BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+68.15	-21.50	556.89	556.89
CL Brg. W. Abut.	729+70.90	-21.50	556.90	556.90
A	729+80.90	-21.50	556.96	556.96
B	729+90.90	-21.50	557.02	557.02
C	730+00.90	-21.50	557.08	557.07
D	730+10.90	-21.50	557.14	557.13
CL Brg. Pier 1	730+17.90	-21.50	557.18	557.18
E	730+27.90	-21.51	557.24	557.26
F	730+37.87	-21.51	557.30	557.35
G	730+47.84	-21.53	557.35	557.43
H	730+57.80	-21.57	557.41	557.51
I	730+67.76	-21.63	557.47	557.56
J	730+77.73	-21.70	557.54	557.61
K	730+87.69	-21.79	557.60	557.64
L	730+97.65	-21.90	557.65	557.67
CL Brg. Pier 2	731+04.87	-21.99	557.69	557.69
M	731+14.83	-22.12	557.75	557.74
N	731+24.79	-22.28	557.80	557.80
O	731+34.75	-22.45	557.86	557.86
P	731+44.71	-22.64	557.91	557.91
CL Brg. E. Abut.	731+51.68	-22.79	557.95	557.95
Bk. E. Abut.	731+54.41	-22.84	557.97	557.97

STAGE CONSTRUCTION LINE (W.B.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+67.77	-19.00	556.83	556.83
CL Brg. W. Abut.	729+70.52	-19.00	556.85	556.85
A	729+80.52	-19.00	556.90	556.90
B	729+90.52	-19.00	556.96	556.96
C	730+00.52	-19.00	557.02	557.01
D	730+10.52	-19.00	557.07	557.06
CL Brg. Pier 1	730+17.52	-19.00	557.11	557.11
E	730+27.52	-19.00	557.17	557.19
F	730+37.49	-19.00	557.22	557.28
G	730+47.46	-19.00	557.28	557.36
H	730+57.42	-19.00	557.33	557.43
I	730+67.38	-19.00	557.39	557.48
J	730+77.34	-19.00	557.45	557.52
K	730+87.29	-19.00	557.50	557.55
L	730+97.24	-19.00	557.55	557.57
CL Brg. Pier 2	731+04.46	-19.00	557.59	557.59
M	731+14.40	-19.00	557.64	557.63
N	731+24.35	-19.00	557.69	557.68
O	731+34.29	-19.00	557.74	557.74
P	731+44.23	-19.00	557.79	557.79
CL Brg. E. Abut.	731+51.18	-19.00	557.83	557.83
Bk. E. Abut.	731+53.91	-19.00	557.84	557.84

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+67.18	-15.08	556.74	556.74
CL Brg. W. Abut.	729+69.93	-15.08	556.76	556.76
A	729+79.93	-15.08	556.81	556.81
B	729+89.93	-15.08	556.86	556.86
C	729+99.93	-15.08	556.92	556.91
D	730+09.93	-15.08	556.97	556.96
CL Brg. Pier 1	730+16.93	-15.08	557.00	557.00
E	730+26.93	-15.09	557.06	557.08
F	730+36.91	-15.10	557.11	557.16
G	730+46.89	-15.11	557.16	557.24
H	730+56.86	-15.15	557.22	557.31
I	730+66.84	-15.20	557.27	557.36
J	730+76.81	-15.28	557.32	557.40
K	730+86.78	-15.36	557.38	557.43
L	730+96.75	-15.47	557.43	557.45
CL Brg. Pier 2	731+03.98	-15.56	557.47	557.47
M	731+13.96	-15.69	557.53	557.52
N	731+23.93	-15.85	557.58	557.58
O	731+33.90	-16.02	557.64	557.64
P	731+43.87	-16.21	557.70	557.70
CL Brg. E. Abut.	731+50.85	-16.35	557.74	557.74
Bk. E. Abut.	731+53.59	-16.41	557.75	557.75

PROFILE GRADE (W.B.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+66.94	-13.50	556.71	556.71
CL Brg. W. Abut.	729+69.69	-13.50	556.72	556.72
A	729+79.69	-13.50	556.77	556.77
B	729+89.69	-13.50	556.83	556.82
C	729+99.69	-13.50	556.88	556.87
D	730+09.69	-13.50	556.93	556.92
CL Brg. Pier 1	730+16.69	-13.50	556.96	556.96
E	730+26.69	-13.50	557.01	557.04
F	730+36.67	-13.50	557.06	557.12
G	730+46.64	-13.50	557.11	557.19
H	730+56.62	-13.50	557.17	557.26
I	730+66.59	-13.50	557.22	557.31
J	730+76.55	-13.50	557.27	557.34
K	730+86.52	-13.50	557.32	557.36
L	730+96.48	-13.50	557.37	557.38
CL Brg. Pier 2	731+03.70	-13.50	557.40	557.40
M	731+13.65	-13.50	557.45	557.45
N	731+23.61	-13.50	557.51	557.50
O	731+33.56	-13.50	557.56	557.55
P	731+43.51	-13.50	557.61	557.61
CL Brg. E. Abut.	731+50.47	-13.50	557.64	557.64
Bk. E. Abut.	731+53.21	-13.50	557.66	557.66

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+66.21	-8.67	556.60	556.60
CL Brg. W. Abut.	729+68.96	-8.67	556.62	556.62
A	729+78.96	-8.67	556.66	556.66
B	729+88.96	-8.67	556.71	556.71
C	729+98.96	-8.67	556.75	556.75
D	730+08.96	-8.67	556.80	556.79
CL Brg. Pier 1	730+15.96	-8.67	556.83	556.83
E	730+25.96	-8.67	556.88	556.90
F	730+35.95	-8.68	556.93	556.98
G	730+45.94	-8.69	556.97	557.05
H	730+55.92	-8.73	557.02	557.11
I	730+65.91	-8.78	557.07	557.16
J	730+75.89	-8.85	557.11	557.19
K	730+85.88	-8.94	557.16	557.21
L	730+95.86	-9.04	557.22	557.23
CL Brg. Pier 2	731+03.10	-9.13	557.26	557.26
M	731+13.08	-9.26	557.31	557.30
N	731+23.07	-9.42	557.37	557.36
O	731+33.05	-9.59	557.42	557.42
P	731+43.03	-9.77	557.48	557.48
CL Brg. E. Abut.	731+50.01	-9.91	557.52	557.52
Bk. E. Abut.	731+52.75	-9.97	557.54	557.54

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+65.24	-2.25	556.46	556.46
CL Brg. W. Abut.	729+67.99	-2.25	556.48	556.48
A	729+77.99	-2.25	556.52	556.52
B	729+87.99	-2.25	556.56	556.55
C	729+97.99	-2.25	556.59	556.59
D	730+07.99	-2.25	556.63	556.63
CL Brg. Pier 1	730+14.99	-2.25	556.66	556.66
E	730+24.99	-2.26	556.70	556.73
F	730+34.99	-2.26	556.74	556.80
G	730+44.98	-2.27	556.78	556.86
H	730+54.98	-2.31	556.82	556.91
I	730+64.98	-2.36	556.86	556.95
J	730+74.97	-2.43	556.91	556.98
K	730+84.97	-2.51	556.95	556.99
L	730+94.96	-2.62	557.00	557.02
CL Brg. Pier 2	731+02.21	-2.70	557.04	557.04
M	731+12.20	-2.83	557.10	557.09
N	731+22.20	-2.98	557.15	557.15
O	731+32.19	-3.15	557.21	557.21
P	731+42.19	-3.34	557.26	557.26
CL Brg. E. Abut.	731+49.18	-3.48	557.30	557.30
Bk. E. Abut.	731+51.92	-3.53	557.32	557.32

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC		REVISED
	CHECKED WJA		REVISED
PLOT SCALE = NTS	DRAWN RMH		REVISED
PLOT DATE = 6/25/2020	CHECKED WJA		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 12 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	301
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-02-TOSE.dgn

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+64.45	3.00	557.46	557.46
CL Brg. W. Abut.	729+67.20	3.00	557.48	557.48
A	729+77.20	3.00	557.55	557.55
B	729+87.20	3.00	557.62	557.62
C	729+97.20	3.00	557.69	557.68
D	730+07.20	3.00	557.76	557.75
CL Brg. Pier 1	730+14.20	3.00	557.81	557.81
E	730+24.20	3.00	557.88	557.90
F	730+34.20	3.00	557.95	558.01
G	730+44.20	2.98	558.02	558.10
H	730+54.21	2.95	558.09	558.19
I	730+64.22	2.90	558.17	558.26
J	730+74.22	2.84	558.24	558.31
K	730+84.23	2.75	558.31	558.36
L	730+94.23	2.65	558.38	558.40
CL Brg. Pier 2	731+01.48	2.57	558.43	558.43
M	731+11.48	2.43	558.49	558.48
N	731+21.49	2.28	558.56	558.55
O	731+31.49	2.12	558.62	558.62
P	731+41.49	1.93	558.69	558.69
CL Brg. E. Abut.	731+48.49	1.79	558.74	558.74
Bk. E. Abut.	731+51.24	1.74	558.76	558.76

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+63.49	9.33	557.32	557.32
CL Brg. W. Abut.	729+66.24	9.33	557.34	557.34
A	729+76.24	9.33	557.40	557.40
B	729+86.24	9.33	557.47	557.46
C	729+96.24	9.33	557.53	557.52
D	730+06.24	9.33	557.60	557.59
CL Brg. Pier 1	730+13.24	9.33	557.64	557.64
E	730+23.24	9.33	557.70	557.73
F	730+33.24	9.33	557.77	557.82
G	730+43.26	9.32	557.83	557.91
H	730+53.28	9.29	557.90	557.99
I	730+63.30	9.24	557.97	558.06
J	730+73.31	9.18	558.03	558.11
K	730+83.33	9.09	558.10	558.15
L	730+93.34	8.99	558.17	558.18
CL Brg. Pier 2	731+00.60	8.91	558.21	558.21
M	731+10.61	8.78	558.28	558.27
N	731+20.63	8.63	558.34	558.34
O	731+30.65	8.47	558.41	558.41
P	731+40.66	8.28	558.48	558.48
CL Brg. E. Abut.	731+47.66	8.14	558.52	558.52
Bk. E. Abut.	731+50.41	8.09	558.54	558.54

PROFILE GRADE (E.B.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+62.86	13.50	557.23	557.23
CL Brg. W. Abut.	729+65.61	13.50	557.25	557.25
A	729+75.61	13.50	557.31	557.31
B	729+85.61	13.50	557.37	557.36
C	729+95.61	13.50	557.43	557.42
D	730+05.61	13.50	557.49	557.48
CL Brg. Pier 1	730+12.61	13.50	557.53	557.53
E	730+22.61	13.50	557.59	557.61
F	730+32.61	13.50	557.65	557.70
G	730+42.63	13.50	557.71	557.79
H	730+52.65	13.50	557.77	557.86
I	730+62.67	13.50	557.83	557.92
J	730+72.69	13.50	557.89	557.97
K	730+82.70	13.50	557.95	558.00
L	730+92.70	13.50	558.01	558.03
CL Brg. Pier 2	730+99.96	13.50	558.06	558.06
M	731+09.96	13.50	558.12	558.11
N	731+19.97	13.50	558.18	558.17
O	731+29.97	13.50	558.24	558.24
P	731+39.97	13.50	558.30	558.30
CL Brg. E. Abut.	731+46.96	13.50	558.34	558.34
Bk. E. Abut.	731+49.70	13.50	558.36	558.36

BEAM 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+62.53	15.67	557.18	557.18
CL Brg. W. Abut.	729+65.28	15.67	557.20	557.20
A	729+75.28	15.67	557.26	557.26
B	729+85.28	15.67	557.31	557.31
C	729+95.28	15.67	557.37	557.37
D	730+05.28	15.67	557.43	557.42
CL Brg. Pier 1	730+12.28	15.67	557.47	557.47
E	730+22.28	15.67	557.53	557.55
F	730+32.29	15.67	557.59	557.64
G	730+42.31	15.65	557.65	557.73
H	730+52.34	15.63	557.71	557.80
I	730+62.37	15.58	557.77	557.86
J	730+72.40	15.52	557.83	557.90
K	730+82.43	15.44	557.89	557.93
L	730+92.45	15.34	557.95	557.97
CL Brg. Pier 2	730+99.72	15.26	558.00	558.00
M	731+09.74	15.13	558.06	558.06
N	731+19.77	14.98	558.13	558.12
O	731+29.80	14.81	558.19	558.19
P	731+39.82	14.63	558.26	558.26
CL Brg. E. Abut.	731+46.83	14.50	558.31	558.31
Bk. E. Abut.	731+49.59	14.44	558.33	558.33

STAGE CONSTRUCTION LINE (E.B.)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+62.03	19.00	557.11	557.11
CL Brg. W. Abut.	729+64.78	19.00	557.12	557.12
A	729+74.78	19.00	557.18	557.18
B	729+84.78	19.00	557.23	557.23
C	729+94.78	19.00	557.29	557.28
D	730+04.78	19.00	557.34	557.34
CL Brg. Pier 1	730+11.78	19.00	557.38	557.38
E	730+21.78	19.00	557.44	557.46
F	730+31.78	19.00	557.49	557.55
G	730+41.81	19.00	557.55	557.63
H	730+51.84	19.00	557.60	557.70
I	730+61.87	19.00	557.66	557.75
J	730+71.89	19.00	557.71	557.79
K	730+81.91	19.00	557.77	557.81
L	730+91.93	19.00	557.83	557.84
CL Brg. Pier 2	730+99.19	19.00	557.87	557.87
M	731+09.20	19.00	557.93	557.92
N	731+19.22	19.00	557.99	557.99
O	731+29.23	19.00	558.05	558.05
P	731+39.24	19.00	558.11	558.11
CL Brg. E. Abut.	731+46.24	19.00	558.16	558.16
Bk. E. Abut.	731+48.98	19.00	558.17	558.17

BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+61.57	22.00	557.05	557.05
CL Brg. W. Abut.	729+64.32	22.00	557.06	557.06
A	729+74.32	22.00	557.11	557.11
B	729+84.32	22.00	557.16	557.16
C	729+94.32	22.00	557.22	557.21
D	730+04.32	22.00	557.27	557.26
CL Brg. Pier 1	730+11.32	22.00	557.30	557.30
E	730+21.32	22.00	557.36	557.38
F	730+31.33	22.00	557.41	557.46
G	730+41.37	21.99	557.46	557.54
H	730+51.41	21.96	557.51	557.61
I	730+61.45	21.92	557.57	557.66
J	730+71.48	21.86	557.62	557.69
K	730+81.52	21.78	557.68	557.72
L	730+91.56	21.68	557.74	557.75
CL Brg. Pier 2	730+98.83	21.60	557.78	557.78
M	731+08.87	21.47	557.85	557.84
N	731+18.91	21.33	557.91	557.91
O	731+28.95	21.16	557.98	557.98
P	731+38.98	20.98	558.05	558.05
CL Brg. E. Abut.	731+46.00	20.85	558.09	558.09
Bk. E. Abut.	731+48.76	20.79	558.11	558.11

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC	REVISED
	CHECKED WJA	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED WJA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS IV
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 13 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	302
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-013-TOSE.dgn

BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+60.62	28.33	556.91	556.91
CL Brg. W. Abut.	729+63.37	28.33	556.92	556.92
A	729+73.37	28.33	556.97	556.97
B	729+83.37	28.33	557.01	557.01
C	729+93.37	28.33	557.06	557.05
D	730+03.37	28.33	557.11	557.10
CL Brg. Pier 1	730+10.37	28.33	557.14	557.14
E	730+20.37	28.33	557.18	557.21
F	730+30.37	28.33	557.23	557.28
G	730+40.42	28.33	557.28	557.36
H	730+50.47	28.30	557.32	557.41
I	730+60.52	28.26	557.37	557.46
J	730+70.57	28.20	557.42	557.49
K	730+80.62	28.12	557.47	557.51
L	730+90.66	28.02	557.52	557.54
CL Brg. Pier 2	730+97.94	27.94	557.57	557.57
M	731+07.99	27.82	557.63	557.63
N	731+18.04	27.67	557.70	557.69
O	731+28.09	27.51	557.76	557.76
P	731+38.14	27.33	557.83	557.83
CL Brg. E. Abut.	731+45.17	27.20	557.88	557.88
Bk. E. Abut.	731+47.93	27.14	557.90	557.90

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+59.66	34.67	556.78	556.78
CL Brg. W. Abut.	729+62.41	34.67	556.79	556.79
A	729+72.41	34.67	556.83	556.83
B	729+82.41	34.67	556.87	556.86
C	729+92.41	34.67	556.91	556.90
D	730+02.41	34.67	556.95	556.94
CL Brg. Pier 1	730+09.41	34.67	556.97	556.97
E	730+19.41	34.67	557.01	557.04
F	730+29.41	34.67	557.05	557.11
G	730+39.46	34.66	557.09	557.17
H	730+49.52	34.64	557.13	557.22
I	730+59.59	34.59	557.17	557.26
J	730+69.65	34.54	557.22	557.29
K	730+79.71	34.46	557.26	557.30
L	730+89.77	34.37	557.31	557.32
CL Brg. Pier 2	730+97.06	34.29	557.35	557.35
M	731+07.12	34.16	557.42	557.41
N	731+17.18	34.02	557.48	557.48
O	731+27.24	33.86	557.55	557.55
P	731+37.29	33.68	557.62	557.62
CL Brg. E. Abut.	731+44.33	33.55	557.66	557.66
Bk. E. Abut.	731+47.09	33.50	557.68	557.68

BEAM 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+58.70	41.00	556.64	556.64
CL Brg. W. Abut.	729+61.45	41.00	556.65	556.65
A	729+71.45	41.00	556.69	556.69
B	729+81.45	41.00	556.72	556.72
C	729+91.45	41.00	556.75	556.75
D	730+01.45	41.00	556.79	556.78
CL Brg. Pier 1	730+08.45	41.00	556.81	556.81
E	730+18.45	41.00	556.84	556.87
F	730+28.45	41.00	556.88	556.93
G	730+38.51	40.99	556.91	556.99
H	730+48.58	40.97	556.94	557.04
I	730+58.65	40.93	556.98	557.07
J	730+68.73	40.88	557.01	557.09
K	730+78.80	40.80	557.05	557.10
L	730+88.87	40.71	557.09	557.11
CL Brg. Pier 2	730+96.17	40.63	557.14	557.14
M	731+06.24	40.51	557.20	557.20
N	731+16.31	40.37	557.27	557.26
O	731+26.38	40.21	557.34	557.33
P	731+36.45	40.03	557.40	557.40
CL Brg. E. Abut.	731+43.49	39.90	557.45	557.45
Bk. E. Abut.	731+46.26	39.85	557.47	557.47

BEAM 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+57.74	47.33	556.51	556.51
CL Brg. W. Abut.	729+60.49	47.33	556.52	556.52
A	729+70.49	47.33	556.55	556.55
B	729+80.49	47.33	556.57	556.57
C	729+90.49	47.33	556.60	556.59
D	730+00.49	47.33	556.63	556.62
CL Brg. Pier 1	730+07.49	47.33	556.65	556.65
E	730+17.49	47.33	556.67	556.70
F	730+27.49	47.33	556.70	556.75
G	730+37.55	47.33	556.73	556.81
H	730+47.64	47.31	556.76	556.85
I	730+57.72	47.27	556.78	556.87
J	730+67.80	47.21	556.81	556.89
K	730+77.89	47.14	556.84	556.89
L	730+87.97	47.05	556.88	556.89
CL Brg. Pier 2	730+95.27	46.98	556.92	556.92
M	731+05.36	46.85	556.99	556.98
N	731+15.44	46.71	557.05	557.05
O	731+25.52	46.56	557.12	557.12
P	731+35.60	46.38	557.19	557.19
CL Brg. E. Abut.	731+42.65	46.25	557.23	557.23
Bk. E. Abut.	731+45.42	46.20	557.25	557.25

BEAM 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+56.79	53.67	556.38	556.38
CL Brg. W. Abut.	729+59.54	53.67	556.39	556.39
A	729+69.54	53.67	556.41	556.41
B	729+79.54	53.67	556.43	556.43
C	729+89.54	53.67	556.45	556.44
D	729+99.54	53.67	556.47	556.46
CL Brg. Pier 1	730+06.54	53.67	556.49	556.49
E	730+16.54	53.67	556.51	556.53
F	730+26.53	53.67	556.53	556.58
G	730+36.59	53.66	556.55	556.63
H	730+46.69	53.64	556.57	556.66
I	730+56.78	53.61	556.59	556.68
J	730+66.88	53.55	556.61	556.69
K	730+76.97	53.48	556.64	556.68
L	730+87.06	53.39	556.67	556.68
CL Brg. Pier 2	730+94.38	53.32	556.71	556.71
M	731+04.47	53.20	556.77	556.77
N	731+14.57	53.06	556.84	556.83
O	731+24.66	52.91	556.91	556.90
P	731+34.75	52.73	556.97	556.97
CL Brg. E. Abut.	731+41.81	52.60	557.02	557.02
Bk. E. Abut.	731+44.58	52.55	557.04	557.04

BEAM 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+55.83	60.00	556.25	556.25
CL Brg. W. Abut.	729+58.58	60.00	556.26	556.26
A	729+68.58	60.00	556.27	556.27
B	729+78.58	60.00	556.29	556.28
C	729+88.58	60.00	556.30	556.29
D	729+98.58	60.00	556.31	556.31
CL Brg. Pier 1	730+05.58	60.00	556.33	556.33
E	730+15.58	60.00	556.34	556.36
F	730+25.58	60.00	556.35	556.41
G	730+35.63	60.00	556.37	556.45
H	730+45.74	59.98	556.38	556.48
I	730+55.85	59.95	556.40	556.49
J	730+65.95	59.89	556.42	556.49
K	730+76.06	59.82	556.43	556.48
L	730+86.16	59.74	556.45	556.47
CL Brg. Pier 2	730+93.48	59.66	556.49	556.49
M	731+03.59	59.54	556.56	556.55
N	731+13.69	59.41	556.63	556.62
O	731+23.80	59.25	556.69	556.69
P	731+33.90	59.08	556.76	556.76
CL Brg. E. Abut.	731+40.97	58.95	556.81	556.81
Bk. E. Abut.	731+43.74	58.90	556.82	556.82

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC	REVISED	
	CHECKED WJA	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED WJA	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS V
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 14 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	303
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-014-TOSE.dgn

BEAM 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+54.87	66.33	556.12	556.12
CL Brg. W. Abut.	729+57.62	66.33	556.13	556.13
A	729+67.62	66.33	556.13	556.13
B	729+77.62	66.33	556.14	556.14
C	729+87.62	66.33	556.15	556.15
D	729+97.62	66.33	556.16	556.15
CL Brg. Pier 1	730+04.62	66.33	556.17	556.17
E	730+14.62	66.33	556.17	556.20
F	730+24.62	66.33	556.18	556.24
G	730+34.67	66.33	556.19	556.27
H	730+44.79	66.32	556.20	556.29
I	730+54.91	66.28	556.21	556.30
J	730+65.02	66.23	556.22	556.29
K	730+75.14	66.17	556.23	556.28
L	730+85.25	66.08	556.24	556.26
CL Brg. Pier 2	730+92.58	66.01	556.28	556.28
M	731+02.70	65.89	556.34	556.34
N	731+12.82	65.75	556.41	556.40
O	731+22.94	65.60	556.48	556.47
P	731+33.05	65.43	556.54	556.54
CL Brg. E. Abut.	731+40.12	65.30	556.59	556.59
Bk. E. Abut.	731+42.90	65.25	556.61	556.61

BEAM 22

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	729+53.91	72.67	556.00	556.00
CL Brg. W. Abut.	729+56.66	72.67	556.00	556.00
A	729+66.66	72.67	556.00	556.00
B	729+76.66	72.67	556.00	556.00
C	729+86.66	72.67	556.00	556.00
D	729+96.66	72.67	556.01	556.00
CL Brg. Pier 1	730+03.66	72.67	556.01	556.01
E	730+13.66	72.67	556.01	556.03
F	730+23.66	72.67	556.01	556.07
G	730+33.70	72.67	556.01	556.09
H	730+43.83	72.65	556.02	556.11
I	730+53.96	72.62	556.02	556.11
J	730+64.09	72.57	556.02	556.10
K	730+74.22	72.51	556.03	556.07
L	730+84.35	72.42	556.03	556.05
CL Brg. Pier 2	730+91.68	72.35	556.07	556.07
M	731+01.81	72.23	556.13	556.12
N	731+11.94	72.10	556.20	556.19
O	731+22.07	71.95	556.26	556.26
P	731+32.19	71.78	556.33	556.33
CL Brg. E. Abut.	731+39.28	71.65	556.38	556.38
Bk. E. Abut.	731+42.06	71.60	556.39	556.39

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC	REVISED
	CHECKED WJA	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED WJA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS VI
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 15 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	304
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-05-TOSE.dgn

NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+45.21	-61.50	557.52
A1	729+55.21	-61.50	557.61
A2	729+65.21	-61.50	557.71
E. End of W. Appr. Slab	729+75.21	-61.50	557.81

NORTH EDGE OF FUTURE LANE 3

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+43.39	-49.50	557.27
A1	729+53.39	-49.50	557.36
A2	729+63.39	-49.50	557.44
E. End of W. Appr. Slab	729+73.39	-49.50	557.53

NORTH EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+41.58	-37.50	557.03
A1	729+51.58	-37.50	557.10
A2	729+61.58	-37.50	557.18
E. End of W. Appr. Slab	729+71.58	-37.50	557.25

NORTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+39.76	-25.50	556.80
A1	729+49.76	-25.50	556.86
A2	729+59.76	-25.50	556.92
E. End of W. Appr. Slab	729+69.76	-25.50	556.98

STAGE CONSTRUCTION LINE

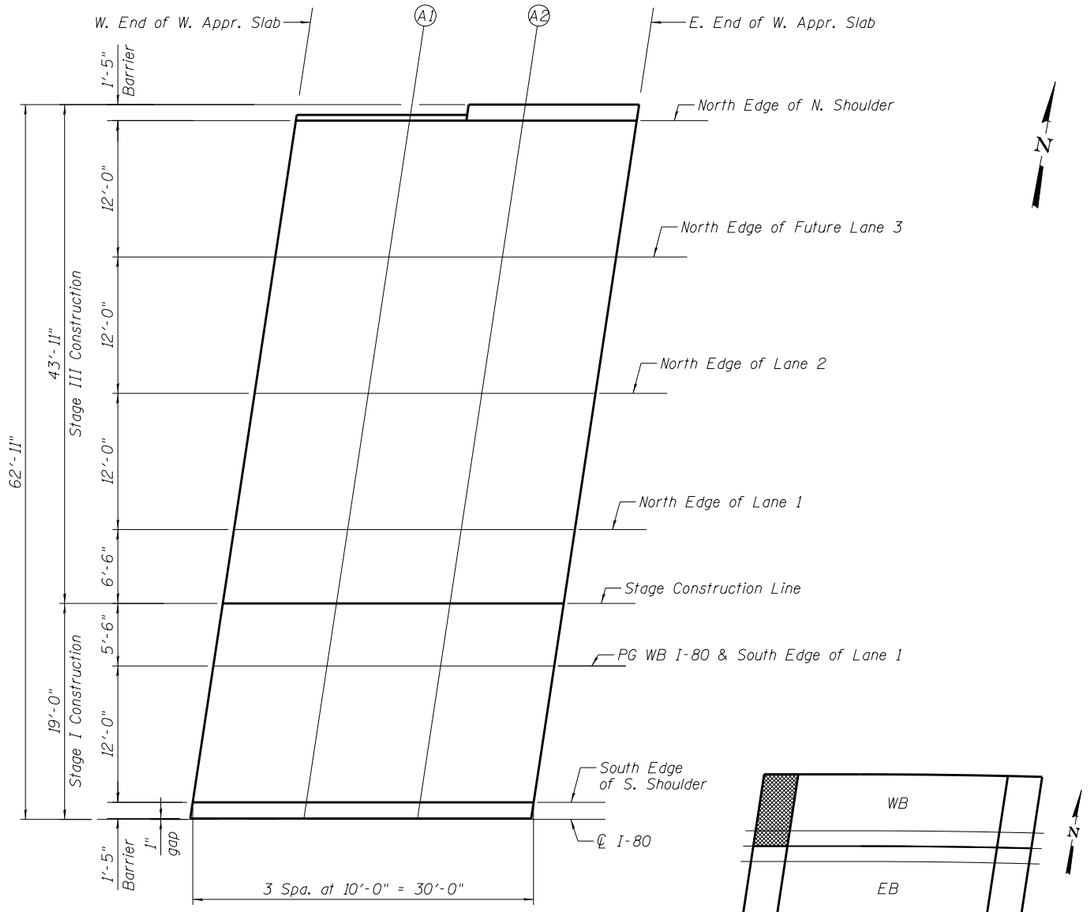
Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+38.78	-19.00	556.67
A1	729+48.78	-19.00	556.72
A2	729+58.78	-19.00	556.78
E. End of W. Appr. Slab	729+68.78	-19.00	556.84

PG WB I-80 & SOUTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+37.95	-13.50	556.56
A1	729+47.95	-13.50	556.61
A2	729+57.95	-13.50	556.66
E. End of W. Appr. Slab	729+67.95	-13.50	556.71

SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+36.14	-1.50	556.33
A1	729+46.14	-1.50	556.37
A2	729+56.14	-1.50	556.41
E. End of W. Appr. Slab	729+66.14	-1.50	556.45



PLAN
West Approach (Westbound)

KEY PLAN

All offsets are measured from ℄ I-80.

USER NAME = default	DESIGNED YC		REVISED
	CHECKED WJA		REVISED
PLOT SCALE = NTS	DRAWN RMH		REVISED
PLOT DATE = 6/25/2020	CHECKED WJA		REVISED

HBP Illinois Partners

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 16 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	305
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-016-TOSE WAPP.dgn

NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+35.68	1.50	557.28
A1	729+45.68	1.50	557.35
A2	729+55.68	1.50	557.43
E. End of W. Appr. Slab	729+65.68	1.50	557.50

PG WB I-80 & NORTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+33.87	13.50	557.05
A1	729+43.87	13.50	557.11
A2	729+53.87	13.50	557.17
E. End of W. Appr. Slab	729+63.87	13.50	557.23

STAGE CONSTRUCTION LINE

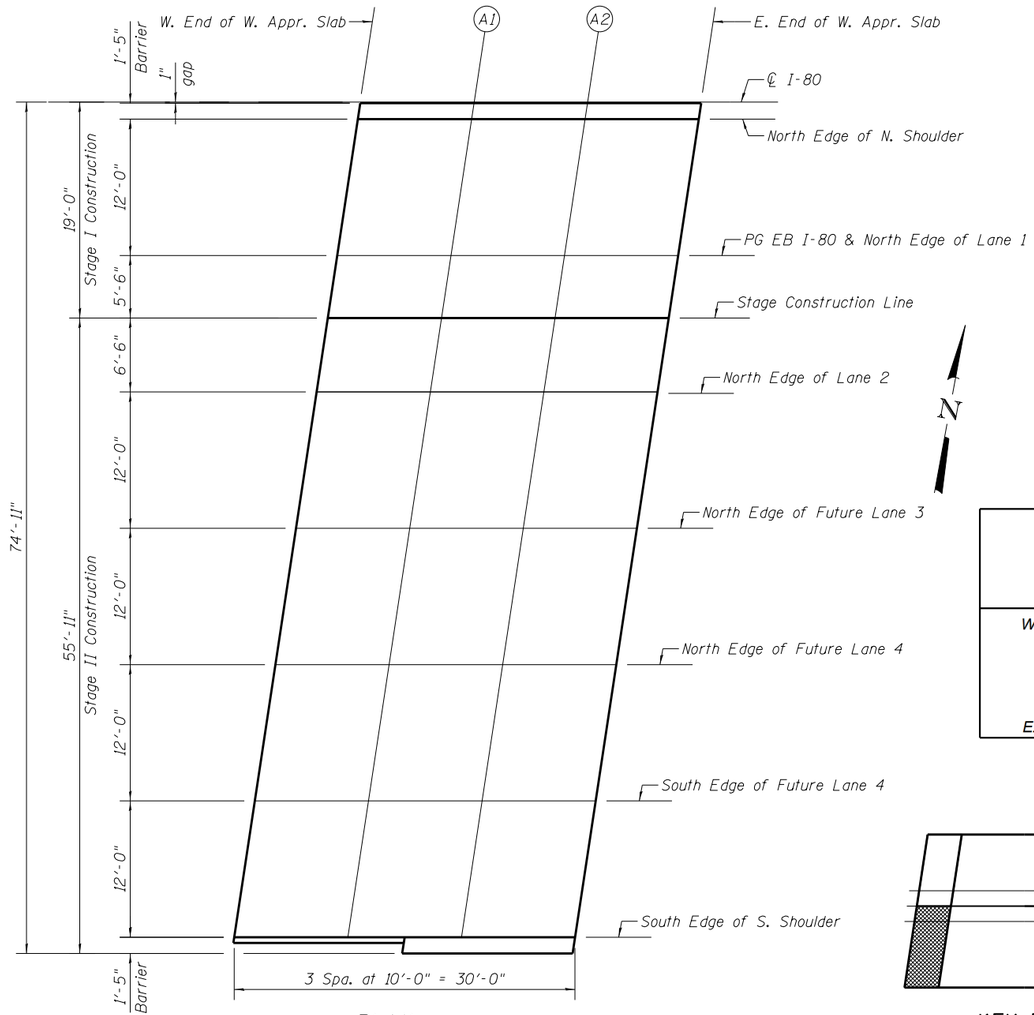
Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+33.04	19.00	556.95
A1	729+43.04	19.00	557.00
A2	729+53.04	19.00	557.06
E. End of W. Appr. Slab	729+63.04	19.00	557.12

NORTH EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+32.06	25.50	556.83
A1	729+42.06	25.50	556.88
A2	729+52.06	25.50	556.93
E. End of W. Appr. Slab	729+62.06	25.50	556.98

NORTH EDGE OF FUTURE LANE 3

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+30.24	37.50	556.61
A1	729+40.24	37.50	556.64
A2	729+50.24	37.50	556.68
E. End of W. Appr. Slab	729+60.24	37.50	556.72

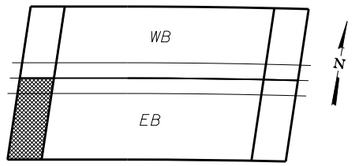


PLAN

West Approach (Eastbound)

SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+24.80	73.50	555.96
A1	729+34.80	73.50	555.97
A2	729+44.80	73.50	555.97
E. End of W. Appr. Slab	729+54.80	73.50	555.98



KEY PLAN

NORTH EDGE OF FUTURE LANE 4

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+28.43	49.50	556.39
A1	729+38.43	49.50	556.42
A2	729+48.43	49.50	556.44
E. End of W. Appr. Slab	729+58.43	49.50	556.47

SOUTH EDGE OF FUTURE LANE 4

Location	Station	Offset	Theoretical Grade Elevation
W. End of W. Appr. Slab	729+26.61	61.50	556.17
A1	729+36.61	61.50	556.19
A2	729+46.61	61.50	556.21
E. End of W. Appr. Slab	729+56.61	61.50	556.22

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC	REVISED
	CHECKED WJA	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED WJA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 17 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	306
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-0990901-60W34-017-TOSE WAPP.dgn

NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+58.36	-61.51	559.27
A3	731+68.23	-61.51	559.32
A4	731+78.09	-61.51	559.37
E. End of E. Appr. Slab	731+87.95	-61.51	559.42

NORTH EDGE OF FUTURE LANE 3

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+56.84	-49.50	558.86
A3	731+66.72	-49.50	558.91
A4	731+76.61	-49.50	558.96
E. End of E. Appr. Slab	731+86.49	-49.50	559.01

NORTH EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+55.30	-37.50	558.46
A3	731+65.21	-37.50	558.51
A4	731+75.11	-37.50	558.56
E. End of E. Appr. Slab	731+85.01	-37.50	558.61

NORTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+53.76	-25.50	558.05
A3	731+63.69	-25.50	558.10
A4	731+73.61	-25.50	558.16
E. End of E. Appr. Slab	731+83.54	-25.50	558.21

STAGE CONSTRUCTION LINE

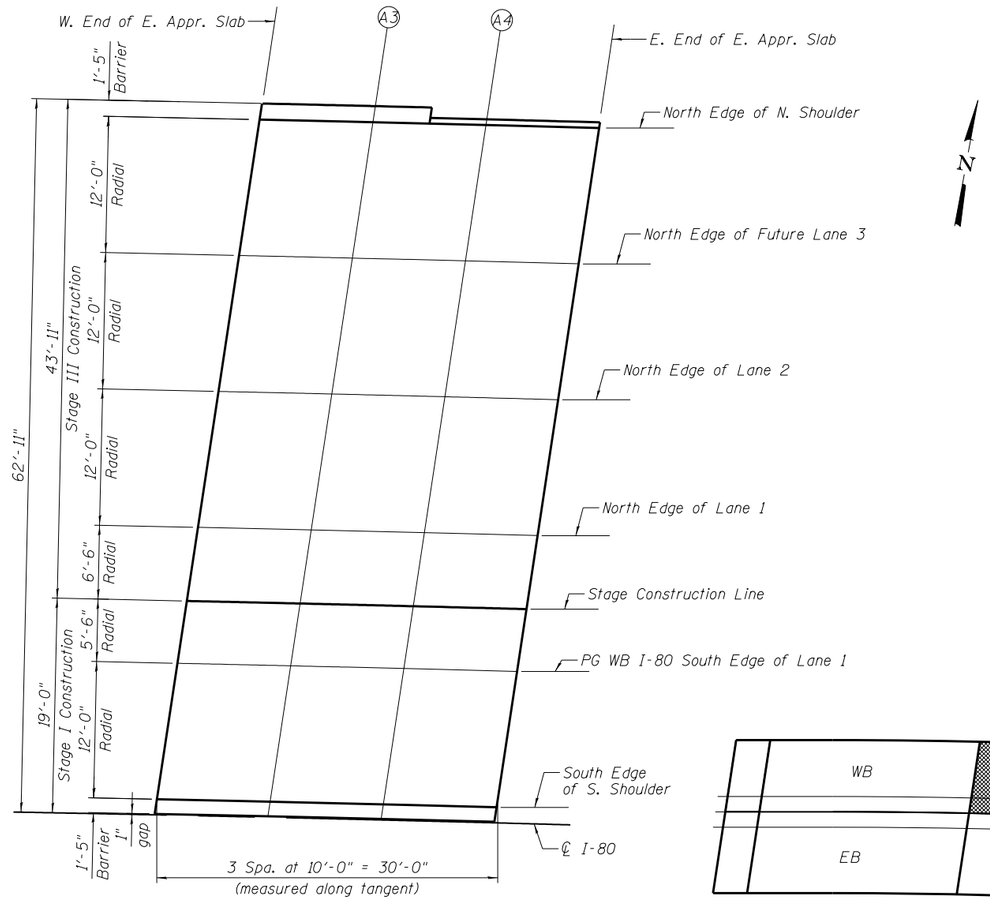
Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+52.92	-19.00	557.84
A3	731+62.86	-19.00	557.89
A4	731+72.80	-19.00	557.94
E. End of E. Appr. Slab	731+82.73	-19.00	557.99

PG WB I-80 & SOUTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+52.21	-13.50	557.65
A3	731+62.16	-13.50	557.70
A4	731+72.11	-13.50	557.75
E. End of E. Appr. Slab	731+82.05	-13.50	557.80

SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+50.66	-1.50	557.25
A3	731+60.63	-1.50	557.30
A4	731+70.59	-1.50	557.35
E. End of E. Appr. Slab	731+80.56	-1.50	557.40



PLAN

East Approach (Westbound)

KEY PLAN

All offsets are measured from ℄ I-80.

HBP Illinois Partners	USER NAME = default	DESIGNED YC	REVISED
		CHECKED WJA	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED WJA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)

SHEET NO. 18 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	307
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-018-TOSE EAPP.dgn

NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+50.26	1.50	558.76
A3	731+60.24	1.50	558.82
A4	731+70.21	1.50	558.88
E. End of E. Appr. Slab	731+80.18	1.50	558.94

PG WB I-80 & NORTH EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+48.70	13.50	558.35
A3	731+58.70	13.50	558.41
A4	731+68.69	13.50	558.47
E. End of E. Appr. Slab	731+78.68	13.50	558.53

STAGE CONSTRUCTION LINE

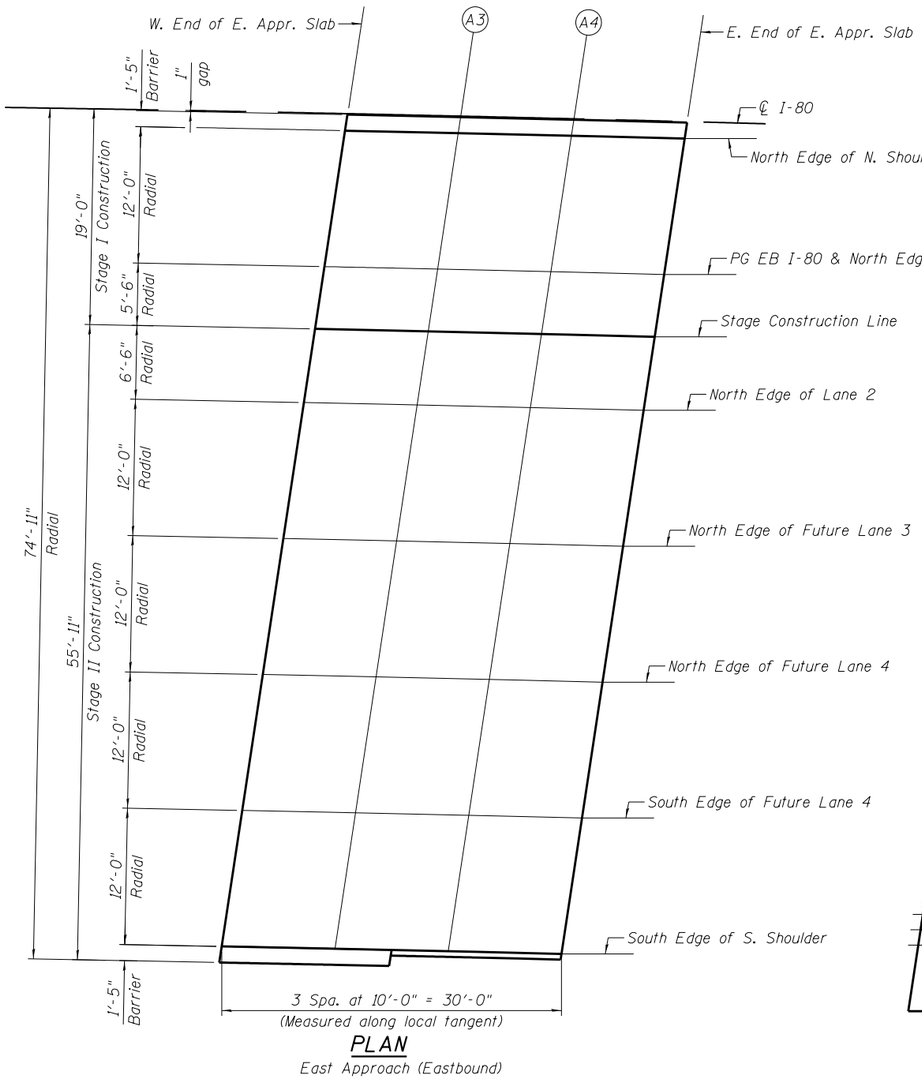
Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+47.98	19.00	558.17
A3	731+57.99	19.00	558.23
A4	731+67.99	19.00	558.29
E. End of E. Appr. Slab	731+77.99	19.00	558.35

NORTH EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+47.13	25.50	557.95
A3	731+57.15	25.50	558.01
A4	731+67.16	25.50	558.07
E. End of E. Appr. Slab	731+77.18	25.50	558.13

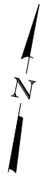
NORTH EDGE OF FUTURE LANE 3

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+45.55	37.50	557.54
A3	731+55.59	37.50	557.60
A4	731+65.63	37.50	557.66
E. End of E. Appr. Slab	731+75.67	37.50	557.72



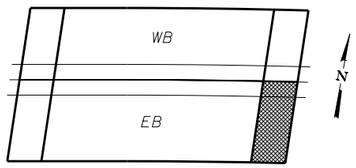
PLAN

East Approach (Eastbound)



SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+40.79	73.49	556.32
A3	731+50.89	73.49	556.39
A4	731+60.99	73.49	556.45
E. End of E. Appr. Slab	731+71.09	73.49	556.51



KEY PLAN

NORTH EDGE OF FUTURE LANE 4

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+43.97	49.50	557.14
A3	731+54.03	49.50	557.20
A4	731+64.09	49.50	557.26
E. End of E. Appr. Slab	731+74.15	49.50	557.32

SOUTH EDGE OF FUTURE LANE 4

Location	Station	Offset	Theoretical Grade Elevation
W. End of E. Appr. Slab	731+42.38	61.49	556.73
A3	731+52.46	61.49	556.79
A4	731+62.55	61.49	556.85
E. End of E. Appr. Slab	731+72.62	61.49	556.91

All offsets are measured from ℄ I-80.

