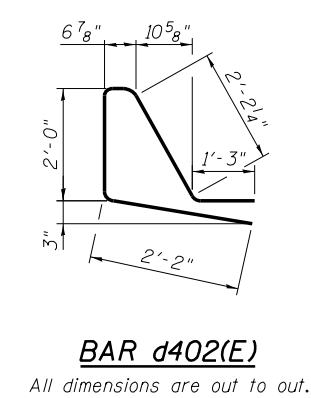
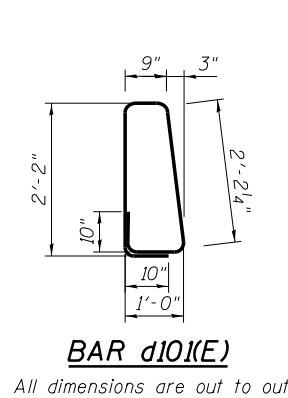
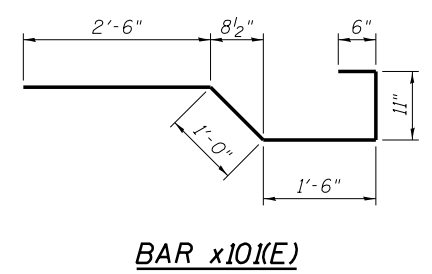
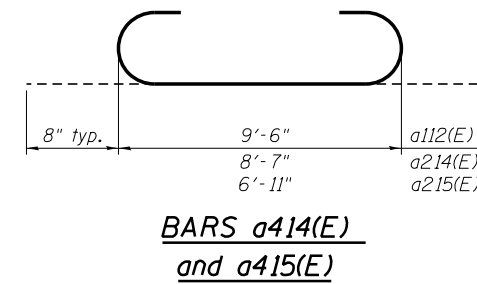
DECK POUR NOTES:

- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 - At least 72 hours shall have elapsed from the end of the previous pour.
 - The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
- The Contractor is alerted that camber and dead load deflection values were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence could result in changes to camber and deck elevations. These changes shall be submitted to the Engineer for review and approval.



Bar	A	B	C	D
a406(E)	18'-6"	20'-2"	2'-0"	36'-8"
a407(E)	14'-10"	17'-3"	2'-10"	29'-3"
a408(E)	36'-4"	1'-7"	19'-9"	18'-2"
a409(E)	28'-0"	6'-5"	18'-5"	16'-0"
a410(E)	26'-2"	1'-6"	14'-8"	13'-0"
a411(E)	37'-5"	1'-6"	20'-8"	18'-3"
a412(E)	18'-0"	19'-8"	6'-5"	31'-3"
a413(E)	18'-8"	21'-1"	4'-3"	35'-6"

CUTTING DIAGRAM
(See table for bar designations)



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-055-Reinforcement Details Unit 4.dgn
MODEL: Default

USER NAME = ksnider
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - JHG
CHECKED - AJK
DRAWN - JHG/VH
CHECKED - AJK

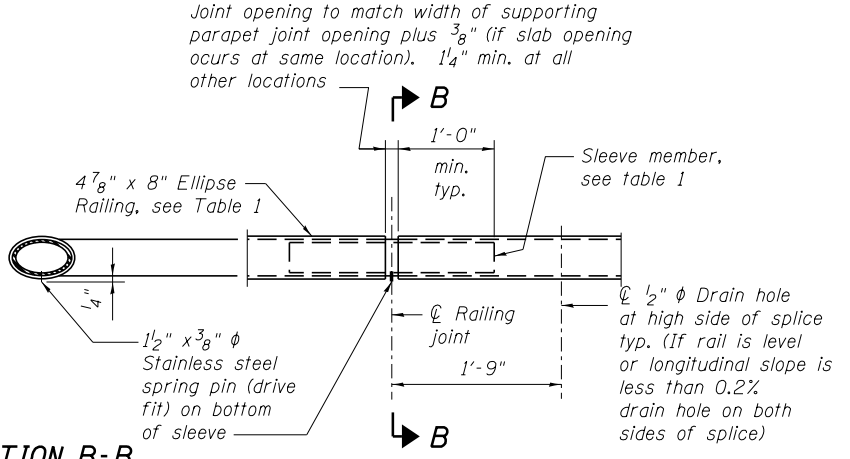
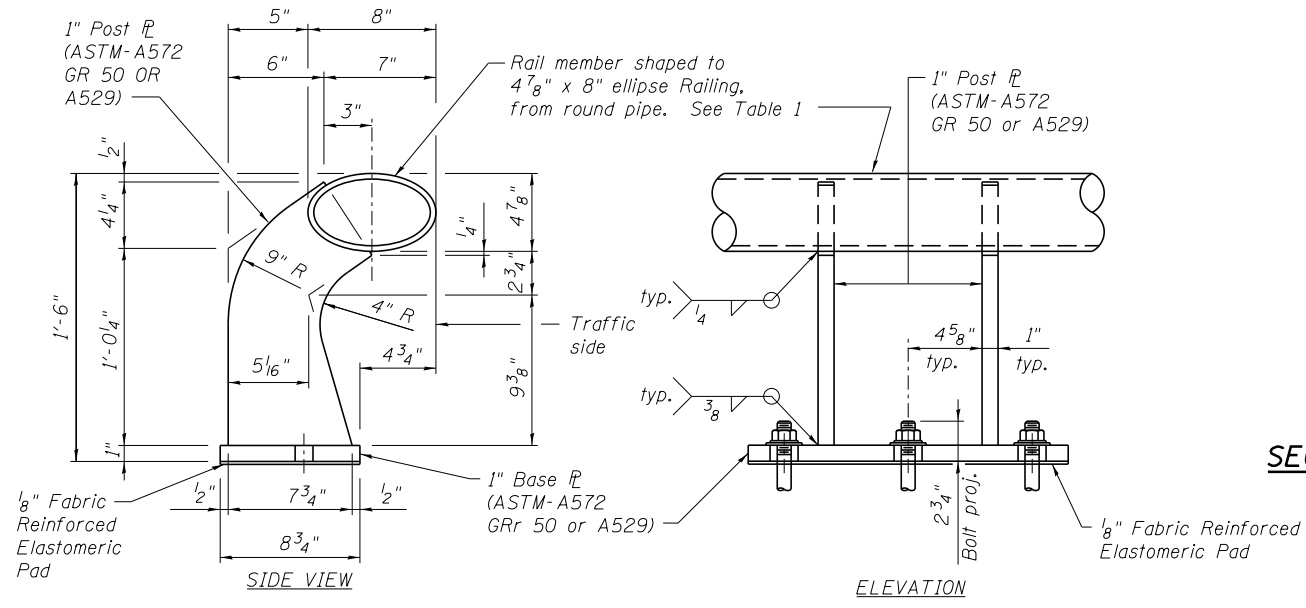
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**REINFORCING BAR DETAILS AND BILL OF MATERIAL UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S55 OF S138 SHEETS

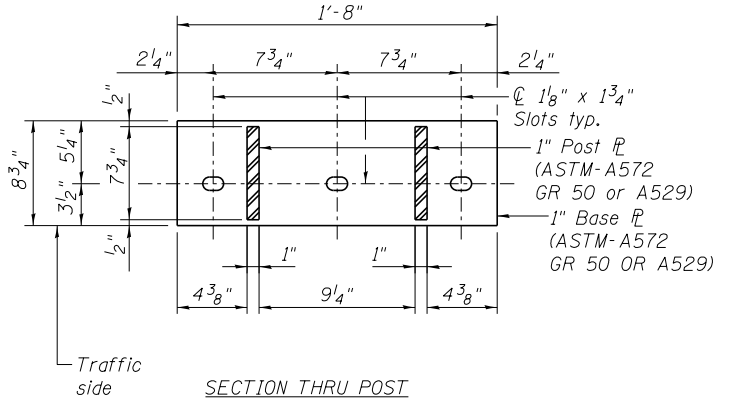
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	944
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	



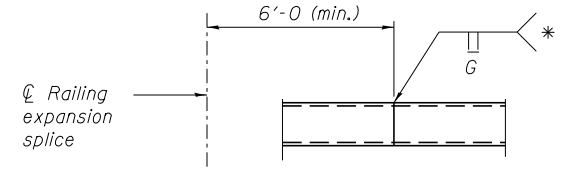
SECTION B-B

ELLIPSE RAILING SLEEVE DETAIL

Note:
The major and minor diameters of the rail member may vary +/- 3/16" from plan dimensions. However, the difference between the outside diameters of the sleeve and the inside diameters of the rail shall not exceed 1/8" along the major or minor axis. The maximum gap along the 45° axis of the sleeve may be 1/4" max.



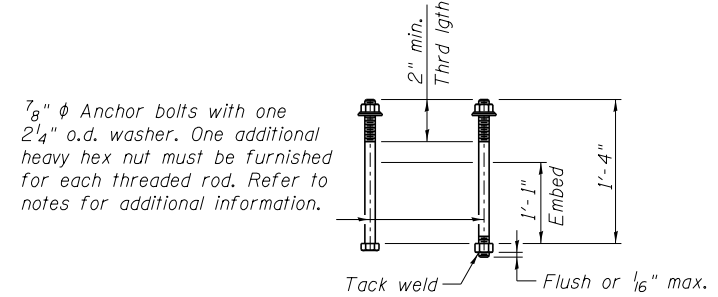
ELLIPTICAL TUBE WITH RAIL POST AND ANCHORAGE DETAILS



RAILING SHOP SPLICE DETAIL

* Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove, double vee groove, or single groove. Grind smooth.

APPROVED RAILING MATERIAL		
4 7/8" x 8" Ellipse Railing		
Material	Sleeve Member (at railing splice)	Thickness
6" Dia. Std. Pipe	ASTM-A53-B	0.353"
ASTM-A53 E OR S GRADE B	A36 or A500 GR. B	0.339"
6" dia. , 0.280" Wall thickness	API-5LX52	0.224"
ASTM-A501	ASTM-A53-B	0.353"
API-5LX52	A36 or A500 GR. B	0.339"
6 5/8" O.D. x 0.188" Tube	API-5LX52	0.224"
ASTM-A53-B	ASTM-A53-B	0.339"
A36 or A500 GR. B	A36 or A500 GR. B	0.325"
API-5LX52	API-5LX52	0.216"



CAST-IN-PLACE ANCHOR BOLT OPTIONS

NOTES:

- See sheets S44, S46, S48 & S50 for post spacing.
- Steel Railing (Special) shall be fabricated and installed in accordance with Article 509 of the Standard Specifications, unless otherwise noted.
- All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
- The Steel Railing (Special) is to be bid on a per linear foot basis measured from end to end of steel railing.
- Payment for Steel Railing (Special) shall include full compensation for furnishing all material, and all the equipment and labor required to erect the rail in accordance with these plans and the Standard Specifications.
- Anchor bolts shall be 7/8" diameter, ASTM A-193 GR. B7, fully threaded with heavy hex nuts and one hardened washer and one 2 1/4" O.D. washer each. Embed threaded rods 10 1/2" min. into concrete parapet. Material for these items shall be in accordance with the adhesive manufacturer's requirements to be capable of obtaining an ultimate load per threaded rod of 36 kips in tension, considering spacing and edge distance. See Standard Specification 509.06 for further details on setting anchor bolts. Cost of anchor bolts included with Steel Railing (Special).
- Optional cast-in-place anchor bolts to comply with ASTM F-1554 Grade 105. Hex nuts to comply with AASHTO M291, washers to comply with AASHTO M-293. Galvanizing in accordance with AASHTO M-232.
- Provide one 1/8" and two 1/16" galvanized steel shims for 25% of rail posts, to be used as required. Shims shall be similar to base plates in size and holes. Cost included with Steel Railing (Special).

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Railing (Special)	Foot	1972

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-056-Traffic Barrier Details (1 of 3).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - DTS	REVISED -
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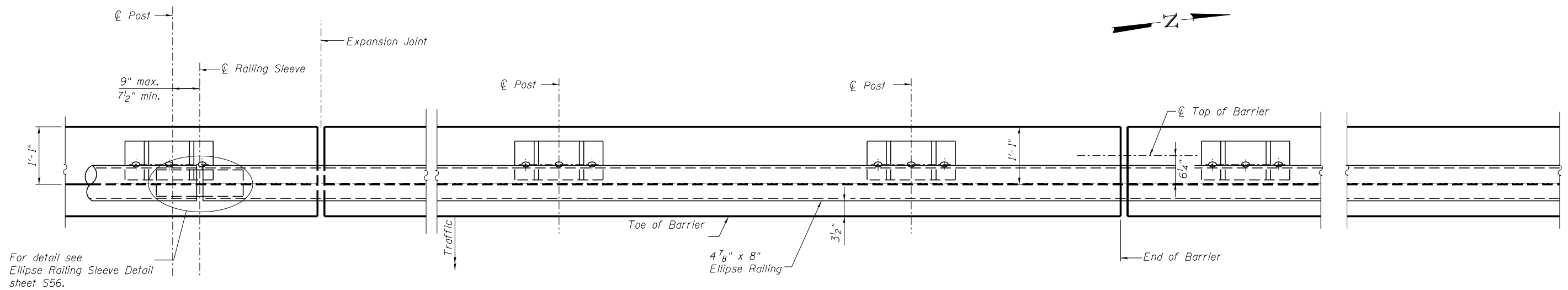
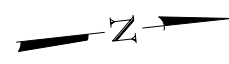
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC BARRIER DETAILS (1 OF 3)
STRUCTURE NO. 081-0178 (EASTBOUND)**

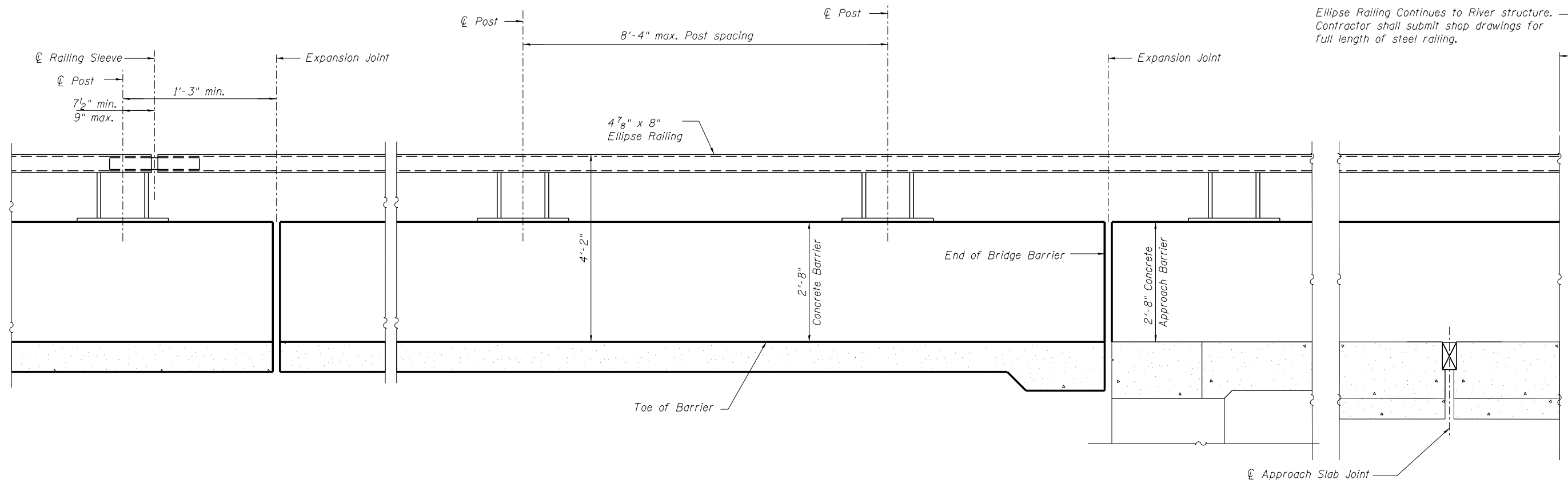
SHEET NO. S56 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	945
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

c:\pwise_work\do_not_delete\dms02467\081-0178-C00AB-056-Traffic Barrier Details (1 of 3).dgn 11:49:55 AM 1/18/2017



PLAN



ELEVATION

(North Abutment end of west rail shown looking West, south end of Unit 1 ties in to Ramp C.)

NOTES:

1. Edge of base plate shall not be less than 6" from any cold joint or barrier discontinuity including the back of the abutment or opening for finger plate expansion joint.
2. See sheets S44, S46, S48 and S50, for post spacing.

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FILE NAME = 081-0178-C00AB-057-Traffic Barrier Details (2 of 3).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - DTS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

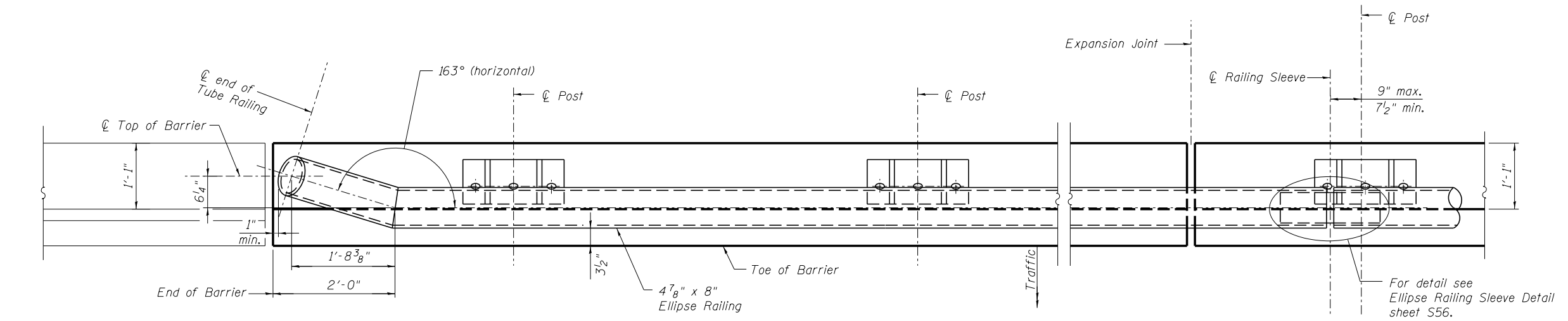
**TRAFFIC BARRIER DETAILS (2 OF 3)
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S57 OF S138 SHEETS

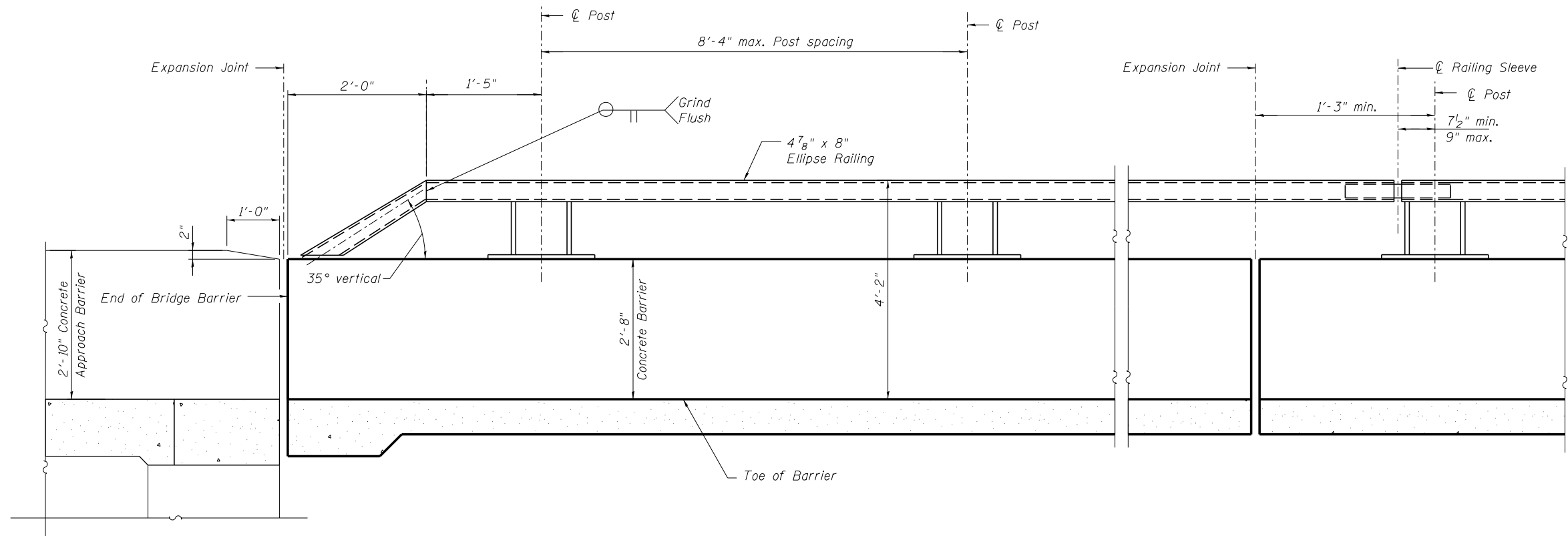
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	946
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

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 1/18/2017 11:50:01 AM



PLAN



ELEVATION

(Eastbound South Abutment end of west rail shown, looking West.)
 (North barrier on west parapet in Unit 2 starts south of the Pier 2 joint. See Sheet S53.)

NOTES:

- Edge of base plate shall not be less than 6" from any cold joint or barrier discontinuity including the back of the abutment or opening for finger plate expansion joint.
- See sheets S44, S46, S48 & S50 for post spacing.

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FILE NAME = 081-0178-C00AB-058-Traffic Barrier Details (3 of 3).dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
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		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
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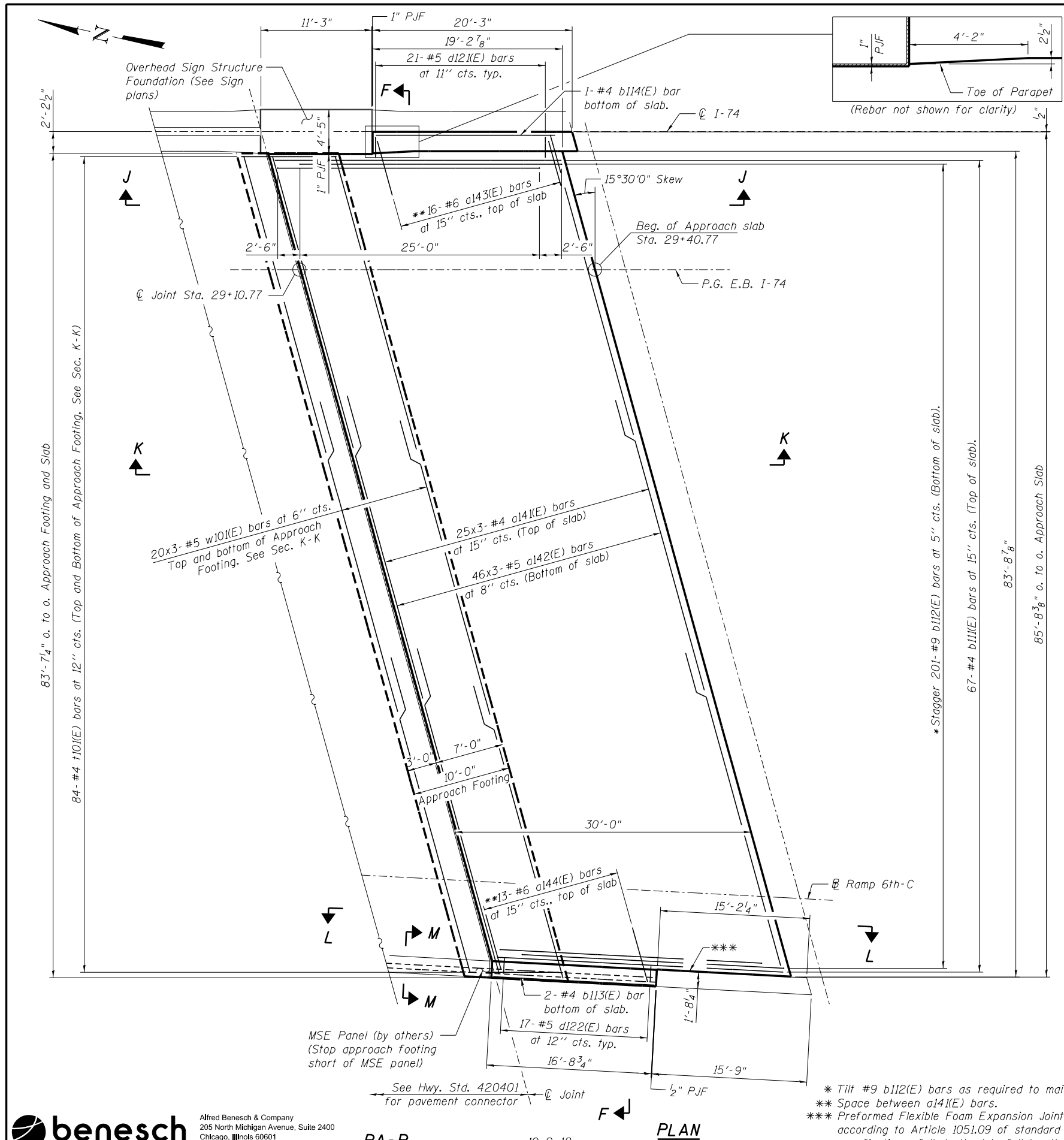
**TRAFFIC BARRIER DETAILS (3 OF 3)
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S58 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	947
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

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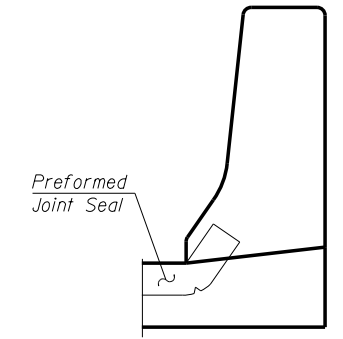


NOTE:

1. See sheet S60 for Sections F-F & K-K and Views J-J & L-L.
2. a14(E) thru a143(E) bar spacings measured along P.G. E.B. I-74.
3. b11(E) & b112(E) bar spacings measured perpendicular to P.G. E.B. I-74.
4. See sheet S99 for dimensions between end of approach slab and abutment backwall.
5. Maskwall not shown for clarity.

MINIMUM BAR LAP

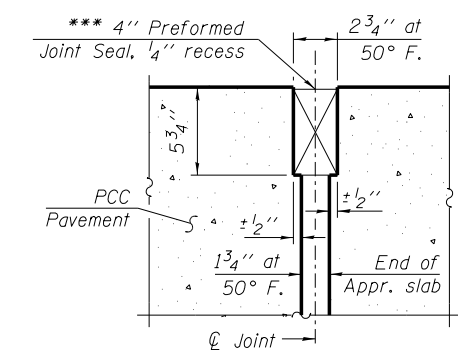
- (Approach)
 #4 bar = 2'-7"
 #5 bar = 3'-3"



VIEW M-M

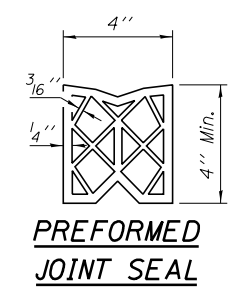
Angle Preformed Joint Seal at 45° at parapet.

*** Cost included with Concrete Superstructure.



RIGID PAVEMENT

DETAIL A



PREFORMED JOINT SEAL

- * Tilt #9 b112(E) bars as required to maintain clearance.
- ** Space between a14(E) bars.
- *** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of standard specifications, full depth slab, full length of parapet.

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BA-R 10-9-12 **PLAN**

FILE NAME =	USER NAME =	DESIGNED -	DMS	REVISED -	
081-0178-C00AB-059-North Bridge Approach Slab Plan	#USER#	CHECKED -	AJK	REVISED -	
MODEL =	PLOT SCALE =	DRAWN -	DMS	REVISED -	
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	PLOT DATE = 1/19/2017				

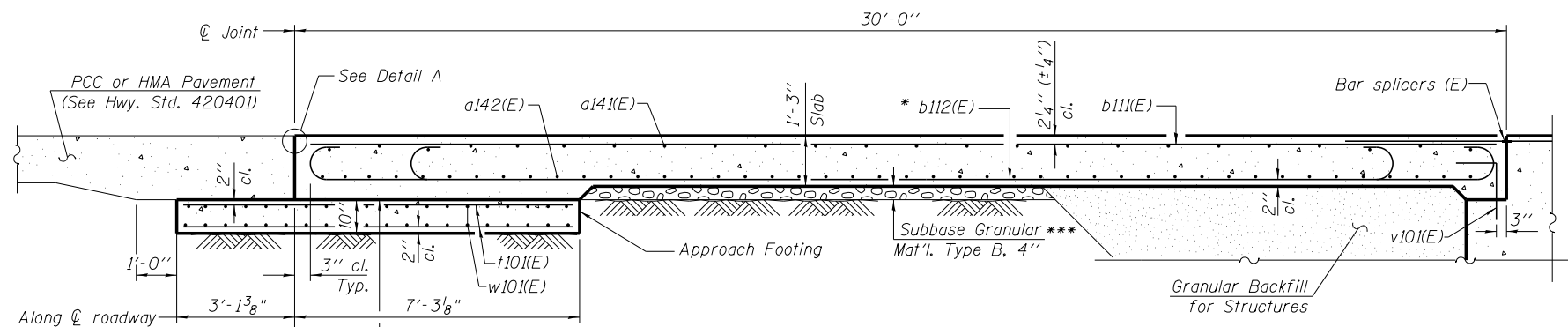
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH BRIDGE APPROACH SLAB PLAN
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S59 OF S138 SHEETS

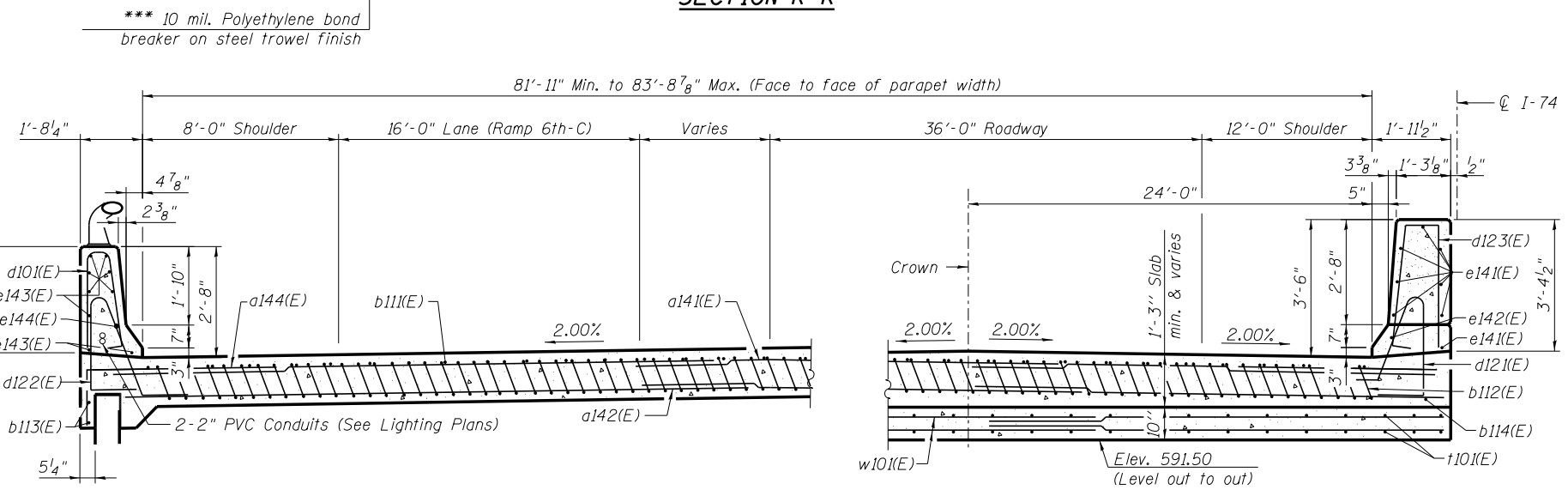
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	948
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

081-0178-C00AB-059-North Bridge Approach Slab Plan.dgn 8:26:09 PM 1/19/2017

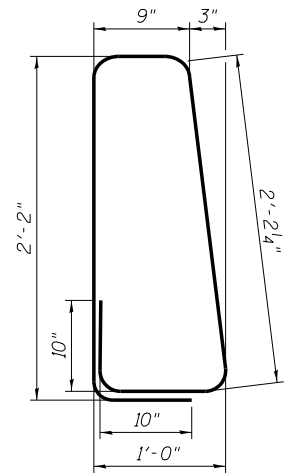


SECTION K-K

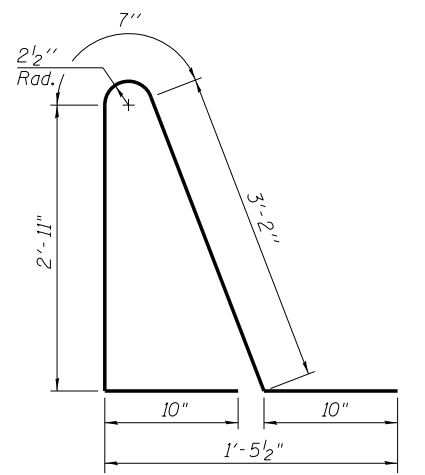
- Notes:
1. See sheet S59 for Detail A.
 2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 3. Approach footing concrete shall be paid for as Concrete Structures.
 4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 5. For v101(E) bar details, see sheets S95 and S99.
 6. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 7. For bar splicer details, see sheet S125.
 8. Cost of excavation for approach footing included with Concrete Structures.
 9. For Granular Backfill for Structures and drainage treatment details, see sheet S7.
 10. Ellipse Railing not shown for clarity.
- * Tilt #9 b112(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.



SECTION F-F



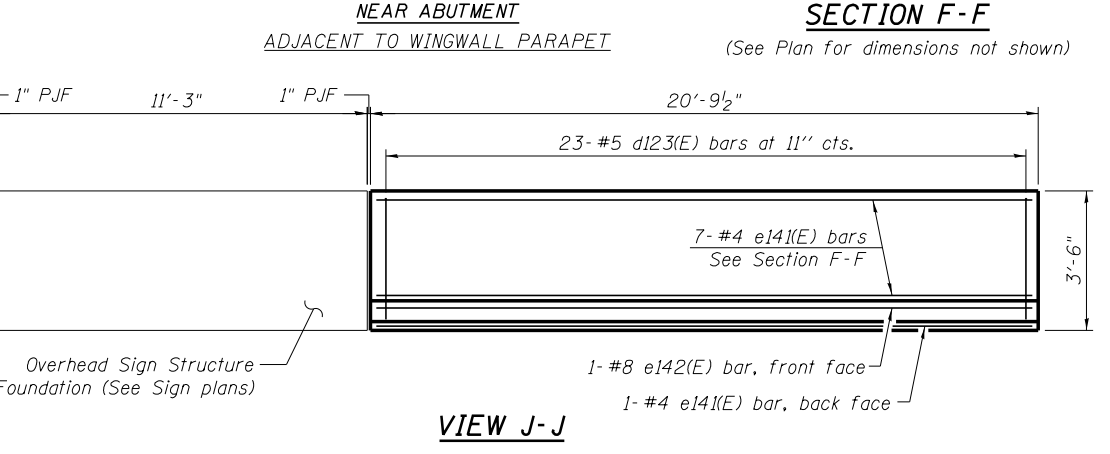
BAR d101(E)



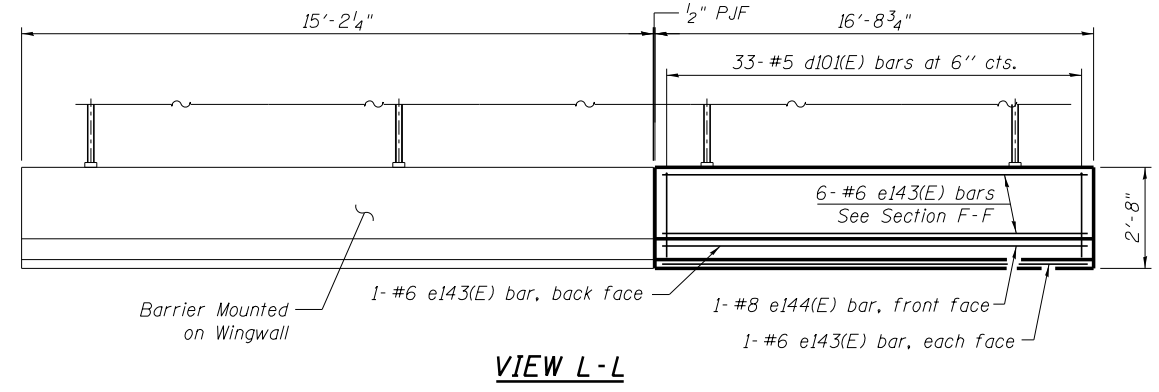
BAR d122(E)

**APPROACH SLAB
BILL OF MATERIAL**

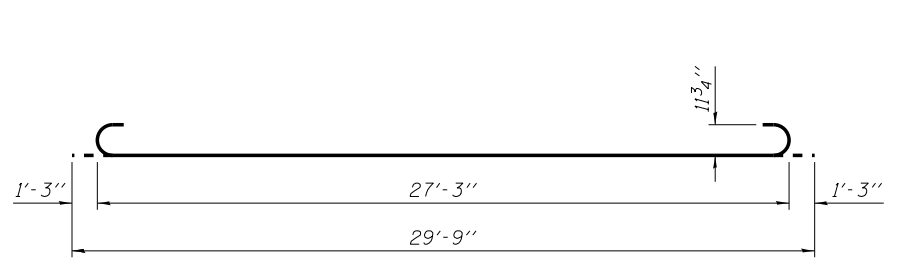
Bar	No.	Size	Length	Shape
a141(E)	75	#4	31'-7"	—
a142(E)	138	#5	32'-1"	—
a143(E)	16	#6	6'-6"	—
a144(E)	13	#6	7'-9"	—
b111(E)	67	#4	29'-8"	—
b112(E)	201	#9	29'-9"	—
b113(E)	2	#4	16'-4"	—
b114(E)	1	#4	19'-11"	—
d101(E)	33	#5	7'-9"	—
d121(E)	21	#5	7'-11"	—
d122(E)	17	#5	8'-4"	—
d123(E)	23	#5	7'-4"	—
e141(E)	8	#4	19'-11"	—
e142(E)	1	#8	19'-11"	—
e143(E)	9	#6	16'-4"	—
e144(E)	1	#8	16'-4"	—
t101(E)	84	#4	9'-11"	—
w101(E)	60	#5	31'-2"	—
Concrete Superstructure		Cu. Yd.	142.2	
Concrete Structures		Cu. Yd.	26.8	
Reinforcement Bars, Epoxy Coated		Pound	31,900	



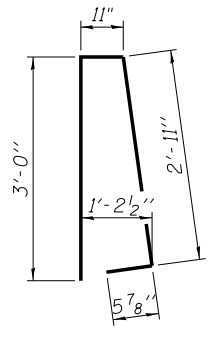
VIEW J-J



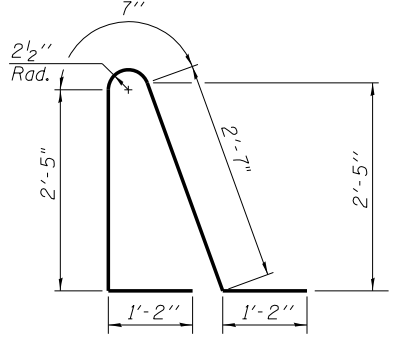
VIEW L-L



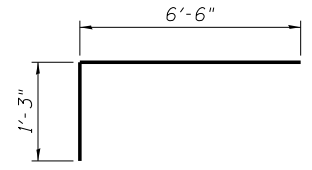
BAR b112(E)



Bars d123(E)



Bar d121(E)



BAR a144(E)

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FILE NAME - 081-0178-C00AB-060-North Bridge Approach Details.dgn	USER NAME - #USER#	DESIGNED - DMS	REVISED -
MODEL - #MODEL	PLOT SCALE -	CHECKED - AJK	REVISED -
	PLOT DATE - 1/20/2017	DRAWN - KMS	REVISED -
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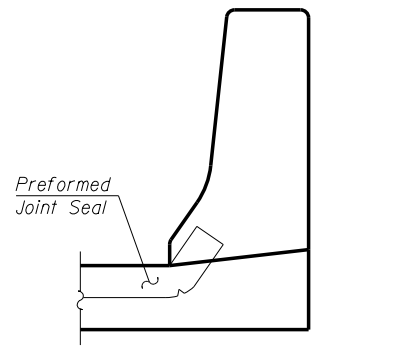
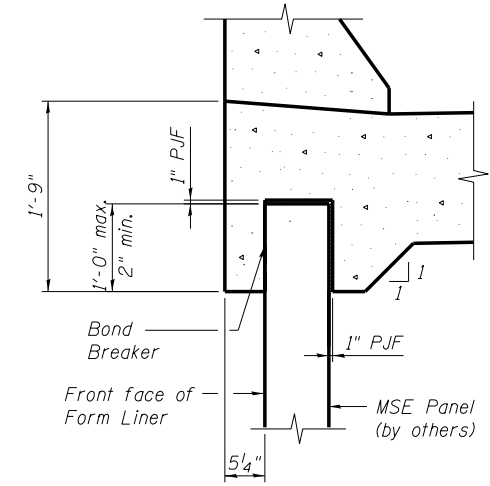
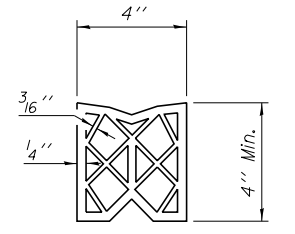
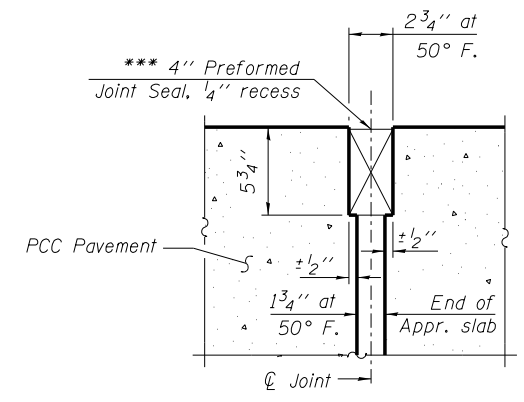
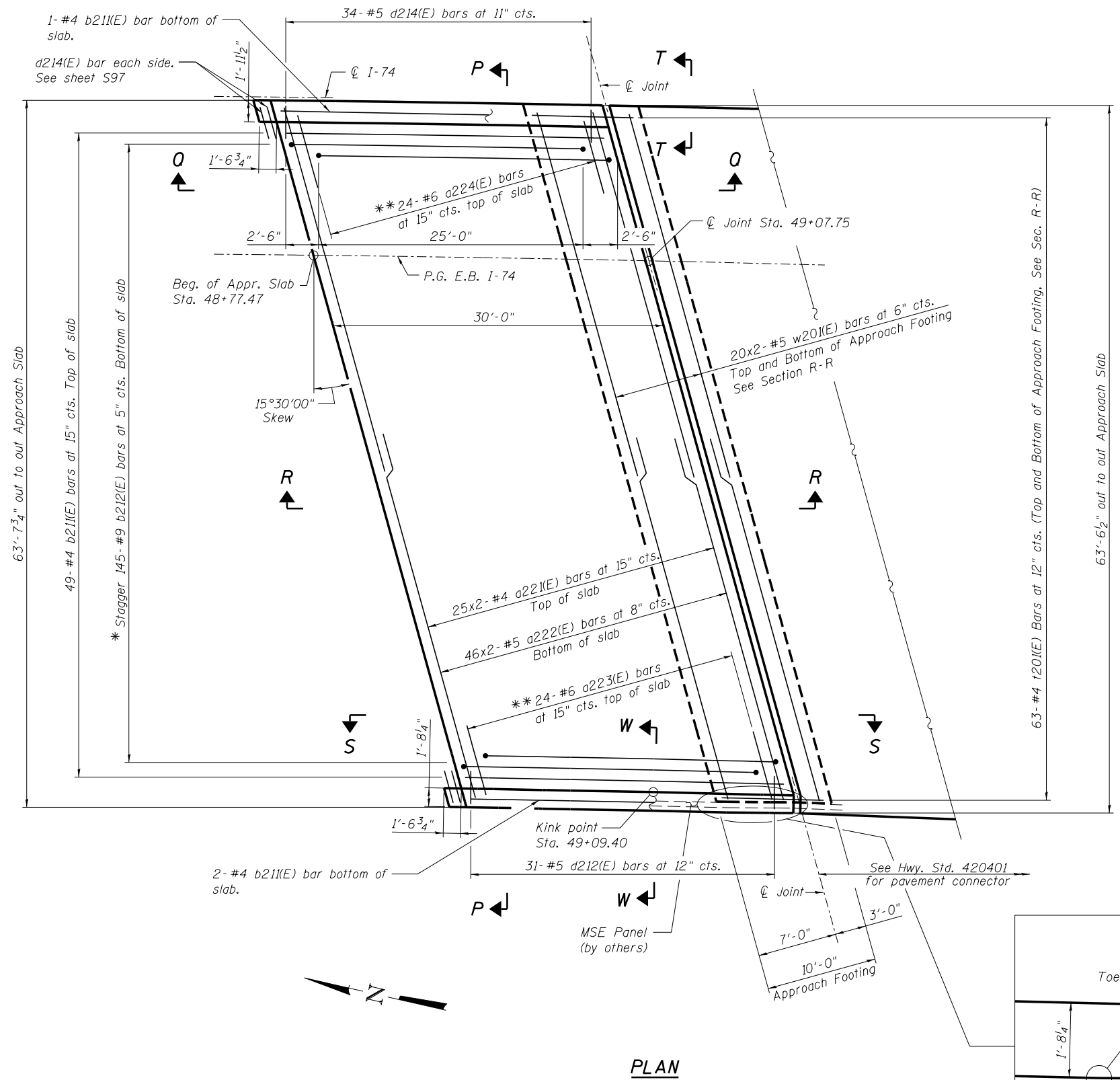
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NORTH BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S60 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	949
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

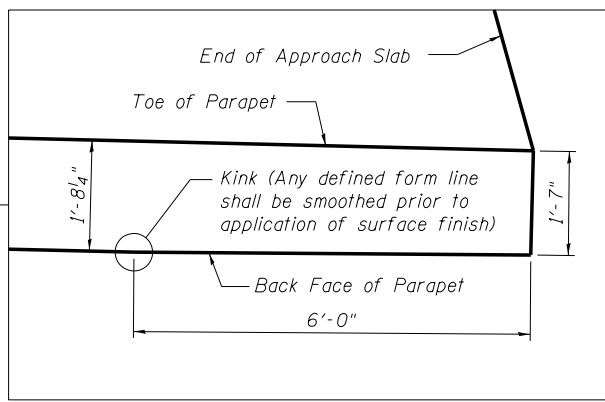
081-0178-C00AB-060-North Bridge Approach Details.dgn 4:00:41 PM 1/20/2017



MINIMUM BAR LAP
 (Approach)
 #4 bar = 2'-7"
 #5 bar = 3'-3"

* Tilt #9 b212(E) bars as required to maintain clearance.
 ** Space between a221(E) bars.
 *** Cost included with Concrete Superstructure.

NOTES:
 1. See sheet S62 for Sections P-P & R-R and Views Q-Q & S-S.
 2. a221(E) thru a224(E) bar spacings measured along P.G. E.B. I-74.
 3. b211(E) & b212(E) bar spacings measured perpendicular to P.G. E.B. I-74.
 4. See sheet S98 for dimensions between end of approach slab and abutment backwall.
 5. Maskwall not shown for clarity.
 6. See sheet S7 for coordination sequence and details.



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 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-061-South Bridge Approach Slab Plan.dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - TJJ	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - TJJ	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH BRIDGE APPROACH SLAB PLAN
 STRUCTURE NO. 081-0178 (EASTBOUND)**

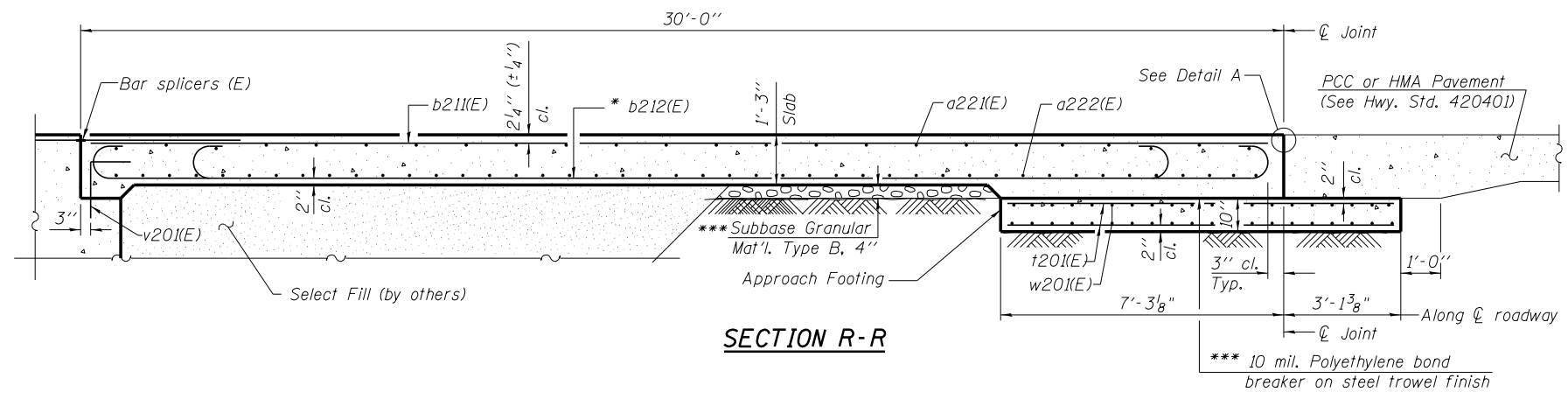
SHEET NO. S61 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	950
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

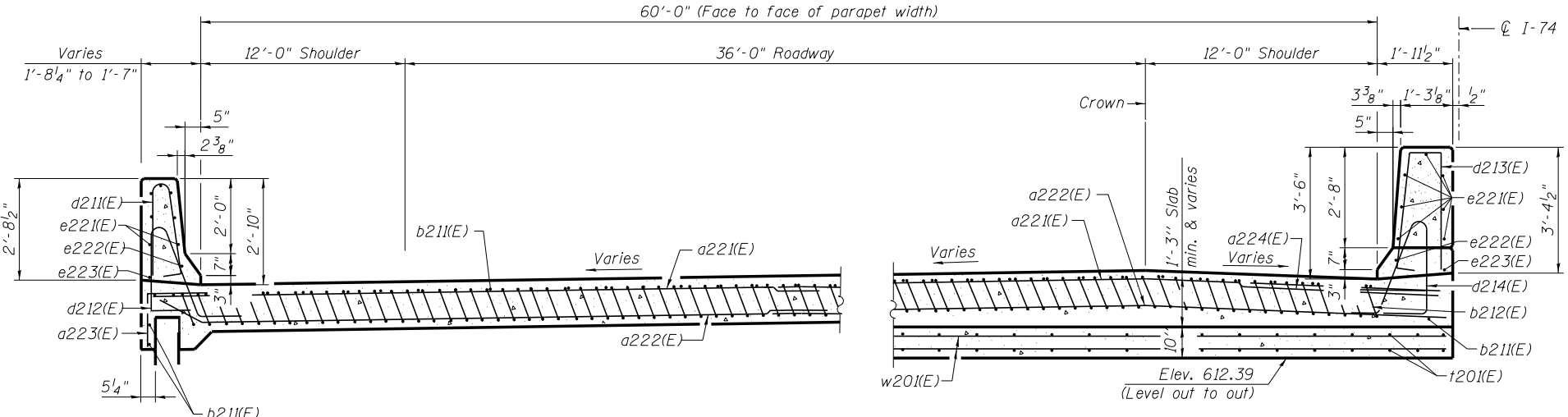
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**APPROACH SLAB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a221(E)	50	#4	34'-3"	—
a222(E)	92	#5	34'-6"	—
a223(E)	24	#6	7'-9"	—
a224(E)	24	#6	6'-6"	—
b211(E)	52	#4	29'-8"	—
b212(E)	145	#9	29'-9"	—
d211(E)	64	#5	5'-7"	—
d212(E)	31	#5	6'-9"	—
d213(E)	35	#5	7'-4"	—
d214(E)	34	#5	7'-11"	—
e221(E)	28	#4	15'-6"	—
e222(E)	2	#8	31'-3"	—
e223(E)	2	#4	31'-3"	—
t201(E)	126	#4	9'-11"	—
w201(E)	80	#5	34'-2"	—
Concrete Superstructure			Cu. Yd.	124.2
Concrete Structures			Cu. Yd.	20.4
Reinforcement Bars, Epoxy Coated			Pound	25,990



SECTION R-R

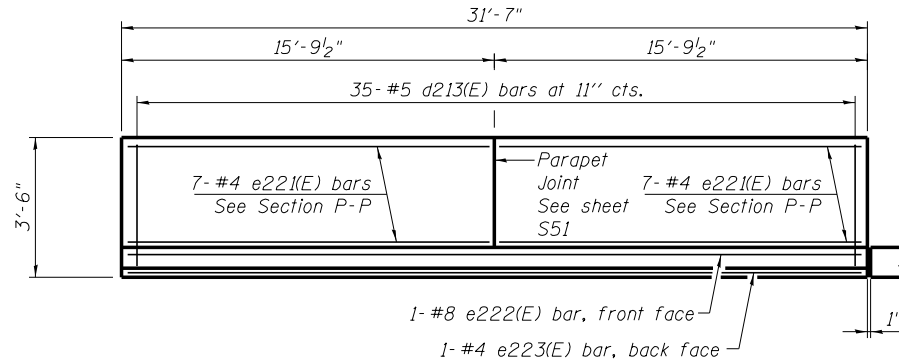


NEAR ABUTMENT

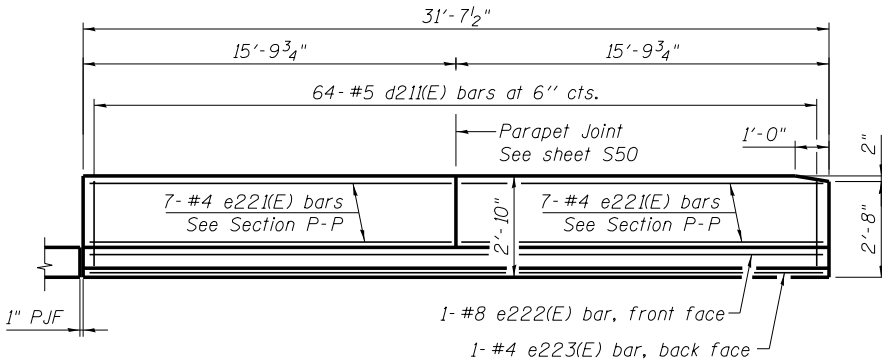
AT APPROACH FOOTING

SECTION P-P

(See Plan for dimensions not shown)



VIEW Q-Q



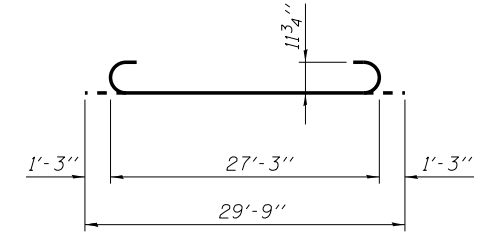
VIEW S-S

NOTES:

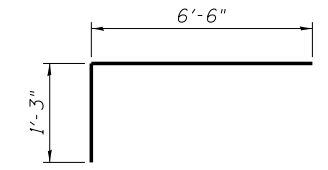
1. See sheet S61 for Detail A.
2. See sheet S43 for Deck Slope Cross Section.
3. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
4. Approach footing concrete shall be paid for as Concrete Structures.
5. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
6. For v201(E) bar details, see sheets S97 and S98.
7. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
8. For bar splicer details, see sheet S125.
9. Cost of excavation for approach footing included with Concrete Structures.

* Tilt #9 b212(E) bars as required to maintain clearance.

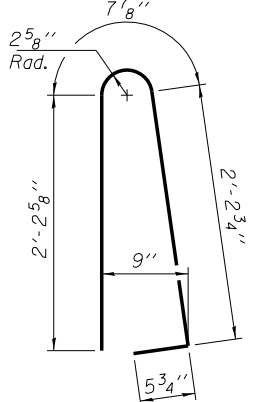
*** Cost included with Concrete Superstructure.