HBP Illinois Partners

USER NAME = default	DESIGNED YC	REVISED
	CHECKED WJA	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED WJA	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS IV
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 19 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	308
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-019-TOSE EAPP.dgn

N

Measured along inside face of parapet

184′-6¼" end to end deck

48′-8⅞" | 87′-2" | 48′-7⅜"

340-#6 a_2(E) bars at 6½" cts. top (lap with each top a(E) or a_1(E) bar Each Side)

2-#6 b_3(E) bars top of slab, typ.

2-#6 b_2(E) bars top of slab, typ.

3x6-#5 b(E) bars top of slab, typ.

℄ Light Pole Sta. 730+72

2-#6 b_2(E) bars top of slab, typ.

2-#6 b_3(E) bars top of slab, typ.

25′-9" | 19′-9" | 19′-9" | 25′-9"

329-#5 a_1(E) bars at 6½" cts. top
215-#5 a_1(E) bars at 10" cts. bot.

60-#6 b_3(E) bars at 12" cts. btwn. b(E) bars, top of slab over pier (18 Stage I, 42 Stage III)

*11-#5 a_1(E) bars at 6½" cts. top
*7-#5 a_1(E) bars at 10" cts. bot.

340-Bar Splicers (E) for #5 a(E), Top
222-Bar Splicers (E) for #5 a(E), Bot.

337-#5 a(E) bars at 6½" cts. top
220-#5 a(E) bars at 10" cts. bot.

*4-#5 a(E) bars at 6½" cts. top
*3-#5 a(E) bars at 10" cts. bot.

60-#6 b_2(E) bars at 12" cts., btwn. b(E) bars, top of slab over pier (lapped with b_3(E) bars) (18 Stage I, 42 Stage III)

60x6-#5 b(E) bars at 12" cts. top (18 Stage I, 42 Stage III)

53x7-#5 b_1(E) bars bot. spaced as shown in cross section

60-#6 b_2(E) bars at 12" cts., btwn. b(E) bars, top of slab over pier (lapped with b_3(E) bars) (18 Stage I, 42 Stage III)

60-#6 b_3(E) bars at 12" cts., btwn. b(E) bars, top of slab over pier (18 Stage I, 42 Stage III)

64-#5 v_{100}(E) bars at 12" cts. each end (19 Stage I, 45 Stage III)

62′-10" out to out deck | 43′-11" Stage III Constr. | 18′-11" Stage I Constr. | 60′-0" face to face parapets | 1′-5" | 8½" | 8½" | 8½" | 1′-5" | 8½" | 5′-6"

Bk. W. Abut. | ℄ Pier 1 | Stage Construction Line | ℄ Pier 2

8°36′0" typ.

B B

1-#5 a_1(E) bar top and bot. each end

1′-0" typ.

1-#5 Bar Splicer (E) for #5 a(E), Top and Bot. each end

5′-6"

PG WB I-80

Bk. E. Abut.

1-#5 a(E) bar, top and bot. each end

℄ I-80

277-#5 d_1(E) bars at 8" cts. Opposite Side
443-#5 d_1(E) at 5" cts. Median Parapet

12′-0" | 12′-0"

⅛"Aluminum sheet joints in parapet, typ.

48′-8⅞" | 87′-2¼" | 48′-7½"

Measured along inside face of parapet

184′-6⅝" end to end deck

Notes:
1. See Sheet 24 of 61 for superstructure details and Bill of Material.
2. See Sheet 22 and 23 of 61 for parapet joint spacing and reinforcement.
3. See Sheet 27 of 61 for Section A-A and Section B-B.
4. For underpass lighting details, see Lighting Plans.
5. For Bar Splicer details, see Sheet 54 of 61.

*Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end

PLAN
(Westbound)

62′-10" out to out deck

Radial dimensions

43′-11" Stage III Construction | 18′-11" Stage I Construction

60′-0" face to face parapets

1′-5" | 24′-0" Shoulder | 12′-0" Lane | 12′-0" Lane | 12′-0" Shoulder | 1′-5"

℄ I-80 | 1"

d_3(E) | d_1(E) | 2" ϕ PVC conduit | b(E) | b_1(E) | 3′-8" | a_2(E) | b(E) | a_1(E) | a_1(E)

slope varies 2.00% to 3.30%

2¼" (±¼") cl. | 1" cl. | slope varies 2.00% to 3.30% | 8" Slab

Stage Construction Line | PG WB I-80 | Bonded Constr. Jt. | Bar Splicers (E), typ.

5′-6"

slope varies 2.00% to 3.30% | slope varies 2.00% to 3.30%

a(E) | b_2(E), b_3(E) over pier | a_2(E)

Total Drop Varies from 1′-2⅜" to 1′-11¾"

Varies 4′-9⅜" to 5′-3⅜"

d_2(E) | d(E) | d_1(E) | b_2(E), b_3(E) | a(E)

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10

Luminaire Hangar Assembly, typ.

10" typ. | 5-#5 b_1(E) bars at ±14" cts., max. (typ. btwn. girders) | 10" typ.

** Beam spacing and overhang dimensions are perpendicular to local tangent
*** Spa. 6⅝" min. to 11¾" max.
**** Spa. 12⅜" max. to 7¼" min.

10" | 4-#5 b_1(E) @ *** | 4-#5 b_1(E) @ **** | 10"

Varies 2′-6" to 3′-9¼"** | Varies 3′-11" to 2′-7¾"** | Varies 4′-10" to 3′-6⅞"** | Varies 1′-7" to 2′-10⅛"**

Varies 2′-11"** to 1′-6¼"** | 9 beam spaces at 6′-5"** = 57′-9" | Varies 2′-2"** to 3′-4¾"** | W. Abut. | E. Abut.

NEAR MIDSPAN | NEAR PIER

CROSS SECTION
(Looking East)

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 20 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	309
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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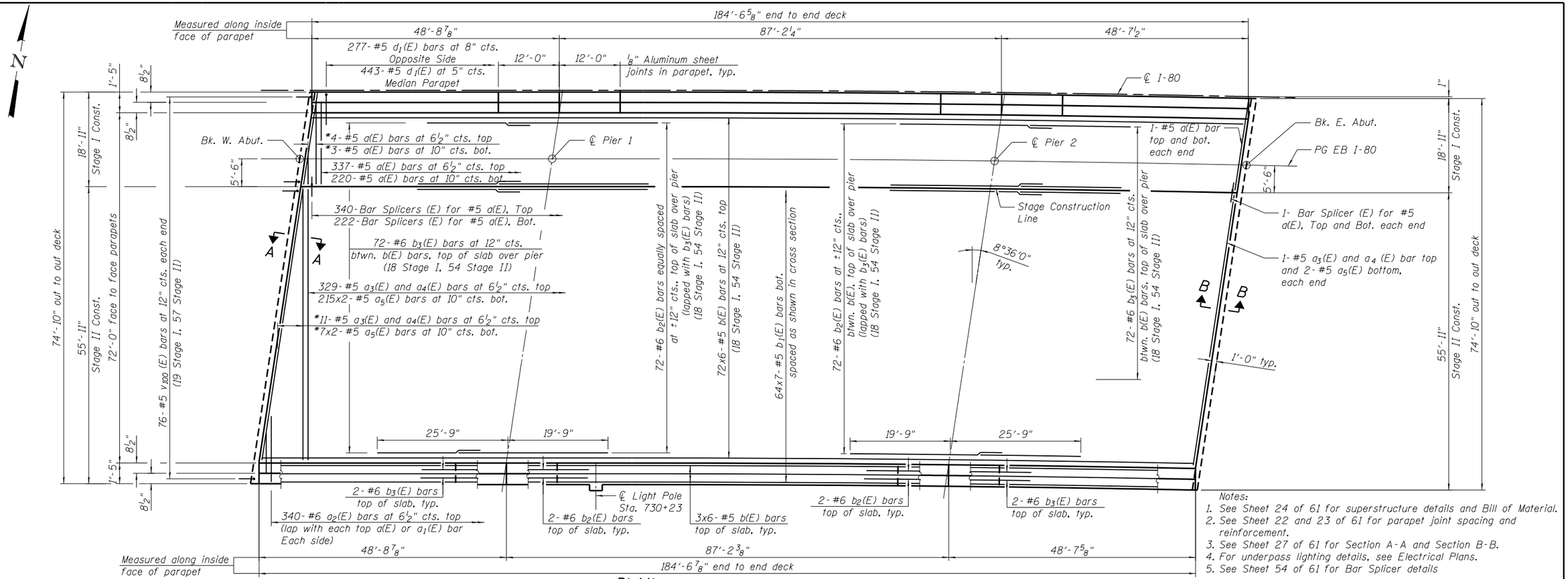
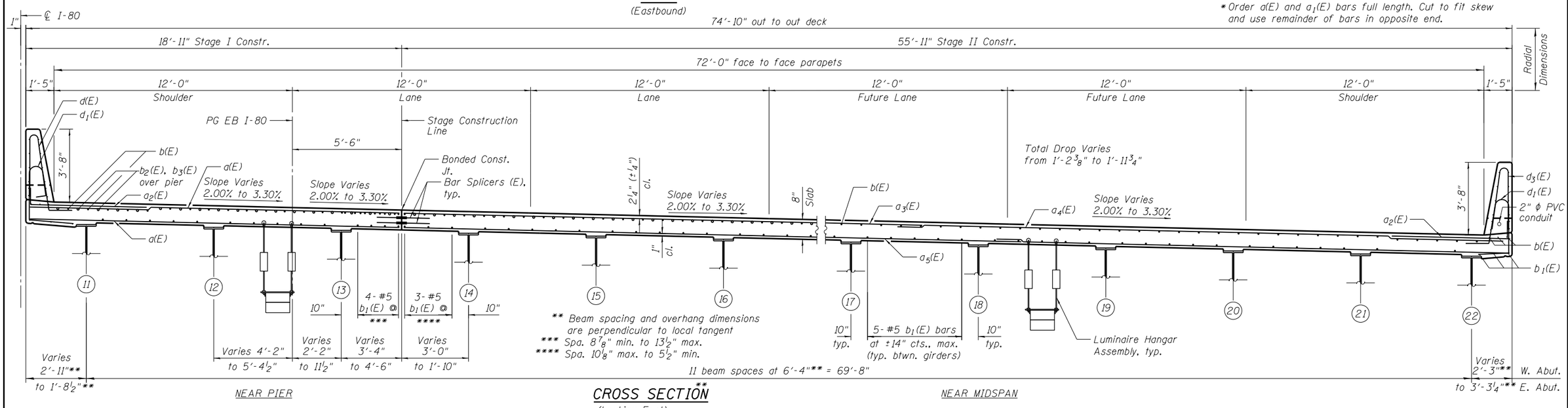


Notes:
1. See Sheet 24 of 61 for superstructure details and Bill of Material.
2. See Sheet 22 and 23 of 61 for parapet joint spacing and reinforcement.
3. See Sheet 27 of 61 for Section A-A and Section B-B.
4. For underpass lighting details, see Electrical Plans.
5. See Sheet 54 of 61 for Bar Splicer details

* Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PLAN
(Eastbound)



NEAR PIER — NEAR MIDSPAN

CROSS SECTION**
(Looking East)

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED	

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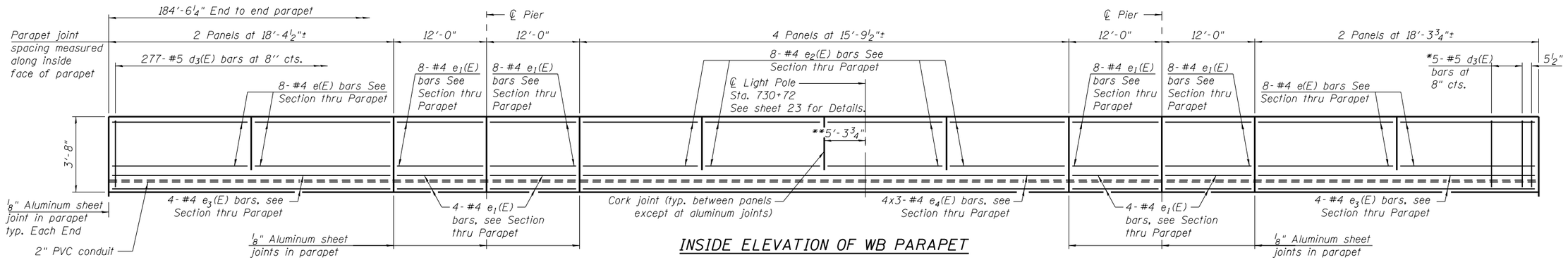
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

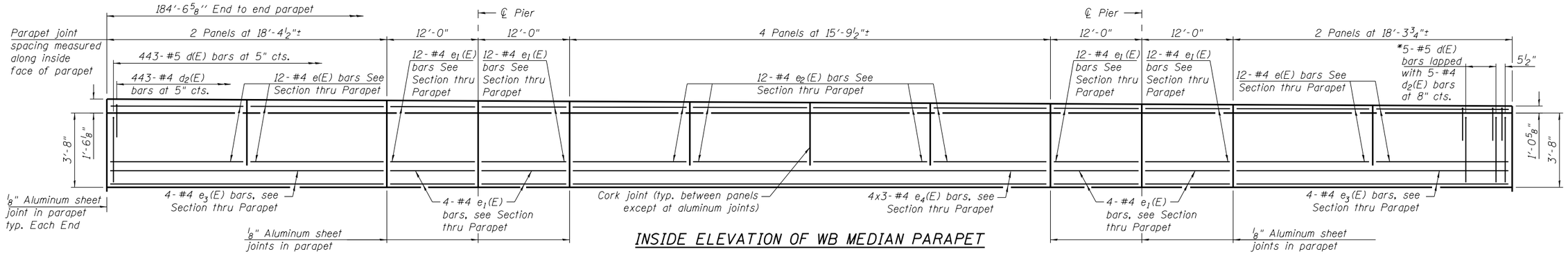
DECK PLAN II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 21 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	310
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

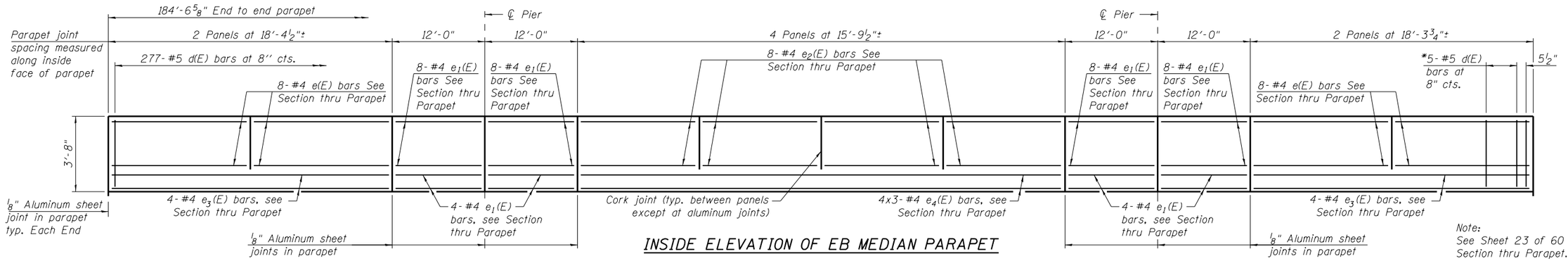
FILE NAME = 0990900-0990901-60W34-021-DCKPL EB.dgn



INSIDE ELEVATION OF WB PARAPET

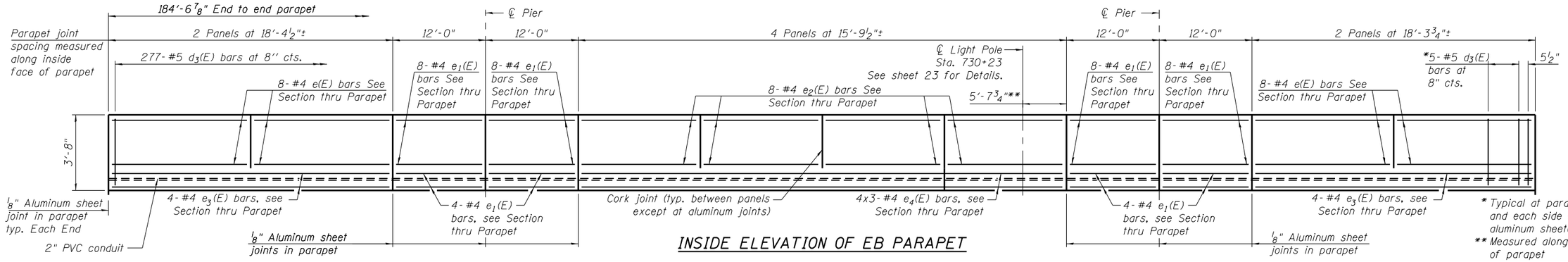


INSIDE ELEVATION OF WB MEDIAN PARAPET



INSIDE ELEVATION OF EB MEDIAN PARAPET

Note:
See Sheet 23 of 60 for Section thru Parapet.



INSIDE ELEVATION OF EB PARAPET

* Typical at parapet ends and each side of aluminum sheeted joints.
** Measured along inside face of parapet

USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

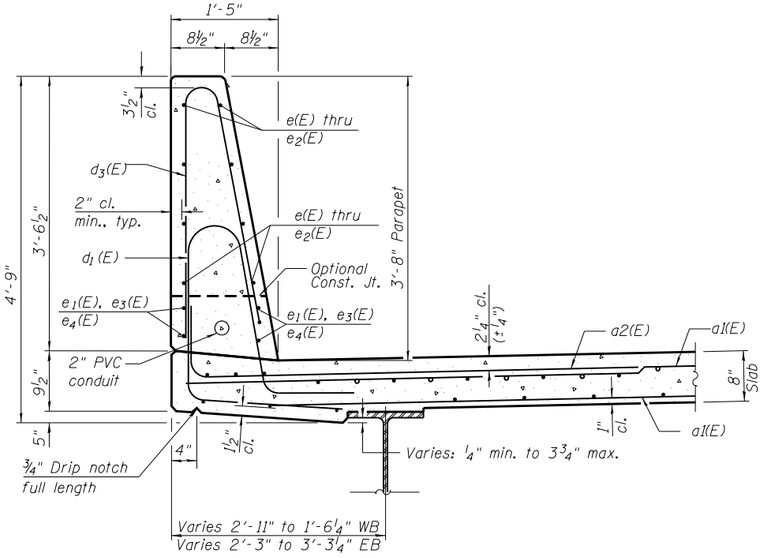
HBP Illinois Partners

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

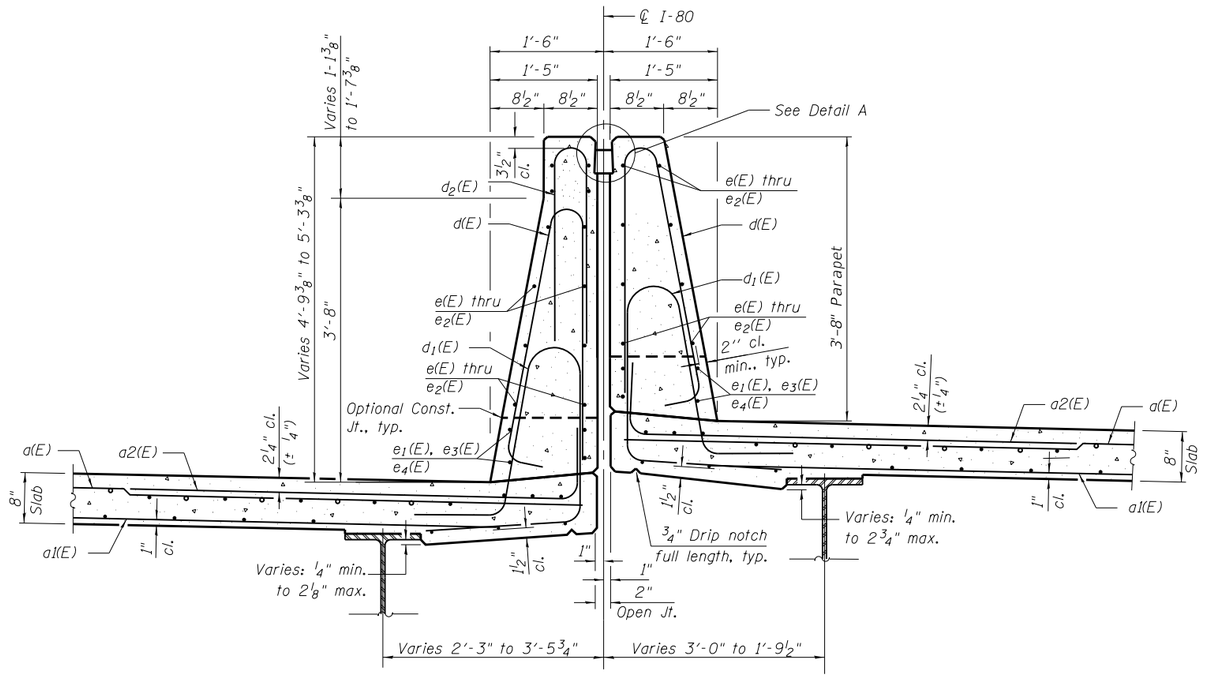
DECK DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 22 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	311
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-022-DCKDTL.dgn

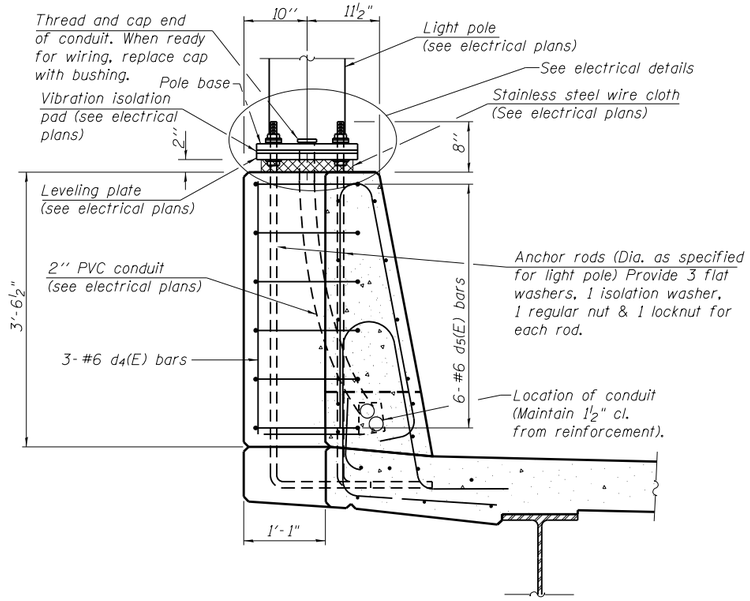


SECTION THRU PARAPET

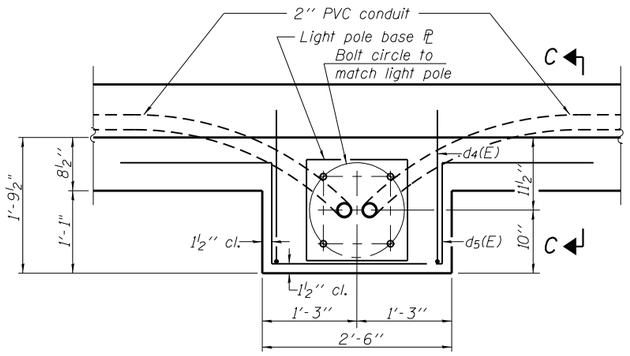


SECTION THRU MEDIAN PARAPET

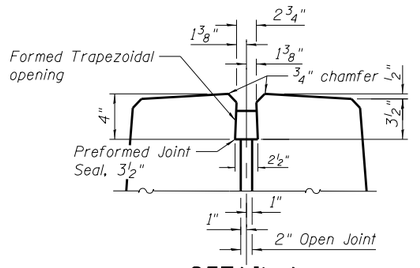
(Looking East)



SECTION C-C



PLAN



DETAIL A

Note:
See Sheet 24 of 60 for bar diagrams and Bill of Materials.

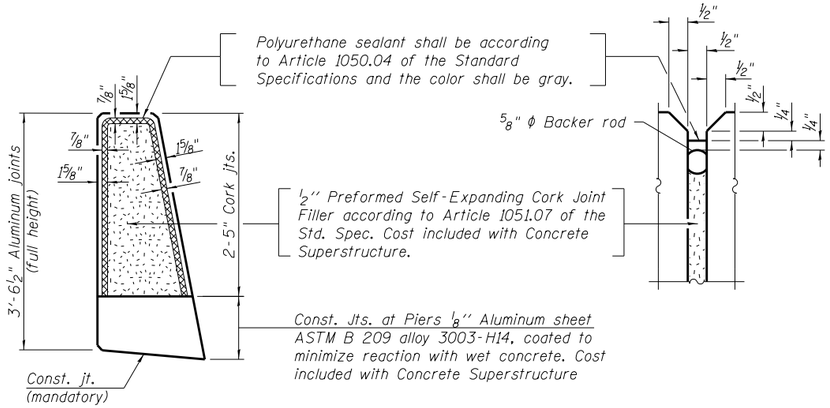
HBP Illinois Partners	USER NAME = default	DESIGNED MSL	REVISED
		CHECKED TAH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

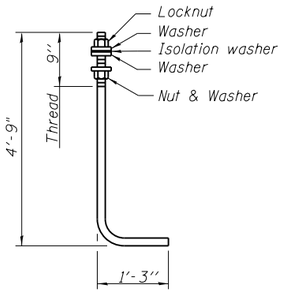
DECK DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 23 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	312
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-023-DCKDTL.dgn



PARAPET JOINT DETAILS



ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized

Note:
Cost of anchor rods is included with Concrete Superstructure.

MINIMUM BAR LAP

#4 bar = 2'-5"
#5 bar = 3'-6"
#6 bar = 4'-10"

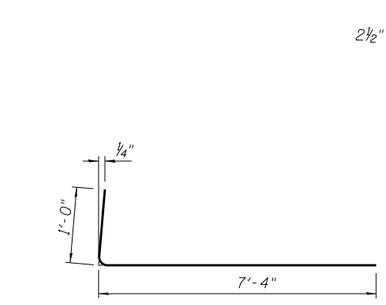
BILL OF MATERIAL (E.B.)

Bar	No.	Size	Length	Shape
a(E)	568	5	18'-8"	
a2(E)	680	6	8'-4"	
a3(E)	342	5	26'-6"	
a4(E)	342	5	32'-10"	
a5(E)	448	5	29'-10"	
b(E)	468	5	34'-8"	
b2(E)	148	6	33'-5"	
b2(E)	148	6	33'-5"	
b3(E)	148	6	20'-4"	
d(E)	282	5	6'-11"	
d1(E)	720	5	8'-11"	
d3(E)	282	5	6'-11"	
d4(E)	3	6	5'-3"	
d5(E)	6	6	8'-11"	
e(E)	64	4	18'-3"	
e1(E)	96	4	11'-10"	
e2(E)	64	4	15'-7"	
e3(E)	32	4	18'-2"	
e4(E)	24	4	22'-8"	
m1(E)	16	6	18'-10"	
m3(E)	32	6	30'-5"	
m7(E)	80	6	6'-0"	
m9(E)	4	6	3'-0"	
m10(E)	4	6	4'-2"	
m11(E)	4	6	2'-8"	
m13(E)	8	6	2'-2"	
m18(E)	4	6	1'-4"	
m19(E)	72	5	5'-10"	
m20(E)	4	6	2'-11"	
m21(E)	4	6	2'-7"	
m22(E)	16	5	1'-6"	
s(E)	166	5	8'-8"	
s1(E)	166	5	9'-1"	
u(E)	166	5	4'-8"	
v100(E)	152	5	3'-1"	
Concrete Superstructure			Cu. Yd.	470
Bridge Deck Grooving			Sq. Yd.	1436
Protective Coat			Sq. Yd.	1804
Reinforcement Bars, Epoxy Coated			Pounds	119,210

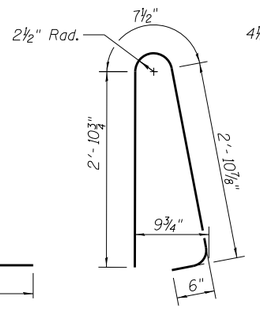
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

BILL OF MATERIAL (W.B.)

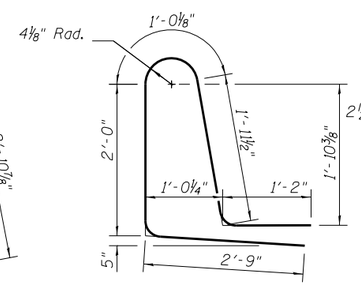
Bar	No.	Size	Length	Shape
a(E)	568	5	18'-8"	
a1(E)	566	5	43'-7"	
a2(E)	680	6	8'-4"	
b(E)	396	5	34'-8"	
b1(E)	372	5	30'-0"	
b2(E)	128	5	33'-5"	
b3(E)	128	6	20'-4"	
d(E)	448	5	6'-11"	
d1(E)	720	5	8'-11"	
d2(E)	448	4	5'-8"	
d3(E)	282	5	6'-11"	
d4(E)	3	6	5'-3"	
d5(E)	6	6	8'-11"	
e(E)	80	4	18'-3"	
e1(E)	112	4	11'-10"	
e2(E)	80	4	15'-7"	
e3(E)	32	4	18'-2"	
e4(E)	24	4	22'-8"	
m1(E)	16	6	18'-10"	
m5(E)	16	6	44'-1"	
m6(E)	4	6	2'-4"	
m7(E)	64	6	6'-0"	
m8(E)	4	6	3'-5"	
m13(E)	4	6	1'-10"	
m14(E)	4	6	1'-2"	
m15(E)	4	6	3'-7"	
m16(E)	4	6	3'-0"	
m17(E)	4	6	2'-2"	
m19(E)	60	5	5'-10"	
m21(E)	4	6	2'-7"	
s(E)	138	5	8'-8"	
s1(E)	138	5	9'-1"	
u(E)	138	5	4'-8"	
v100(E)	128	5	3'-1"	
Concrete Superstructure			Cu. Yd.	409
Bridge Deck Grooving			Sq. Yd.	1189
Protective Coat			Sq. Yd.	1613
Reinforcement Bars, Epoxy Coated			Pounds	103,290



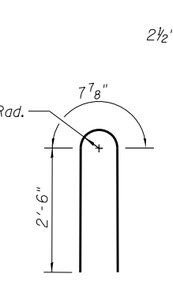
BAR a2(E)



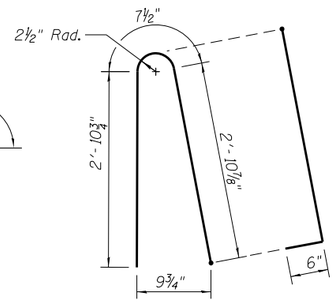
BAR d(E)



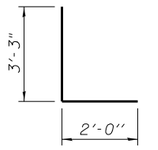
BAR d1(E)



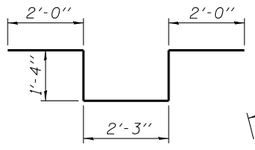
BAR d2(E)



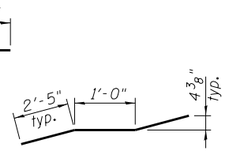
BAR d3(E)
(use where conduit is present)



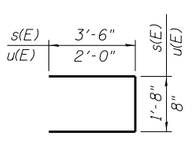
BAR d4(E)



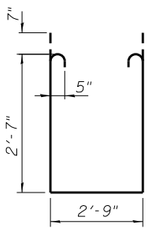
BAR d5(E)



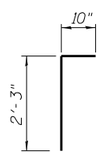
BAR m19(E)



BARS s(E) & u(E)



BAR s1(E)



BAR v100(E)

Note:
See Sheet 53 of 60 for Bar Splicer (E) details.

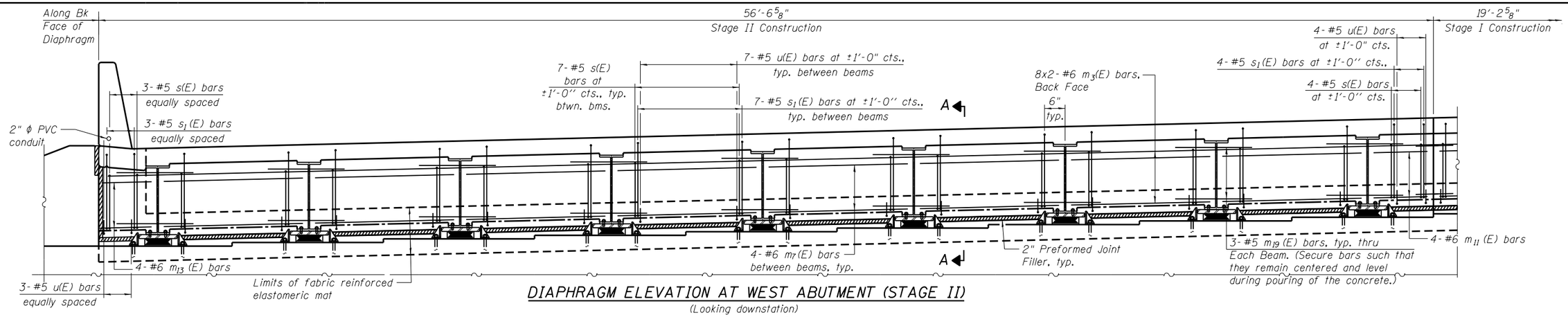
HBP Illinois Partners	USER NAME = default	DESIGNED MSL	REVISED
		CHECKED TAH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED RRH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 24 OF 61 SHEETS

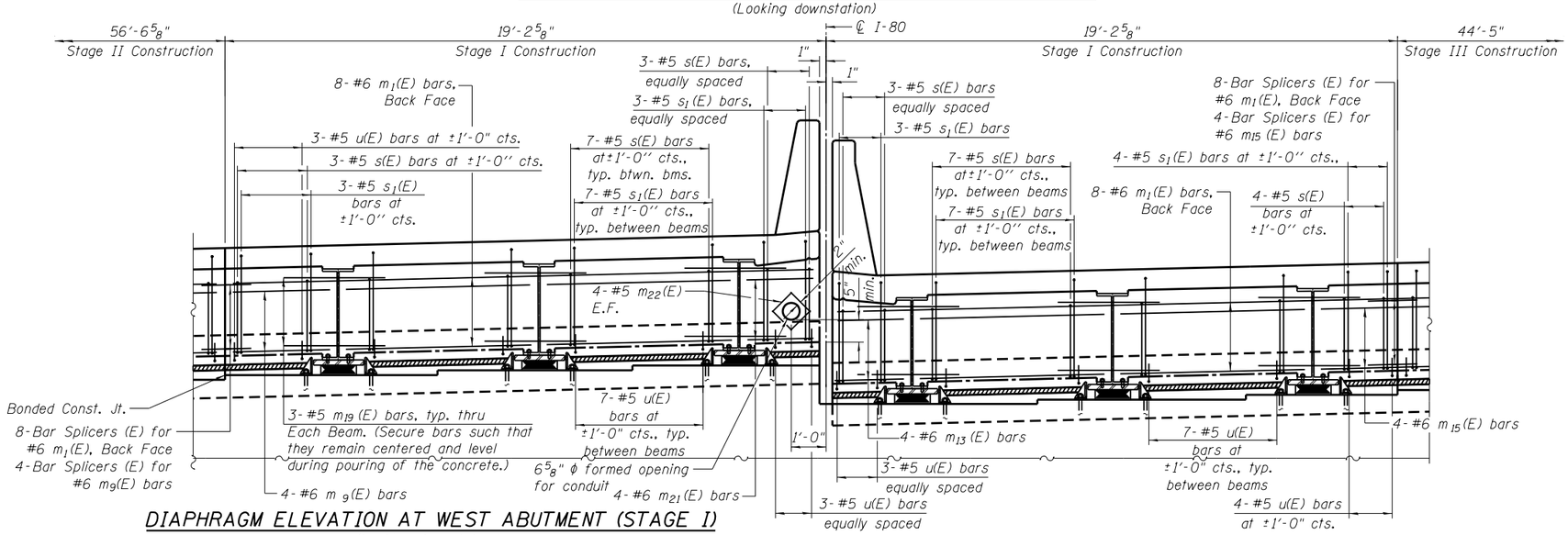
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	313
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-024-DCKDTL.dgn



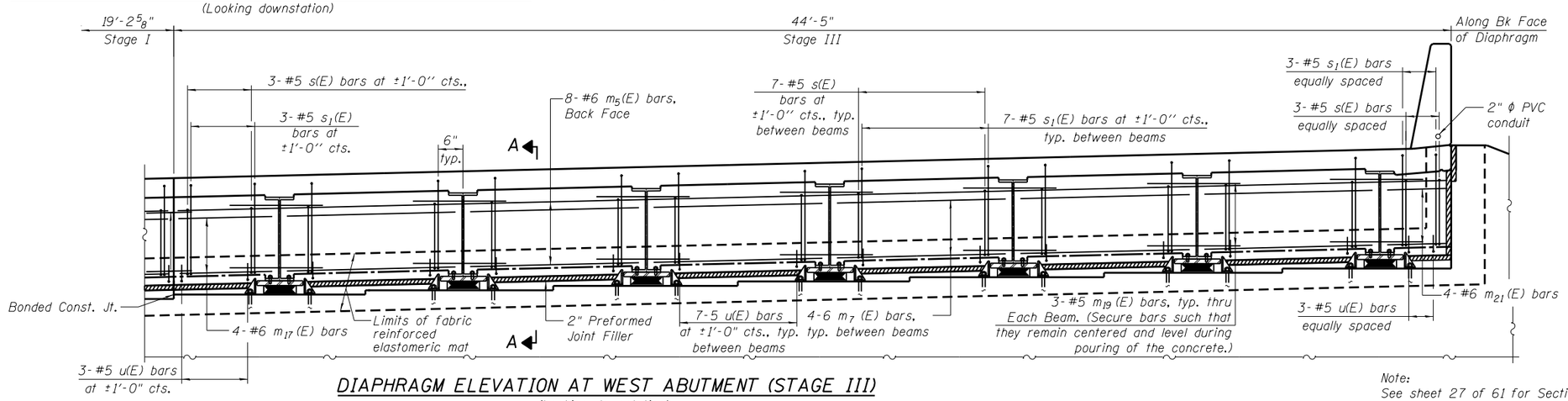
DIAPHRAGM ELEVATION AT WEST ABUTMENT (STAGE II)

(Looking downstation)



DIAPHRAGM ELEVATION AT WEST ABUTMENT (STAGE I)

(Looking downstation)



DIAPHRAGM ELEVATION AT WEST ABUTMENT (STAGE III)

(Looking downstation)

Note:
See sheet 27 of 61 for Section A-A, and Plan at Abutment.