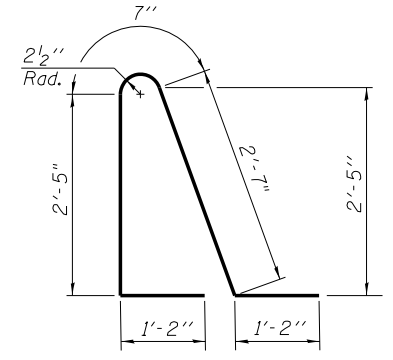
BAR b212(E)



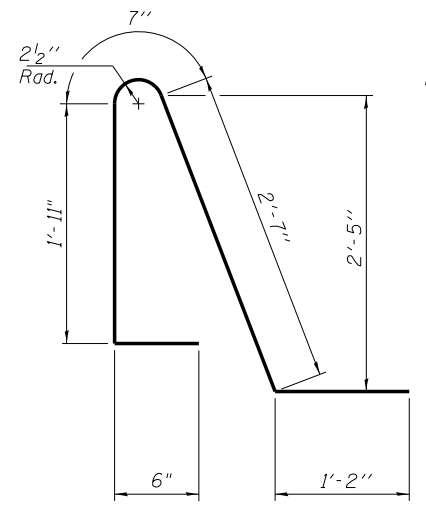
BAR a223(E)



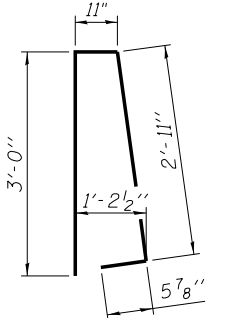
BAR d211(E)



BAR d214(E)



BAR d212(E)



BAR d213(E)

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Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-062-South Bridge Approach Details.dgn	USER NAME = ksnyder	DESIGNED - JHG	REVISED -
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	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
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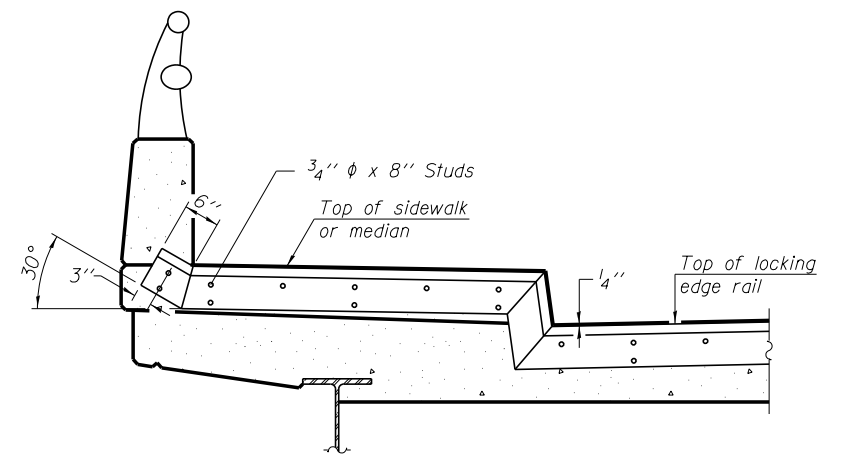
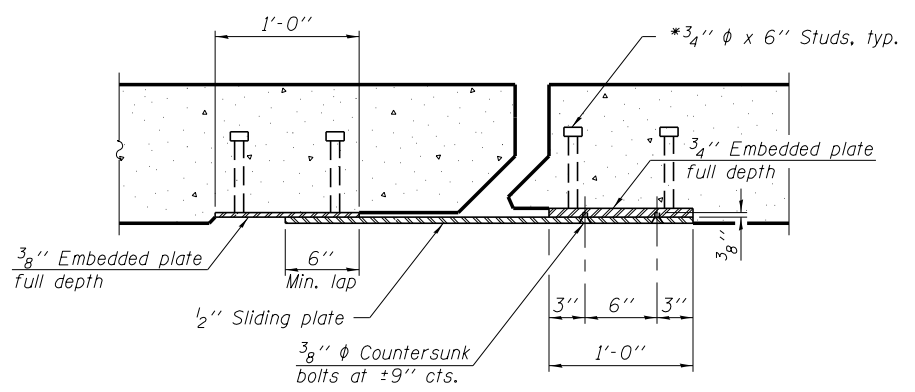
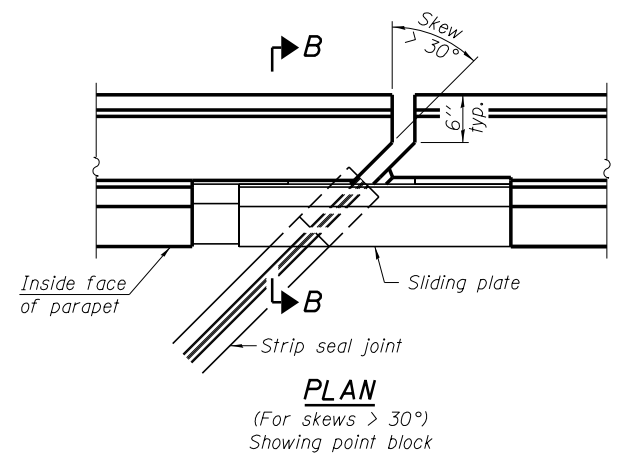
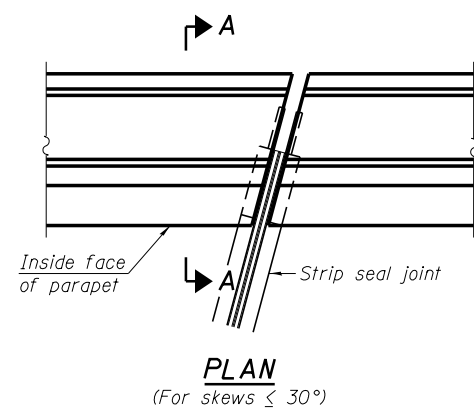
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOUTH BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)**

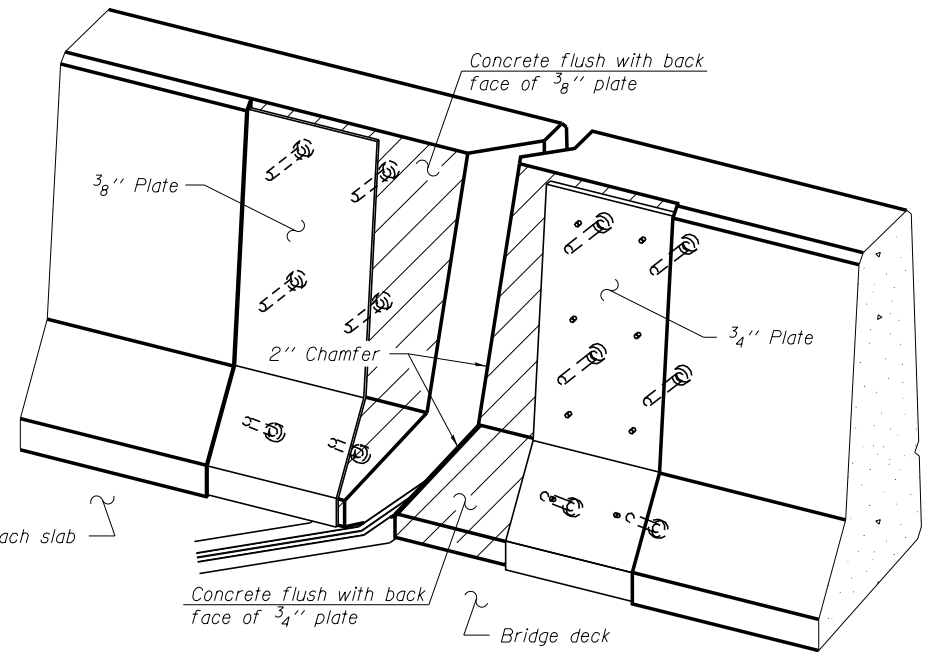
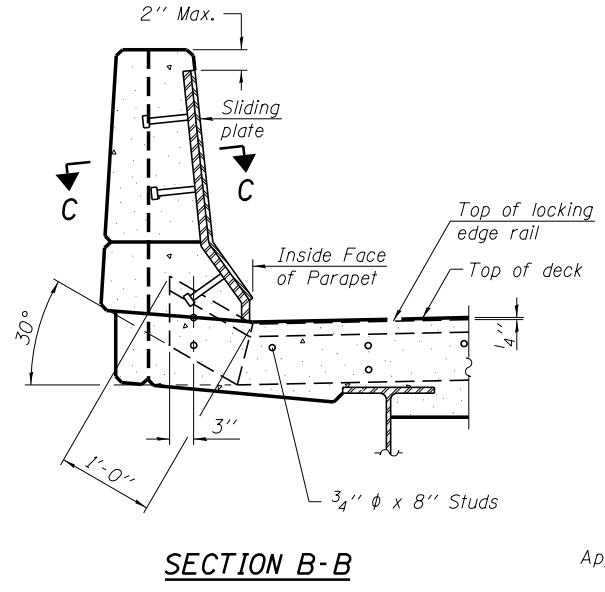
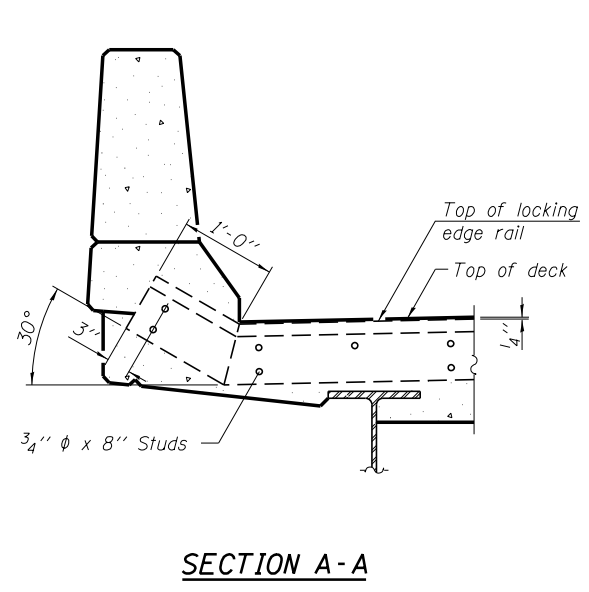
F.A.I. RE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 951
			CONTRACT NO. 64C08	
ILLINOIS FED. AID PROJECT				

SHEET NO. S62 OF S138 SHEETS

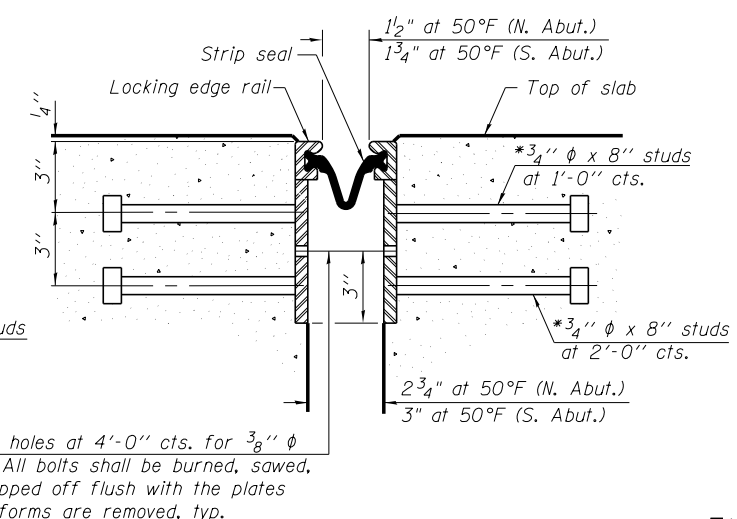
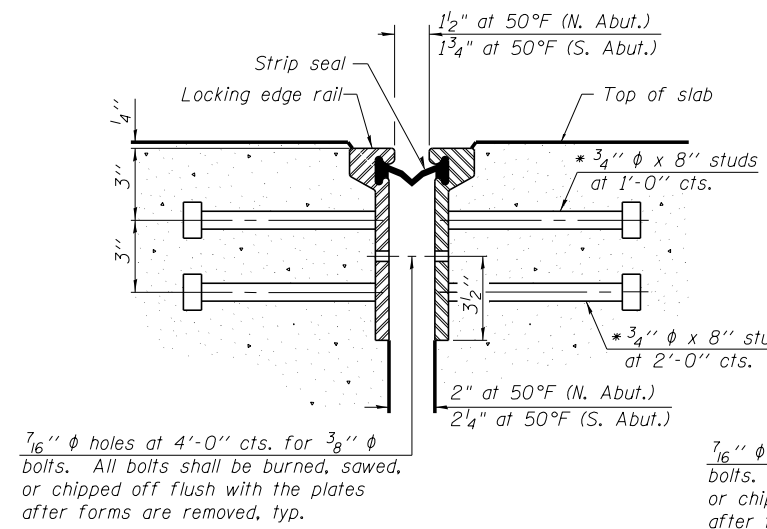
11:50:27 AM c:\pwise_work\do_not_delete\dms02467\081-0178-C00AB-062-South Bridge Approach Details.dgn 1/18/2017



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN
 Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



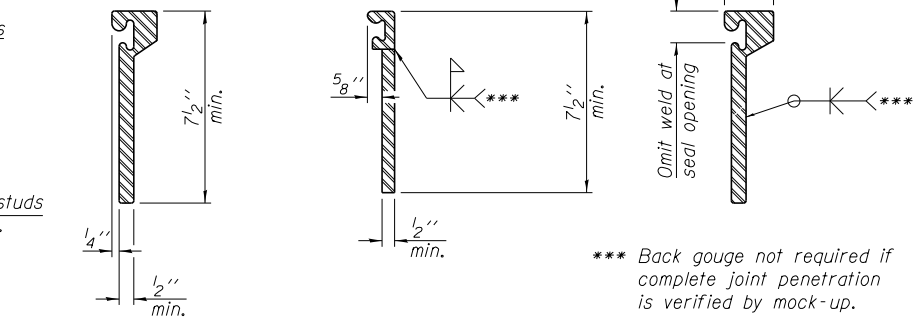
Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
 The manufacturer's recommended installation methods shall be followed.
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
 Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



LOCKING EDGE RAIL SPLICE
 The inside of the locking edge rail groove shall be free of weld residue.
 Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	153.5

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 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

EJ-SSJ 1-27-12

FILE NAME = 081-0178-C00AB-063-Strip Seal Expansion Joint Details.dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

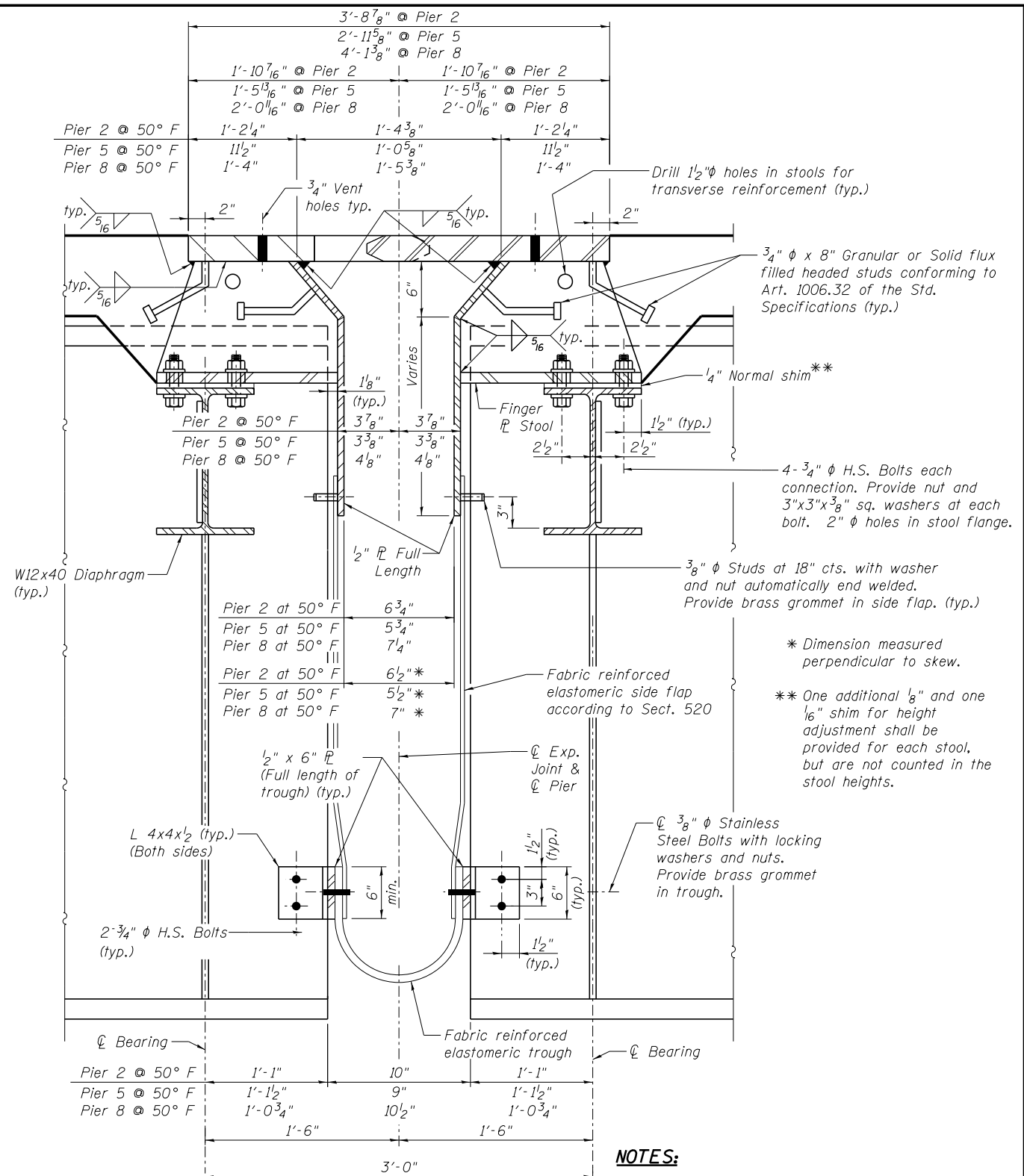
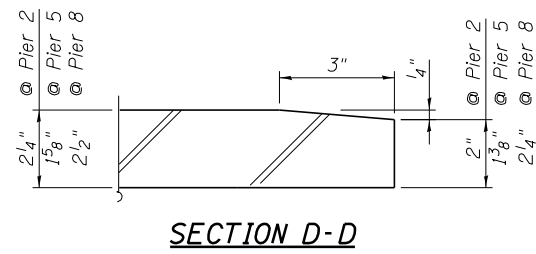
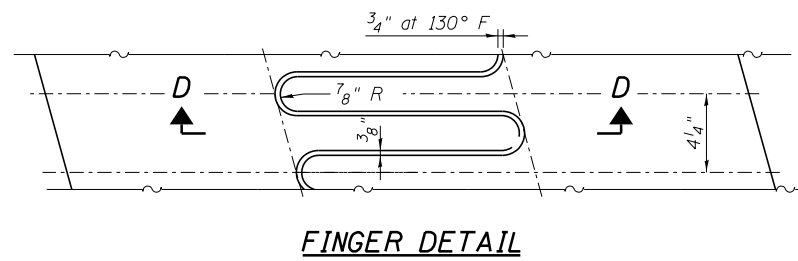
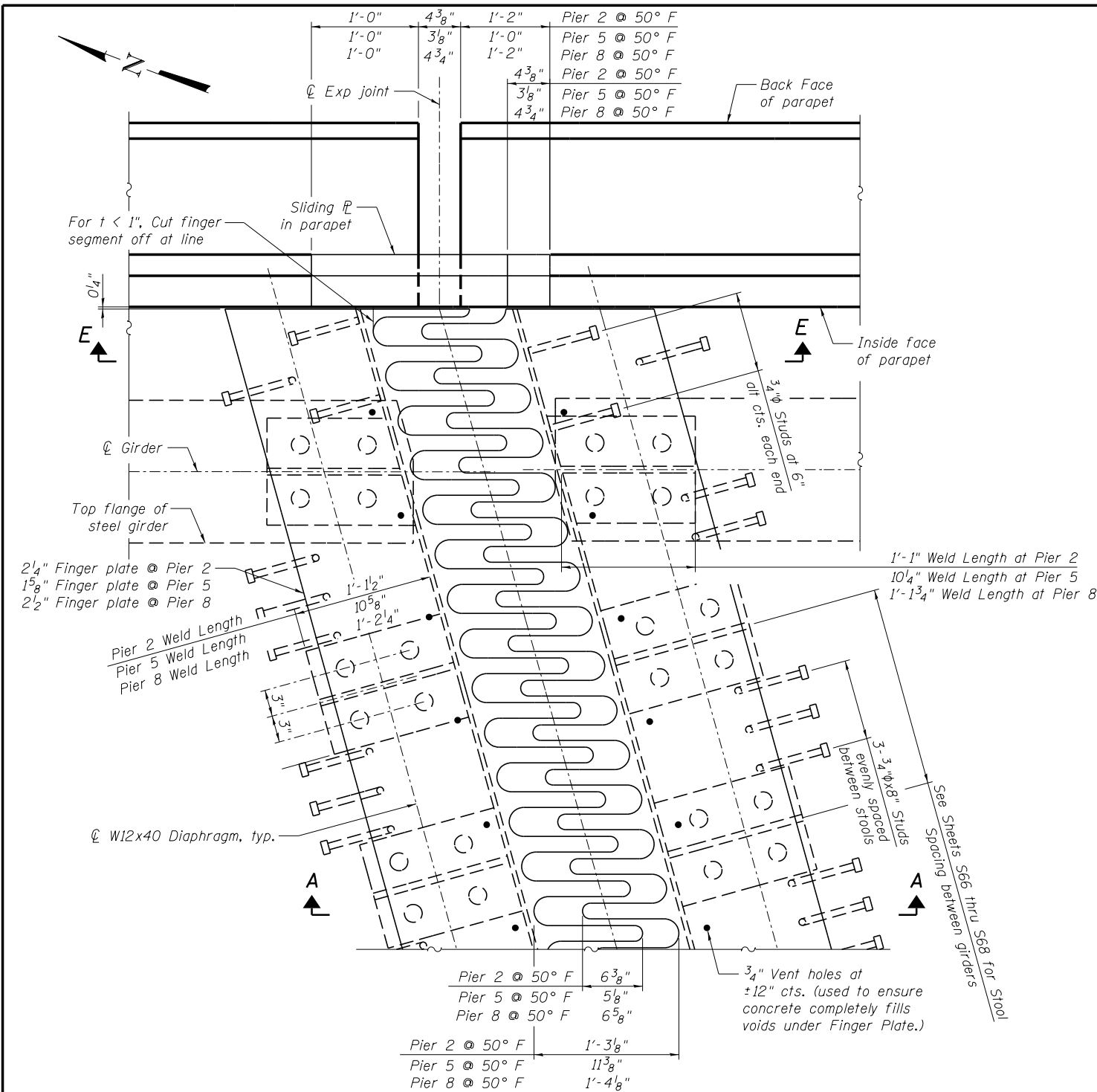
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
 STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S63 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	952
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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- NOTES:**
1. Painting sequencing before and after installation shall occur according to Articles 520.03 and 520.09 of the Standard Specifications.
 2. All steel for Finger Plate Joint shall conform to AASHTO M270 specification, Gr. 50.
 3. Design expansion at Pier 2 ± 3.60" from 50°F
 4. Design expansion at Pier 5 ± 2.33" from 50°F
 5. Design expansion at Pier 8 ± 3.90" from 50°F
 6. Finger plate expansion joints shall be assembled in their final position with the ends in place for shop inspection and acceptance.
 7. For View E-E, see sheet S65.

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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-064-Finger Plate Expansion Joint Details (1 of 2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

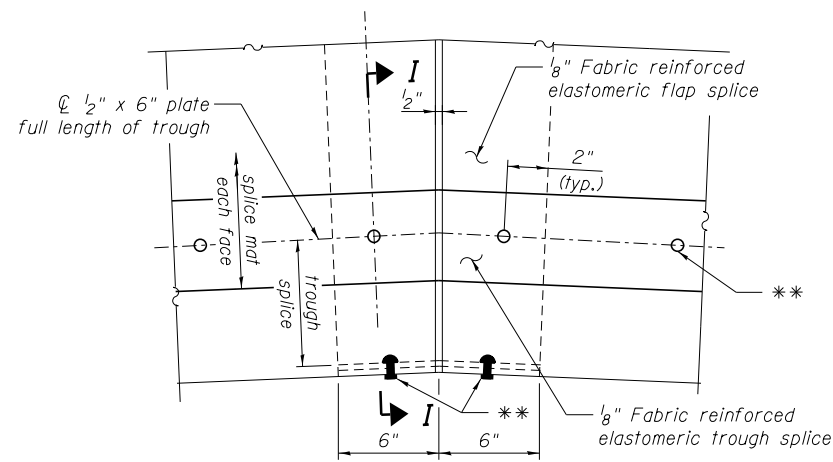
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FINGER PLATE EXPANSION JOINT DETAILS (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

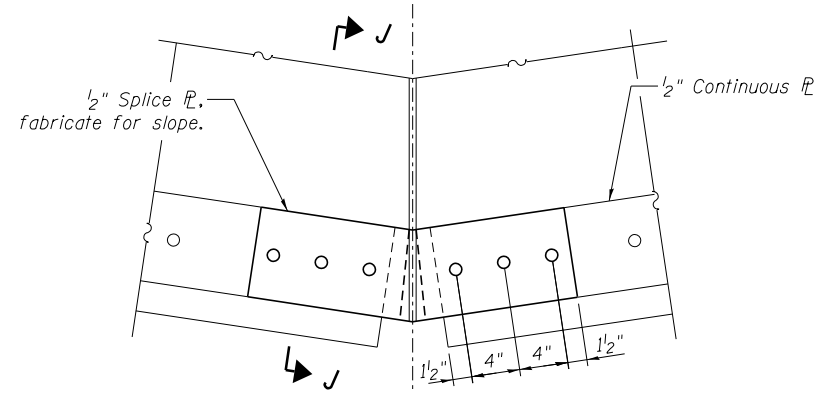
SHEET NO. S64 OF S138 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	953
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

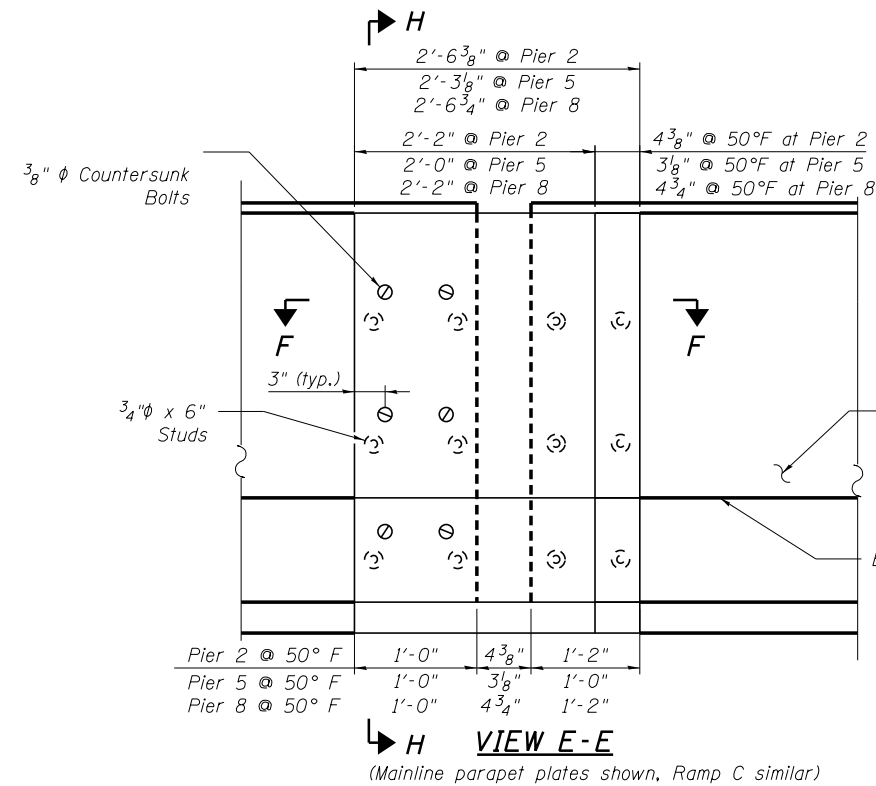
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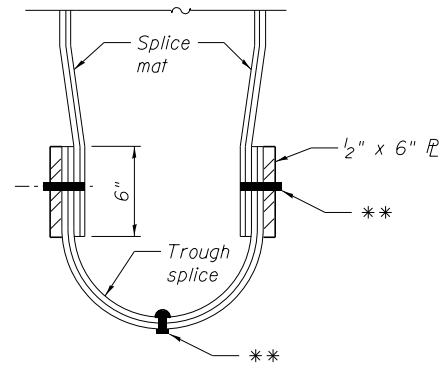
TROUGH SPLICE DETAIL



CONNECTION P DETAIL AT COLLECTOR

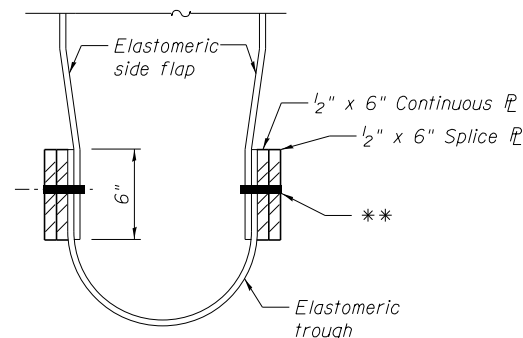


VIEW E-E
(Mainline parapet plates shown, Ramp C similar)



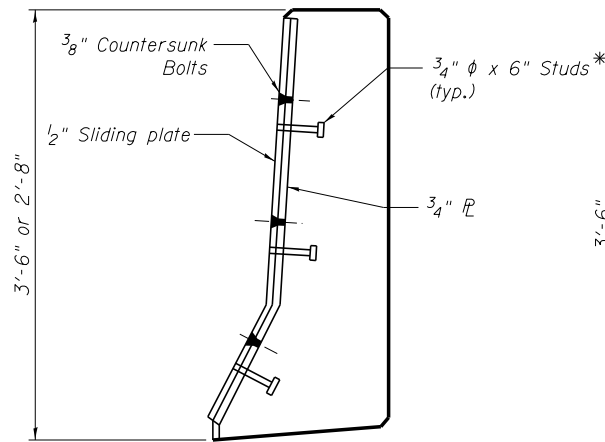
SECTION I-I

** 3/8" ϕ Stainless Steel bolts w/ washers & nuts. Provide brass grommet in trough.

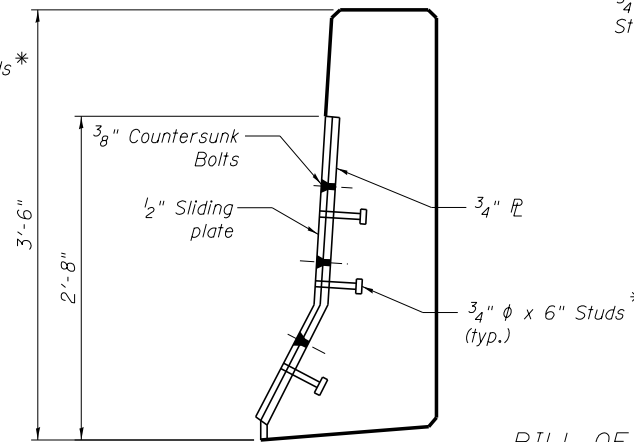


SECTION J-J

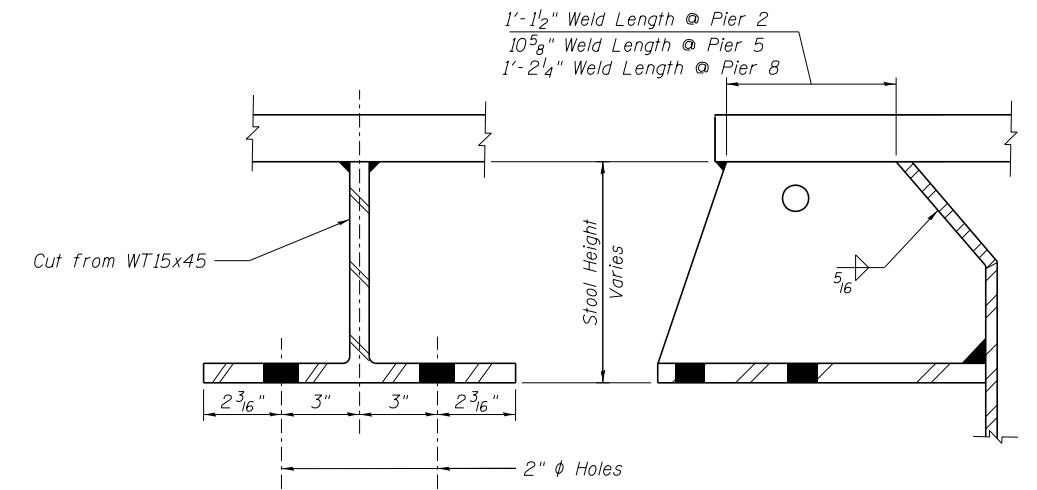
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs, automatically end welded.



SECTION H-H

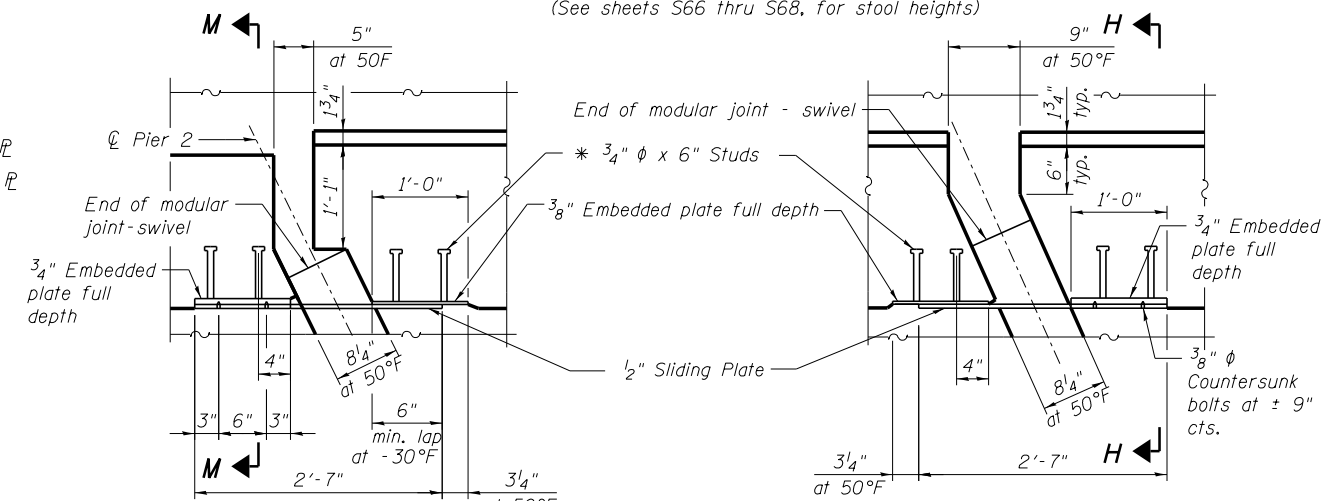


SECTION M-M



FINGER PLATE STOOL DETAIL

(See sheets S66 thru S68, for stool heights)

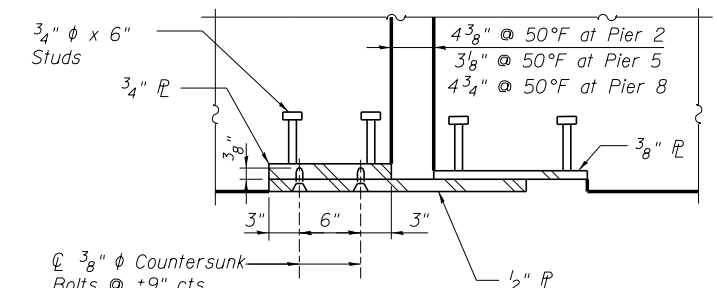


SECTION K-K

SECTION L-L

SECTIONS AT MODULAR JOINT-SWIVEL

See sheet S66 for sections



SECTION F-F

NOTES:

- The pay item Finger Plate Expansion Joint, 3" refers to the joint at Pier 5. Finger Plate Expansion Joint, 4" refers to the joint at Pier 2. Finger Plate Expansion Joint, 5" refers to the joint at Pier 8.
- For drainage details, see sheets S70 thru S72.
- Painting sequencing before and after installation shall occur according to Articles 520.03 and 520.09 of the Standard Specifications.
- See sheet S52 & S66 for Modular Joint-Swivel Details.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Finger Plate Expansion Joint, 3"	FOOT	74.0
Finger Plate Expansion Joint, 4"	FOOT	76.0
Finger Plate Expansion Joint, 5"	FOOT	66.5
Modular Expansion Joint-Swivel 6"	FOOT	34.0



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FILE NAME = 081-0178-C004B-065-Finger Plate Expansion Joint Details (2 of 2).dgn
MODEL: Default

USER NAME = ksnider
PLOT SCALE =
PLOT DATE = 1/18/2017

DESIGNED - DTS
CHECKED - AJK
DRAWN - KMS
CHECKED - AJK

REVISED -
REVISED -
REVISED -
REVISED -

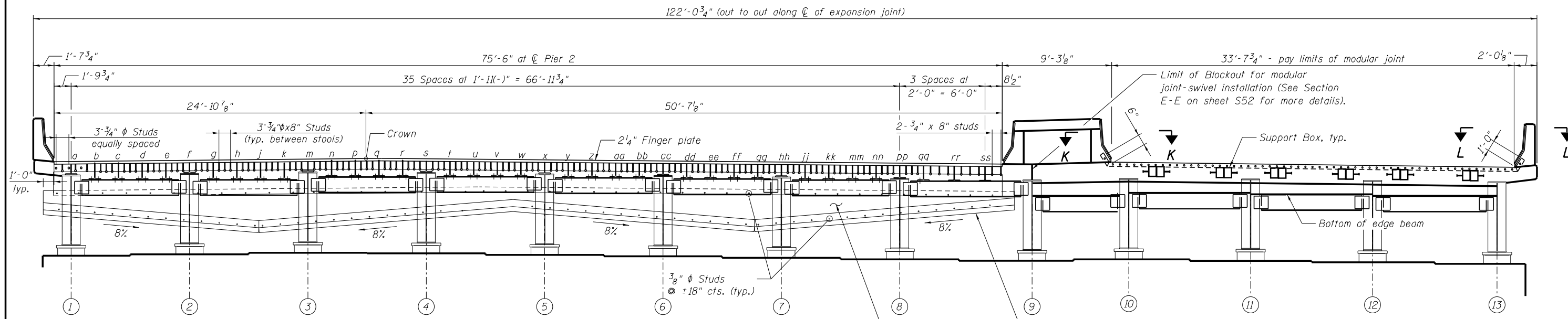
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FINGER PLATE EXPANSION JOINT DETAILS (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

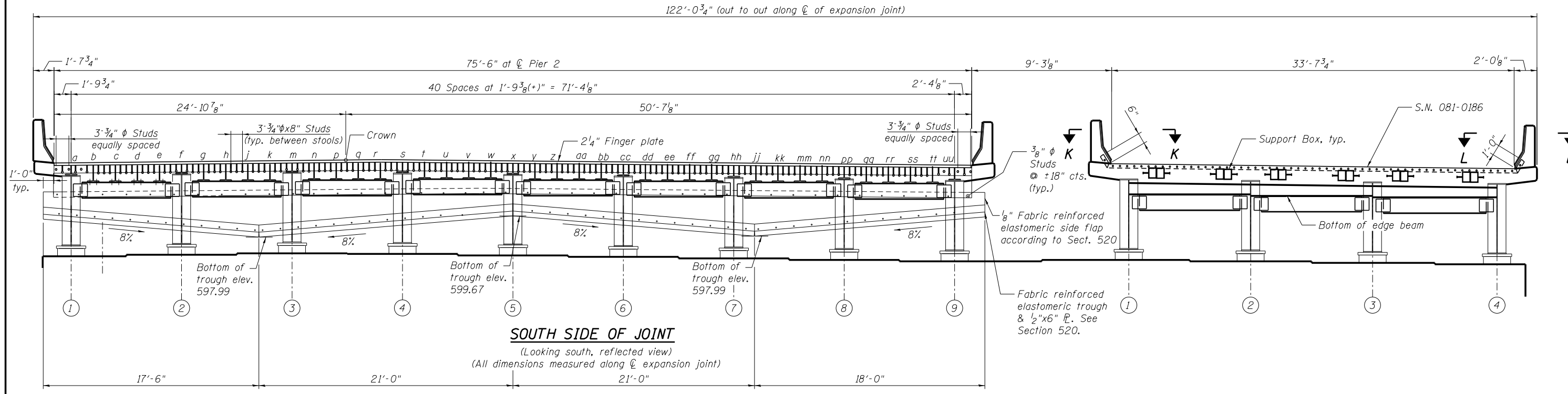
SHEET NO. S65 OF S138 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	954
			CONTRACT NO. 64C08	

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NORTH SIDE OF JOINT
(Looking south)
(All dimensions measured along ϕ expansion joint)



SOUTH SIDE OF JOINT
(Looking south, reflected view)
(All dimensions measured along ϕ expansion joint)

STOOL HEIGHT
(Stool Heights measured at ϕ Brg.)

ITEM	a	b	c	d	e	f	g	h	j	k	m	n	p	q	r	s	t	u	v	w	x	y	z
North side of joint	7 ³ / ₈ "	1'-0 ⁵ / ₁₆ "	1'-0 ⁵ / ₈ "	1'-1 ³ / ₁₆ "	1'-1 ¹³ / ₁₆ "	7 ⁵ / ₈ "	1'-0 ⁹ / ₁₆ "	1'-0 ⁷ / ₈ "	1'-1 ¹ / ₁₆ "	1'-2 ¹ / ₁₆ "	7 ³ / ₄ "	1'-0 ⁷ / ₁₆ "	1'-1"	1'-0 ³ / ₄ "	1'-0 ⁷ / ₁₆ "	7 ⁷ / ₈ "	1'-0 ³ / ₈ "	1'-0 ¹ / ₁₆ "	11 ³ / ₄ "	11 ⁷ / ₁₆ "	7"	1'-0 ⁴ / ₄ "	11 ¹⁵ / ₁₆ "
South side of joint	6 ⁷ / ₈ "	11 ⁵ / ₁₆ "	11 ¹³ / ₁₆ "	1'-0 ³ / ₈ "	1'-0 ⁷ / ₈ "	6 ⁷ / ₈ "	11 ⁵ / ₁₆ "	11 ¹³ / ₁₆ "	1'-0 ³ / ₈ "	1'-0 ⁷ / ₈ "	6 ⁷ / ₈ "	11 ⁵ / ₁₆ "	11 ¹³ / ₁₆ "	1'-0 ⁵ / ₁₆ "	1'-0"	6 ⁷ / ₈ "	11 ⁵ / ₁₆ "	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	11 ¹¹ / ₁₆ "	6 ⁷ / ₈ "	11 ¹⁵ / ₁₆ "	11 ⁵ / ₈ "

ITEM	aa	bb	cc	dd	ee	ff	gg	hh	jj	kk	mm	nn	pp	qq	rr	ss	tt	uu
North side of joint	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	6 ⁷ / ₈ "	1'-0 ⁴ / ₄ "	11 ⁵ / ₁₆ "	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	6 ⁷ / ₈ "	1'-0 ⁸ / ₈ "	11 ¹³ / ₁₆ "	11 ² / ₂ "	11 ³ / ₁₆ "	6 ³ / ₄ "	11 ⁷ / ₈ "	11 ⁹ / ₁₆ "	11 ³ / ₁₆ "	-	-
South side of joint	11 ⁵ / ₁₆ "	11 ¹ / ₁₆ "	6 ⁷ / ₈ "	11 ¹⁵ / ₁₆ "	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	11 ¹ / ₁₆ "	6 ⁷ / ₈ "	11 ¹⁵ / ₁₆ "	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	11 ¹ / ₁₆ "	6 ⁷ / ₈ "	11 ¹⁵ / ₁₆ "	11 ⁵ / ₈ "	11 ⁵ / ₁₆ "	11 ¹ / ₁₆ "	6 ⁷ / ₈ "

- NOTES:**
1. For finger plate and trough details, see sheets S64 and S65.
 2. For drainage details, see sheet S70.
 3. For section K-K & L-L, see sheet S65.

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Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-066-Expansion Joint Details - Pier 2.dgn
USER NAME = ksnider
DESIGNED - DTS
CHECKED - AJK
PLOT SCALE =
DRAWN - KMS
PLOT DATE = 1/18/2017
REVISOR -
REVISOR -
REVISOR -
REVISOR -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

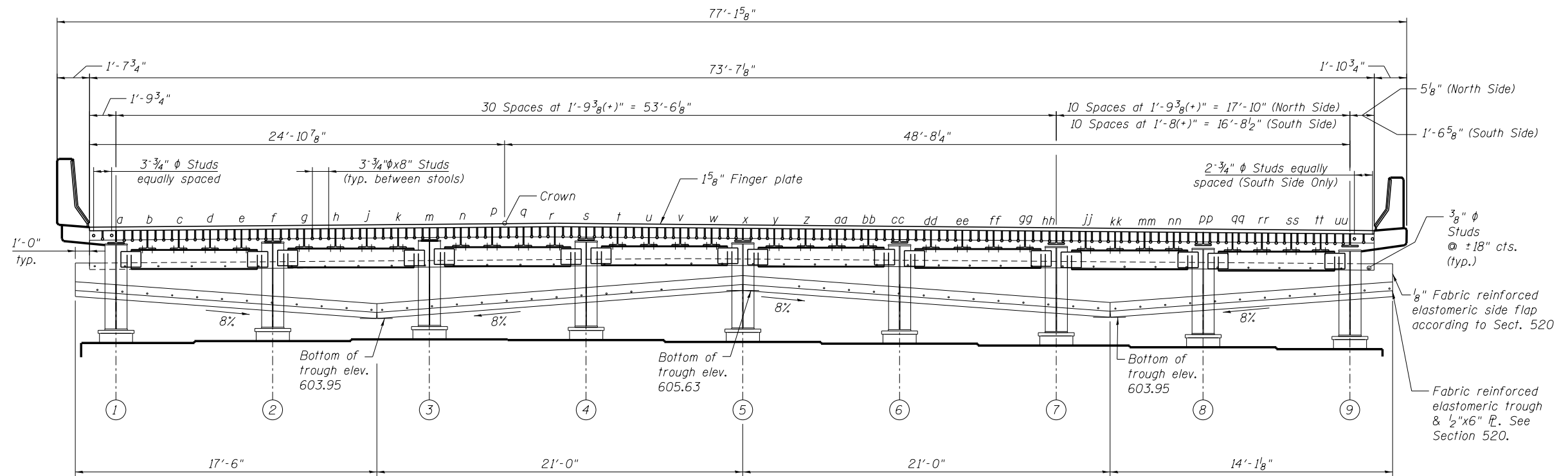
**EXPANSION JOINT DETAILS - PIER 2
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S66 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	955
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

c:\pwise_work\do_not_delete\dms02467\081-0178-C00AB-066-Expansion Joint Details - Pier 2.dgn 11:50:49 AM 1/18/2017



PIER 5
(Looking south)
(All dimensions measured along \perp expansion joint)

STOOL HEIGHT
(Stool heights measured at \perp Brg.)

ITEM	a	b	c	d	e	f	g	h	j	k	m	n	p	q	r	s	t	u	v	w	x	y	z	aa	bb	cc	dd	ee	ff	gg
North side of joint	7 ³ / ₈ "	11 ¹ / ₁₆ "	1'-0 ¹ / ₈ "	1'-0 ⁹ / ₁₆ "	1'-1"	7 ³ / ₈ "	11 ¹ / ₁₆ "	1'-0 ¹ / ₈ "	1'-0 ⁹ / ₁₆ "	1'-1"	7 ¹ / ₂ "	11 ¹ / ₁₆ "	1'-0 ¹ / ₄ "	1'-0 ⁵ / ₈ "	1'-0 ¹ / ₄ "	7 ³ / ₈ "	1'-0 ¹ / ₁₆ "	1'-0 ³ / ₈ "	1'-0"	11 ⁵ / ₈ "	7 ³ / ₈ "	1'-0 ¹ / ₁₆ "	1'-0 ³ / ₈ "	1'-0"	11 ⁵ / ₈ "	7 ³ / ₈ "	1'-0 ¹ / ₁₆ "	1'-0 ³ / ₈ "	1'-0"	11 ⁵ / ₈ "
South side of joint	7 ³ / ₄ "	1'-0 ¹ / ₁₆ "	1'-0 ¹ / ₂ "	1'-0 ¹⁵ / ₁₆ "	1'-1 ³ / ₈ "	7 ⁷ / ₈ "	1'-0 ³ / ₁₆ "	1'-0 ⁹ / ₈ "	1'-1 ¹ / ₁₆ "	1'-1 ¹ / ₂ "	8"	1'-0 ⁵ / ₁₆ "	1'-0 ³ / ₄ "	1'-1 ³ / ₁₆ "	1'-0 ³ / ₄ "	7 ³ / ₄ "	1'-1 ³ / ₁₆ "	1'-0 ³ / ₄ "	1'-0 ³ / ₈ "	1'-0"	7 ³ / ₄ "	1'-1 ³ / ₁₆ "	1'-0 ³ / ₄ "	1'-0 ³ / ₈ "	1'-0"	7 ³ / ₄ "	1'-1 ³ / ₁₆ "	1'-0 ³ / ₄ "	1'-0 ³ / ₈ "	1'-0"

ITEM	hh	jj	kk	mm	nn	pp	qq	rr	ss	tt	uu
North side of joint	7 ³ / ₈ "	1'-0 ¹ / ₁₆ "	1'-0 ³ / ₈ "	1'-0"	11 ⁵ / ₈ "	7 ³ / ₈ "	1'-0 ¹ / ₁₆ "	1'-0 ¹ / ₄ "	11 ⁷ / ₈ "	11 ¹ / ₂ "	7 ¹ / ₄ "
South side of joint	7 ³ / ₄ "	1'-1 ³ / ₁₆ "	1'-0 ¹ / ₁₆ "	1'-0 ⁷ / ₁₆ "	1'-0 ¹ / ₈ "	7 ⁷ / ₈ "	1'-1 ³ / ₁₆ "	1'-0 ¹ / ₁₆ "	1'-0 ⁷ / ₁₆ "	1'-0 ¹ / ₈ "	7 ⁷ / ₈ "

- NOTES:**
- For finger plate and trough details, see sheets S64 and S65.
 - For drainage details, see sheet S71.

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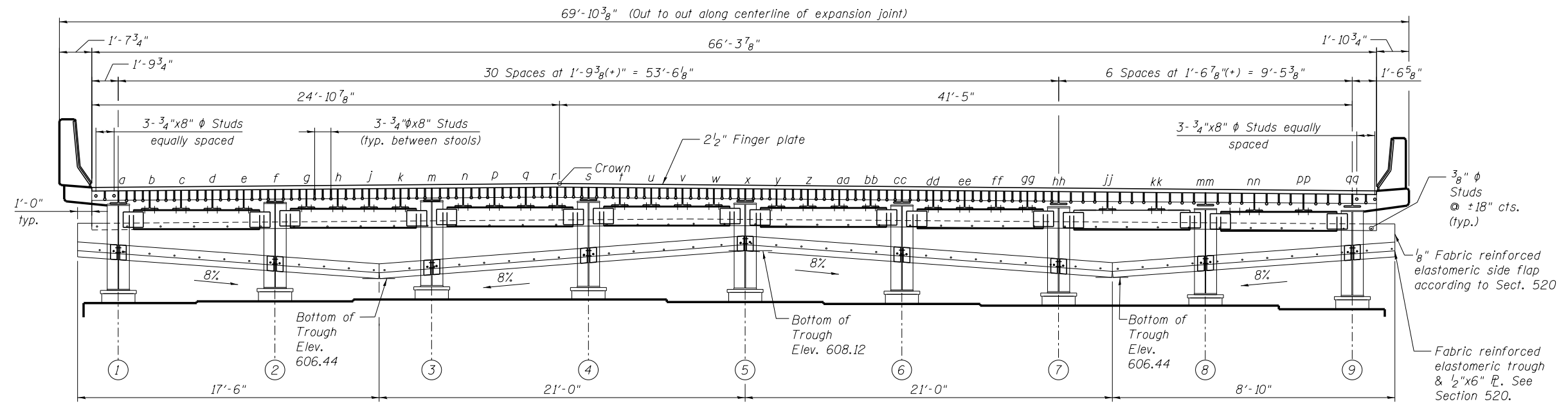
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MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT DETAILS - PIER 5
STRUCTURE NO. 081-0178 (EASTBOUND)**

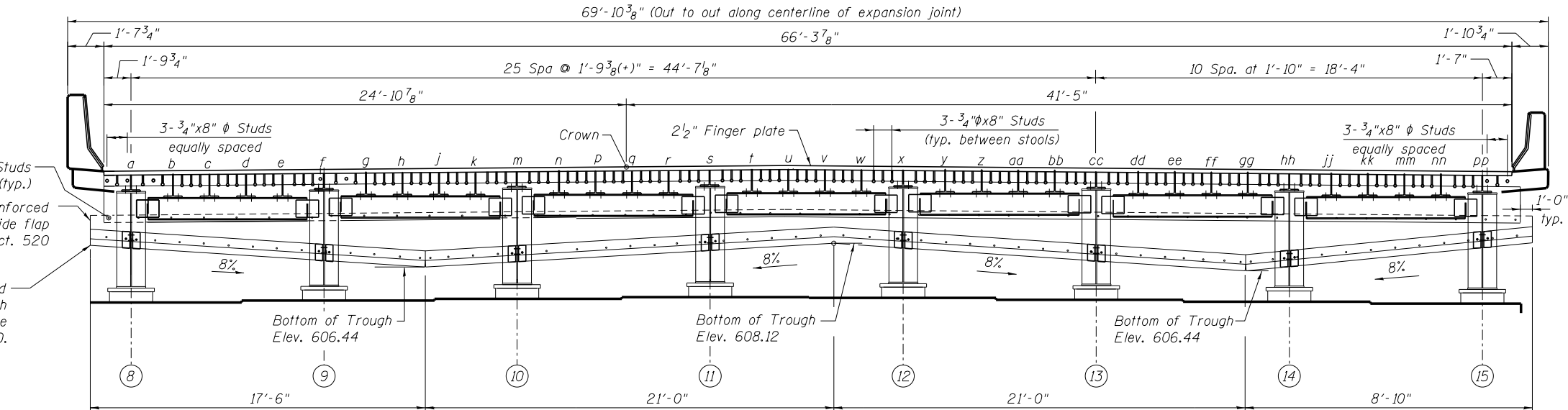
SHEET NO. S67 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	956
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	



PIER 8 NORTH SIDE OF JOINT

(Looking south)
(All dimensions measured along ϕ expansion joint)



PIER 8 SOUTH SIDE OF JOINT

(Looking south)
(All dimensions measured along ϕ expansion joint)

STOOL HEIGHT

(Stool Height measured at ϕ Brg.)

LOCATION	a	b	c	d	e	f	g	h	j	k	m	n	p	q	r	s	t	u	v	w	x	y	z	aa	bb	cc	dd	ee	ff	gg	hh
North Side of joint	6 3/4"	10 15/16"	11 3/8"	11 13/16"	1'-0 1/4"	6 7/8"	11 1/16"	11 1/2"	11 15/16"	1'-0 3/8"	6 7/8"	11 1/16"	11 1/2"	11 7/8"	11 1/2"	6 5/8"	1'-0 1/16"	11 5/8"	11 1/4"	10 7/8"	6 3/4"	1'-0 1/16"	11 5/8"	11 1/4"	10 7/8"	6 3/4"	1'-0 9/16"	1'-0 1/8"	11 3/4"	11 3/8"	7 1/4"
South Side of joint	6 1/2"	10 11/16"	11 1/8"	11 9/16"	1'-0"	6 1/2"	10 11/16"	11 1/8"	11 9/16"	1'-0"	6 5/8"	10 13/16"	11 1/4"	11 1/16"	11 1/4"	6 3/8"	11 13/16"	11 3/8"	11"	10 5/8"	6 1/2"	11 13/16"	11 3/8"	11"	10 5/8"	6 1/2"	1'-0 3/16"	11 13/16"	11 7/16"	11"	6 7/8"

LOCATION	jj	kk	mm	nn	pp	qq
North Side of joint	10 11/16"	10 5/16"	6 1/4"	11 3/16"	10 13/16"	6 3/4"
South Side of joint	11 13/16"	11 7/16"	11 1/16"	10 5/8"	6 1/2"	----

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Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-068-Expansion Joint Details - Pier 8.dgn	USER NAME = ksnider	DESIGNED - AAY	REVISD -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - TJJ	REVISD -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISD -
		CHECKED - TJJ	REVISD -

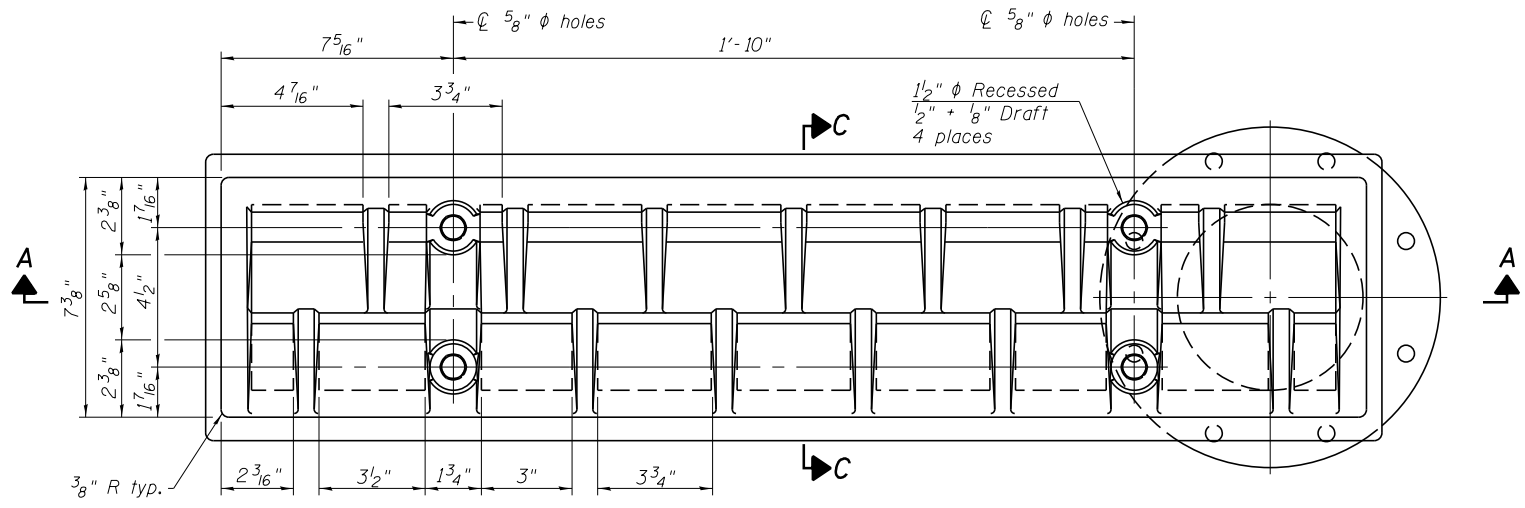
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT DETAILS - PIER 8
STRUCTURE NO. 081-0178 (EASTBOUND)**

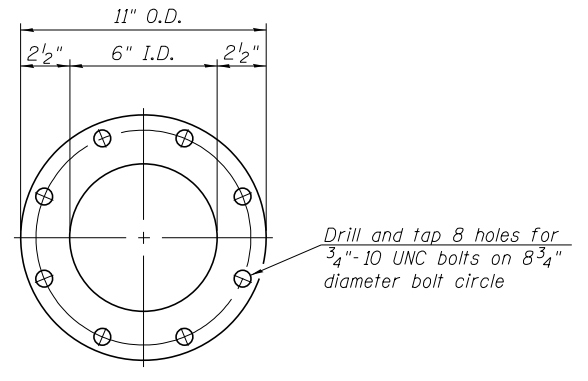
SHEET NO. S68 OF S138 SHEETS

- NOTES:**
- For Finger plate details, see sheets S64 & S65.
 - For drainage details, see sheet S72.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	957
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

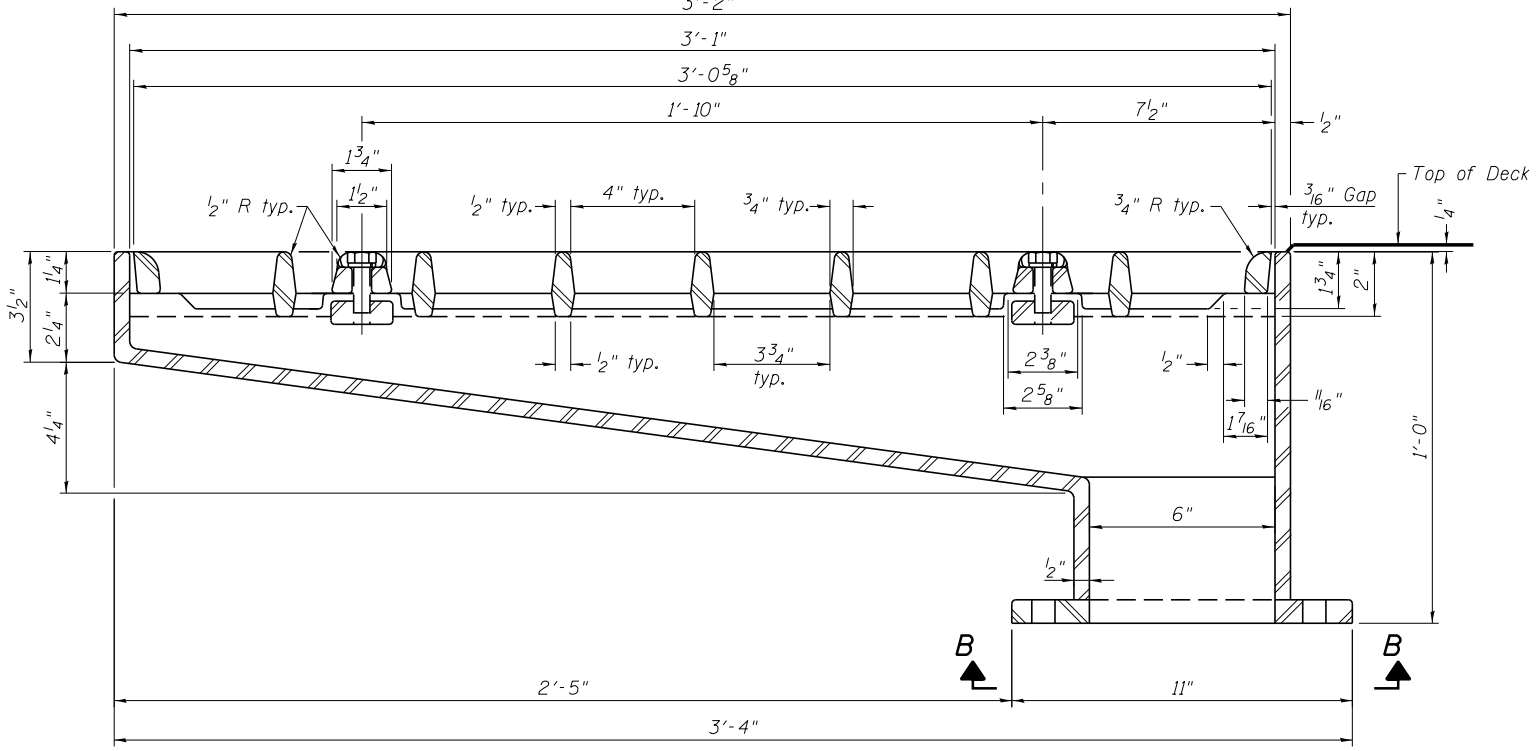


PLAN



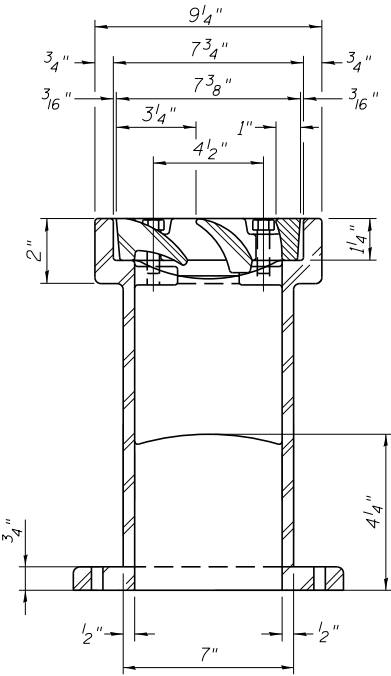
VIEW B-B

Drill and tap 8 holes for 3/4"-10 UNC bolts on 8 3/4" diameter bolt circle

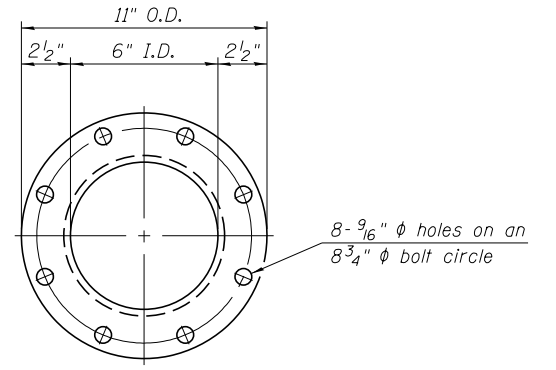


SECTION A-A

See sheets S41 thru S43 for scupper location relative to parapet.

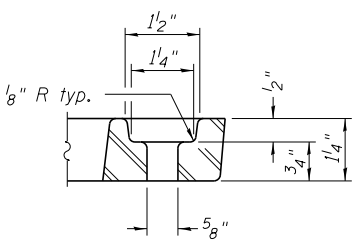


SECTION C-C

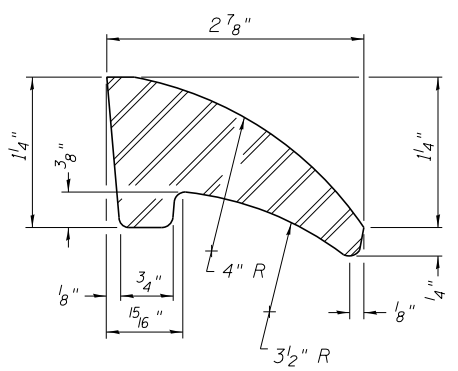


DOWNSPOUT

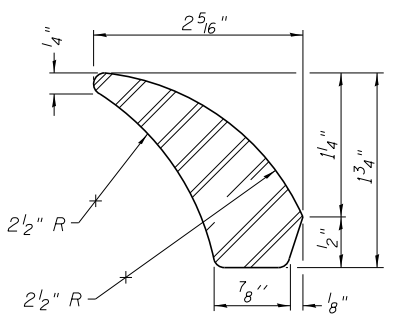
Varies (Connect downspout into closed drainage systems. See sheets S70 thru S73 for drainage details)



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper (Special).
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper (Special)	Each	9

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-069-Scupper Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

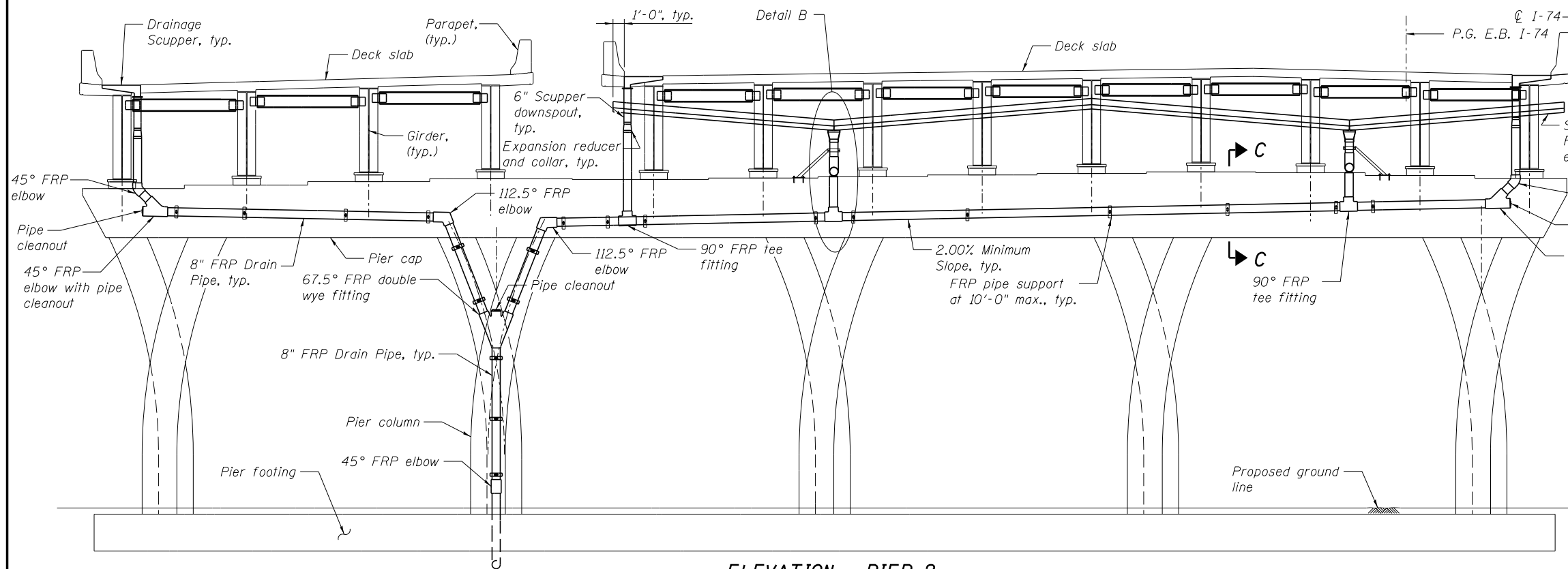
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCUPPER DETAILS
 STRUCTURE NO. 081-0178 (EASTBOUND)**

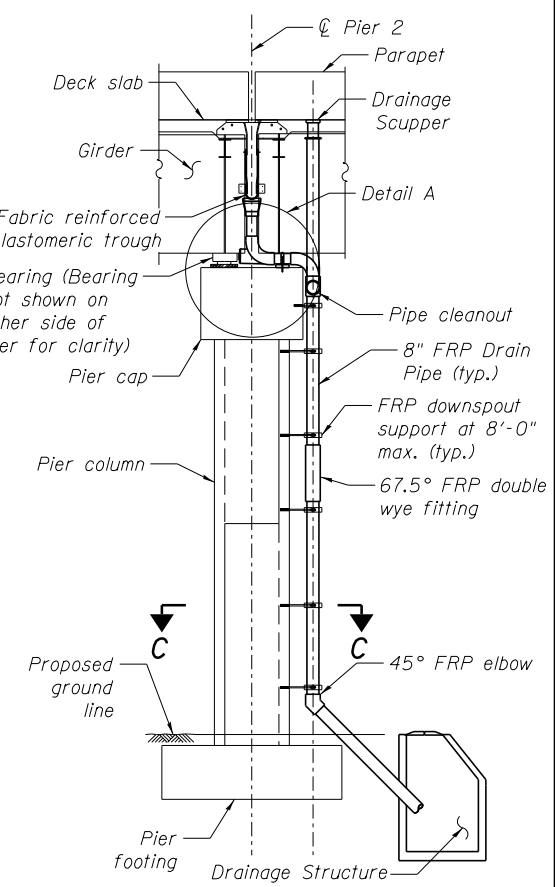
SHEET NO. S69 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	958
				CONTRACT NO. 64C08
ILLINOIS FED. AID PROJECT				

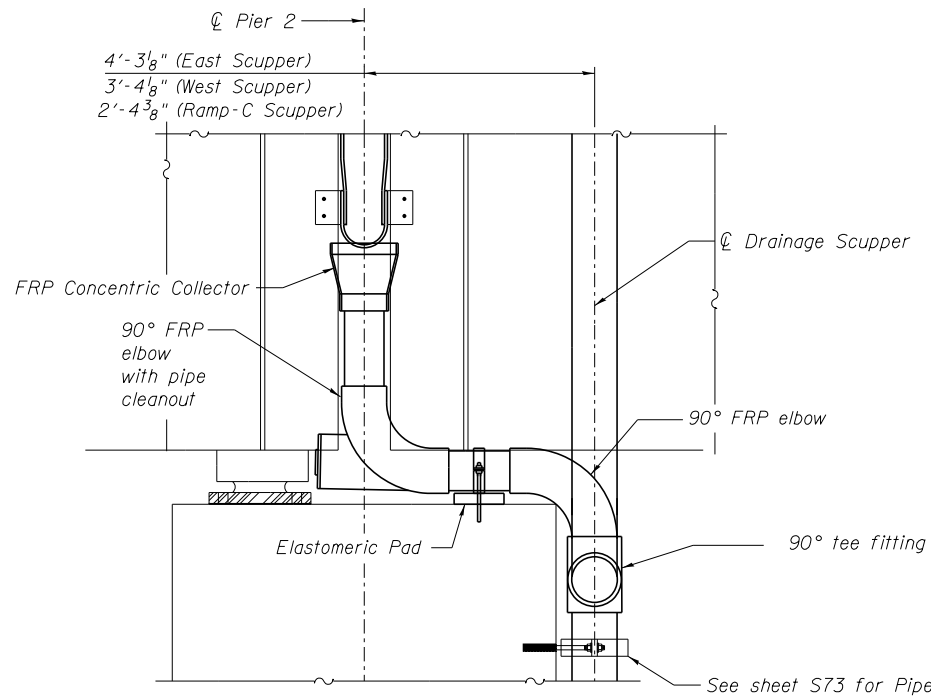
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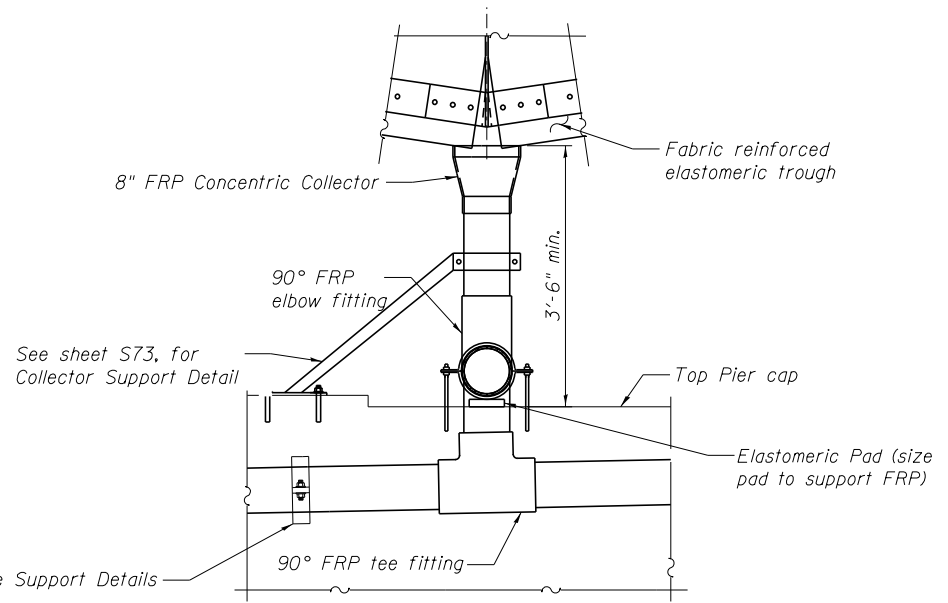
ELEVATION - PIER 2
(Looking north)



END VIEW - PIER 2
(Looking east)



DETAIL A
(Dimensions measured along gutterline)



DETAIL B

NOTES:

1. Closed Drainage system shall be fabricated and installed in accordance with special provision "Drainage System."
2. The surface of the fiberglass shall be free of bond inhibiting agents.
3. For section C-C, see sheet S73.
4. See sheets S64 thru S68, for finger plate expansion joint details.
5. Expansion Reducers shall be sized to accomodate longitudinal thermal movement of the superstructure.
6. Seal opening of drainage structure with grout after installation of drain pipe. Cost included with Drainage System.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-078-Drainage Details - Pier 2.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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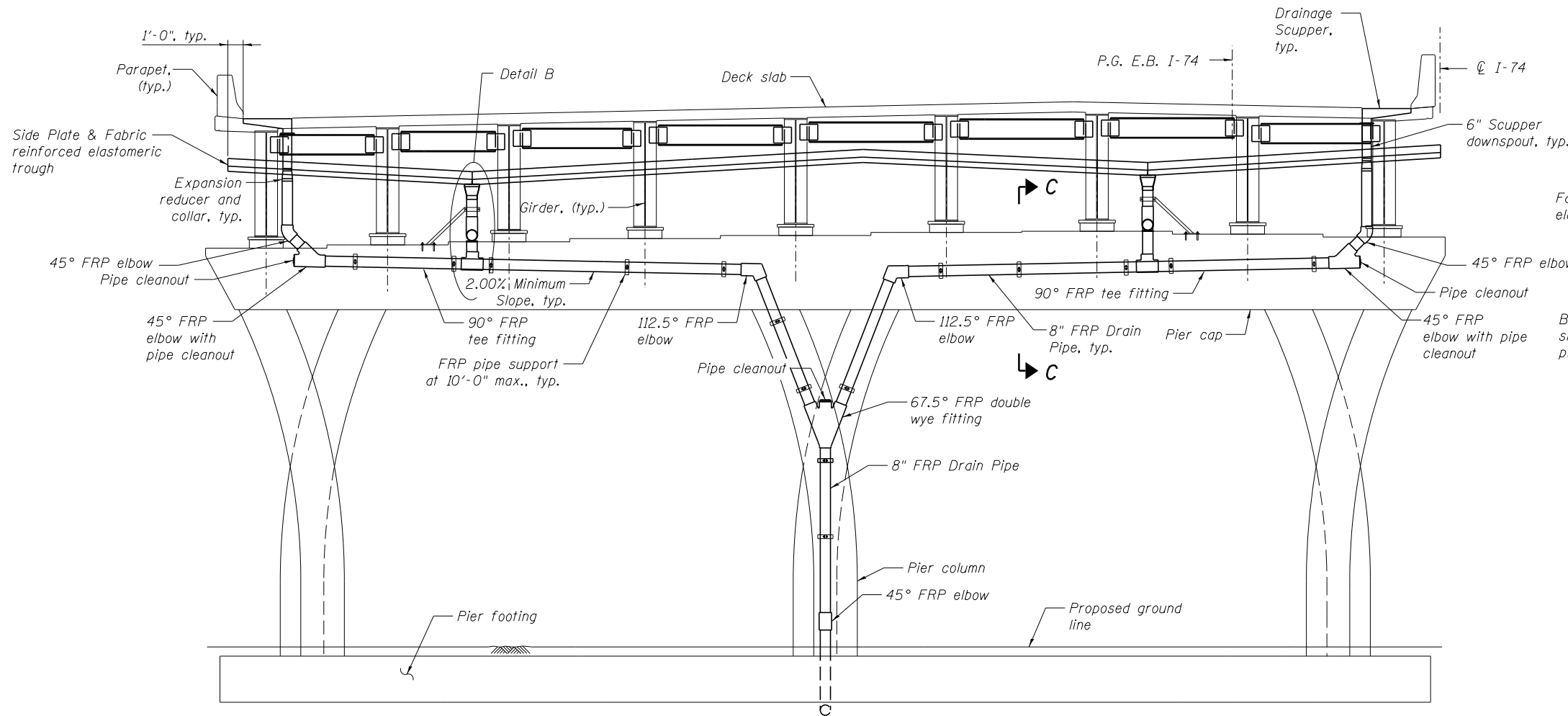
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE DETAILS - PIER 2
STRUCTURE NO. 081-0178 (EASTBOUND)

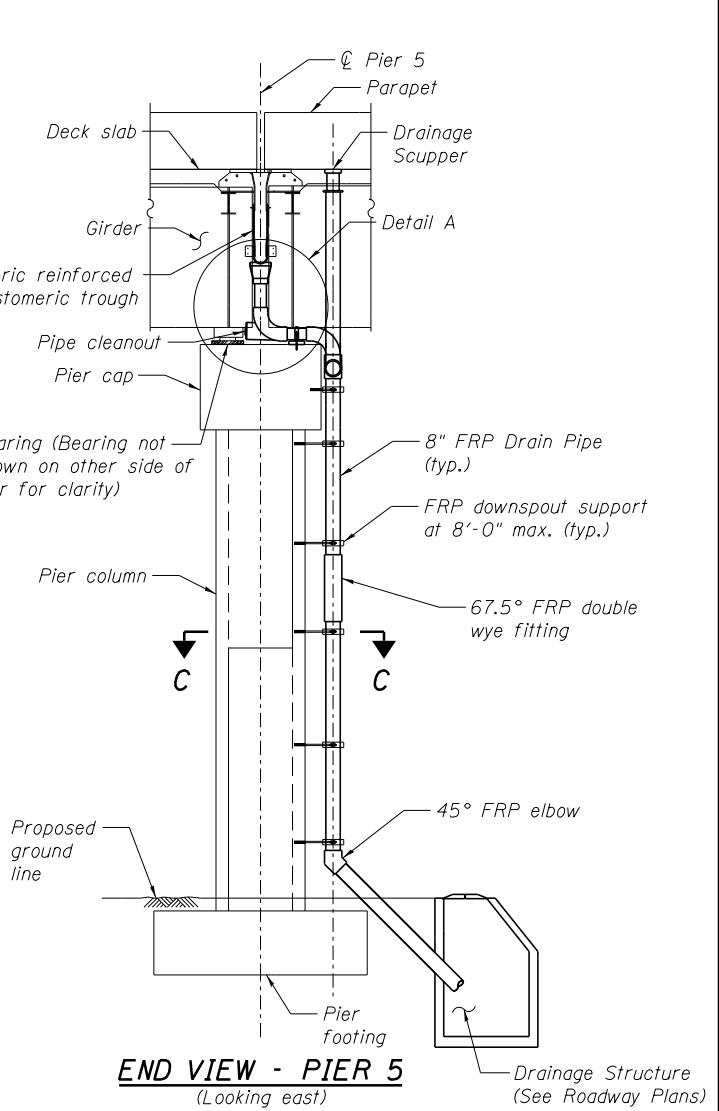
SHEET NO. S70 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	959
			CONTRACT NO. 64C08	
ILLINOIS FED. AID PROJECT				

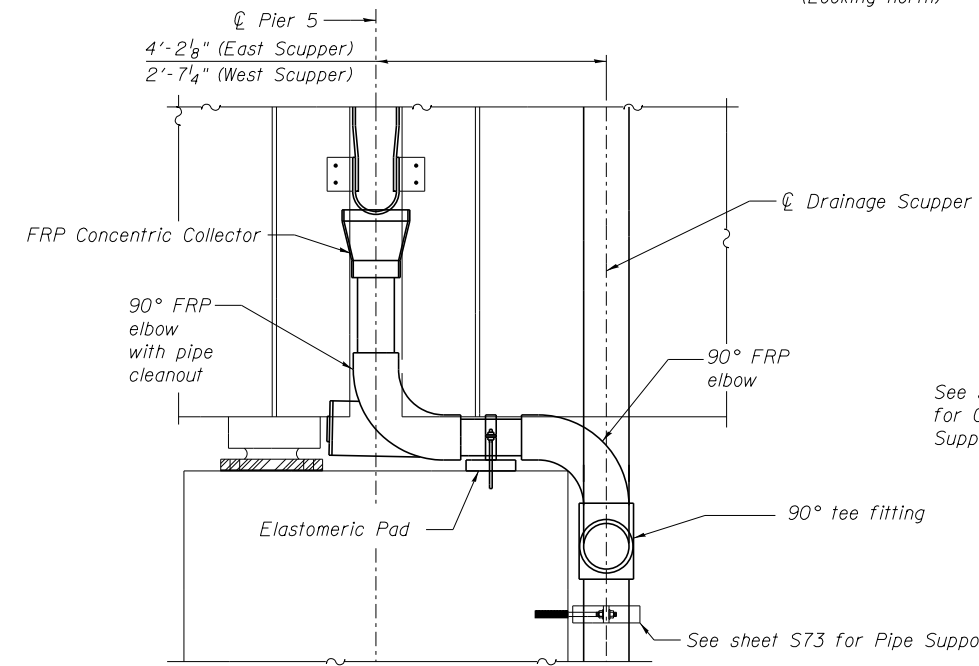
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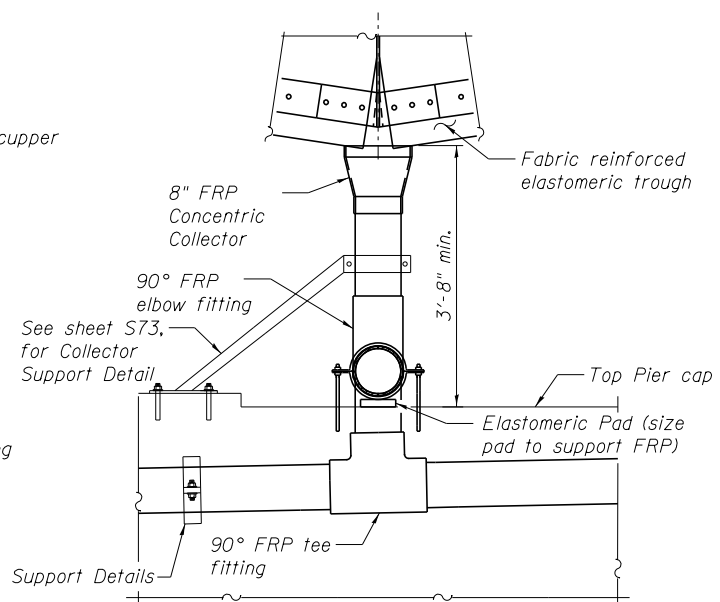
ELEVATION - PIER 5
(Looking north)



END VIEW - PIER 5
(Looking east)



DETAIL A
(Dimensions measured along gutterline)



DETAIL B

NOTES:

1. Closed Drainage system shall be fabricated and installed in accordance with special provision "Drainage System."
2. The surface of the fiberglass shall be free of bond inhibiting agents.
3. For section C-C, see sheet S73.
4. See sheets S64 thru S68, for finger plate expansion joint details.
5. Expansion Reducers shall be sized to accommodate longitudinal thermal movement of the superstructure.
6. Seal opening of drainage structure with grout after installation of drain pipe. Cost included with Drainage System.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C0004B-071-Drainage Details - Pier 5.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK	REVISED -

STATE OF ILLINOIS
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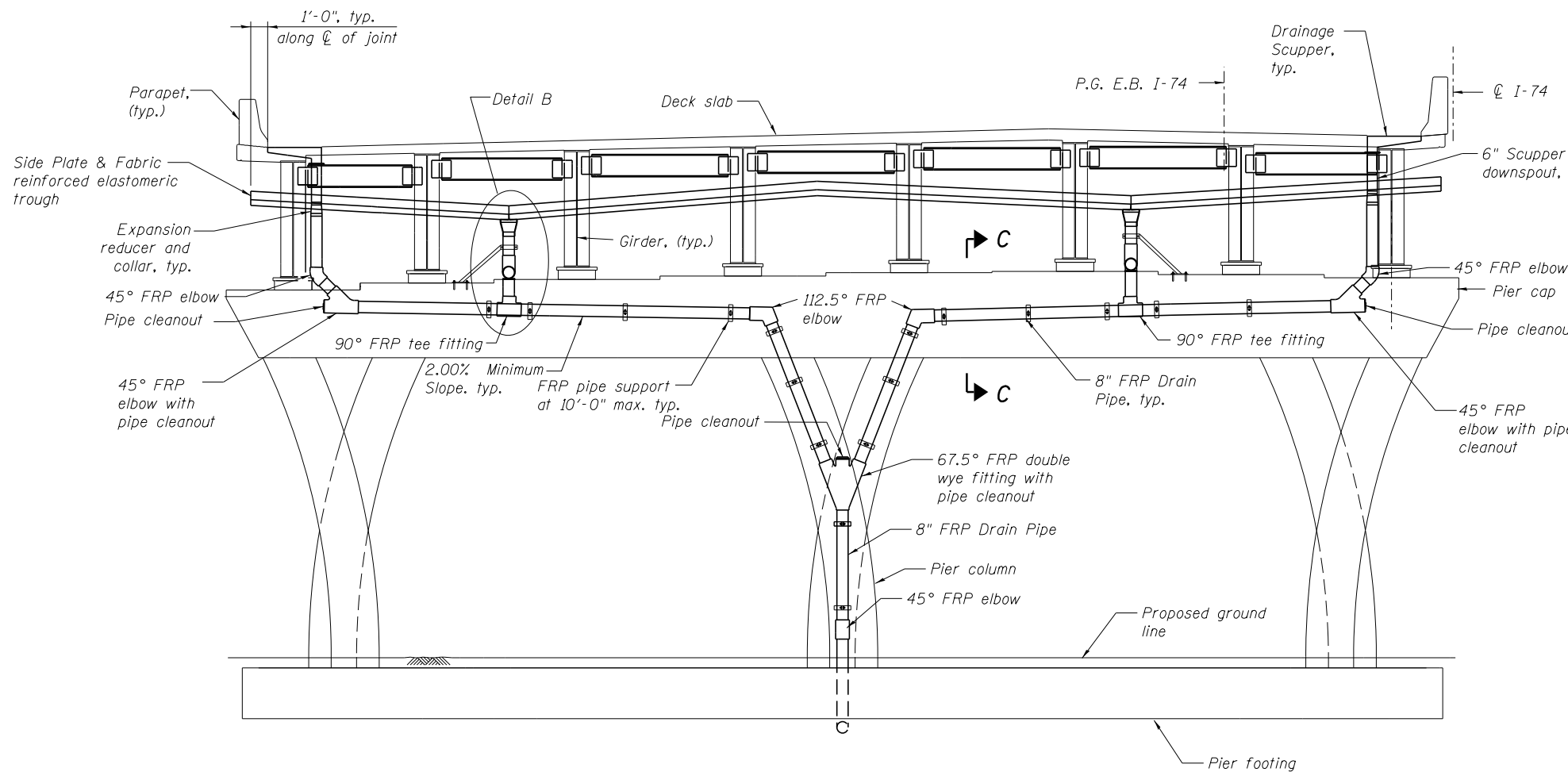
DRAINAGE DETAILS - PIER 5
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S71 OF S138 SHEETS

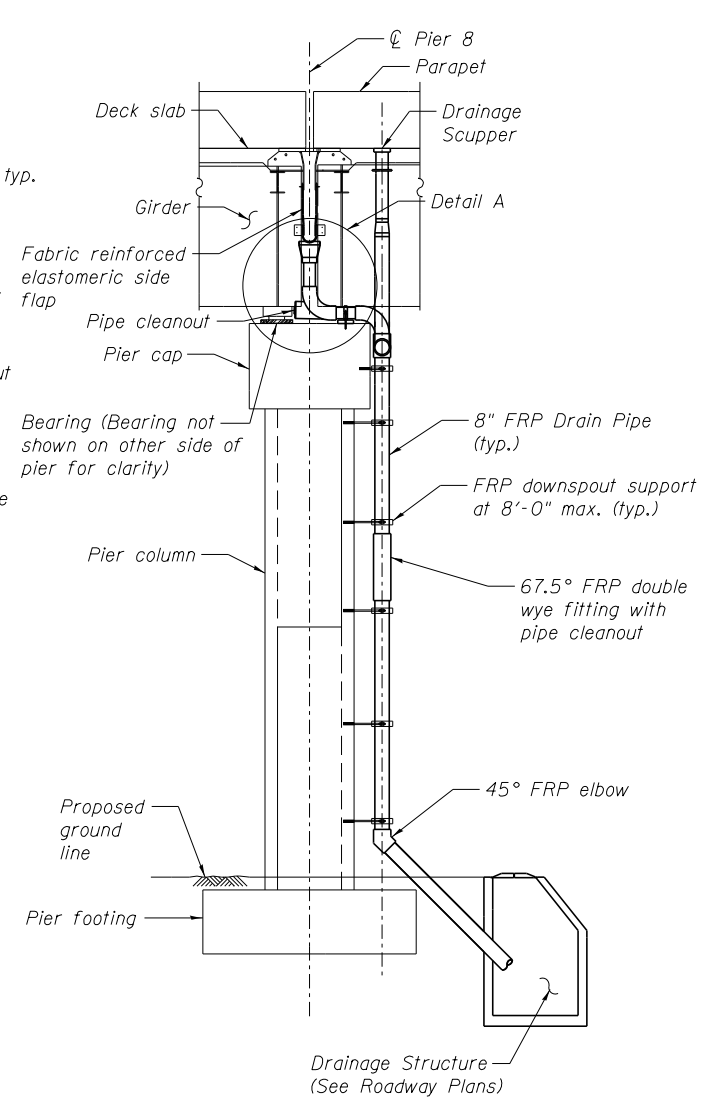
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	960
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

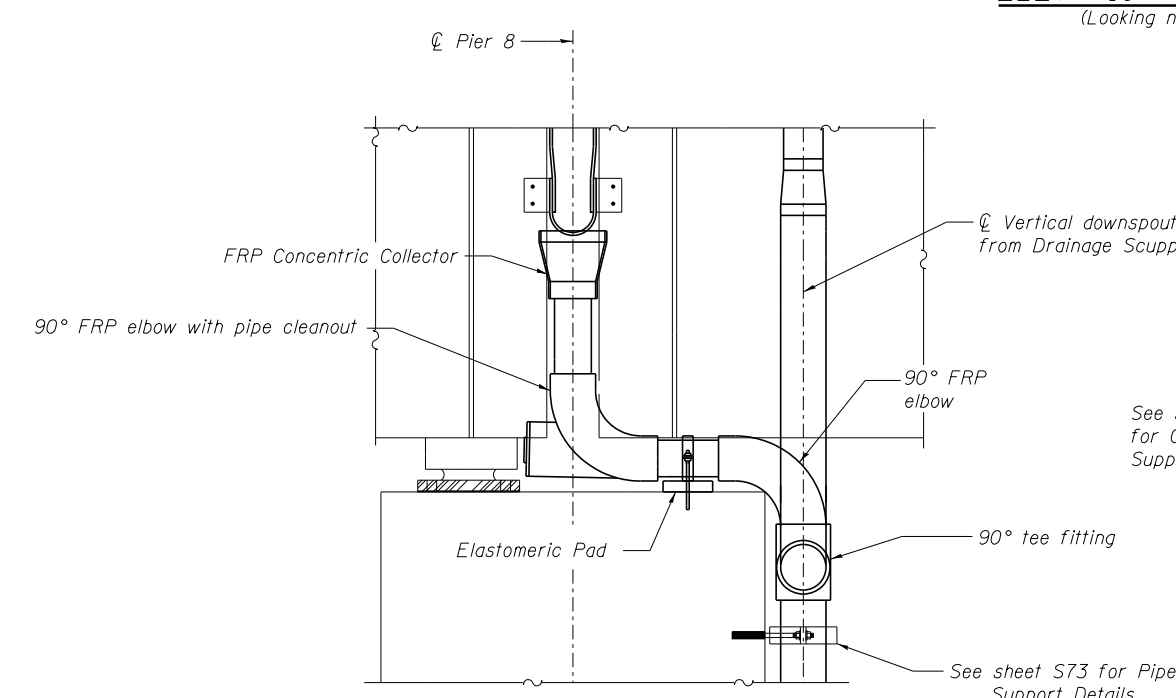
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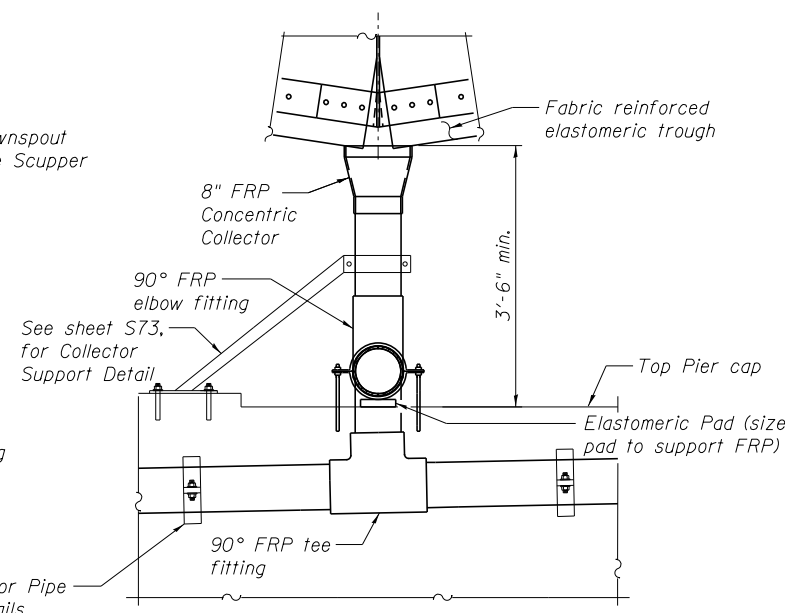
ELEVATION - PIER 8
(Looking north)



END VIEW - PIER 8
(Looking east)



DETAIL A



DETAIL B

- NOTES:**
1. Closed Drainage system shall be fabricated and installed in accordance with special provision "Drainage System."
 2. The surface of the fiberglass shall be free of bond inhibiting agents.
 3. For Section C-C, see sheet S73.
 4. See sheets S64 thru S68, for finger plate expansion joint details.
 5. Expansion Reducers shall be sized to accommodate longitudinal thermal movement of the superstructure.
 6. Seal opening of drainage structure with grout after installation of drain pipe. Cost included with Drainage System.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-072-Drainage Details - Pier 8.dgn	USER NAME = ksnider	DESIGNED - AAY	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - TJJ	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - TJJ	REVISED -

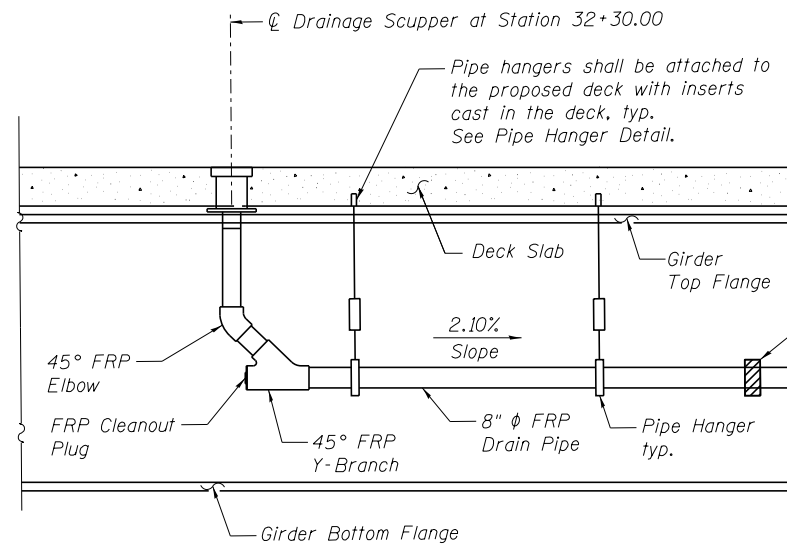
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE DETAILS - PIER 8
STRUCTURE NO. 081-0178 (EASTBOUND)

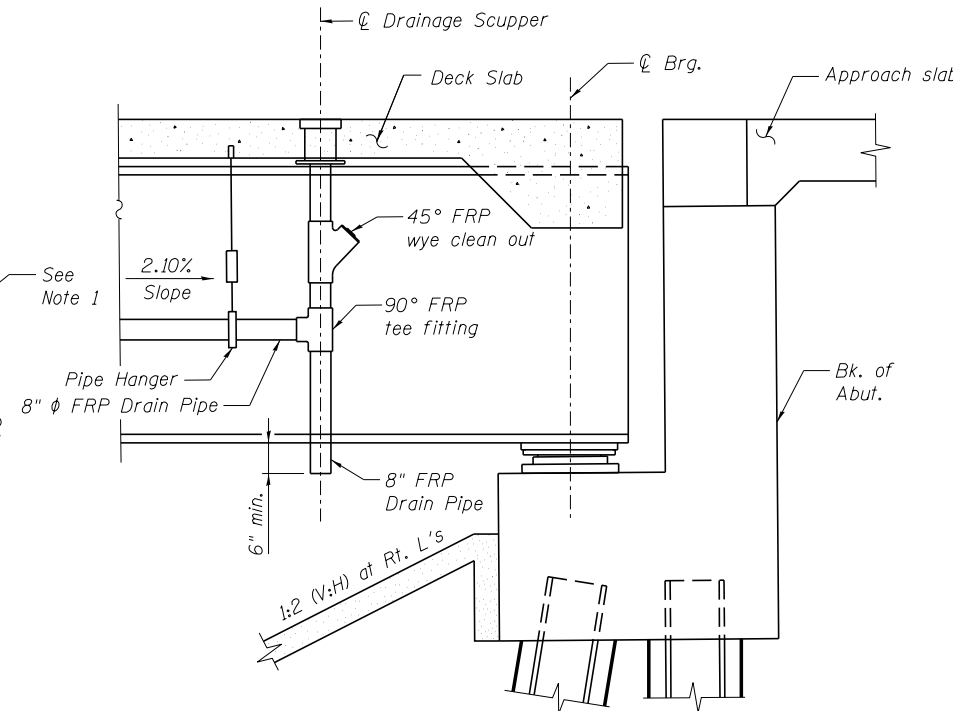
SHEET NO. S72 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	961
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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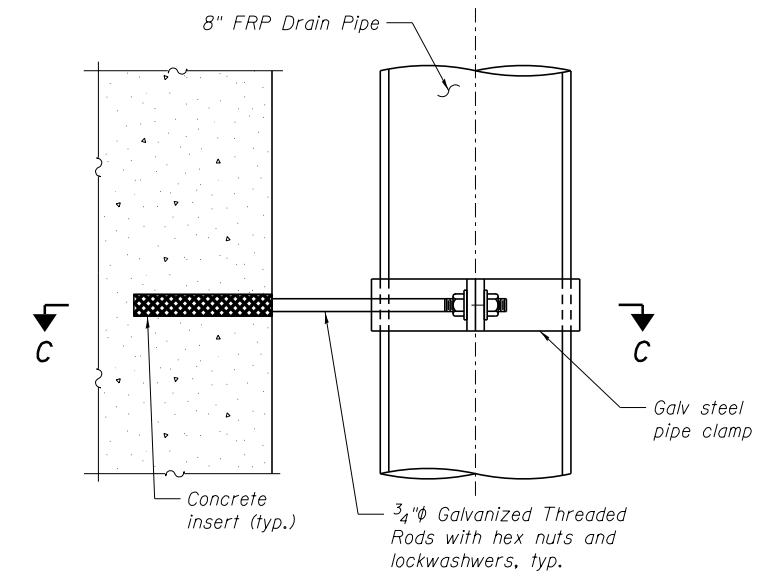


DRAINAGE DETAIL IN UNIT 1

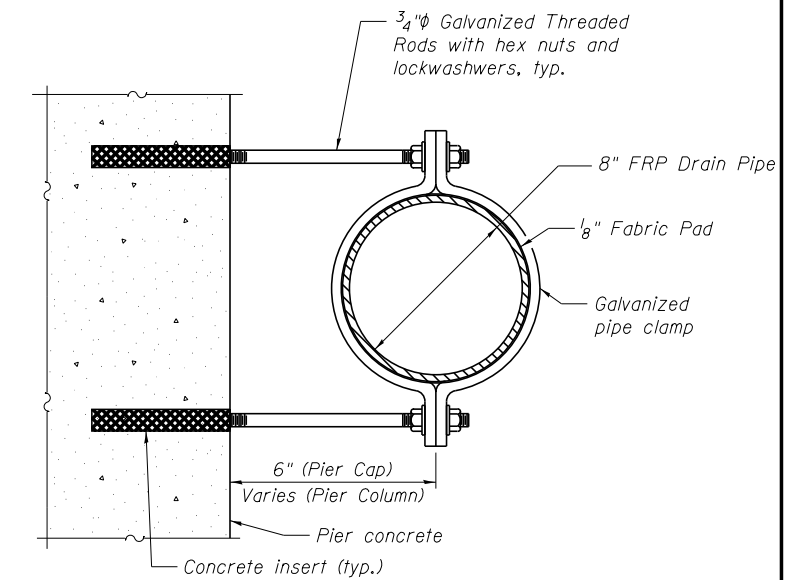


DRAINAGE DETAIL AT N. ABUT.

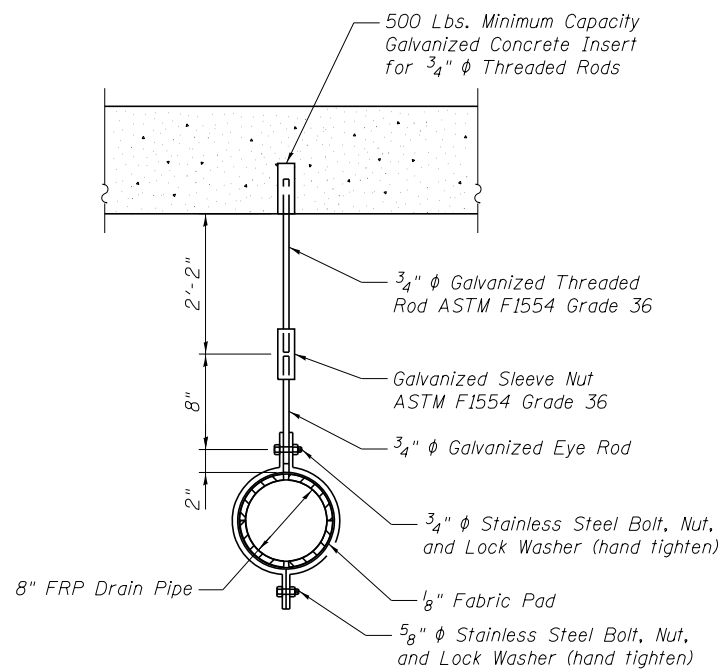
(Free fall onto slopewall)
(West Scupper shown looking West, East Scupper
downspout similar but does not have longitudinal tie-in.)



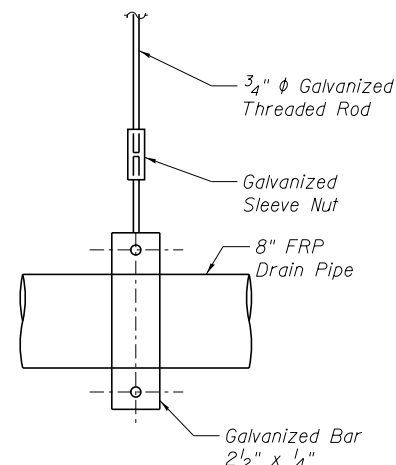
PIPE SUPPORT PLAN AT PIER



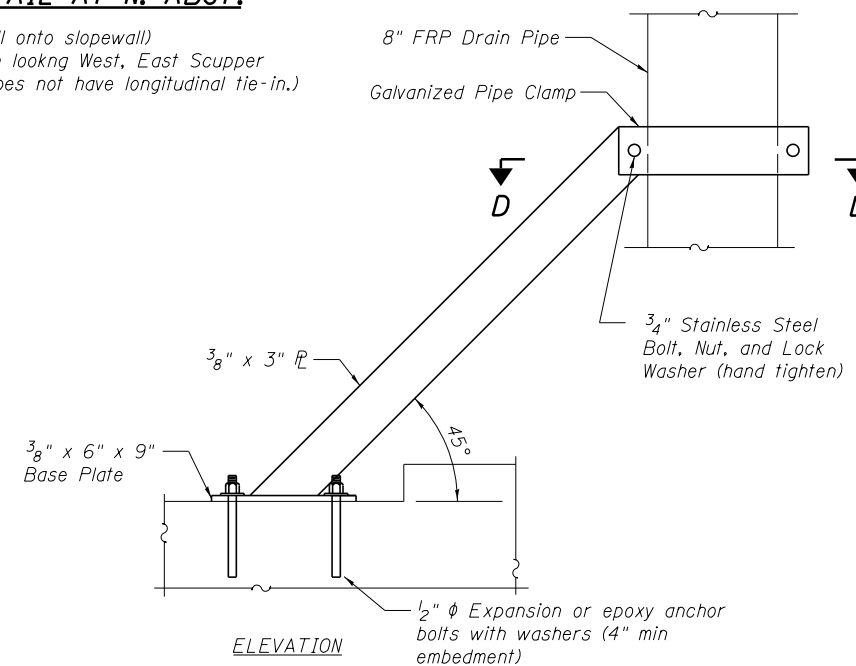
SECTION C-C



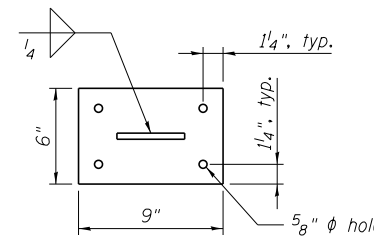
PIPE HANGER DETAIL



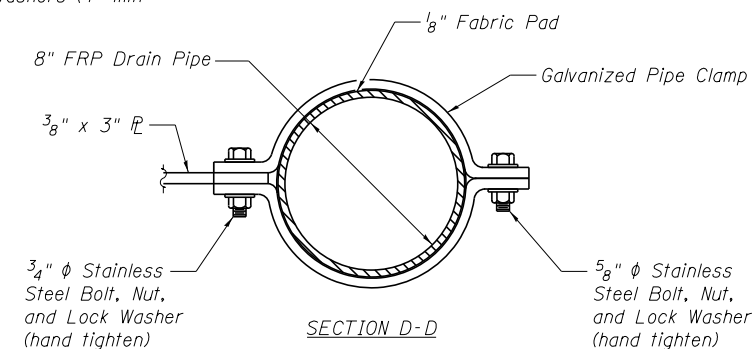
ELEVATION



ELEVATION



BASE PLATE DETAIL



SECTION D-D

COLLECTOR SUPPORT DETAIL

(Cost included with Drainage System)

NOTE:

1. A single expansion collar shall be placed between Unit 1 scuppers with a total movement capacity of 3".

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205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-073-Drainage Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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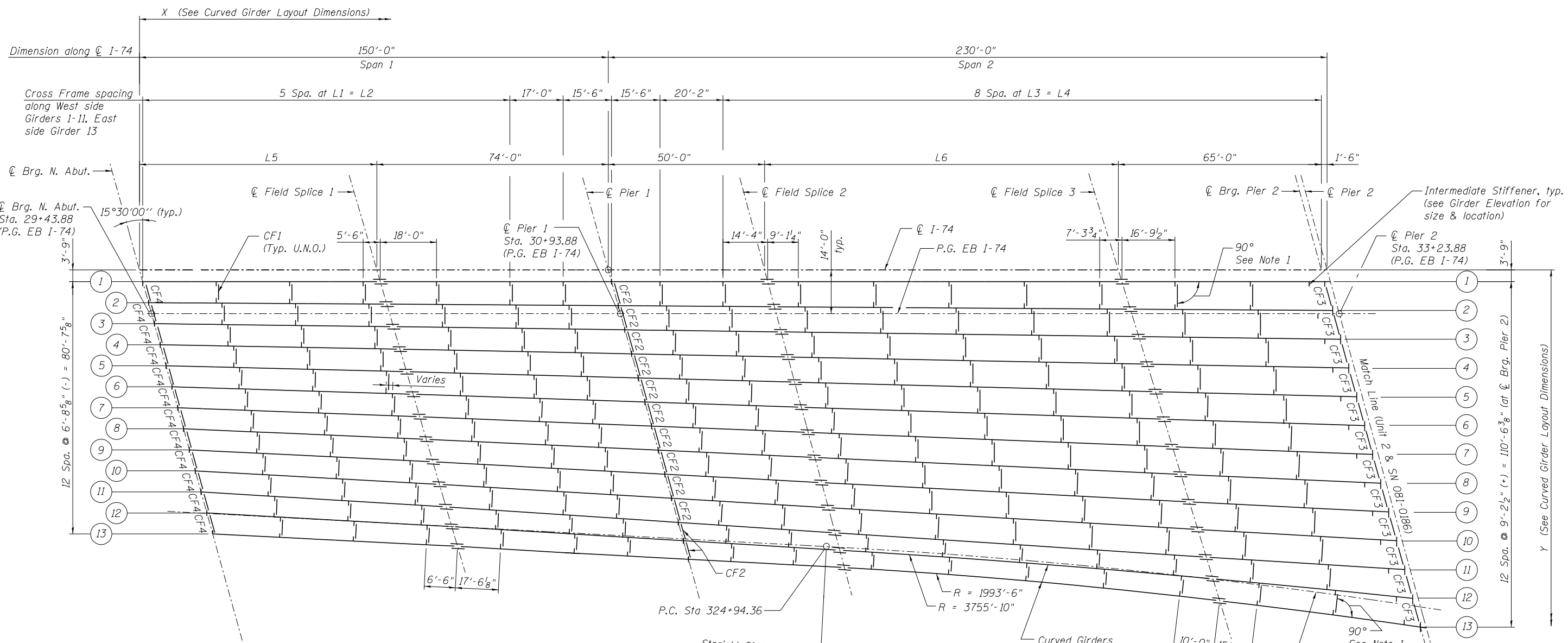
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S73 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	962
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT



NOTES:

1. Cross frames are perpendicular to the west side of Girders 1-11 and to the east side of Girder 13, except at all support locations.
2. For cross frame details, see Sheet S76.

FRAMING PLAN

Girder No.	Curved Girder Layout Dimensions								
	Radius	☐ Brg. N. Abut.		Field Splice 1		☐ Pier 1		Point of Curvature	
		X	Y	X	Y	X	Y	X	Y
12	3775'-10"	21'-6 1/2"	77'-8"	100'-2"	82'-3 3/4"	174'-0 1/2"	86'-8 1/8"	219'-9"	89'-4 1/2"
13	1993'-6"	23'-4 1/8"	84'-4 5/8"	101'-9 1/8"	88'-6 1/8"	175'-7 7/8"	92'-6 1/4"	219'-5 1/2"	94'-10 3/8"

Girder No.	Curved Girder Layout Dimensions					
	Field Splice 2		Field Splice 3		☐ Brg. Pier 2	
	X	Y	X	Y	X	Y
12	223'-11 3/8"	89'-7 5/8"	342'-11 5/8"	98'-6 3/4"	407'-7 5/8"	105'-0 7/8"
13	225'-7"	95'-2 3/8"	345'-9 1/4"	105'-7 3/4"	410'-2 3/8"	114'-3 3/8"

Girder No.	Girder Dimensions					
	L1	L2	L3	L4	L5	L6
1	23'-6"	117'-6"	24'-1 1/4"	192'-10"	76'-0"	113'-6"
2	23'-6 5/8" (+)	117'-9 3/8"	24'-1 1/8" (+)	193'-3 1/8"	76'-3 3/8"	113'-11 1/8"
3	23'-7 3/8" (-)	118'-0 3/4"	24'-2 1/2" (+)	193'-8 1/4"	76'-6 3/4"	114'-4 1/4"
4	23'-8" (+)	118'-4 1/4"	24'-3 1/4" (-)	194'-1 1/2"	76'-10 1/4"	114'-9 1/2"
5	23'-8 3/4"	118'-7 3/4"	24'-3 7/8"	194'-7"	77'-1 3/4"	115'-3"
6	23'-9 1/2" (-)	118'-11 3/8"	24'-4 1/2" (+)	195'-0 1/2"	77'-5 3/8"	115'-8 1/2"
7	23'-10 1/4" (-)	119'-3 1/8"	24'-5 1/4" (+)	195'-6 1/8"	77'-9 1/8"	116'-2 1/8"
8	23'-11" (-)	119'-6 1/8"	24'-6" (-)	195'-11 1/8"	78'-0 1/8"	116'-7 1/8"
9	23'-11 3/4"	119'-10 3/4"	24'-6 3/4" (-)	196'-5 3/4"	78'-4 3/4"	117'-1 3/4"
10	24'-0 1/2" (+)	120'-2 3/8"	24'-7 1/2" (-)	196'-11 3/4"	78'-8 5/8"	117'-7 3/4"
11	24'-1 3/8" (-)	120'-6 5/8"	24'-8 1/4" (-)	197'-5 7/8"	79'-0 5/8"	118'-1 1/8"
12	24'-0 5/8"	120'-3 1/8"	24'-10" (+)	198'-8 1/4"	78'-9 1/8"	119'-4 1/4"
13	23'-11 7/8" (+)	119'-11 5/8"	25'-0" (-)	199'-11 7/8"	78'-5 5/8"	120'-7 7/8"

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

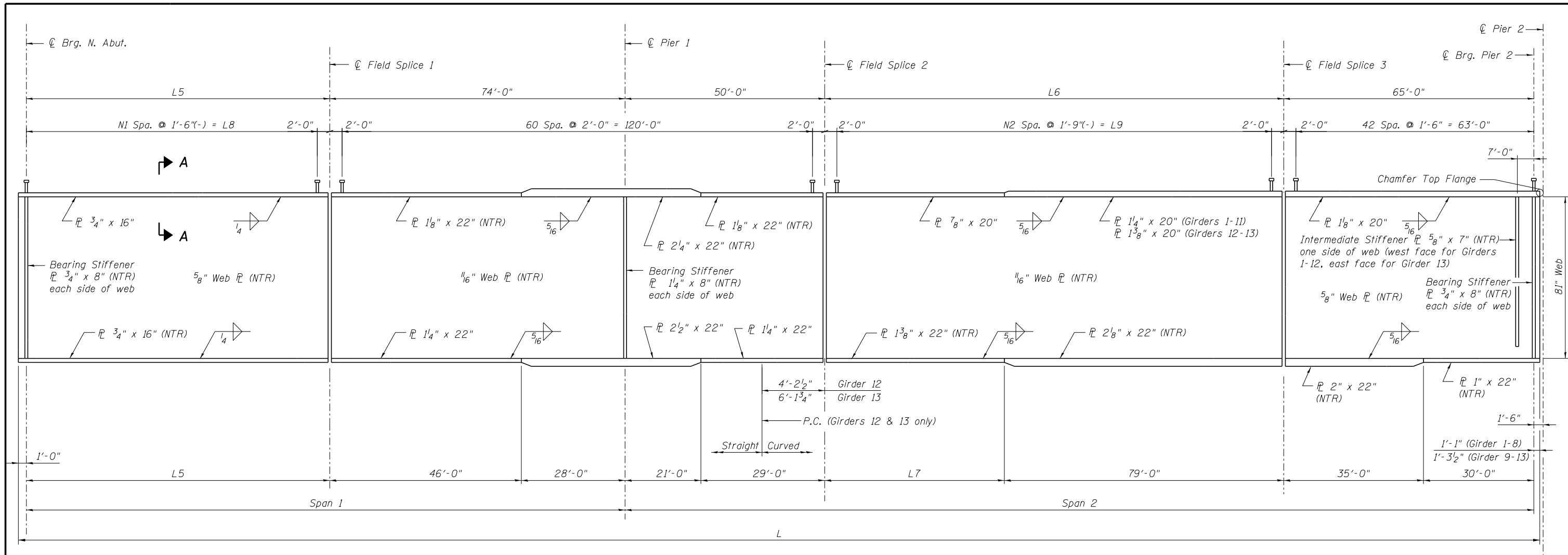
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MODEL: Default	PLOT SCALE =	CHECKED - KWS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - KWS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN UNIT 1
 STRUCTURE NO. 081-0178 (EASTBOUND)**

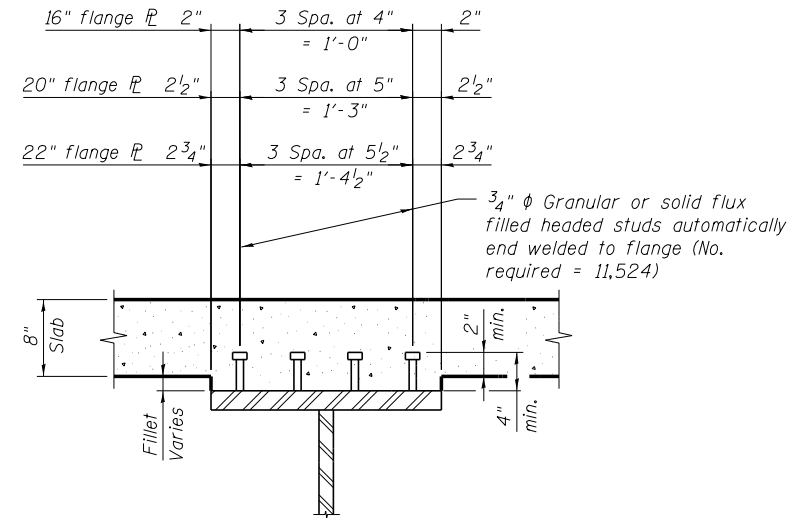
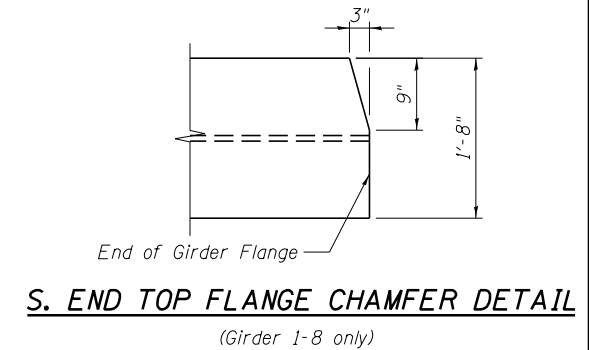
SHEET NO. S74 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 963
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	



GIRDER ELEVATION

Girder No.	Girder Dimensions						Shear Connector No. of Spaces	
	Span 1	Span 2	L	L7	L8	L9	N1	N2
1	150'-0"	228'-6"	380'-7"	34'-6"	74'-0"	109'-6"	50	63
2	150'-3 ³ / ₈ "	228'-11 ¹ / ₈ "	381'-3 ¹ / ₂ "	34'-11 ¹ / ₈ "	74'-3 ³ / ₈ "	109'-11 ¹ / ₈ "	50	63
3	150'-6 ³ / ₄ "	229'-4 ¹ / ₄ "	382'-0"	35'-4 ¹ / ₄ "	74'-6 ³ / ₄ "	110'-4 ¹ / ₄ "	50	64
4	150'-10 ¹ / ₄ "	229'-9 ¹ / ₂ "	382'-8 ³ / ₄ "	35'-9 ¹ / ₂ "	74'-10 ¹ / ₄ "	110'-9 ¹ / ₂ "	50	64
5	151'-1 ³ / ₄ "	230'-3"	383'-5 ³ / ₄ "	36'-3"	75'-1 ³ / ₄ "	111'-3"	51	64
6	151'-5 ³ / ₈ "	230'-8 ¹ / ₂ "	384'-2 ¹ / ₈ "	36'-8 ¹ / ₂ "	75'-5 ³ / ₈ "	111'-8 ¹ / ₂ "	51	64
7	151'-9 ¹ / ₈ "	231'-2 ¹ / ₈ "	385'-0 ¹ / ₄ "	37'-2 ¹ / ₈ "	75'-9 ¹ / ₈ "	112'-2 ¹ / ₈ "	51	65
8	152'-0 ⁷ / ₈ "	231'-7 ⁷ / ₈ "	385'-9 ³ / ₄ "	37'-7 ⁷ / ₈ "	76'-0 ⁷ / ₈ "	112'-7 ⁷ / ₈ "	51	65
9	152'-4 ³ / ₄ "	232'-1 ³ / ₄ "	386'-7 ¹ / ₂ "	38'-1 ³ / ₄ "	76'-4 ³ / ₄ "	113'-1 ³ / ₄ "	51	65
10	152'-8 ⁵ / ₈ "	232'-7 ³ / ₄ "	387'-5 ³ / ₈ "	38'-7 ³ / ₄ "	76'-8 ⁵ / ₈ "	113'-7 ³ / ₄ "	52	65
11	153'-0 ⁵ / ₈ "	233'-1 ¹ / ₈ "	388'-3 ¹ / ₂ "	39'-1 ¹ / ₈ "	77'-0 ⁵ / ₈ "	114'-1 ¹ / ₈ "	52	66
12	152'-9 ¹ / ₈ "	234'-4 ¹ / ₄ "	389'-2 ³ / ₈ "	40'-4 ¹ / ₄ "	76'-9 ¹ / ₈ "	115'-4 ¹ / ₄ "	52	66
13	152'-5 ⁵ / ₈ "	235'-7 ¹ / ₈ "	390'-2 ¹ / ₂ "	41'-7 ¹ / ₈ "	76'-5 ⁵ / ₈ "	116'-7 ¹ / ₈ "	51	67



- NOTES:**
- See Sheet S74 for additional girder data table.
 - Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
 - All flange plates, web plates, bearing stiffeners, intermediate stiffeners, and cross frame connection plates shall be AASHTO M270 Grade 50 steel.

SECTION A-A

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-075-Steel Plate Girder Elevation Unit 1.dgn	USER NAME = ksnider	DESIGNED - TJJ	REVISED -
MODEL: Plot sheet	PLOT SCALE =	CHECKED - KWS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - KWS	REVISED -

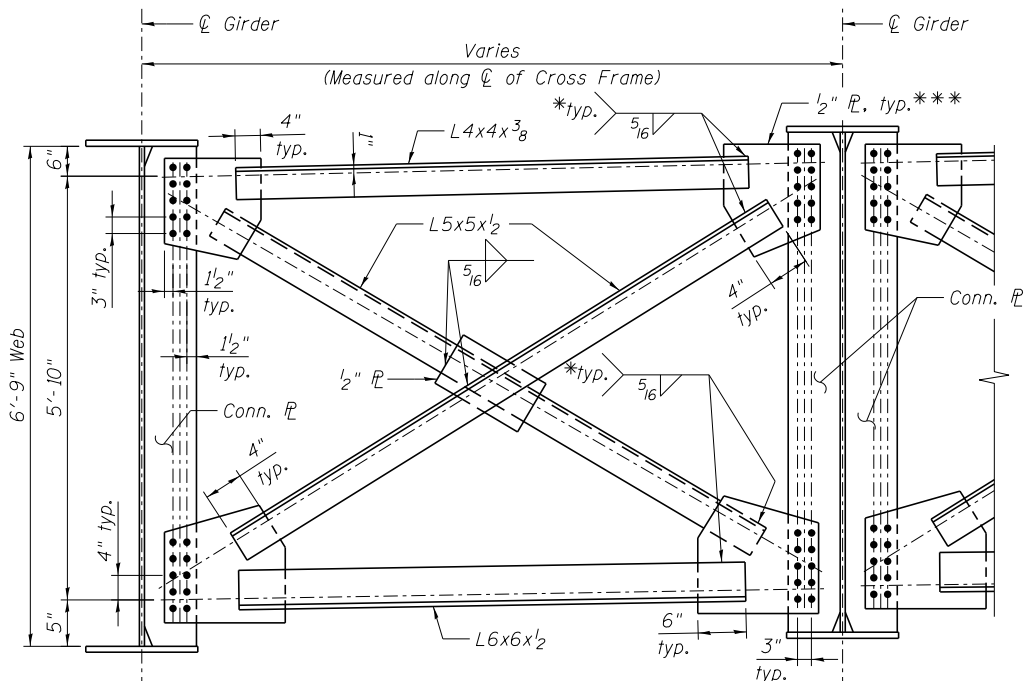
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER ELEVATION UNIT 1
 STRUCTURE NO. 081-0178 (EASTBOUND)**

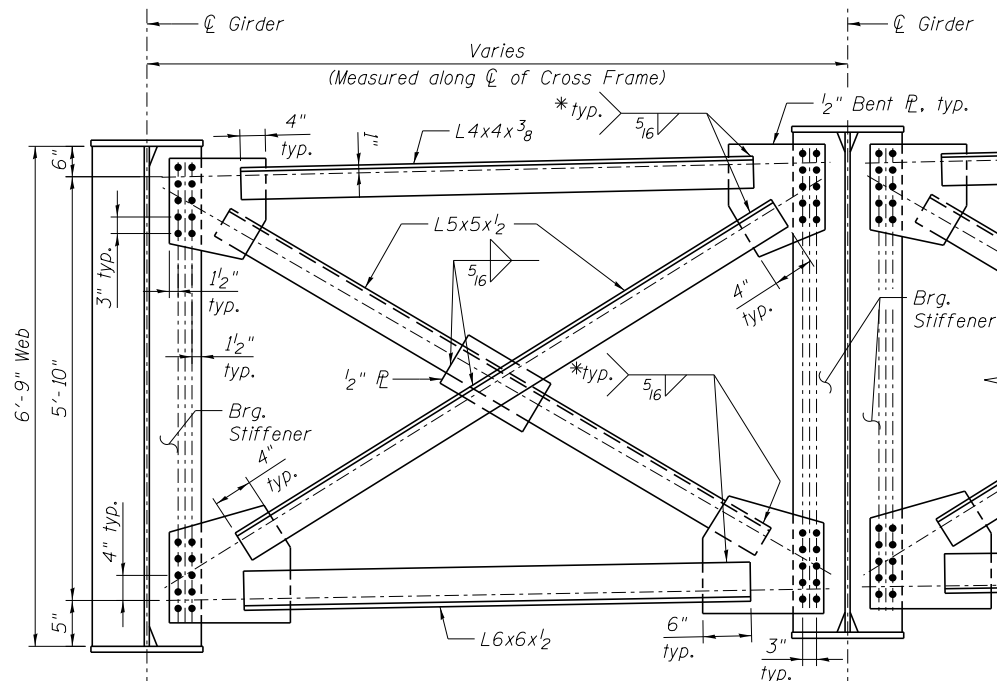
SHEET NO. S75 OF S138 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	964
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

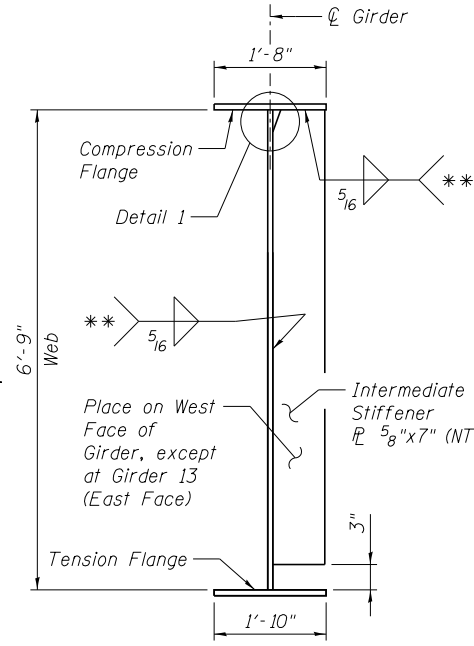
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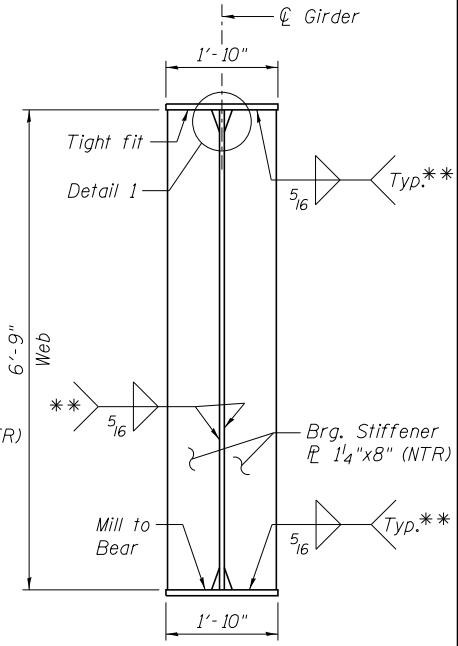
TYPE 1 CROSS FRAME
(CF1)
(No. Req'd = 180)



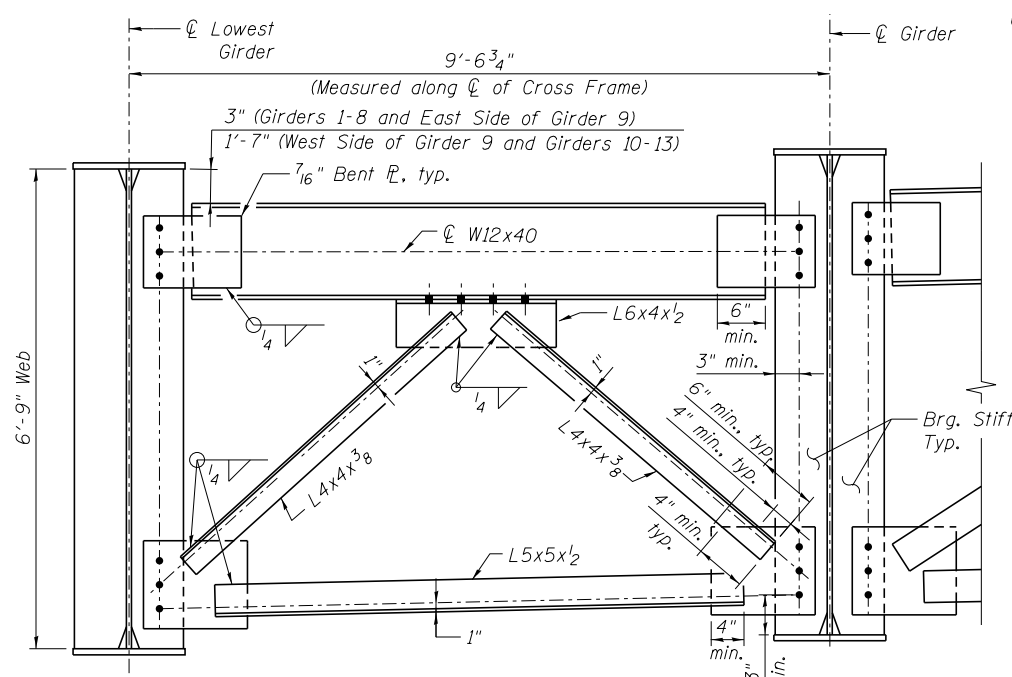
TYPE 2 CROSS FRAME AT PIER 1
(CF2)
(No. Req'd = 12)



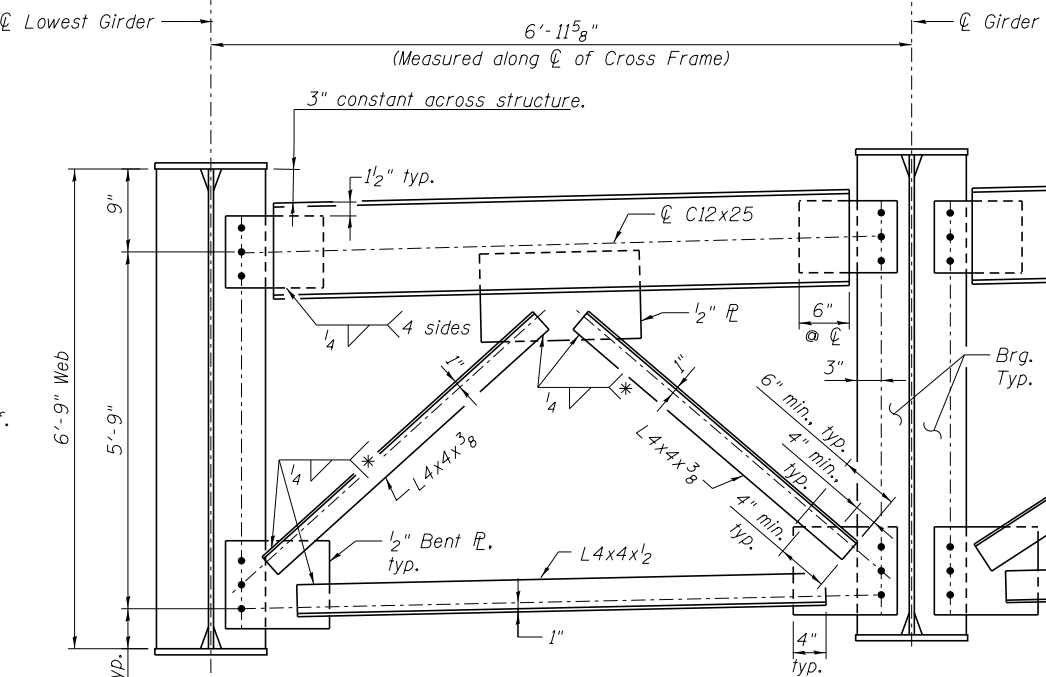
INTERMEDIATE STIFFENER
(No. of Plates Req'd = 13)



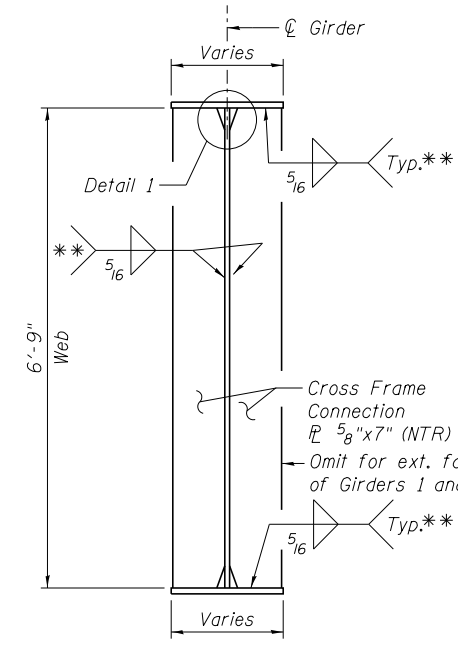
BEARING STIFFENER AT PIER 1
(No. of Plates Req'd = 26)



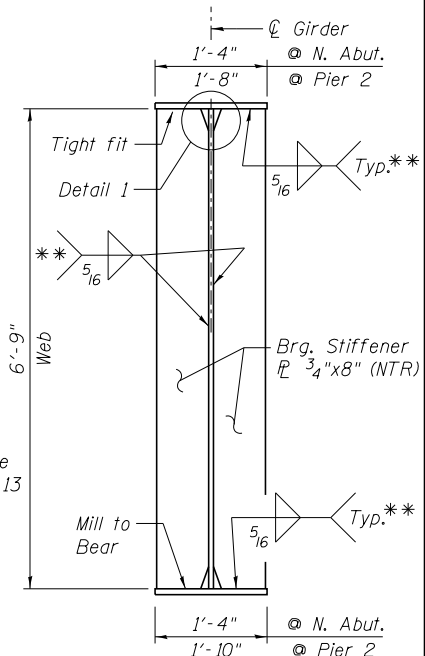
TYPE 3 CROSS FRAME AT PIER 2
(CF3)
(No. Req'd = 12)



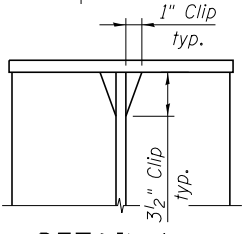
TYPE 4 CROSS FRAME AT NORTH ABUTMENT
(CF4)
(No. Req'd = 12)



CONNECTION PLATE
(No. of Plates Req'd = 360)



BEARING STIFFENER AT N. ABUT. & PIER 2
(No. of Plates Req'd = 52)



DETAIL 1
(Typical top & bottom flanges, except bottom flange of intermediate stiffener)

NOTES:

- The Contractor shall either:
 - Ream cross frame connection holes during shop assembly, or
 - Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(1) of the Standard Specifications.
- All cross frame members shall be AASHTO M270 Grade 50 Steel.
- The calculated deflections of the primary girders/beams under steel self-weight shall be used to detail the diaphragm, cross frame and lateral bracing connections, and to erect the structural steel such that the girders/beams will be plumb within a tolerance of $\pm 1/8$ in. per vertical ft. throughout when supporting their own weight.
- All cross frames between girders shall be installed as steel erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $7/8$ " ϕ , holes $15/16$ " ϕ , unless noted otherwise. Two hardened washers required for each set of oversized holes.
- For steel self-weight deflections, see Sheet S85.