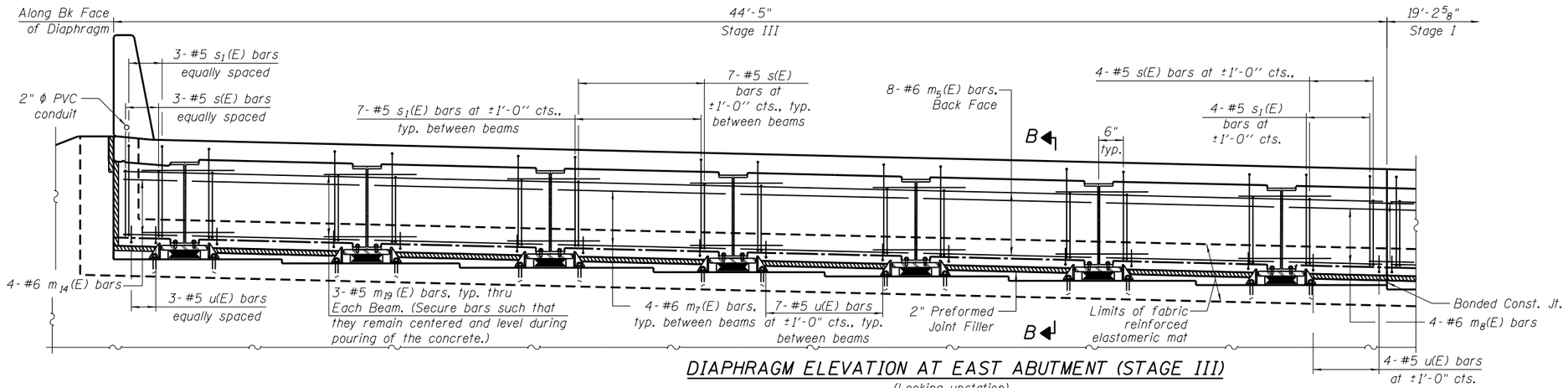
USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED JP	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 25 OF 61 SHEETS

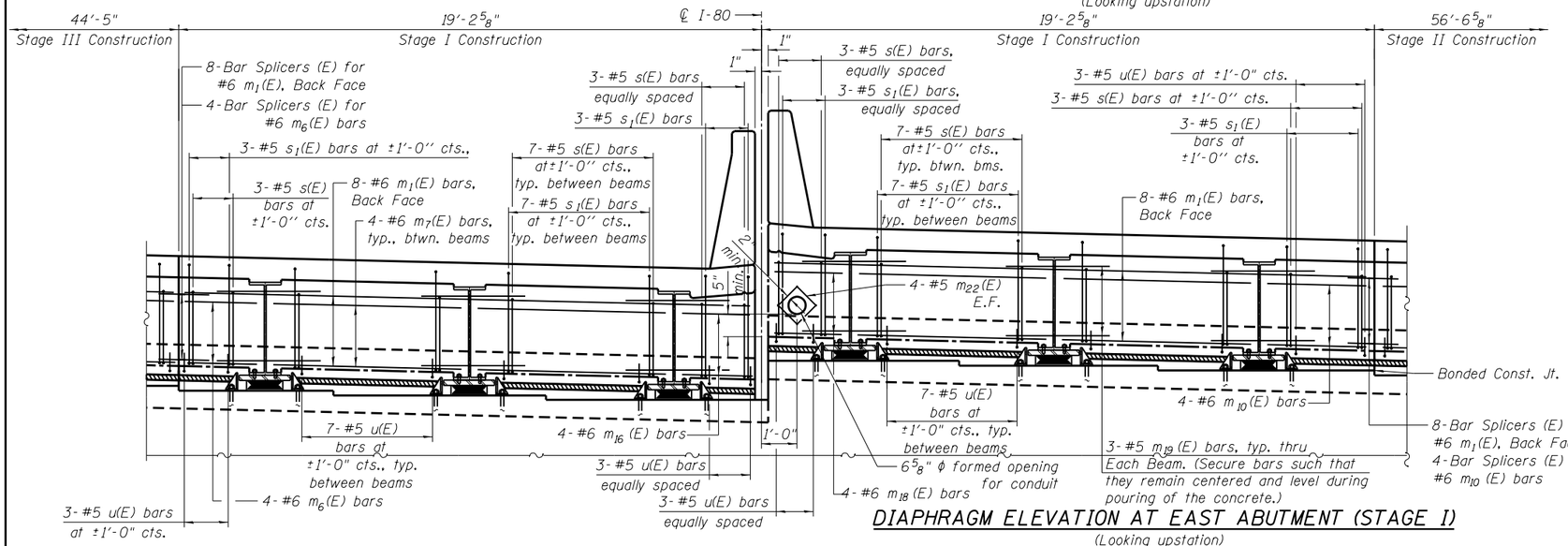
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	314
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-025-DIA WB.dgn



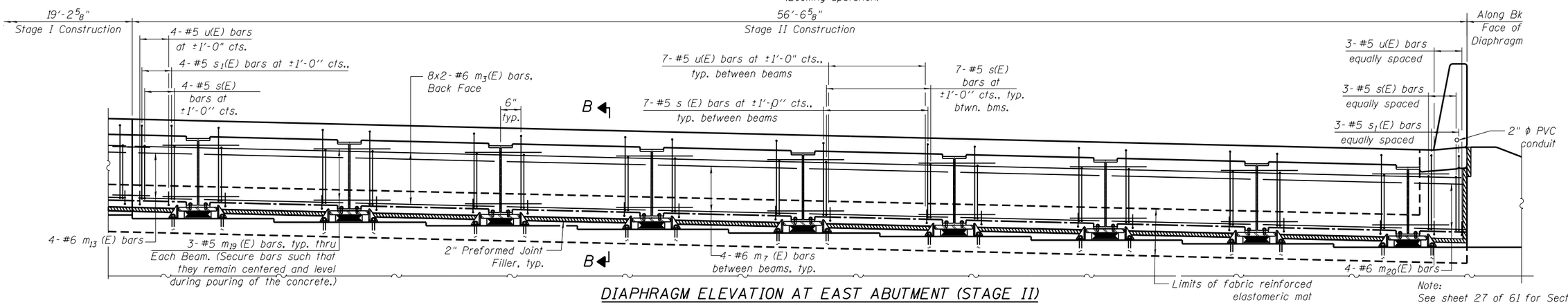
DIAPHRAGM ELEVATION AT EAST ABUTMENT (STAGE III)

(Looking upstation)



DIAPHRAGM ELEVATION AT EAST ABUTMENT (STAGE I)

(Looking upstation)



DIAPHRAGM ELEVATION AT EAST ABUTMENT (STAGE II)

(Looking upstation)

Note:
See sheet 27 of 61 for Section A-A, and Plan at Abutment.

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED JP	REVISED	

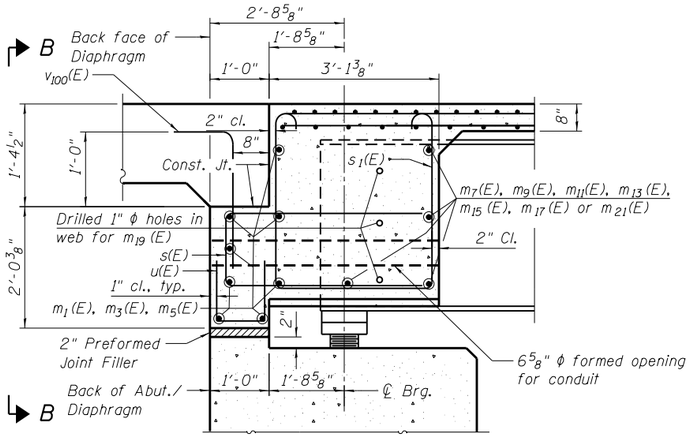
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)

SHEET NO. 26 OF 61 SHEETS

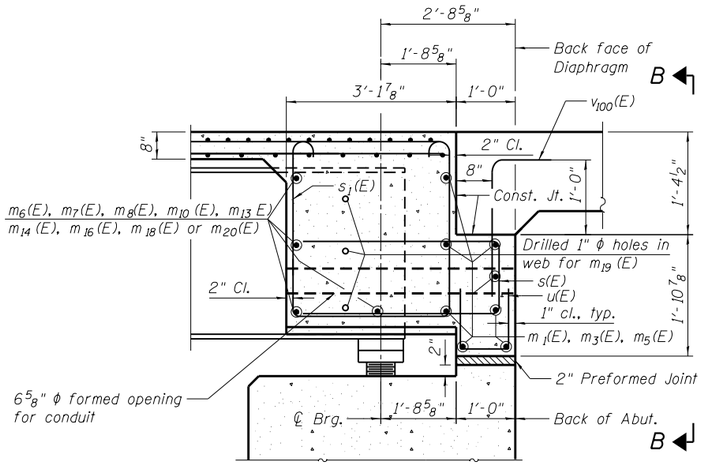
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	315
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-026-DIA EB.dgn



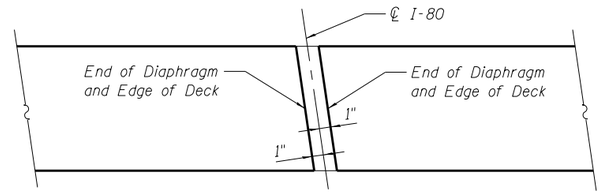
SECTION A-A

West Abutment (at Rt. L's)

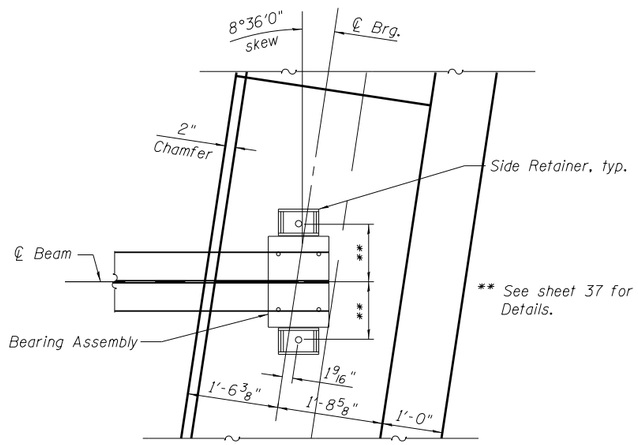


SECTION B-B

East Abutment (at Rt. L's)

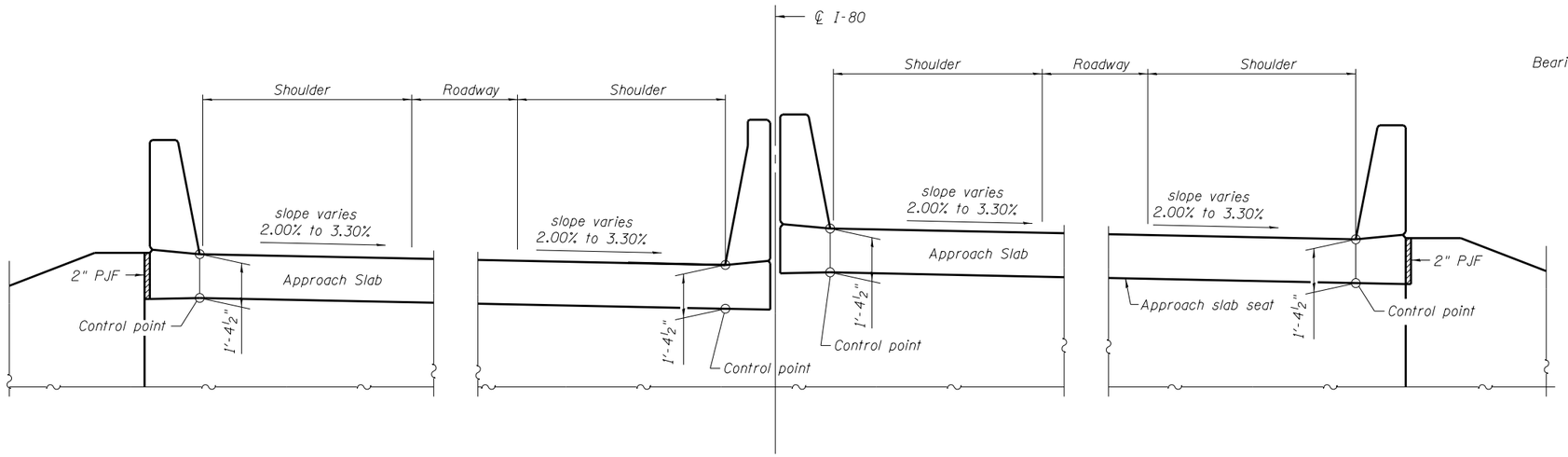


PLAN AT DIAPHRAGM



PLAN AT ABUTMENT

(Showing bottom flange of beam)



VIEW B-B

(Looking at back of West Abutment. East Abutment similar)

Notes:

1. See Sheet 54 of 61 for bar splicer details.
2. See sheet 23 and 24 of 61 for superstructure details and Bill of Material.
3. Composite wall drain not shown on this sheet for clarity, see sheet 44 of 61 for details.
4. The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
5. The approach slab seat shall have a constant slope determined from the control points shown.

HBP Illinois Partners

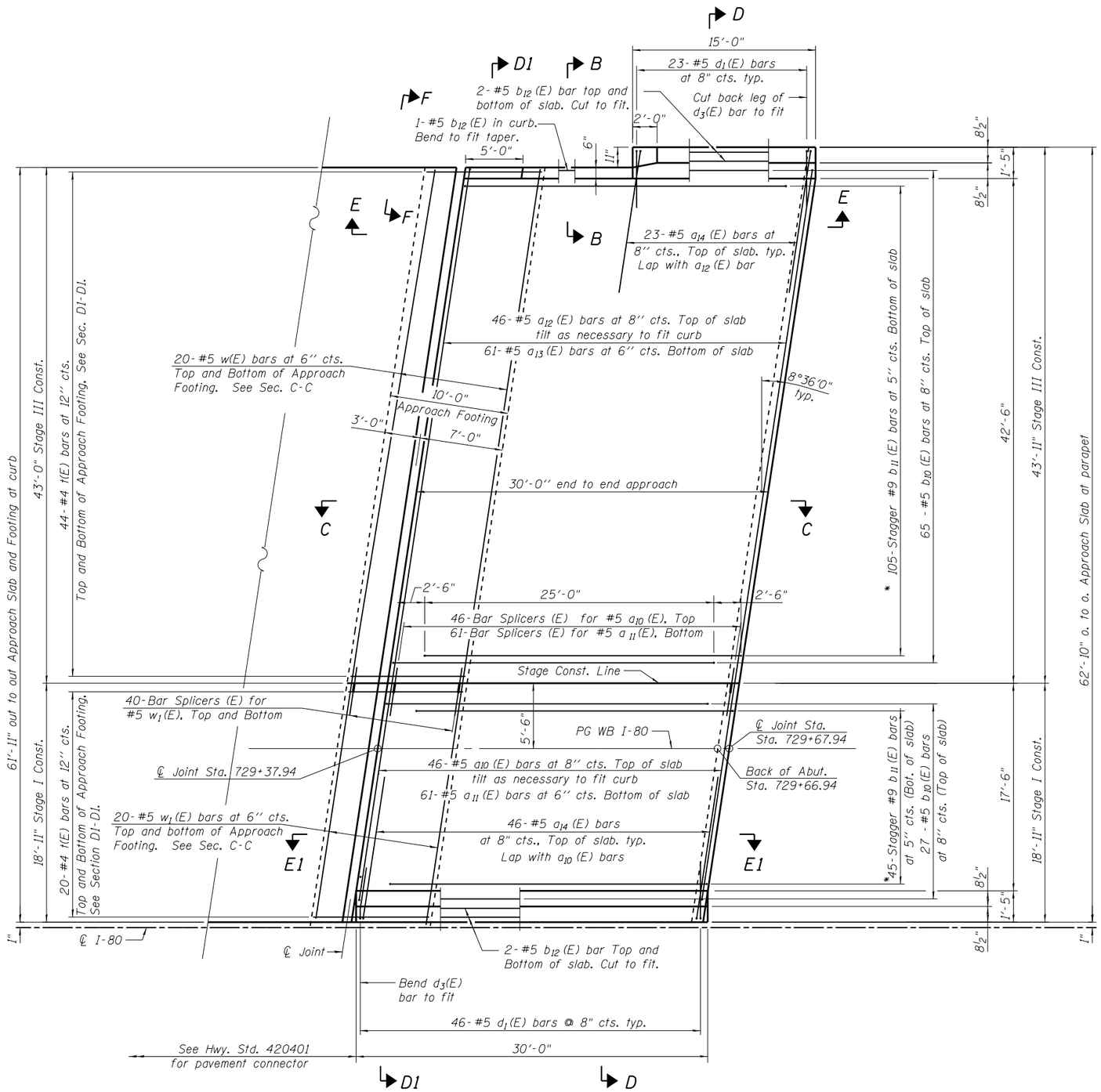
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 27 OF 61 SHEETS

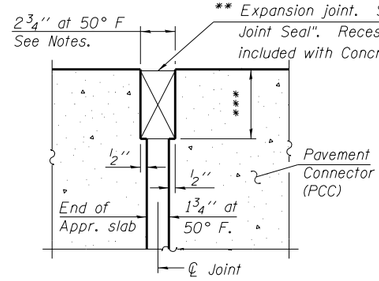
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	316
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-027-DIA DTL.dgn



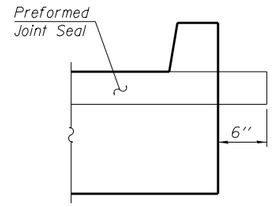
PLAN

West Approach Slab (Westbound)

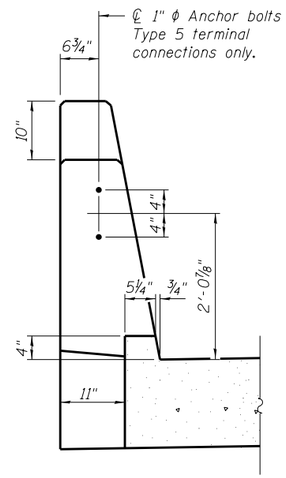


RIGID PAVEMENT

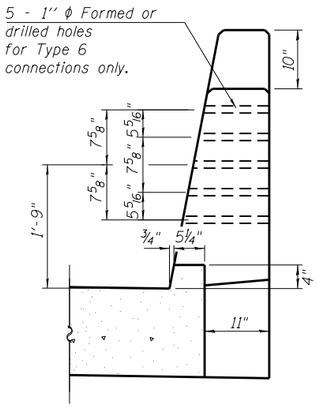
DETAIL A



VIEW F-F



VIEW B-B



VIEW B'-B'

Notes:

1. See sheet 32 of 61 for Section C-C.
   See sheet 33 of 61 for Sections D-D, D1-D1, and Views E-E and E1-E1.
2. a_{10} (E) and a_{11} (E) bar spacings measured along PG WB I-80.

* Tilt #9 b_{11} (E) bars as required to maintain clearance.
** Cost included with Concrete Superstructure (Approach Slab).
*** Per manufacturer recommendations.

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED YC	REVISED	

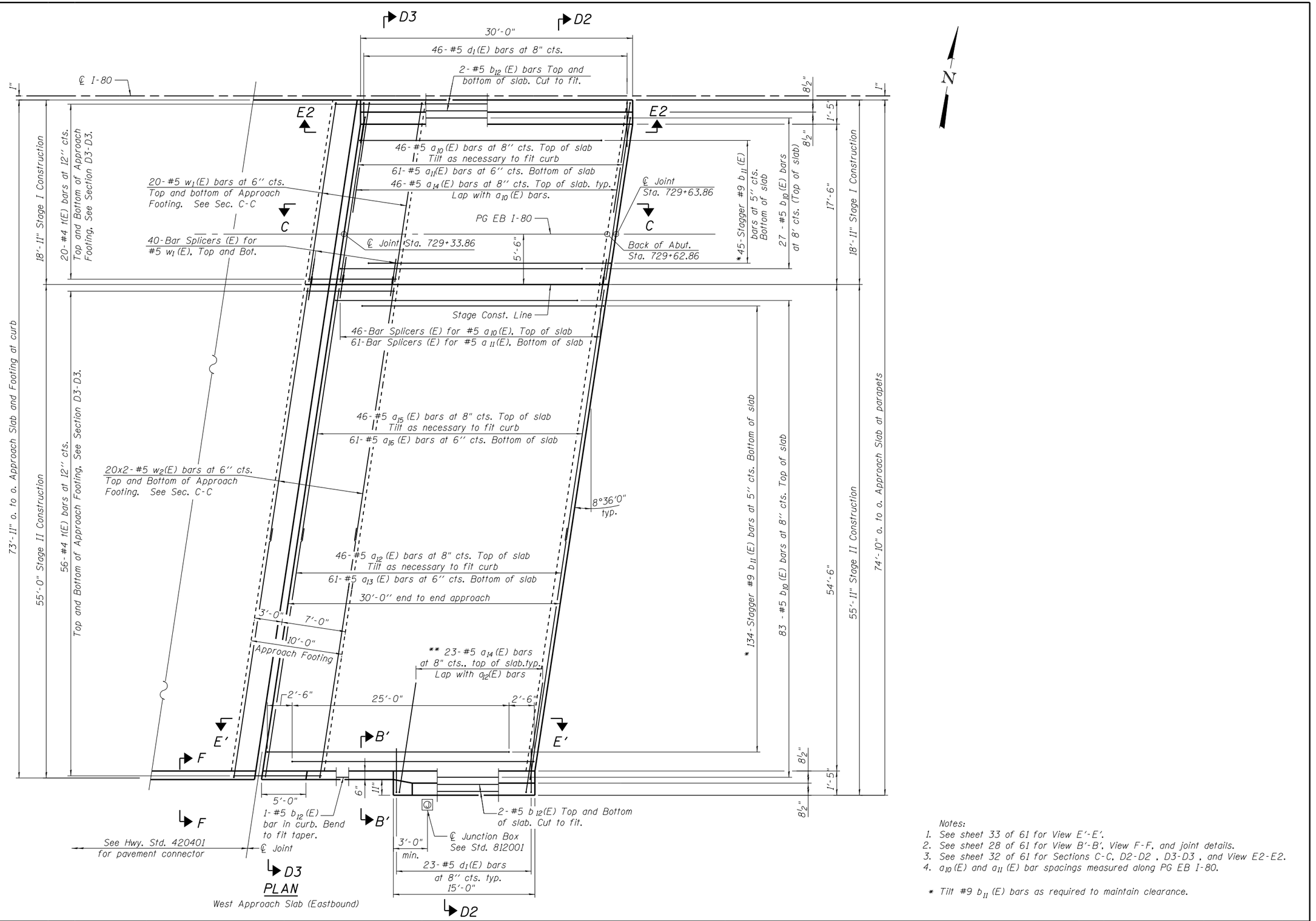
HBP Illinois Partners

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APROACH SLAB DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 28 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	317
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-0990901-60W34-028-WAPPR WB.dgn



Notes:

1. See sheet 33 of 61 for View E'-E'.
2. See sheet 28 of 61 for View B'-B', View F-F, and joint details.
3. See sheet 32 of 61 for Sections C-C, D2-D2 , D3-D3 , and View E2-E2.
4. a_{10}(E) and a_{11} (E) bar spacings measured along PG EB I-80.

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

HBP Illinois Partners

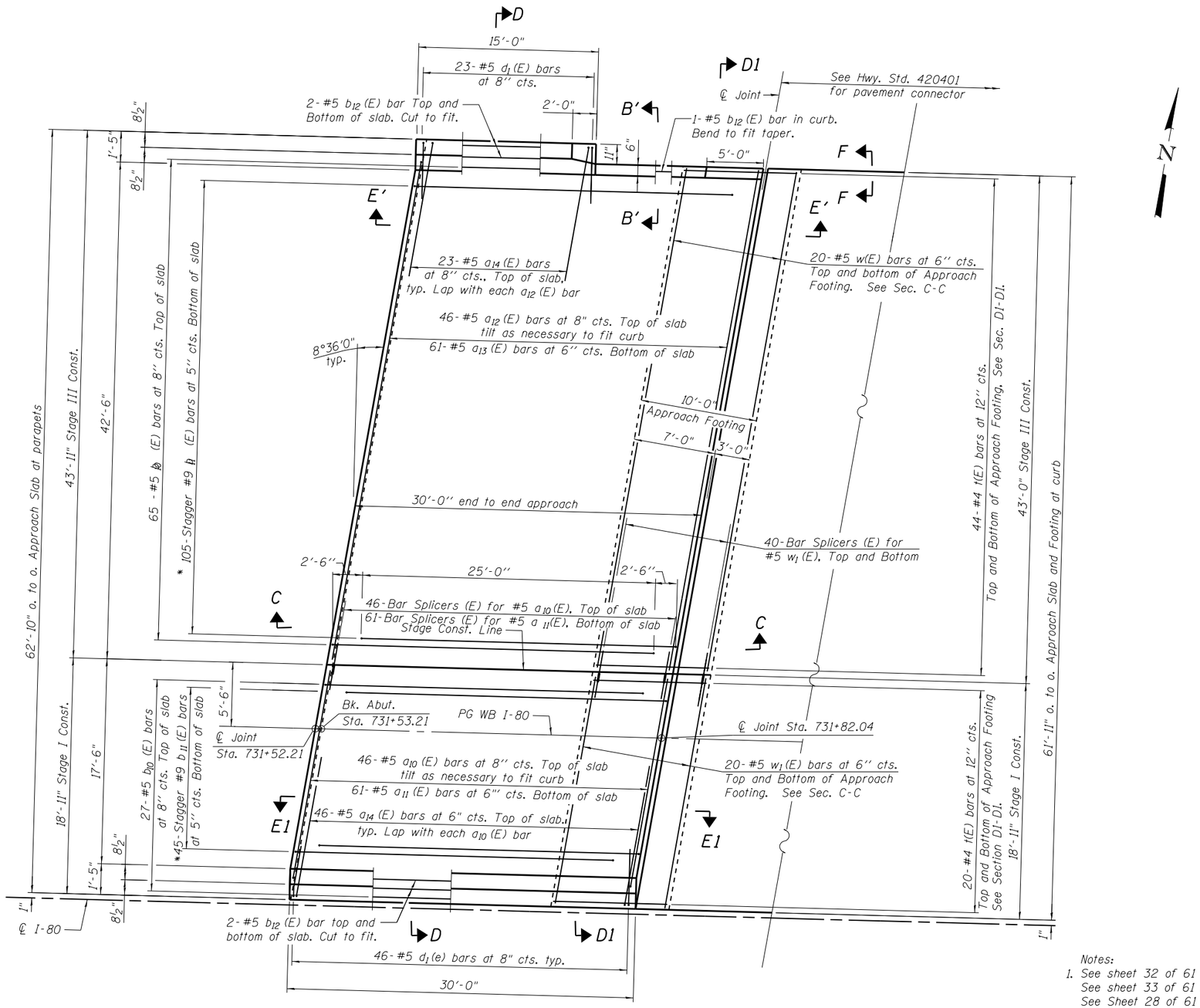
USER NAME = default	DESIGNED	MSL	REVISED
	CHECKED	TAH	REVISED
PLOT SCALE = NTS	DRAWN	RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED	YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS II
STRUCTURE NOS. 099–0900 (E.B.) & 099–0901(W.B.)
SHEET NO. 29 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	318
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-029-WAPPR EB.dgn



PLAN

East Approach Slab (Westbound)

Notes:

1. See sheet 32 of 61 for Section C-C.
   See sheet 33 of 61 for Sections D-D, D1-D1 and Views E'-E' & E1-E1.
   See Sheet 28 of 61 for View B'-B' and F-F, and joint details.
2. a_{10}(E) and a_{11} (E) bar spacings measured along PG WB I-80.

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

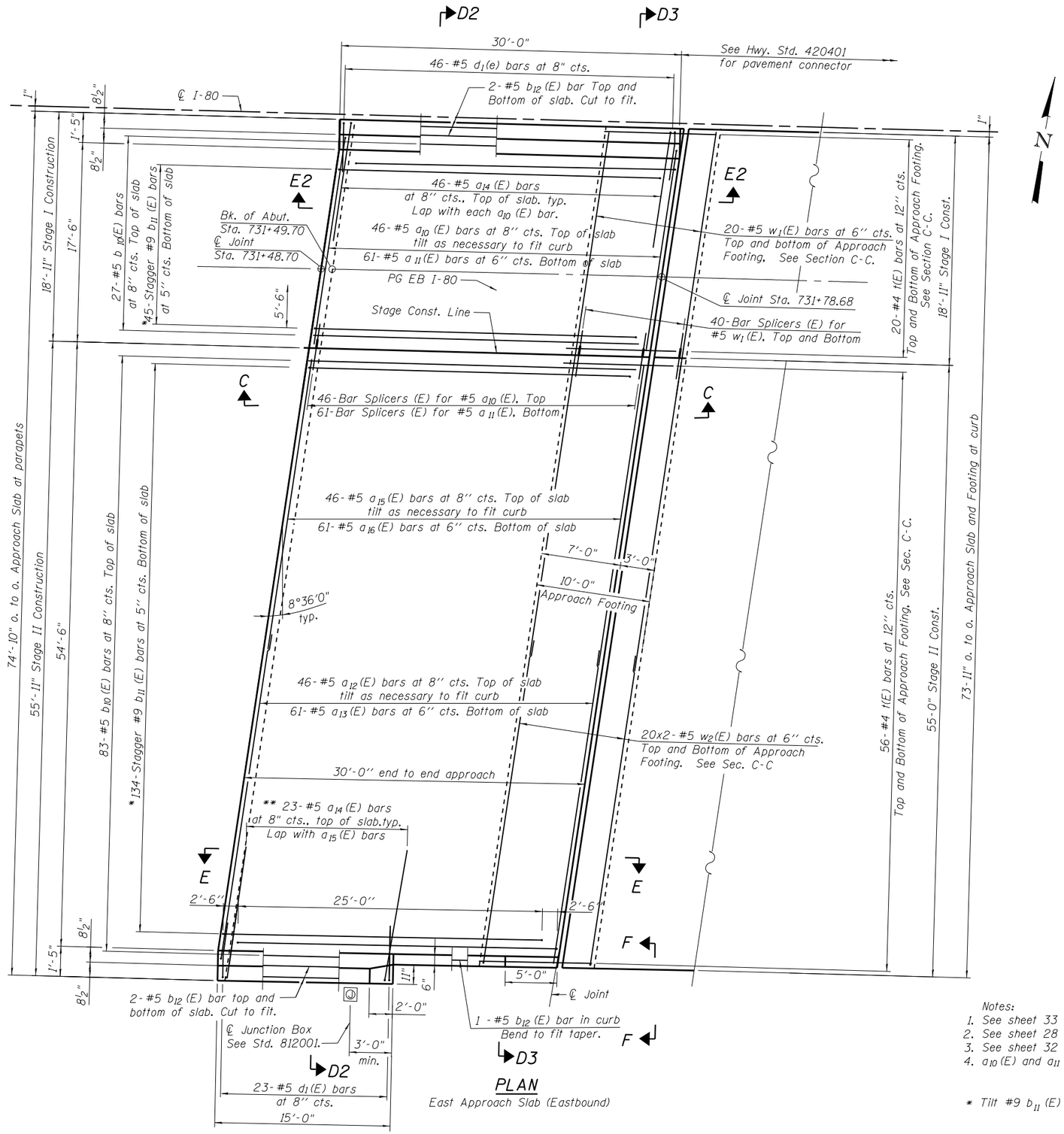
HBP Illinois Partners	USER NAME = default	DESIGNED MSL	REVISED
		CHECKED TAH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 30 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	319
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-0990901-60W34-030-EAPPR #B.dgn



Notes:

1. See sheet 33 of 61 for View E-E.
2. See sheet 28 of 61 for Views B-B and F-F and joint details.
3. See sheet 32 of 61 for Sections C-C, D2-D2, D3-D3 and View E2-E2.
4. a_{10}(E) and a_{11} (E) bar spacings measured along PG EB I-80.

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

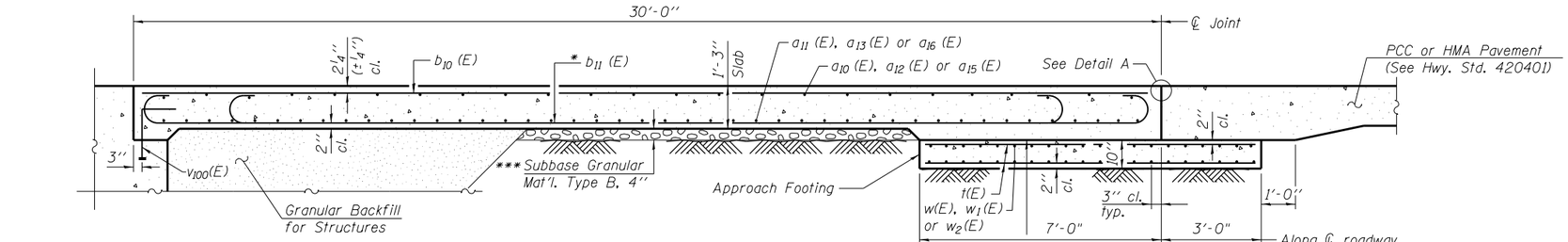
HBP Illinois Partners	USER NAME = default	DESIGNED MSL	REVISED
		CHECKED TSH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

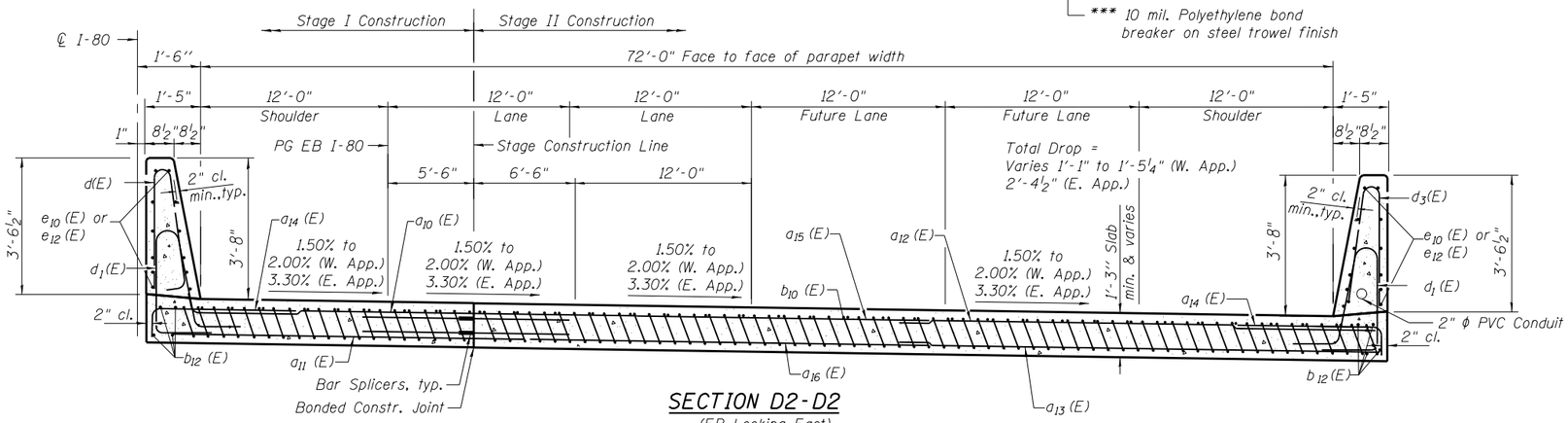
BRIDGE APPROACH SLAB DETAILS IV
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 31 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	320
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-03I-EAPPR EB.dgn

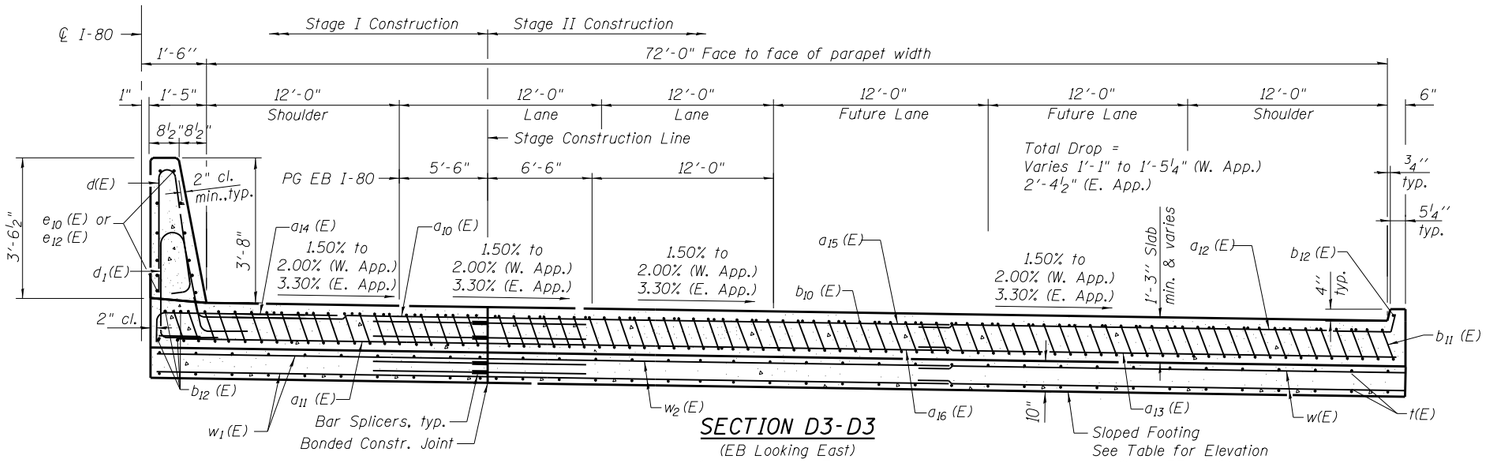


SECTION C-C



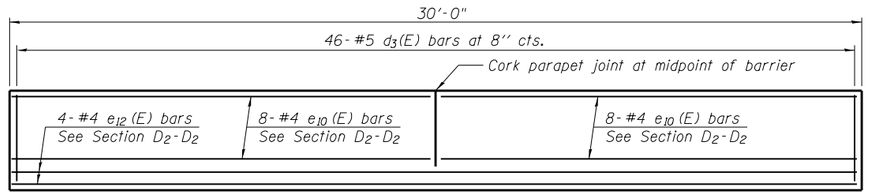
SECTION D2-D2

(EB Looking East)
(Near Abutment)



SECTION D3-D3

(EB Looking East)
(Near Approach Footing)



VIEW E2-E2

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure (Approach Slab).

Notes:

1. See sheets 28 and 30 of 61 for Location of Section D-D, Section D1-D1, and View E1-E1 of approach slab.
2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure (Approach Slab).
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
6. For bar splicer details, see sheet 54 of 61.
7. Cost of excavation for approach footing included with Concrete Structures.
8. For Granular Backfill for Structures and drainage treatment details, see sheet 44 of 61.
9. For additional parapet details, see sheet 23 of 61. Parapet continues the entire length of the approach on the median side.

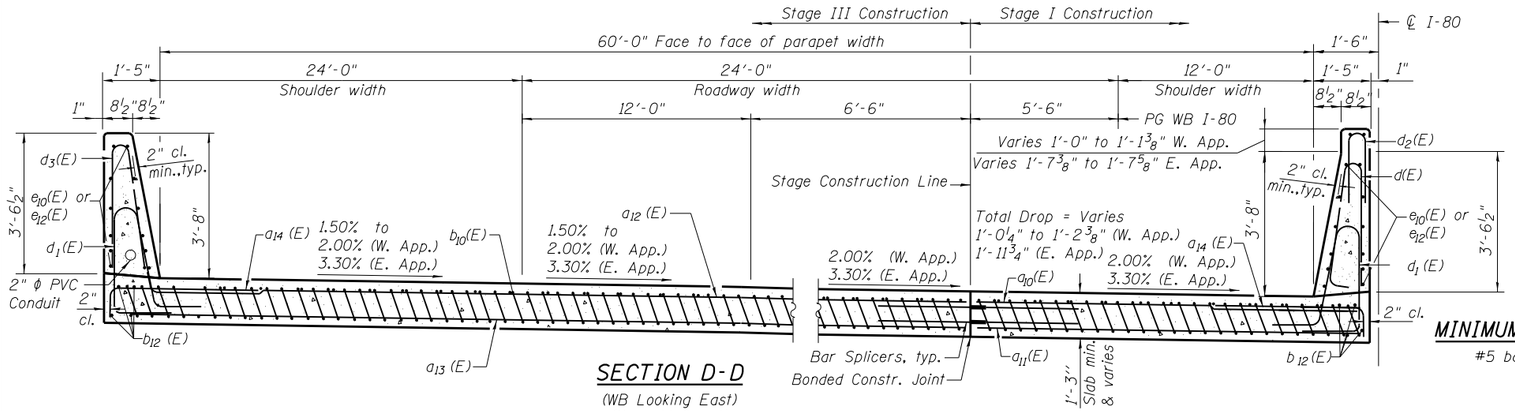
USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED YC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS V
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 32 OF 61 SHEETS

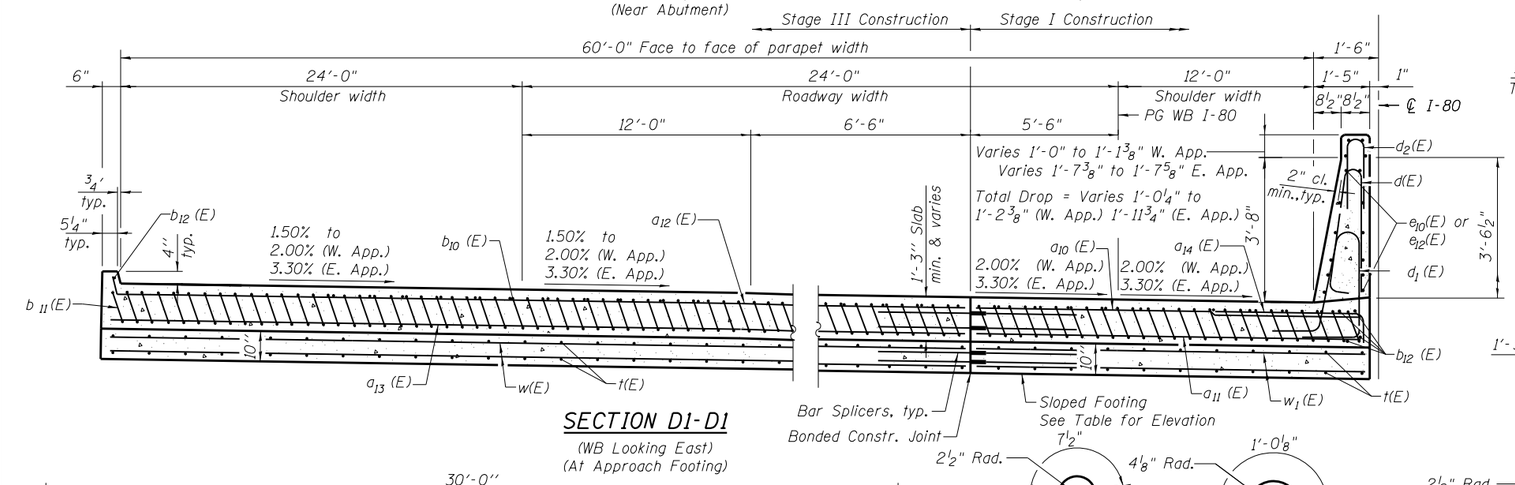
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	321
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-032-APPR-EB.dgn



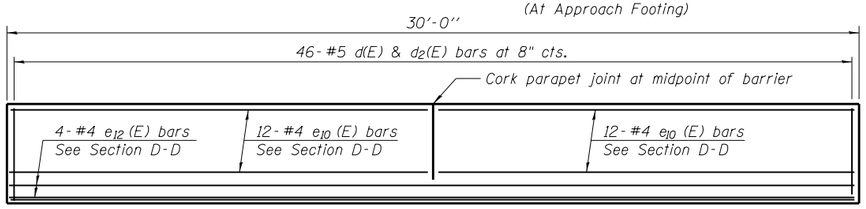
SECTION D-D

(WB Looking East)
(Near Abutment)

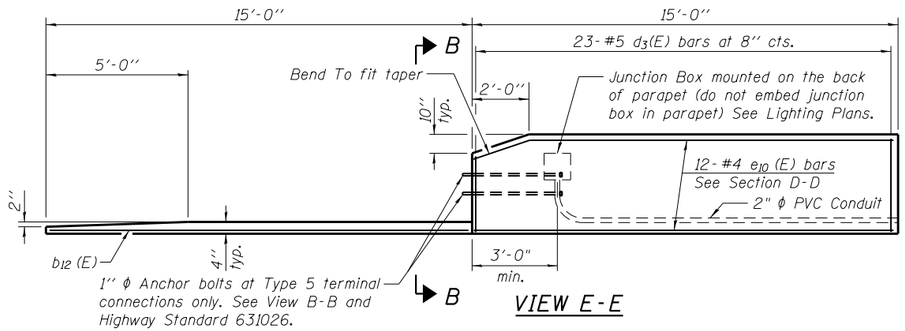


SECTION D1-D1

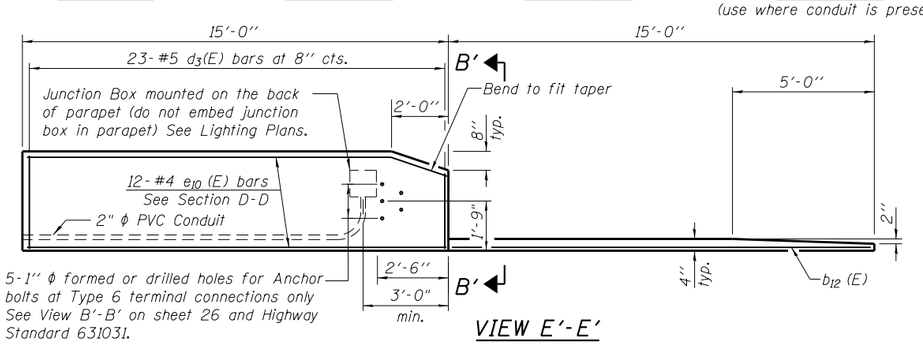
(WB Looking East)
(At Approach Footing)



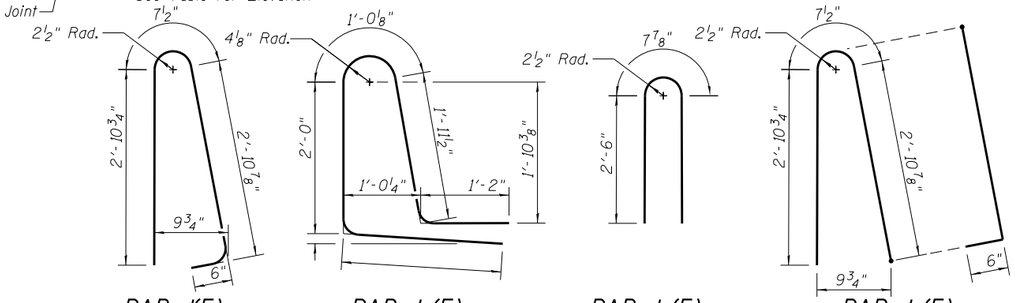
VIEW E1 -E1



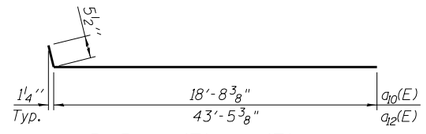
VIEW E-E



VIEW E'-E'

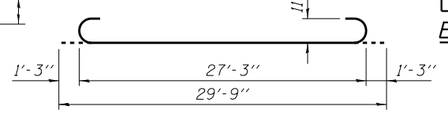


BAR d(E) | BAR d1(E) | BAR d2(E) | BAR d3(E) (use where conduit is present)



BAR a10(E), a12(E)

BAR a14(E)



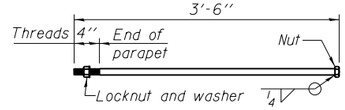
BAR b11 (E)

Notes:

1. See sheet 28 of 61 for Detail A; View B-B and View B'-B'; location of Section C-C, D-D, D1-D1; and Views E-E and E1-E1 of approach slab.
2. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of the bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
3. Parapet concrete shall be paid for as Concrete Superstructure.
4. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
5. Approach footing concrete shall be paid for as Concrete Structures.
6. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
7. For $v_{100}(E)$ bar details, see sheet 24 of 61.
8. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
9. For bar splicer details, see sheet 54 of 61.
10. Cost of excavation for approach footing included with Concrete Structures.
11. For Granular Backfill for Structures and drainage treatment details, see sheet 44 of 61.
12. For additional parapet details, see sheet 23 of 61. Parapet continues the entire length of the approach on the median side.