- * Fillet weld angles along 3 sides on one face of gusset plate.
- ** Terminate weld $1/4$ " from edges of stiffener PL.
- *** Bent PL's on side where cross frame is not perpendicular to girder (See Framing Plan)

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-076-Steel Plate Girder Cross Frame Details - Unit 1.dgn	USER NAME = ksnider	DESIGNED - TJJ	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - KWS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - TJJ	REVISED -
		CHECKED - KWS	REVISED -

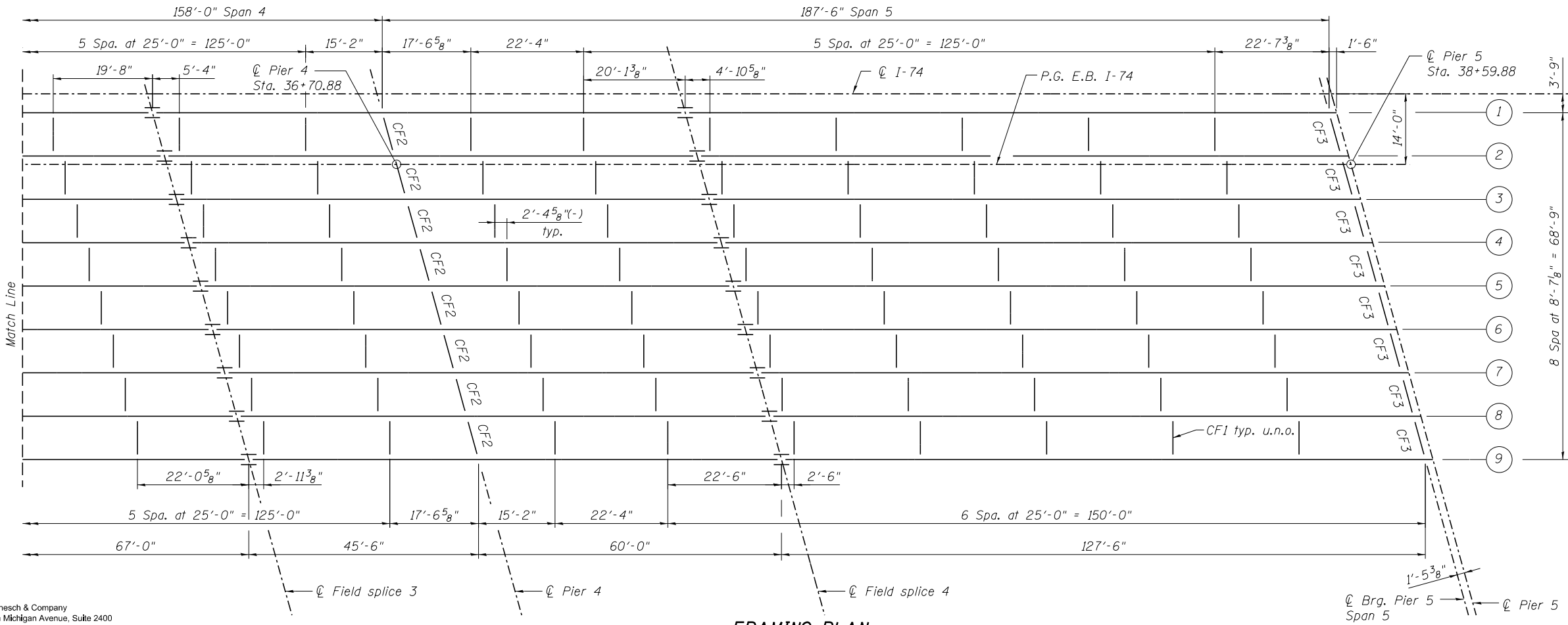
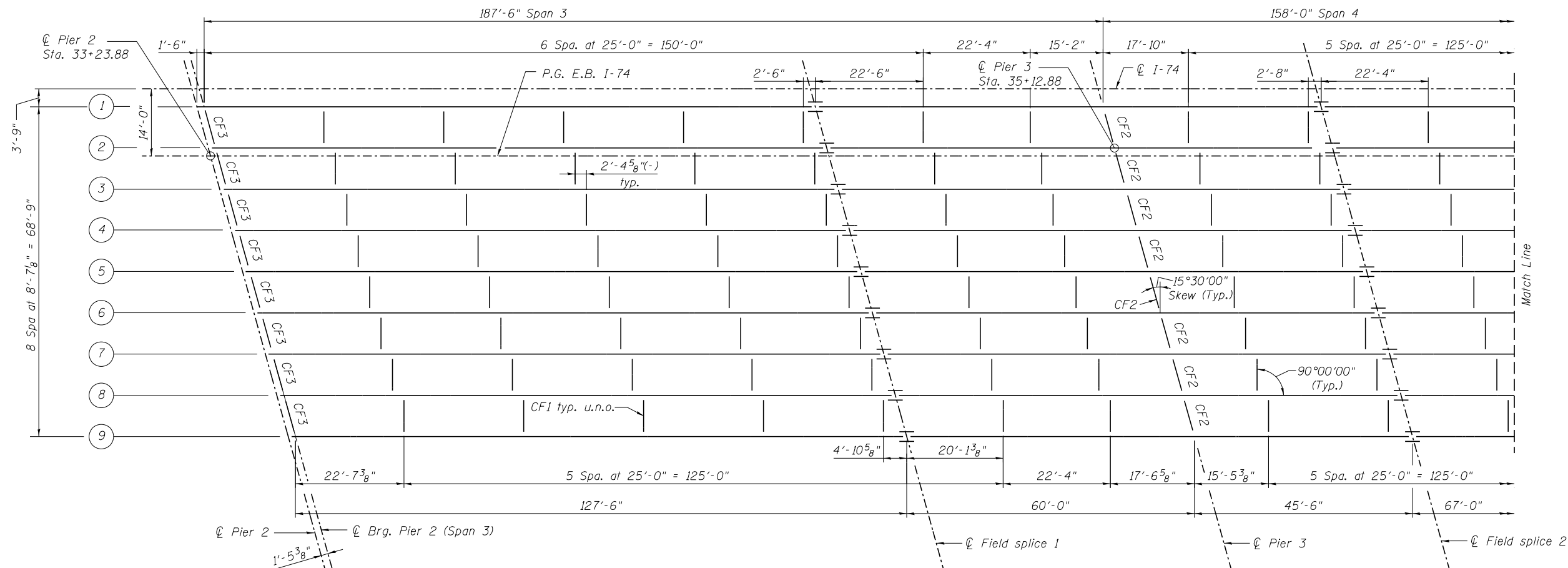
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER CROSS FRAME DETAILS - UNIT 1
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S76 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	965
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

c:\pwise_work\do_not_delete\ms02467\081-0178-C00AB-076-Steel Plate Girder Cross Frame Details - Unit 1.dgn 11:51:42 AM 1/18/2017



FRAMING PLAN

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 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-077-Framing Plan Unit 2.dgn
 MODEL: Default

USER NAME = ksnider
 PLOT SCALE =
 PLOT DATE = 1/18/2017

DESIGNED - SL	REVISED -
CHECKED - DTS	REVISED -
DRAWN - SL	REVISED -
CHECKED - DTS	REVISED -

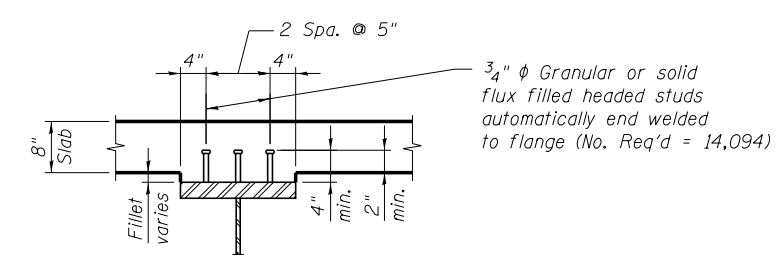
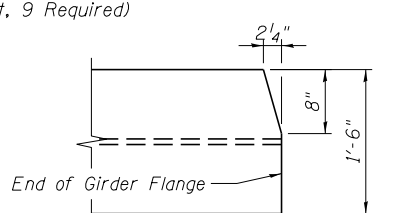
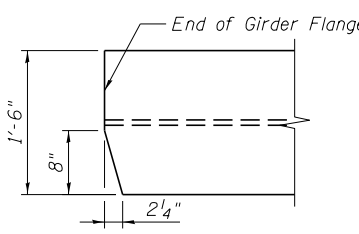
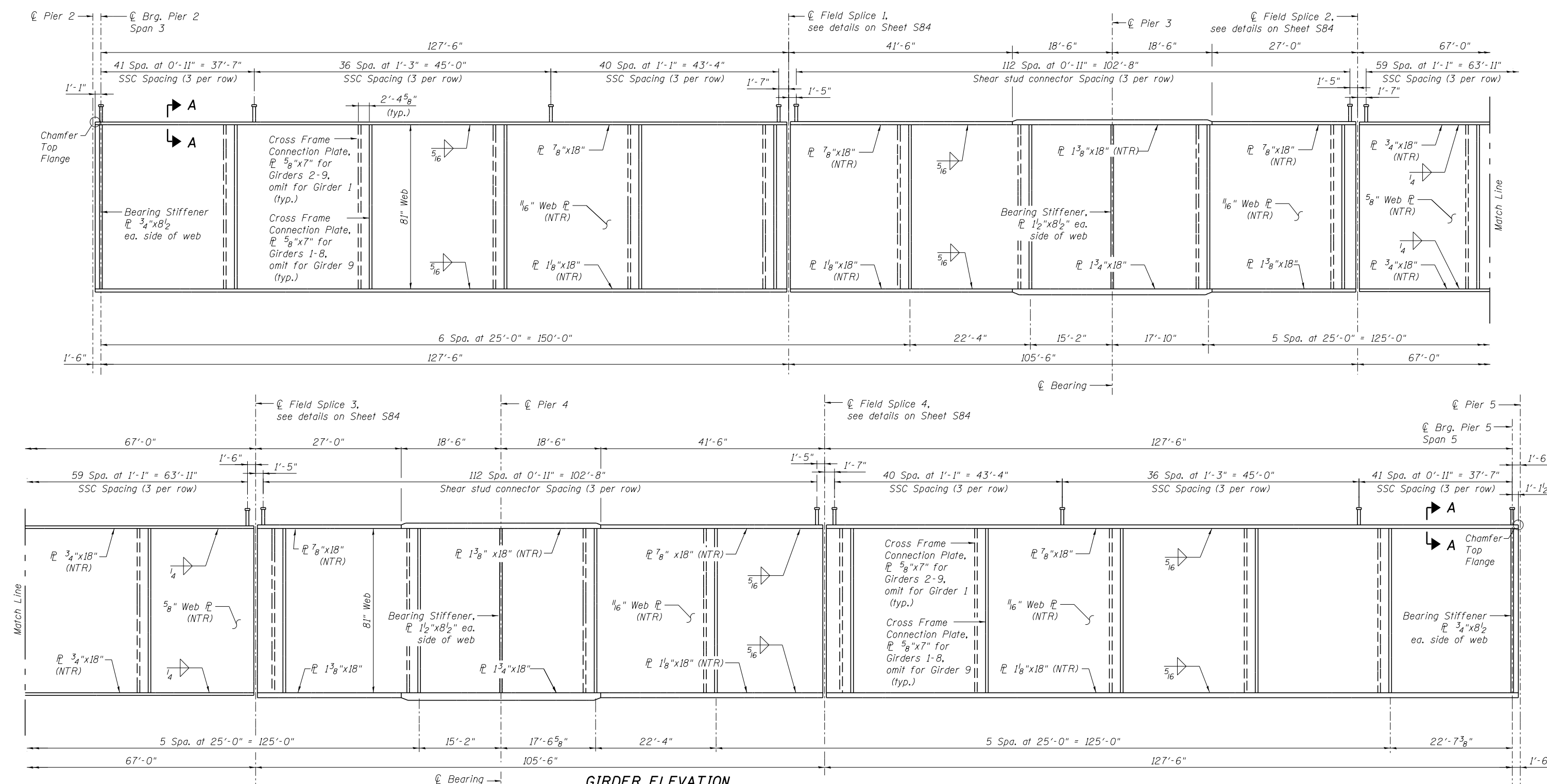
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN UNIT 2
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S77 OF S138 SHEETS

F.A.I. RTE. 74	SECTION 81-1HVBR	COUNTY ROCK ISLAND	TOTAL SHEETS 1504	SHEET NO. 966
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

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 11:51:51 AM
 1/18/2017



NOTES:

- Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
- All flange plates, web plates and bearing stiffeners shall be AASHTO M270 Grade 50 steel.

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N. END TOP FLANGE CHAMFER DETAIL S. END TOP FLANGE CHAMFER DETAIL SECTION A-A

FILE NAME = 081-0178-C00AB-078-Steel Plate Girder Elevation Unit 2.dwg	USER NAME = ksnider	DESIGNED - SL	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - DTS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - SL	REVISED -
		CHECKED - DTS	REVISED -

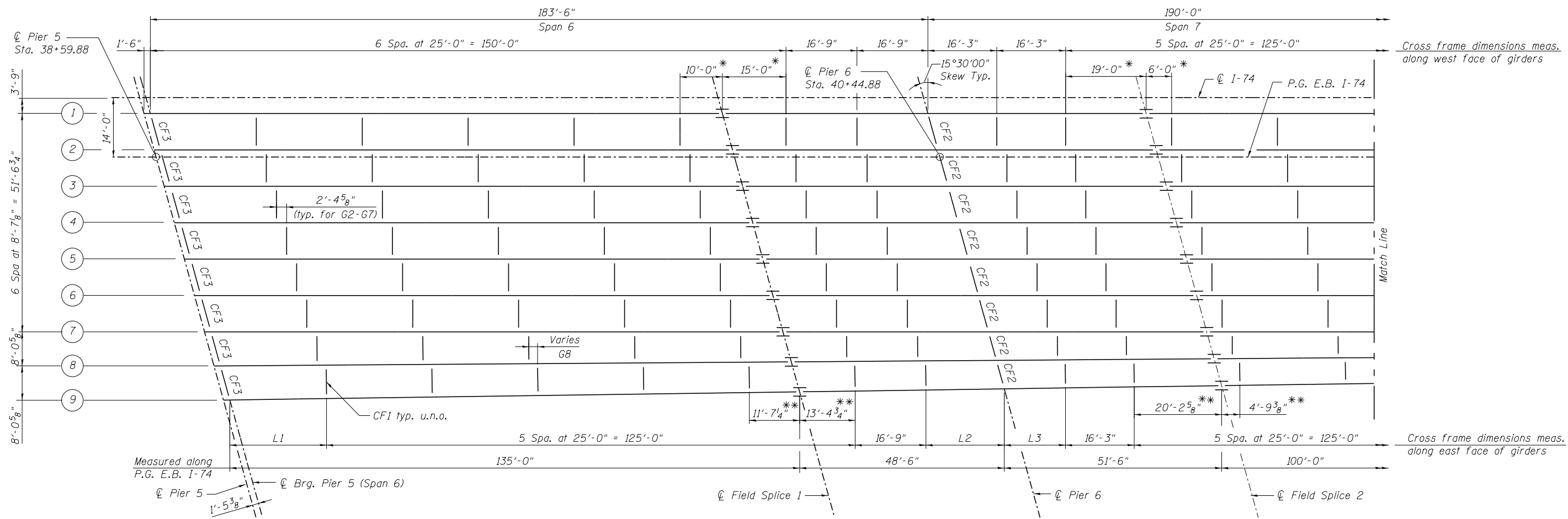
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER ELEVATION UNIT 2
 STRUCTURE NO. 081-0178 (EASTBOUND)**

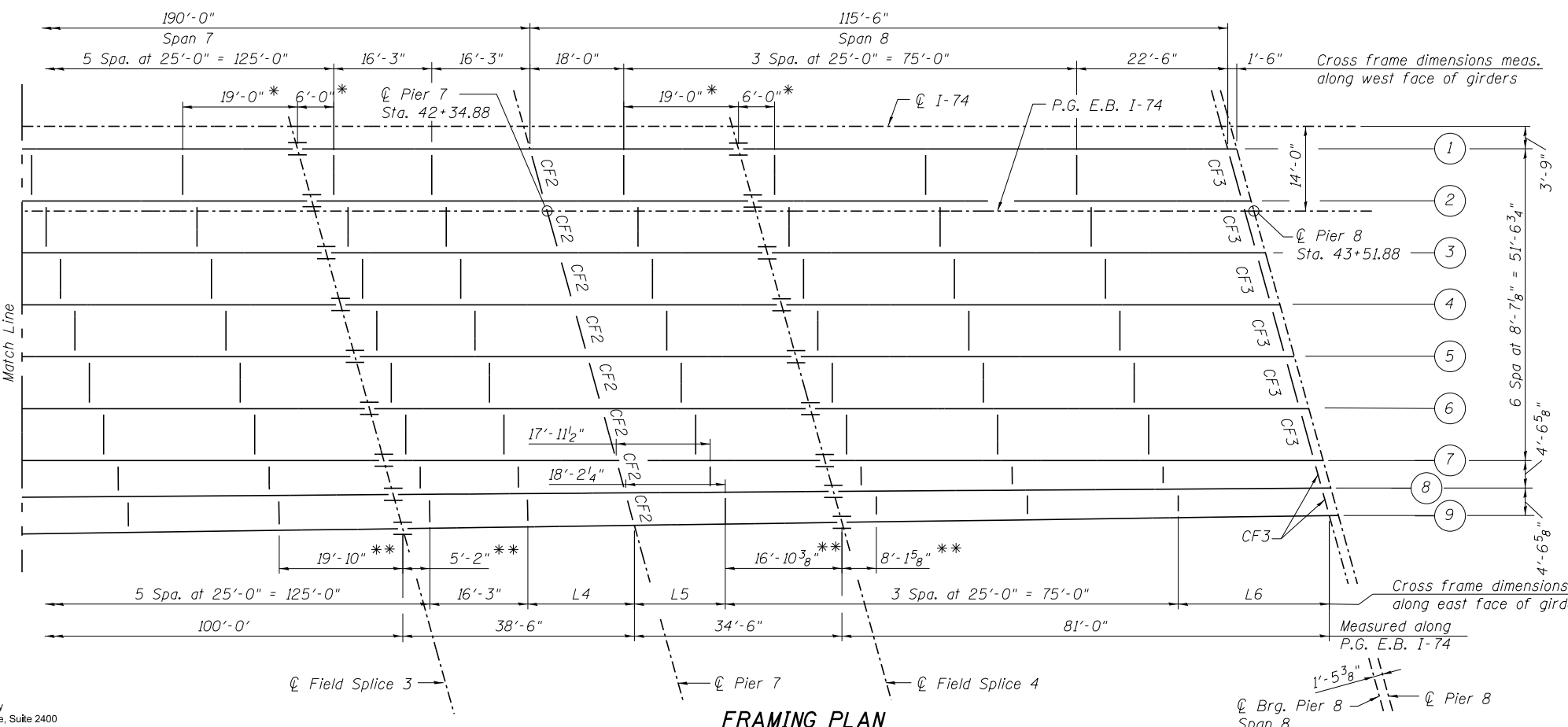
SHEET NO. S78 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	967
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

c:\pwise\work\do_not_delete\dms02467\081-0178-C00AB-078-Steel Plate Girder Elevation Unit 2.dwg 11:51:56 AM 1/18/2017

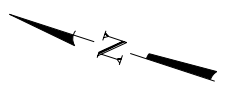


* Cross frame dimensions meas. along west face of girder 1 only.
 ** Cross frame dimensions meas. along east face of girder 9 only.



	G1-G7	G8	G9
L1	22'-7 ³ / ₈ "	22'-9 ¹ / ₈ "	22'-10 ⁵ / ₈ "
L2	19'-1 ⁵ / ₈ "	18'-6 ⁷ / ₈ "	18'-2"
L3	13'-10 ³ / ₈ "	14'-5 ¹ / ₈ "	14'-10"
L4	18'-7 ⁵ / ₈ "	17'-8 ¹ / ₂ "	16'-11 ¹ / ₄ "
L5	15'-7 ³ / ₈ "	16'-6"	17'-6"
L6	24'-10 ⁵ / ₈ "	23'-9 ¹ / ₄ "	22'-6 ³ / ₄ "

- NOTES:**
- Cross frames shall be perpendicular to eastern girder, except at all support locations.
 - Girder spacing measured at ϕ of piers.



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FILE NAME = 081-0178-C00AB-079-Framing Plan Unit 3.dgn
 USER NAME = ksnider
 DESIGNED - AAY
 CHECKED - MFH
 PLOT SCALE =
 DRAWN - VH
 REVISIONS:
 PLOT DATE = 1/18/2017
 CHECKED - MFH
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

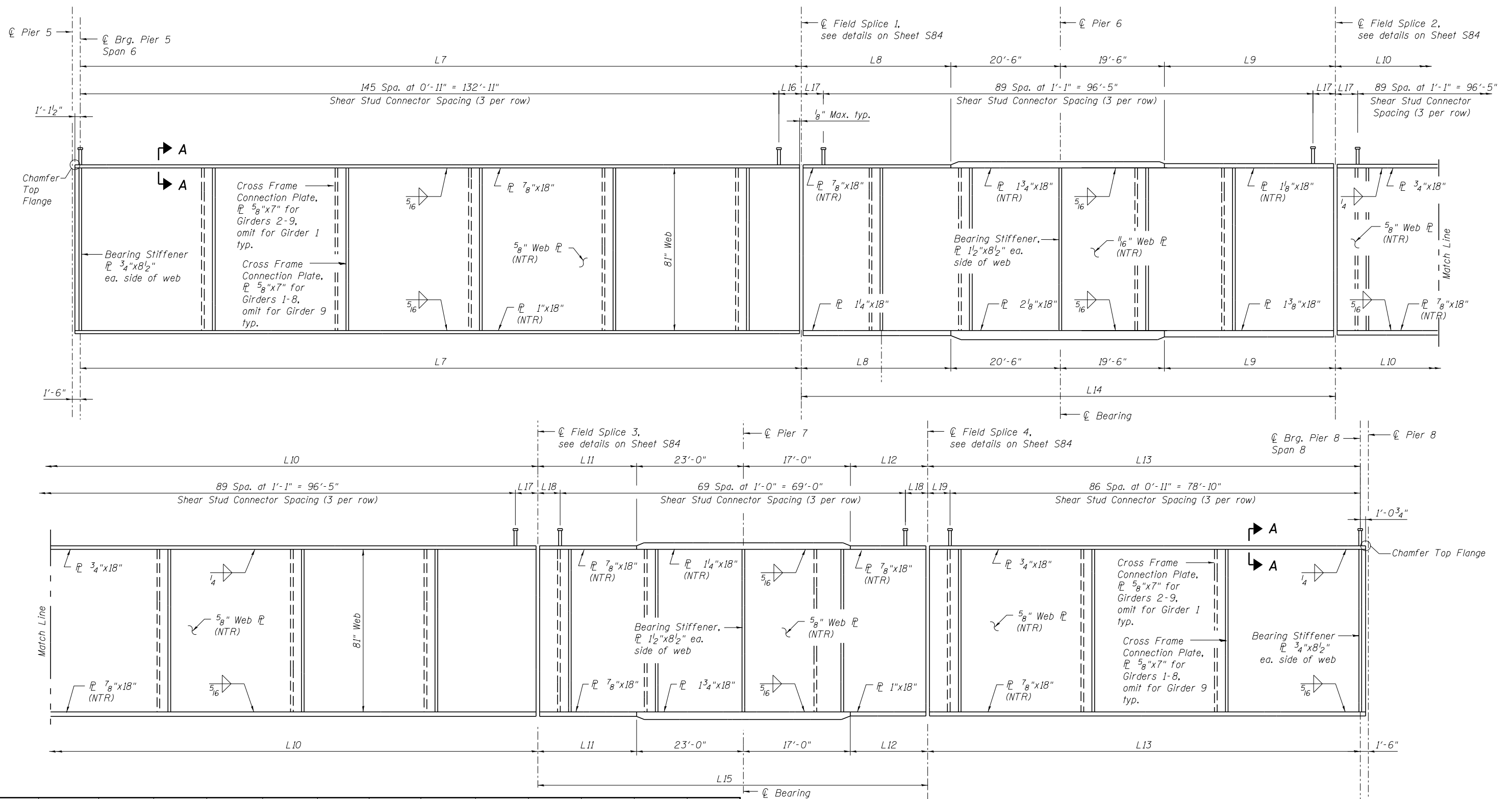
**FRAMING PLAN UNIT 3
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S79 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	968
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

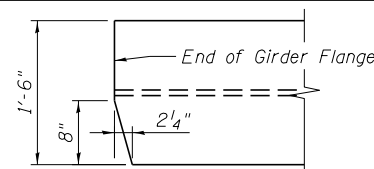
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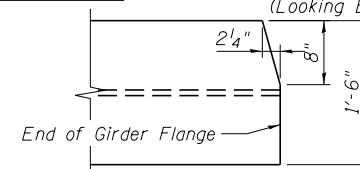
Girder	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19
G1-G7	135'-0"	28'-0"	32'-0"	100'-0"	15'-6"	17'-6"	81'-0"	100'-0"	73'-0"	2'-1"	1'-9 1/2"	2'-0"	2'-2"
G8	134'-8 1/8"	27'-10 1/8"	31'-10 3/4"	99'-9 5/8"	15'-5 1/2"	17'-5 1/4"	80'-10 1/8"	99'-9 5/8"	72'-10 3/8"	1'-9 7/8"	1'-8 3/8"	1'-11 1/4"	2'-0 1/2"
G9	134'-5 3/4"	27'-9 3/4"	31'-9 5/8"	99'-7 3/8"	15'-4 1/4"	17'-4 3/8"	80'-8 1/4"	99'-7 3/8"	72'-8 5/8"	1'-6 3/4"	1'-7 1/4"	1'-10 1/4"	1'-10 1/4"

GIRDER ELEVATION

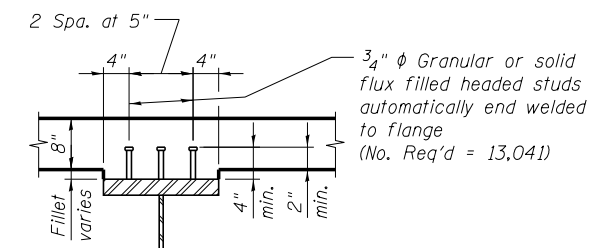
Interior Girder Shown, Exterior Girders Similar (Looking East, 9 Required)



N. END TOP FLANGE CHAMFER DETAIL



S. END TOP FLANGE CHAMFER DETAIL



SECTION A-A

NOTES:

- Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
- All flange plates, web plates, and bearing stiffeners shall be AASHTO M270 Grade 50 steel.
- See Sheet S83 for Cross Frame and Connection Plate details.



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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-080-Steel Plate Girder Elevation Unit 3.dgn	USER NAME = ksnyder	DESIGNED - AAY	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - MFH	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - MFH	REVISED -

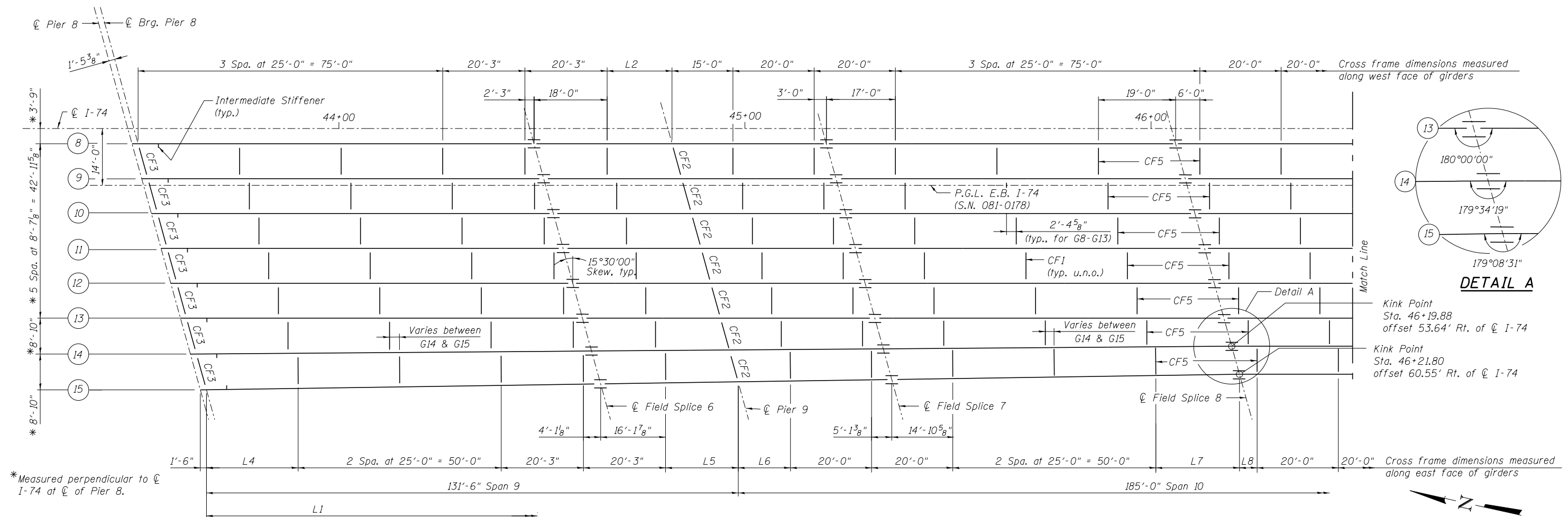
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE GIRDER ELEVATION UNIT 3
STRUCTURE NO. 081-0178 (EASTBOUND)

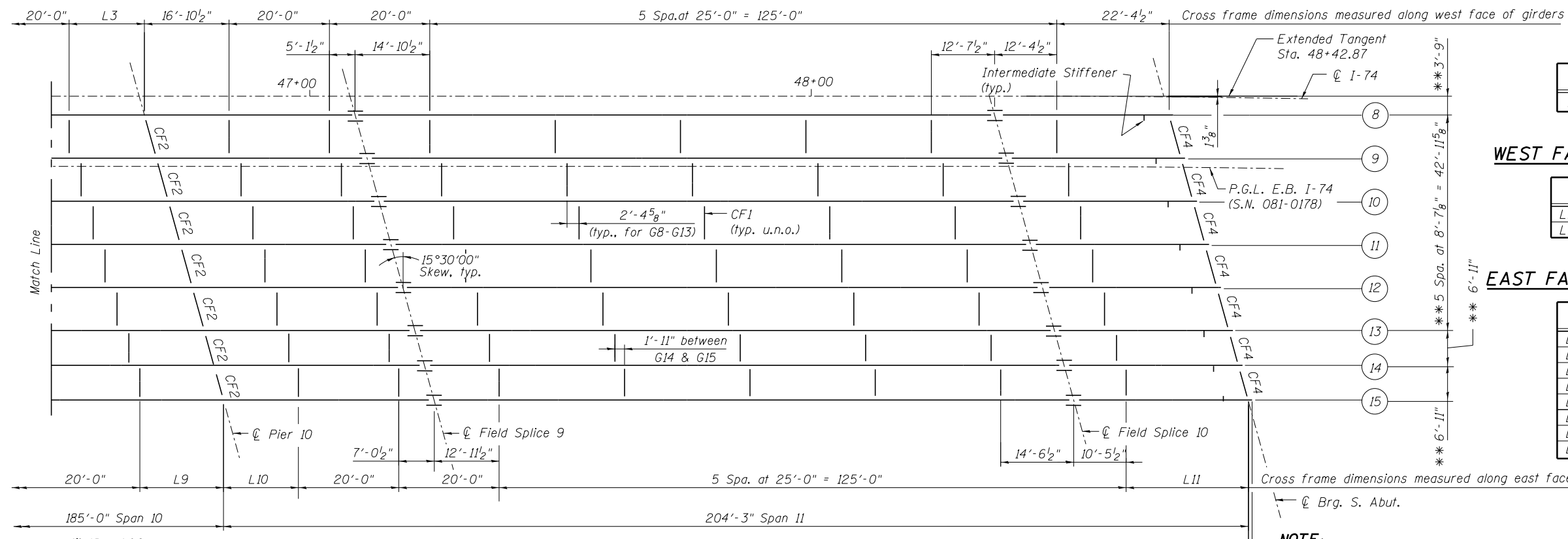
SHEET NO. S80 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	969
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT



FRAMING PLAN



FRAMING PLAN

	G8-G13	G14	G15
L1	520'-9"	520'-2 ³ / ₄ "	519'-8 ⁵ / ₈ "

WEST FACE CROSS FRAME SPACING

	G8-G13	G14
L2	16'-0"	15'-8 ³ / ₄ "
L3	15'-0"	14'-9"

EAST FACE CROSS FRAME SPACING

	G9-G13	G14	G15
L4	22'-7 ³ / ₈ "	22'-6 ⁵ / ₈ "	22'-7 ¹ / ₂ "
L5	18'-4 ⁵ / ₈ "	18'-2 ¹ / ₈ "	17'-10 ⁵ / ₈ "
L6	12'-7 ³ / ₈ "	12'-10"	12'-10 ⁵ / ₈ "
L7	21'-4 ⁵ / ₈ "	20'-11"	20'-7 ³ / ₈ "
L8	3'-7 ³ / ₈ "	4'-1"	4'-4"
L9	17'-4 ⁵ / ₈ "	16'-11"	16'-8"
L10	14'-5 ⁵ / ₈ "	14'-11 ¹ / ₂ "	14'-11 ¹ / ₂ "
L11	24'-9 ⁵ / ₈ "	24'-3 ¹ / ₂ "	24'-3 ¹ / ₂ "

** Measured perpendicular to extended tangent at $\bar{\bar{C}}$ Brg. S. Abut.

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FILE NAME = 081-0178-C004B-081-Framing Plan Unit 4.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISIONS -
MODEL: Plot sheet	PLOT SCALE =	CHECKED - AJK	REVISIONS -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISIONS -
		CHECKED - AJK	REVISIONS -

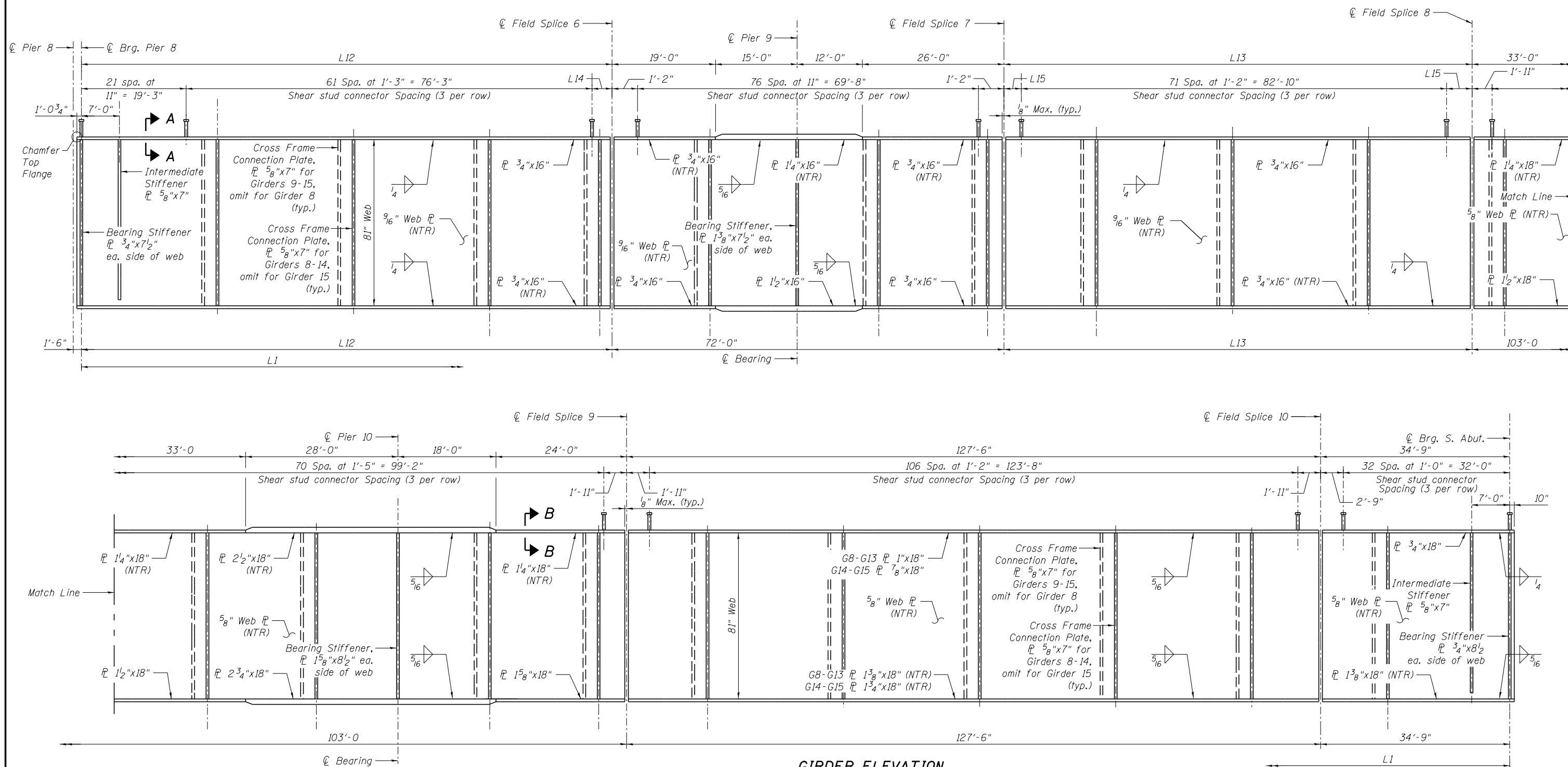
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN UNIT 4
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S81 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	970
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

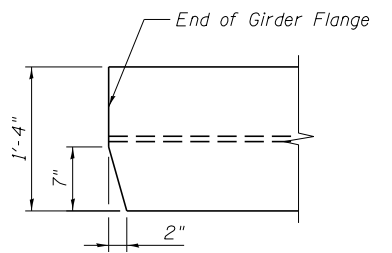
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GIRDER ELEVATION

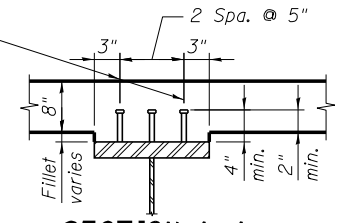
Interior Girder Shown, Exterior Girder Similar
(Looking East, 8 Required)

Girder	L1	L12	L13	L14	L15
G8-G13	520'-9"	97'-6"	86'-0"	2'-0"	1'-7"
G14	520'-2 3/4"	97'-2 3/4"	85'-9"	1'-8 3/4"	1'-5 1/2"
G15	519'-8 5/8"	96'-11 5/8"	85'-6"	1'-5 3/8"	1'-4"



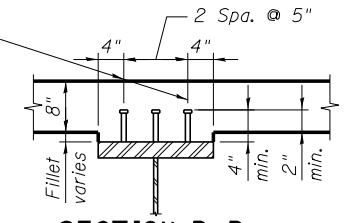
N. END TOP FLANGE CHAMFER DETAIL

3/4" φ Granular or solid flux filled headed studs automatically end welded to flange



SECTION A-A
(For 16" wide flanges)

3/4" φ Granular or solid flux filled headed studs automatically end welded to flange



SECTION B-B
(For 18" wide flanges)

Total Studs Required = 10,632

NOTES:

1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
2. All flange plates, web plates, and bearing stiffeners shall be AASHTO M270 Grade 50 steel.
3. See sheet S83 for Cross Frame and Connection Plate details.
4. See sheet S86 for splice details.
5. See sheet S81 for intermediate stiffener locations.

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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-082-Steel Plate Girder Elevation Unit 4.dgn
USER NAME = ksnider
DESIGNED - DTS
CHECKED - AJK
PLOT SCALE =
DRAWN - KMS
PLOT DATE = 1/18/2017
CHECKED - AJK
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

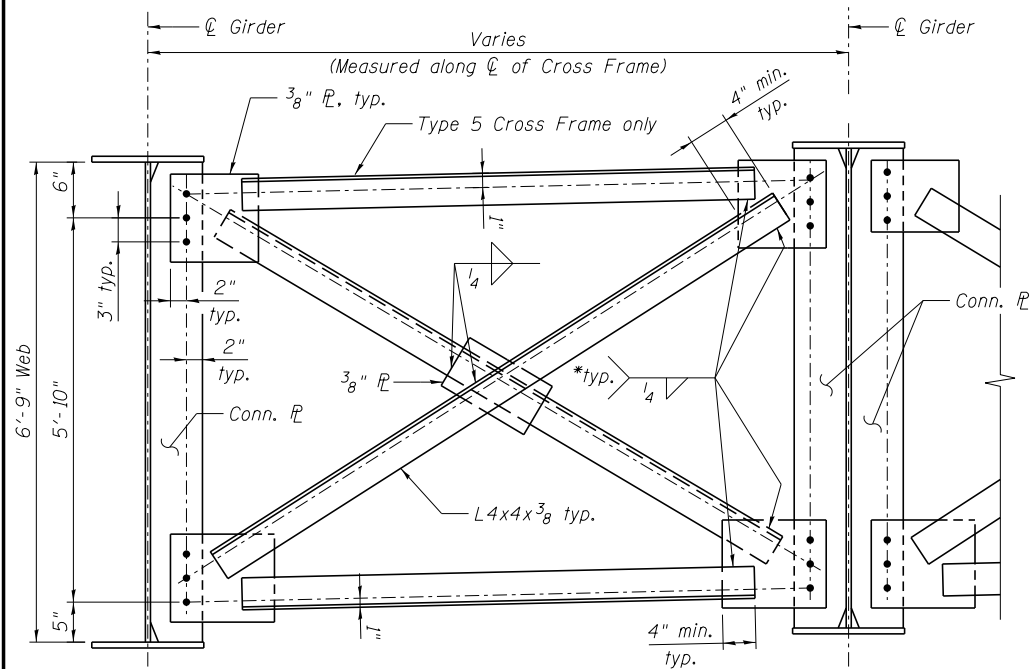
STEEL PLATE GIRDER ELEVATION UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S82 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	971
				CONTRACT NO. 64C08

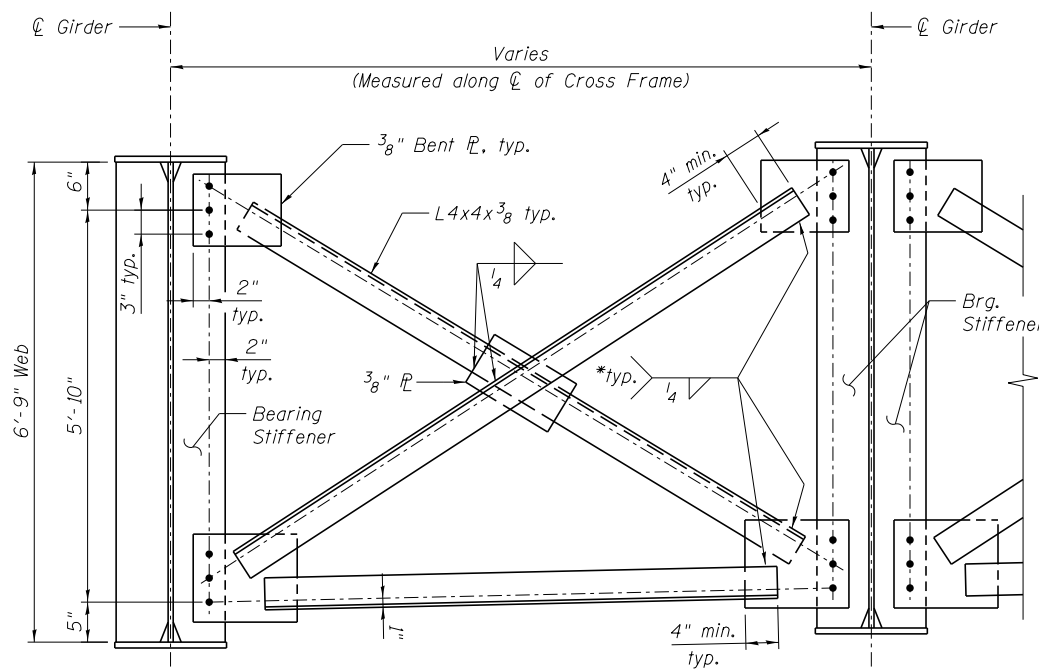
ILLINOIS FED. AID PROJECT

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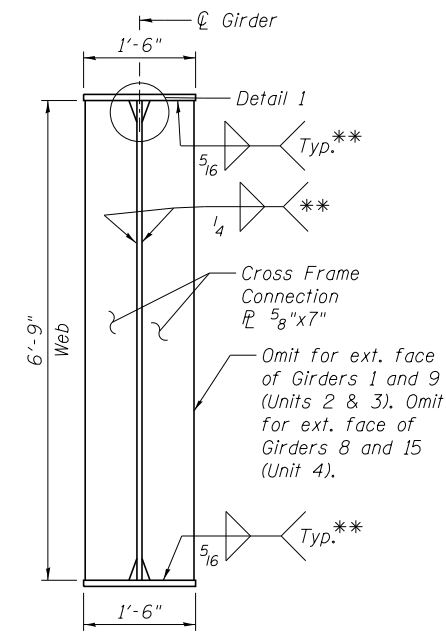
TYPE 1 & TYPE 5 CROSS FRAME

(CF1) (CF5)
(No. Req'd = 445) (No. Req'd = 14)



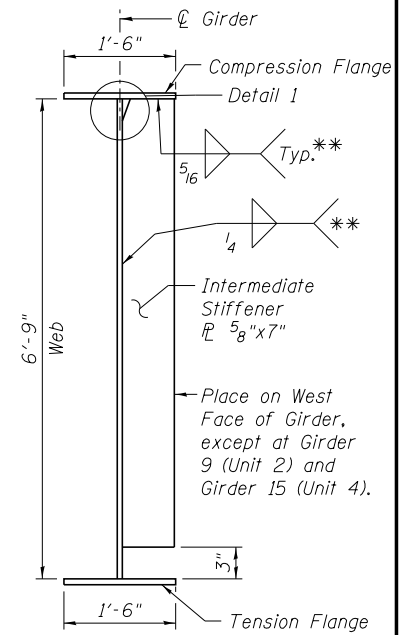
**TYPE 2 CROSS FRAME
AT PIER 3, 4, 6, 7, 9 & 10**

(CF2)
(No. Req'd = 46)



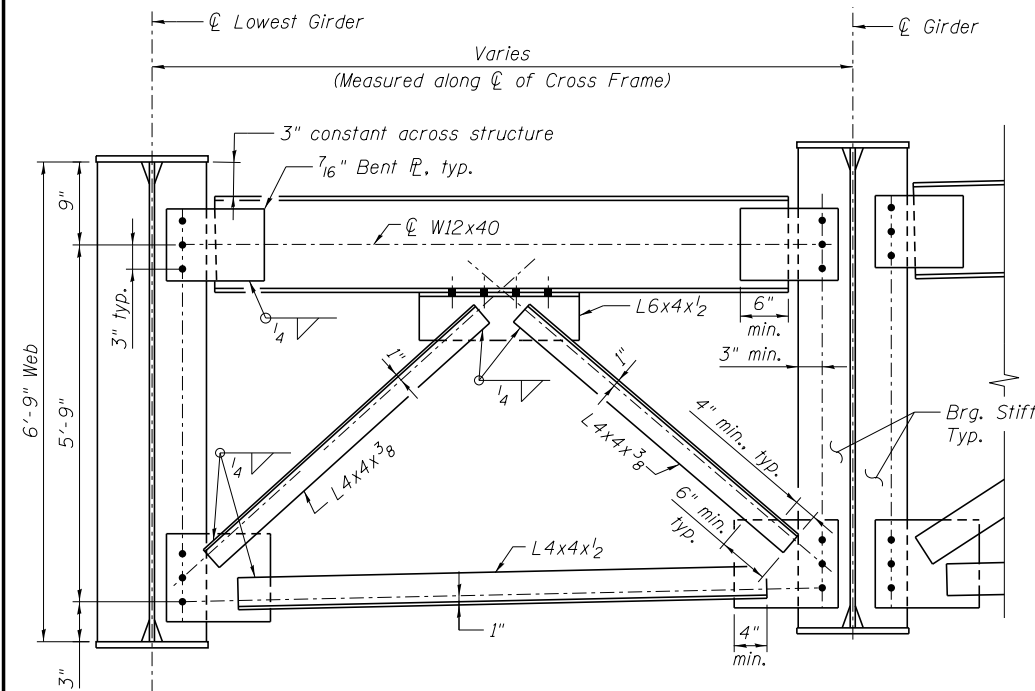
CONNECTION PLATE

(No. of Plates Req'd = 918)



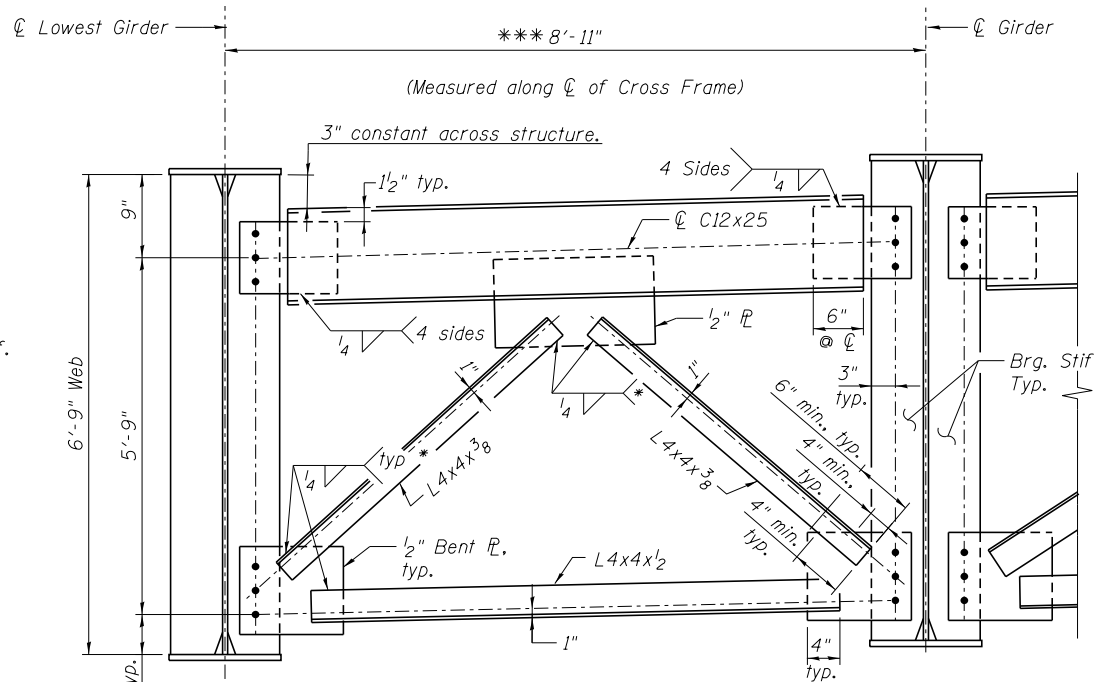
**INTERMEDIATE
STIFFENER**

(No. of Plates Req'd = 16)



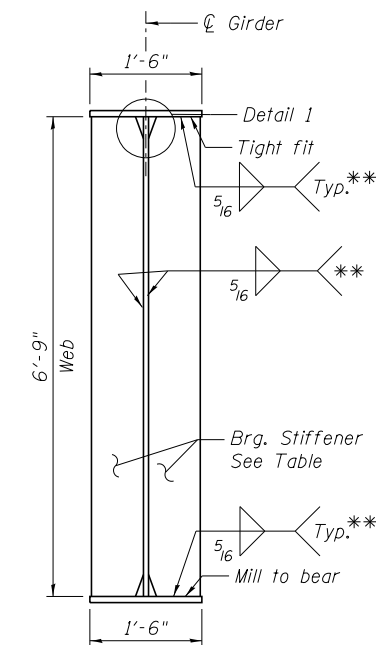
**TYPE 3 CROSS FRAME
AT PIER 2, 5 & 8**

(CF3)
(No. Req'd = 39)



**TYPE 4 CROSS FRAME
AT SOUTH ABUTMENT**

(CF4)
(No. Req'd = 7)



BEARING STIFFENER

(No. of Plates Req'd = 208)
(See Table)

**BEARING STIFFENER
DIMENSIONS**

Location	PL Size
Pier 2 (Unit 2)	3/4" x 8 1/2"
Pier 3	1 1/2 x 8 1/2"
Pier 4	1 1/2 x 8 1/2"
Pier 5 (Unit 2)	3/4" x 8 1/2"
Pier 5 (Unit 3)	3/4" x 8 1/2"
Pier 6	1 1/2 x 8 1/2"
Pier 7	1 1/2 x 8 1/2"
Pier 8 (Unit 3)	3/4" x 8 1/2"
Pier 8 (Unit 4)	3/4" x 7 1/2"
Pier 9	1 3/8" x 7 1/2"
Pier 10	1 5/8" x 8 1/2"
S. Abut.	3/4" x 8 1/2"

NOTES:

- All cross frames between girders shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4" ϕ , holes 15/16" ϕ , unless noted otherwise. Two hardened washers required for each set of oversized holes.

- * Fillet weld angles along 3 sides on one face of gusset plate.
- ** Terminate weld 1/4" from edges of stiffener PL.
- *** Dimension typical between girders 8-13. Dimension varies between girders 13-15.