MINIMUM BAR LAP

#5 bar = 3'-4"



1"ϕ ANCHOR BOLT

Cost included with Concrete Superstructure (Approach Slab) (Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)

SLOPED FOOTING TABLE

Approach Slab	Elev. Bottom of App. Footing	
	North End	South End
EB at E. Abut.	556.57	554.46
EB at W. Abut.	554.89	553.75
WB at E. Abut.	557.02	554.94
WB at W. Abut.	555.11	554.00

BILL OF MATERIAL FOUR APPROACHES

Bar	No.	Size	Length	Shape
a10(E)	184	#5	19'-2"	
a11(E)	254	#5	18'-4"	
a12(E)	184	#5	43'-11"	
a13(E)	254	#5	43'-11"	
a14(E)	276	#5	7'-4"	
a28(E)	92	#5	29'-5"	
a16(E)	122	#5	29'-5"	
b10(E)	404	#5	29'-8"	
b11(E)	658	#9	29'-9"	
b12(E)	36	#5	14'-8"	
d(E)	92	#5	7'-0"	
d1(E)	276	#5	8'-9"	
d2(E)	92	#5	4'-2"	
d3(E)	184	#5	6'-11"	
e10(E)	128	#4	14'-8"	
e12(E)	25	#4	29'-8"	
t(E)	560	#4	9'-8"	
w(E)	80	#5	43'-7"	
w1(E)	160	#5	18'-10"	
w2(E)	160	#5	29'-5"	
Concrete Structures		Cu. Yd.	85	
Concrete Superstructure		Cu. Yd.	32	
Bridge Deck Grooving		Sq. Yd.	851	
Protective Coat		Sq. Yd.	1,065	
Concrete Superstructure (Approach Slab)		Cu. Yd.	451	
Reinforcement Bars, Epoxy Coated		Pound	128,360	

HBP Illinois Partners

USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS VI
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)

SHEET NO. 33 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	322
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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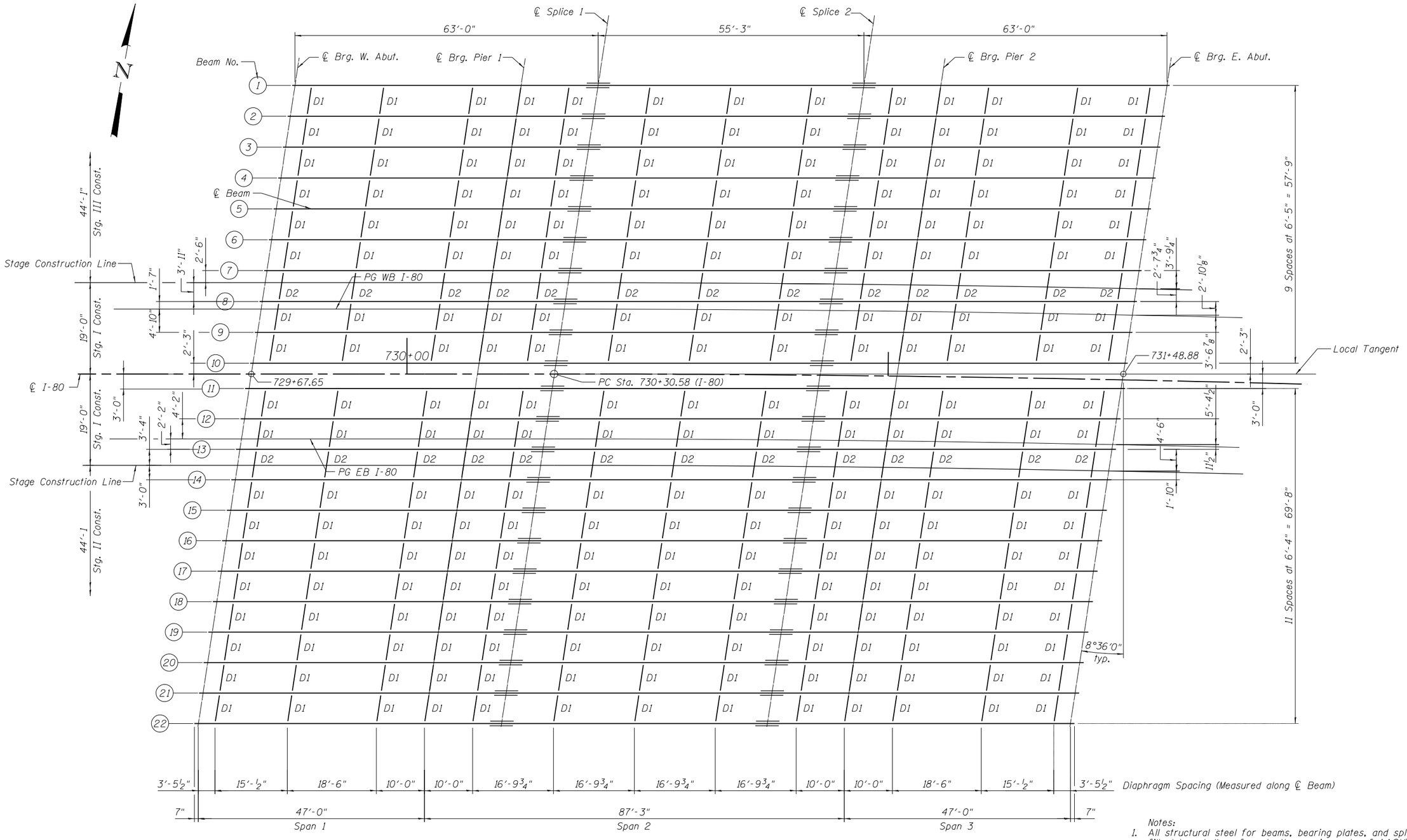


FRAMING PLAN

Notes:
1. All structural steel for beams, bearing plates, and splices except fill plates shall conform to the requirements of AASHTO M270, Grade 50.
2. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

HBP Illinois Partners

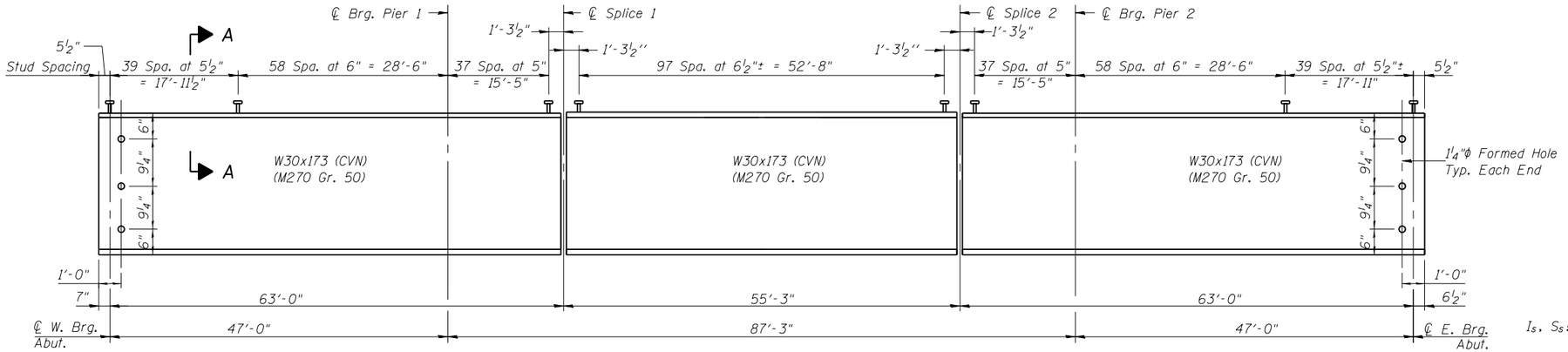
USER NAME = default	DESIGNED TAH	REVISED
	CHECKED YC	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 34 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	323
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

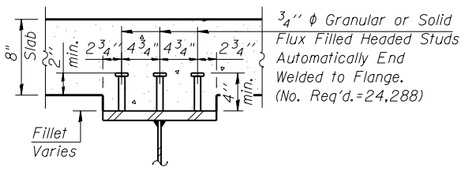
FILE NAME = 0990900-099090I-60W34-034-FRAMPL.dgn



BEAM ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2

INTERIOR GIRDER MOMENT TABLE - HL-93						
		0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
I_s	(in^4)	8,230	8,230	8,230	8,230	8,230
I_c (n)	(in^4)	18,163	-	18,163	-	18,163
I_c (3n)	(in^4)	13,481	-	13,481	-	13,481
I_c (cr)	(in^4)	-	10,106	-	10,106	-
S_s	(in^3)	541	541	541	541	541
S_c (n)	(in^3)	712	-	712	-	712
S_c (3n)	(in^3)	651	-	651	-	651
S_c (cr)	(in^3)	-	587	-	587	-
DC1	(k/ft)	0.82	0.82	0.82	0.82	0.82
M_{DC1}	(k-ft)	41	447	341	447	41
DC2	(k/ft)	0.19	0.19	0.19	0.19	0.19
M_{DC2}	(k-ft)	9.3	103.0	78.0	103.0	9.3
DW	(k/ft)	0.32	0.32	0.32	0.32	0.32
M_{DW}	(k-ft)	16	173	132	173	16
M_{LL+IM}	(k-ft)	475	692	703	692	475
M_u (Strength I)	(k-ft)	918	2158	1,952	2158	918
$\Phi_f M_n$	(k-ft)	-	-	-	-	-
f_s DC1	(ksi)	0.90	9.91	7.56	9.91	0.91
f_s DC2	(ksi)	0.17	2.11	1.44	2.11	0.17
f_s DW	(ksi)	0.29	3.54	2.43	3.54	0.29
f_s (LL+IM)	(ksi)	8.01	14.15	11.85	14.15	8.01
f_s (Service II)	(ksi)	11.77	33.95	26.84	33.95	11.78
$0.95R_h F_{yf}$	(ksi)	47.5	47.5	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)	15.79	45.09	35.64	45.09	15.80
$\Phi_f F_n$	(ksi)	50.0	50.0	50.0	50.0	50.0
V_f	(k)	34.8	-	39.2	-	34.8



SECTION A-A

INTERIOR GIRDER REACTION TABLE			
		W. Abut. or E. Abut.	Pier 1 or 2
R (DC1)	(k)	45.1 **	65.0
R (DC2)	(k)	2.3	14.9
R (DW)	(k)	3.8	25.2
R (LL+IM)	(k)	65.5	129.6
R (Total)	(k)	116.7	234.7

** Abutment DC1 Reaction Includes Diaphragm Self-Weight and Weight of Approach Slab.

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.).

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.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

$\phi_f M_n$: 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 (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 $M_{L+IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$

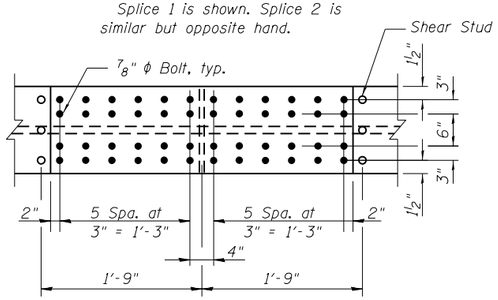
$0.95R_h F_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$

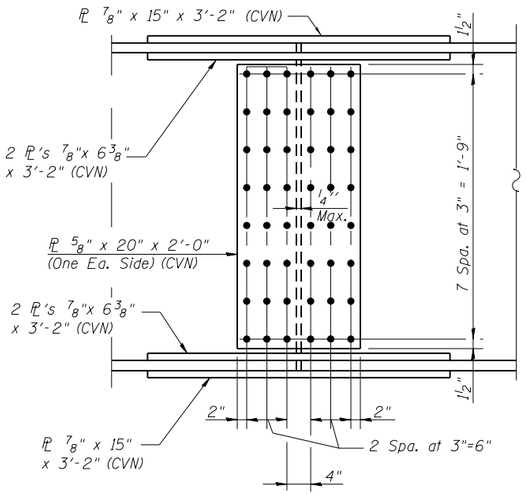
$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

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

Note:
Splice 1 is shown. Splice 2 is similar but opposite hand.



FLANGE SPLICE PLATE



WEB SPLICE PLATE

FIELD SPLICE DETAIL

44 Required
"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2

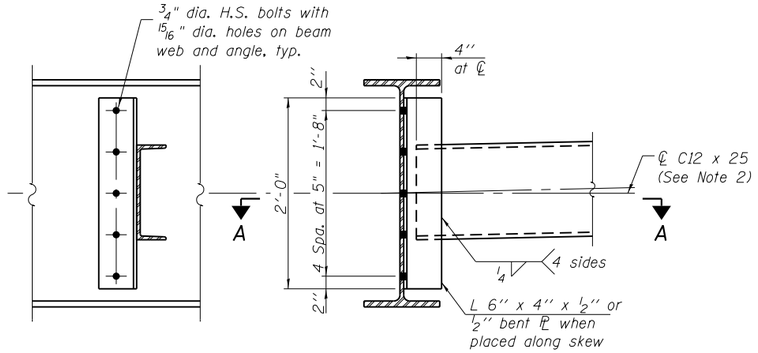
* For the diaphragms (D2) ℄ of 3/4" ϕ H.S. bolts, 15/16" ϕ holes at Beam 13 end of bracing and 13/16" x 1 7/8" long-slotted vertical holes at Beam 14 member connection plate. At Beam 14, locate slotted holes such that at final condition, bolts are at bottom of slots.

The bolts for the slotted holes shall only be finger tightened prior to the deck pouring and to be fully tightened after completion of the pouring for Stage II Construction.

℄ of 3/4" ϕ H.S. bolts, 15/16" ϕ holes at Beam 8 end of bracing and 13/16" x 1 7/8" long-slotted vertical holes at Beam 7 member connection plate.

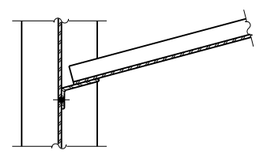
At Beam 7 locate slotted holes such that at final condition, bolts are at bottom of slots.

The bolts for the slotted holes shall only be finger tightened prior to the deck pouring and to be fully tightened after completion of the pouring for Stage III Construction.

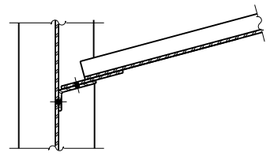


INTERIOR DIAPHRAGM - D1

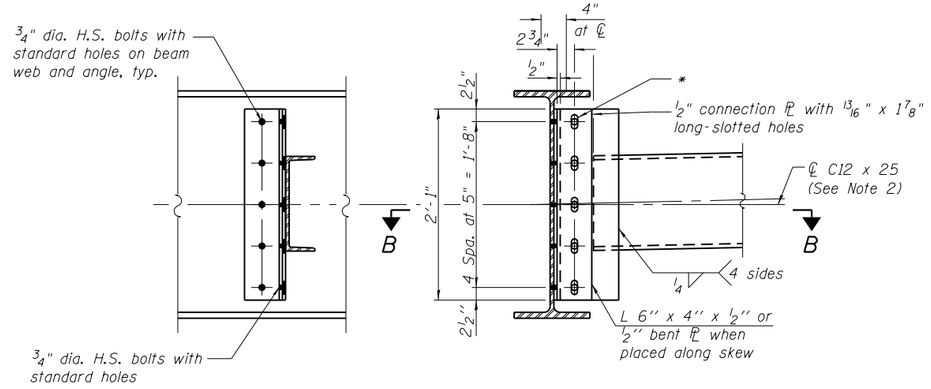
234 Required



SECTION A-A



SECTION B-B



INTERIOR DIAPHRAGM - D2

26 Required

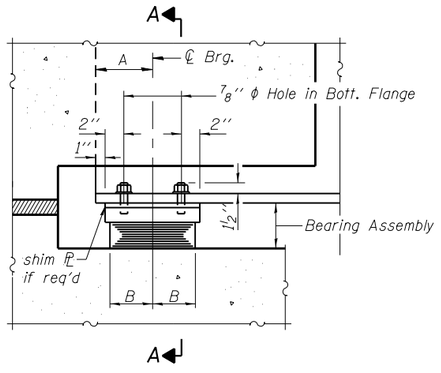
TOP OF BEAM ELEVATIONS

(For Fabrication Only)

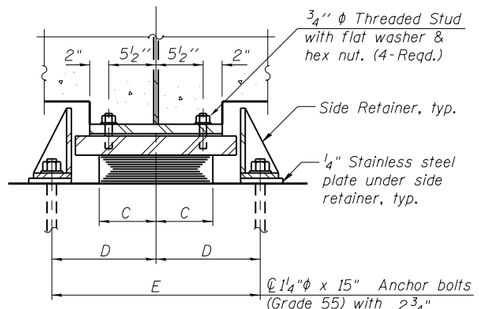
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9	Beam 10
CL Brg. W. Abut.	557.06	556.91	556.76	556.61	556.46	556.32	556.17	556.03	555.89	555.75
CL Pier 1	557.51	557.33	557.15	556.98	556.80	556.62	556.45	556.28	556.10	555.93
Splice #1	557.65	557.46	557.28	557.09	556.91	556.73	556.54	556.36	556.18	556.00
Splice #2	558.12	557.91	557.70	557.49	557.29	557.08	556.87	556.66	556.45	556.24
CL Pier 2	558.26	558.04	557.83	557.61	557.39	557.18	556.96	556.74	556.53	556.31
CL Brg. E. Abut.	558.52	558.31	558.09	557.87	557.66	557.44	557.23	557.01	556.79	556.58

	Beam 11	Beam 12	Beam 13	Beam 14	Beam 15	Beam 16	Beam 17	Beam 18	Beam 19	Beam 20	Beam 21	Beam 22
CL Brg. W. Abut.	556.75	556.61	556.47	556.33	556.19	556.06	555.92	555.79	555.66	555.53	555.40	555.27
CL Pier 1	557.08	556.91	556.74	556.58	556.41	556.24	556.08	555.92	555.76	555.60	555.44	555.28
Splice #1	557.19	557.02	556.84	556.66	556.49	556.31	556.14	555.97	555.80	555.63	555.46	555.29
Splice #2	557.58	557.38	557.17	556.97	556.76	556.55	556.35	556.14	555.94	555.73	555.53	555.33
CL Pier 2	557.70	557.48	557.27	557.05	556.84	556.62	556.41	556.19	555.98	555.77	555.55	555.34
CL Brg. E. Abut.	558.01	557.79	557.58	557.36	557.15	556.93	556.72	556.51	556.29	556.08	555.86	555.65

Notes:
1. Two hardened washers are required for each set of oversized holes.
2. Alternate C12 x 30 diphragm channels are permitted for D1 and D2 diaphragms to facilitate material acquisition. Calculated weight of structural steel is based on C12 x 25. The alternate, if utilized, shall be provided at no extra cost to the department.
3. The W30 x 173 splice plates for beams shall be AASHTO M270 Grade 50.
4. All diaphragms 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.



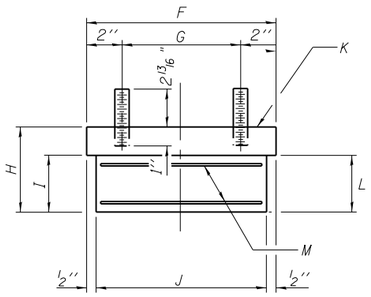
ELEVATION AT ABUT.



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG. AT ABUTMENTS

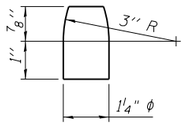
(44 Required)



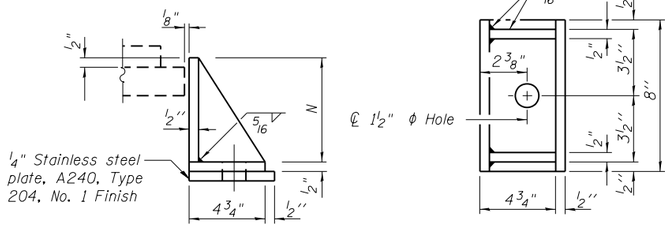
BEARING ASSEMBLY

Shim plates shall not be placed under Bearing Assembly.

	West Abut.	East Abut.
A	7"	6 1/2"
B	5 1/2"	5"
C	8"	7"
D	11 1/2"	11 1/2"
E	1'-11"	1'-11"
F	1'-0"	11"
G	8"	7"
H	5 3/4"	4 3/16"
I	4 1/4"	2 11/16"
J	11"	10"
K	1'-6" x 1'-0" x 1 1/2"	1'-6" x 11" x 1 1/2"
L	7 - Layers of 1/2" Elastomer	5 - Layers of 7/16" Elastomer
M	6 - 1/8" Steel Plates	4 - 1/8" Steel Plates
N	5 3/4"	4 3/4"



PINTLE



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 at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

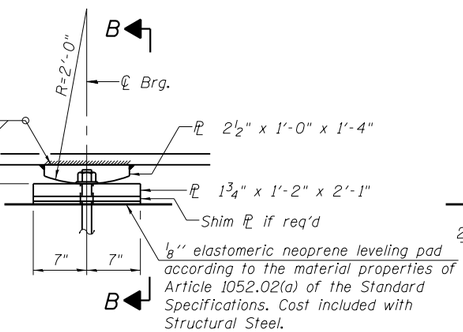
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

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

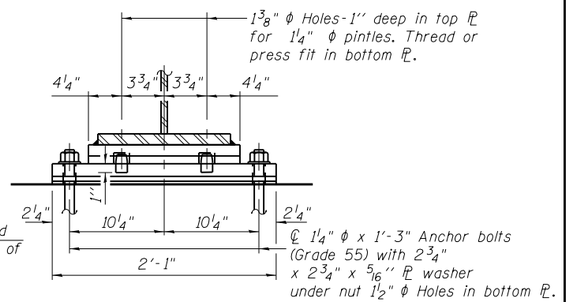
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

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

Structural steel plates and pintles of the fixed bearing shall conform to the requirements of AASHTO M270 Grade 50.



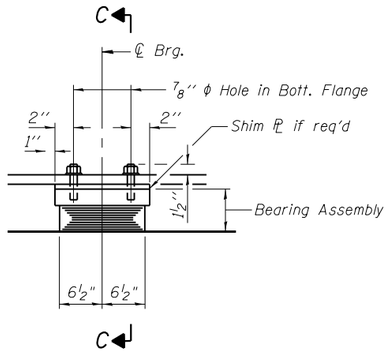
ELEVATION AT PIER



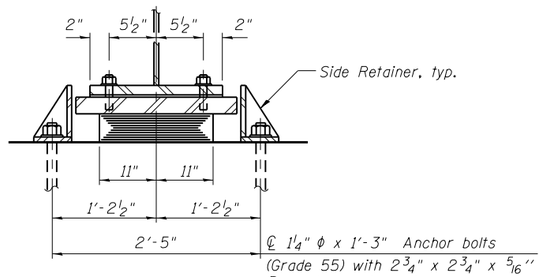
SECTION B-B

FIXED BEARING AT PIER 2

(22 Required)



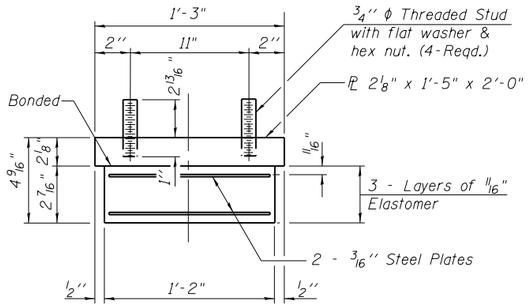
ELEVATION AT PIER



SECTION C-C

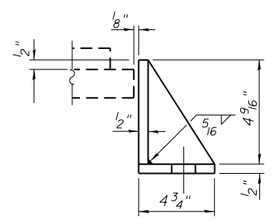
TYPE I ELASTOMERIC EXP. BRG. AT PIER 1

(22 Required)



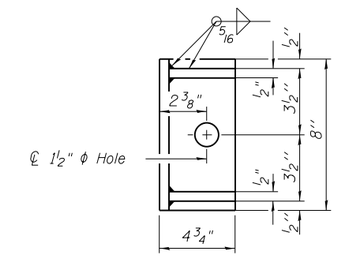
BEARING ASSEMBLY

Shim plates shall not be placed under Bearing Assembly.



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	66
Anchor Bolts, 1 1/4"	Each	176

USER NAME = default	DESIGNED TAH	REVISED	
	CHECKED YC	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED YC	REVISED	

HBP Illinois Partners

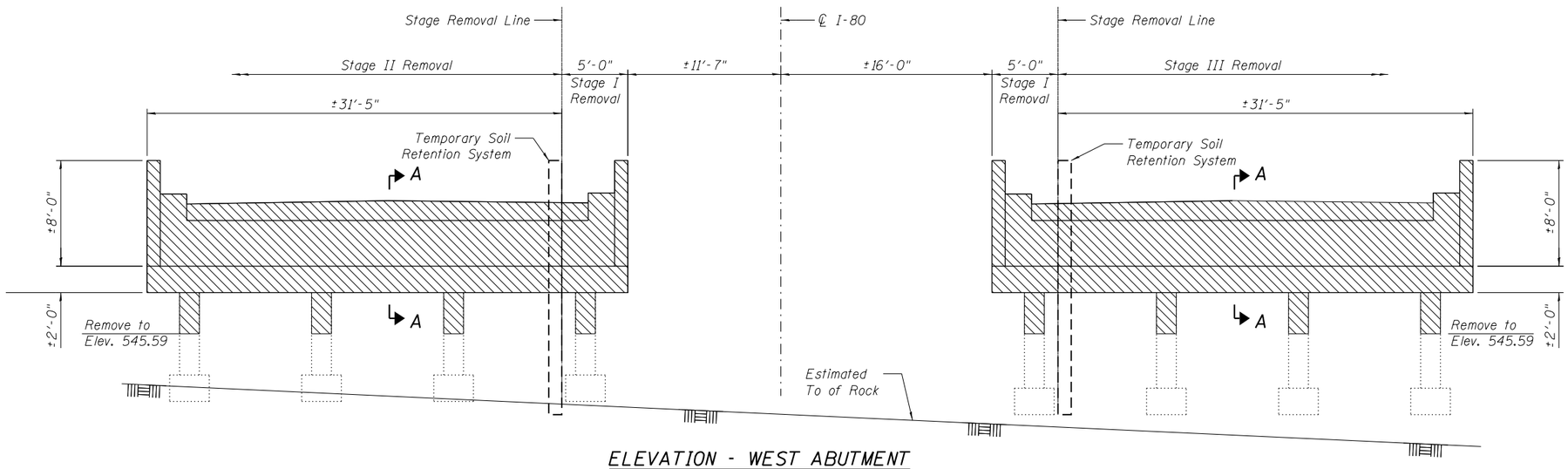
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)

SHEET NO. 37 OF 61 SHEETS

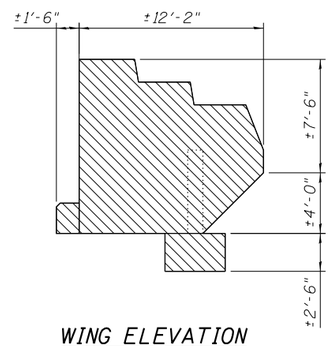
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	326
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-037-BRG.dgn

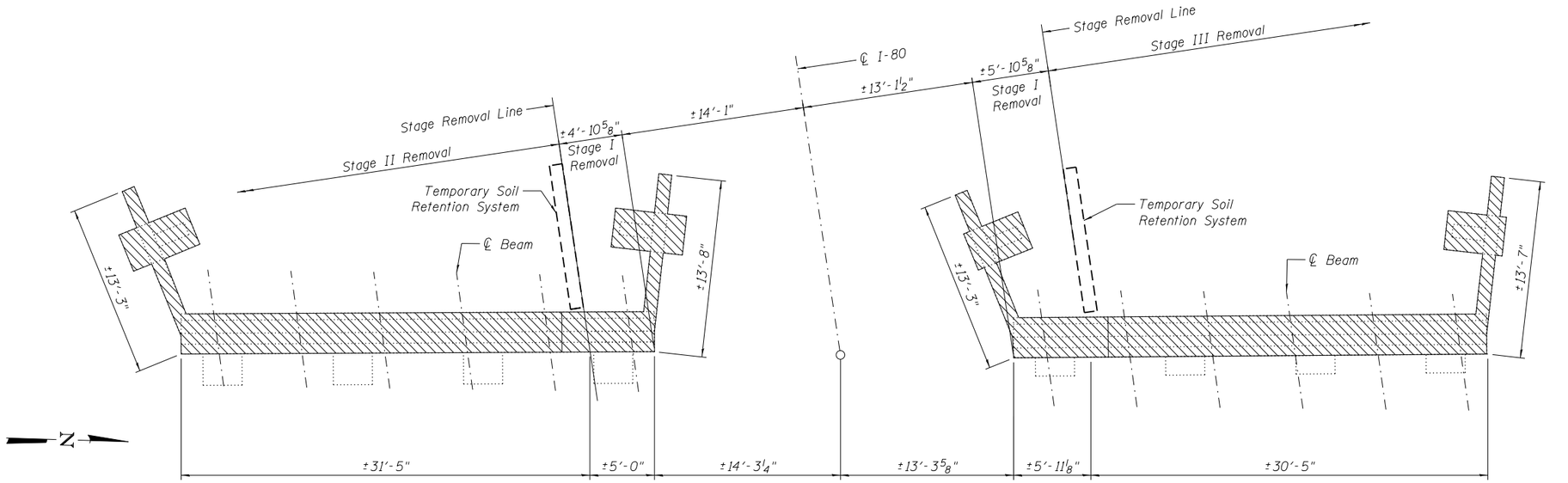


ELEVATION - WEST ABUTMENT

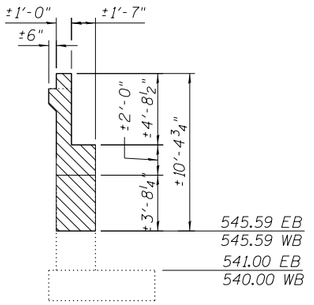
(Looking West)



WING ELEVATION



PLAN - WEST ABUTMENT



SECTION A-A

Notes:
1. Hatched areas indicate Removal of Existing Structures No. 2.
2. Removal shall be paid for as Removal of Existing Stuctures No. 2.
3. See sheet 5 of 61 for Temporary Soil Retention System details.

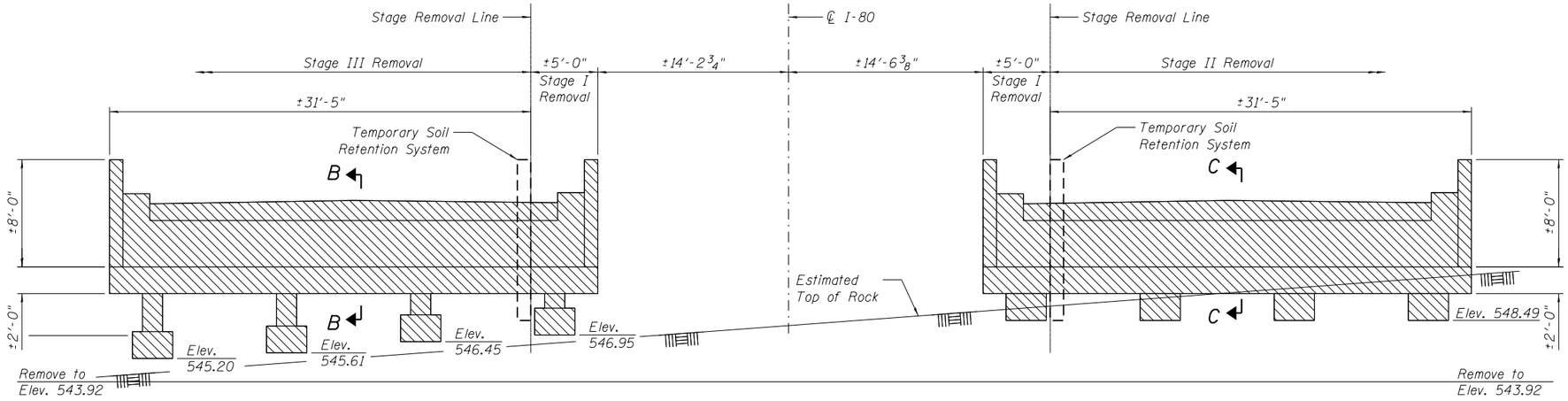
HBP Illinois Partners	USER NAME = default	DESIGNED WJA	REVISED
		CHECKED TAH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED YC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT REMOVAL
STRUCTURE NOS. 099–0900 (E.B.) & 099–0901(W.B.)
SHEET NO. 38 OF 61 SHEETS

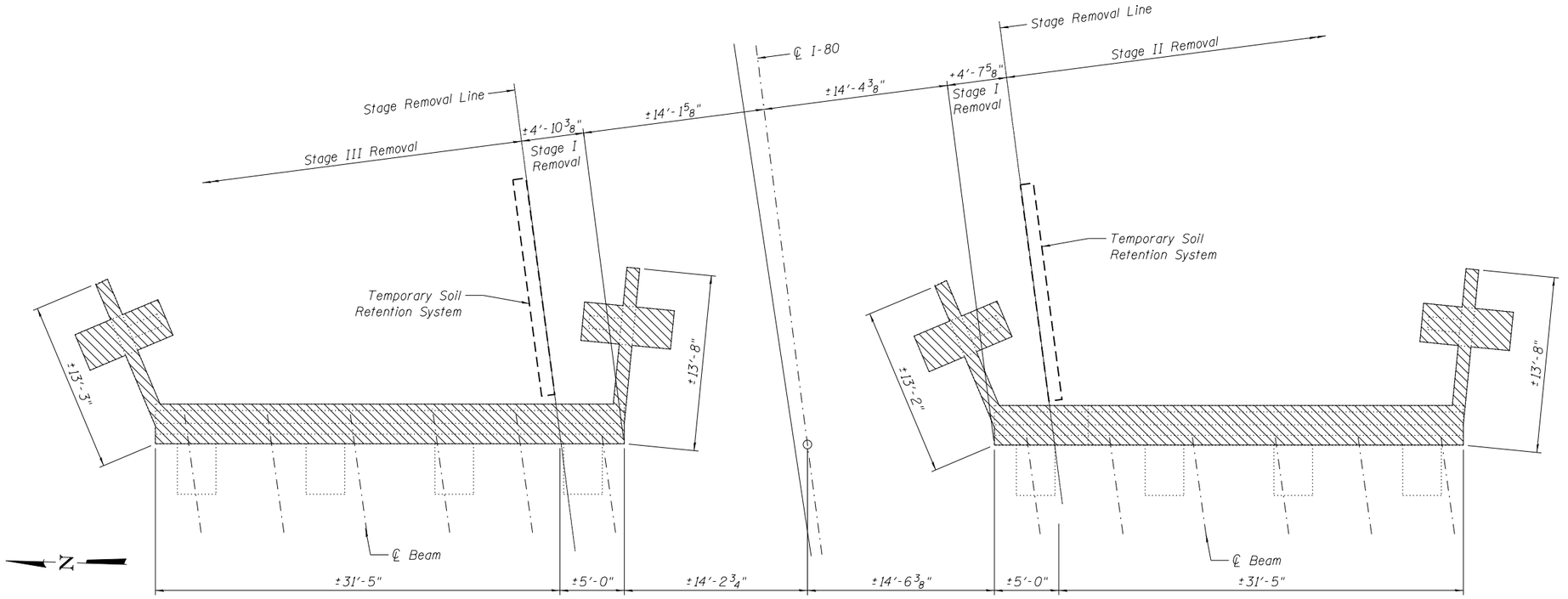
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	327
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-038-WABUT REM.dgn

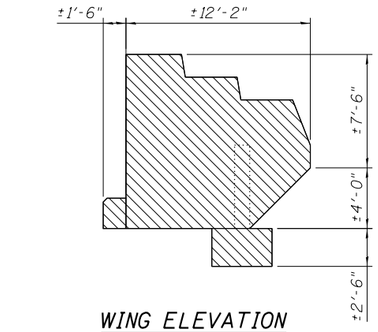


ELEVATION - EAST ABUTMENT

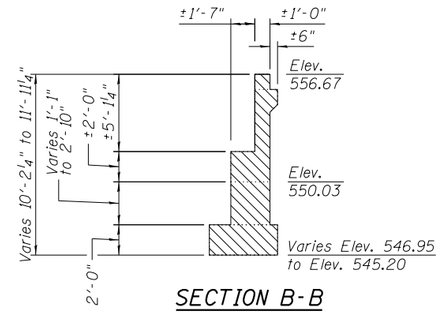
(Looking East)



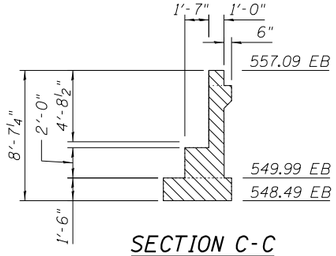
PLAN - EAST ABUTMENT



WING ELEVATION



SECTION B-B



SECTION C-C

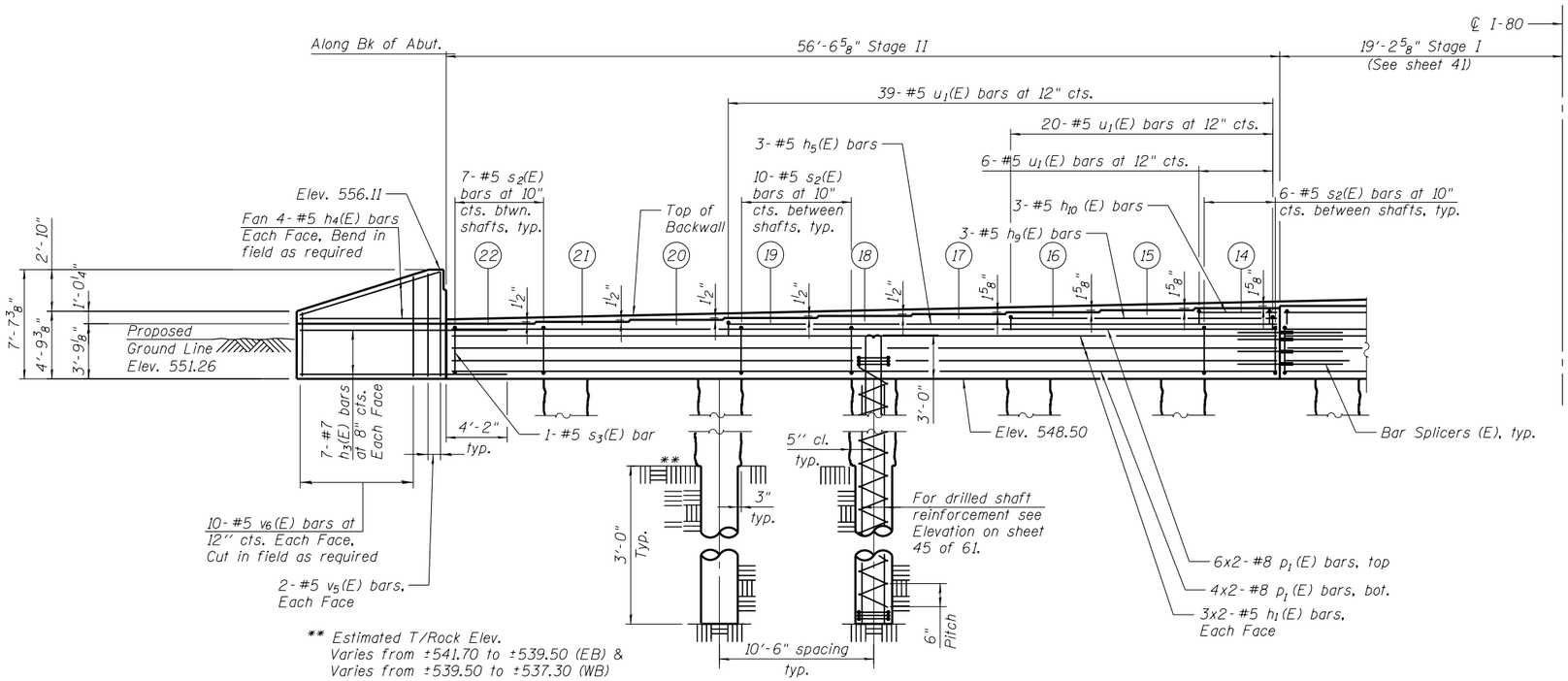
Notes:

1. *Hatched areas indicate Removal of Existing Structures No. 2.*
2. *Removal shall be paid for as Removal of Existing Stuctures No. 2.*
3. *See sheet 5 of 61 for Temporary Soil Retention System details.*

HBP Illinois Partners	USER NAME = default	DESIGNED WJA	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT REMOVAL STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
		CHECKED TAH	REVISED		
	PLOT SCALE = NTS	DRAWN RMH	REVISED		SHEET NO. 39 OF 61 SHEETS
	PLOT DATE = 6/25/2020	CHECKED YC	REVISED		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	328
			CONTRACT NO. 60W34	
		ILLINOIS	FED. AID PROJECT	

FILE NAME = 0990900-099090I-60W34-039-EABUT REM.dgn

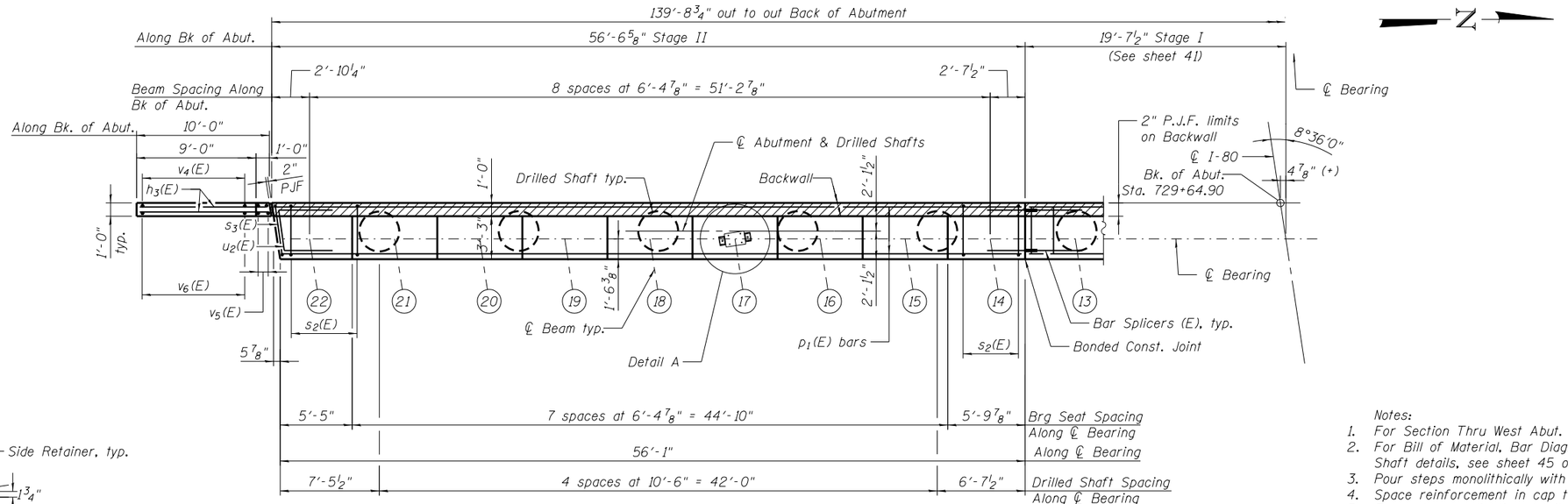


PARTIAL WEST ABUTMENT ELEVATION

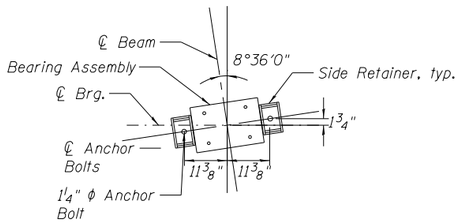
(Looking West)

BEARING SEAT ELEVATIONS

Beam	Elev.
14	553.32
15	553.18
16	553.05
17	552.91
18	552.78
19	552.65
20	552.51
21	552.38
22	552.26



PARTIAL WEST ABUTMENT PLAN



DETAIL A

Notes:
1. For Section Thru West Abut. see sheet 44 of 61.
2. For Bill of Material, Bar Diagrams, and Drilled Shaft details, see sheet 45 of 61.
3. Pour steps monolithically with cap.
4. Space reinforcement in cap to miss anchor bolts.
5. For underpass lighting details, see Electrical Plans.
6. For Temporary Soil Retention System details, see sheet 5 of 61.
7. For Bar Splicer details, see Sheet 54 of 61.

HBP Illinois Partners

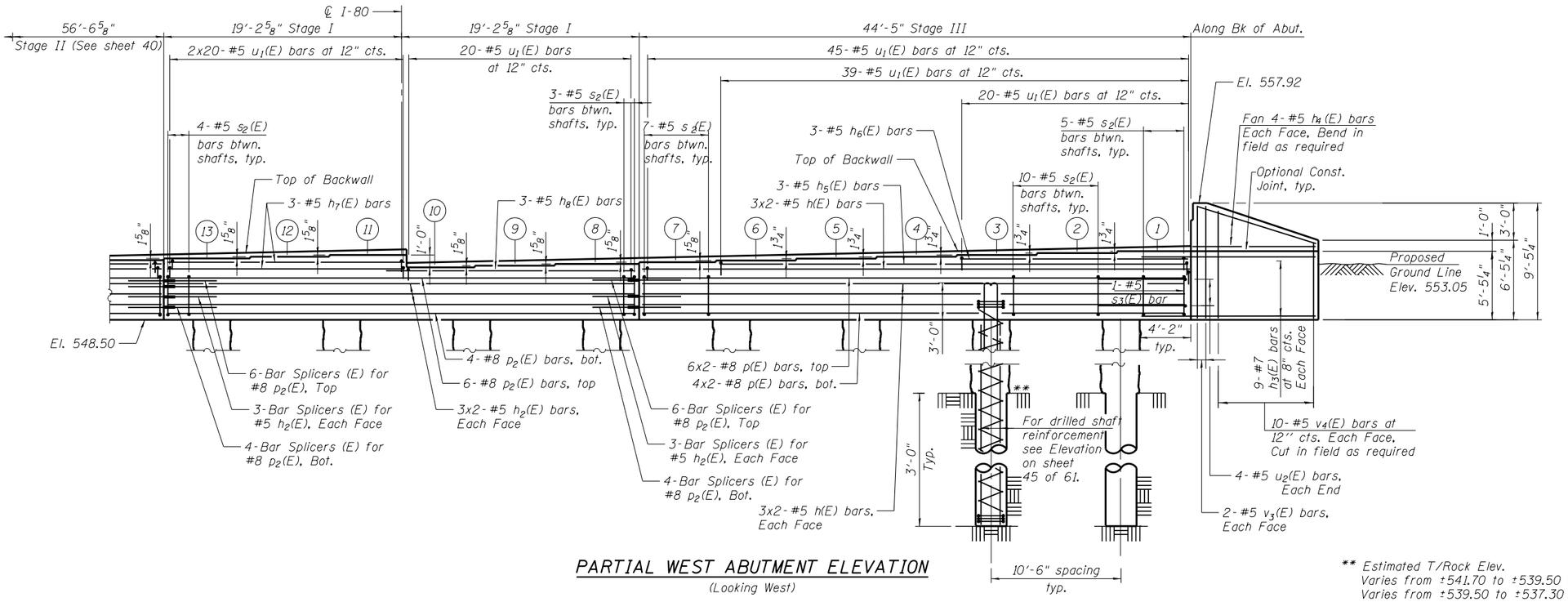
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 40 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	329
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

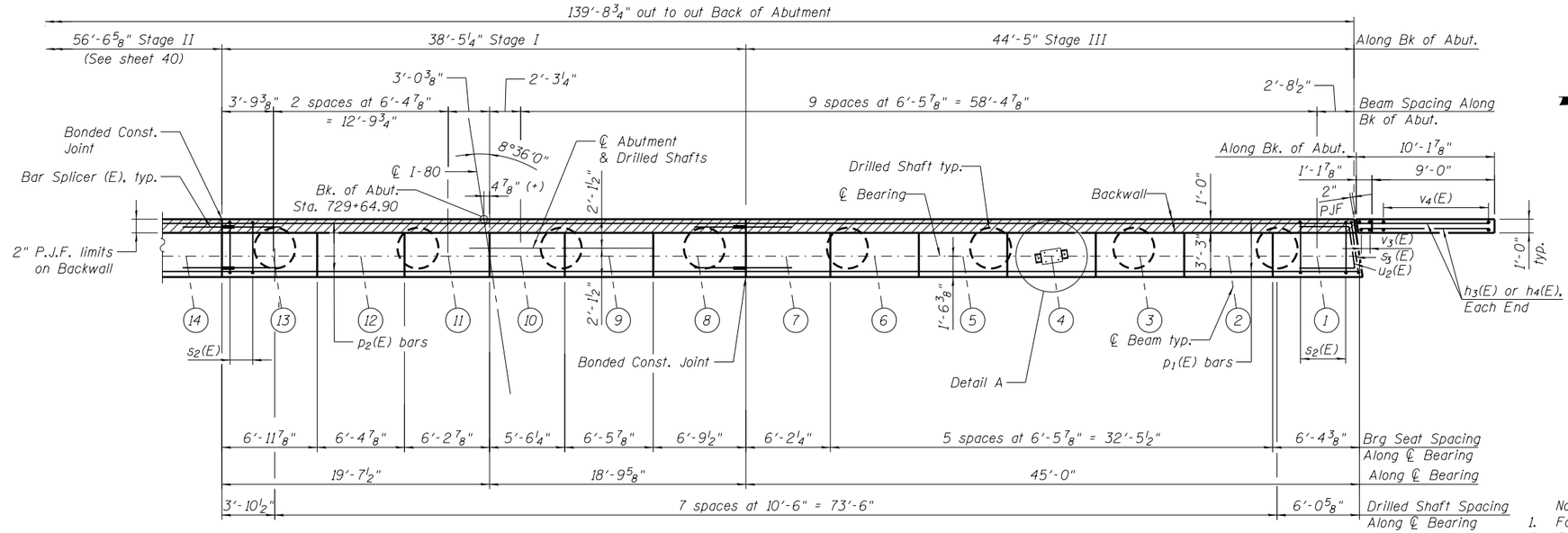
FILE NAME = 0990900-099090I-60W34-040-#ABUT WB.dgn



PARTIAL WEST ABUTMENT ELEVATION

(Looking West)

** Estimated T/Rock Elev.
Varies from ±541.70 to ±539.50 (EB) &
Varies from ±539.50 to ±537.30 (WB)



PARTIAL WEST ABUTMENT PLAN

BEARING SEAT ELEVATIONS

Beam	Elev.
1	554.05
2	553.90
3	553.75
4	553.60
5	553.45
6	553.31
7	553.16
8	553.02
9	552.88
10	552.73
11	553.74
12	553.60
13	553.46

Notes:
1. For Section Thru West Abut. see sheet 44 of 61.
2. For Bill of Material, Bar Diagrams, and Drilled Shaft details, see sheet 45 of 61.
3. Pour steps monolithically with cap.
4. Space reinforcement in cap to miss anchor bolts.
5. For underpass lighting details, see Electrical Plans.
6. For Temporary Soil Retention System details, see sheet 5 of 61.
7. For Bar Splicer details, see Sheet 54 of 61.

HBP Illinois Partners

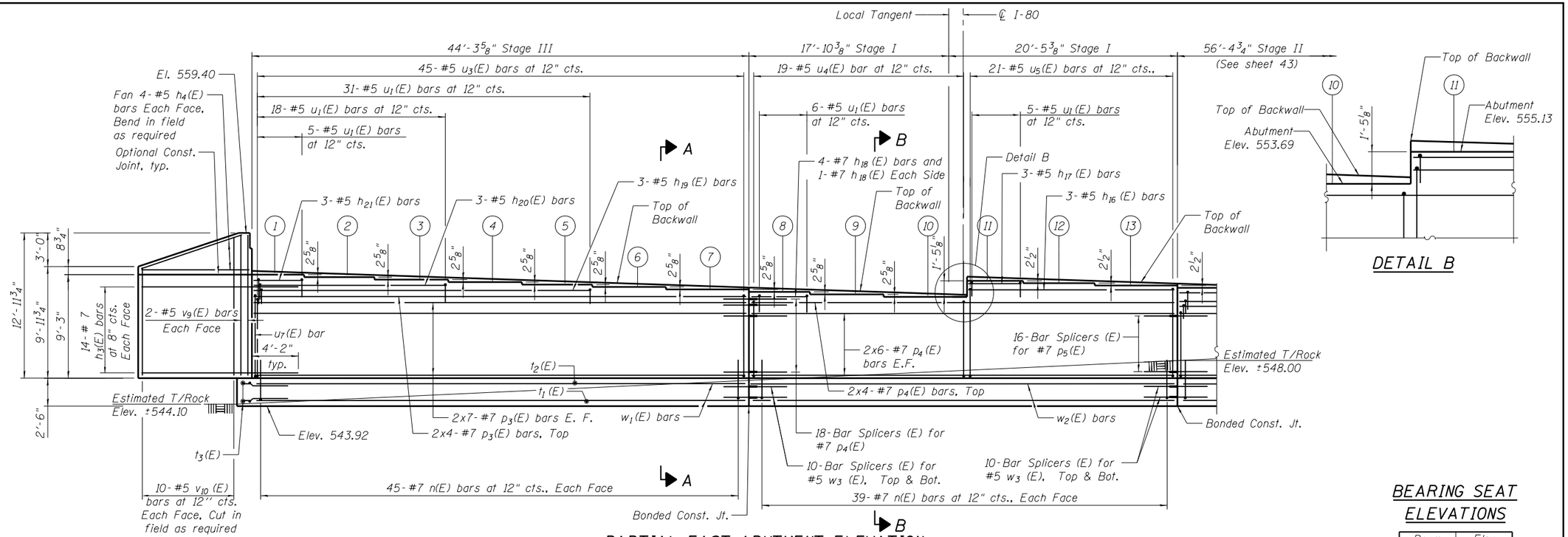
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 41 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	330
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-04I-WABUT WB.dgn

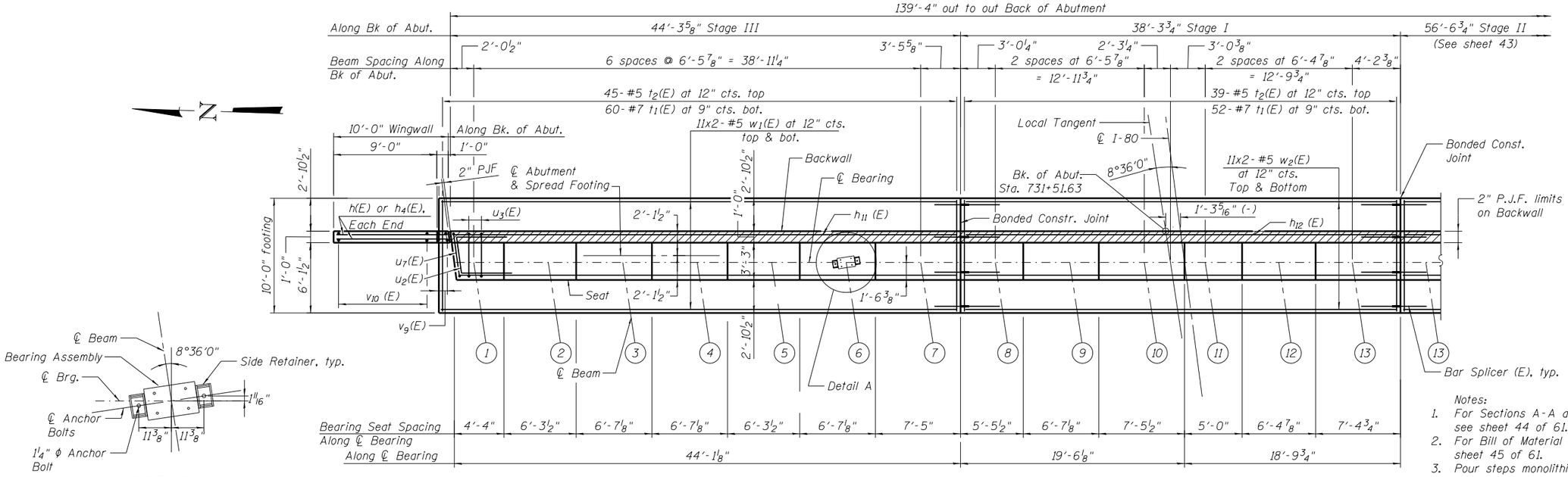


PARTIAL EAST ABUTMENT ELEVATION

(Looking East)

BEARING SEAT ELEVATIONS

Beam	Elev.
1	555.64
2	555.43
3	555.21
4	554.99
5	554.78
6	554.56
7	554.34
8	554.13
9	553.91
10	553.69
11	555.13
12	554.91
13	554.70



PARTIAL EAST ABUTMENT PLAN

Notes:
1. For Sections A-A and B-B, Section Thru West Abut., see sheet 44 of 61.
2. For Bill of Material and Bar Diagrams, see sheet 45 of 61.
3. Pour steps monolithically with cap.
4. Space reinforcement in cap to miss anchor bolts.
5. For underpass lighting details, see Electrical Plans.
6. For Temporary Soil Retention System details, see sheet 5 of 61.
7. For Bar Splicer details, see Sheet 54 of 61.

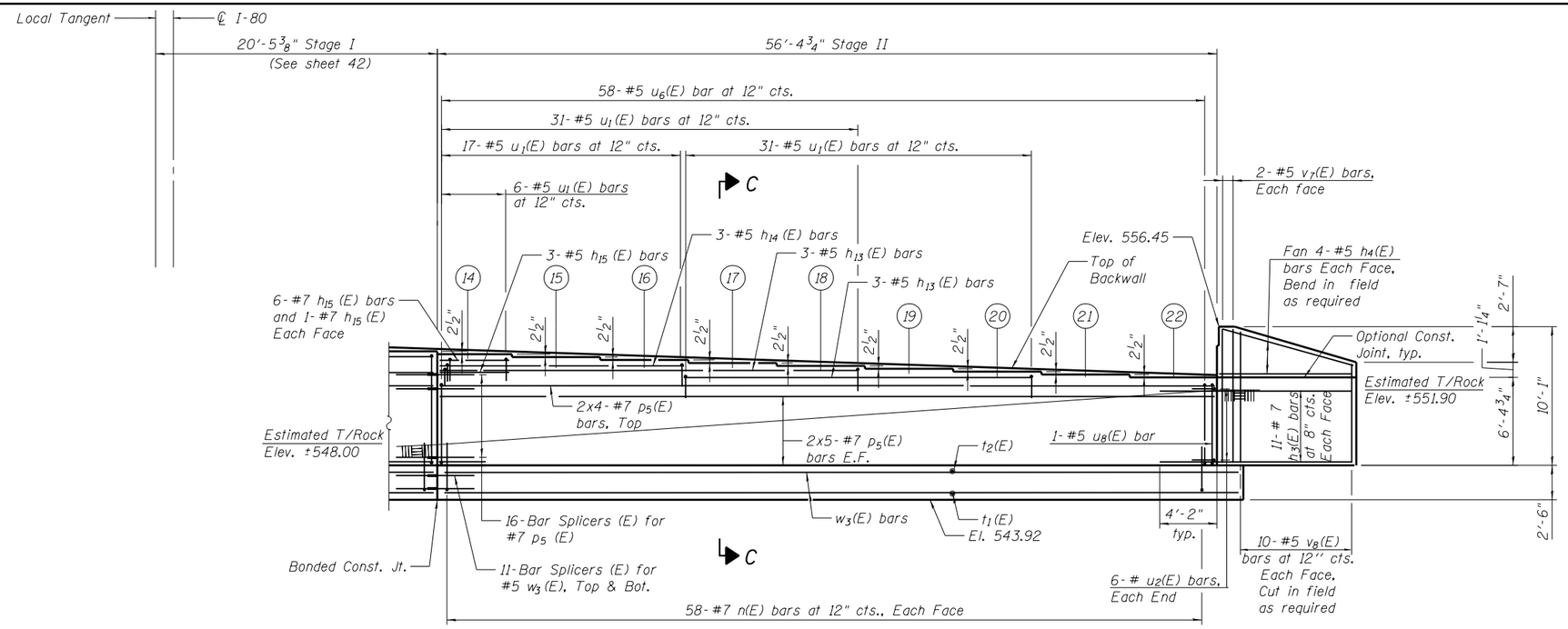
USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 42 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	331
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-042-EABUT EB.dgn

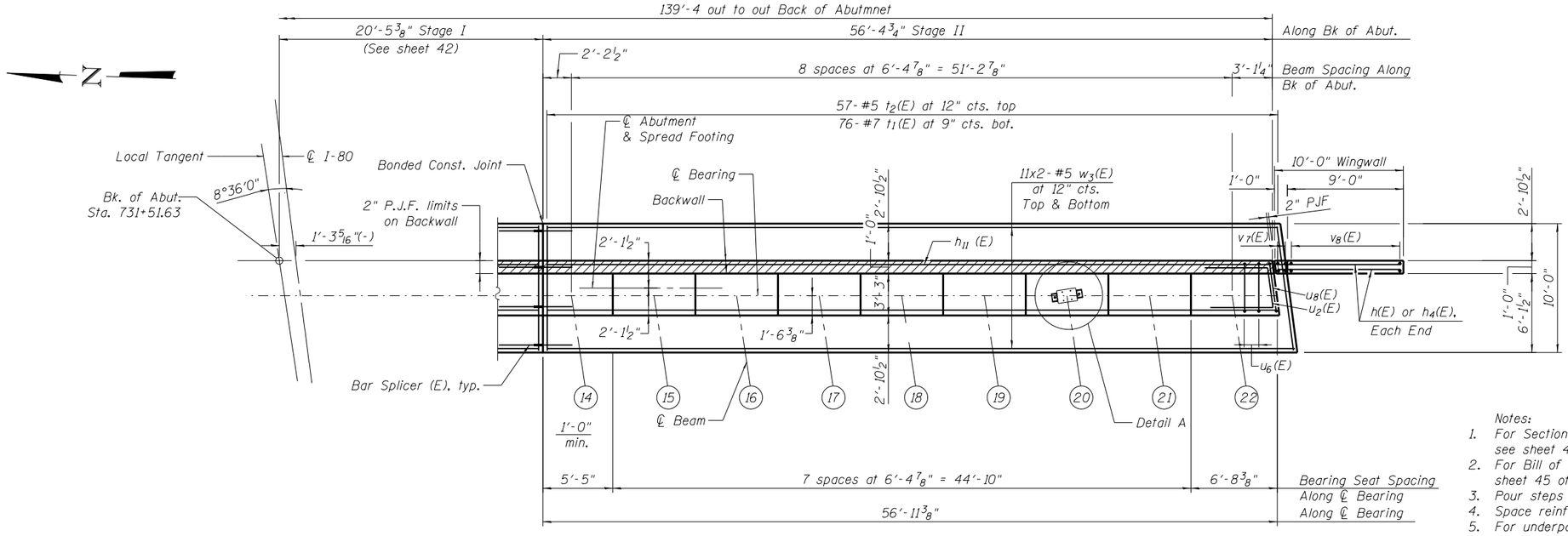


PARTIAL EAST ABUTMENT ELEVATION

(Looking East)

BEARING SEAT ELEVATIONS

Beam	Elev.
14	554.48
15	554.27
16	554.05
17	553.84
18	553.62
19	553.41
20	553.19
21	552.98
22	552.76



PARTIAL EAST ABUTMENT PLAN

Notes:

1. For Sections C-C and Section Thru West Abut., see sheet 44 of 61.
2. For Bill of Material and Bar Diagrams, see sheet 45 of 61.
3. Pour steps monolithically with cap.
4. Space reinforcement in cap to miss anchor bolts.
5. For underpass lighting details, see Electrical Plans.
6. For Detail A, see sheet 42 of 61.
7. For Temporary Soil Retention System details, see sheet 5 of 61.
8. For Bar Splicer details, see Sheet 54 of 61.

HBP Illinois Partners

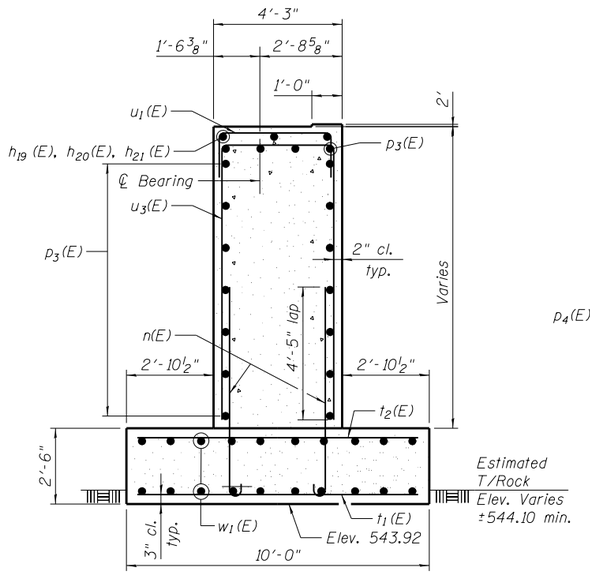
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 43 OF 61 SHEETS

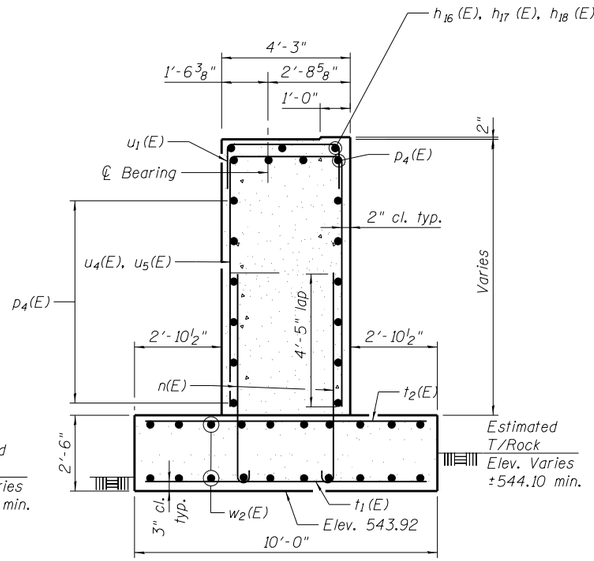
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	332
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-043-EABUT EB.dgn



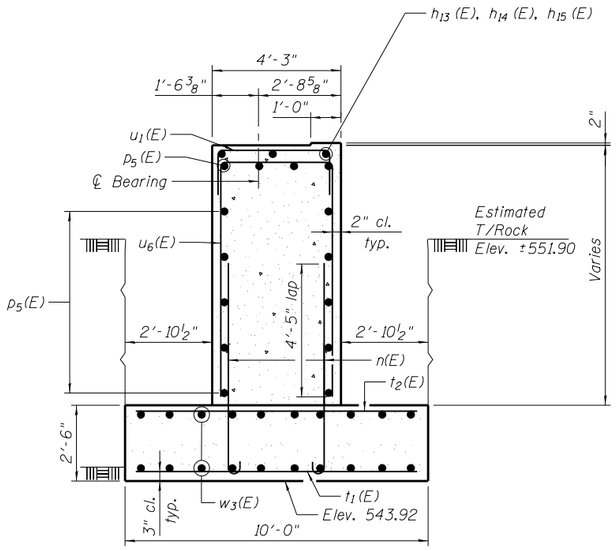
SECTION A-A

Dimensions at right angles to abutment.



SECTION B-B

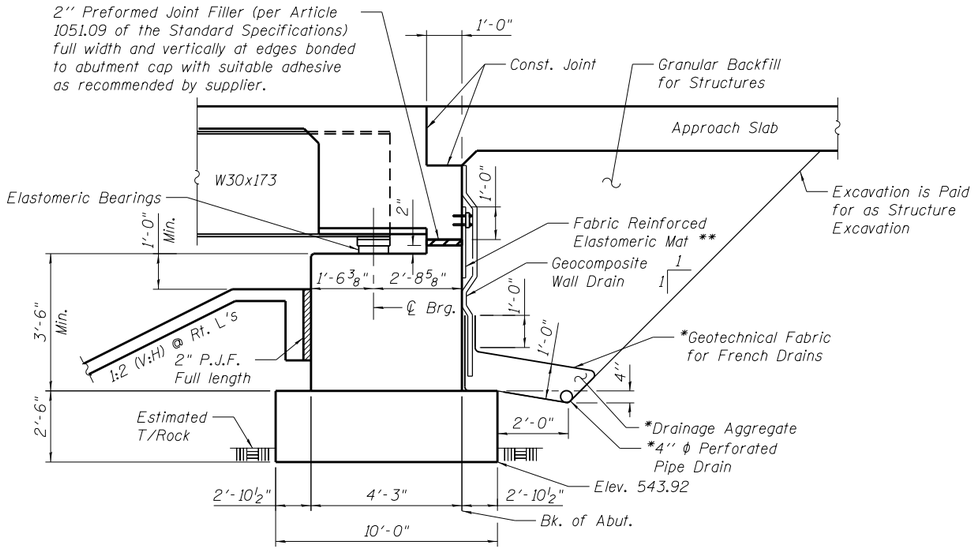
Dimensions at right angles to abutment.



SECTION C-C

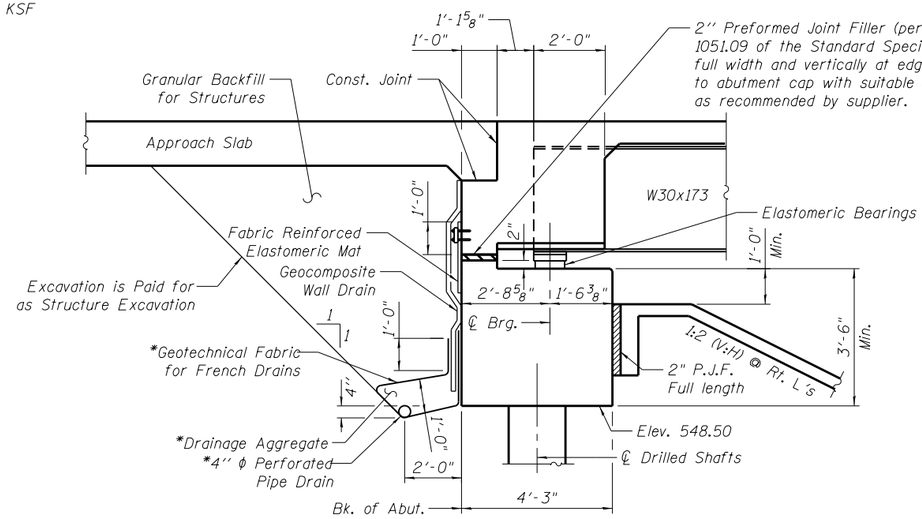
Dimensions at right angles to abutment.

Note:
The maximum applied service bearing pressure at East Abutment: Q_{MAX} = 2.48 KSF



SECTION THRU EAST ABUTMENT

(Horiz. Dim. @ Rt. L's)



SECTION THRU WEST ABUTMENT

(Horiz. Dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions).

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

** Fabric Reinforced Elastomeric Mat according to Section 1028 of the Standard Specifications. Fabric mat shall be 24" wide and attached full width and vertically at edges to the abutment cap with a ⅜" x 5" steel plate and ½" ϕ studs with nuts and washers at 12" cts. Cost included with Concrete Superstructure.

Note:
Since the top of rock is sloping across the footing, the bottom of footing elevation shall be verified and adjusted as needed in the field to ensure 3" minimum embedment in non-weathered rock. The rock excavation shall be made with near-vertical sides at the plan dimensions to allow the sides and base of the embedded portion of the footing to be cast against undisturbed rock surfaces.

HBP Illinois Partners

USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 44 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	333
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

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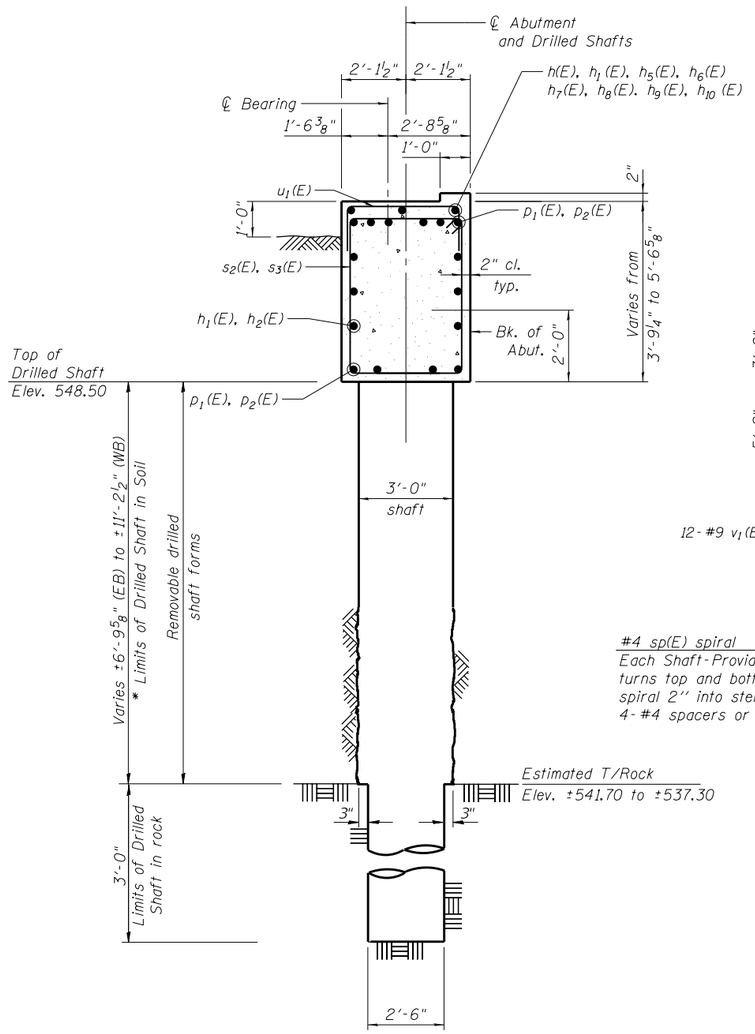
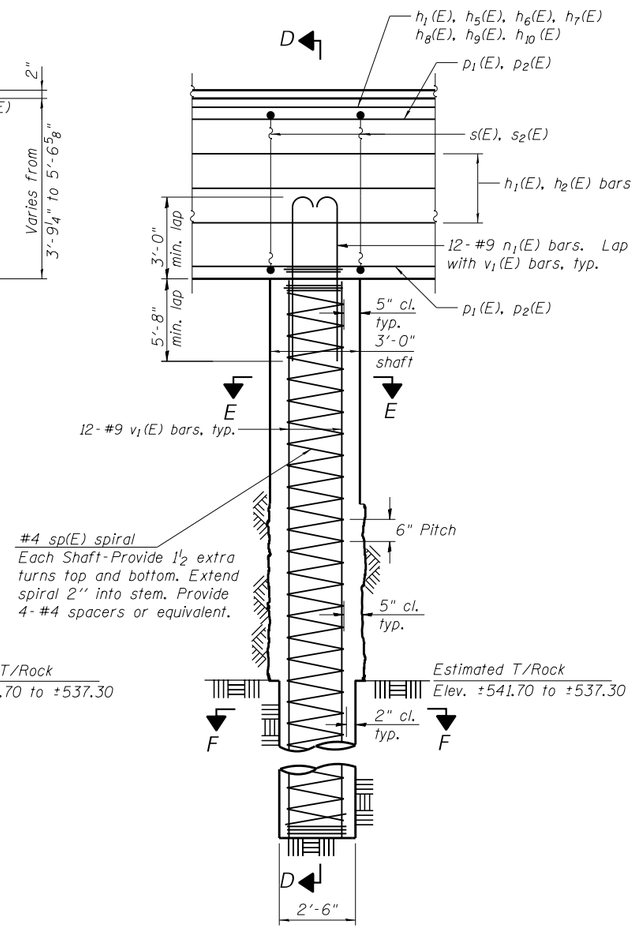
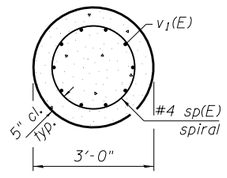


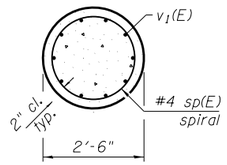
SECTION D-D



ELEVATION
(Looking West)



SECTION E-E



SECTION F-F

TYP. LAP SPLICE

Bar Size	Min. Lap
#5	3'-2"
#7	4'-5"
#8	5'-1"
#9	5'-8"

BILL OF MATERIAL AT WEST ABUTMENT

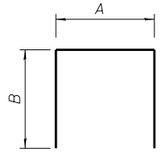
Bar	No.	Size	Length	Shape
h(E)	18	#5	24'-0"	——
h1(E)	12	#5	30'-0"	——
h2(E)	12	#5	20'-10"	——
h3(E)	32	#7	14'-0"	——
h4(E)	16	#5	9'-8"	——
h5(E)	6	#5	38'-5"	——
h6(E)	3	#5	18'-11"	——
h7(E)	6	#5	19'-3"	——
h8(E)	3	#5	21'-5"	——
h9(E)	3	#5	18'-4"	——
h10(E)	3	#5	5'-6"	——
n1(E)	156	#9	9'-11"	——→
p(E)	20	#8	25'-0"	——
p1(E)	20	#8	30'-7"	——
p2(E)	10	#8	38'-1"	——
s2(E)	132	#5	15'-7"	⌐
s3(E)	2	#5	15'-8"	⌐
sp(E)	13	#4	*12'-4"	WWWW
u1(E)	229	#5	7'-5"	⌐
u2(E)	8	#5	11'-8"	⌐
v1(E)	156	#9	11'-10"	——
v3(E)	4	#5	9'-5"	——
v4(E)	20	#5	9'-1"	——
v5(E)	4	#5	7'-3"	——
v6(E)	20	#5	6'-11"	——
Structure Excavation		Cu. Yd.	783	
Concrete Structures		Cu. Yd.	107	
Drilled Shafts in Soil		Cu. Yd.	31	
Drilled Shaft in Rock		Cu. Yd.	8	
Reinforcement Bars, Epoxy Coated		Pounds	22,810	
Concrete Sealer		Sq. Ft.	2,244	

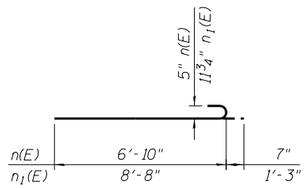
BILL OF MATERIAL AT EAST ABUTMENT

Bar	No.	Size	Length	Shape
h3(E)	50	#7	14'-0"	——
h4(E)	16	#5	9'-8"	——
h13(E)	6	#5	30'-8"	——
h14(E)	3	#5	17'-10"	——
h15(E)	6	#7	5'-1"	——
h16(E)	3	#5	18'-5"	——
h17(E)	3	#5	4'-8"	——
h18(E)	6	#7	5'-1"	——
h19(E)	3	#5	29'-9"	——
h20(E)	3	#5	16'-11"	——
h21(E)	3	#5	4'-0"	——
n(E)	284	#7	7'-5"	——→
p3(E)	36	#7	24'-4"	——
p4(E)	32	#7	21'-6"	——
p5(E)	28	#7	30'-6"	——
t1(E)	188	#7	9'-8"	——
t2(E)	141	#5	9'-8"	——
u1(E)	150	#5	7'-5"	⌐
u2(E)	12	#5	11'-8"	⌐
u3(E)	45	#5	18'-11"	⌐
u4(E)	19	#5	18'-1"	⌐
u5(E)	21	#5	18'-1"	⌐
u6(E)	58	#5	16'-3"	⌐
u7(E)	1	#5	19'-0"	⌐
u8(E)	1	#5	16'-4"	⌐
v7(E)	4	#5	9'-9"	——
v8(E)	20	#5	9'-5"	——
v9(E)	4	#5	12'-11"	——
v10(E)	20	#5	12'-7"	——
w1(E)	44	#5	24'-0"	——
w2(E)	44	#5	20'-9"	——
w3(E)	44	#5	30'-0"	——
Rock Excavation for Structures		Cu. Yd.	252	
Structure Excavation		Cu. Yd.	1857	
Concrete Structures		Cu. Yd.	312	
Reinforcement Bars, Epoxy Coated		Pounds	24,540	
Concrete Sealer		Sq. Ft.	3,649	

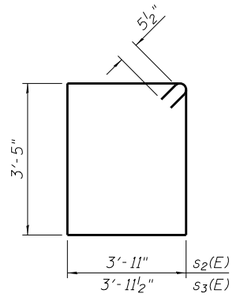
* Length is average height of spiral. Contractor shall ensure spiral lengths are sufficient for each of the variable depths of drilled shafts.