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Chicago, Illinois 60601
312-565-0450 Job No. 10061

DETAIL 1
(Typical top & bottom flanges)

FILE NAME = 081-0178-C00AB-083-Steel Plate Girder Cross Frame Details Units 2-4.dgn	USER NAME = ksnider	DESIGNED - AAY	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - MFH	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - MFH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE GIRDER CROSS FRAME DETAILS - UNITS 2, 3 & 4
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S83 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	972
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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TOP OF WEB ELEVATIONS - UNIT 1

(For fabrication only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12	Girder 13
Brg. N. Abut	593.69	593.87	594.04	594.20	594.20	594.11	594.01	593.92	593.82	593.74	593.65	593.56	593.48
Splice 1	595.16	595.34	595.53	595.71	595.63	595.53	595.43	595.34	595.21	595.13	595.04	594.96	594.92
Brg. Pier 1	596.74	596.93	597.13	597.27	597.18	597.07	596.96	596.85	596.68	596.52	596.41	596.32	596.22
Splice 2	598.28	598.47	598.68	598.80	598.69	598.58	598.46	598.34	598.14	597.93	597.80	597.64	597.50
Splice 3	601.01	601.23	601.46	601.51	601.39	601.27	601.14	600.94	600.90	600.74	600.45	600.19	599.89
Brg. Pier 2	601.55	601.77	602.00	602.07	601.95	601.83	601.70	601.58	601.47	601.57	601.32	601.04	600.75

TOP OF WEB ELEVATIONS - UNIT 2

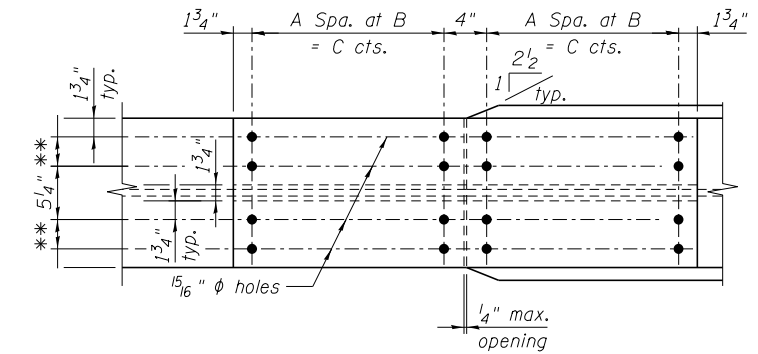
(For fabrication only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
Brg. Pier 2	601.68	601.90	602.12	602.20	602.08	601.96	601.84	601.71	601.59
Splice 1	604.51	604.72	604.93	604.99	604.86	604.72	604.59	604.45	604.32
Brg. Pier 3	604.90	605.10	605.30	605.37	605.23	605.09	604.95	604.80	604.66
Splice 2	605.33	605.53	605.73	605.79	605.65	605.50	605.36	605.21	605.07
Brg. Pier 4	606.03	606.22	606.41	606.47	606.31	606.16	606.01	605.86	605.71
Splice 3	606.54	606.73	606.92	606.98	606.82	606.66	606.51	606.35	606.20
Splice 4	607.42	607.60	607.79	607.84	607.67	607.51	607.35	607.19	607.03
Brg. Pier 5	607.61	607.79	607.97	608.02	607.86	607.70	607.54	607.38	607.23

TOP OF WEB ELEVATIONS - UNIT 3

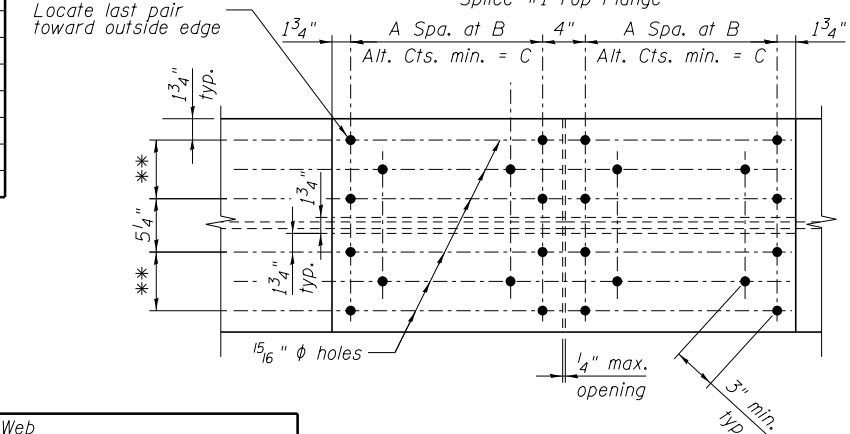
(For fabrication only)

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9
Brg. Pier 5	607.59	607.77	607.94	608.00	607.85	607.69	607.53	607.37	607.22
Splice 1	608.42	608.60	608.78	608.84	608.67	608.51	608.35	608.22	608.08
Brg. Pier 6	608.46	608.65	608.82	608.89	608.72	608.56	608.39	608.25	608.13
Splice 2	608.85	609.04	609.21	609.28	609.11	608.95	608.77	608.63	608.53
Splice 3	609.34	609.52	609.70	609.75	609.59	609.43	609.26	609.14	609.05
Brg. Pier 7	609.48	609.67	609.84	609.90	609.74	609.58	609.41	609.30	609.21
Splice 4	609.62	609.80	609.97	610.03	609.87	609.71	609.54	609.45	609.35
Brg. Pier 8	610.08	610.26	610.44	610.51	610.34	610.18	609.97	609.97	609.85



FLANGE SPLICE

Unit 1 - All Splices Bottom Flange
Splice #1 Top Flange



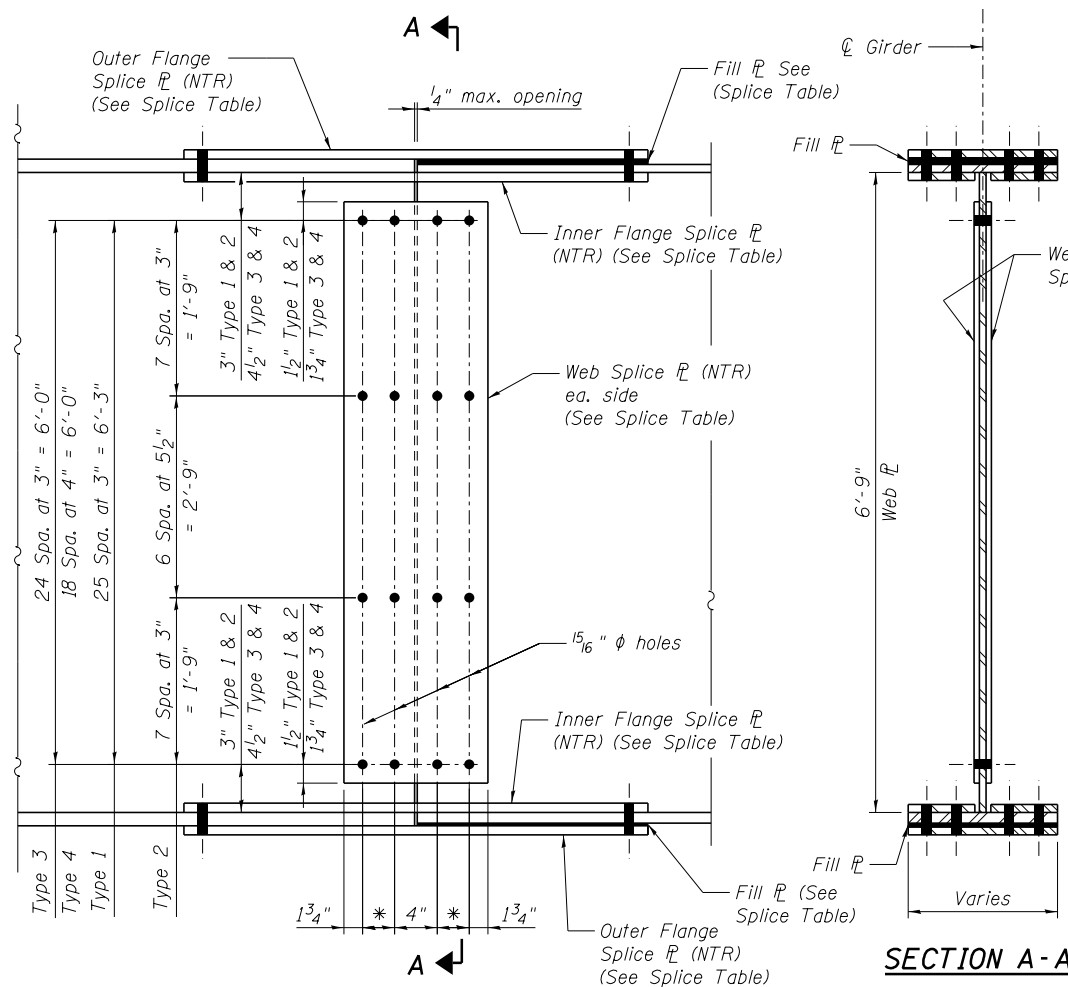
FLANGE SPLICE

Unit 1 - Splice #2 and #3 Top Flange
Units 2 & 3 - All Splices

** Unit 1 - Splice 1 - 3 5/8" Top & Bottom Flange
Splice 2 & 3 - 5 5/8" Top Flange
Splice 2 - 2 @ 3 5/8" = 6 5/8" Bottom Flange
Splice 3 - 6 5/8" Bottom Flange
Units 2 & 3 - All Splices - 4 5/8" Top & Bottom Flange

NOTES:

- All Splice Plates shall be AASHTO M270 Grade 50 steel.
- All Splice Bolts shall be 7/8" φ ASTM A325 High Strength with 15/16" φ holes.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



ELEVATION

* D Spa. at 3" = E cts.

SPLICE TABLE - UNIT 1

Splice Location	Top Flange				Bottom Flange				Web				
	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Web Splice PL	D	E	Type	No. Bolts
Field Splice 1	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/8"x2'-1 1/2"	3/8"x16"x1'-0 5/8"	32	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/8"x2'-1 1/2"	1/2"x16"x1'-0 5/8"	32	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 2	1/2"x20"x2'-1 1/2"	2-1/2"x9 1/8"x2'-1 1/2"	1/4"x20"x1'-0 5/8"	44	3/4"x22"x2'-7 1/2"	2-3/4"x10 1/8"x2'-7 1/2"	1/8"x22"x1'-3 5/8"	60	3/8"x19 1/2"x6'-6"	2	6"	2	126
Field Splice 3A	3/4"x20"x3'-1 1/2"	2-3/4"x9 1/8"x3'-1 1/2"	1/8"x20"x1'-6 5/8"	68	1 1/8"x22"x8'-1 1/2"	2-1 1/8"x10 1/8"x8'-1 1/2"	1/8"x22"x4'-0 5/8"	128	3/8"x19 1/2"x6'-6"	2	6"	1	156
Field Splice 3B	3/4"x20"x3'-1 1/2"	2-3/4"x9 1/8"x3'-1 1/2"	1/4"x20"x1'-6 5/8"	68	1 1/8"x22"x8'-1 1/2"	2-1 1/8"x10 1/8"x8'-1 1/2"	1/8"x22"x4'-0 5/8"	128	3/8"x19 1/2"x6'-6"	2	6"	1	156

Field Splice 3A (Girders 1-11)
Field Splice 3B (Girders 12 & 13)

SPLICE TABLE - UNIT 2

Splice Location	Top Flange				Bottom Flange				Web				
	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Web Splice PL	D	E	Type	No. Bolts
Field Splice 1	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	N/A	32	5/8"x18"x2'-7 1/2"	2-5/8"x8 1/8"x2'-7 1/2"	N/A	44	1/2"x19 1/2"x6'-3 1/2"	2	6"	3	150
Field Splice 2	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	1/8"x18"x11 5/8"	32	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/8"x2'-7 1/2"	5/8"x18"x1'-3 5/8"	44	3/8"x19 1/2"x6'-3 1/2"	2	6"	4	114
Field Splice 3	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	1/8"x18"x11 5/8"	32	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/8"x2'-7 1/2"	5/8"x18"x1'-3 5/8"	44	3/8"x19 1/2"x6'-3 1/2"	2	6"	4	114
Field Splice 4	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	N/A	32	5/8"x18"x2'-7 1/2"	2-5/8"x8 1/8"x2'-7 1/2"	N/A	44	1/2"x19 1/2"x6'-3 1/2"	2	6"	3	150

SPLICE TABLE - UNIT 3

Splice Location	Top Flange				Bottom Flange				Web				
	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Web Splice PL	D	E	Type	No. Bolts
Field Splice 1	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	N/A	32	5/8"x18"x2'-7 1/2"	2-5/8"x8 1/8"x2'-7 1/2"	1/4"x18"x1'-3 5/8"	44	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 2	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	3/8"x18"x11 5/8"	32	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/8"x2'-7 1/2"	1/2"x18"x1'-3 5/8"	44	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 3	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	1/8"x18"x11 5/8"	32	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	N/A	32	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 4	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	1/8"x18"x11 5/8"	32	1/2"x18"x1'-11 1/2"	2-1/2"x8 1/8"x1'-11 1/2"	1/8"x18"x11 5/8"	32	3/8"x13 1/2"x6'-6"	1	3"	1	104

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205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-084-Girder Splice Details Units 1-3.dwg	USER NAME = ksnider	DESIGNED - AAY	REVISIONS -
MODEL: Default	PLOT SCALE =	CHECKED - KWS	REVISIONS -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISIONS -
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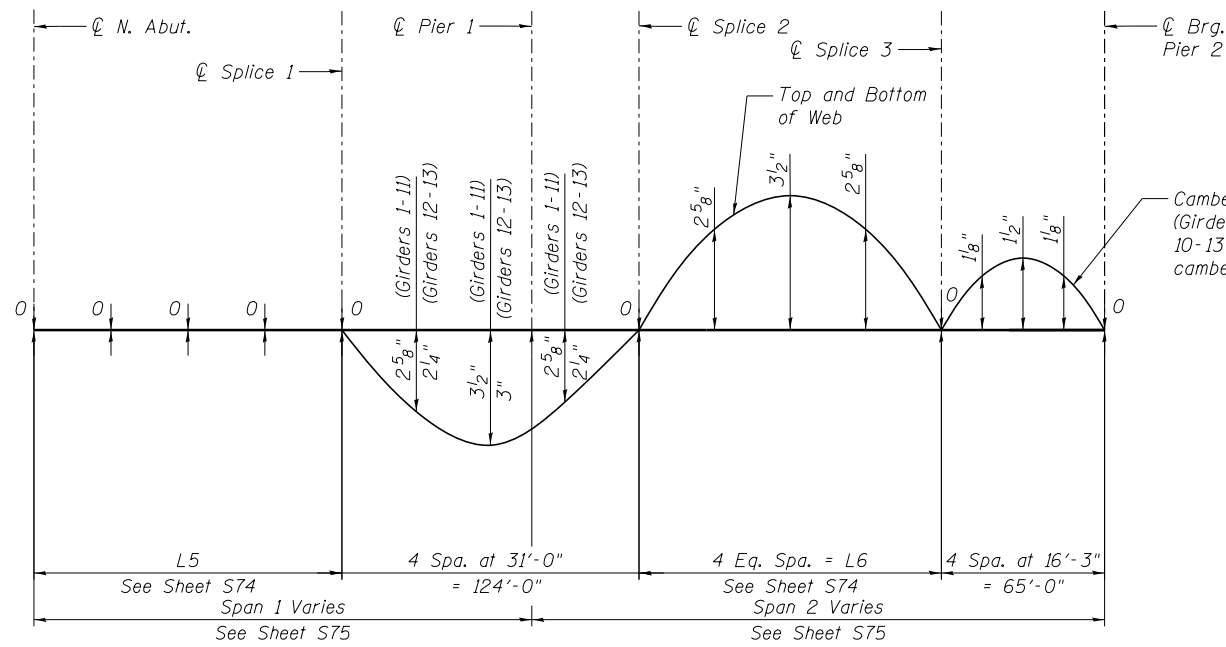
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER SPLICE DETAILS UNITS 1-3
STRUCTURE NO. 081-0178 (EASTBOUND)**

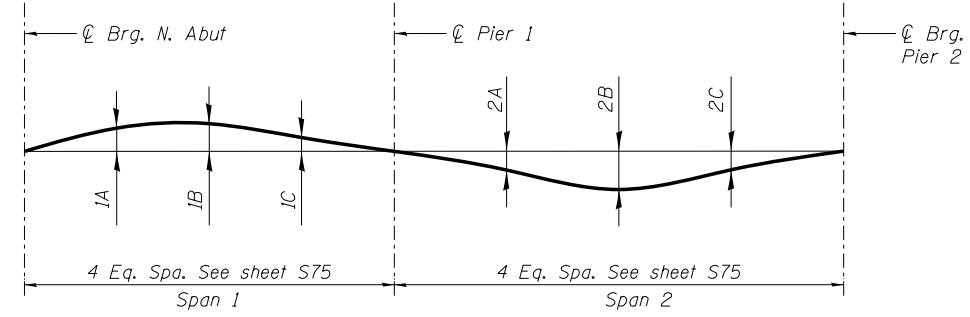
SHEET NO. S84 OF S138 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	973
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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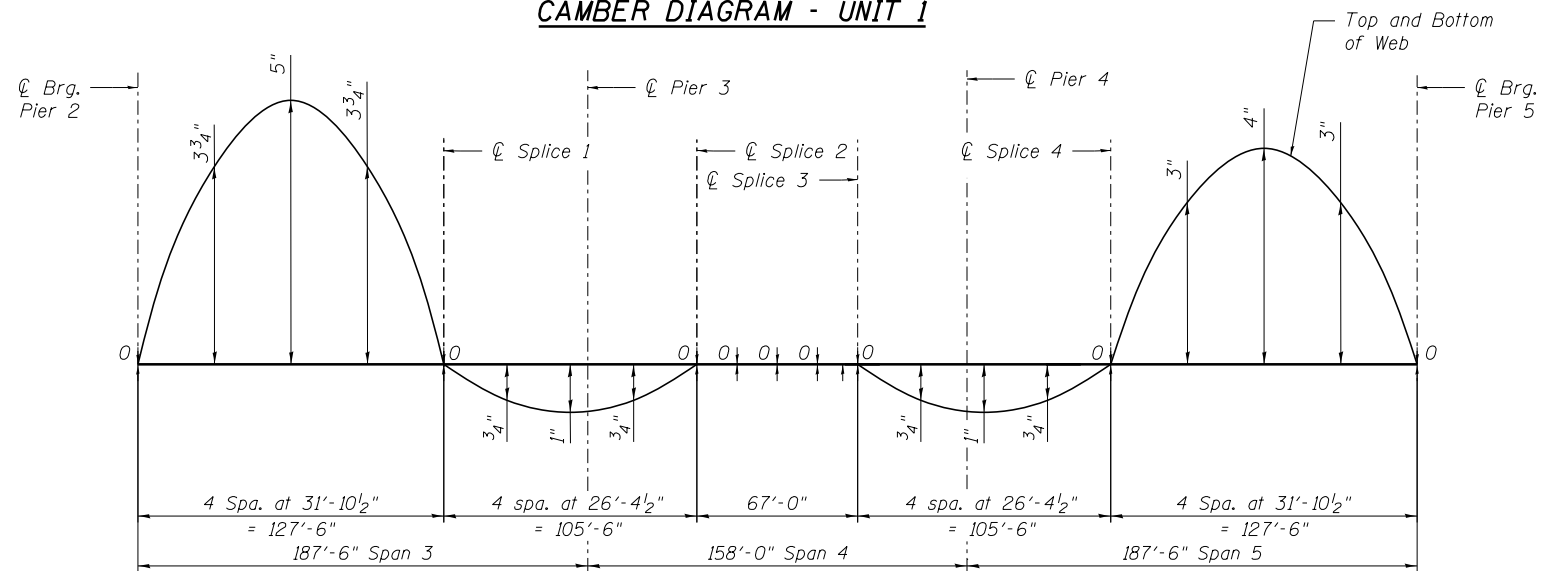
CAMBER DIAGRAM - UNIT 1



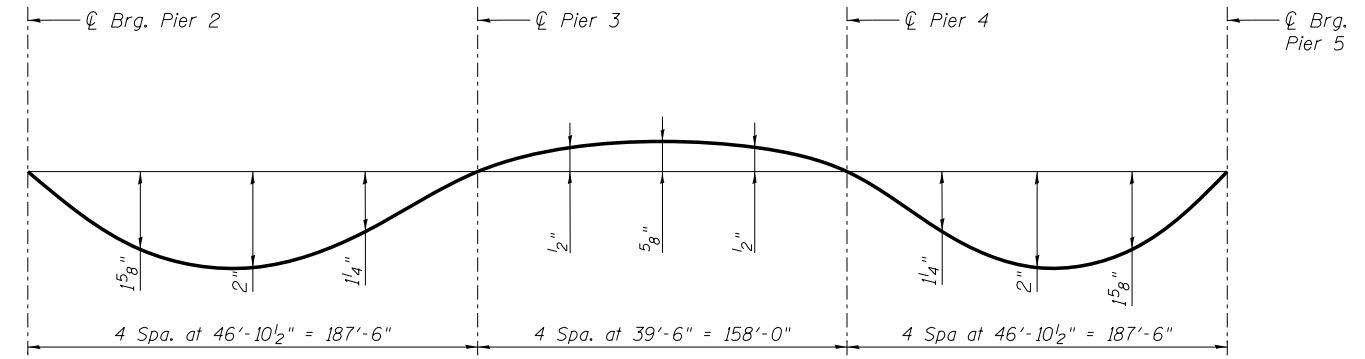
STEEL DEFLECTION DIAGRAM - UNIT 1
(Deflection due to steel self weight only)

STEEL DEFLECTION TABLE

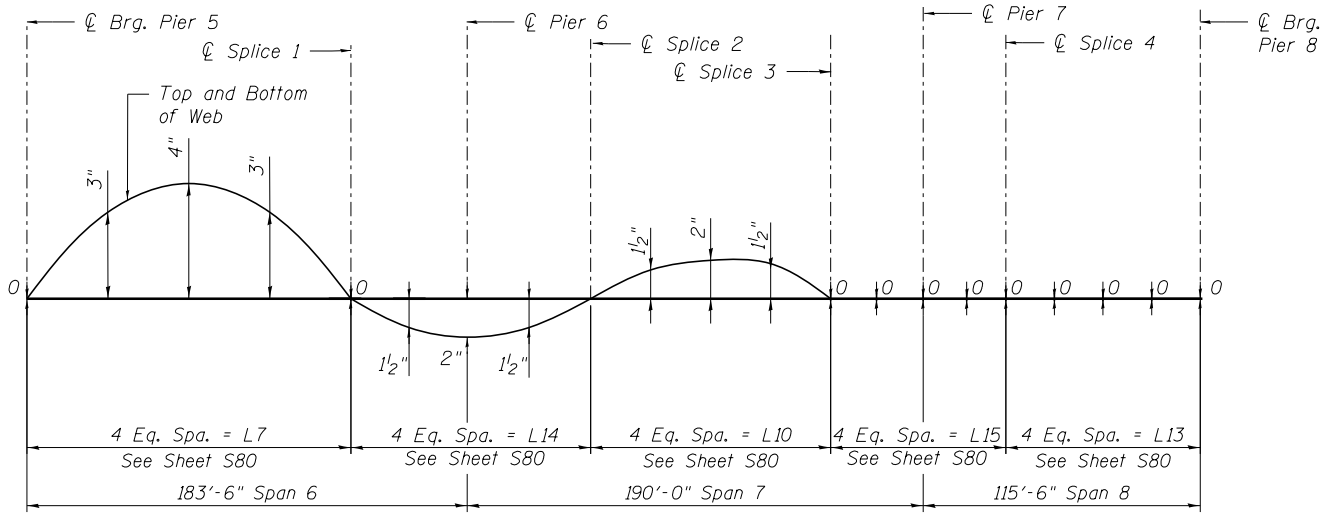
Girder	1A	1B	1C	2A	2B	2C
1	1/8"	3/8"	1/2"	2 1/8"	3 5/8"	2 7/8"
2	1/8"	3/8"	1/2"	2 1/8"	3 5/8"	2 7/8"
3	1/8"	3/8"	1/2"	2 1/8"	3 3/4"	2 7/8"
4	1/8"	3/8"	1/2"	2 1/8"	3 3/4"	3"
5	1/8"	2"	1/2"	2 1/4"	3 1/8"	3"
6	1/8"	2"	1/2"	2 1/4"	3 1/8"	3"
7	1/8"	2"	1/2"	2 1/4"	3 1/8"	3 3/8"
8	1/8"	2"	1/2"	2 1/4"	4"	3 1/8"
9	1/8"	2"	1/2"	2 1/4"	4"	3 1/8"
10	1/8"	2"	1/2"	2 1/4"	4"	3 1/8"
11	1/8"	2"	1/2"	2 1/4"	3 1/8"	3 3/8"
12	1/8"	2"	1/2"	2 1/4"	3 1/8"	3"
13	1/8"	2"	1/2"	2 1/4"	3 1/8"	3"



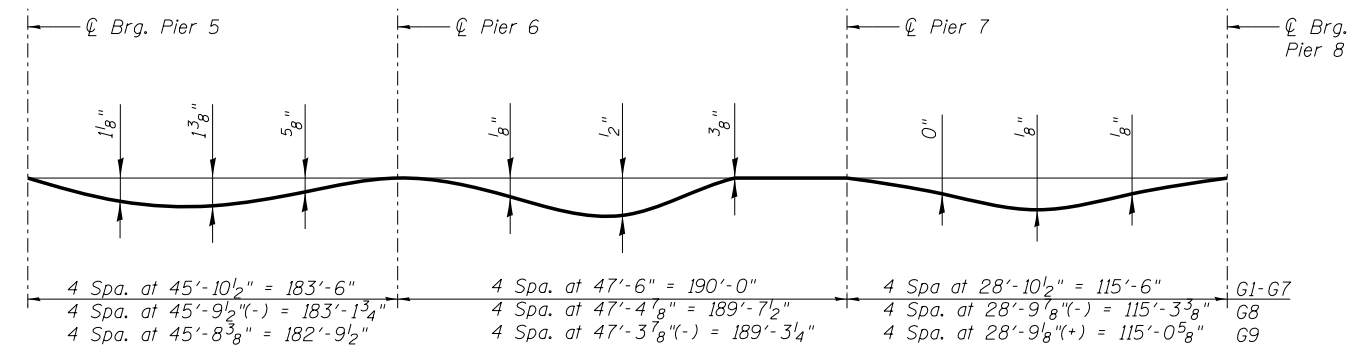
CAMBER DIAGRAM - UNIT 2



STEEL DEFLECTION DIAGRAM - UNIT 2



CAMBER DIAGRAM - UNIT 3



STEEL DEFLECTION DIAGRAM - UNIT 3
(Deflection due to steel self weight only)

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205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-085-Girder Camber Diagrams Units 1-3.dgn	USER NAME = ksnider	DESIGNED - AAY	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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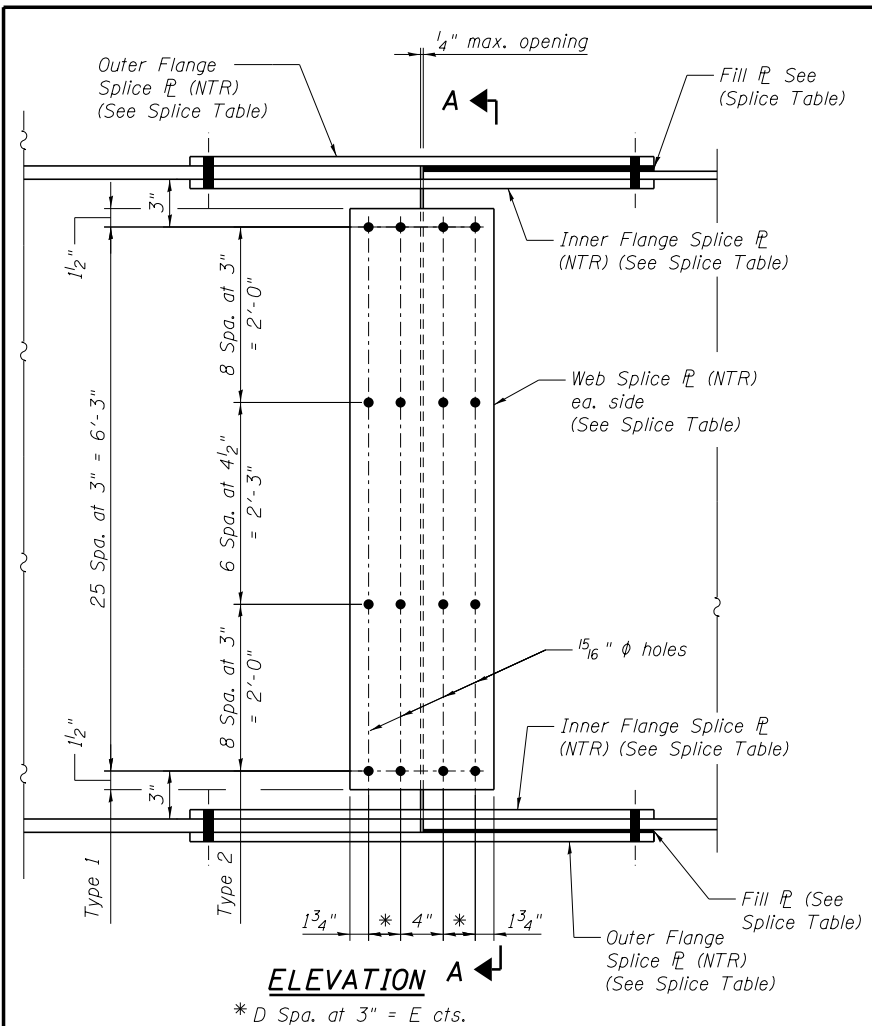
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER CAMBER DIAGRAMS UNITS 1-3
STRUCTURE NO. 081-0178 (EASTBOUND)**

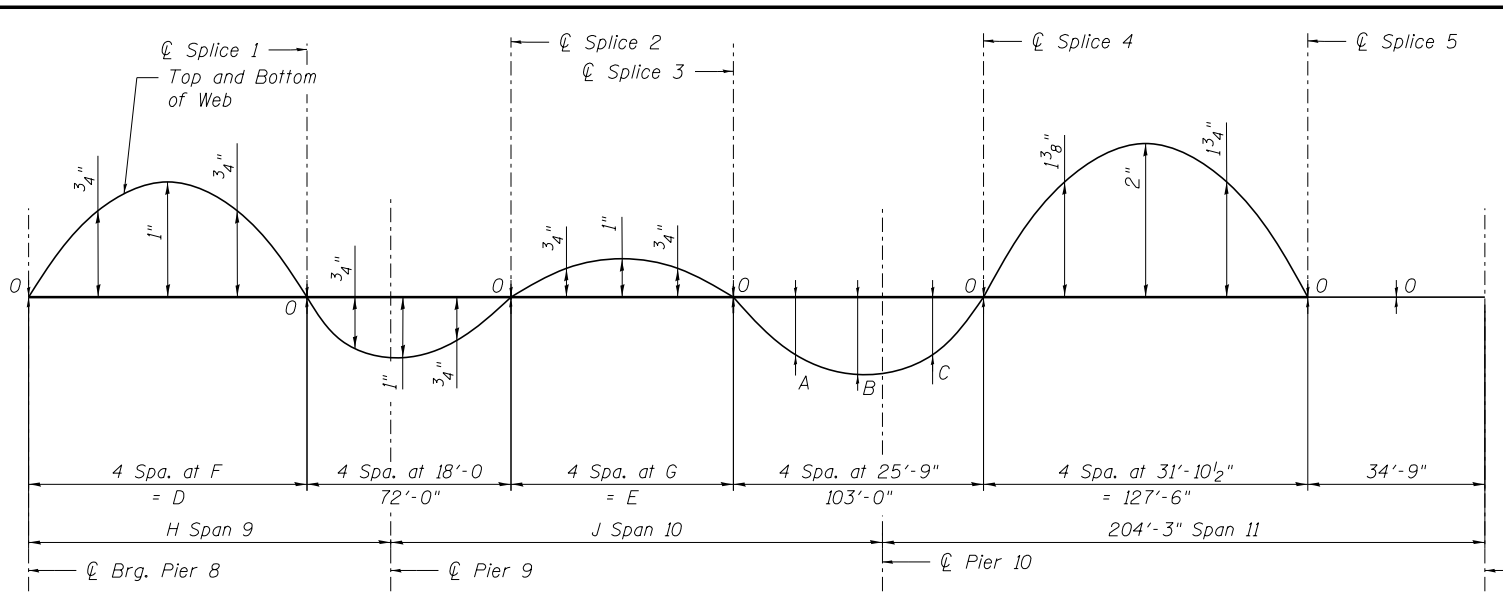
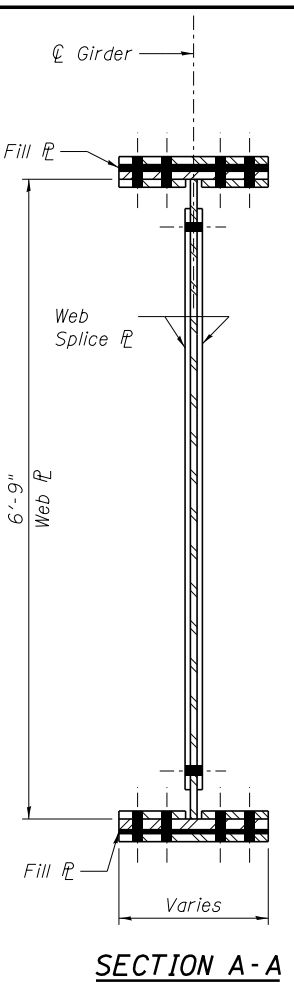
SHEET NO. S85 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	974
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

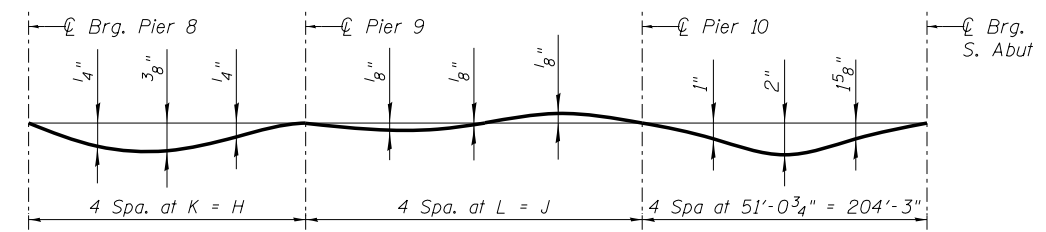
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ELEVATION A
* D Spa. at 3" = E cts.



CAMBER DIAGRAM



STEEL DEFLECTION DIAGRAM
(Deflections due to steel self weight only)

Location	D	E	F	G	H	J	K	L
G8-G13	97'-6"	86'-0"	24'-4 1/2"	21'-6"	131'-6"	185'-0"	32'-10 1/2"	46'-3"
G14	97'-2 3/4"	85'-9"	24'-3 3/4" (-)	21'-5 1/4"	131'-2 3/4"	184'-9"	32'-9 3/4" (-)	46'-2 1/4"
G15	96'-11 5/8"	85'-6"	24'-2 7/8" (+)	21'-4 1/2"	130'-11 5/8"	184'-6"	32'-8 7/8" (+)	46'-1 1/2"

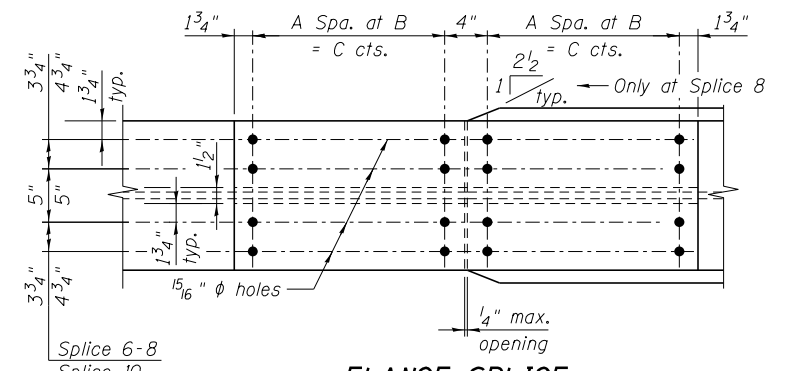
Location	A	B	C
G8-G13	2 1/2"	2 7/8"	2"
G14-G15	2 1/8"	2 3/8"	1 5/8"

TOP OF WEB ELEVATIONS
(For fabrication only)

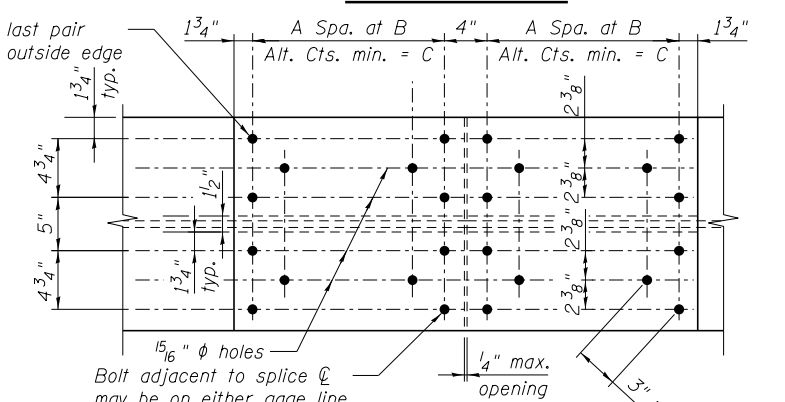
Location	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12	Girder 13	Girder 14	Girder 15
CL. BRG. PIER 8	610.12	610.30	610.47	610.54	610.37	610.21	610.01	609.88
FS #1	610.65	610.83	611.02	611.04	610.90	610.74	610.59	610.44
CL. BRG. PIER 9	610.74	610.92	611.11	611.10	610.99	610.83	610.68	610.54
FS #2	611.01	611.20	611.38	611.34	611.27	611.11	610.96	610.83
FS #3	611.55	611.72	611.89	611.96	611.83	611.66	611.53	611.40
CL. BRG. PIER 10	612.00	612.17	612.23	612.23	612.08	611.91	611.81	611.69
FS #4	612.72	612.88	612.87	612.82	612.66	612.49	612.35	612.23
FS #5	614.60	614.80	614.63	614.38	614.12	613.84	613.61	613.40
CL. BRG. S. Abut.	614.75	614.96	614.78	614.50	614.21	613.91	613.66	613.43

SPLICE TABLE

Splice Location	Top Flange				Bottom Flange				Web				
	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Outer Flange PL	Inner Flange PL	Fill PL	No. Bolts	Web Splice PL	D	E	Type	No. Bolts
Field Splice 6	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/4"x2'-1 1/2"	N/A	32	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/4"x2'-1 1/2"	N/A	32	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 7	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/4"x2'-1 1/2"	N/A	32	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/4"x2'-1 1/2"	N/A	32	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 8	1/2"x16"x2'-1 1/2"	2-1/2"x7 1/4"x2'-1 1/2"	1/2"x16"x1'-0 5/8"	32	1/2"x16"x2'-7 1/2"	2-1/2"x7 1/4"x2'-7 1/2"	3/4"x16"x1'-3 5/8"	40	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 9 G8-G13	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/4"x2'-7 1/2"	1/4"x18"x1'-3 5/8"	44	3/4"x18"x3'-3 1/2"	2-3/4"x8 1/4"x3'-3 1/2"	1/4"x18"x1'-7 5/8"	8	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 9 G14-G15	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/4"x2'-7 1/2"	3/8"x18"x1'-3 5/8"	44	7/8"x18"x3'-11 1/2"	2-7/8"x8 1/4"x3'-11 1/2"	1/2"x18"x1'-11 5/8"	10	3/8"x13 1/2"x6'-6"	1	3"	1	104
Field Splice 10 G8-G13	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/4"x2'-7 1/2"	1/4"x18"x1'-3 5/8"	40	3/4"x18"x4'-1 1/2"	2-3/4"x8 1/4"x4'-1 1/2"	N/A	7	3/8"x19 1/2"x6'-6"	2	3"	2	138
Field Splice 10 G14-G15	1/2"x18"x2'-7 1/2"	2-1/2"x8 1/4"x2'-7 1/2"	1/8"x18"x1'-3 5/8"	40	3/4"x18"x4'-1 1/2"	2-3/4"x8 1/4"x4'-1 1/2"	3/8"x18"x2'-0 5/8"	7	3/8"x19 1/2"x6'-6"	2	3"	2	138



FLANGE SPLICE



FLANGE SPLICE 9

- NOTES:**
- All Splice Plates shall be AASHTO M270 Grade 50 steel.
 - All Splice Bolts shall be 7/8" phi ASTM A325 High Strength with 15/16" phi holes.
 - Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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312-565-0450 Job No. 10061

FILE NAME - 081-0178-C00AB-086-Steel Plate Girder Splice Details Unit 4.dgn	USER NAME - ksnider	DESIGNED - DTS	REVISED -
MODEL - Default	PLOT SCALE -	CHECKED - KWS/AJK	REVISED -
	PLOT DATE - 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - KWS/AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE GIRDER CAMBER DIAGRAM AND SPLICE DETAILS UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S86 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	975
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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EXTERIOR GIRDER MOMENT TABLE (GIRDER 1)			
	0.4 Sp. 1	Pier 1	0.6 Sp. 2
I_s	(in ⁴)	67,779	211,784
$I_c(n)$	(in ⁴)	143,046	284,730
$I_c(3n)$	(in ⁴)	104,981	208,666
$I_c(cr)$	(in ⁴)	-----	227,380
S_s	(in ³)	1643	4789
$S_c(n)$	(in ³)	2255	5102
$S_c(3n)$	(in ³)	2010	4681
$S_c(cr)$	(in ³)	-----	5388
DC1	(k/')	1.070	1.400
MDC1	('k)	330	6670
DC2	(k/')	0.193	0.193
MDC2	('k)	178	1021
DW	(k/')	0.345	0.363
MDW	('k)	167	1914
$M\ddot{\iota} + IM$	('k)	2424	4262
M_u (Strength I)	('k)	5128	19,943
$\phi_r M_n$	('k)	-----	-----
f_s DC1	(ksi)	2.4	16.7
f_s DC2	(ksi)	1.1	2.3
f_s DW	(ksi)	1.0	4.3
f_s ($\ddot{\iota} + IM$)	(ksi)	12.9	9.5
f_s (Service II)	(ksi)	21.2	35.6
0.95R _h F _{yr}	(ksi)	47.5	47.5
f_s (Total)(Strength I)	(ksi)	28.4	46.7
$\phi_r F_n$	(ksi)	50.0	50.0
V _r	(k)	60.5	68.1

EXTERIOR GIRDER REACTION TABLE (GIRDER 1)			
	N. Abut.	Pier 1	Pier 2
R _{DC1}	(k)	38.0	315.4
R _{DC2}	(k)	9.2	49.5
R _{DW}	(k)	12.8	90.8
R $\ddot{\iota} + IM$	(k)	80.3	206.9
R _{Total}	(k)	140.4	662.5

INTERIOR GIRDER MOMENT TABLE (GIRDER 2)			
	0.4 Sp. 1	Pier 1	0.6 Sp. 2
I_s	(in ⁴)	67,779	211,784
$I_c(n)$	(in ⁴)	145,154	296,798
$I_c(3n)$	(in ⁴)	106,544	216,152
$I_c(cr)$	(in ⁴)	-----	231,599
S_s	(in ³)	1643	4789
$S_c(n)$	(in ³)	2267	5154
$S_c(3n)$	(in ³)	2022	4732
$S_c(cr)$	(in ³)	-----	5559
DC1	(k/')	1.030	1.400
MDC1	('k)	314	6724
DC2	(k/')	0.193	0.193
MDC2	('k)	138	824
DW	(k/')	0.345	0.363
MDW	('k)	166	1950
$M\ddot{\iota} + IM$	('k)	2138	3569
M_u (Strength I)	('k)	4556	18,606
$\phi_r M_n$	('k)	-----	-----
f_s DC1	(ksi)	2.3	16.8
f_s DC2	(ksi)	0.8	1.8
f_s DW	(ksi)	1.0	4.2
f_s ($\ddot{\iota} + IM$)	(ksi)	11.3	7.7
f_s (Service II)	(ksi)	18.8	32.9
0.95R _h F _{yr}	(ksi)	47.5	47.5
f_s (Total)(Strength I)	(ksi)	25.2	43.1
$\phi_r F_n$	(ksi)	50.0	50.0
V _r	(k)	55.0	58.2

INTERIOR GIRDER REACTION TABLE (GIRDER 2)			
	N. Abut.	Pier 1	Pier 2
R _{DC1}	(k)	37.2	318.1
R _{DC2}	(k)	7.6	41.6
R _{DW}	(k)	12.9	92.2
R $\ddot{\iota} + IM$	(k)	79.4	200.5
R _{Total}	(k)	137.2	652.5

EXTERIOR GIRDER MOMENT TABLE (GIRDER 13)			
	0.4 Sp. 1	Pier 1	0.6 Sp. 2
I_s	(in ⁴)	67,779	211,784
$I_c(n)$	(in ⁴)	141,538	274,172
$I_c(3n)$	(in ⁴)	103,889	205,223
$I_c(cr)$	(in ⁴)	-----	227,380
S_s	(in ³)	1643	4789
$S_c(n)$	(in ³)	2247	5053
$S_c(3n)$	(in ³)	2001	4653
$S_c(cr)$	(in ³)	-----	5388
S_{xc}	(in ³)	2136	5061
DC1	(k/')	1.050	1.330
MDC1	('k)	466	6199
DC2	(k/')	0.173	0.173
MDC2	('k)	175	892
DW	(k/')	0.345	0.363
MDW	('k)	172	1993
$M\ddot{\iota} + IM$	('k)	2392	3366
f_i (Strength I)	(ksi)	0	0
$M_u + 1/3 f_i S_{xc}$	('k)	5245	17,744
$\phi_r M_n$	('k)	-----	-----
f_s DC1	(ksi)	3.4	15.5
f_s DC2	(ksi)	1.0	2.0
f_s DW	(ksi)	1.0	4.4
f_s ($\ddot{\iota} + IM$)	(ksi)	12.8	7.5
f_i (Service II)	(ksi)	0.0	0.0
$f_s + f_i/2$ (Service II)	(ksi)	22.1	31.7
0.95R _h F _{yr}	(ksi)	47.5	47.5
$f_s + f_i/3$ (Total)(Strength I)	(ksi)	29.5	41.7
$\phi_r F_n$	(ksi)	50.0	50.0
V _r	(k)	55.7	59.2

EXTERIOR GIRDER REACTION TABLE (GIRDER 13)			
	N. Abut.	Pier 1	Pier 2
R _{DC1}	(k)	40.6	291.3
R _{DC2}	(k)	8.6	43.5
R _{DW}	(k)	13.1	92.8
R $\ddot{\iota} + IM$	(k)	64.6	166.8
R _{Total}	(k)	126.9	594.4

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in⁴ and in³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite dead loads (in⁴ and in³).

S_{xc} : Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M\ddot{\iota} + IM$: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

$M_u + 1/3 f_i S_{xc}$: Factored design moment (kip-ft.) (for curved girders).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 $M\ddot{\iota} + IM + 1/3 f_i S_{xc}$

M_u (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 $M\ddot{\iota} + IM$

f_i : Factored calculated normal stress at edge of flange for controlling steel flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

$\phi_r M_n$: Factored resistance available according to A6.1.1 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1 / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2 / $S_c(3n)$ or MDC2 / $S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW / $S_c(3n)$ or MDW / $S_c(cr)$ as applicable.

f_s ($\ddot{\iota} + IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
 $M\ddot{\iota} + IM / S_c(n)$ or $M\ddot{\iota} + IM / S_c(cr)$ as applicable.

$f_s + f_i/2$ (Service II): Sum of stresses as computed below (ksi) (for curved girders).
 $f_s DC1 + f_s DC2 + f_s DW + 1.3 f_s \ddot{\iota} + IM + f_i/2$

f_s (Service II): Sum of stresses as computed below (ksi).
 $f_s DC1 + f_s DC2 + f_s DW + 1.3 f_s (\ddot{\iota} + IM)$

0.95R_hF_{yr}: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s + f_i/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi) (for curved girders).
1.25 ($f_s DC1 + f_s DC2$) + 1.5 $f_s DW + 1.75 f_s \ddot{\iota} + IM + f_i/3$

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 ($f_s DC1 + f_s DC2$) + 1.5 $f_s DW + 1.75 f_s (\ddot{\iota} + IM)$

$\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

V_r: Maximum factored shear range in the span computed according to Article 6.10.10 (k).



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FILE NAME = 081-0178-C00AB-087-Moment and Reaction Tables - Unit 1.dgn	USER NAME = ksnider	DESIGNED - TJJ	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - KWS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - TJJ	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE GIRDER MOMENT AND REACTION TABLES - UNIT 1
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S87 OF S138 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	976
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

UNIT 2 - GIRDER 9 MOMENT TABLE			
	0.4 Sp. 3 & 0.6 Sp. 5	Pier 3 & 4	0.5 Sp. 4
I_s	90,609	125,650	72,791
$I_c(n)$	187,961	236,527	154,576
$I_c(3n)$	137,812	-----	114,098
$I_c(cr)$	-----	141,311	-----
S_s	2289	2829	1765
$S_c(n)$	3038	-----	2400
$S_c(3n)$	2734	-----	2154
$S_c(cr)$	-----	3316	-----
DC1	1.229	1.301	1.179
MDC1	3606	-3962	-203
DC2	0.173	0.173	0.173
MDC2	505	-561	-22
DW	0.400	0.400	0.400
MDW	1169	-1297	-50
$M\psi + IM$	3229	-3104	2107
M_u (Strength I)	12,543	-13,031	3331
$\phi_r M_n$	14,192	14,004	12,865
f_s DC1	18.9	-16.8	-1.4
f_s DC2	2.2	-2.0	-0.1
f_s DW	5.1	-4.7	-0.3
f_s ($\psi + IM$)	12.8	-11.2	10.5
f_s (Service II)	42.8	-38.1	11.9
0.95 $R_h F_y f$	47.5	47.5	47.5
f_s (Total)(Strength I)	-----	-----	-----
$\phi_r F_n$	-----	-----	-----
Vr	68.3	77.0	52.3

UNIT 2 - TYPICAL EXTERIOR GIRDER REACTION TABLE		
	Pier 2 & 5	Pier 3 & 4
RDC1	96.2	234.3
RDC2	13.2	32.9
RDW	30.6	76.0
$R\psi + IM$	129.1	244.3
RTotal	269.1	587.5

NOTE:
For Unit 2 Girder 9 at Pier 3 & 4, top flange capacity controls Strength I and Service II design. S_s & $S_c(cr)$ is for top flange section modulus.

UNIT 3 - TYPICAL EXTERIOR GIRDER MOMENT TABLE					
	0.4 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8
I_s	84,232	149,815	76,523	118,303	76,523
$I_c(n)$	174,165	-----	163,800	-----	163,800
$I_c(3n)$	128,727	-----	120,294	-----	120,294
$I_c(cr)$	-----	167,604	-----	136,487	-----
S_s	2085	3714	1903	3062	1903
$S_c(n)$	2755	-----	2574	-----	2574
$S_c(3n)$	2490	-----	2314	-----	2314
$S_c(cr)$	-----	3873	-----	3237	-----
DC1	1.195	1.342	1.179	1.267	1.179
MDC1	2802	5146	1450	2759	791
DC2	0.193	0.193	0.193	0.193	0.193
MDC2	456	810	241	449	129
DW	0.394	0.394	0.394	0.394	0.394
MDW	931	1653	493	917	264
$M\psi + IM$	3082	3380	2420	2695	1950
M_u (Strength I)	10,863	15,840	7088	10,102	4959
$\phi_r M_n$	13,188	16,395	12,960	13,072	13,408
f_s DC1	16.1	16.6	9.1	10.8	5.0
f_s DC2	2.2	2.5	1.2	1.7	0.7
f_s DW	4.5	5.1	2.6	3.4	1.4
f_s ($\psi + IM$)	13.4	10.5	11.3	10.0	9.1
f_s (Service II)	40.3	37.9	27.6	28.9	18.8
0.95 $R_h F_y f$	47.5	47.5	47.5	47.5	47.5
f_s (Total)(Strength I)	-----	-----	-----	-----	-----
$\phi_r F_n$	-----	-----	-----	-----	-----
Vr	69.9	69.1	61.5	75.7	71.4

UNIT 3 - TYPICAL EXTERIOR GIRDER REACTION TABLE				
	Pier 5	Pier 6	Pier 7	Pier 8
RDC1	83.2	272.1	196.1	45.5
RDC2	13.3	42.4	31.5	7.3
RDW	27.1	86.5	64.3	14.8
$R\psi + IM$	126.7	248.3	227.6	111.6
RTotal	250.3	649.3	519.5	179.2

UNIT 2 - TYPICAL INTERIOR GIRDER MOMENT TABLE			
	0.4 Sp. 3 & 0.6 Sp. 5	Pier 3 & 4	0.5 Sp. 4
I_s	90,609	125,650	72,791
$I_c(n)$	194,138	244,251	159,343
$I_c(3n)$	142,289	182,069	117,847
$I_c(cr)$	-----	145,642	-----
S_s	2289	3164	1765
$S_c(n)$	3067	3,971	2423
$S_c(3n)$	2766	3,635	2181
$S_c(cr)$	-----	3577	-----
DC1	1.240	1.316	1.187
MDC1	3640	-4014	-222
DC2	0.193	0.193	0.193
MDC2	564	-626	-23
DW	0.400	0.400	0.400
MDW	1169	-1297	-49
$M\psi + IM$	3230	-3116	2106
M_u (Strength I)	12661	-13,199	3306
$\phi_r M_n$	14,255	14,302	12,978
f_s DC1	19.1	-15.2	-1.5
f_s DC2	2.4	-2.1	-0.1
f_s DW	5.1	-4.3	-0.3
f_s ($\psi + IM$)	12.6	-9.4	10.4
f_s (Service II)	43.0	-33.8	11.7
0.95 $R_h F_y f$	47.5	47.5	47.5
f_s (Total)(Strength I)	-----	-----	-----
$\phi_r F_n$	-----	-----	-----
Vr	68.3	77.0	52.3

UNIT 2 - TYPICAL INTERIOR GIRDER REACTION TABLE		
	Pier 2 & 5	Pier 3 & 4
RDC1	96.3	235.9
RDC2	14.8	36.7
RDW	30.6	76.0
$R\psi + IM$	129.1	244.3
RTotal	270.8	592.9

NOTE:
For Unit 2 Interior Girder at Pier 3 & 4, top flange capacity controls Strength I design. Bottom flange capacity controls Service II design. S_s , $S_c(n)$, $S_c(3n)$ are for bottom flange section modulus. $S_c(cr)$ is for top flange section modulus.

UNIT 3 - TYPICAL INTERIOR GIRDER MOMENT TABLE					
	0.4 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8
I_s	84,232	149,815	76,523	118,303	76,523
$I_c(n)$	179,637	-----	168,961	-----	168,961
$I_c(3n)$	132,857	-----	124,297	-----	124,297
$I_c(cr)$	-----	170,020	-----	138,923	-----
S_s	2085	3714	1903	3062	1903
$S_c(n)$	2781	-----	2599	-----	2599
$S_c(3n)$	2519	-----	2343	-----	2343
$S_c(cr)$	-----	3893	-----	3258	-----
DC1	1.213	1.366	1.196	1.288	1.196
MDC1	2844	5225	1471	2800	802
DC2	0.193	0.193	0.193	0.193	0.193
MDC2	456	809	242	449	129
DW	0.394	0.394	0.394	0.394	0.394
MDW	931	1652	494	917	264
$M\psi + IM$	3082	3381	2420	2696	1950
M_u (Strength I)	10,915	15,937	7117	10,155	4972
$\phi_r M_n$	13,255	16,536	13,055	13,264	13,521
f_s DC1	16.4	16.9	9.3	11.0	5.1
f_s DC2	2.2	2.5	1.2	1.7	0.7
f_s DW	4.4	5.1	2.5	3.4	1.4
f_s ($\psi + IM$)	13.3	10.4	11.2	9.9	9.0
f_s (Service II)	40.3	38.0	27.6	28.9	18.8
0.95 $R_h F_y f$	47.5	47.5	47.5	47.5	47.5
f_s (Total)(Strength I)	-----	-----	-----	-----	-----
$\phi_r F_n$	-----	-----	-----	-----	-----
Vr	69.9	69.1	61.5	75.7	71.4

UNIT 3 - TYPICAL INTERIOR GIRDER REACTION TABLE				
	Pier 5	Pier 6	Pier 7	Pier 8
RDC1	84.5	276.4	199.0	46.2
RDC2	13.3	42.4	31.5	7.3
RDW	27.2	86.5	64.3	14.8
$R\psi + IM$	126.7	248.3	227.6	111.6
RTotal	251.7	653.6	522.4	179.9

I_s , S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M\psi + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M\psi + IM$

$\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s ($\psi + IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

$M\psi + IM / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).

$f_{SDC1} + f_{SDC2} + f_{SDW} + 1.3 f_s (\psi + IM)$

0.95 $R_h F_y f$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

$1.25 (f_{SDC1} + f_{SDC2}) + 1.5 f_{SDW} + 1.75 f_s (\psi + IM)$

$\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vr: Maximum factored shear range in span computed according to Article 6.10.10.



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FILE NAME - 081-0178-C00AB-088-Moment and Reaction Tables - Units 2 & 3.dgn	USER NAME - ksnider	DESIGNED - AAY/SL	REVISED -
MODEL: Default	PLOT SCALE -	CHECKED - MFH/DTS	REVISED -
	PLOT DATE - 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - MFH/DTS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL PLATE GIRDER MOMENT AND REACTION TABLES - UNITS 2 & 3
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S88 OF S138 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	977
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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GIRDER 11 MOMENT TABLE						
	0.4 Sp. 9	Pier 9	0.5 Sp. 10	Pier 10	0.6 Sp. 11	
I_s	(in ⁴)	65,011	99,268	65,011	192,711	99,081
$I_c(n)$	(in ⁴)	148,269	205,132	148,269	328,749	211,311
$I_c(3n)$	(in ⁴)	113,344	157,176	113,344	-----	159,889
$I_c(cr)$	(in ⁴)	-----	117,832	-----	212,532	-----
S_s	(in ³)	1576	2474	1576	4598	2550
$S_c(n)$	(in ³)	2194	3,163	2194	-----	3325
$S_c(3n)$	(in ³)	2003	2,927	2003	-----	3058
$S_c(cr)$	(in ³)	-----	2649	-----	4751	-----
DC1	(k/')	1.153	1.228	1.153	1.440	1.246
M _{DC1}	(k)	1387	2437	741	6135	3734
DC2	(k/')	0.138	0.138	0.138	0.138	0.138
M _{DC2}	(k)	165	299	108	665	425
DW	(k/')	0.396	0.396	0.396	0.396	0.396
M _{DW}	(k)	473	858	309	1907	1220
M _{ℓ + IM}	(k)	2104	2696	2207	3845	3285
M _u (Strength I)	(k)	6332	9,425	5387	18,089	12,778
φ _r M _n	(k)	10,888	-----	11,339	19,697	15,898
f _s DC1	(ksi)	10.6	11.8	5.6	16.0	17.6
f _s DC2	(ksi)	1.0	1.2	0.6	1.7	1.7
f _s DW	(ksi)	2.8	3.5	1.9	4.8	4.8
f _s (ℓ+IM)	(ksi)	11.5	10.2	12.1	9.7	11.9
f _s (Service II)	(ksi)	29.3	29.9	23.8	35.1	39.4
0.95R _h F _{yr}	(ksi)	47.5	47.5	47.5	47.5	47.5
f _s (Total)(Strength I)	(ksi)	-----	43.7	-----	-----	-----
φ _r F _n	(ksi)	-----	48.0	-----	-----	-----
V _r	(k)	41.8	57.6	46.2	65.1	58.7

GIRDER 11 REACTION TABLE					
	Pier 8	Pier 9	Pier 10	S. Abut.	
R _{DC1}	(k)	59.4	182.0	294.4	96.4
R _{DC2}	(k)	6.9	22.0	32.0	10.8
R _{DW}	(k)	19.7	63.2	91.8	31.0
R _{ℓ + IM}	(k)	95.1	189.6	203.5	98.9
R _{Total}	(k)	181.1	456.8	621.7	237.1

GIRDER 15 MOMENT TABLE						
	0.4 Sp. 9	Pier 9	0.5 Sp. 10	Pier 10	0.6 Sp. 11	
I_s	(in ⁴)	65,011	99,268	65,011	192,711	103,577
$I_c(n)$	(in ⁴)	143,972	197,381	141,573	309,895	220,306
$I_c(3n)$	(in ⁴)	109,528	151,205	107,692	-----	163,487
$I_c(cr)$	(in ⁴)	-----	116,260	-----	210,798	-----
S_s	(in ³)	1576	2474	1576	4598	2916
$S_c(n)$	(in ³)	2174	3130	2162	-----	3775
$S_c(3n)$	(in ³)	1978	2891	1965	-----	3458
$S_c(cr)$	(in ³)	-----	2636	-----	4738	-----
DC1	(k/')	1.159	1.210	1.107	1.358	1.181
M _{DC1}	(k)	1391	2406	735	5589	3453
DC2	(k/')	0.138	0.138	0.138	0.138	0.138
M _{DC2}	(k)	161	297	111	654	429
DW	(k/')	0.396	0.396	0.396	0.396	0.396
M _{DW}	(k)	463	853	317	1877	1232
M _{ℓ + IM}	(k)	2290	2743	2334	3720	3509
M _u (Strength I)	(k)	6642	9459	5618	17129	12841
φ _r M _n	(k)	-----	-----	-----	-----	-----
f _s DC1	(ksi)	10.6	11.7	5.6	14.6	14.2
f _s DC2	(ksi)	1.0	1.2	0.7	1.7	1.5
f _s DW	(ksi)	2.8	3.5	1.9	4.8	4.3
f _s (ℓ+IM)	(ksi)	12.6	10.5	13.0	9.4	11.2
f _s (Service II)	(ksi)	30.8	30.1	25.0	33.2	34.5
0.95R _h F _{yr}	(ksi)	47.5	47.5	47.5	47.5	47.5
f _s (Total)(Strength I)	(ksi)	40.8	44.0	33.4	43.9	45.6
φ _r F _n	(ksi)	50.0	47.6	50.0	50.0	50.0
V _r	(k)	66.4	68.5	44.4	61.8	57.8

GIRDERS 15 REACTION TABLE					
	Pier 8	Pier 9	Pier 10	S. Abut.	
R _{DC1}	(k)	58.3	179.2	271.4	88.2
R _{DC2}	(k)	6.7	22.0	31.9	10.7
R _{DW}	(k)	19.2	63.1	91.6	30.8
R _{ℓ + IM}	(k)	90.5	177.9	183.3	87.2
R _{Total}	(k)	174.7	442.1	578.1	216.9

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in⁴ and in³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in⁴ and in³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{ℓ + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}

φ_rM_n: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

M_{DC2} / S_c(3n) or M_{DC2} / S_c(cr) as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

M_{DW} / S_c(3n) or M_{DW} / S_c(cr) as applicable.

f_s (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

M_{ℓ + IM} / S_c(n) or M_{DW} / S_c(cr) as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).

f_sDC1 + f_sDC2 + f_sDW + 1.3 f_s(ℓ + IM)

0.95R_hF_{yr}: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

1.25 (f_sDC1 + f_sDC2) + 1.5 f_sDW + 1.75 f_s(ℓ + IM)

φ_rF_n: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_r: Maximum factored shear range in span computed according to Article 6.10.10.

NOTES:

- Deck slab does not crack at Pier 9 during service loading.
- Girder 15 limited to elastic strength due to kink in girder.



FILE NAME - 081-0178-C00AB-089-Girder Moment and Reaction Tables Unit 4.dgn	USER NAME - ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE -	CHECKED - AJK/RJT	REVISED -
	PLOT DATE: 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK/RJT	REVISED -

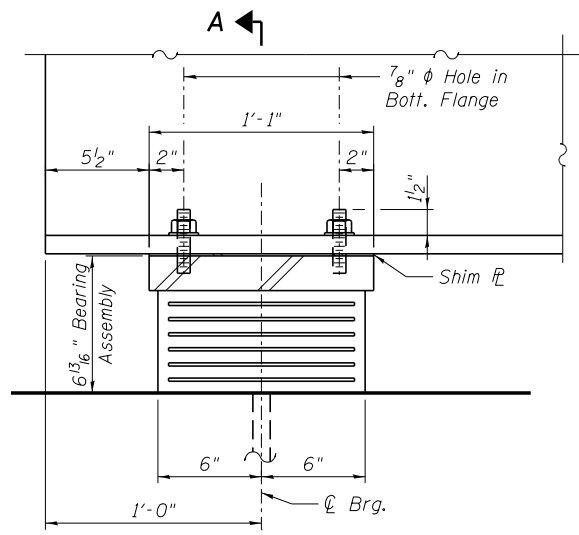
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL PLATE GIRDER MOMENT AND REACTION TABLES - UNIT 4
STRUCTURE NO. 081-0178 (EASTBOUND)**

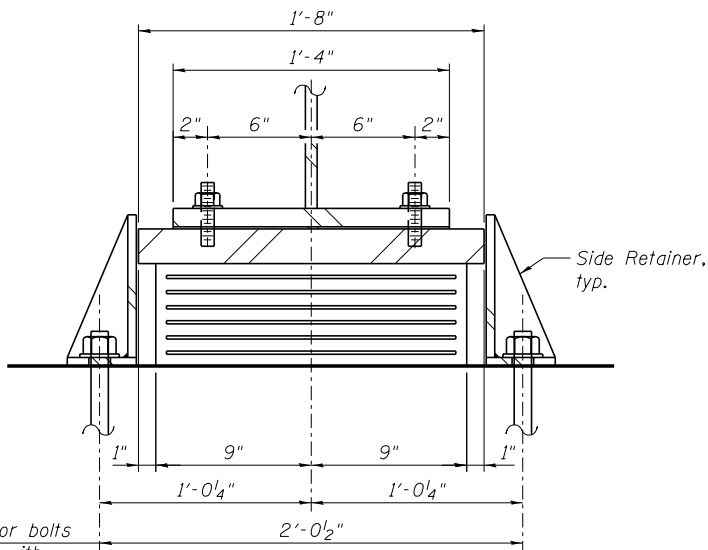
SHEET NO. S89 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	978
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

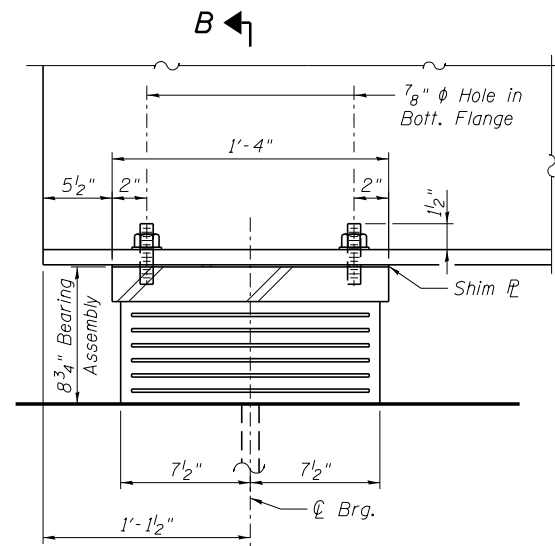
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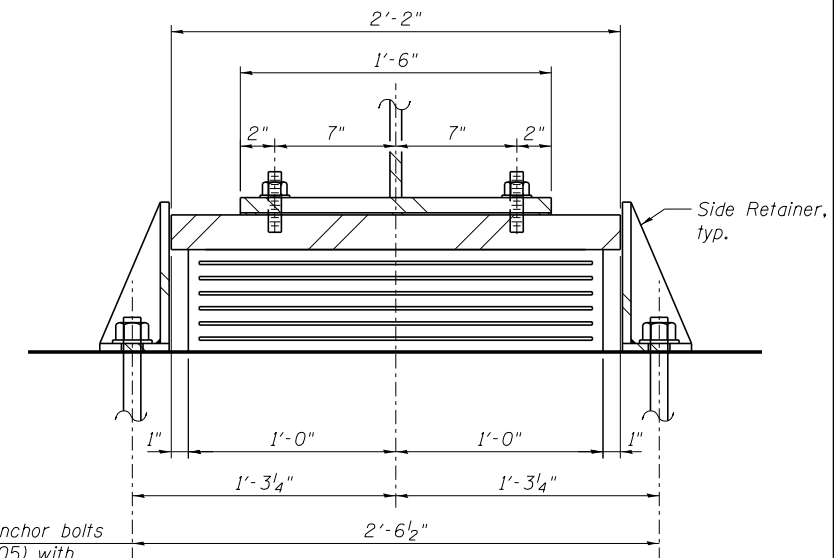
ELEVATION



SECTION A-A



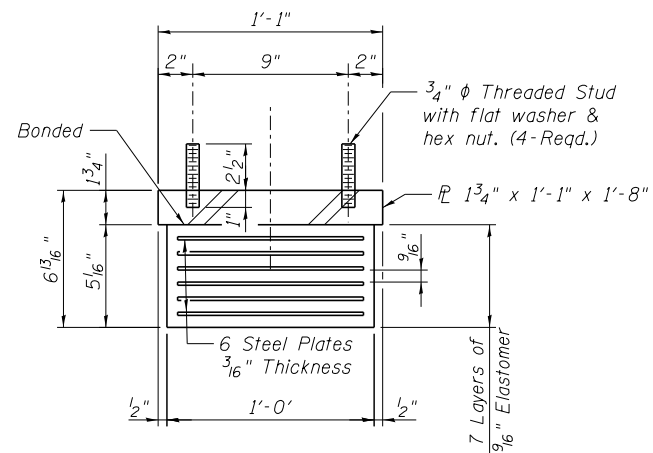
ELEVATION



SECTION B-B

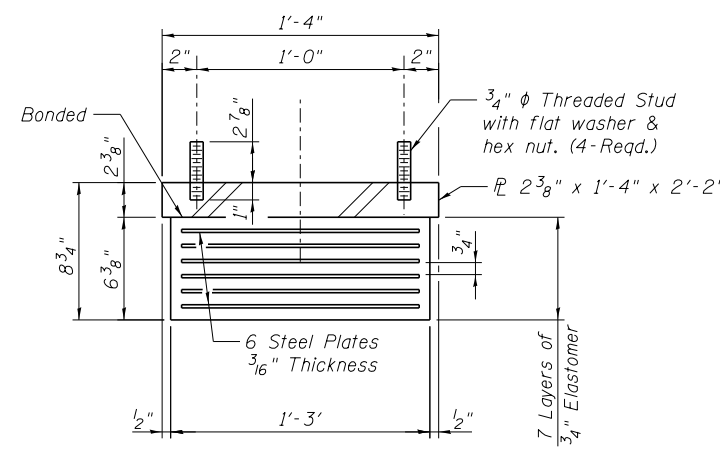
4 1" ϕ x 12" Anchor bolts (F1554 Grade 105) with 2 1/4" x 2 1/4" x 5/16" \mathcal{P} washer under nut

4 1" ϕ x 12" Anchor bolts (F1554 Grade 105) with 2 1/4" x 2 1/4" x 5/16" \mathcal{P} washer under nut



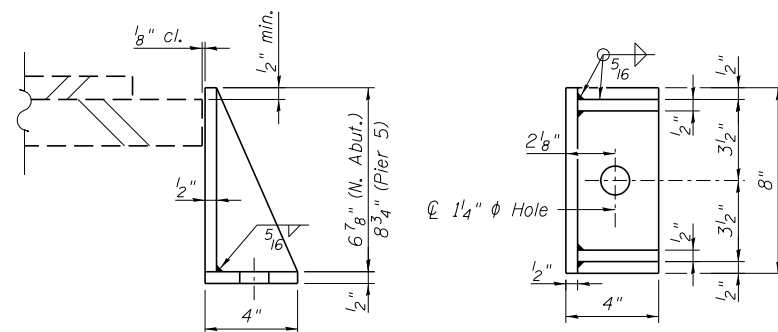
BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG. NORTH ABUTMENT
(13 Required)



BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG. PIER 5 (SPAN 5 AND SPAN 6)
(18 Required)



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	31
Anchor Bolts, 1"	Each	62

NOTES:

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Shim plates shall not be placed under Type I bearing assemblies.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

I-2E-1

I-27-12

FILE NAME = 081-0178-C00AB-090-Elastomeric Bearing Type I.dgn

USER NAME = ksnyder

DESIGNED - DMS

REVISED -

MODEL: Default

PLOT SCALE =

CHECKED - AJK

REVISED -

PLOT DATE = 1/18/2017

DRAWN - KMS

REVISED -

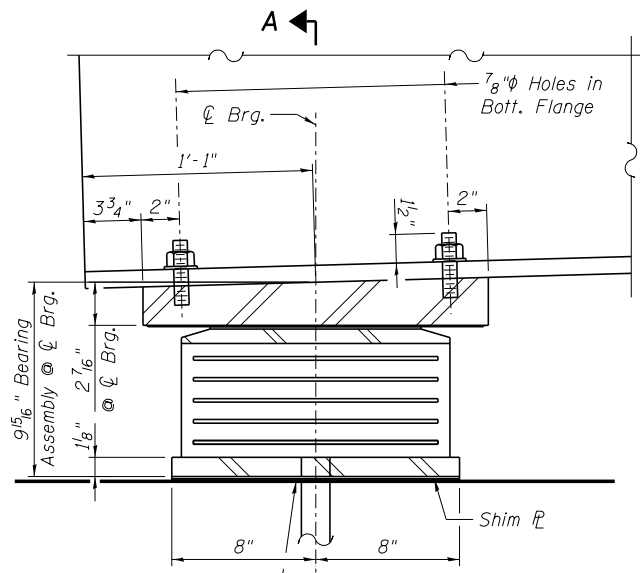
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPE I ELASTOMERIC BEARING DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S90 OF S138 SHEETS

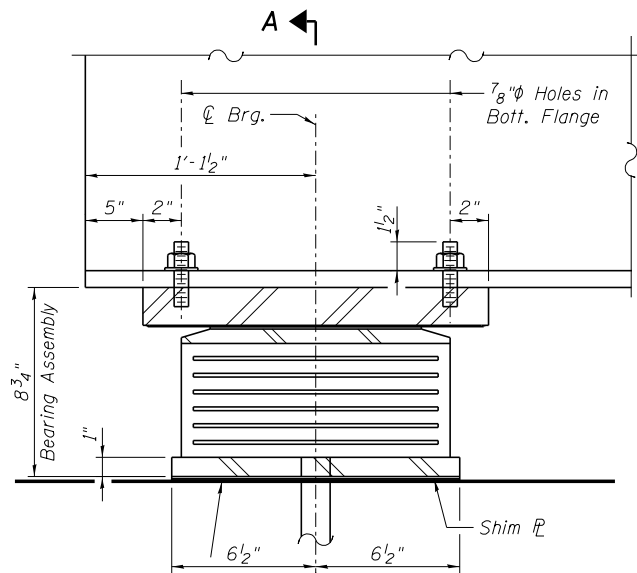
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	979
			CONTRACT NO. 64C08	

ILLINOIS FED. AID PROJECT



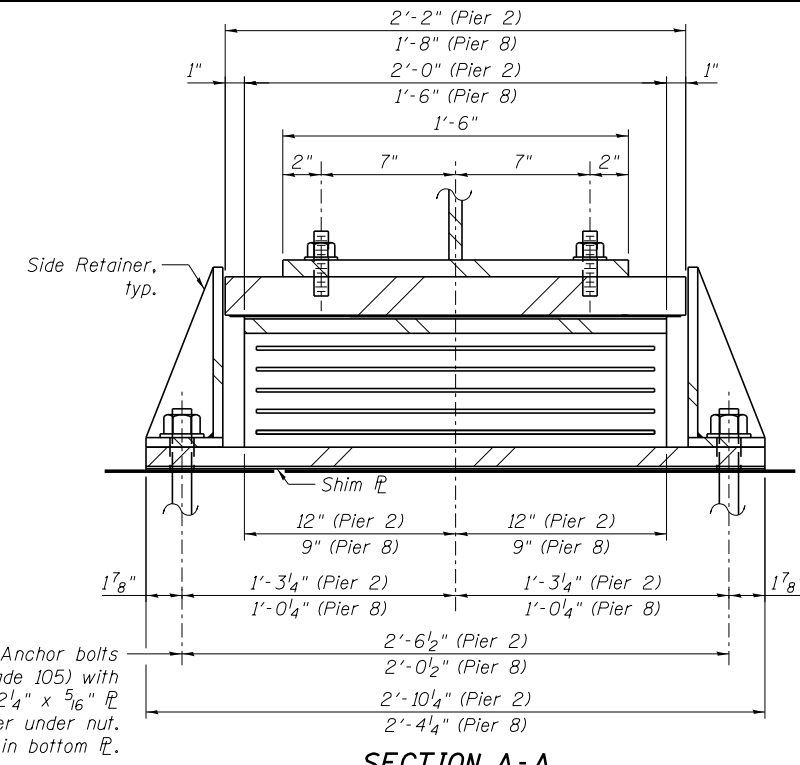
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Elastomeric Bearing Assembly Type II.

ELEVATION
(Looking East)



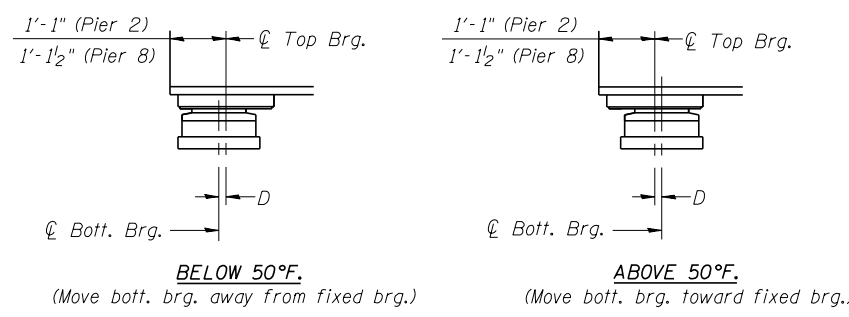
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Elastomeric Bearing Assembly Type II.

ELEVATION
(Looking East)



1" x 12" Anchor bolts (F1554 Grade 105) with 2 1/4" x 2 1/4" x 5/16" PL washer under nut. 1 1/2" diameter holes in bottom PL.

SECTION A-A



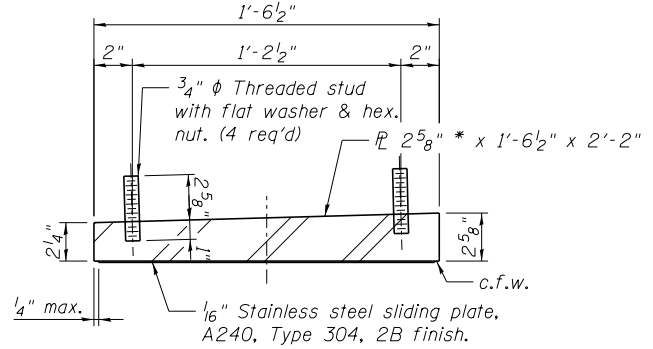
SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

NOTES:
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

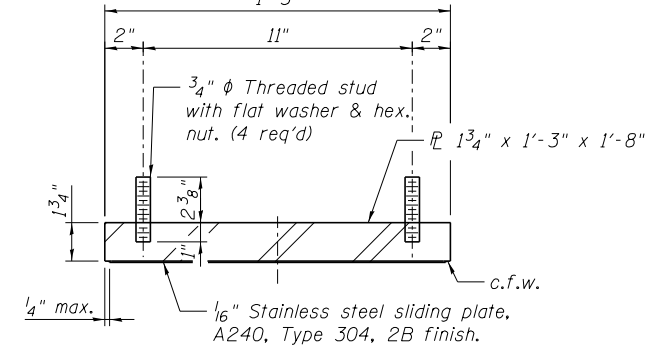
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	18
Anchor Bolts, 1"	Each	36

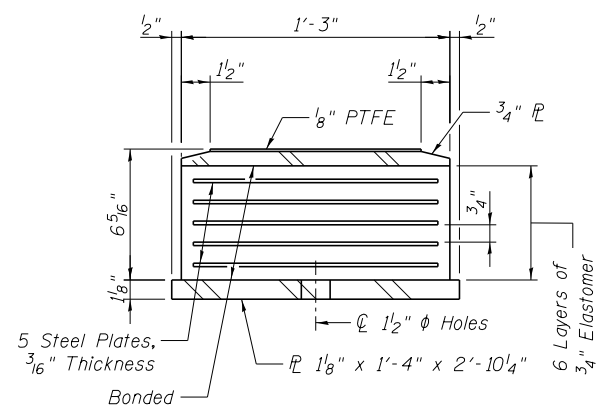


TOP BEARING ASSEMBLY

* Max. - top PL beveled

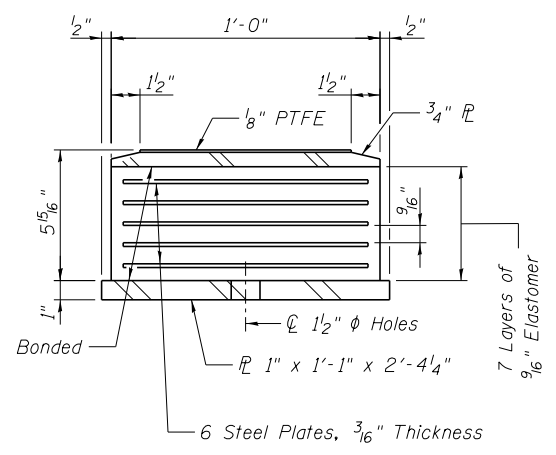


TOP BEARING ASSEMBLY



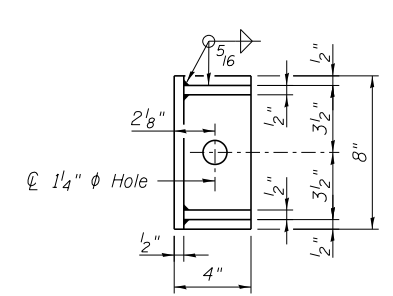
BOTTOM BEARING ASSEMBLY

TYPE II ELASTOMERIC EXP. BRG. @ PIER 2 (SPAN 3)
(9 Required)



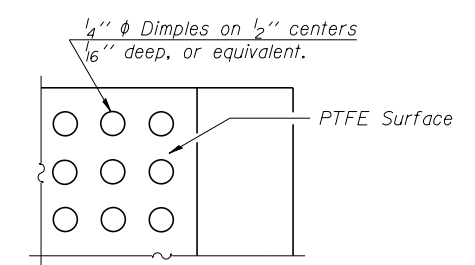
BOTTOM BEARING ASSEMBLY

TYPE II ELASTOMERIC EXP. BRG. @ PIER 8 (SPAN 8)
(9 Required)

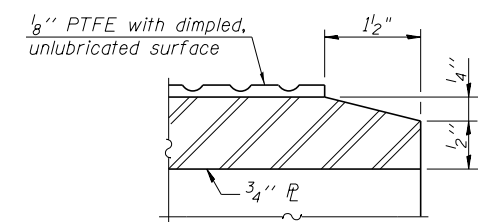


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN-PTFE SURFACE



SECTION THRU PTFE

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

I-2E-2

I-27-12

FILE NAME	USER NAME	DESIGNED	REVISIONS
081-0178-C004B-091-Elastomeric Bearing Type II.dgn	ksnyder	DMS/DTS	-
		AJK/TPS	-
		KMS	-
		AJK/TPS	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

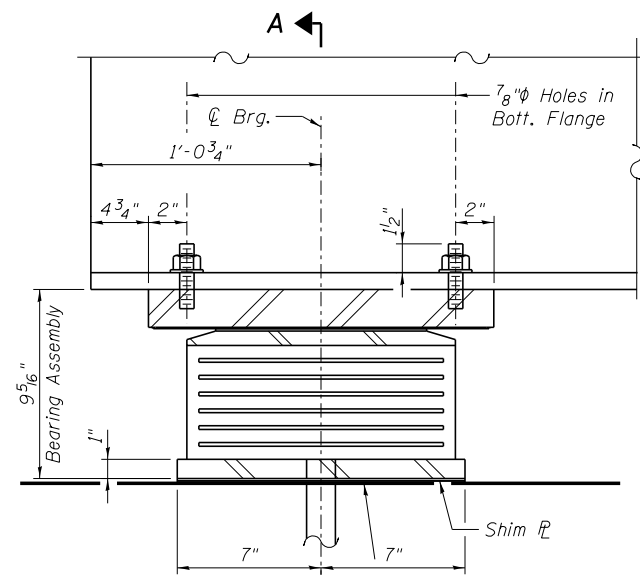
TYPE II ELASTOMERIC BEARING DETAILS (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S91 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	980
				CONTRACT NO. 64C08

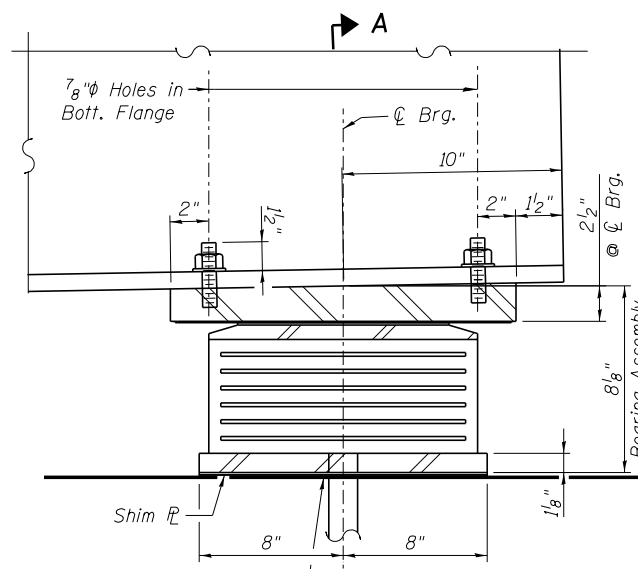
ILLINOIS FED. AID PROJECT

11:53:17 AM c:\pwise_work\do_not_delete\dms02467\081-0178-C004B-091-Elastomeric Bearing Type II.dgn 1/18/2017



ELEVATION
(Looking East)

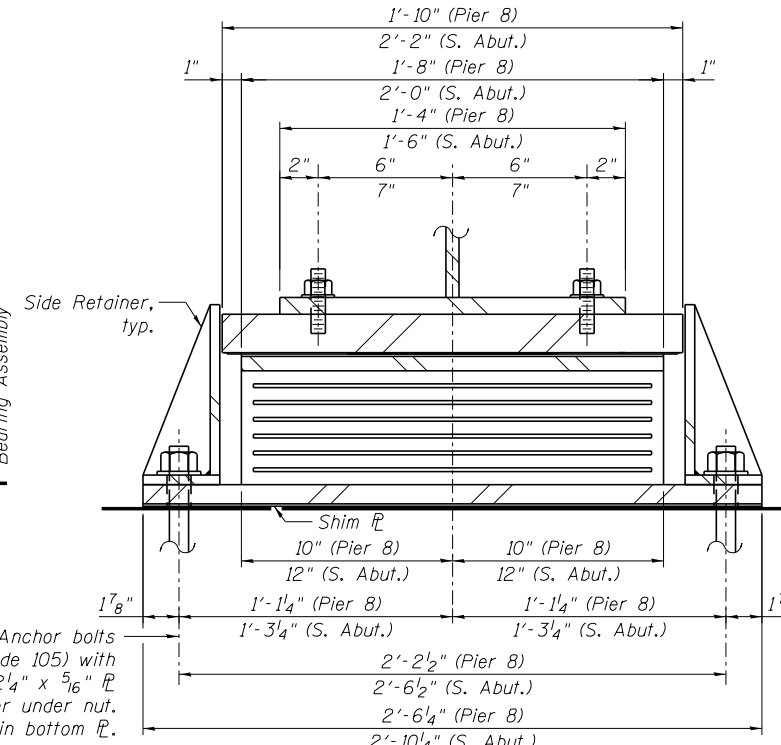
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Elastomeric Bearing Assembly Type II.



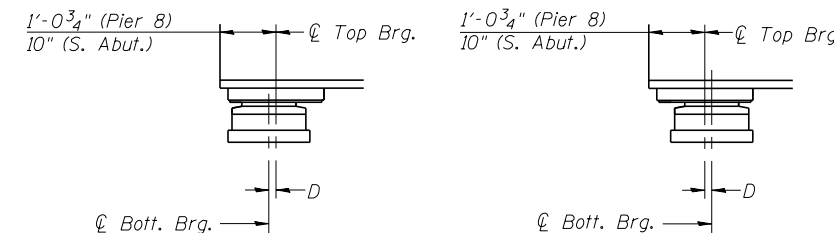
ELEVATION
(Looking East)

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Elastomeric Bearing Assembly Type II.

1" ϕ x 12" Anchor bolts (F1554 Grade 105) with 2 1/4" x 2 1/4" x 5/16" \mathcal{P} washer under nut. 1 1/2" ϕ Holes in bottom \mathcal{P} .



SECTION A-A



BELOW 50°F.

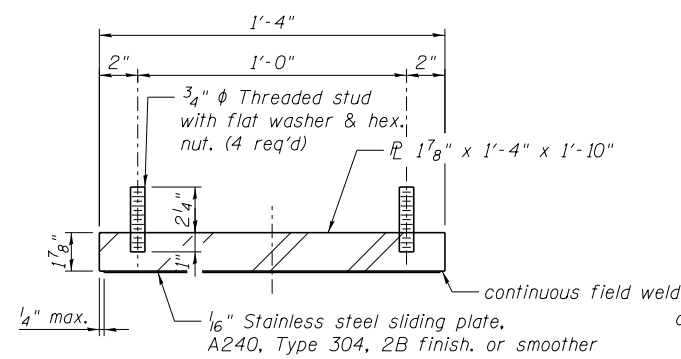
(Move bott. brg. away from fixed brg.)

ABOVE 50°F.

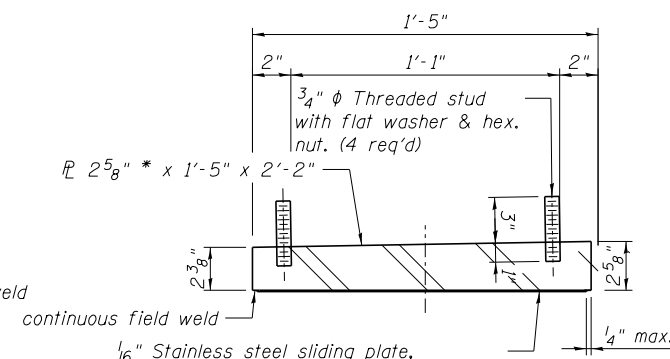
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

$D = \frac{1}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

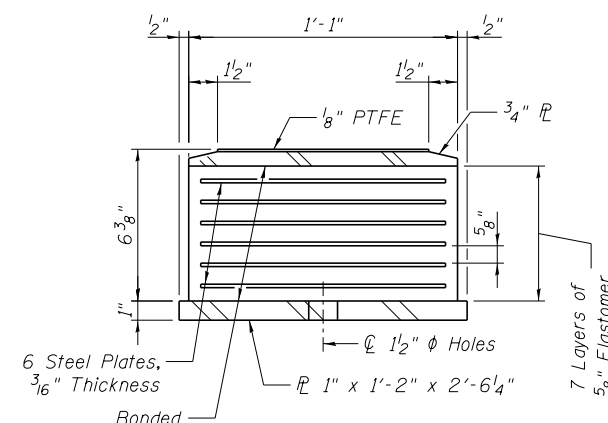


TOP BEARING ASSEMBLY



TOP BEARING ASSEMBLY

* Max. - top \mathcal{P} beveled

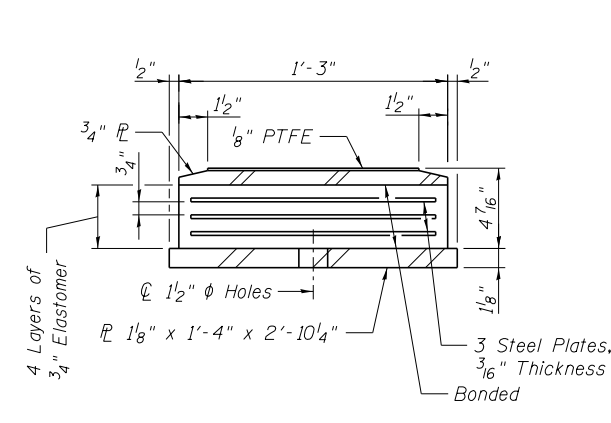


BOTTOM BEARING ASSEMBLY

TYPE II ELASTOMERIC EXP.

BRG. at PIER 8 (SPAN 9)

(8 Required)

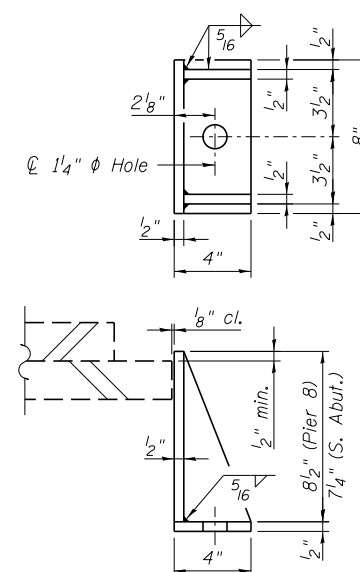


BOTTOM BEARING ASSEMBLY

TYPE II ELASTOMERIC EXP.

BRG. at S ABUT.

(8 Required)



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

NOTES:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

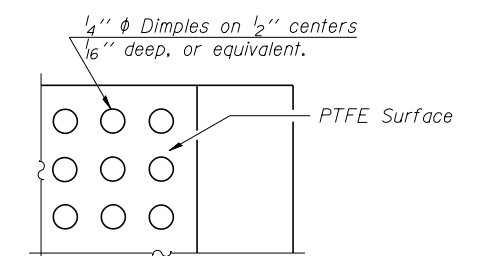
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

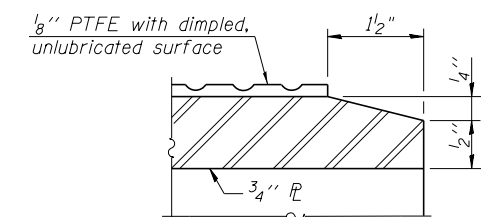
The structural steel plates of the bearing assembly, shall conform to requirements of AASHTO M270 Grade 50.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	16
Anchor Bolts, 1"	Each	32



PLAN-PTFE SURFACE



SECTION THRU PTFE



Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

I-2E-2

I-27-12

FILE NAME = 081-0178-C00AB-092-Type II Elastomeric Bearing Details.dgn
MODEL: Default

USER NAME = ksnyder
DESIGNED - DTS
CHECKED - AJK
PLOT SCALE =
DRAWN - KMS
PLOT DATE = 1/18/2017
CHECKED - AJK

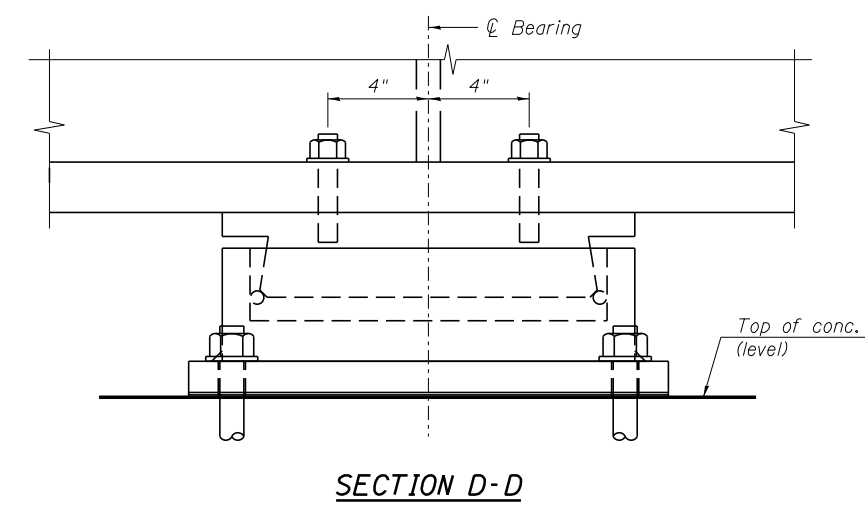
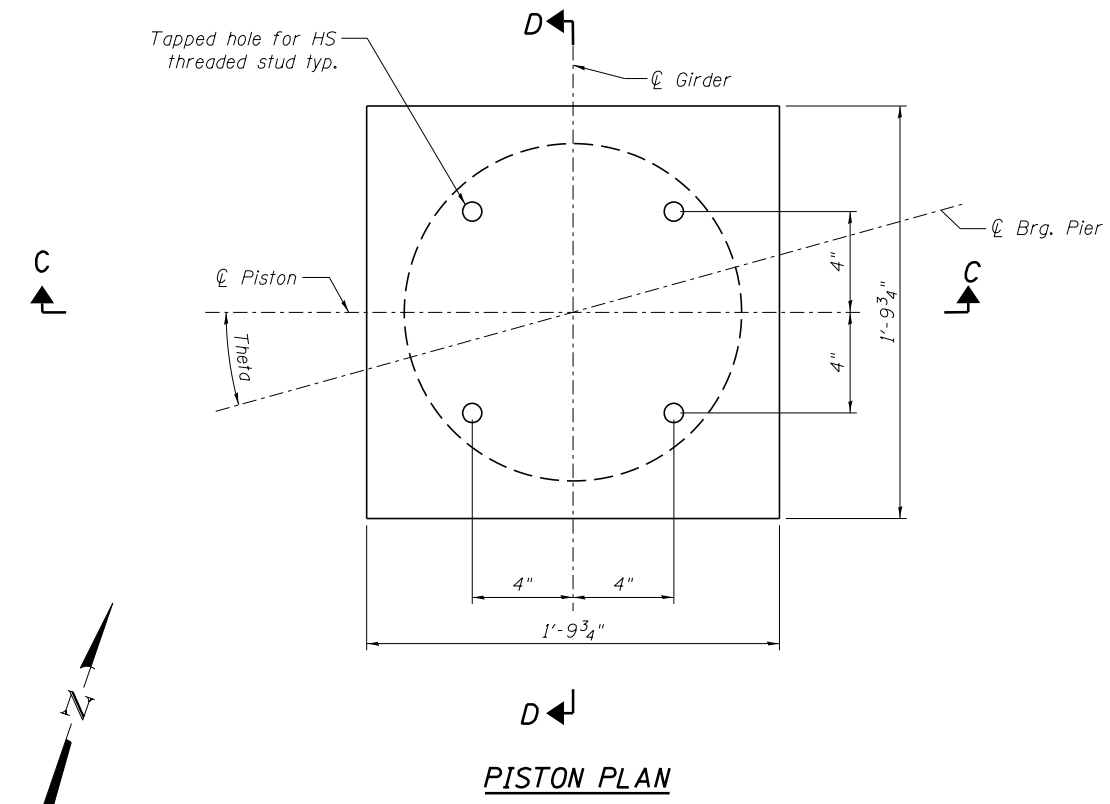
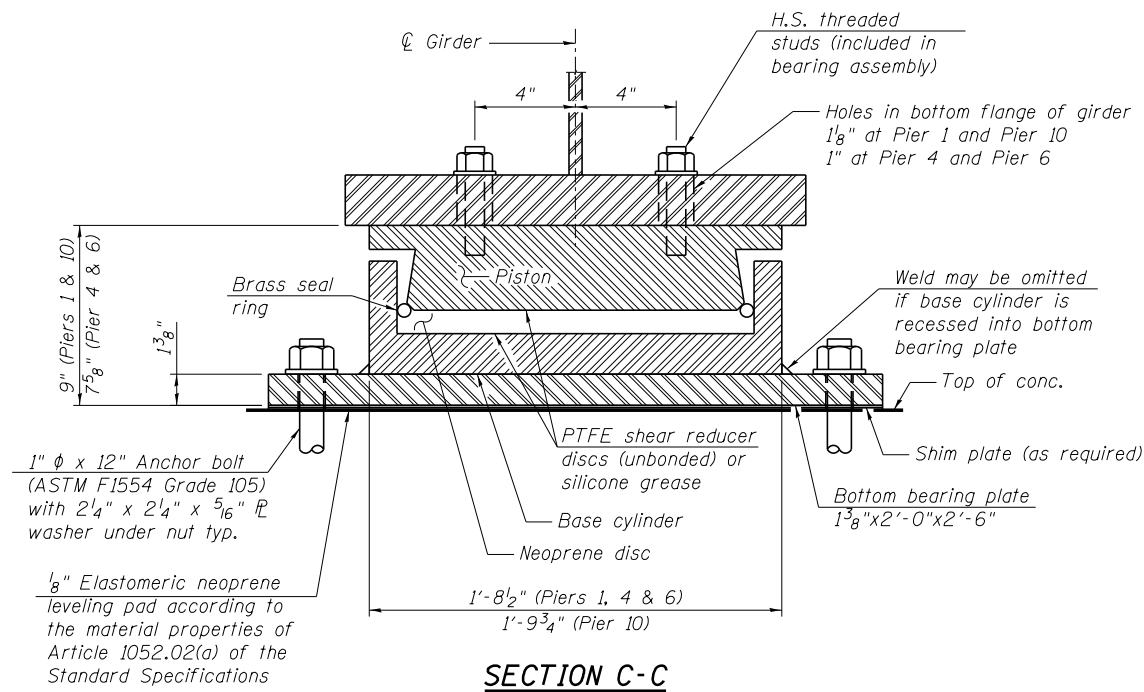
REVISOR -
REVISION -
REVISOR -
REVISION -
REVISOR -
REVISION -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPE II ELASTOMERIC BEARING DETAILS (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

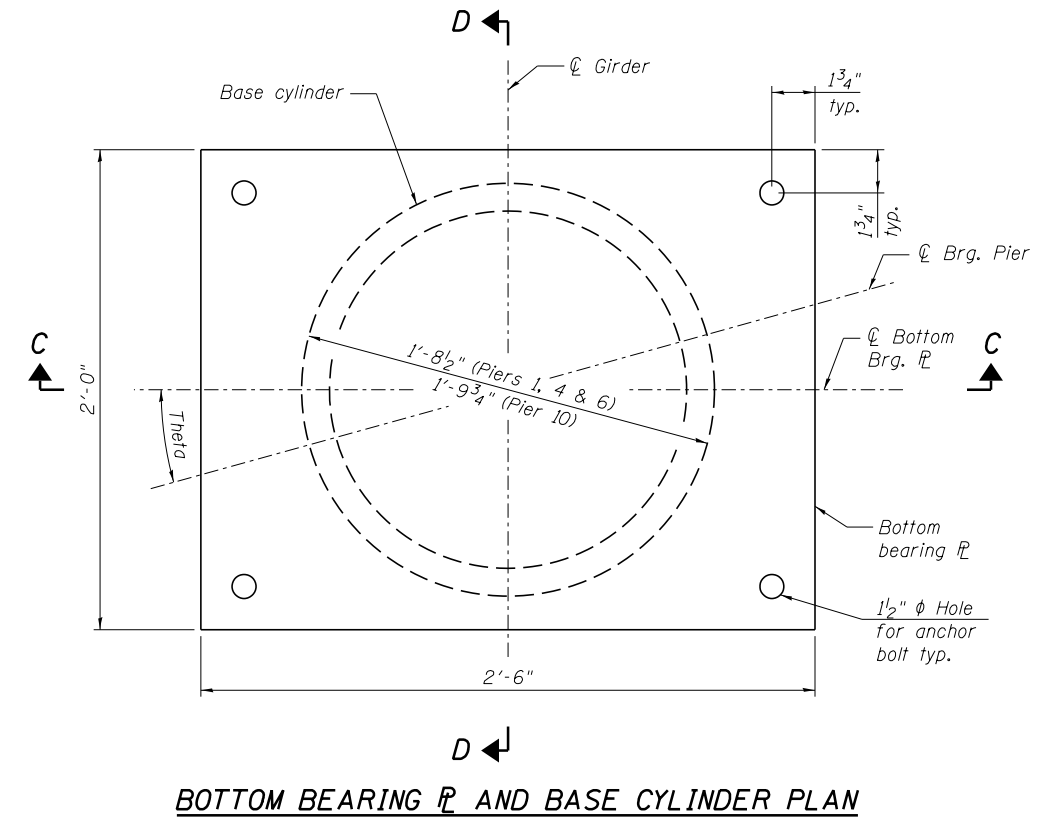
SHEET NO. S92 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	981
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	



Skew

Location	Theta
Pier 1, Girder 1	15°30'00"
Pier 1, Girder 2	15°52'35"
Pier 1, Girder 3	16°15'05"
Pier 1, Girder 4	16°37'30"
Pier 1, Girder 5	16°59'50"
Pier 1, Girder 6	17°22'04"
Pier 1, Girder 7	17°44'13"
Pier 1, Girder 8	18°06'17"
Pier 1, Girder 9	18°28'15"
Pier 1, Girder 10	18°50'07"
Pier 1, Girder 11	19°11'54"
Pier 1, Girder 12	18°52'54"
Pier 1, Girder 13	18°33'28"
Pier 4	15°30'00"
Pier 6, Girders 1-7	15°30'00"
Pier 6, Girder 8	15°05'30"
Pier 6, Girder 9	14°40'54"
Pier 10	15°30'00"



BEARING DIMENSIONS

Location	Pay Item Designation (kips)	Vert. Design Load* (kips)	Hu. Horiz. Design Load* (kips)	θ , Req'd Rotation Range** (radians)	Top Plate Bevel	Threaded Studs ϕ
Pier 1	650	634	91	0.02	2.10%	1"
Pier 4	600	559	70	0.02	N/A	7/8"
Pier 6	650	620	81	0.02	N/A	7/8"
Pier 10	700	698	91	0.02	N/A	1"

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Fixed, 600K	Ea.	9
High Load Multi-Rotational Bearings, Fixed, 650K	Ea.	22
High Load Multi-Rotational Bearings, Fixed, 700K	Ea.	8
Anchor Bolts, 1"	Ea.	156

* Design Loads are the governing loads with no dynamic allowance.
 ** Rotation allowances for fabrication tolerances (0.005 radians) and installation uncertainties (0.005 radians) are excluded.

NOTE:
 1. For notes see sheet S94.



FILE NAME = 081-0178-C00AB-093-HLMR Bearing Details, Fixed.dgn	USER NAME = ksnyder	DESIGNED - DMS/DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - DTS/AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - DTS/AJK	REVISED -

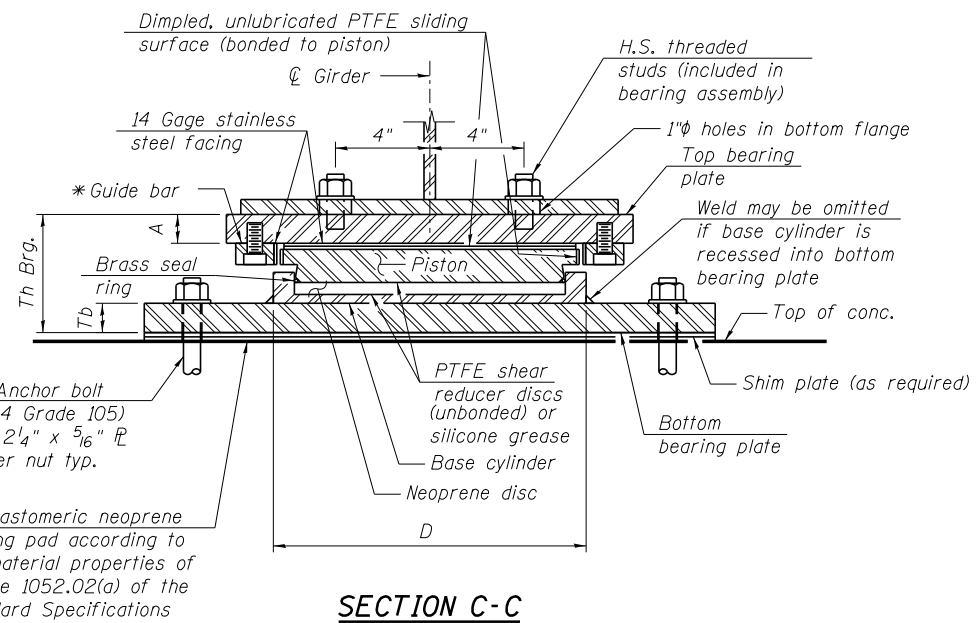
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**HLMR FIXED BEARING DETAILS
 STRUCTURE NO. 081-0178 (EASTBOUND)**

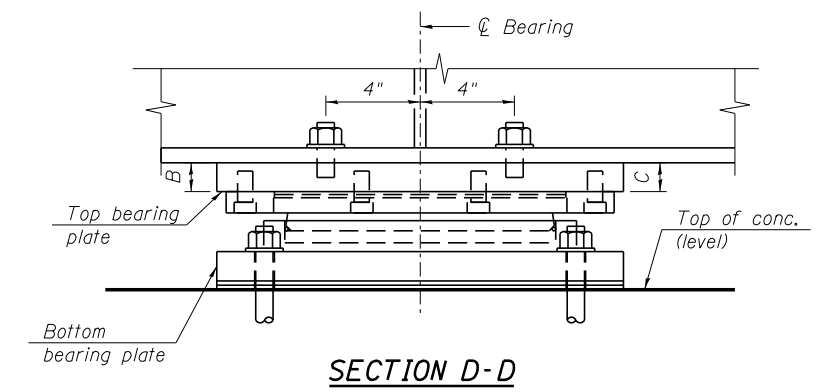
SHEET NO. S93 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	982
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

c:\pwise_work\do_not_delete\dms02467\081-0178-C00AB-093-HLMR Bearing Details, Fixed.dgn 11:53:26 AM 1/18/2017



SECTION C-C



SECTION D-D

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 300K	Ea.	13
High Load Multi-Rotational Bearings, Guided Expansion, 500K	Ea.	17
High Load Multi-Rotational Bearings, Guided Expansion, 600K	Ea.	9
Anchor Bolts, 1"	Ea.	156

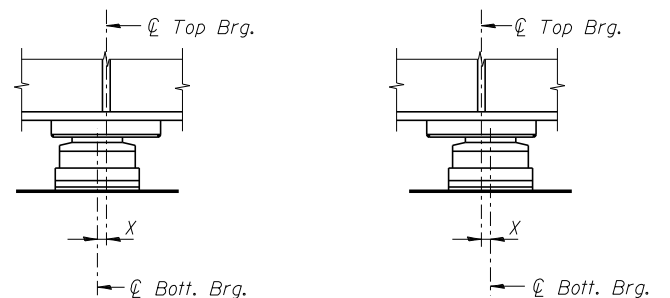
BEARING DIMENSIONS

Location	Pay Item Designation (kips)	Vert. Design Load** (kips)	Hu, Horiz. Design Load** (kips)	θu, Req'd Rotation Range*** (radians)	Max. Theor. Thermal Mvmt**** from 50 °F	Top Plate				Bearing Assembly		Bottom Plate			Total Ht.		
						Wt	Lt	"A" R Thickness @ C Brg.	"B" R Thickness @ North End	"C" R Thickness @ South End	Threaded Stud φ	L	D	Wb		Lb	Tb
Pier 2 (Span 2)	300	272	42	0.02	1 1/2"	1'-8 1/4"	1'-9"	2 1/8"	1 7/8"	2 1/4"	7/8"	1'-3 3/8"	1'-3 3/8"	1'-6"	2'-4 1/2"	1 1/2"	8 1/2"
Pier 3	600	559	70	0.02	1 1/4"	1'-11 1/8"	1'-11 1/2"	2 5/8"	N/A	N/A	7/8"	1'-7"	1'-7"	2'-0"	2'-6"	1 5/8"	9 1/8"
Pier 7	500	489	59	0.02	1 1/4"	1'-10 1/2"	1'-11"	2 3/8"	N/A	N/A	7/8"	1'-5 5/8"	1'-5 5/8"	2'-0"	2'-6"	1 5/8"	9 5/8"
Pier 9	500	500	58	0.02	1 1/4"	1'-10 1/2"	1'-11"	2 3/8"	N/A	N/A	7/8"	1'-5 5/8"	1'-5 5/8"	2'-0"	2'-6"	1 5/8"	9 5/8"

* As an alternate to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece. Guide bars shall be omitted from G1 and G13 for Pier 2 (Span 2).
 ** Design Loads are the governing loads with no dynamic load allowance.
 *** Rotation allowances for fabrication tolerances (0.005 radians), installation uncertainties (0.005 radians) are excluded.
 **** Total required movement is based on one way expansion (or contraction) of the superstructure perpendicular to the centerline of girder when bearings are set at 50°F. Bearing movement tolerances are excluded.

Skew

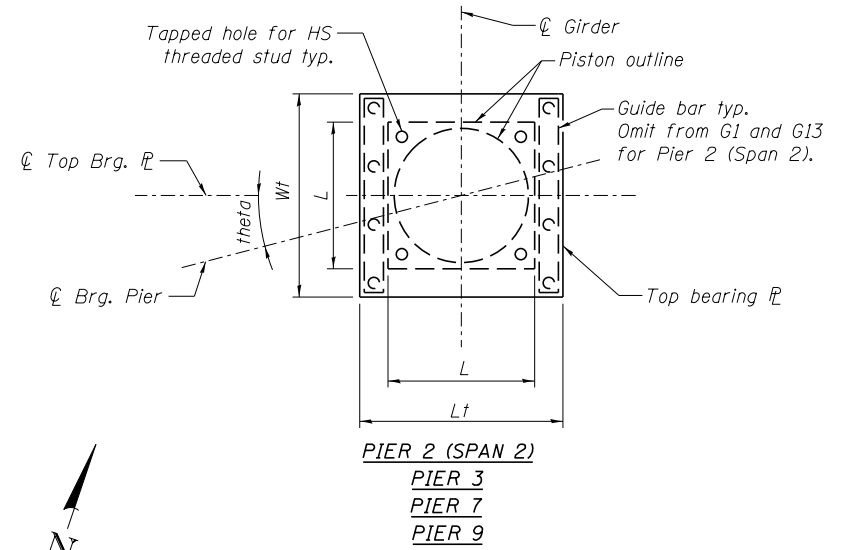
Location	Theta
Pier 2 (Span 2), Girder 1	15°30'00"
Pier 2 (Span 2), Girder 2	15°52'35"
Pier 2 (Span 2), Girder 3	16°15'05"
Pier 2 (Span 2), Girder 4	16°37'30"
Pier 2 (Span 2), Girder 5	16°59'50"
Pier 2 (Span 2), Girder 6	17°22'04"
Pier 2 (Span 2), Girder 7	17°44'13"
Pier 2 (Span 2), Girder 8	18°06'17"
Pier 2 (Span 2), Girder 9	18°28'15"
Pier 2 (Span 2), Girder 10	18°50'07"
Pier 2 (Span 2), Girder 11	19°11'54"
Pier 2 (Span 2), Girder 12	22°41'05"
Pier 2 (Span 2), Girder 13	24°04'13"
Pier 3, All Girders	15°30'00"
Pier 7, Girders 1-7	15°30'00"
Pier 7, Girder 8	15°05'30"
Pier 7, Girder 9	14°40'54"
Pier 9, Girders 8-13	15°30'00"
Pier 9, Girder 14	15°04'19"
Pier 9, Girder 15	14°38'31"



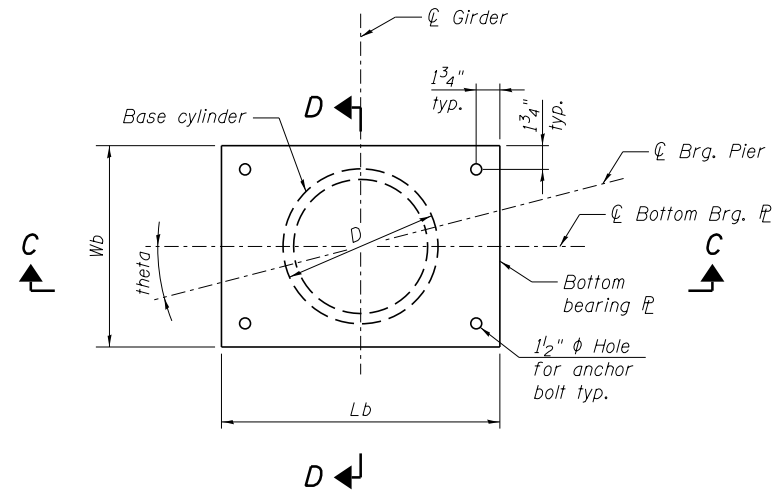
BELOW 50°F (Move bottom brg. away from fixed brg.) **ABOVE 50°F** (Move bottom brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

X = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



TOP BEARING PLATE AND PISTON PLAN



PIER 2 (SPAN 2)
PIER 3
PIER 7
PIER 9
BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

NOTES:

- All steel for bearings shall conform to the requirements of AASHTO M270 Grade 50, unless otherwise noted.
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554. Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Total bearing height is taken at the centerline of bearing for bevelled top plates.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



FILE NAME = 081-0178-C00AB-094-HLMR Bearings Details, Guided.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK/DTS	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
		CHECKED - AJK/DTS	REVISED -

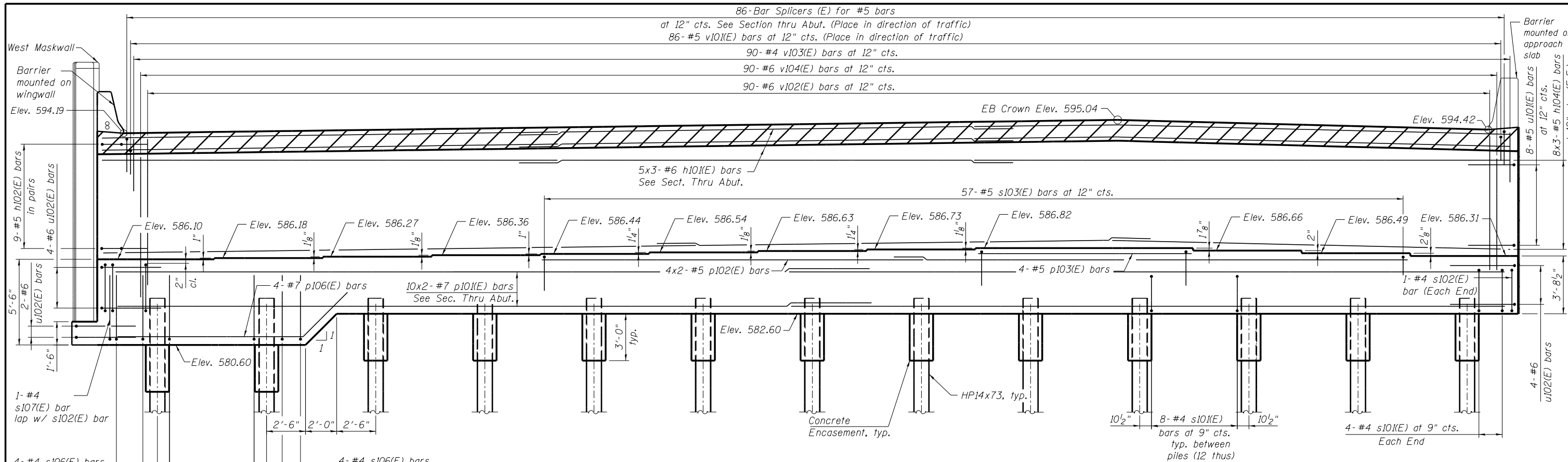
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HLMR GUIDED EXPANSION BEARING DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S94 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	983
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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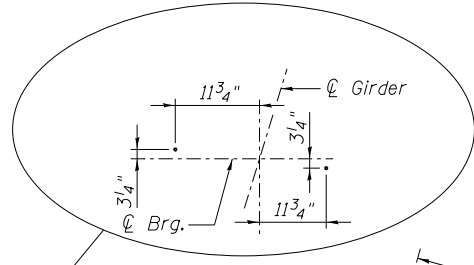
ELEVATION

MINIMUM BAR LAP

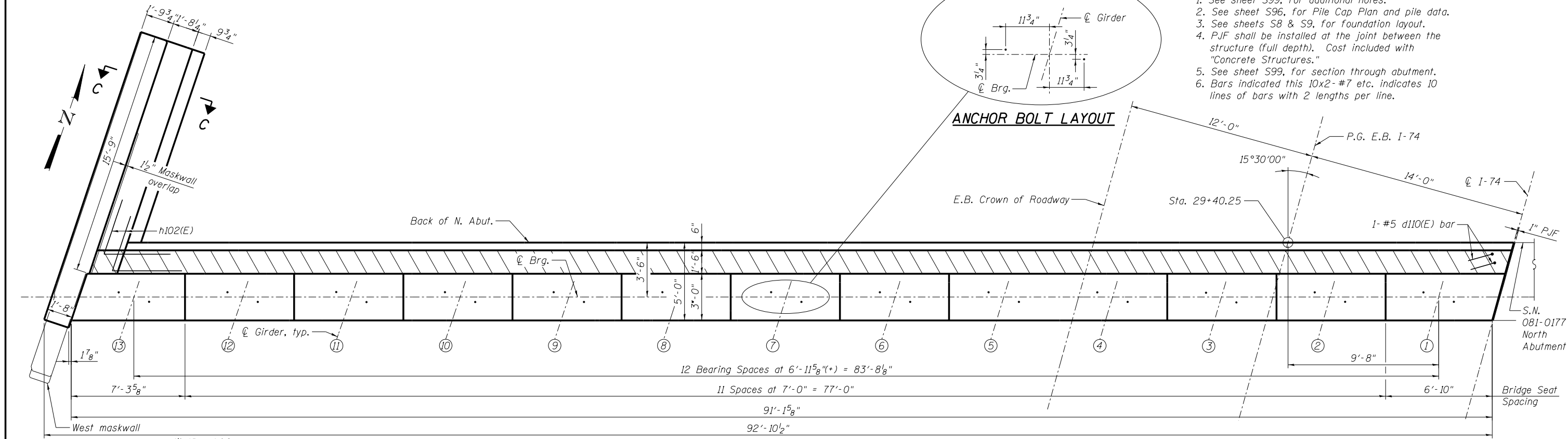
- #5 bar = 3'-3"
- #6 bar = 3'-10"
- #7 bar = 5'-2"

NOTES:

1. See sheet S99, for additional notes.
2. See sheet S96, for Pile Cap Plan and pile data.
3. See sheets S8 & S9, for foundation layout.
4. PJF shall be installed at the joint between the structure (full depth). Cost included with "Concrete Structures."
5. See sheet S99, for section through abutment.
6. Bars indicated this 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.



ANCHOR BOLT LAYOUT



TOP VIEW

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-095-North Abutment Layout.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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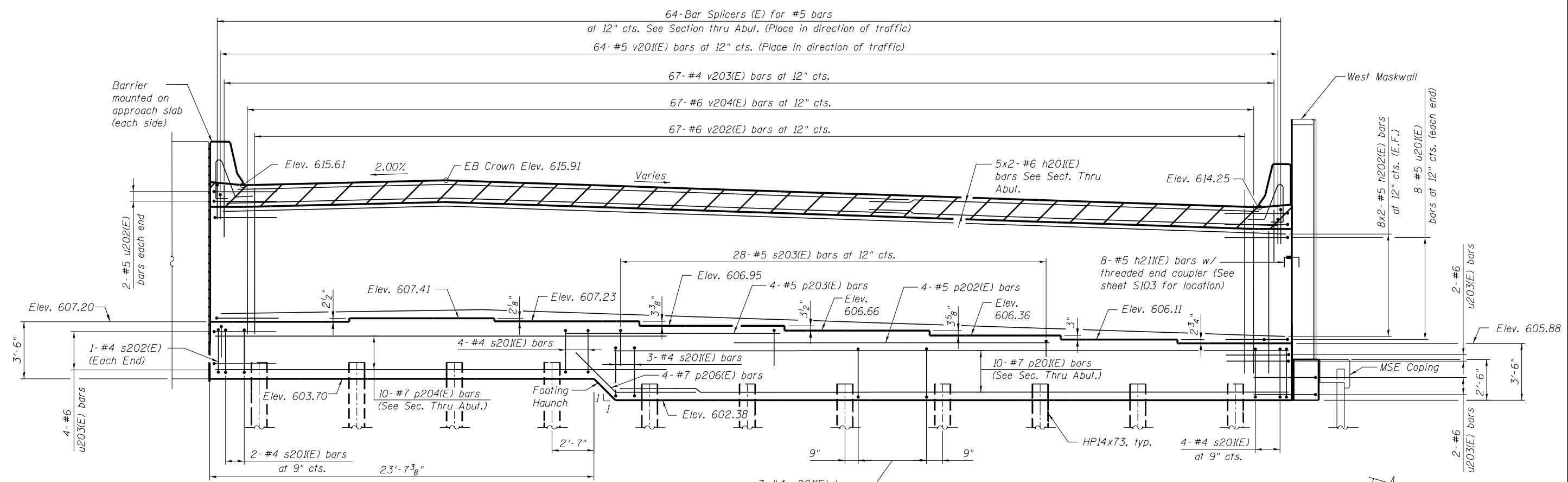
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT LAYOUT
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S95 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	984
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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MINIMUM BAR LAP

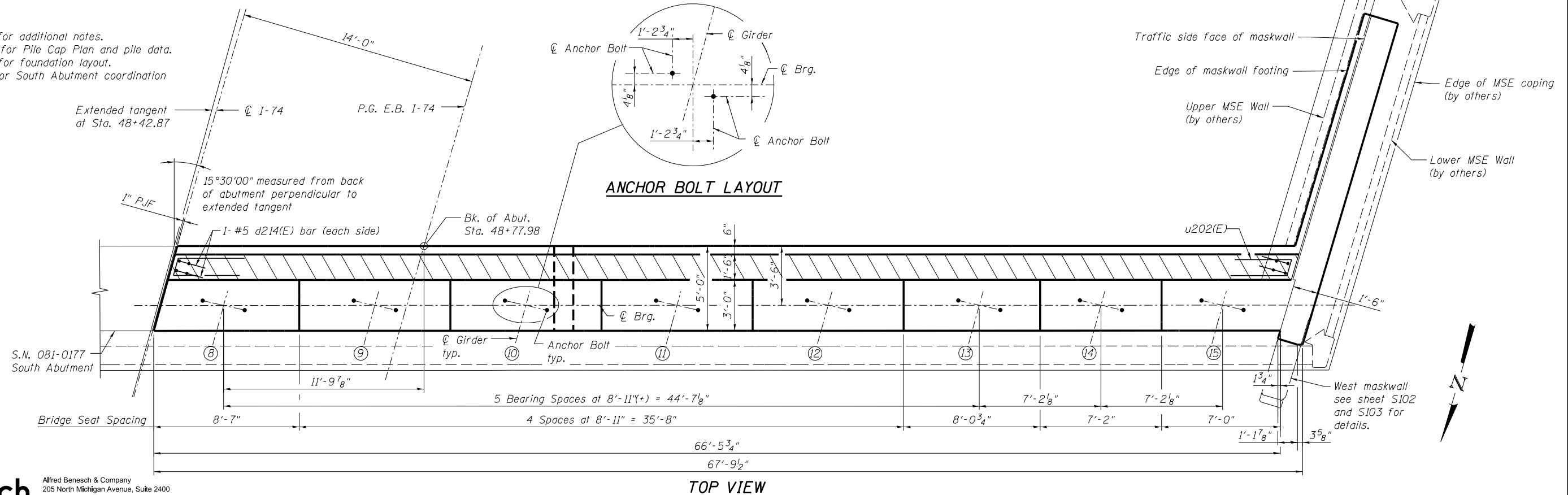
- #5 bar = 3'-3"
- #6 bar = 3'-10"
- #7 bar = 5'-2"

NOTES:

1. See sheet S99 for additional notes.
2. See sheet S98 for Pile Cap Plan and pile data.
3. See sheet S10 for foundation layout.
4. See sheet S7 for South Abutment coordination requirements.