Bar	A	B
$u_1(E)$	3'-11"	1'-9"
$u_3(E)$	3'-11"	7'-6"
$u_4(E)$	3'-11"	7'-1"
$u_5(E)$	3'-11"	7'-1"
$u_6(E)$	3'-11"	6'-2"
$u_7(E)$	3'-11½"	7'-6"
$u_8(E)$	3'-11½"	6'-2"

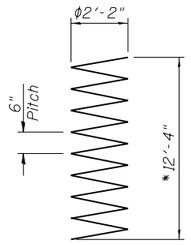




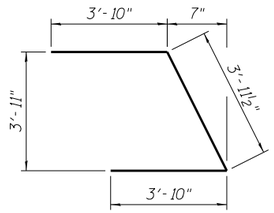
BAR n(E), n_1(E)



BARs s_2(E), s_3(E)



BAR sp (E)



BAR u_2(E)

Note:
See sheet 54 of 61 for Bar Splicer (E) details.

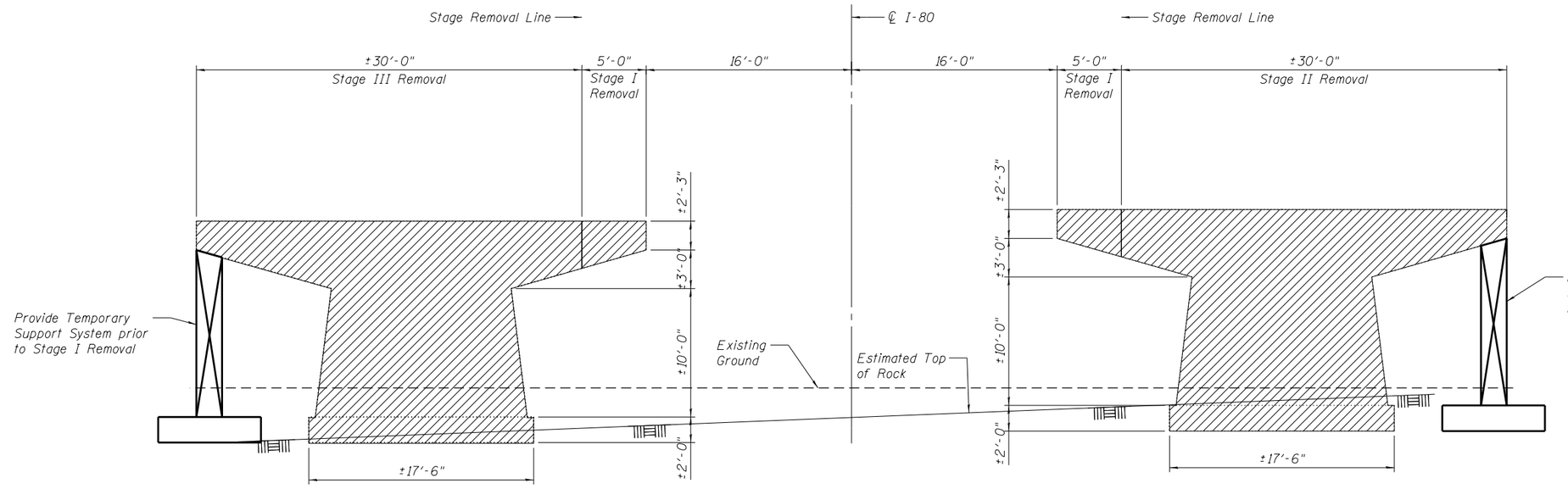
USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

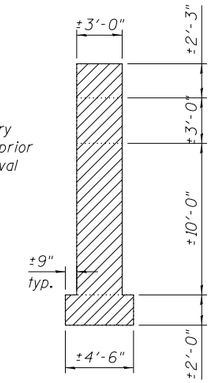
ABUTMENT DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 45 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	334
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

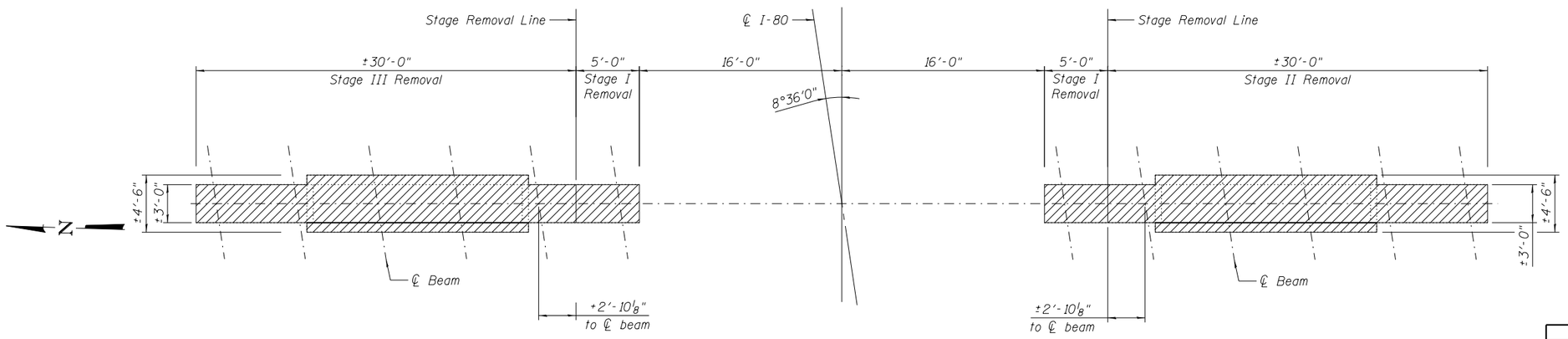
FILE NAME = 0990900-099090I-60W34-045-ABUT DTL.dgn



ELEVATION
(Looking East)



TYPICAL SECTION THRU PIER



TOP PLAN

BILL OF MATERIAL

Item	Units	Qty.
Temporary Support System	Each	2

Notes:
1. The design and documentation of the temporary support system must be sealed by a licensed structural engineer in the State of Illinois and submitted to the Engineer for review and approval.
2. At each Pier, provide Temporary Support System prior to Stage I Removal. The Temporary Support System shall be designed for the following unfactored Service loads:
   Dead Load = 117 kips
   Live Load = 55 kips

Notes:
1. Hatched areas indicate Removal of Existing Structures No. 2.
2. Removal shall be paid for as Removal of Existing Stuctures No. 2.

HBP Illinois Partners

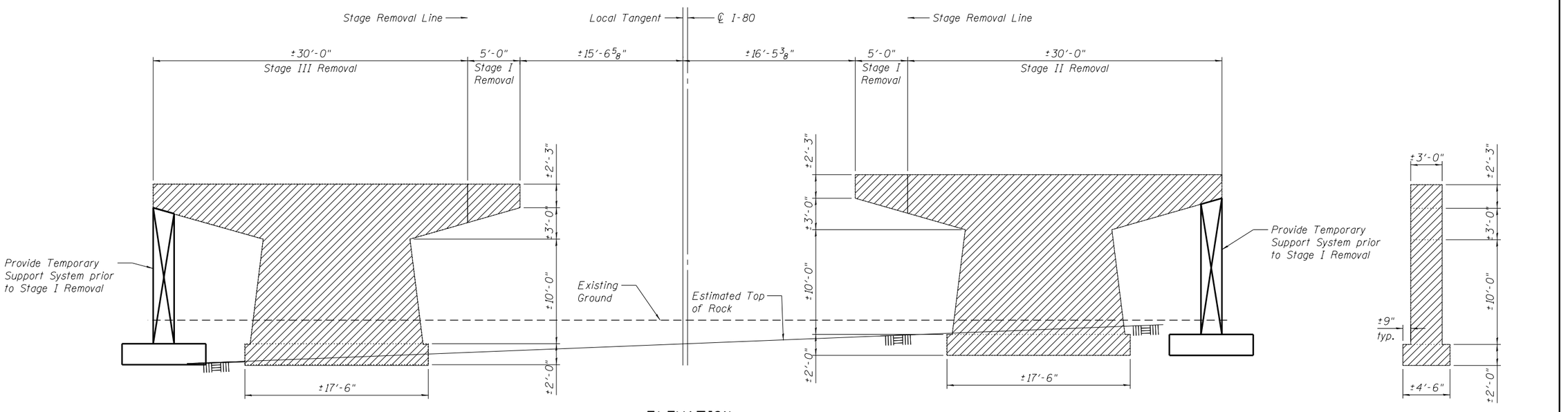
USER NAME = default	DESIGNED WJA	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 REMOVAL
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 46 OF 61 SHEETS

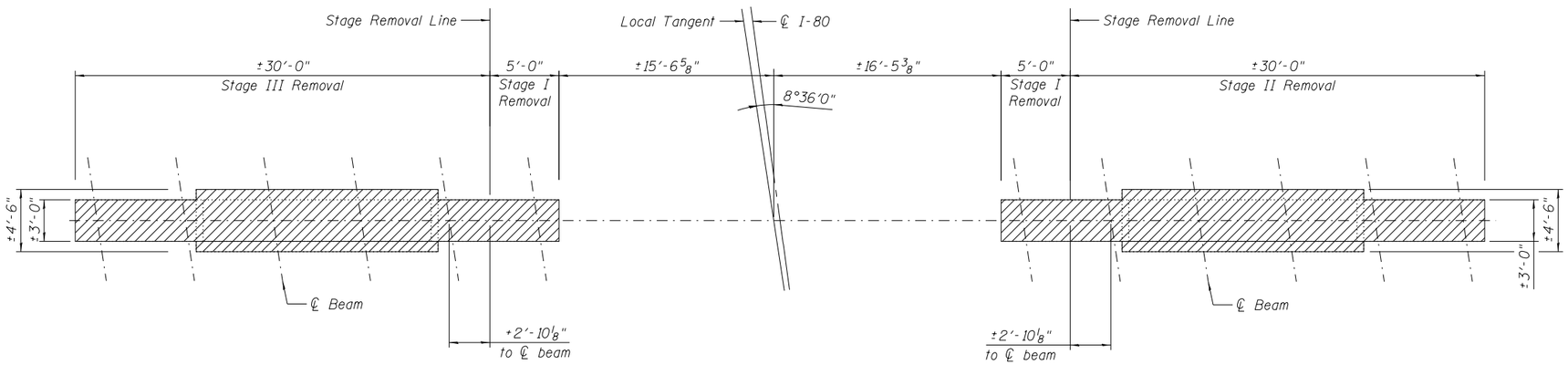
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	335
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-046-PIERREM.dgn



ELEVATION
(Looking East)

TYPICAL SECTION THRU PIER



TOP PLAN

Notes:
1. The design and documentation of the temporary support system must be sealed by a licensed structural engineer in the State of Illinois and submitted to the Engineer for review and approval.
2. At each Pier, provide Temporary Support System prior to Stage I Removal. The Temporary Support System shall be designed for the following unfactored Service loads:
   Dead Load = 117 kips
   Live Load = 55 kips

BILL OF MATERIAL

Item	Units	Qty.
Temporary Support System	Each	2

Notes:
1. Hatched areas indicate Removal of Existing Structures No. 2.
2. Removal shall be paid for as Removal of Existing Stuctures No. 2.

HBP Illinois Partners

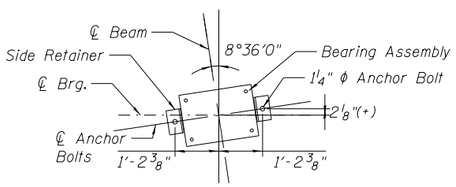
USER NAME = default	DESIGNED WJA	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

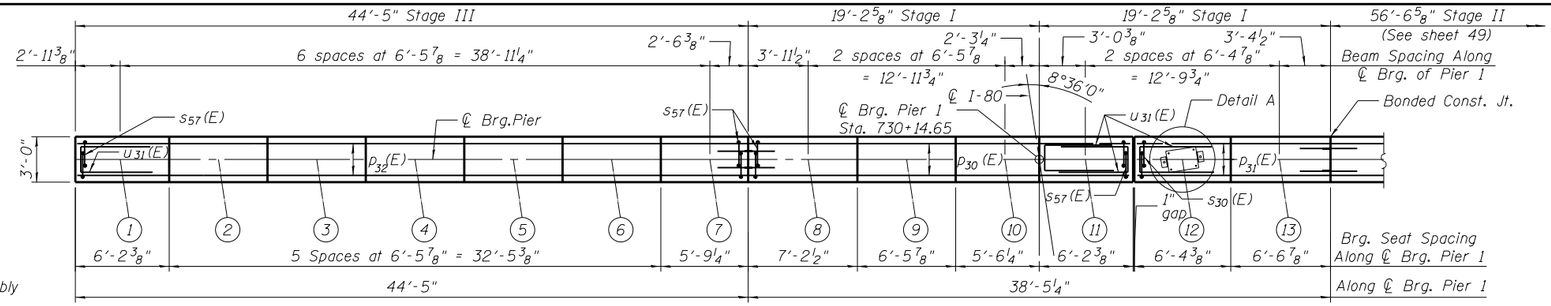
PIER 2 REMOVAL
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 47 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	336
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-047-PIER2 REM.dgn



DETAIL A

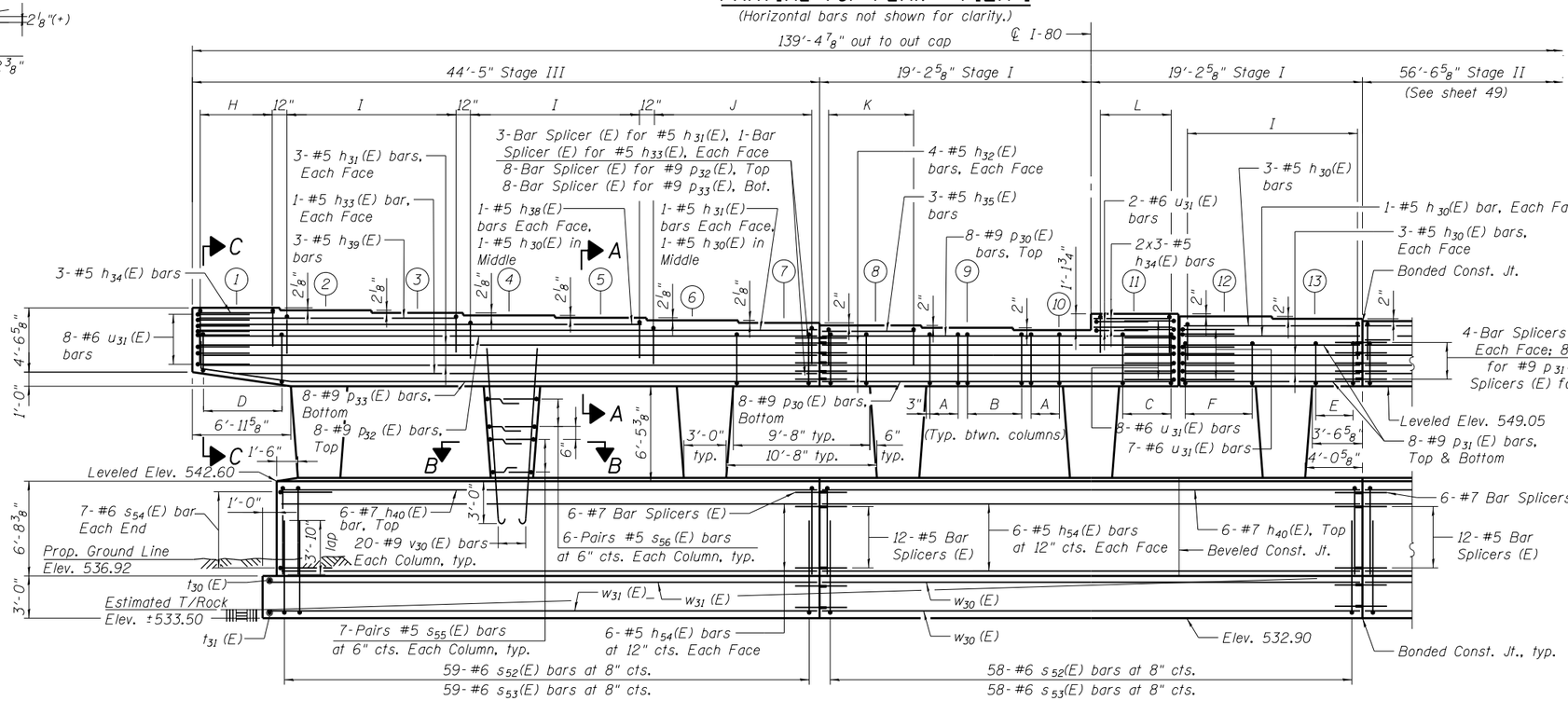


PARTIAL TOP PLAN - PIER 1

(Horizontal bars not shown for clarity.)

BAR SCHEDULE

Label	Bar (Stirrup) and Quantity	Spacing
A	7 pairs - #5 s_{57}(E)	4"
B	8 pairs - #5 s_{57}(E)	8"
C	11 pairs - #5 s_{57}(E)	4"
D	21 pairs - #5 s_{58}(E) thru #5 s_{78}(E)	4"
E	11 pairs - #5 s_{30}(E)	4"
F	14 pairs - #5 s_{30}(E)	4"
G	7 pairs - #5 s_{30}(E)	4"
H	6 - #5 u_{30}(E)	12"
I	13 - #5 u_{30}(E)	12"
J	12 - #5 u_{30}(E)	12"
K	7 - #5 u_{30}(E)	12"
L	6 - #5 u_{30}(E)	12"
M	20 - #5 u_{30}(E)	12"
N	8 pairs - #5 s_{30}(E)	8"
O	6 pairs - #5 s_{30}(E)	4"
P	6 pairs - #5 s_{30}(E)	8"
Q	21 pairs - #5 s_{31}(E) thru #5 s_{51}(E)	4"
R	6 pairs - #5 s_{30}(E)	4"

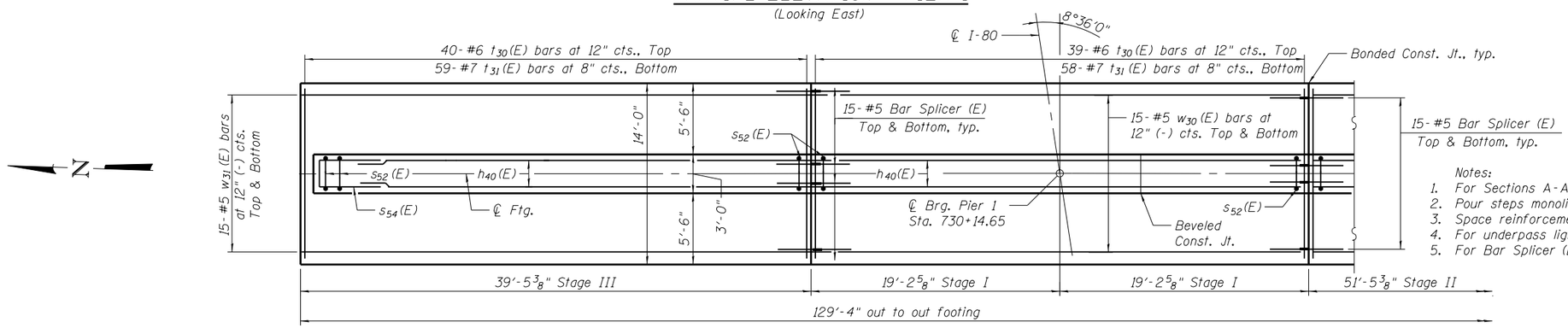


PARTIAL ELEVATION - PIER 1

(Looking East)

BEARING SEAT ELEVATIONS

Beam	Elev.
1	554.60
2	554.42
3	554.24
4	554.06
5	553.89
6	553.71
7	553.54
8	553.36
9	553.19
10	553.02
11	554.17
12	554.00
13	553.83



PARTIAL FOOTING PLAN - PIER 1

Notes:
1. For Sections A-A thru C-C, see sheet 50 of 61.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. For underpass lighting details, see Electrical plans.
5. For Bar Splicer (E) details, see sheet 54 of 61.

HBP Illinois Partners

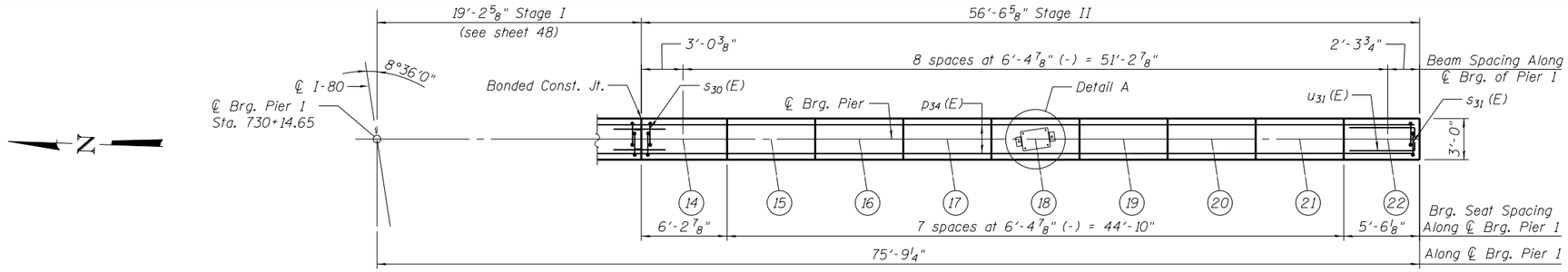
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 48 OF 61 SHEETS

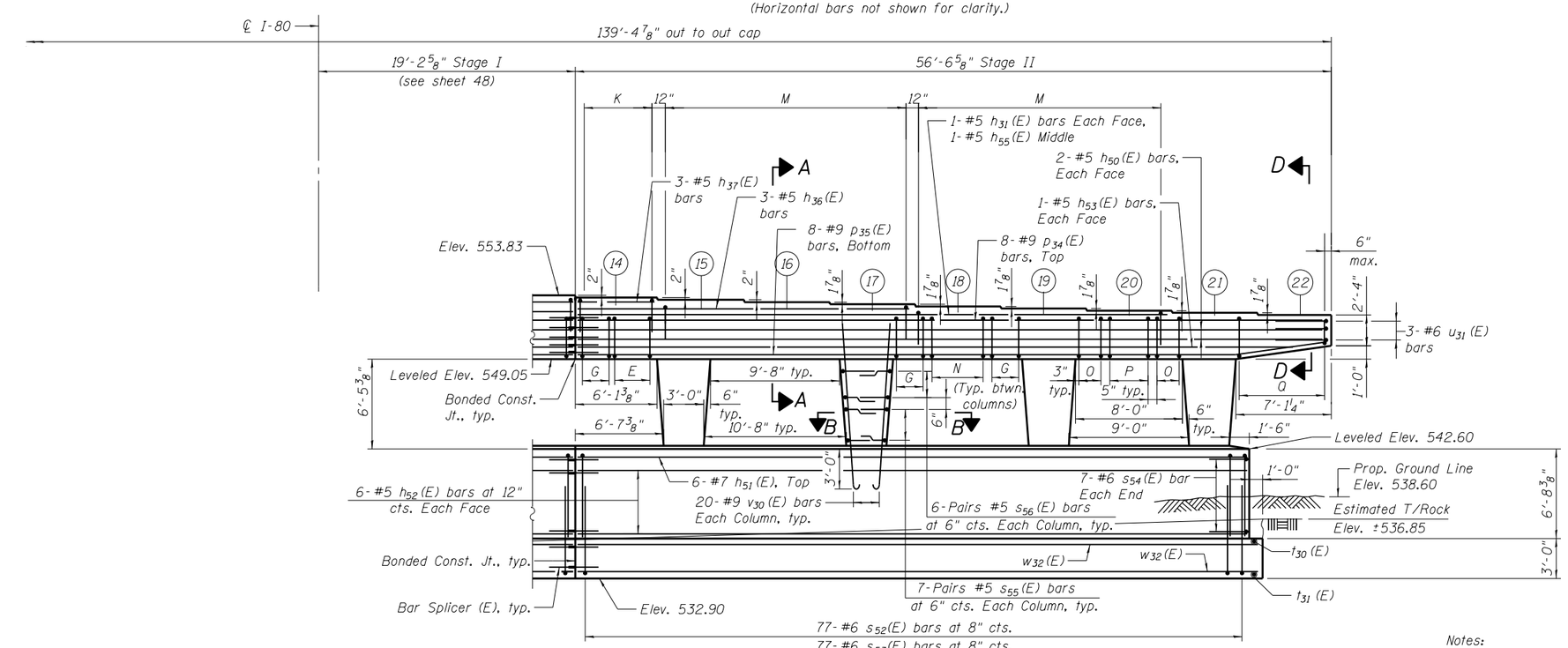
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	337
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

FILE NAME = 0990900-0990901-60W34-048-PIER1.dgn



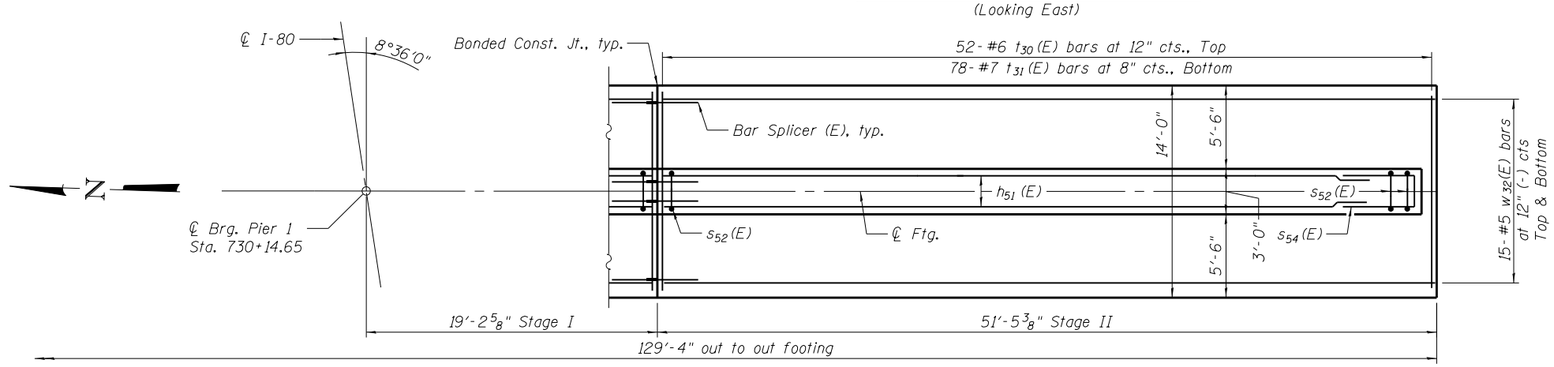
PARTIAL TOP PLAN - PIER 1

(Horizontal bars not shown for clarity.)



PARTIAL ELEVATION - PIER 1

(Looking East)



PARTIAL FOOTING PLAN - PIER 1

BEARING SEAT ELEVATIONS

Beam	Elev.
14	553.66
15	553.50
16	553.33
17	553.17
18	553.00
19	552.84
20	552.68
21	552.52
22	552.37

Notes:

1. For Sections A-A thru C-C, see Sheet 50 of 61.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. For underpass lighting details, see Electrical plans.
5. For Detail A, see sheet 48 of 61.
6. For Bar Schedule, see sheet 48 of 61.
7. For Bar Splicers details, see sheet 54 of 61.

HBP Illinois Partners

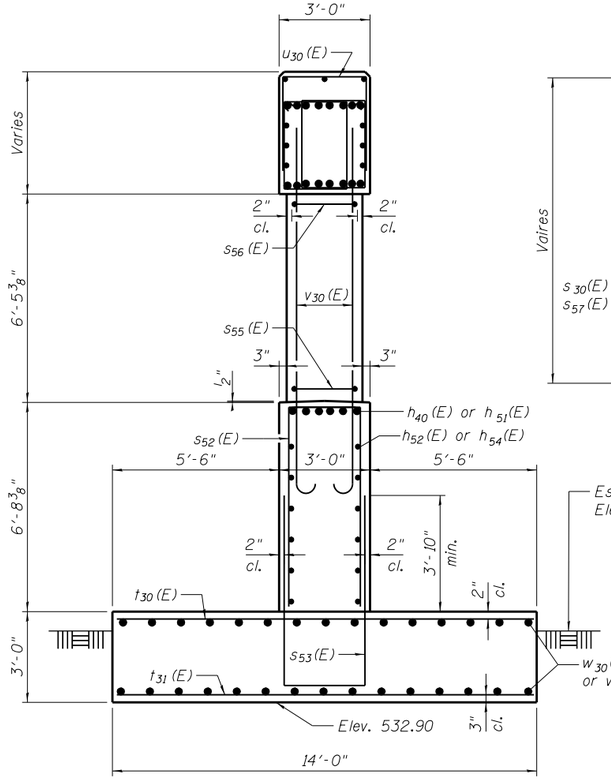
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 49 OF 61 SHEETS

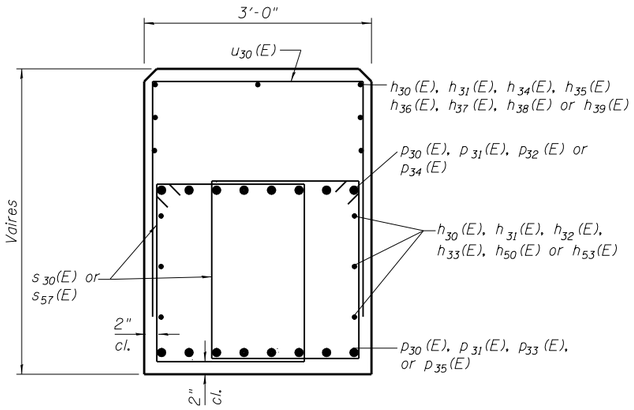
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	338
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-049-PIER1.dgn

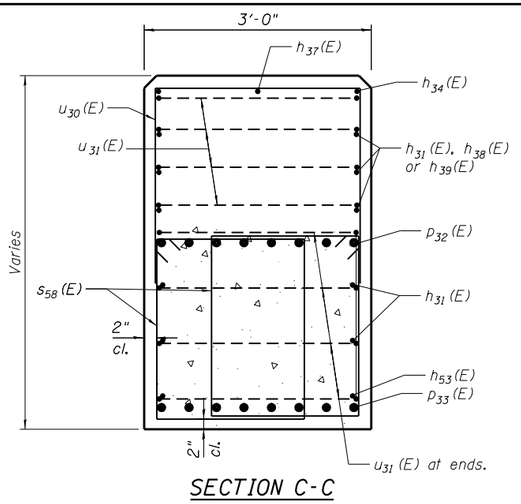


TYPICAL SECTION AT ℄ COLUMNS

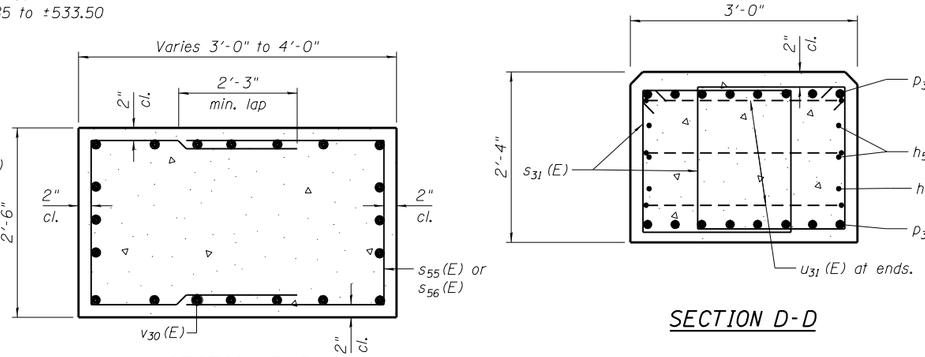
Note:
The Maximum applied Service Bearing Pressure: Q_{MAX} = 3.98 KSF



SECTION A-A

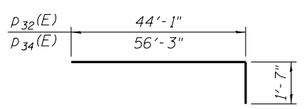


SECTION C-C

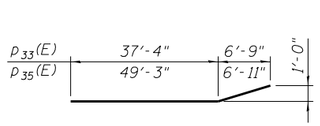


SECTION B-B

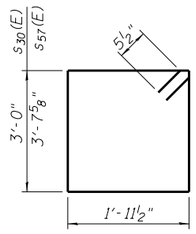
SECTION D-D



BARS p_{32} (E) & p_{34} (E)

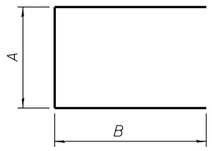


BARS p_{33} (E) & p_{35} (E)

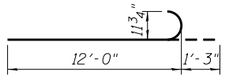


BAR s_{30} (E) & s_{57} (E)

Bar	A	B
s_{52} (E)	2'-8"	6'-4"
s_{53} (E)	2'-8"	6'-7"
s_{54} (E)	2'-6½"	2'-8"
s_{55} (E)	2'-2"	2'-8"
s_{56} (E)	2'-2"	3'-0"
u_{30} (E)	2'-8"	2'-7"
u_{31} (E)	2'-6 3/4"	3'-6"



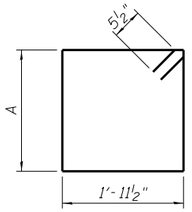
BAR s_{52} (E) thru s_{56} (E)
BARS u_{30} (E) & u_{31} (E)



BAR v_{30} (E)

Bar	A
s_{31} (E)	2'-0"
s_{32} (E)	2'-5/8"
s_{33} (E)	2'-1 1/4"
s_{34} (E)	2'-1 3/4"
s_{35} (E)	2'-2 3/8"
s_{36} (E)	2'-3"
s_{37} (E)	2'-3 5/8"
s_{38} (E)	2'-4 1/4"
s_{39} (E)	2'-4 3/4"
s_{40} (E)	2'-5 3/8"
s_{41} (E)	2'-6"
s_{42} (E)	2'-6 5/8"
s_{43} (E)	2'-7 1/4"
s_{44} (E)	2'-7 3/4"
s_{45} (E)	2'-8 3/8"
s_{46} (E)	2'-9"
s_{47} (E)	2'-9 5/8"
s_{48} (E)	2'-10 1/4"
s_{49} (E)	2'-10 3/4"
s_{50} (E)	2'-11 3/8"
s_{51} (E)	3'-0"

Bar	A
s_{58} (E)	2'-7 5/8"
s_{59} (E)	2'-8 1/4"
s_{60} (E)	2'-8 7/8"
s_{61} (E)	2'-9 1/2"
s_{62} (E)	2'-10"
s_{63} (E)	2'-10 5/8"
s_{64} (E)	2'-11 1/4"
s_{65} (E)	2'-11 7/8"
s_{66} (E)	3'-1/2"
s_{67} (E)	3'-1"
s_{68} (E)	3'-1 5/8"
s_{69} (E)	3'-2 1/4"
s_{70} (E)	3'-2 7/8"
s_{71} (E)	3'-3 1/2"
s_{72} (E)	3'-4"
s_{73} (E)	3'-4 5/8"
s_{74} (E)	3'-5 1/4"
s_{75} (E)	3'-5 7/8"
s_{76} (E)	3'-6 1/2"
s_{77} (E)	3'-7"
s_{78} (E)	3'-7 5/8"



BARS s_{31} (E) thru s_{51} (E) & s_{58} (E) thru s_{78} (E)

Note:
Since the top of rock is sloping across the footing, the bottom of footing elevation shall be verified and adjusted as needed in the field to ensure 3" minimum embedment in non-weathered rock. The rock excavation shall be made with near-vertical sides at the plan dimensions to allow the sides and base of the embedded portion of the footing to be cast against undisturbed rock surfaces.

Note:
For Bar Splicer Details, see sheet 54 of 61.

BILL OF MATERIAL AT PIER 1

Bar	No.	Size	Length	Shape
h30(E)	13	#5	12'-7"	
h31(E)	10	#5	44'-1"	
h32(E)	8	#5	25'-1"	
h33(E)	2	#5	40'-7"	
h34(E)	9	#5	5'-10"	
h35(E)	3	#5	6'-10"	
h36(E)	3	#5	25'-1"	
h37(E)	3	#5	5'-11"	
h38(E)	2	#5	31'-10"	
h39(E)	3	#5	18'-10"	
h40(E)	12	#7	38'-1"	
h50(E)	4	#5	56'-2"	
h51(E)	6	#7	50'-1"	
h52(E)	12	#5	50'-1"	
h53(E)	2	#5	52'-5"	
h54(E)	24	#5	38'-1"	
h55(E)	1	#5	19'-3"	
p30(E)	16	#9	25'-1"	
p31(E)	16	#9	12'-7"	
p32(E)	8	#9	45'-8"	
p33(E)	8	#9	44'-1"	
p34(E)	8	#9	57'-10"	
p35(E)	8	#9	56'-2"	
s30(E)	210	#5	11'-2"	
s31(E)	2	#5	9'-2"	
s32(E)	2	#5	9'-3"	
s33(E)	2	#5	9'-4"	
s34(E)	2	#5	9'-6"	
s35(E)	2	#5	9'-7"	
s36(E)	2	#5	9'-8"	
s37(E)	2	#5	9'-9"	
s38(E)	2	#5	9'-10"	
s39(E)	2	#5	9'-12"	
s40(E)	2	#5	10'-1"	
s41(E)	2	#5	10'-2"	
s42(E)	2	#5	10'-3"	
s43(E)	2	#5	10'-4"	
s44(E)	2	#5	10'-6"	
s45(E)	2	#5	10'-7"	
s46(E)	2	#5	10'-8"	
s47(E)	2	#5	10'-9"	
s48(E)	2	#5	10'-10"	
s49(E)	2	#5	10'-12"	
s50(E)	2	#5	11'-1"	
s51(E)	2	#5	11'-2"	

Bar	No.	Size	Length	Shape
s52(E)	194	#6	15'-4"	
s53(E)	194	#6	16'-6"	
s54(E)	14	#6	7'-11"	
s55(E)	140	#5	7'-6"	
s56(E)	120	#5	8'-2"	
s57(E)	198	#5	12'-5"	
s58(E)	2	#5	10'-5"	
s59(E)	2	#5	10'-6"	
s60(E)	2	#5	10'-8"	
s61(E)	2	#5	10'-9"	
s62(E)	2	#5	10'-10"	
s63(E)	2	#5	10'-11"	
s64(E)	2	#5	11'-0"	
s65(E)	2	#5	11'-2"	
s66(E)	2	#5	11'-3"	
s67(E)	2	#5	11'-4"	
s68(E)	2	#5	11'-5"	
s69(E)	2	#5	11'-6"	
s70(E)	2	#5	11'-8"	
s71(E)	2	#5	11'-9"	
s72(E)	2	#5	11'-10"	
s73(E)	2	#5	11'-11"	
s74(E)	2	#5	12'-0"	
s75(E)	2	#5	12'-2"	
s76(E)	2	#5	12'-3"	
s77(E)	2	#5	12'-4"	
s78(E)	2	#5	12'-5"	
t30(E)	131	#6	13'-8"	
t31(E)	195	#7	13'-8"	
u30(E)	117	#5	7'-6"	
u31(E)	28	#6	9'-6"	
v30(E)	200	#9	13'-3"	
w30(E)	30	#5	38'-1"	
w31(E)	30	#5	39'-1"	
w32(E)	30	#5	51'-1"	
Rock Excavation for Structures			Cu. Yd.	175
Structure Excavation			Cu. Yd.	17
Concrete Structures			Cu. Yd.	386
Reinforcement Bars, Epoxy Coated			Pounds	52,300
Concrete Sealer			Sq. Ft.	4,377

HBP Illinois Partners

USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 50 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	339
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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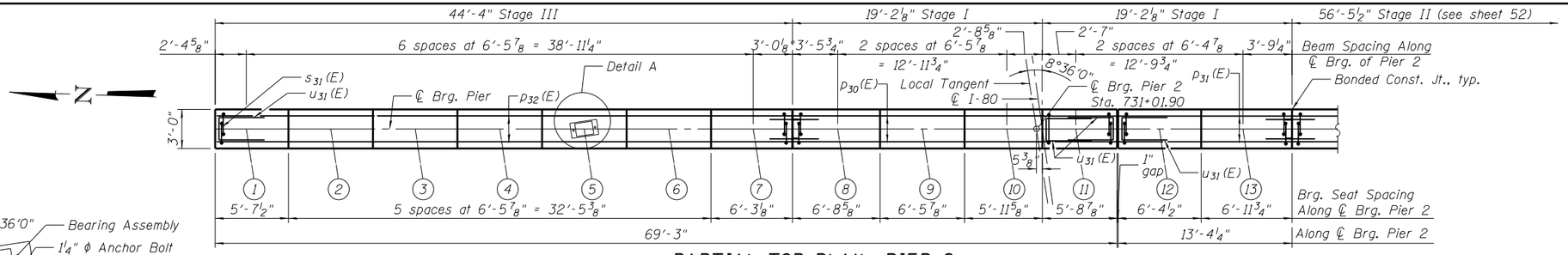
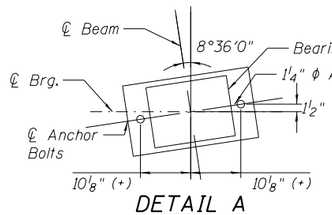


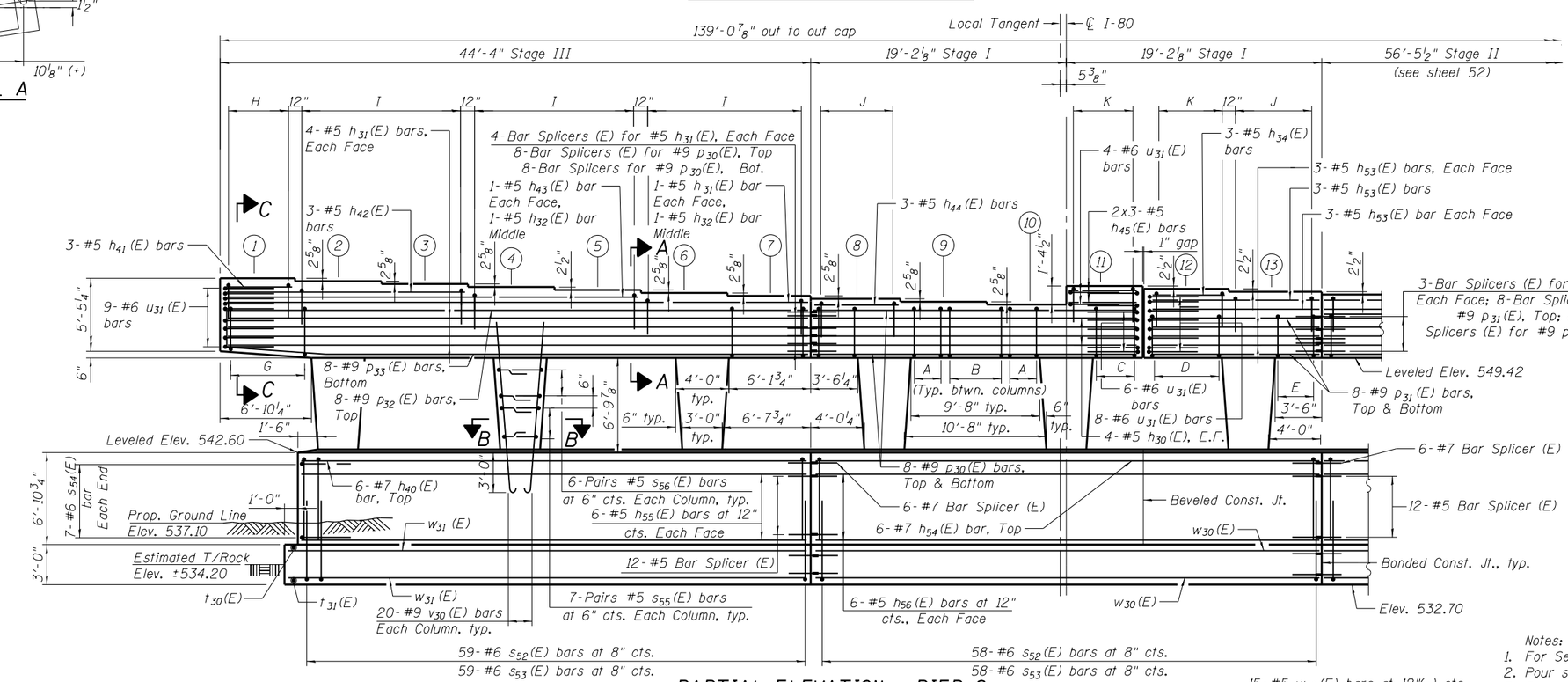
PARTIAL TOP PLAN -PIER 2



DETAIL A

BAR SCHEDULE

Label	Bar (Stirrup) and Quantity	Spacing
A	7 pair #5 s_{57}(E)	4"
B	8 pair #5 s_{57}(E)	8"
C	10 pair #5 s_{57}(E)	4"
D	15 pair #5 s_{30}(E)	4"
E	8 pair #5 s_{30}(E)	4"
F	17 pair #5 s_{30}(E)	4"
G	21 #5 s_{58}(E) thru #5 s_{78}(E) in pairs	4"
H	6 - #5 u_{30}(E)	12"
I	13- #5 u_{30}(E)	12"
J	8- #5 u_{30}(E)	12"
K	7- #5 u_{30}(E)	12"
L	7 pair #5 s_{30}(E)	4"
M	8 pair #5 s_{30}(E)	8"
N	10 pair #5 s_{30}(E)	4"
O	21 #5 s_{31}(E) thru #5 s_{51}(E) in pairs	4"

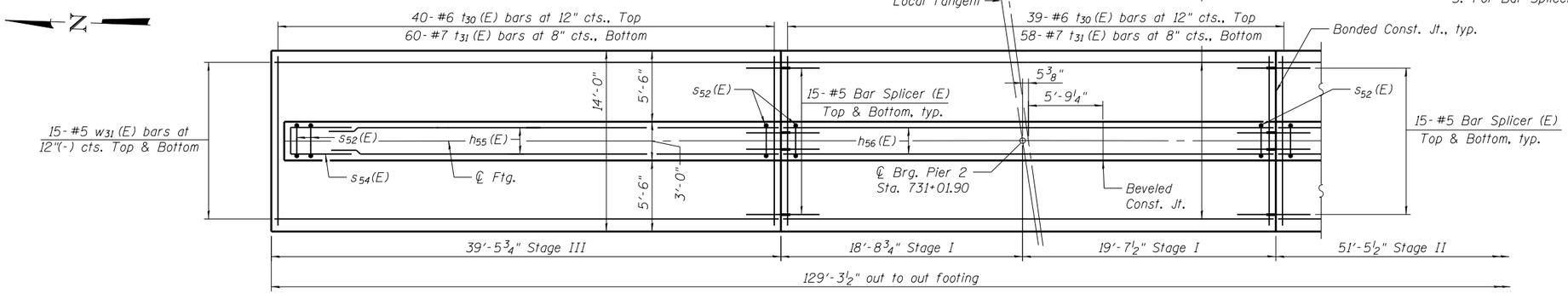


PARTIAL ELEVATION - PIER 2
(Looking East, Front Face)

BEARING SEAT ELEVATIONS

Beam	Elev.
1	555.36
2	555.15
3	554.93
4	554.71
5	554.50
6	554.28
7	554.06
8	553.85
9	553.63
10	553.41
11	554.80
12	554.59
13	554.37

Notes:
1. For Sections A-A thru C-C, see Sheet 53 of 61.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. For underpass lighting details, see Electrical plans.
5. For Bar Splicer Details, see sheet 54 of 61.