ELEVATION

ANCHOR BOLT LAYOUT



TOP VIEW

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-097-South Abutment Layout.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Plot Sheet	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
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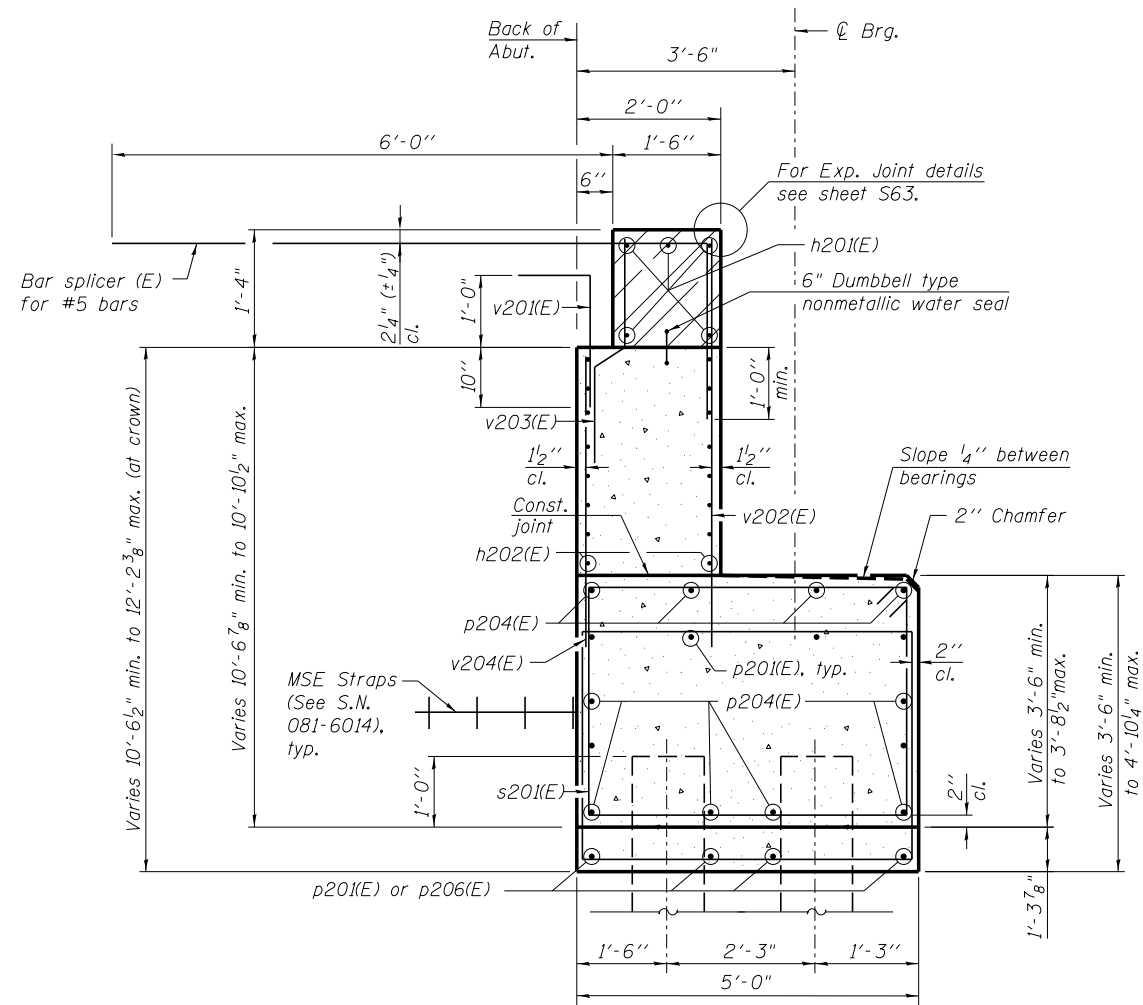
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT LAYOUT
 STRUCTURE NO. 081-0178 (EASTBOUND)**

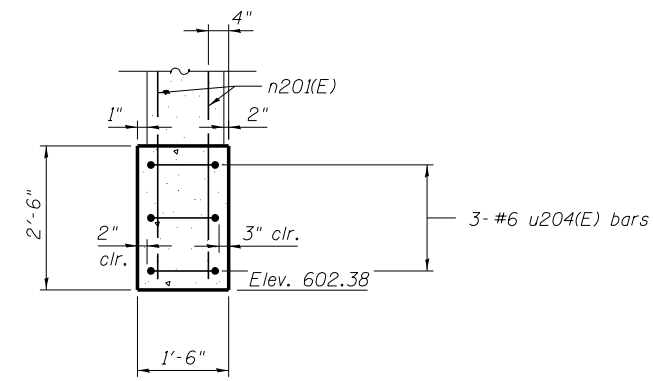
SHEET NO. S97 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	986
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

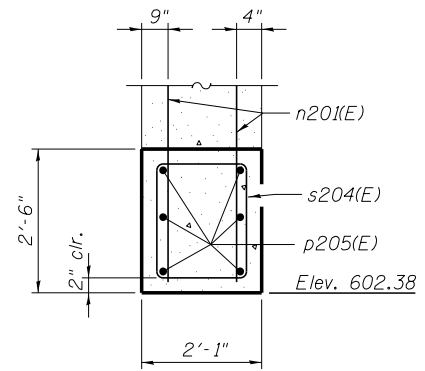
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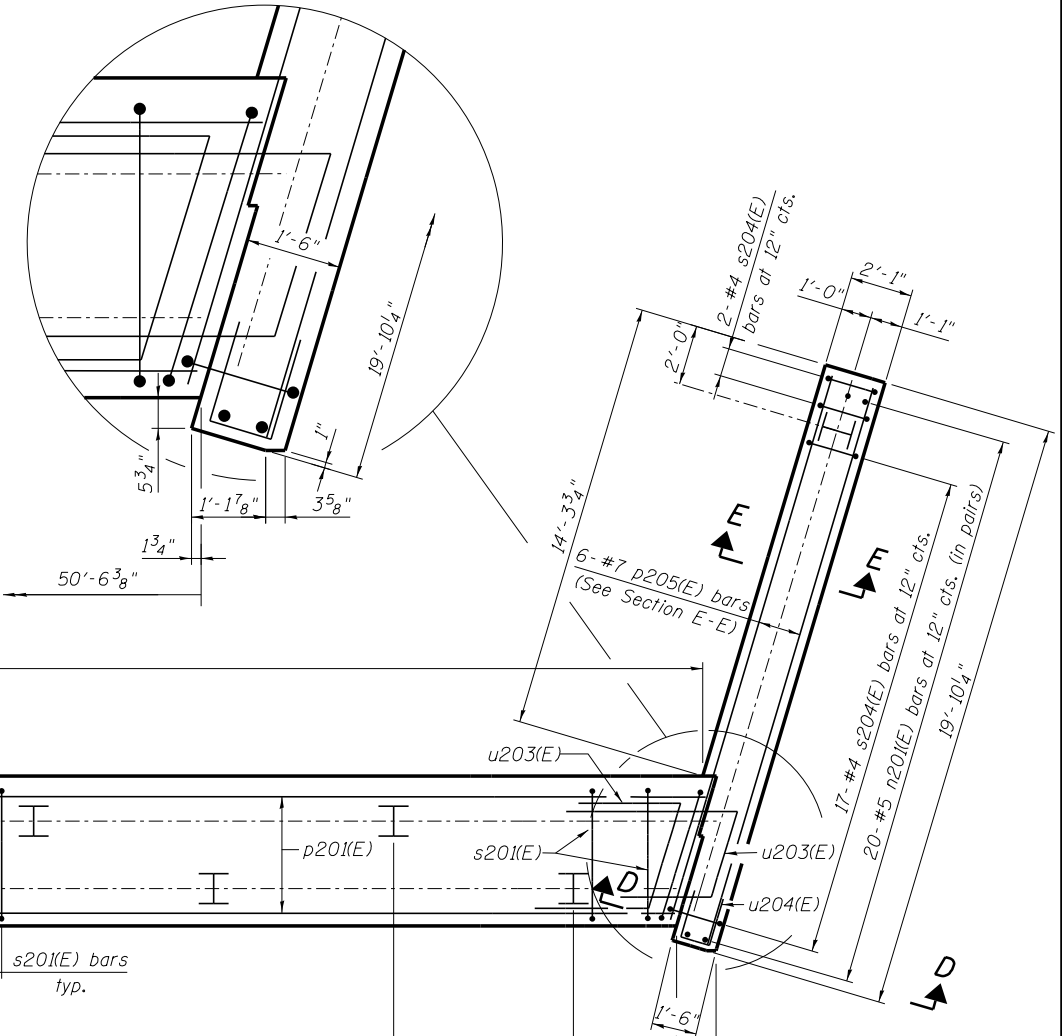
SEC. THRU SOUTH ABUT.



SECTION D-D



SECTION E-E



PLAN-PILE CAP

PILE DATA

Type: HP 14x89 with pile shoes
 Nominal Required Bearing: 848 kips
 Factored Resistance Available: 418 kips
 Est. Length: 46 feet
 No. Production Piles: 11
 No. Test Piles: 1

* measured from back of abutment perpendicular to extended tangent

NOTES:

1. See sheet S10 for foundation layout.
2. Factored Resistance Available accounts for the effect of downdrag on the pile.

benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

FILE NAME = 081-0178-C004B-098-South Abutment Details.dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - VH	REVISED -
		CHECKED - AJK	REVISED -

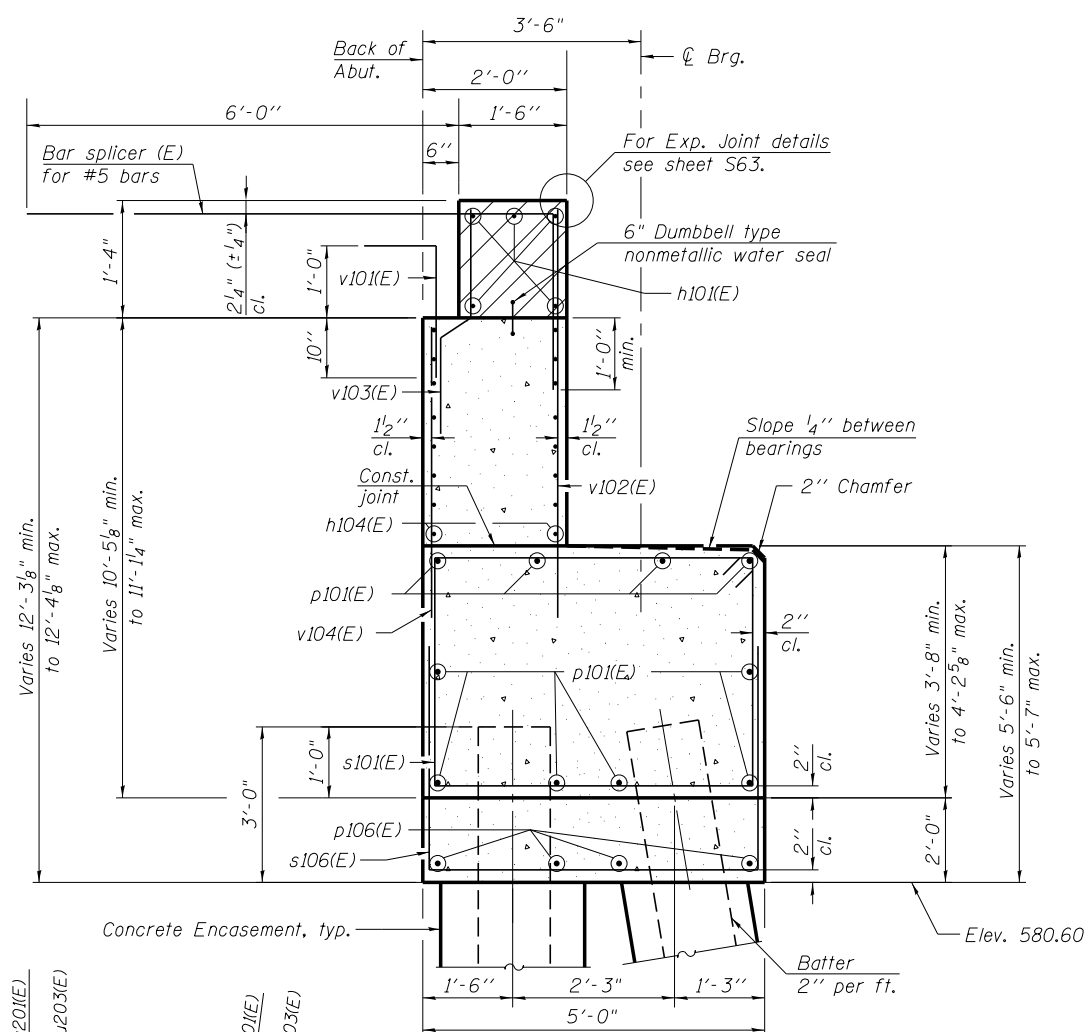
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT DETAILS
 STRUCTURE NO. 081-0178 (EASTBOUND)**

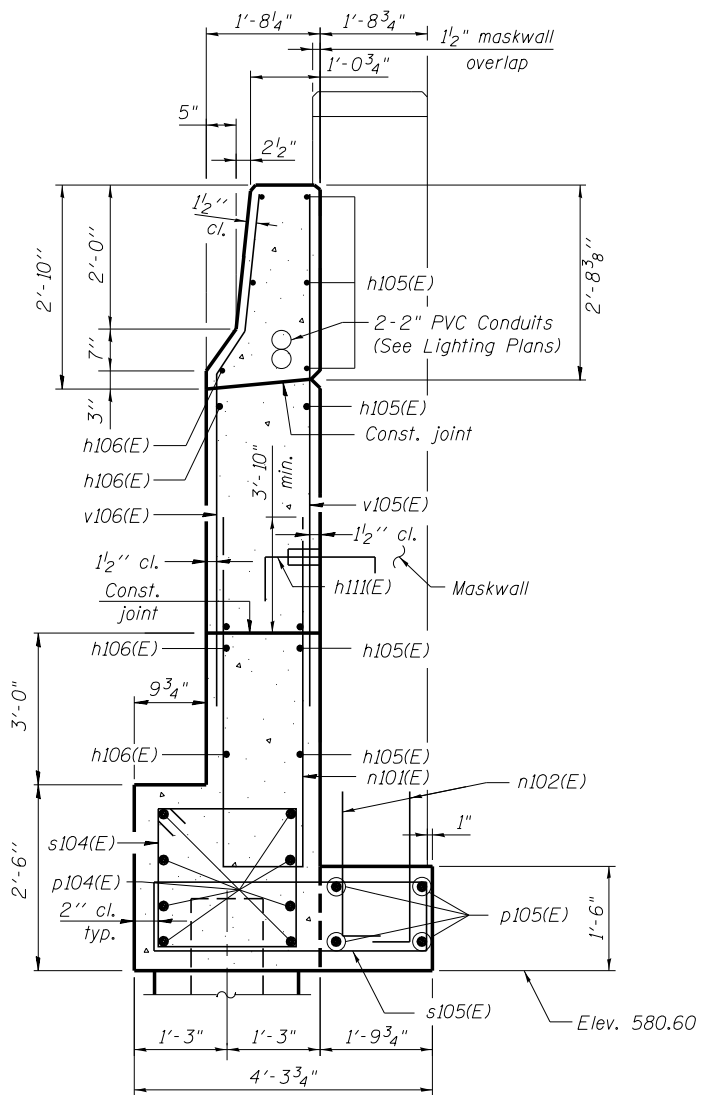
SHEET NO. S98 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	987
CONTRACT NO. 64C08				

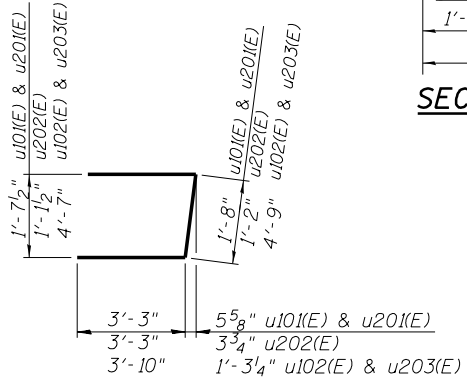
ILLINOIS FED. AID PROJECT



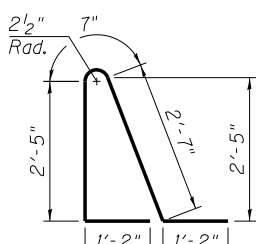
SEC. THRU NORTH ABUT.



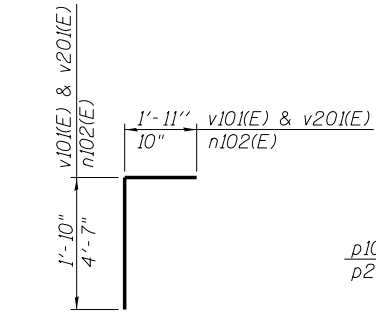
SECTION C-C



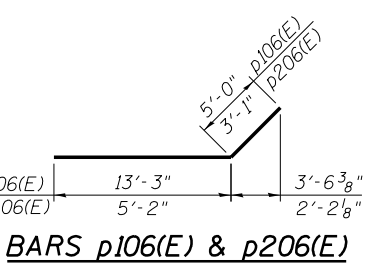
BARS u101(E), u102(E), u201(E), u202(E) & u203(E)



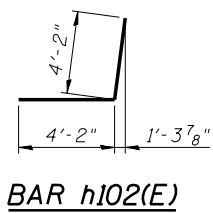
BARS d110(E) & d214(E)



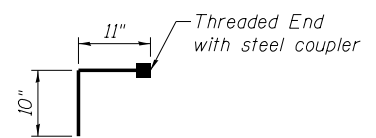
BARS v101(E), n102(E) & v201(E)



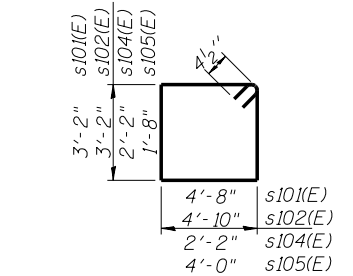
BARS p106(E) & p206(E)



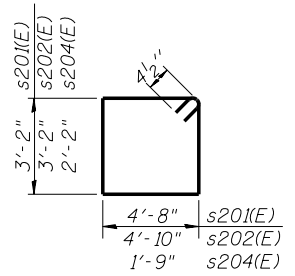
BAR h102(E)



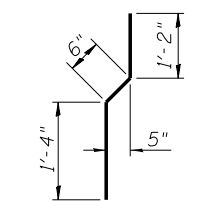
BARS h111(E) & h211(E)



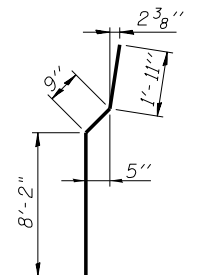
BARS s101(E), s102(E), s104(E) & s105(E)



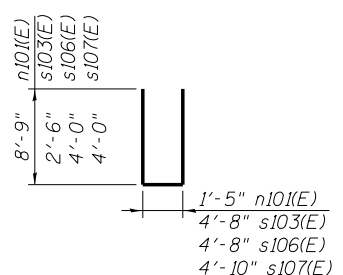
BARS s201(E), s202(E), & s204(E)



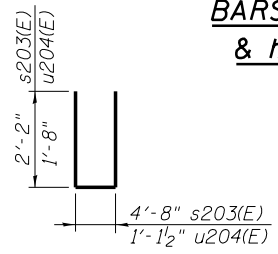
BARS v103(E) & v203(E)



BAR v106(E)



BARS n101(E), s103(E), s106(E) & s107(E)



BARS u204(E), & s203(E)

NORTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d110(E)	2	#5	7'-11"	
h101(E)	15	#6	33'-0"	
h102(E)	18	#5	8'-4"	
h104(E)	48	#5	32'-9"	
h105(E)	15	#4	15'-5"	
h106(E)	15	#4	14'-10"	
h111(E)	9	#5	1'-9"	
n101(E)	17	#6	18'-11"	
n102(E)	40	#5	5'-5"	
p101(E)	20	#7	48'-3"	
p102(E)	8	#5	29'-9"	
p103(E)	4	#5	6'-8"	
p104(E)	8	#7	18'-6"	
p105(E)	4	#7	19'-6"	
p106(E)	4	#7	18'-3"	
s101(E)	104	#4	16'-5"	
s102(E)	2	#4	16'-9"	
s103(E)	57	#5	9'-8"	
s104(E)	15	#4	9'-5"	
s105(E)	15	#4	10'-11"	
s106(E)	16	#4	12'-8"	
s107(E)	1	#4	12'-10"	
u101(E)	8	#5	8'-2"	
u102(E)	10	#6	12'-5"	
v101(E)	86	#5	3'-9"	
v102(E)	90	#6	10'-3"	
v103(E)	90	#4	3'-0"	
v104(E)	90	#6	8'-11"	
v105(E)	17	#6	10'-8"	
v106(E)	17	#6	10'-10"	
Pile Shoes	Each		14	
Concrete Structures	Cu. Yd.		131.6	
Reinforcement Bars, Epoxy Coated	Pound		12,450	
Furnishing Steel Piles HP14x73	Foot		455	
Driving Piles	Foot		455	
Concrete Sealer	Sq. Ft.		1,224	
Test Pile Steel HP14x73	Each		1	
Structure Excavation	Cu. Yd.		266	
Concrete Encasement	Cu. Yd.		7.6	

SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d214(E)	4	#5	7'-11"	
h201(E)	10	#6	35'-3"	
h202(E)	16	#5	35'-0"	
h211(E)	8	#5	1'-9"	
n201(E)	40	#5	4'-8"	
p201(E)	10	#7	28'-0"	
p202(E)	4	#5	20'-0"	
p203(E)	4	#5	12'-4"	
p204(E)	10	#7	43'-0"	
p205(E)	4	#7	19'-0"	
p206(E)	4	#7	8'-3"	
s201(E)	76	#4	16'-5"	
s202(E)	2	#4	16'-9"	
s203(E)	28	#5	9'-0"	
s204(E)	19	#4	8'-7"	
u201(E)	16	#5	8'-2"	
u202(E)	4	#5	7'-8"	
u203(E)	8	#6	12'-5"	
u204(E)	3	#6	4'-6"	
v201(E)	64	#5	3'-9"	
v202(E)	67	#6	10'-6"	
v203(E)	67	#4	3'-0"	
v204(E)	67	#6	9'-2"	
Pile Shoes	Each		12	
Concrete Structures	Cu. Yd.		86.3	
Reinforcement Bars, Epoxy Coated	Pound		7,100	
Furnishing Steel Piles HP14x89	Foot		506	
Driving Piles	Foot		506	
Concrete Sealer	Sq. Ft.		959	
Test Pile Steel HP14x89	Each		1	

NOTES:

- Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure on sheets S60 and S62.
- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- Quantity of concrete in end post included with Concrete Superstructure on sheets S60 & S62.
- See sheet S100 thru S104, for maskwall details.
- See sheet S124, for HP Pile and Concrete Encasement Details.
- See sheet S125, for Bar Splicer Details.
- Cost of reinforcement for concrete encasement shall be included with Cost of Concrete Encasement.
- Piles shall be driven prior to placement of select fill at the S. Abut.

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FILE NAME = 081-0178-C00AB-099-Abutment Details and Bar Lists.dwg	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
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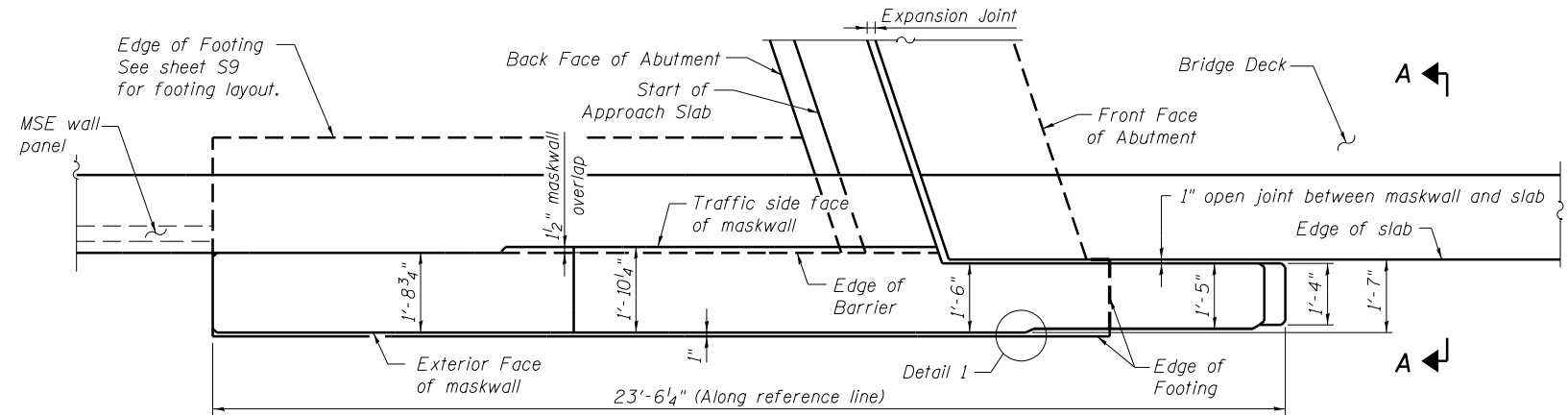
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS AND REINFORCEMENT DETAILS STRUCTURE NO. 081-0178 (EASTBOUND)

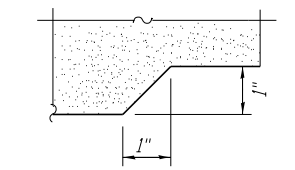
SHEET NO. S99 OF S138 SHEETS

F.A.I. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	988
CONTRACT NO. 64C08				

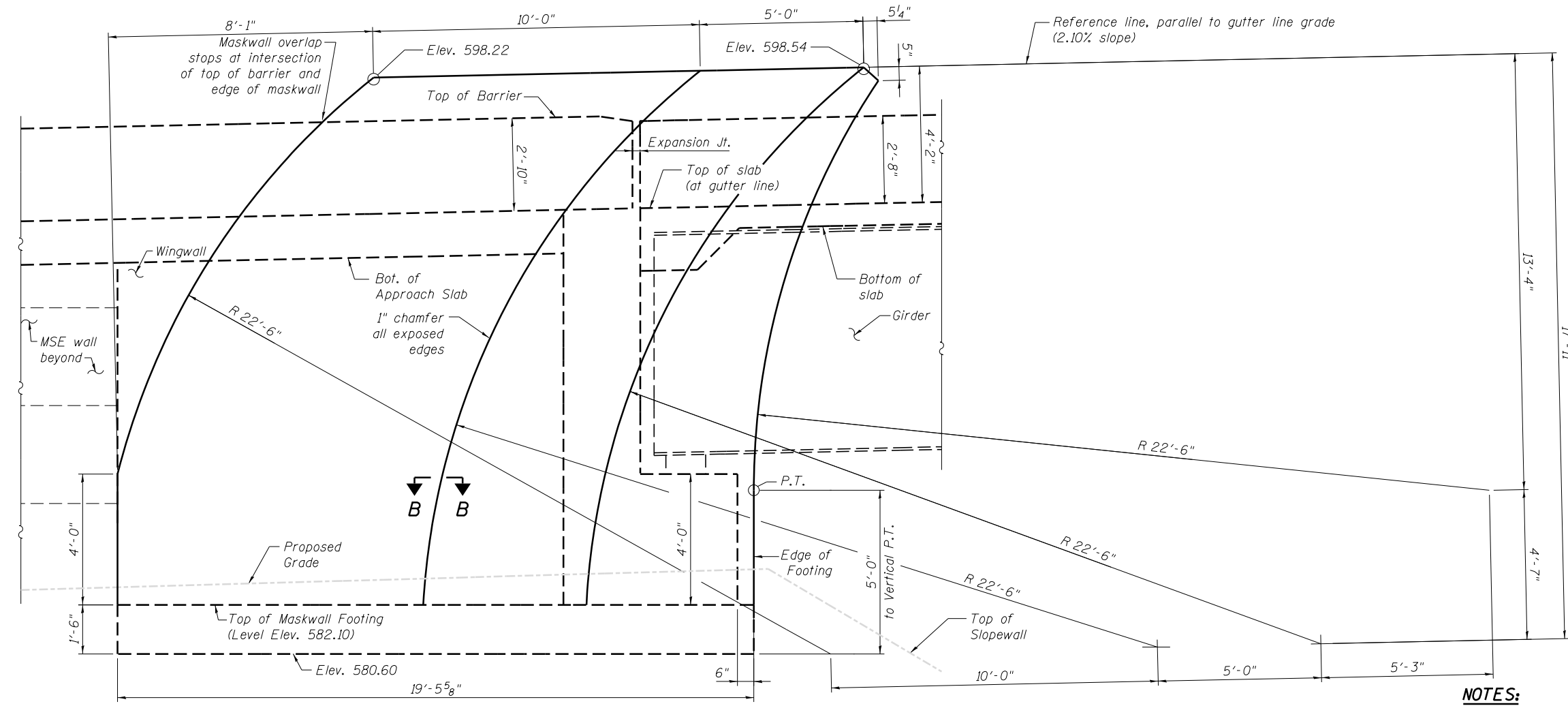
ILLINOIS FED. AID PROJECT



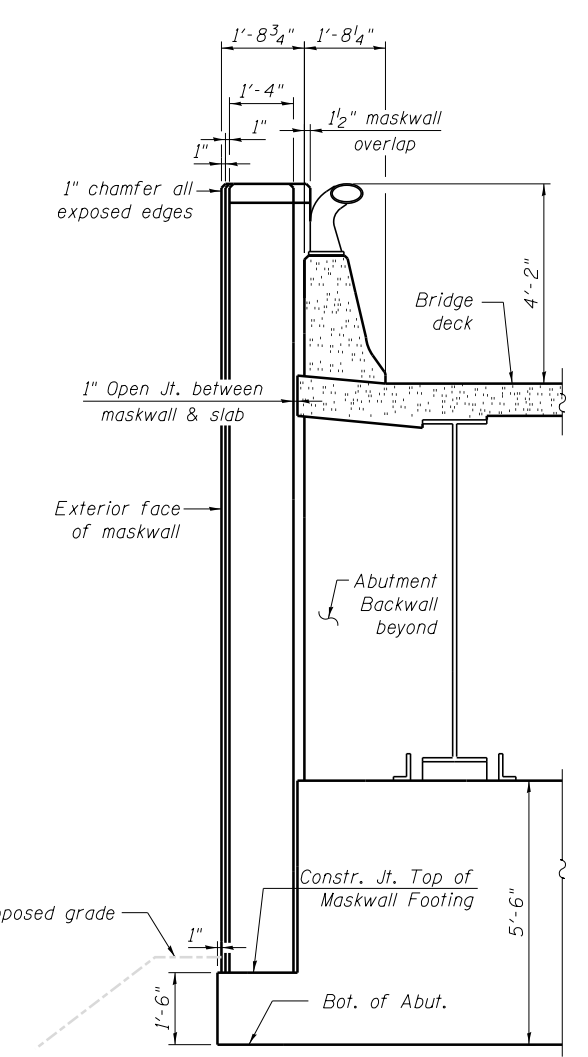
MASKWALL PLAN
(Ellipse Railing not shown for clarity)



SECTION B-B - DETAIL 1



ELEVATION
(Ellipse railing not shown for clarity)



VIEW A-A

- NOTES:**
1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.
 2. P.T. denotes point of vertical tangent for curved face of southern edge only.
 3. See S.N. 081-6018 Plan set for MSE wall details.

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FILE NAME = 081-0178-C00AB-100-North Maskwall Details (1 of 2).dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISED -
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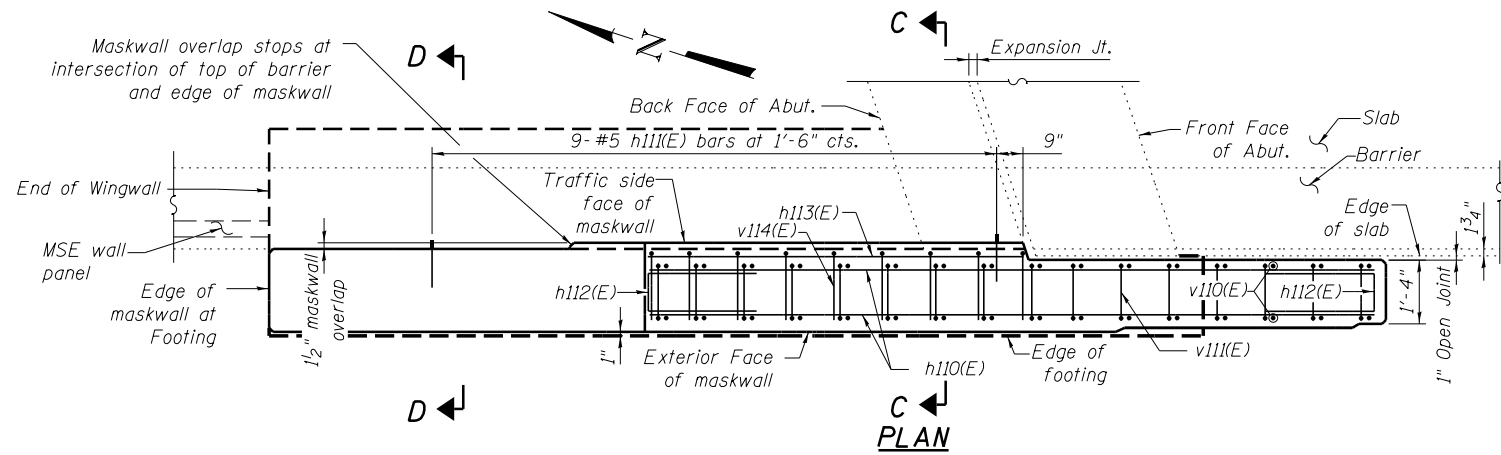
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT MASKWALL DETAILS (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

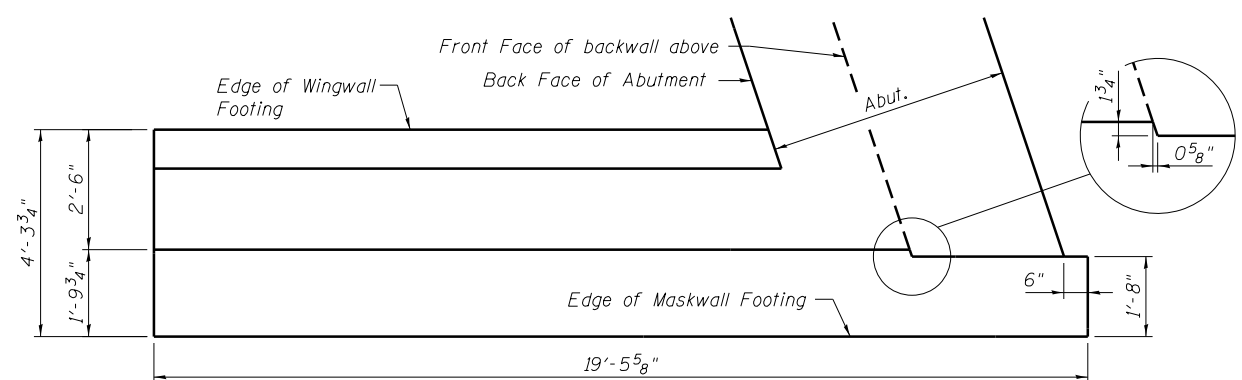
SHEET NO. S100 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

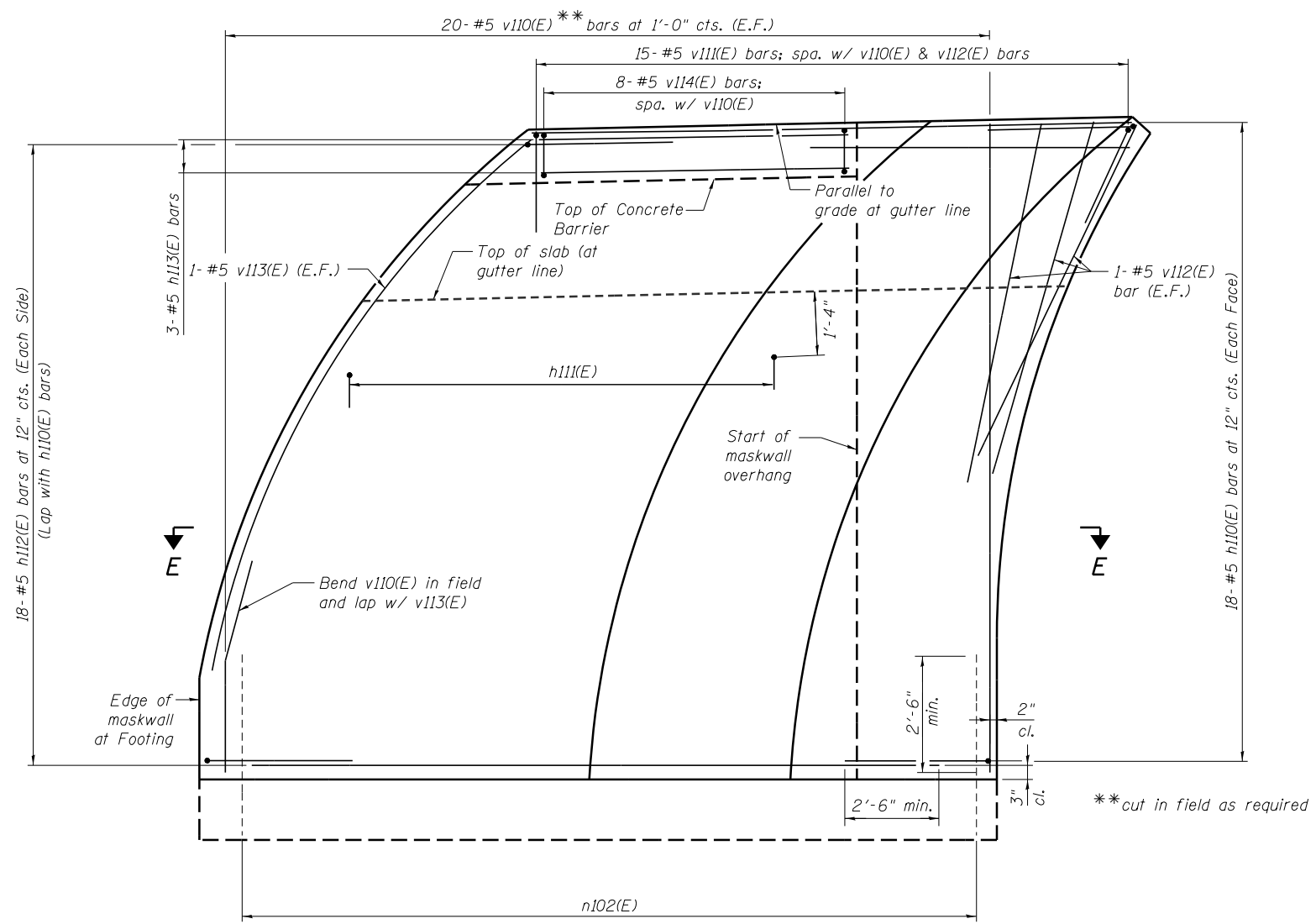
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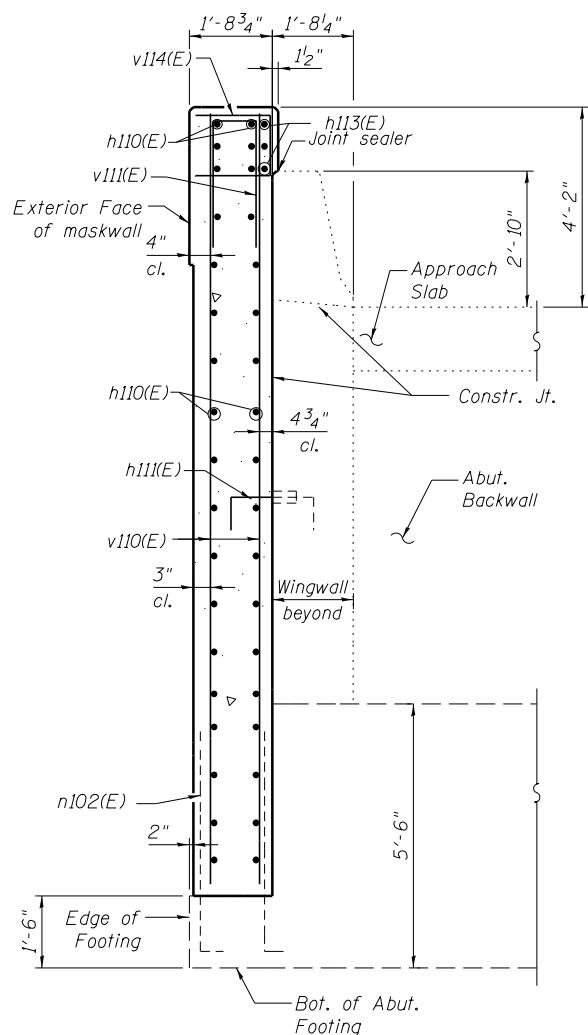
PLAN



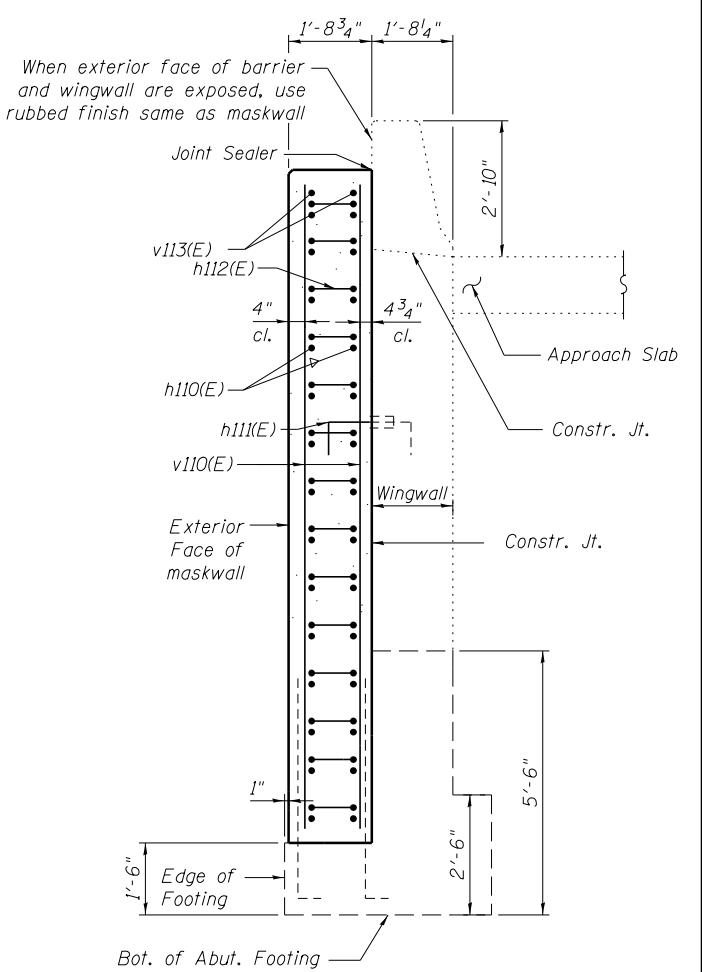
SECTION E-E
(Footing Partial Plan)



ELEVATION



SECTION C-C



SECTION D-D

- NOTES:**
1. Two inch clear concrete cover unless noted otherwise.
 2. The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with concrete structures.
 3. See sheets S96 and S99 for maskwall footing bar detailing.

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FILE NAME = 081-0178-C00AB-101-North Maskwall Details (2 of 2).dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISED -
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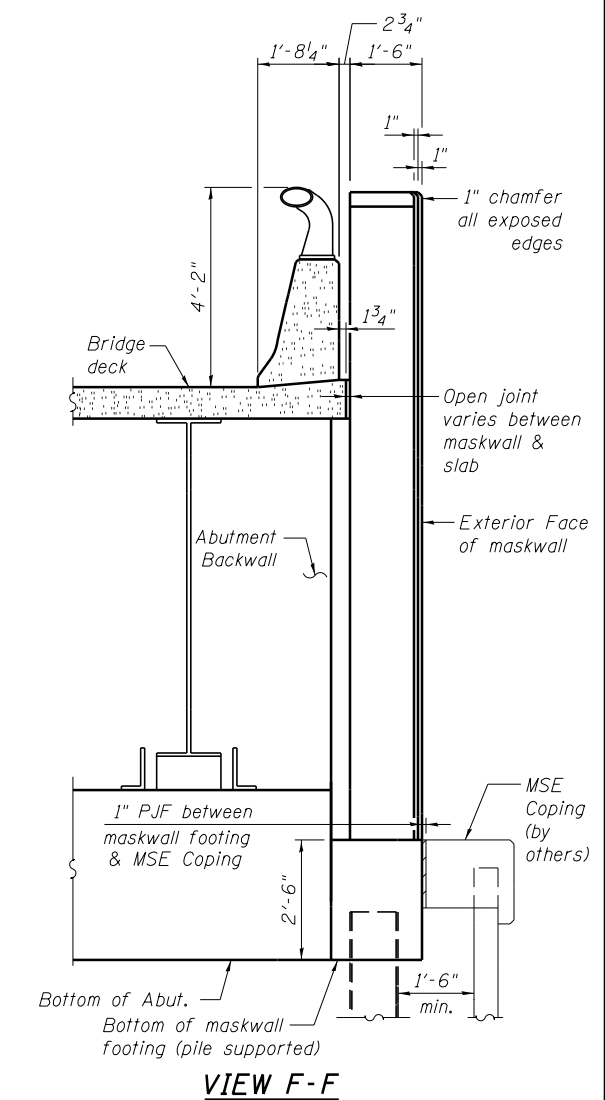
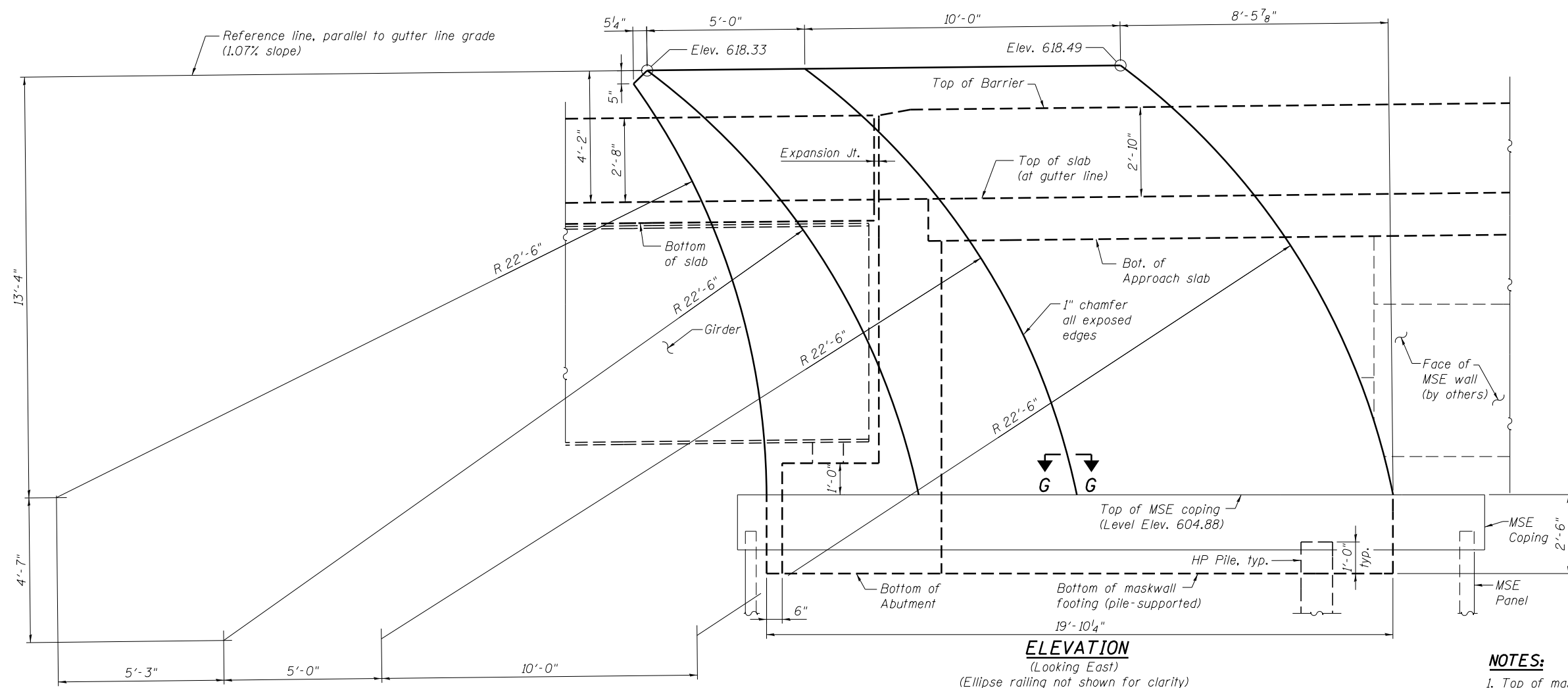
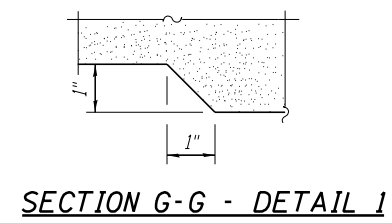
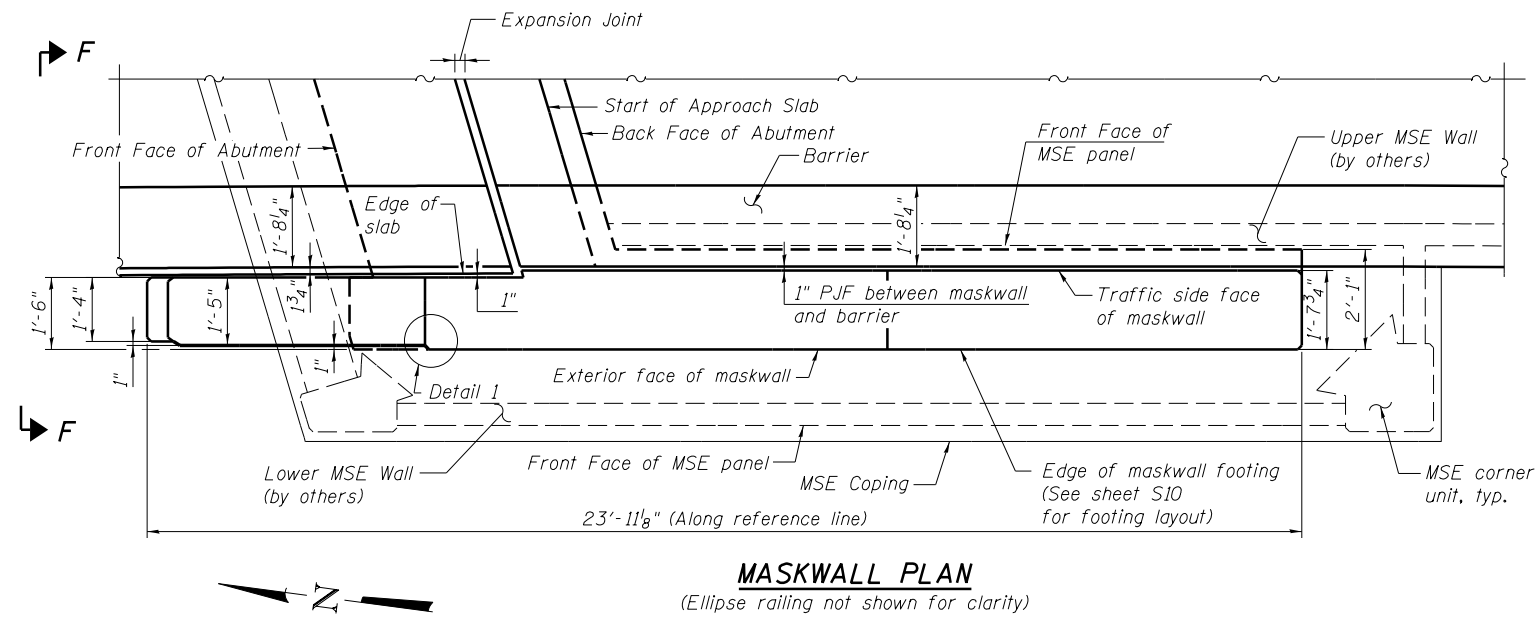
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT MASKWALL DETAILS (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S101 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	990
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT



- NOTES:**
1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and adjacent barrier.
 2. P.T. denotes Point of Tangent for curved northern edge only.
 3. See sheet S7 for South Abutment coordination requirements.

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FILE NAME = 081-0178-C00AB-102-South Maskwall Details 1 of 2.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
	PLOT DATE = 1/18/2017	DRAWN - KMS	REVISED -
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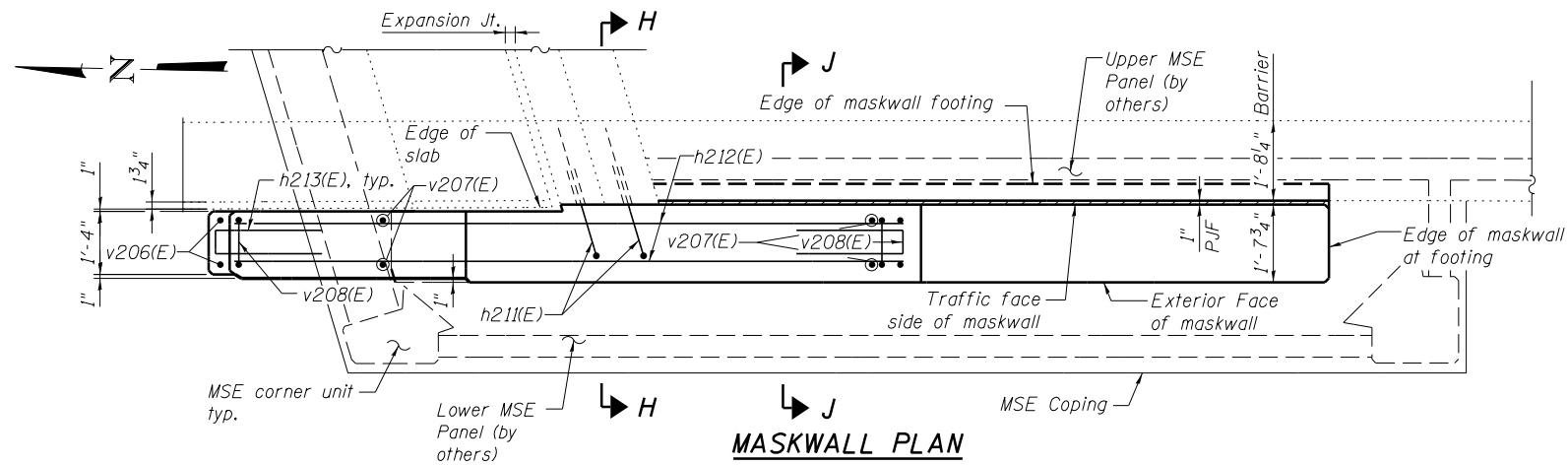
SOUTH ABUTMENT MASKWALL DETAILS (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S102 OF S138 SHEETS

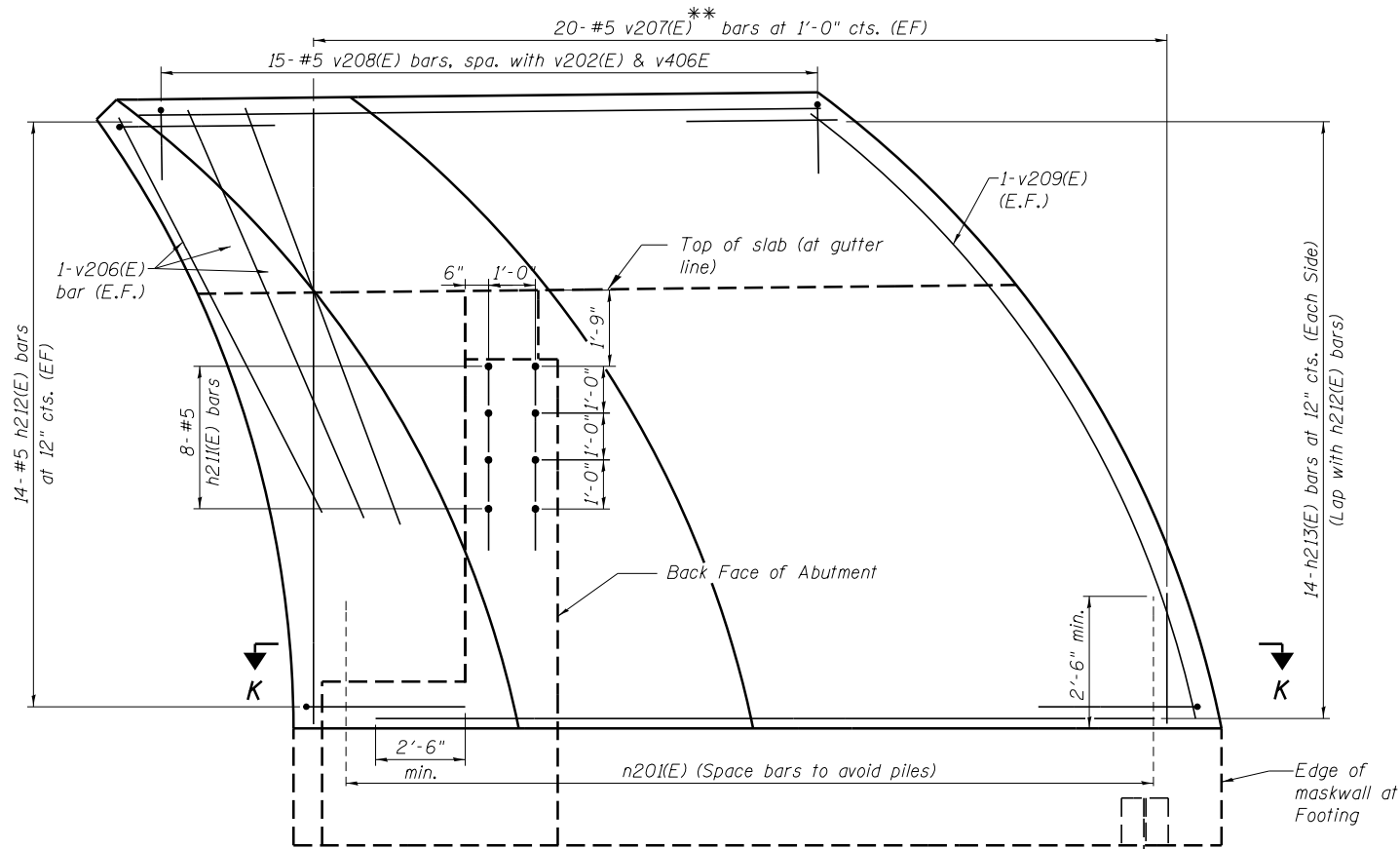
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	991
CONTRACT NO. 64C08				

ILLINOIS FED. AID PROJECT

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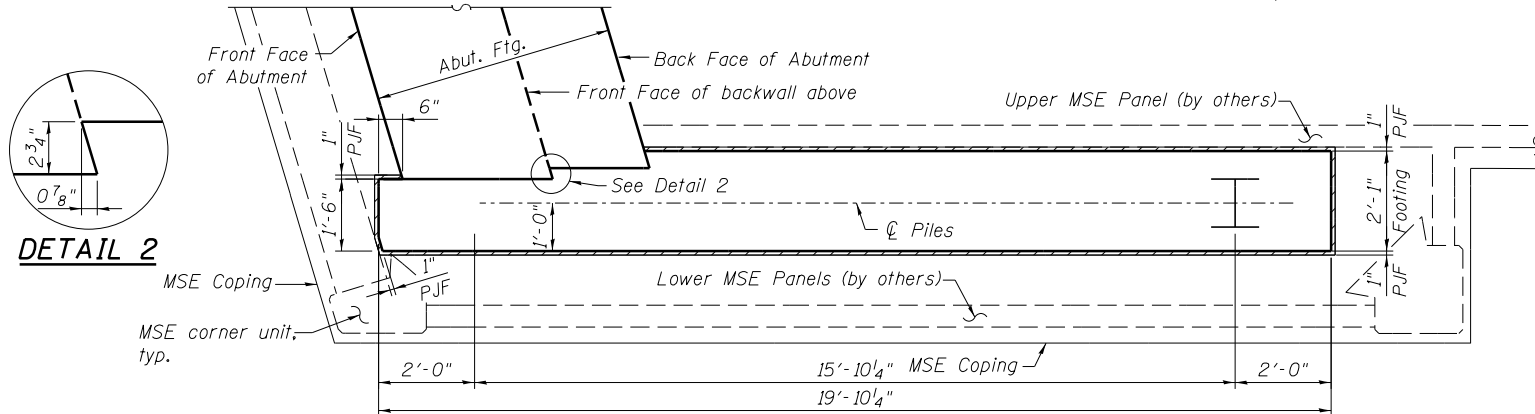


MASKWALL PLAN

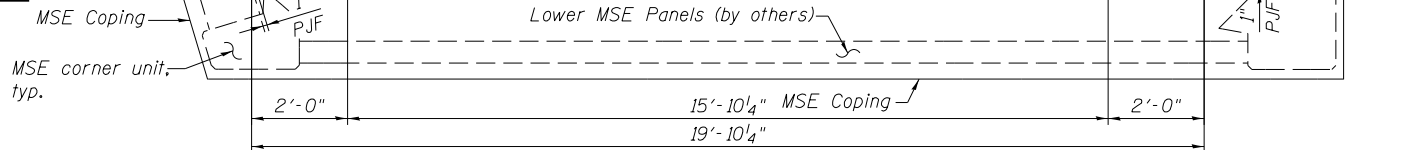


ELEVATION

** Cut in field as required

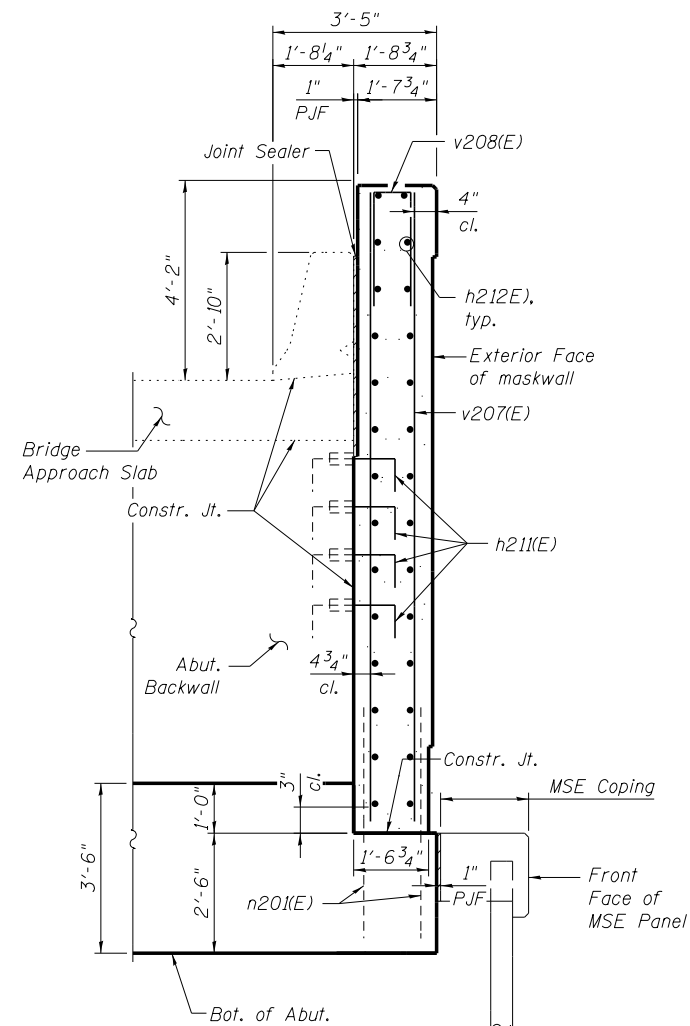


DETAIL 2

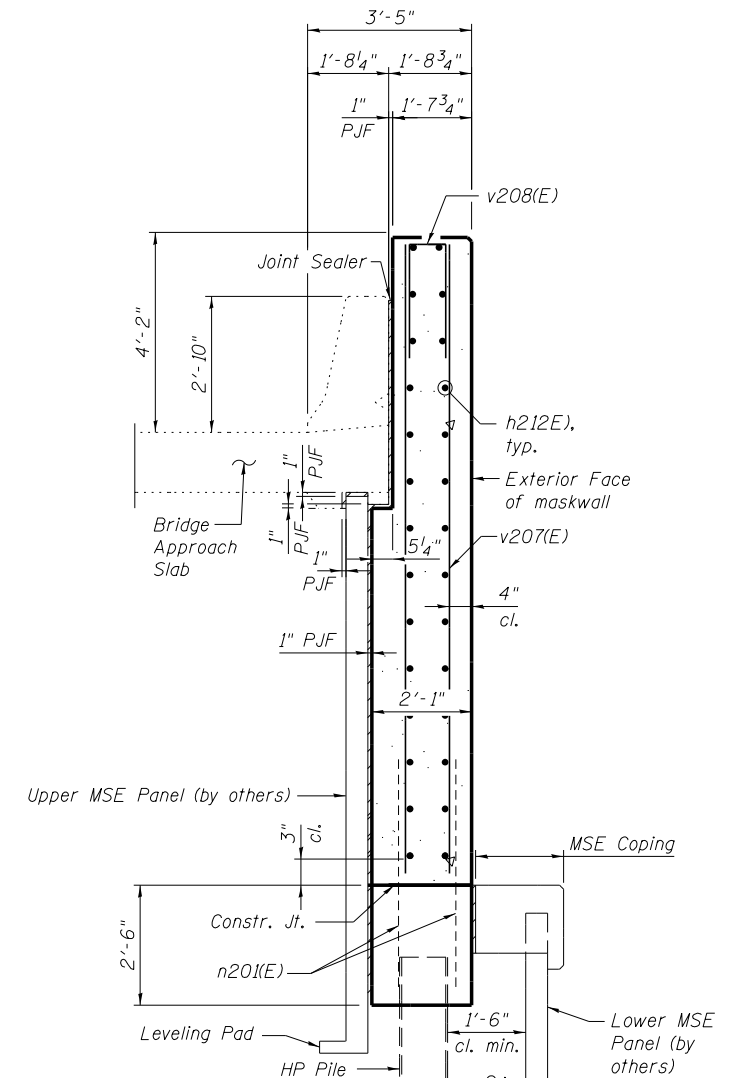


SECTION K-K

(Footing Partial Plan)



SECTION H-H



SECTION J-J

NOTES:

1. Two inch clear concrete cover unless noted otherwise.
2. The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with concrete structures.
3. See sheet S98 for maskwall footing bar detailing.
4. When exterior face of barrier is exposed, contractor shall use rubbed finish same as maskwall.
5. See sheet S7 for coordination notes.