PARTIAL FOOTING PLAN - PIER 2

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED	

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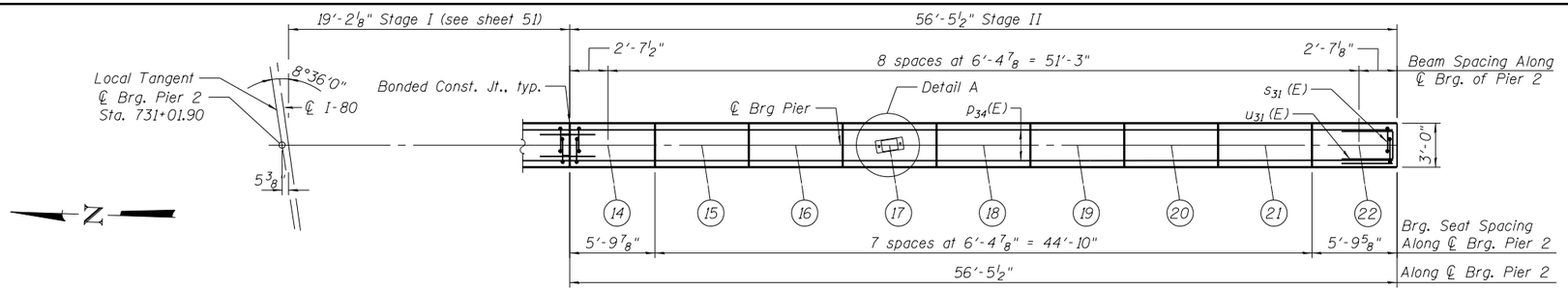
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS I
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 51 OF 61 SHEETS

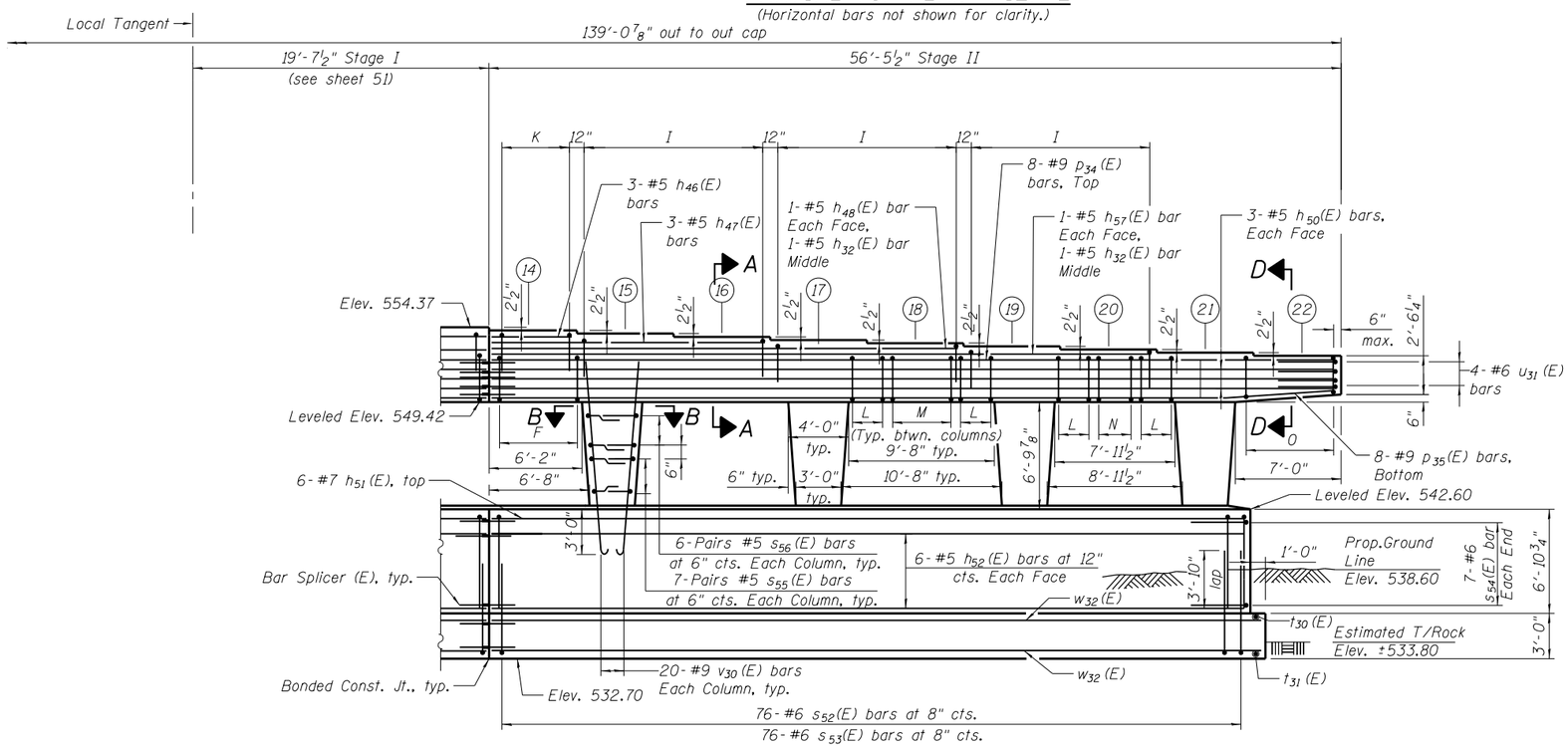
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	340
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-05I-PIER2.dgn



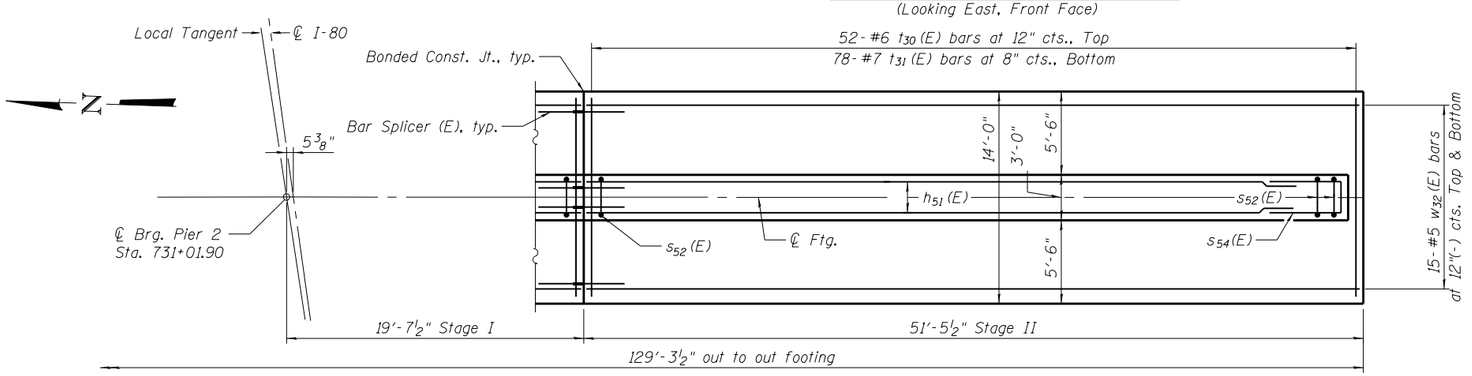
PARTIAL TOP PLAN -PIER 2

(Horizontal bars not shown for clarity.)



PARTIAL ELEVATION - PIER 2

(Looking East, Front Face)



PARTIAL FOOTING PLAN - PIER 2

BEARING SEAT ELEVATIONS

Beam	Elev.
14	554.16
15	553.94
16	553.73
17	553.51
18	553.30
19	553.08
20	552.87
21	552.65
22	552.44

Notes:

1. For Sections A-A thru C-C, see Sheet 53 of 61.
2. Pour steps monolithically with cap.
3. Space reinforcement in cap to miss anchor bolts.
4. For underpass lighting details, see Electrical plans.
5. For Detail A, see sheet 51 of 61.
6. For Bar Schedule, see sheet 51 of 61.
7. For Bar Splicer Details, see sheet 54 of 61.

HBP Illinois Partners

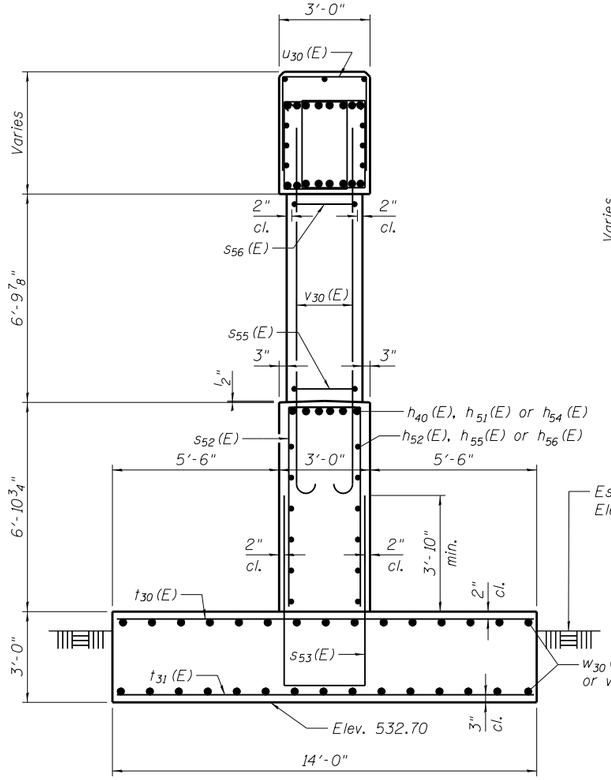
USER NAME = default	DESIGNED MSL	REVISED
	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 52 OF 61 SHEETS

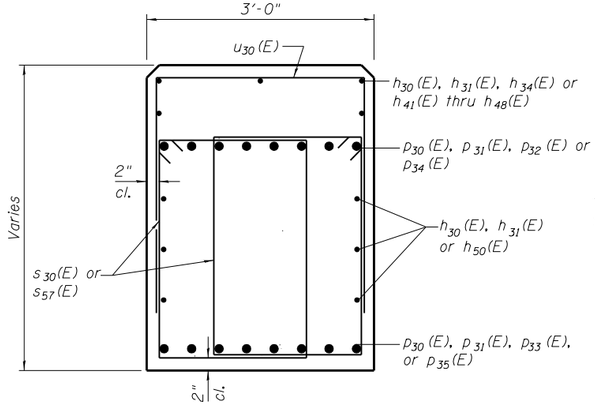
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	341
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-052-PIER2.dgn

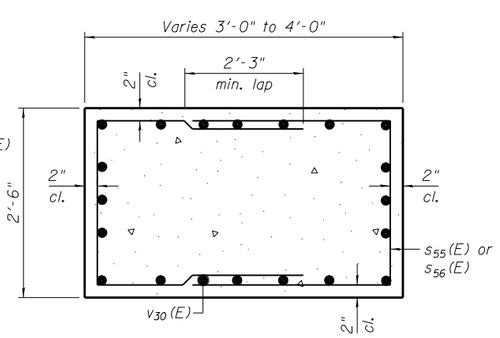


TYPICAL SECTION AT ℄ COLUMNS

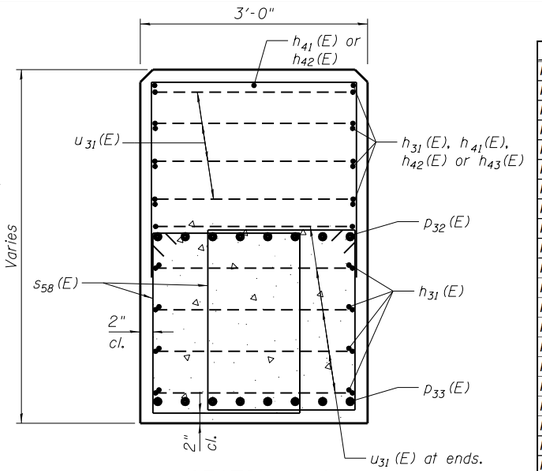
Note:
The Maximum applied Service Bearing Pressure: Q_{MAX} = 3.98 KSF



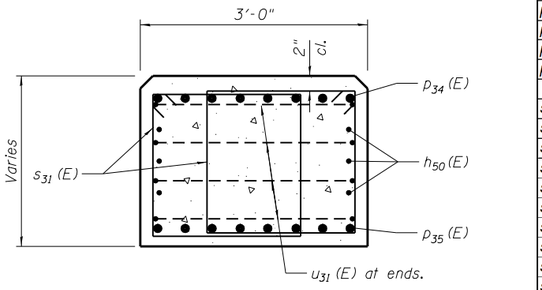
SECTION A-A



SECTION B-B



SECTION C-C



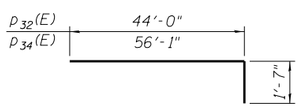
SECTION D-D

BILL OF MATERIAL AT PIER 2

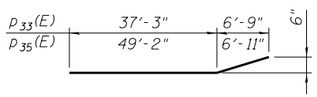
Bar	No.	Size	Length	Shape
h30(E)	8	#5	24'-7"	—
h31(E)	10	#5	44'-0"	—
h32(E)	4	#5	13'-4"	—
h34(E)	3	#5	6'-0"	—
h40(E)	6	#7	38'-2"	—
h41(E)	3	#5	5'-5"	—
h42(E)	3	#5	18'-3"	—
h43(E)	2	#5	31'-3"	—
h44(E)	3	#5	6'-4"	—
h45(E)	6	#5	5'-5"	—
h46(E)	3	#5	5'-6"	—
h47(E)	3	#5	18'-3"	—
h48(E)	2	#5	31'-1"	—
h50(E)	6	#5	56'-1"	—
h51(E)	6	#7	50'-1"	—
h52(E)	12	#5	50'-1"	—
h53(E)	11	#5	13'-0"	—
h54(E)	6	#7	38'-0"	—
h55(E)	12	#5	38'-2"	—
h56(E)	12	#5	38'-0"	—
h57(E)	2	#5	43'-11"	—
p30(E)	16	#9	24'-7"	—
p31(E)	16	#9	13'-0"	—
p32(E)	8	#9	45'-7"	⌐
p33(E)	8	#9	44'-0"	／
p34(E)	8	#9	57'-8"	⌐
p35(E)	8	#9	56'-1"	／
s30(E)	216	#5	10'-2"	□
s31(E)	2	#5	9'-6"	□
s32(E)	2	#5	9'-7"	□
s33(E)	2	#5	9'-7"	□
s34(E)	2	#5	9'-8"	□
s35(E)	2	#5	9'-8"	□
s36(E)	2	#5	9'-9"	□
s37(E)	2	#5	9'-10"	□
s38(E)	2	#5	9'-10"	□
s39(E)	2	#5	9'-11"	□
s40(E)	2	#5	9'-11"	□
s41(E)	2	#5	10'-0"	□
s42(E)	2	#5	10'-1"	□
s43(E)	2	#5	10'-1"	□
s44(E)	2	#5	10'-2"	□
s45(E)	2	#5	10'-2"	□
s46(E)	2	#5	10'-3"	□
s47(E)	2	#5	10'-4"	□
s48(E)	2	#5	10'-4"	□
s49(E)	2	#5	10'-5"	□
s50(E)	2	#5	10'-5"	□
s51(E)	2	#5	10'-6"	□
s52(E)	193	#6	16'-0"	⊏

Bar	No.	Size	Length	Shape
s53(E)	193	#6	15'-10"	⊏
s54(E)	14	#6	7'-11"	⊏
s55(E)	140	#5	7'-6"	⊏
s56(E)	120	#5	8'-2"	⊏
s57(E)	196	#5	12'-6"	□
s58(E)	2	#5	11'-6"	□
s59(E)	2	#5	11'-6"	□
s60(E)	2	#5	11'-7"	□
s61(E)	2	#5	11'-8"	□
s62(E)	2	#5	11'-8"	□
s63(E)	2	#5	11'-9"	□
s64(E)	2	#5	11'-9"	□
s65(E)	2	#5	11'-10"	□
s66(E)	2	#5	11'-11"	□
s67(E)	2	#5	11'-11"	□
s68(E)	2	#5	11'-12"	□
s69(E)	2	#5	12'-0"	□
s70(E)	2	#5	12'-1"	□
s71(E)	2	#5	12'-2"	□
s72(E)	2	#5	12'-2"	□
s73(E)	2	#5	12'-3"	□
s74(E)	2	#5	12'-3"	□
s75(E)	2	#5	12'-4"	□
s76(E)	2	#5	12'-5"	□
s77(E)	2	#5	12'-5"	□
s78(E)	2	#5	12'-6"	□
t30(E)	131	#6	13'-8"	—
t31(E)	196	#7	13'-8"	—
	0	#	'-"	
u30(E)	121	#5	7'-6"	⊏
u31(E)	31	#6	9'-7"	⊏
v30(E)	200	#9	13'-7"	⊃
w30(E)	30	#5	38'-0"	—
w31(E)	30	#5	39'-2"	—
w32(E)	30	#5	51'-1"	—

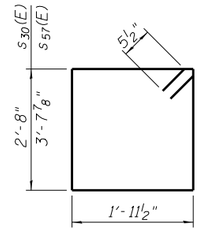
Rock Excavation for Structures	Cu. Yd.	96
Structure Excavation	Cu. Yd.	35
Concrete Structures	Cu. Yd.	389
Reinforcement Bars, Epoxy Coated	Pounds	52,500
Concrete Sealer	Sq. Ft.	4490



BARS p_{32} (E) & p_{34} (E)



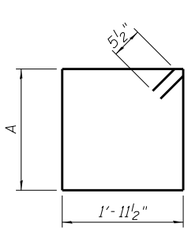
BARS p_{33} (E) & p_{35} (E)



BAR s_{30} (E) & s_{57} (E)

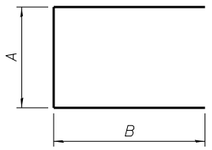
Bar	A
s_{31} (E)	2'-2"
s_{32} (E)	2'-2 1/4"
s_{33} (E)	2'-2 5/8"
s_{34} (E)	2'-2 7/8"
s_{35} (E)	2'-3 1/4"
s_{36} (E)	2'-3 1/2"
s_{37} (E)	2'-3 3/4"
s_{38} (E)	2'-4 1/8"
s_{39} (E)	2'-4 3/8"
s_{40} (E)	2'-4 3/4"
s_{41} (E)	2'-5"
s_{42} (E)	2'-5 1/4"
s_{43} (E)	2'-5 5/8"
s_{44} (E)	2'-5 7/8"
s_{45} (E)	2'-6 1/4"
s_{46} (E)	2'-6 1/2"
s_{47} (E)	2'-6 3/4"
s_{48} (E)	2'-7 1/8"
s_{49} (E)	2'-7 3/8"
s_{50} (E)	2'-7 3/4"
s_{51} (E)	2'-8"

Bar	A
s_{58} (E)	3'-1 7/8"
s_{59} (E)	3'-2 1/8"
s_{60} (E)	3'-2 1/2"
s_{61} (E)	3'-2 3/4"
s_{62} (E)	3'-3 1/8"
s_{63} (E)	3'-3 3/8"
s_{64} (E)	3'-3 5/8"
s_{65} (E)	3'-4"
s_{66} (E)	3'-4 1/4"
s_{67} (E)	3'-4 5/8"
s_{68} (E)	3'-4 7/8"
s_{69} (E)	3'-5 1/8"
s_{70} (E)	3'-5 1/2"
s_{71} (E)	3'-5 3/4"
s_{72} (E)	3'-6 1/8"
s_{73} (E)	3'-6 3/8"
s_{74} (E)	3'-6 5/8"
s_{75} (E)	3'-7"
s_{76} (E)	3'-7 1/4"
s_{77} (E)	3'-7 5/8"
s_{78} (E)	3'-7 7/8"

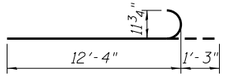


BAR s_{31} (E) thru s_{51} (E) & s_{58} (E) thru s_{78} (E)

Bar	A	B
s_{52} (E)	2'-8"	6'-8"
s_{53} (E)	2'-8"	6'-7"
s_{54} (E)	2'-6 1/2"	2'-8"
s_{55} (E)	2'-2"	2'-8"
s_{56} (E)	2'-2"	3'-0"
u_{30} (E)	2'-4"	2'-7"
u_{31} (E)	2'-6 3/4"	3'-6"



BAR s_{52} (E) thru s_{56} (E), BARS u_{30} (E) & u_{31} (E)



BAR v_{30} (E)

Note:
Since the top of rock is sloping across the footing, the bottom of footing elevation shall be verified and adjusted as needed in the field to ensure 3" minimum embedment in non-weathered rock. The rock excavation shall be made with near-vertical sides at the plan dimensions to allow the sides and base of the embedded portion of the footing to be cast against undisturbed rock surfaces.

Note:
For Bar Splicer Details, see sheet 54 of 61.

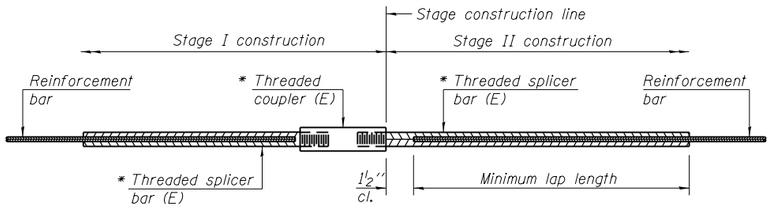
HBP Illinois Partners	USER NAME = default	DESIGNED MSL	REVISED
		CHECKED TAH	REVISED
	PLOT SCALE = NTS	DRAWN RMH	REVISED
	PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 53 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	342
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-053-PIER2 DTL.dgn



STANDARD BAR SPLICER ASSEMBLY

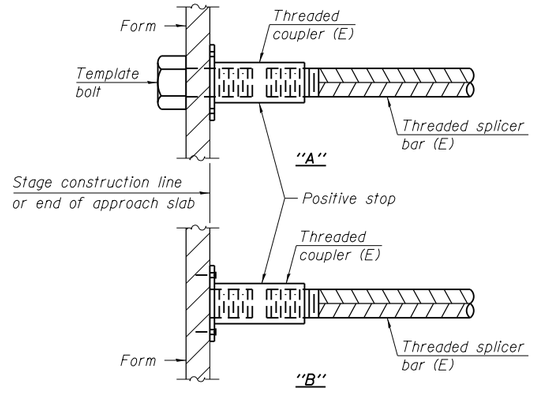
Threaded splicer bar length = min. lap length + 1½" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar Size	No. Assemblies Required	Minimum Lap Length
EB Deck	#5	566	5
WB Deck	#5	566	5
EB Diaphragm	#6	24	5
WB Diaphragm	#6	24	5
EB E Approach	#5	147	5
WB E Approach	#5	147	5
EB W Approach	#5	147	5
WB W Approach	#5	147	5
Pier 1	#5	96	6
Pier 1	#7	12	6
Pier 1	#9	32	6
Pier 2	#5	96	6
Pier 2	#7	12	6
Pier 2	#9	32	6
W Abutment	#5	12	6
W Abutment	#8	20	6
E Abutment	#5	40	6
E Abutment	#7	34	6

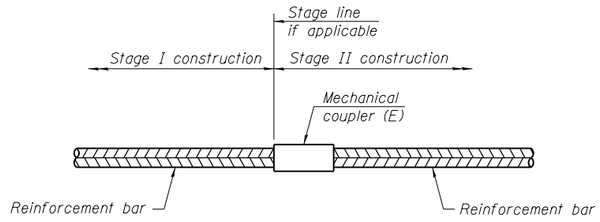
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"
10	5'-10"	8'-1"	8'-8"	9'-10"	10'-10"	12'-4"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C



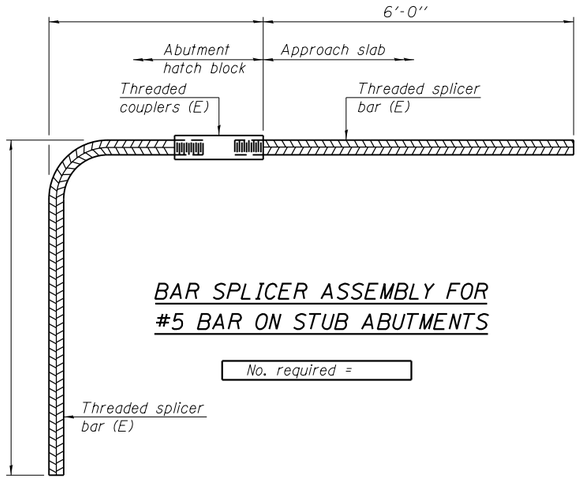
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

Notes:
1. Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
2. All reinforcement shall be lapped and tied to the splicer bars.
3. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
4. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 6-8-15

USER NAME = default	DESIGNED MSL	REVISED	
	CHECKED TAH	REVISED	
PLOT SCALE = NTS	DRAWN RMH	REVISED	
PLOT DATE = 6/25/2020	CHECKED RRH	REVISED	

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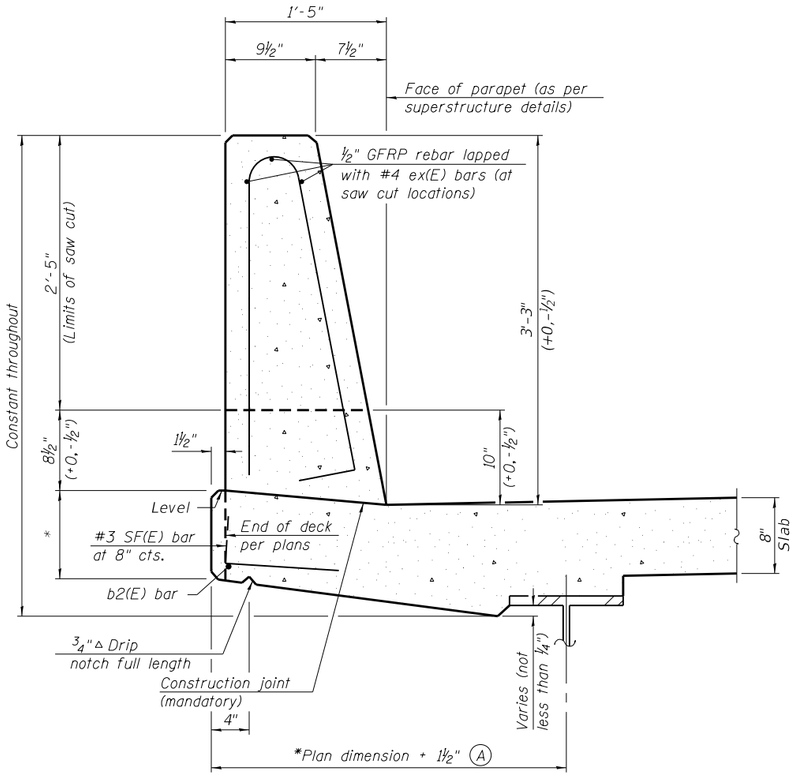
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 54 OF 61 SHEETS

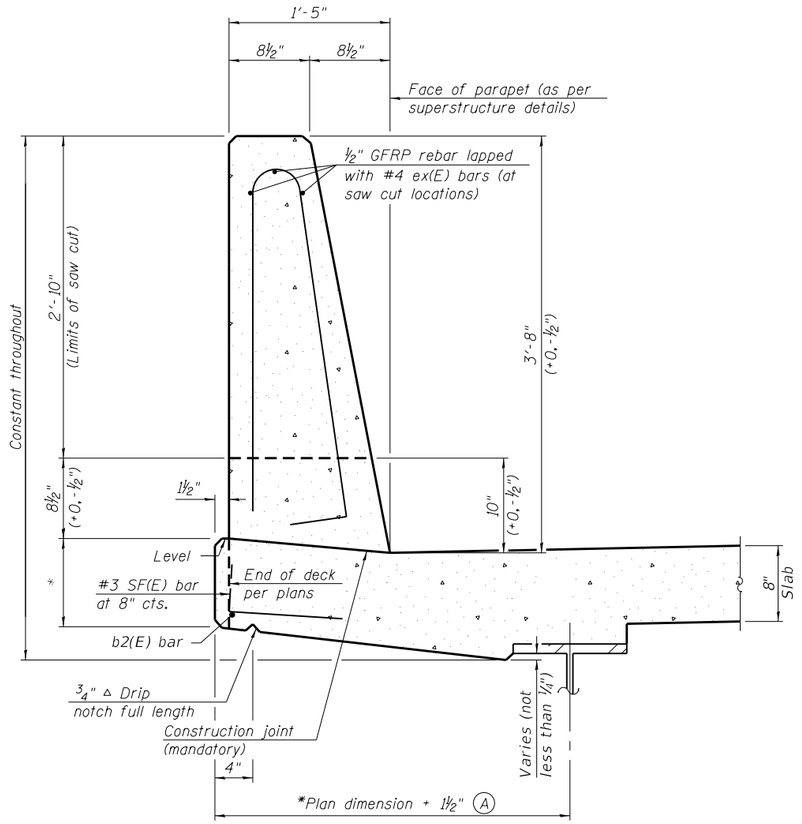
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	343
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-054-BARSPL.dgn



39" CONSTANT-SLOPE PARAPET SECTION

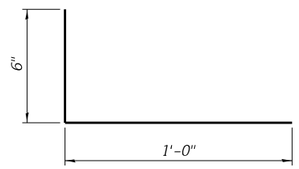
(Showing dimensions, d(E), and ½" ϕ GFRP rebar)



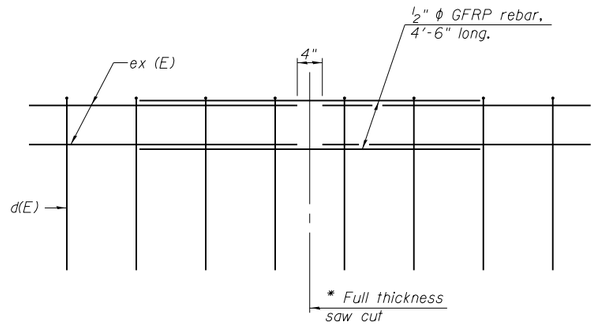
44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" ϕ GFRP rebar)

*See Superstructure Details.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.

Place full depth aluminum sheets as shown on superstructure details.

Replace all cork joint filler locations with a full thickness saw cut.

Steel superstructure shown. Other superstructure types similar.

Slipforming of the median parapet (adjacent to the centerline of I-80) is not allowed.

HBP Illinois Partners

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	CHECKED TAH	REVISED
PLOT SCALE = NTS	DRAWN RMH	REVISED
PLOT DATE = 6/25/2020	CHECKED TAH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 55 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	344
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-0990901-60W34-055-PARSLP.dgn

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 11/7/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. W.B. 099-0065
Station 730+57.48

BORING NO. BSB-25
Station 729+67
Offset 42.60ft Left
Ground Surface Elev. 556.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 18.5' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
11.0" ASPHALT				
555.08				
CLAY LOAM-brown & gray-very stiff (Fill)		6		
		7	2.5	14
		8	P	
553.00				
CRUSHED STONE-dense to very dense (Fill)		17		
		19		4
	-5	23		
		50/5"		
				1
548.00				
SAND, GRAVEL & STONE-dense (Fill)		19		
		23		5
	-10	27		
545.50				
CRUSHED STONE with BRICK-medium dense (Fill)		5		
		6		9
		8		
543.00				
SAND, GRAVEL, STONE & BRICK-brown & gray-medium dense (Fill)		5		
		6		9
	-15	7		
539.50				
Drillers Observation: Weathered & fractured rock		7		
		50/5"		8
538.00				
Drillers Observation: Apparent Bedrock				
537.00				
Borehole continued with rock coring.	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2013\13125 INTB. I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/1/14

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ROCK CORE LOG

PAGE 1 of 1
DATE 11/7/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. W.B.099-0065 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-25** Top of Rock Elev. 538.0
Station 729+67 Begin Core Elev. 537.0
Offset 42.6' Left
Ground Surface Elev. 556.0

	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE						
RUN 1 (-19.0' to -29.0')		1	100.0	84.0	n/a	932 @ -19.4'
Light gray with horizontal bedding. Slightly porous with horizontal fractures & some small vugs.	-24					
	-29					

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 11/7/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. E.B. 099-0064
Station 730+57.48

BORING NO. BSB-26
Station 729+47
Offset 43.20ft Right
Ground Surface Elev. 556.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 15.0' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" ASPHALT				
555.67				
8.0" CONCRETE				
555.00				
CLAY LOAM-brown & gray-stiff to hard (Fill)		6		
		8	4.5	14
		10	P	
		7		
		9	1.0	18
	-5	10	P	
550.50				
CRUSHED STONE-medium dense to dense (Fill)		37		
		25		2
		27		
		12		
		9		6
	-10	9		
545.50				
SANDY CLAY LOAM-dark brown to black-medium dense (Fill)		6		
		7		14
		9		
543.00				
FRACTURED ROCK-very dense		50/2"		
				2
541.00	-15			
Borehole continued with rock coring.				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE 11/7/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I. RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. E.B.099-0064 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-26** Top of Rock Elev. 541.0
Station 729+47 Begin Core Elev. 541.0
Offset 43.2' Right
Ground Surface Elev. 556.0

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
	1	100.0	26.0	n/a	1136 @ -16.6'

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
RUN 1 (-15.0' to -25.0')
Light gray with horizontal bedding. Highly fractured to -23.0' with numerous intersecting horizontal & vertical fractures.

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/17/13

ROUTE F.A.I RTE. 80 DESCRIPTION F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) LOGGED BY TZ
SECTION 99-4HB-1 LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. W.B. 099-0065
Station 730+57.48
BORING NO. BSB-27
Station 730+31
Offset 74.60ft Left
Ground Surface Elev. 536.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to 3.0' ft
Upon Completion n/a ft
After ___ Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.5" CONCRETE	535.83			
GRAVEL & FRACTURE ROCK-very dense		25		
		50/4"		5
	533.20			
Borehole continued with rock coring.				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE 10/17/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I. RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. W.B.099-0065 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-27** Top of Rock Elev. 533.2
Station 730+31 Begin Core Elev. 533.2
Offset 74.6' Left
Ground Surface Elev. 536.2

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
	1	100.0	34.0	n/a	806 @ -3.5'

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
RUN 1 (-3.0' to -13.0')
Light gray to gray with horizontal to wavy bedding. Porous with some small vugs.
Weathered with rust staining becoming highly weathered & fractured from -5.9' with some chert replacement nodules.

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

USER NAME = default	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE = NTS	DRAWN -	REVISED	
PLOT DATE = 6/25/2020	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS II
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 57 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	346
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-057-BOR2.dgn

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/17/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. E.B. 099-0064
Station 730+57.48

BORING NO. BSB-28
Station 730+30
Offset 5.00ft Right
Ground Surface Elev. 536.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 2.5' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" CONCRETE			
535.80			
CLAY LOAM-dark brown-stiff (Fill) 535.30	7		
Drillers Observation: Apparent Bedrock 534.30	50/5"	1.5 P	15
Borehole continued with rock coring.			
-5			
-10			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE 10/17/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I. RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. E.B.099-0064 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-28** Top of Rock Elev. 535.3
Station 730+30 Begin Core Elev. 534.3
Offset 5.0' Right
Ground Surface Elev. 536.8

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE					
RUN 1 (-2.5' to -12.5')	1	100.0	31.0	n/a	1380 @ -3.0'
Light gray to gray with horizontal to wavy bedding. Porous & weathered with some chert nodules. Highly fractured & weathered from -4.5' with intersecting horizontal & vertical fractures.					
-7.5					
-12.5					

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/18/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. W.B. 099-0065
Station 730+57.48

BORING NO. BSB-29
Station 731+09
Offset 64.20ft Left
Ground Surface Elev. 536.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 2.5' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" CONCRETE 535.87			
SAND & STONE-brown (Fill)			
	7		
534.20	50/5"		7
Drillers Observation: Apparent Bedrock 533.70			
Borehole continued with rock coring.			
-5			
-10			
-15			
-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2013\13125 INTB. I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/1/14

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	CHECKED -	REVISED
PLOT SCALE = NTS	DRAWN -	REVISED
PLOT DATE = 6/25/2020	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS III
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 58 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	347
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-058-BOR3.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 10/18/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. W.B.099-0065 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-29** Top of Rock Elev. 534.2
Station 731+09 Begin Core Elev. 533.7
Offset 64.2' Left
Ground Surface Elev. 536.2

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
	1	100.0	21.0	n/a	1110 ● -4.7'

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
RUN 1 (-2.5' to -12.5')
Light gray & porous with horizontal bedding. Weathered & cherty with some vugs. Highly fractured throughout with vertical fractures from -2.5' to -4.0'.

-7.5
-12.5

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/18/13

ROUTE F.A.I RTE. 80 DESCRIPTION F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) LOGGED BY TZ
SECTION 99-4HB-1 LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. E.B. 099-0064
Station 730+57.48
BORING NO. BSB-30
Station 730+88
Offset 61.80ft Right
Ground Surface Elev. 538.30 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to 4.5' ft
Upon Completion n/a ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" CONCRETE 537.97			
CRUSHED STONE-medium dense to dense (Fill)	7		
	11		3
	14		
	26		
533.80	50/3"		3
Borehole continued with rock coring.			

-5
-10
-15
-20

Z:\PROJECTS\2013\13125 INTB. I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 5/1/14

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Naperville, Illinois 60565
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ROCK CORE LOG

PAGE 1 of 1
DATE 10/18/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. E.B.099-0064 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. **BSB-30** Top of Rock Elev. 533.8
Station 730+88 Begin Core Elev. 533.8
Offset 61.8' Right
Ground Surface Elev. 538.3

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
	1	100.0	31.0	n/a	1608 ● -5.2'

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
RUN 1 (-4.5' to -14.5')
Light gray & with horizontal bedding becoming cherty, porous & weathered with numerous horizontal fractures throughout. Vertical fracture with intersecting horizontal fractures from -12.6' to -14.5'.