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 MODEL: Default

USER NAME = ksnider
 PLOT SCALE =
 PLOT DATE = 1/18/2017

DESIGNED - DTS
 CHECKED - AJK
 DRAWN - KMS
 CHECKED - AJK

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT MASKWALL DETAILS (2 OF 2)
 STRUCTURE NO. 081-0178 (EASTBOUND)**

SHEET NO. S103 OF S138 SHEETS

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	992
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

MASKWALL FINISHING NOTES

If form ties are used in forming the maskwall, arrange ties to be regularly spaced and in a consistent geometric grid pattern. Do not locate ties at edges of concrete rustications.

Following form removal, a rubbed surface finish in accordance with Article 503.15 (b) of the Standard Specifications shall be required but with the following additional requirements:

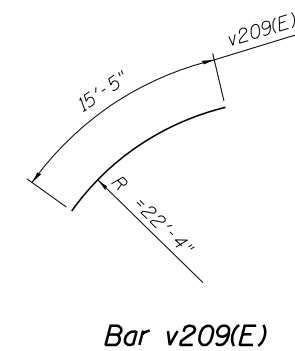
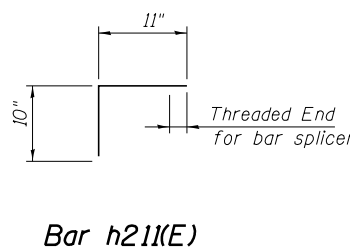
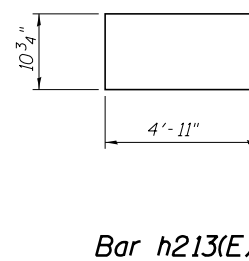
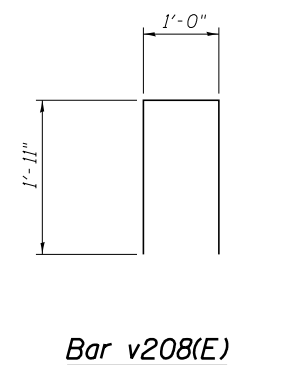
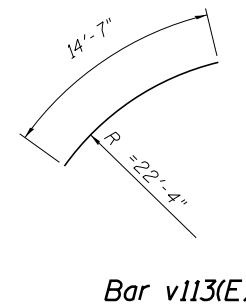
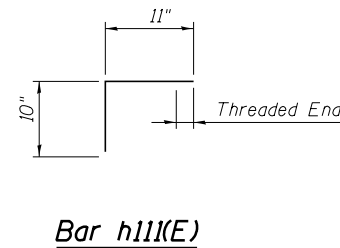
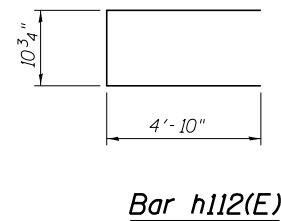
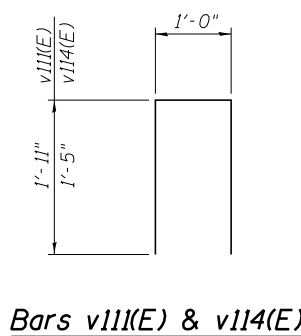
1. Demonstrate hole and void patching operations in accordance with Article 503.15 (b) of the Standard Specifications on a four foot section of vertical maskwall located in an inconspicuous area. Begin patching demonstration by using a mortar mix comprised of 1 part white cement, 2 parts standard portland cement, 6 parts mortar sand, and water. The quantity of water used shall produce a mortar consistency as dry as possible to use effectively.
2. When patching test areas have set, saturate with water and rub with a fine carborundum stone until surfaces are smooth in texture. Remove loose powder and other contaminants by rubbing with burlap and rinsing with water. After surfaces have dried, patch color and texture of surfaces will be reviewed by the engineer. Patches should match or be slightly lighter than surrounding concrete. If results are unsatisfactory, adjust patching mortar mix proportions and perform another demonstration until results are deemed satisfactory by the engineer.
3. Use the patching mortar mix proportions that are approved by the engineer as a result of the satisfactory demonstration. Do not use patching mortar that is more than 1 hour old.
4. Finished maskwall concrete shall be smooth and show no wood grain or other texture from the face of the forms used. All costs for repair or covering wood grain or other textures on these surfaces shall be the responsibility of the Contractor.
5. Do not apply curing compounds, sealers, or other coatings to the finished maskwalls.

**BILL OF MATERIAL
NORTH ABUTMENT MASKWALL**

Bar	No.	Size	Length	Shape
h110(E)	36	#5	15'-0"	—
h111(E)	9	#5	1'-9"	┌
h112(E)	36	#5	10'-7"	▭
h113(E)	3	#5	7'-6"	—
v110(E)	40	#5	16'-1"	—
v111(E)	15	#5	4'-8"	┐
v112(E)	6	#5	8'-3"	—
v113(E)	2	#5	14'-7"	⤿
v114(E)	8	#5	3'-10"	▭
Concrete Structures			Cu. Yd.	17.9
Reinforcement Bars, Epoxy Coated			Pound	1,860

**BILL OF MATERIAL
SOUTH ABUTMENT MASKWALL**

Bar	No.	Size	Length	Shape
h211(E)	8	#5	1'-9"	┌
h212(E)	28	#5	15'-0"	—
h213(E)	28	#5	10'-9"	▭
v206(E)	6	#5	8'-3"	—
v207(E)	40	#5	13'-4"	—
v208(E)	15	#5	4'-10"	┐
v209(E)	2	#5	15'-5"	⤿
Concrete Structures			Cu. Yd.	16.0
Reinforcement Bars, Epoxy Coated			Pound	1,490



NOTE:

Contractor shall exercise all due care to assure that the maskwall surface finish is intact and the overall appearance is aesthetically pleasing at completion of the project. If the maskwalls are constructed before the deck, approach slab or parapets, additional effort may be required in forming and placing the deck, approach slab and/or parapet concrete, and precautions shall be taken to protect the maskwalls during these operations. If the maskwalls are constructed after deck, approach slab or parapets, temporary earth retention may be required. In either case, any costs for protecting the maskwalls, working around them or temporary earth retention and final grading shall be included in the cost of Concrete Structures.

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FILE NAME = 081-0178-C00AB-104-Maskwall Notes and bill of material.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
MODEL: Default	PLOT SCALE =	CHECKED - AJK	REVISED -
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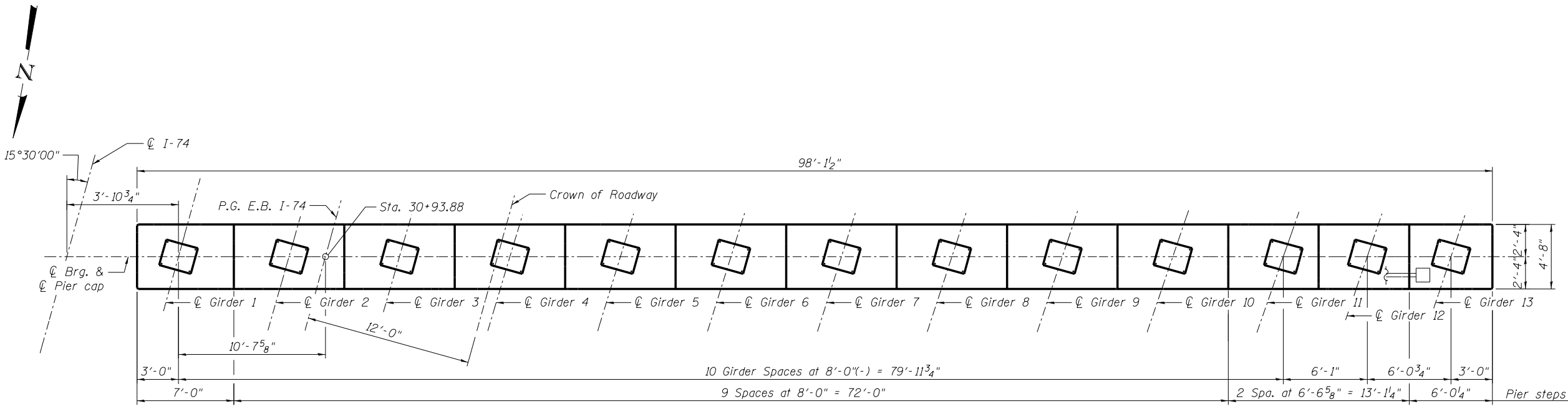
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MASKWALL NOTES AND BILL OF MATERIAL
STRUCTURE NO. 081-0178 (EASTBOUND)**

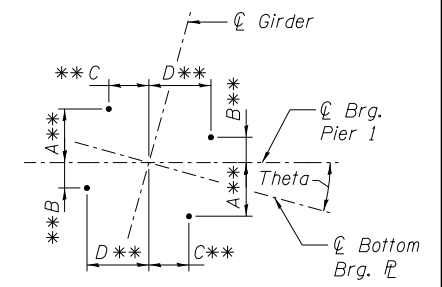
SHEET NO. S104 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	993
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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PLAN OF PIER CAP

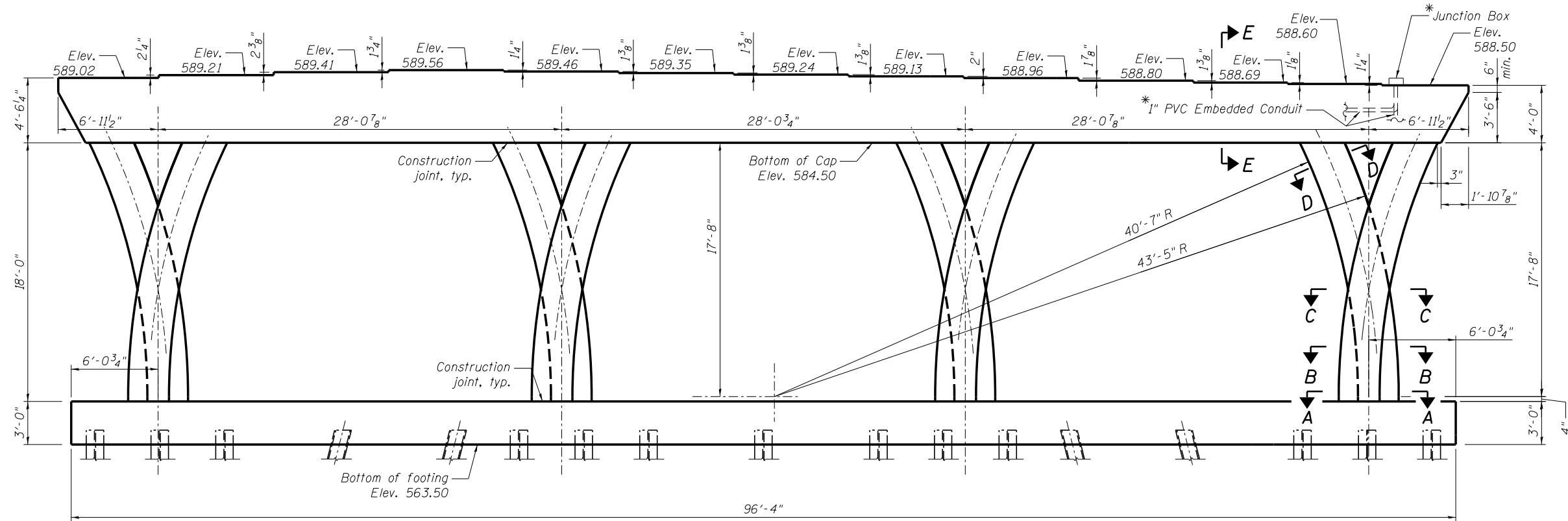


ANCHOR BOLT LAYOUT

A	1'-1 3/8" to 1'-2"
B	5 3/8" to 6 3/8"
C	9 8/8" to 10"
D	1'-3 1/2" to 1'-3 7/8"

** Variation in anchor bolt offset from \varnothing Pier and \varnothing Girder Intersection due to variation in Theta. See sheet S93 for additional information and values of theta.

* See "Lighting plans and details" sheets, for details and pay items.



PIER 1 ELEVATION
(Looking South)

PILE DATA

Type: HP14x73 with pile shoes
 Nominal Required Bearing: 695 kips
 Factored Resistance Available: 452 kips
 Est. Length: 10 feet
 No. Production Piles: 33
 No. Test Piles: 1

- NOTES:**
1. See sheet S106 for reinforcing details.
 2. See sheet S121 for pier notes.
 3. See sheet S122 for bar list and bill of material.
 4. See sheet S120 for sections A-A, B-B, C-C, D-D & E-E.

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FILE NAME = 081-0178-C00AB-105-Pier 1 Plan and Elevation.dgn	USER NAME = ksnider	DESIGNED - AWH	REVISED -
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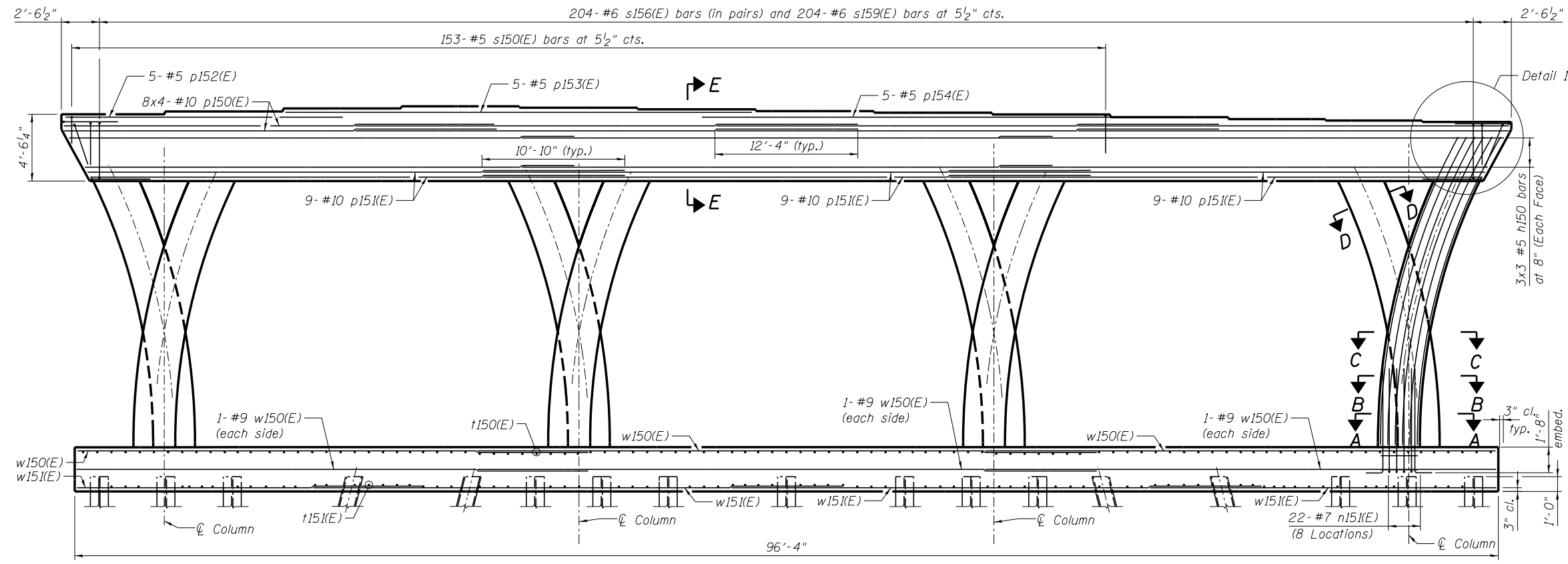
STATE OF ILLINOIS
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PIER 1 PLAN AND ELEVATION
STRUCTURE NO. 081-0178 (EASTBOUND)

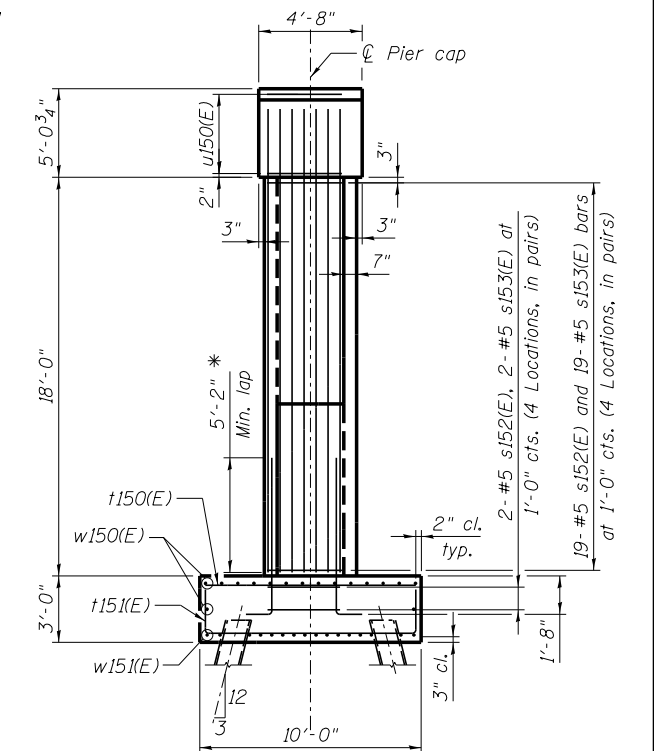
SHEET NO. S105 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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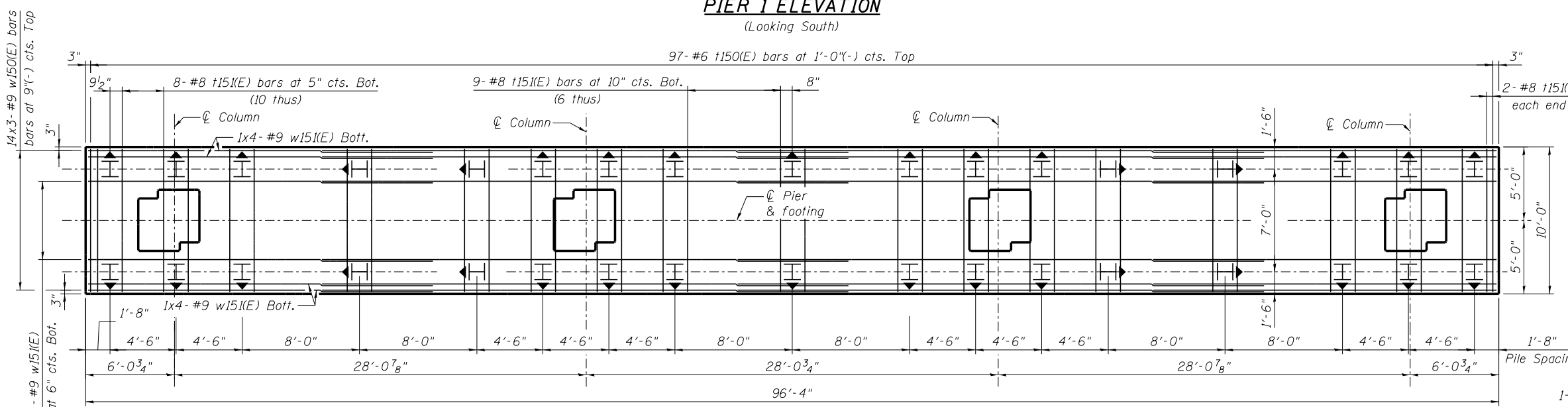


PIER 1 ELEVATION
(Looking South)

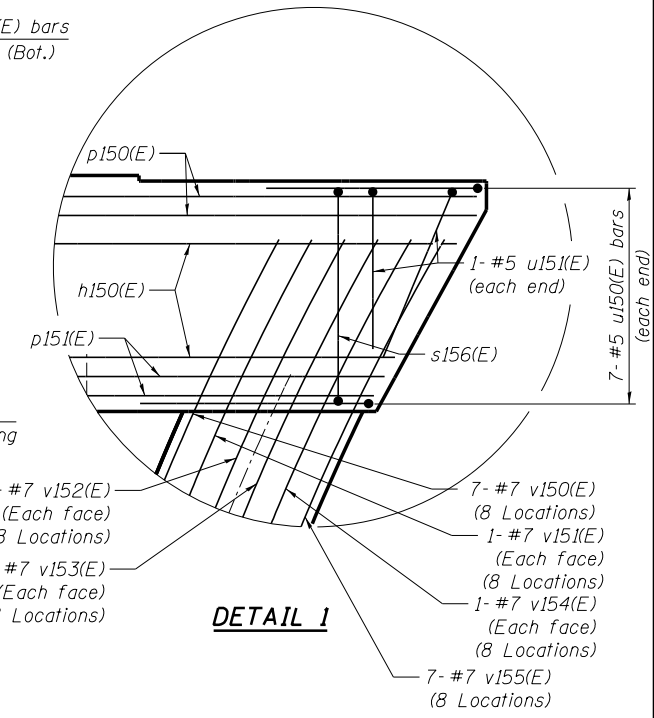


END VIEW

* Bend n15(E) bars in field to match radius of "v" bars



FOOTING PLAN



DETAIL 1

MINIMUM BAR LAP
#5 bar 3'-8"
#9 bar 9'-8"



NOTES:

1. See sheet S120 for sections A-A, B-B, C-C, D-D & E-E.
2. See sheet S121 for pier notes.
3. See sheets S8 and S9 for footing and pile layout.

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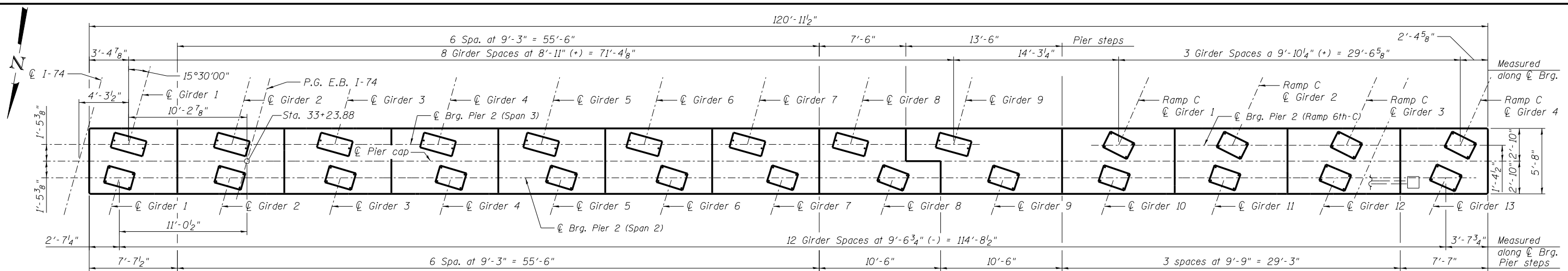
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 REINFORCEMENT DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S106 OF S138 SHEETS

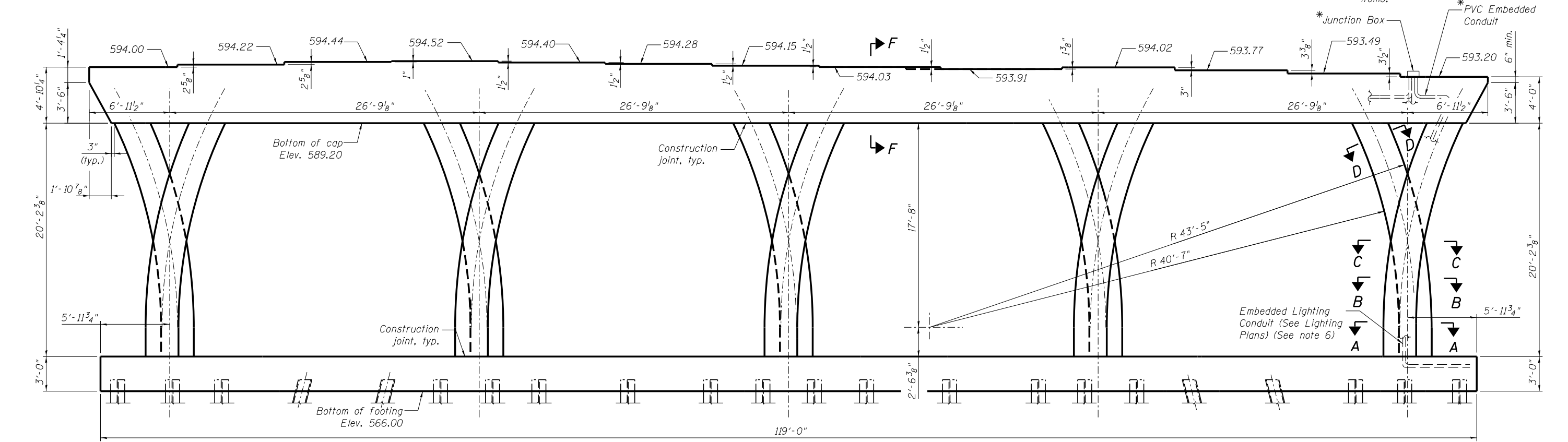
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	995
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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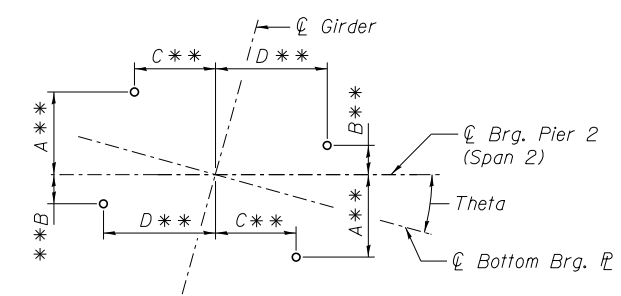
PLAN OF PIER CAP

* See "Lighting plans and details" sheets, for details and pay items.



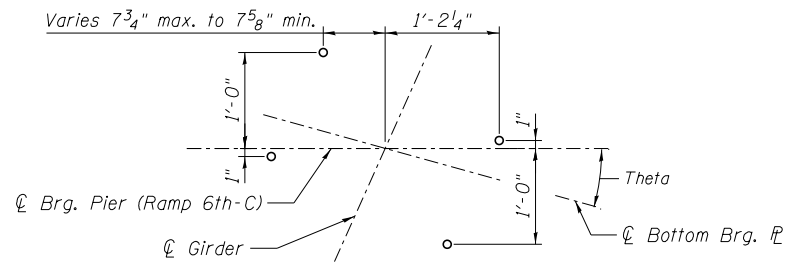
PIER 2 ELEVATION
(Looking South)

A	10 3/8" to 11 3/4"
B	1 1/2" to 3 5/8"
C	8 1/2" to 10 1/8"
D	1'-2" to 1'-2 3/8"

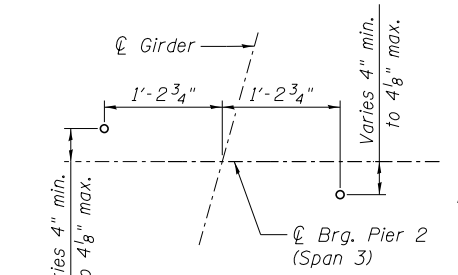


ANCHOR BOLT LAYOUT
(Span 2)

** Variation in anchor bolt offset from C.L. Pier and C.L. Brg. due to variation in θ . See sheet S94 and S.N. 081-0186 sheet SC23 for additional information and values of θ .



ANCHOR BOLT LAYOUT
(Ramp 6th-C)



ANCHOR BOLT LAYOUT
(Span 3 Mainline E.B.)

PILE DATA

Type: HP14x73 with pile shoes
Nominal Required Bearing: 695 kips
Factored Resistance Available: 452 kips
Est. Length: 12 feet
No. Production Piles: 43
No. Test Piles: 1

NOTES:

1. See sheet S108 for reinforcing details.
2. See sheet S121 for pier notes.
3. See sheet S122 for bar list and bill of material.
4. See sheet S120 for sections A-A, B-B, C-C & D-D.
5. See sheet S109 for section F-F.
6. Conduits shall be 6" clr. from edge of column.

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FILE NAME = 081-0178-C00AB-107-Pier 2 Plan and Elevation.dgn	USER NAME = ksnyder	DESIGNED - DTS	REVISED -
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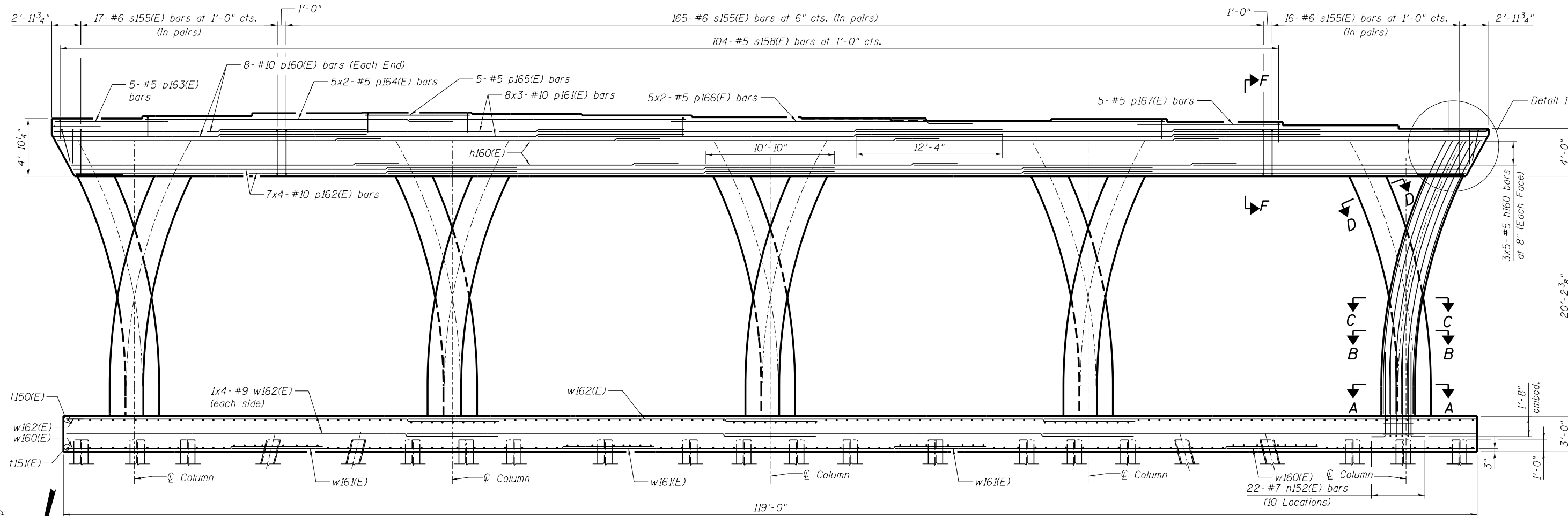
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 PLAN AND ELEVATION
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S107 OF S138 SHEETS

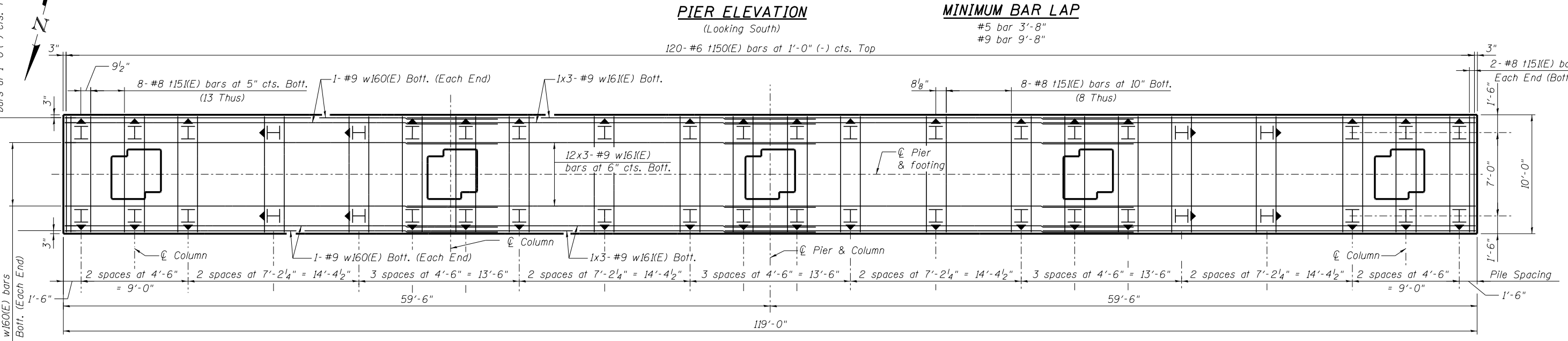
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	996
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64C08	

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PIER ELEVATION
(Looking South)

MINIMUM BAR LAP
#5 bar 3'-8"
#9 bar 9'-8"



FOOTING PLAN

- NOTES:**
1. For End view, Section F-F, and Detail 1 see sheet S109.
 2. See sheet S121 for pier notes.
 3. See sheet S8 and S9 for footing and pile layout.
 4. See Sheet S120 for sections A-A, B-B, C-C & D-D.

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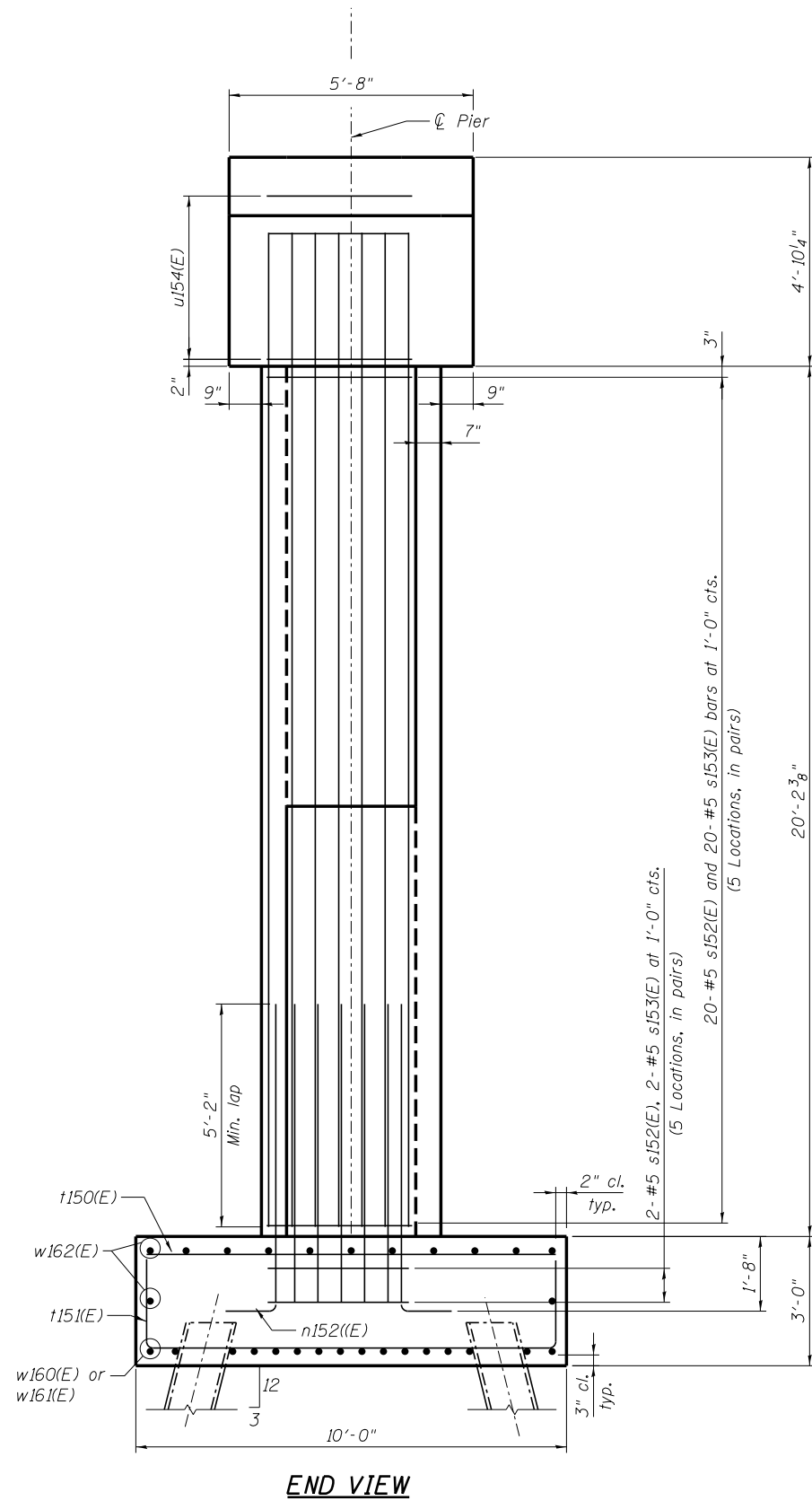
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 REINFORCEMENT DETAILS (1 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)

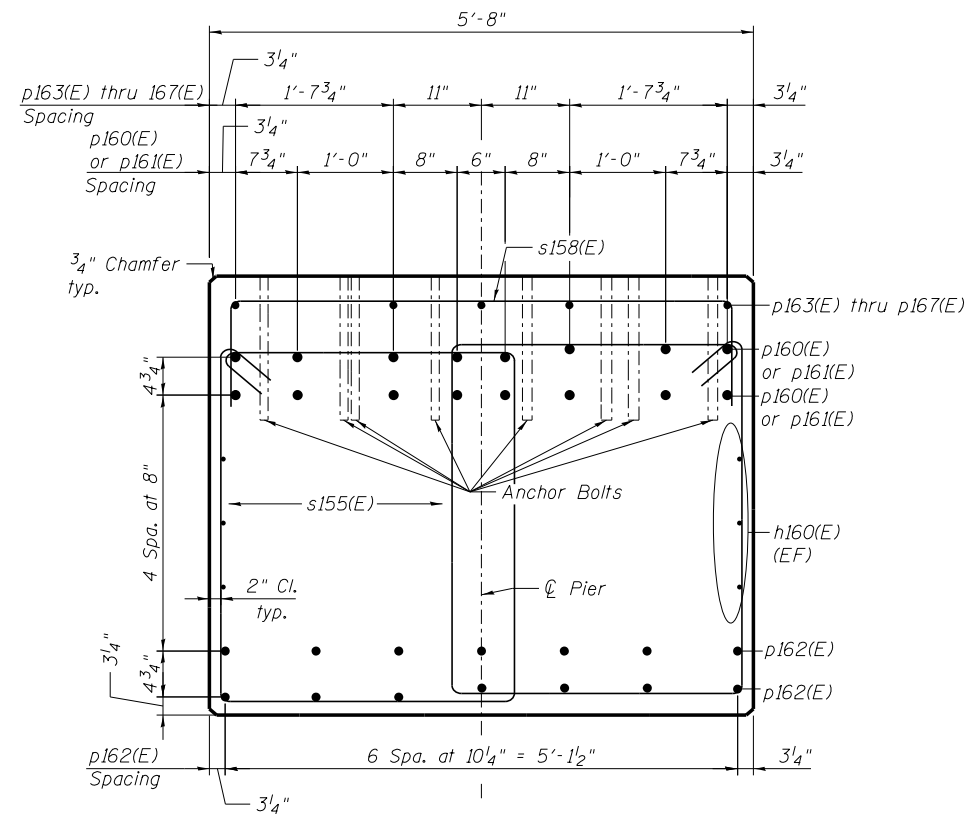
SHEET NO. S108 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 64C08	
ILLINOIS FED. AID PROJECT				

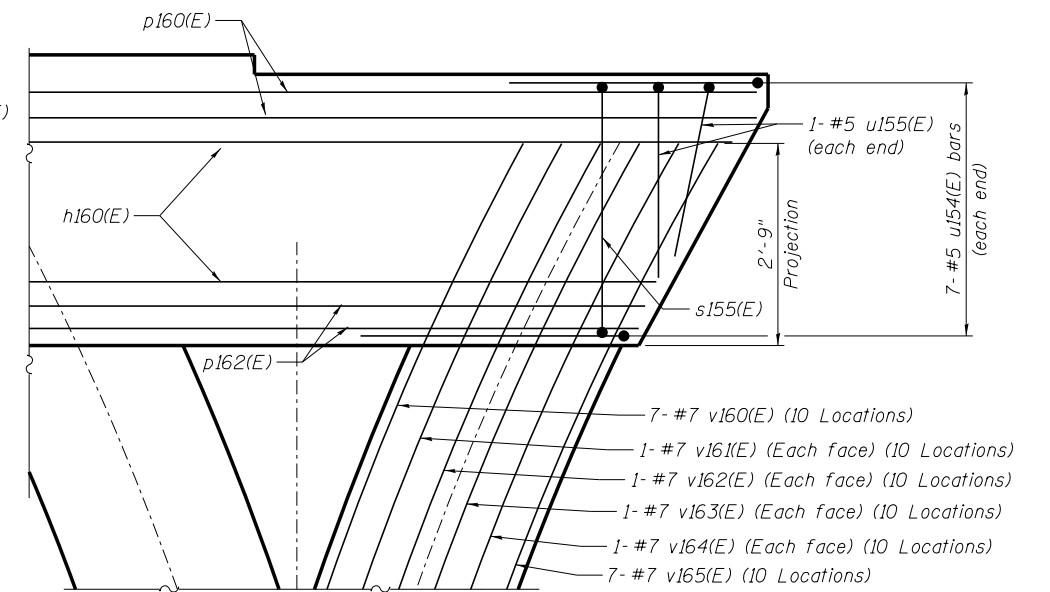
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END VIEW



SECTION F-F



DETAIL 1

NOTES:

1. See sheet S121 for pier notes.



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FILE NAME = 081-0178-C004B-109-Pier 2 Reinforcement Details (2 of 2).dgn
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PLOT DATE = 1/18/2017

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CHECKED - AWH
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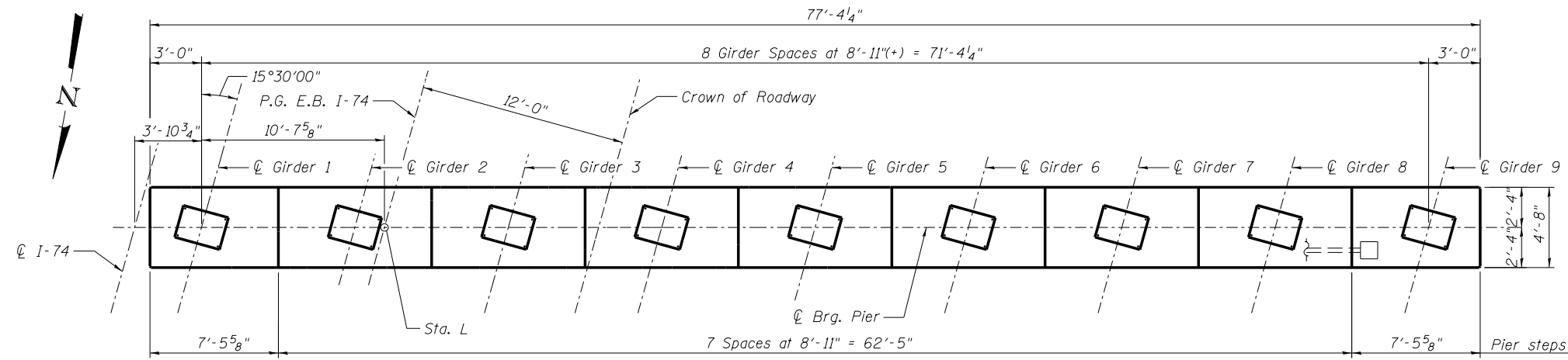
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 2 REINFORCEMENT DETAILS (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)**

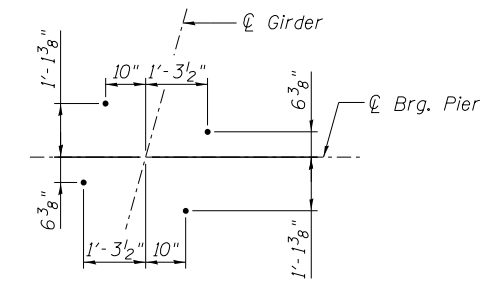
SHEET NO. S109 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 64C08	

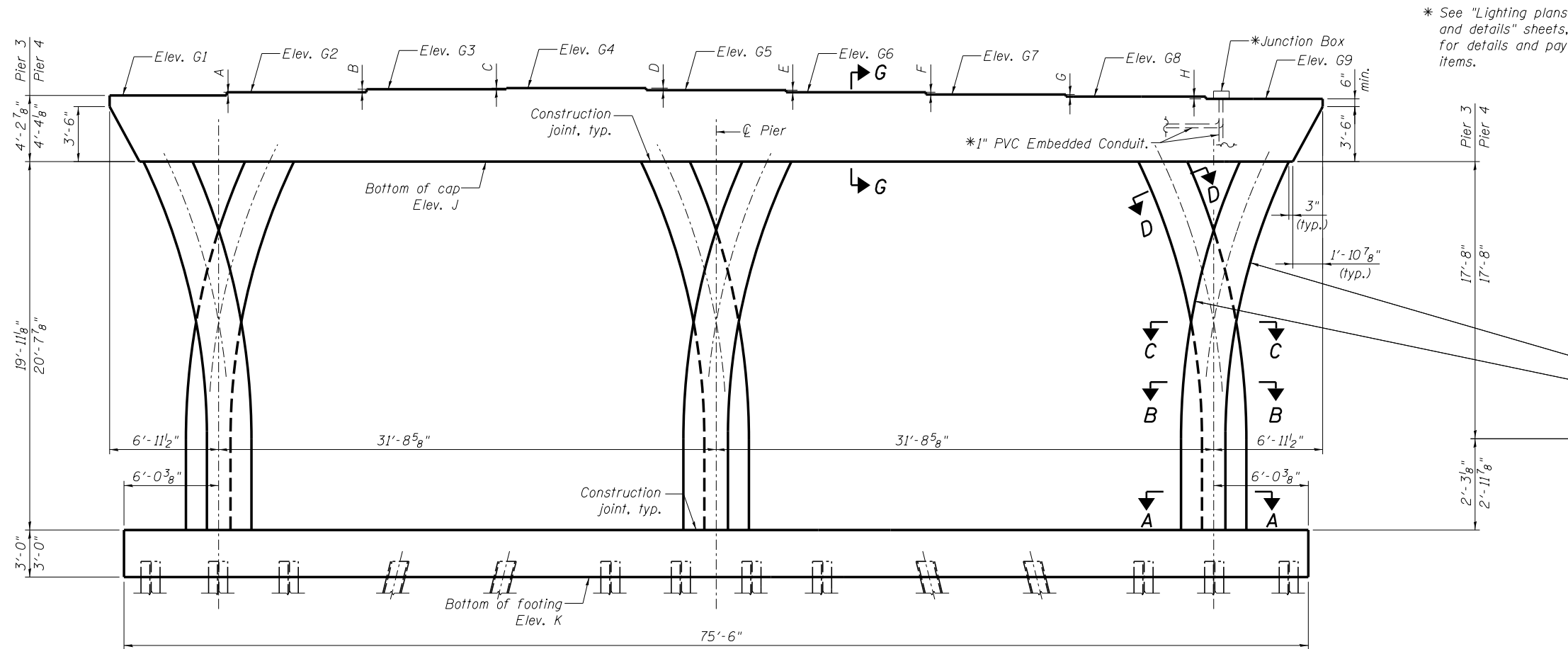
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PLAN OF PIER CAP



ANCHOR BOLT LAYOUT



PIERS 3 & 4 ELEVATION
(Looking South)

* See "Lighting plans and details" sheets, for details and pay items.

PILE DATA - PIER 3

Type: HP14x89 with pile shoes
Nominal Required Bearing: 848 kips
Factored Resistance Available: 551 kips
Est. Length: 18 feet
No. Production Piles: 27
No. Test Piles: 1

PILE DATA - PIER 4

Type: HP14x89 with pile shoes
Nominal Required Bearing: 848 kips
Factored Resistance Available: 551 kips
Est. Length: 18 feet
No. Production Piles: 27
No. Test Piles: 1

PIER	A	B	C	D	E	F	G	H	J	K	L	G1	G2	G3	G4	G5	G6	G7	G8	G9
Pier 3	2 3/8"	2 3/8"	7/8"	1 5/8"	1 5/8"	1 5/8"	1 5/8"	1 3/4"	592.93	570.00	35*12.88	597.17	597.37	597.57	597.64	597.50	597.36	597.22	597.08	596.93
Pier 4	2 1/4"	2 1/4"	3/4"	2"	1 3/4"	1 3/4"	1 3/4"	1 3/4"	594.66	571.00	36*70.88	599.00	599.19	599.38	599.44	599.27	599.12	598.96	598.81	598.66

NOTES:

1. See sheet S111 for reinforcing details.
2. See sheet S121 for pier notes.
3. See sheet S122 for bar list and bill of material.
4. See sheet S120 for sections A-A, B-B, C-C, D-D & G-G.

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FILE NAME = 081-0178-C00AB-110-Piers 3 and 4 Plan and Elevation.dgn	USER NAME = ksnider	DESIGNED - AWH	REVISED -
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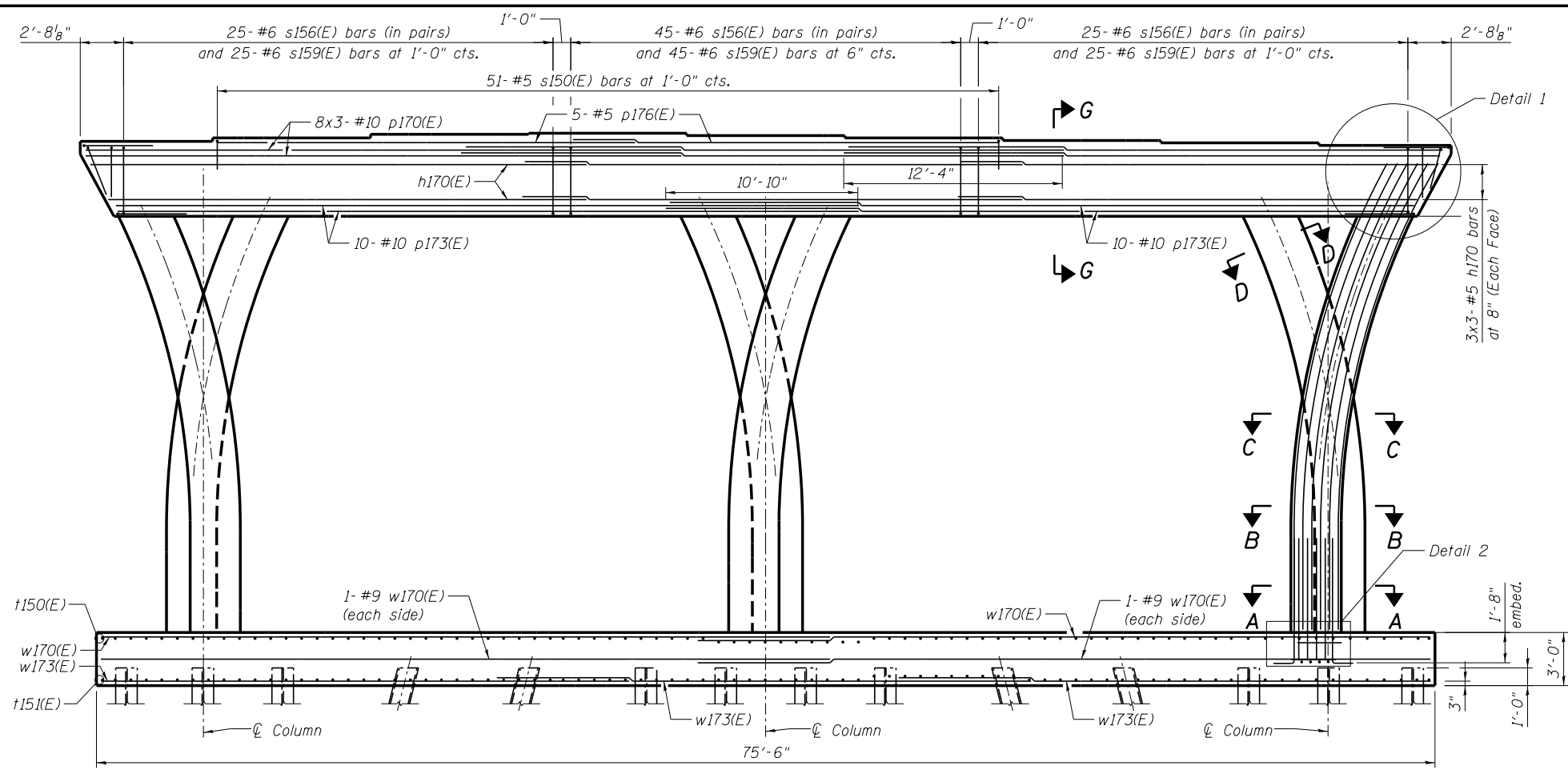
STATE OF ILLINOIS
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PIERS 3 AND 4 PLAN AND ELEVATION
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S110 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	999
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	

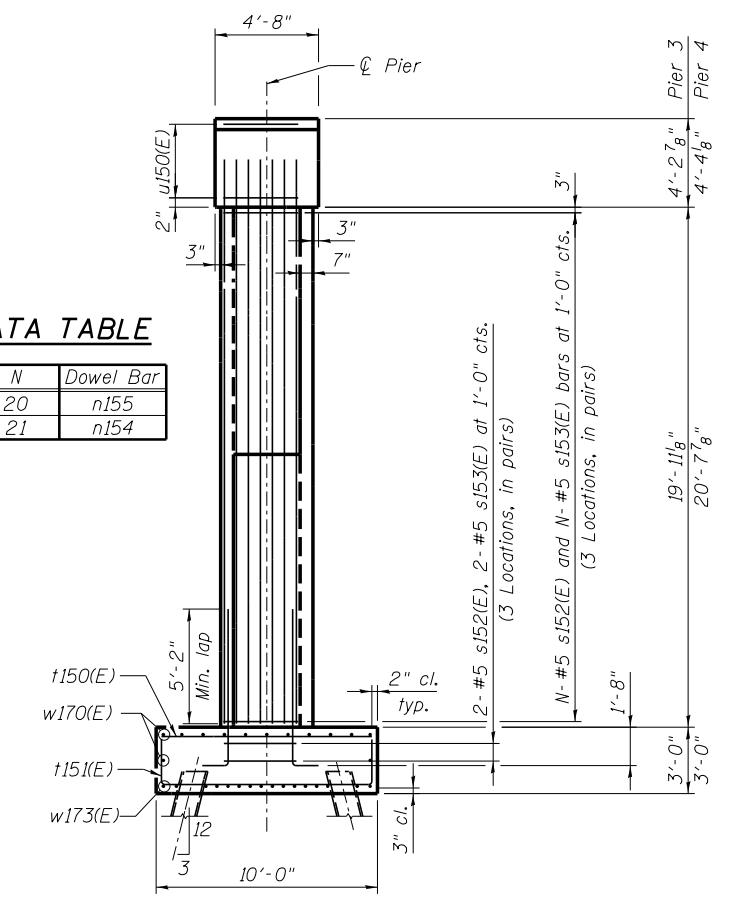
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PIER ELEVATION
(Looking South)

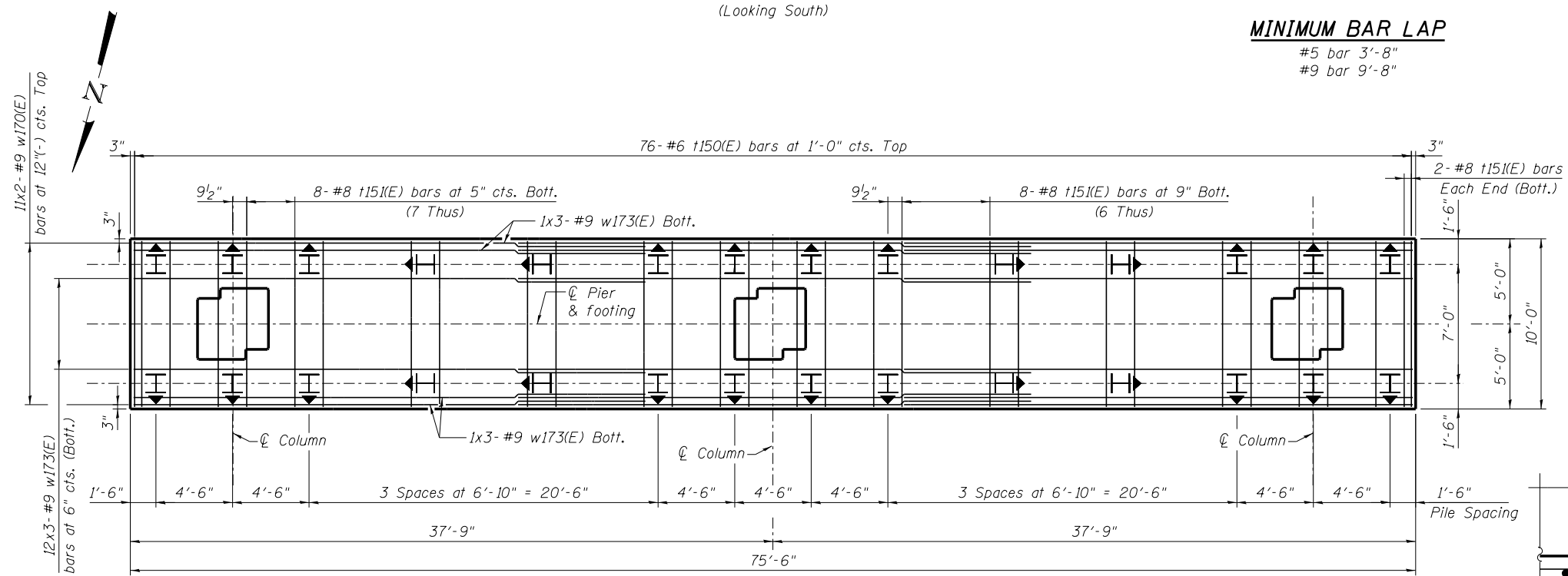
PIER DATA TABLE

PIER	N	Dowel Bar
Pier 3	20	n155
Pier 4	21	n154

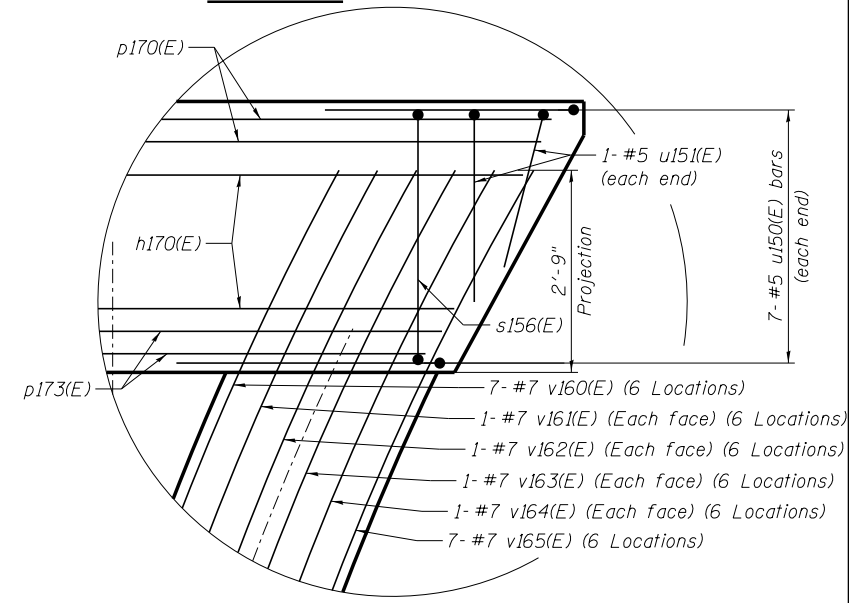


END VIEW

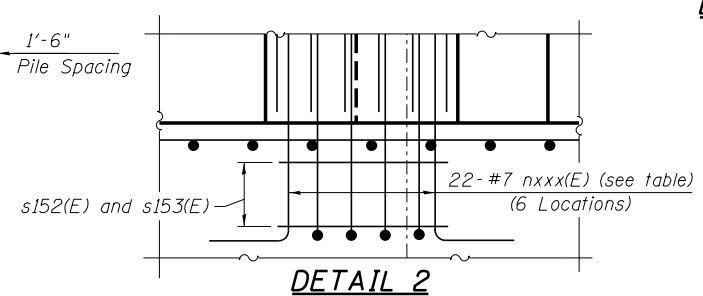
MINIMUM BAR LAP
#5 bar 3'-8"
#9 bar 9'-8"



FOOTING PLAN



DETAIL 1



DETAIL 2

NOTES:

1. See sheet S120 For sections A-A, B-B, C-C, D-D, & G-G.
2. See sheet S121 for pier notes.
3. See sheets S8 and S9 for footing and pile layout.

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FILE NAME = 081-0178-C00AB-111-Piers 3 and 4 Reinforcement Details.dgn	USER NAME = ksnider	DESIGNED - AWH	REVISED -
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STATE OF ILLINOIS
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PIERS 3 AND 4 REINFORCEMENT DETAILS
STRUCTURE NO. 081-0178 (EASTBOUND)

SHEET NO. S111 OF S138 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	1000
CONTRACT NO. 64C08			ILLINOIS FED. AID PROJECT	