-9.5
-14.5

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

HBP Illinois Partners	USER NAME = default	DESIGNED -	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS IV STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
		CHECKED -	REVISED		
	PLOT SCALE = NTS	DRAWN -	REVISED		
	PLOT DATE = 6/25/2020	CHECKED -	REVISED		SHEET NO. 59 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	348
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 0990900-099090I-60W34-059-BOR4.dgn

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(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 11/7/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. W.B. 099-0065
Station 730+57.48

BORING NO. BSB-31
Station 731+59
Offset 0.40ft Left
Ground Surface Elev. 556.00 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 8.0' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY TOPSOIL & STONE (Fill)			
555.00			12
TOPSOIL-dark brown to black	6		
	5	3.0	26
	4	P	
553.00			
CLAY LOAM-brown & gray-very stiff	3		
	4	1.0	19
-5	4	P	
	5		
	6	2.5	23
	14	P	
548.00			
Drillers Observation: Apparent Bedrock			
546.00 -10			
Borehole continued with rock coring.			
-15			
-20			

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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 11/7/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. W.B.099-0065 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. BSB-31 Top of Rock Elev. 548.0
Station 731+59 Begin Core Elev. 546.0
Offset 0.4' Left
Ground Surface Elev. 556.0

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE					
RUN 1 (-10.0' to -20.0')	1	99.0	44.0	n/a	847 ● -15.0'
Light gray & slightly porous with horizontal bedding. Light rust staining to -13.5'.					
Numerous horizontal fractures throughout.					
-15					
-20					

Color pictures of the cores Yes Cores will be stored for examination for —
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

USER NAME = default	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE = NTS	DRAWN -	REVISED	
PLOT DATE = 6/25/2020	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS V
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 60 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	349
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-060-BORS.dgn

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/21/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** F.A.I. RTE. 80 Over F.A.U. 354 (Richards St.) **LOGGED BY** TZ

SECTION 99-4HB-1 **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. E.B. 099-0064
Station 730+57.48

BORING NO. BSB-32
Station 731+51
Offset 59.80ft Right
Ground Surface Elev. 556.40 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 6.0' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" TOPSOIL-black			
555.40			22
CLAY LOAM-dark brown & black-hard (Fill)	10		
	10	4.5	13
	15	P	
553.40			
SILTY GRAVEL & FRACTURED ROCK-brown-medium dense	13		
551.90	16		5
-5 Drillers Observation: Apparent Bedrock	50/3"		
550.40			
Borehole continued with rock coring.			
-10			
-15			
-20			

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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 10/21/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION 99-4HB-1 LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. E.B.099-0064 CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station 730+57.48 Core Diameter 2.0 in
BORING NO. BSB-32 Top of Rock Elev. 551.9
Station 731+51 Begin Core Elev. 550.4
Offset 59.8' Right
Ground Surface Elev. 556.4

DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE					
RUN 1 (-6.0' to -16.0')	1	100.0	27.0	n/a	910 @ -11.2'
Light gray & fine grained with horizontal bedding. Weathered with numerous horizontal fractures throughout.					
-11.0					
-16.0					

Color pictures of the cores Yes Cores will be stored for examination for –
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

USER NAME = default	DESIGNED -	REVISED	
	CHECKED -	REVISED	
PLOT SCALE = NTS	DRAWN -	REVISED	
PLOT DATE = 6/25/2020	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS VI
STRUCTURE NOS. 099-0900 (E.B.) & 099-0901(W.B.)
SHEET NO. 61 OF 61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	350
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 0990900-099090I-60W34-06I-BOR6.dgn

Benchmark: Chiseled "□" on the east step of the southeast wingwall of WB I-80. Elev. 624.41.

Existing Structures: S.N. 099-0066 carrying I-80 Eastboundover Rowell Avenue and WCL Railroad was originally constructed in 1965 as FAI Route 80, Section 99-4-1VB. The 8 span structure is approximately 559-ft bk to bk of abutment and consists of two continuous span units separated by a single span. Unit 1 consists of a three span continuous wide flange beam and reinforced concrete deck and the single span unit is similar. Unit 2 consists of a four span continuous plate girder and reinforced concrete deck. The existing bridge deck is 36-ft out to out and consist of 6 1/4" reinforced concrete composite slab with 2 3/4" latex concrete overlay. The superstructure is supported on concrete stub abutments on piles and 2-column piers on spread footings and piles. The skew is 07°07'31" forward right Unit 1 and 34°05'00" forward left Unit 2. The deck was repaired in 1999 and 2011. The existing structure shall be removed.

Stage construction shall be utilized to maintain traffic during construction.

No salvage.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

DESIGN STRESSES

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.125
Soil Site Class = C

SCUPPER SPACING

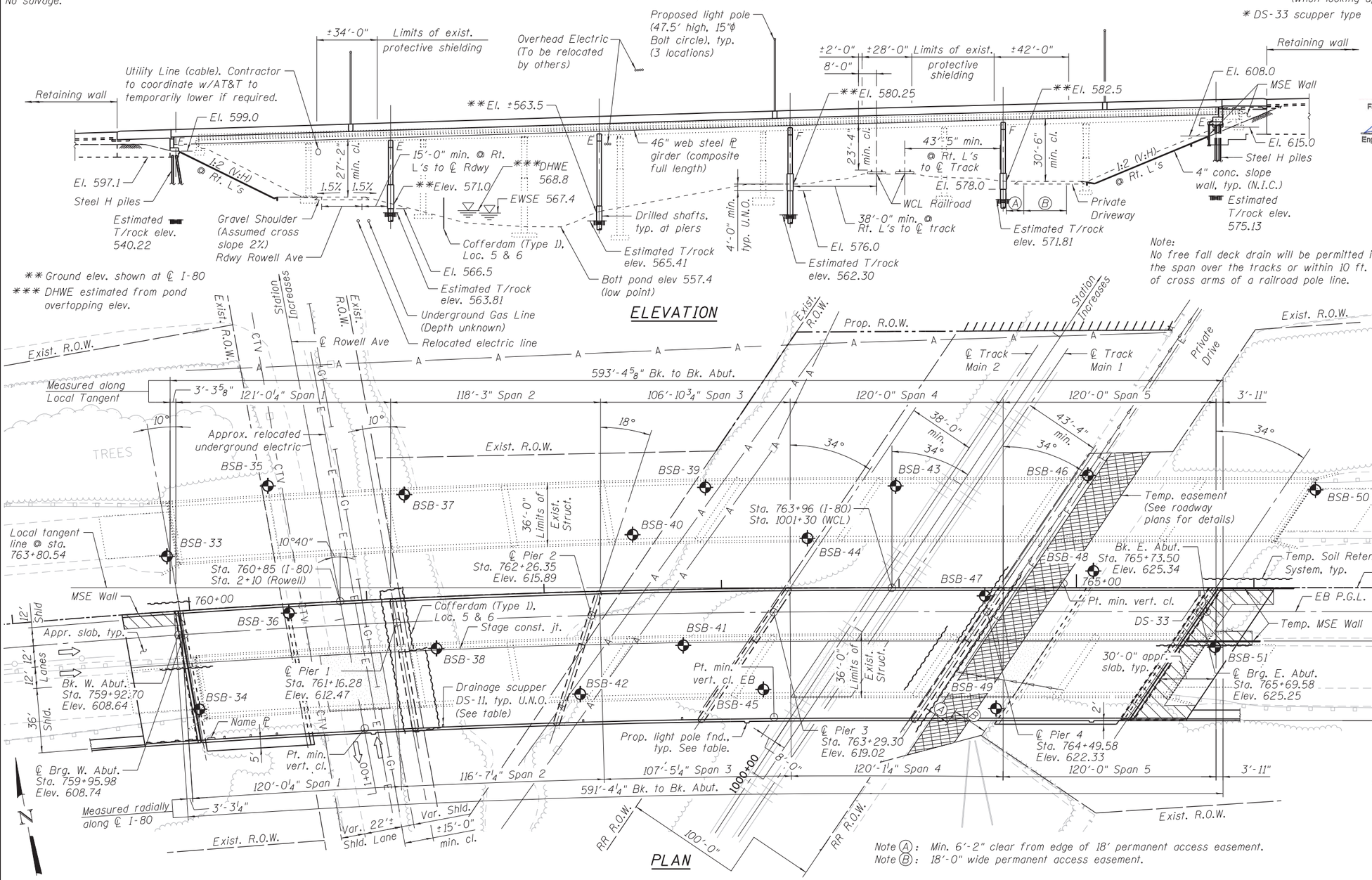
Sta.	Outlet
760+15 R	Free Fall
760+30 R	Free Fall
760+45 R	Free Fall
761+40 R	Downspout
762+20 R	Downspout
762+76.5 R	Downspout
764+30 R	Downspout
764+69.4 L	Free Fall*

R = scupper offset along right curb line
L = scupper offset along left curb line (when looking upstation)

* DS-33 scupper type

LIGHT POLE FOUNDATIONS

Sta. 761+00
Sta. 763+13.5
Sta. 765+8.5

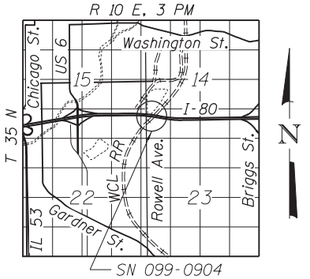


** Ground elev. shown at ℄ I-80
*** DHWE estimated from pond overtopping elev.

Note:
No free fall deck drain will be permitted in the span over the tracks or within 10 ft. of cross arms of a railroad pole line.

ELEVATION

PLAN



LOCATION SKETCH

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
DANIEL S. FILICE
081-007107
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

SIGNED: Dan Filice
DATE: June 26, 2020
EXPIRES: November 30, 2020

LEGEND

- Soil Boring
- Temp. Easement
- Permanent Easement
- Approximate Limits of Reinforced Soil Mass
- Limits of Exist. Protective Shielding
- Exist. R.O.W.
- Prop. R.O.W.
- N.I.C. Not in Contract

GENERAL PLAN & ELEVATION
I-80 OVER ROWELL AVE. & WCL RR
F.A.I. RTE. 80 - SEC. 2013-008B
WILL COUNTY
STA. 760+85.00
STRUCTURE NO. 099-0904 (EB)

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	351
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 1,724,000 lbs. (Grade 50)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of the abutment backwall, seats, and front face of the seat.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Slipforming of the median parapet (adjacent to the centerline of I-80) is not allowed.

Existing protective shielding was installed under Contract 60M64. If the Contractor elects to use the existing protective shielding, the Contractor shall inspect its condition prior to bidding and make necessary adjustments or modifications as necessary for re-use. In addition, the Contractor shall submit, to the Engineer, calculations and working drawings prepared and sealed by an Illinois Licensed Structural Engineer incorporating the existing protective shielding into this work. This work, along with modifications and adjustments shall be included in the cost of "Protective Shield."

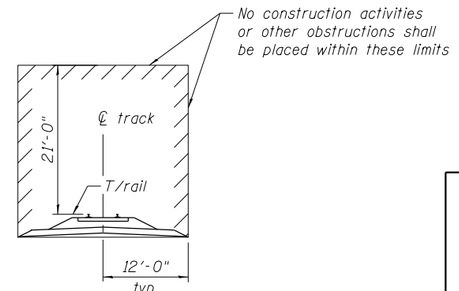
The removal and disposal of the existing protective shielding shall be included in the cost of "Removal of Existing Structures No. 2."

This project requires a US Army Corps of Engineers (USACE) 404 permit. See General Note 25 on roadway plan sheet no. 4. Instream work plan will be required depicting any work within the Waters of the US (WOUS) noted on the plans. The Contractor shall develop and submit the instream work plan as described in General Note 4 on sheet no. 4. Instream work plan may be required for the removal of existing Pier 2, 3, or 4, and for the construction of proposed Pier 2.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 2	Each	0.5	0.5	1
Protective Shield	Sq Yd	1,040	-	1040
Structure Excavation	Cu Yd	-	1,528.4	1,528.4
Cofferdam Excavation	Cu Yd	-	320.0	320.0
Cofferdam (Type I) (Location 5)	Each	-	1	1
Cofferdam (Type I) (Location 6)	Each	-	1	1
Concrete Structures	Cu Yd	49.0	1,103.2	1,152.2
Concrete Superstructure	Cu Yd	1,302.8	-	1,302.8
Concrete Superstructure (Approach Slab)	Cu Yd	221.6	-	221.6
Bridge Deck Grooving	Sq Yd	4,780	-	4,780
Protective Coat	Sq Yd	5,526	-	5,526
Furnishing and Erecting Structural Steel	L Sum	0.5	-	0.5
Shear Stud Connectors	Each	28,743	-	28,743
Reinforcement Bars	Pound	-	63,840	63,840
Reinforcement Bars, Epoxy Coated	Pound	409,280	308,550	717,830
Bar Splicers	Each	1,995	427	2,422
Furnishing Steel Piles HP12X53	Foot	-	2,447	2,447
Driving Piles	Foot	-	2,447	2,447
Test Pile Steel HP12x53	Each	-	2	2
Pile Shoes	Each	-	52	52
Name Plates	Each	1	-	1
Permanent Casing	Foot	-	64	64
Drilled Shaft in Soil	Cu Yd	-	62.1	62.1
Drilled Shaft in Rock	Cu Yd	-	103.4	103.4
Preformed Joint Strip Seal	Foot	90	-	90
Elastomeric Bearing Assembly, Type II	Each	12	-	12
Elastomeric Bearing Assembly, Type III	Each	12	-	12
Anchor Bolts, 1"	Each	144	-	144
Anchor Bolts, 1½"	Each	48	-	48
Concrete Sealer	Sq Ft	-	2,412	2,412
Geocomposite Wall Drain	Sq Yd	-	115	115
Granular Backfill for Structures	Cu Yd	-	228.8	228.8
Drainage Scuppers, DS-11	Each	7	-	7
Drainage Scuppers, DS-33	Each	1	-	1
Drainage System	L Sum	1	-	1
Temporary Soil Retention System	Sq Ft	-	3,624	3,624
Mechanially Stabilized Earth Retaining Wall	Sq Ft	-	1,996	1,996
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	1,578	1,578
Pipe Underdrains for Structures 4"	Foot	-	150	150
Modular Expansion Joint 6"	Foot	76	-	76
High Load Multi-Rotational Bearings, Guided Expansion, 400k	Each	24	-	24
Crosshole Sonic Logging Access Ducts	Foot	-	290	290
Crosshole Sonic Logging Testing	Each	-	8	8



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
(Dimensions @ Rt. L to ℄ Track)

STATION 760+85.0
BUILT 202_ BY
STATE OF ILLINOIS
F.A.I. RTE. 80 SEC. 2013-008B
LOADING HL-93
STRUCTURE NO. 099-0904

NAME PLATE
See Std. 515001

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA I
STRUCTURE NO. 099-0904
SHEET NO. 2 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	352
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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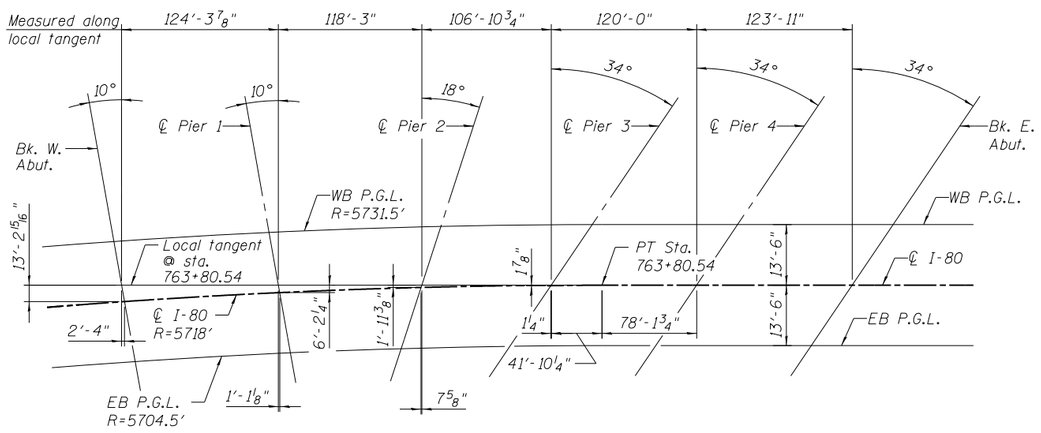
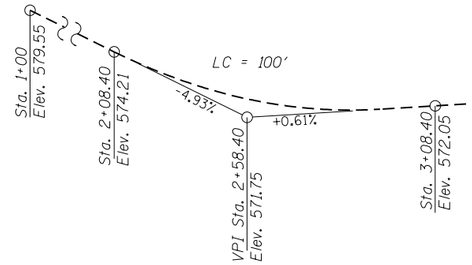
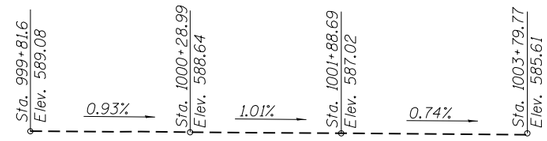


OFFSET SKETCH



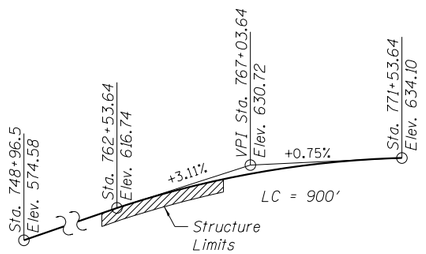
PROFILE GRADE EXIST. ROWELL AVE.

(Along ℄ Rdwy)



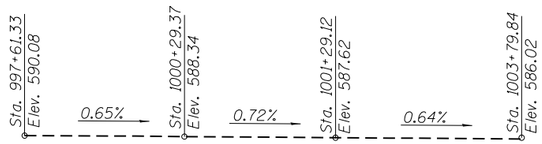
PROFILE GRADE EXIST. WCL RR

(Top of rail @ Track 2)



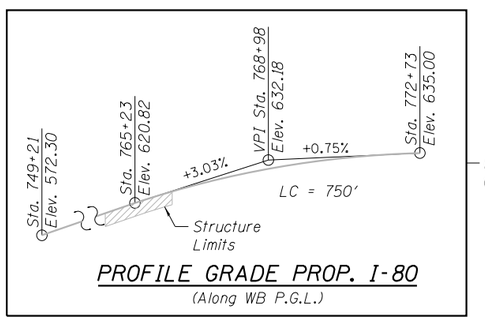
PROFILE GRADE PROP. I-80

(Along EB P.G.L.)



PROFILE GRADE EXIST. WCL RR

(Top of rail @ Track 1)



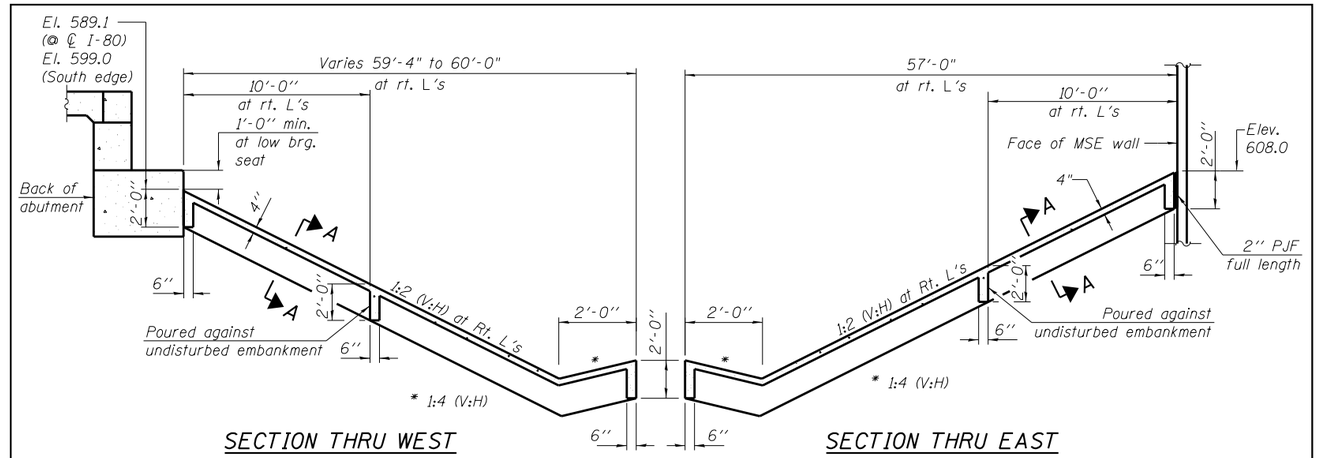
PROFILE GRADE PROP. I-80

(Along WB P.G.L.)

For Information Only
(Not in contract)

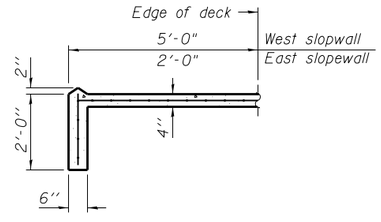
CURVE DATA (℄ I-80)

PI STA. = 758+81.58
△ = 10° 01' 30" (RT)
D = 1° 00' 07"
R = 5,718.00'
T = 501.52'
L = 1,000.48'
E = 21.95'
e = 3.3%
T.R. = 90'
S.E. RUN = 248'
P.C. STA = 753+80.06
P.T. STA = 763+80.54



SECTION THRU WEST CONCRETE SLOPEWALL

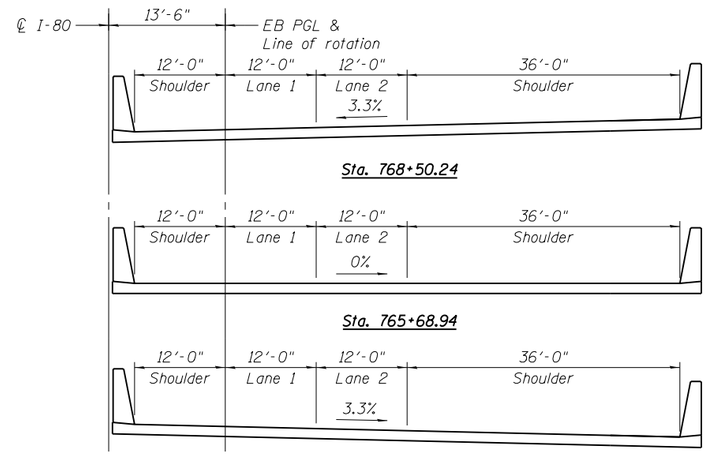
SECTION THRU EAST CONCRETE SLOPEWALL



SECTION A-A

NOTES

1. Slopewall shall be reinforced with welded wire fabric. 6" x 6" - W4.0 x W4.0. weighing 58 lbs. per 100 sq. ft.
2. See sheet 4 of 65 for additional information.



W. Approach Slab to Sta. 762+85.0

EB DECK CROSS SLOPE DETAIL

Superelevation transition detail.
See roadway plans for additional info.

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA II
STRUCTURE NO. 099-0904
SHEET NO. 3 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	353
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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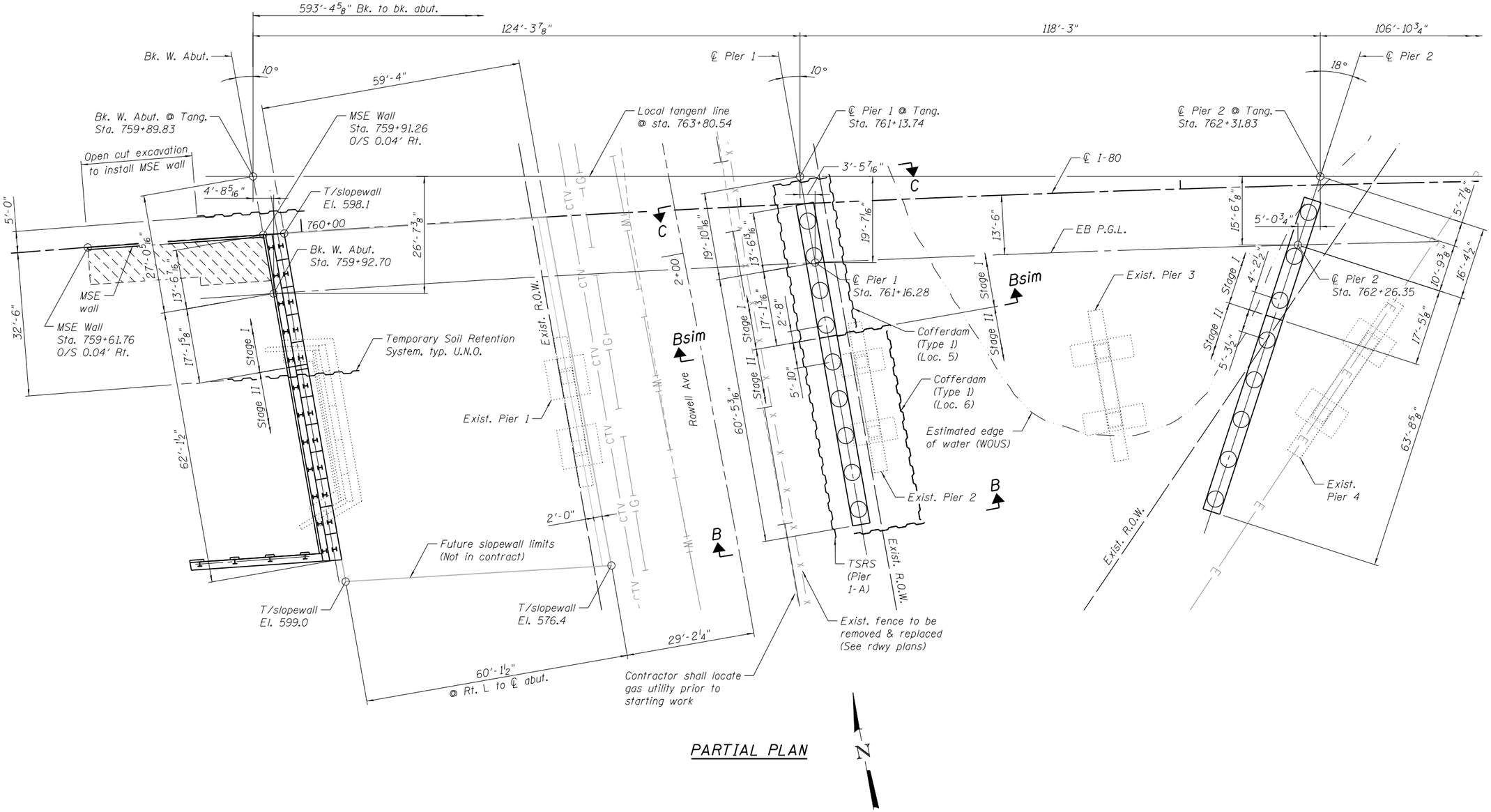

PARTIAL PLAN

NOTES

1. See sheet 8 of 65 for View B-B, Bsim-Bsim & C-C, Temporary Soil Retention System and Cofferdam details.
2. MSE wall stations and offsets shown to front face of MSE wall panel.

LEGEND

MSE Strap Zone Limits

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LAYOUT I
STRUCTURE NO. 099-0904
SHEET NO. 4 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	354
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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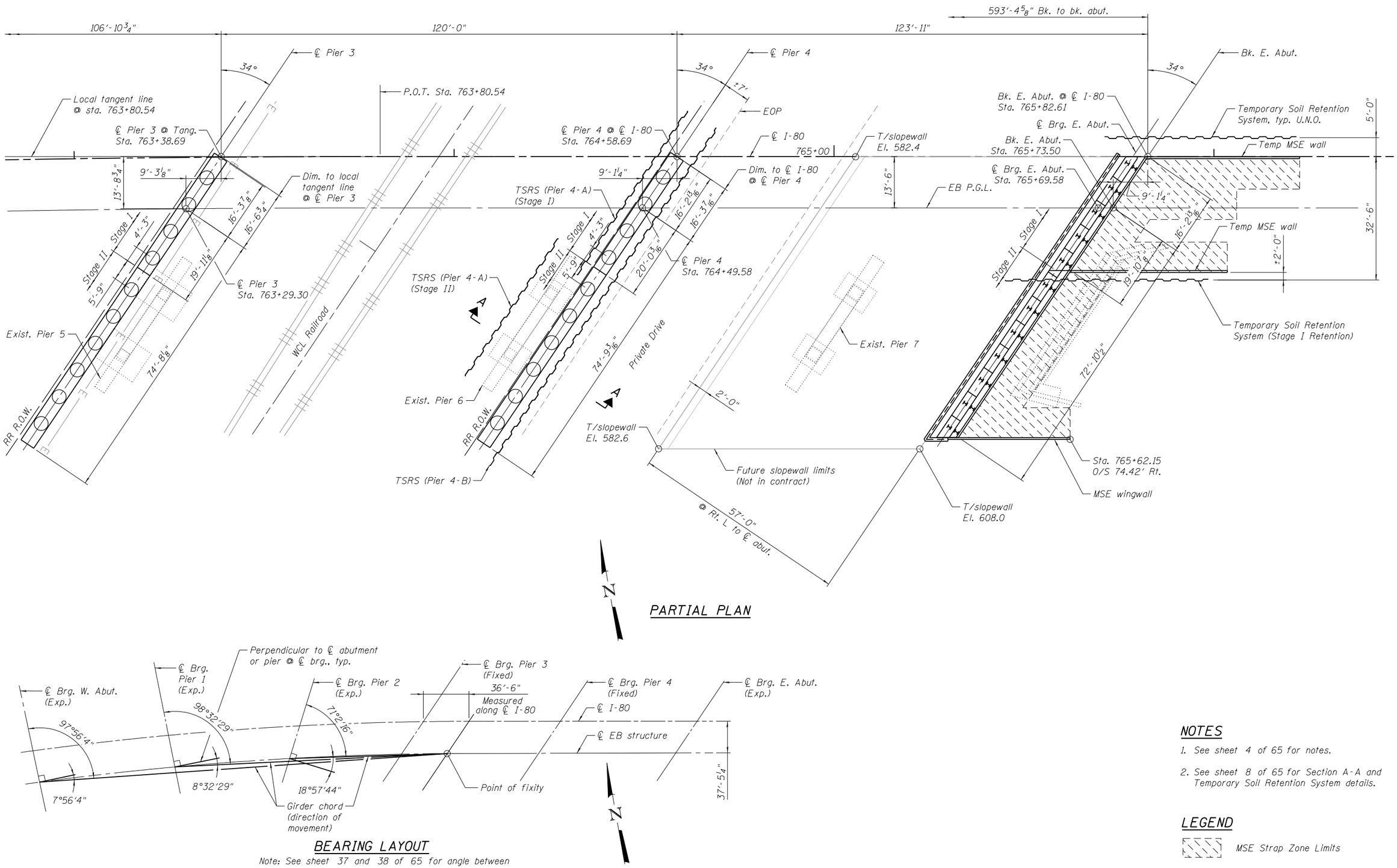

PARTIAL PLAN

BEARING LAYOUT

Note: See sheet 37 and 38 of 65 for angle between centerline bearing and tangent to beam centerline.

NOTES

1. See sheet 4 of 65 for notes.
2. See sheet 8 of 65 for Section A-A and Temporary Soil Retention System details.

LEGEND

MSE Strap Zone Limits

USER NAME = default	DESIGNED - DF	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LAYOUT II
STRUCTURE NO. 099-0904
SHEET NO. 5 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	355
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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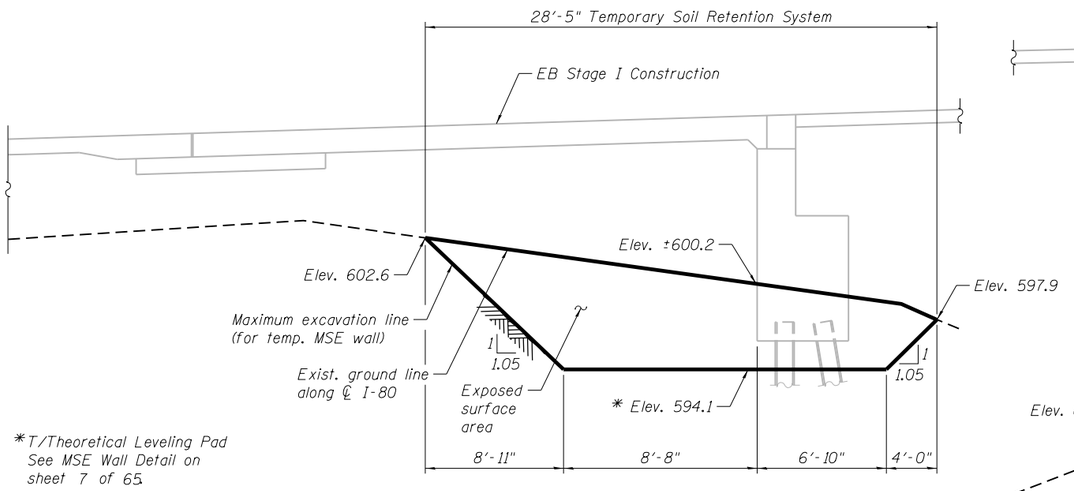
NOTES

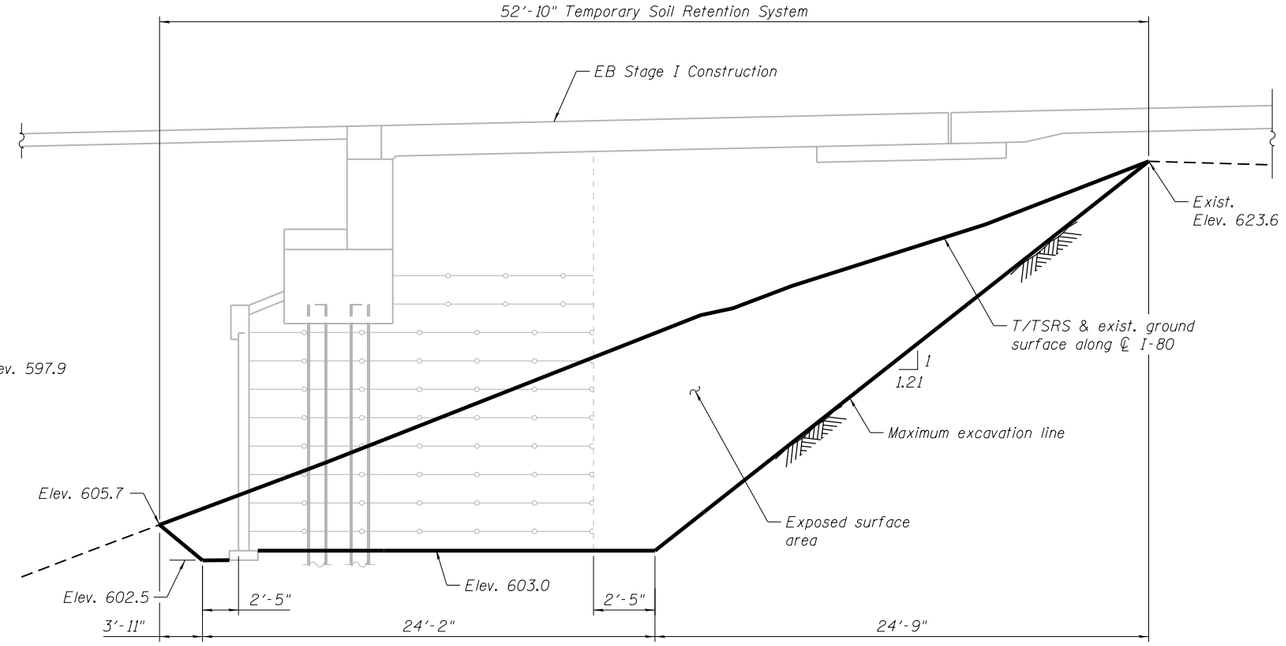
1. See sheet 8 of 65 for Bill of Material.



*T/Theoretical Leveling Pad See MSE Wall Detail on sheet 7 of 65.

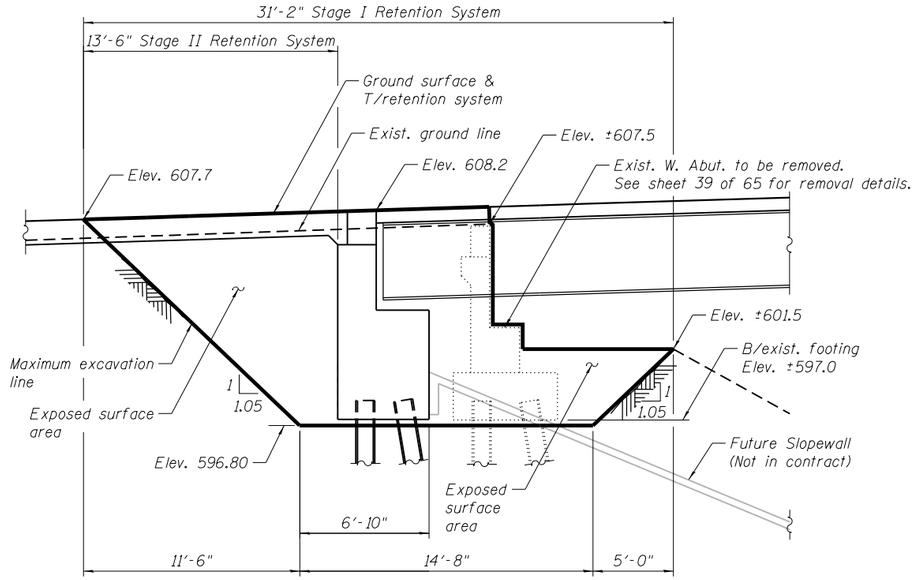
WEST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along ℄ I-80, Offset 5′ Left)



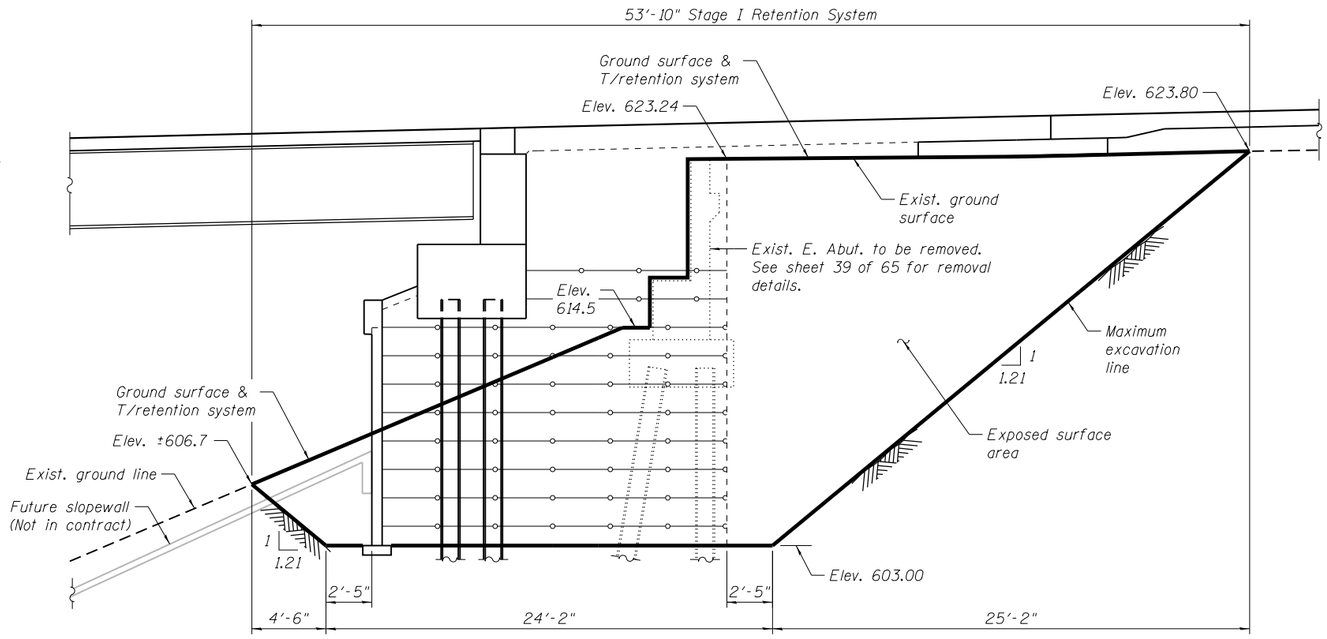
EAST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along ℄ I-80, Offset 5′ Left)



WEST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along Stage Line)



EAST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along Stage Line)

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - DF	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 6 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	356
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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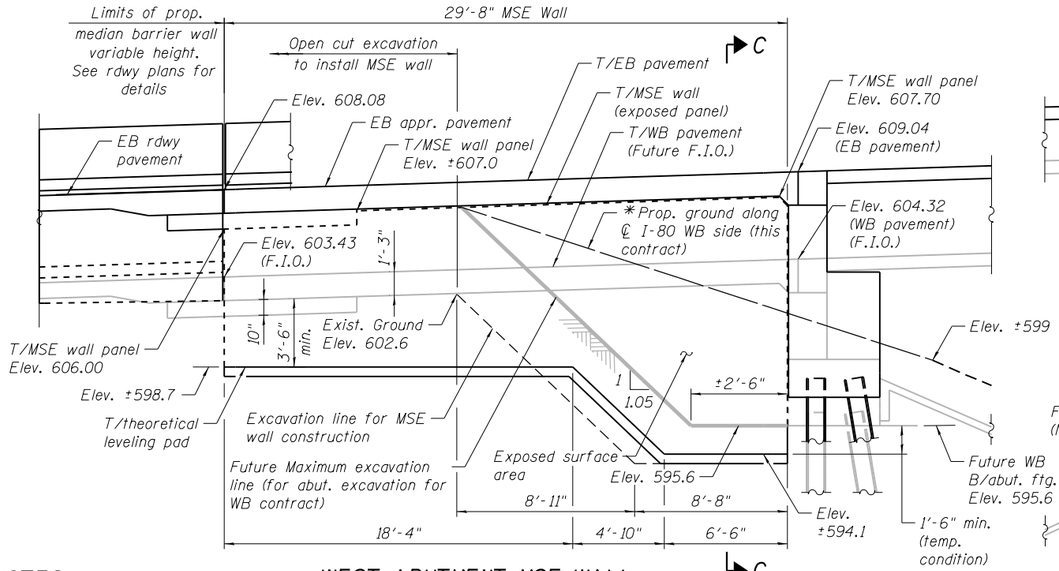
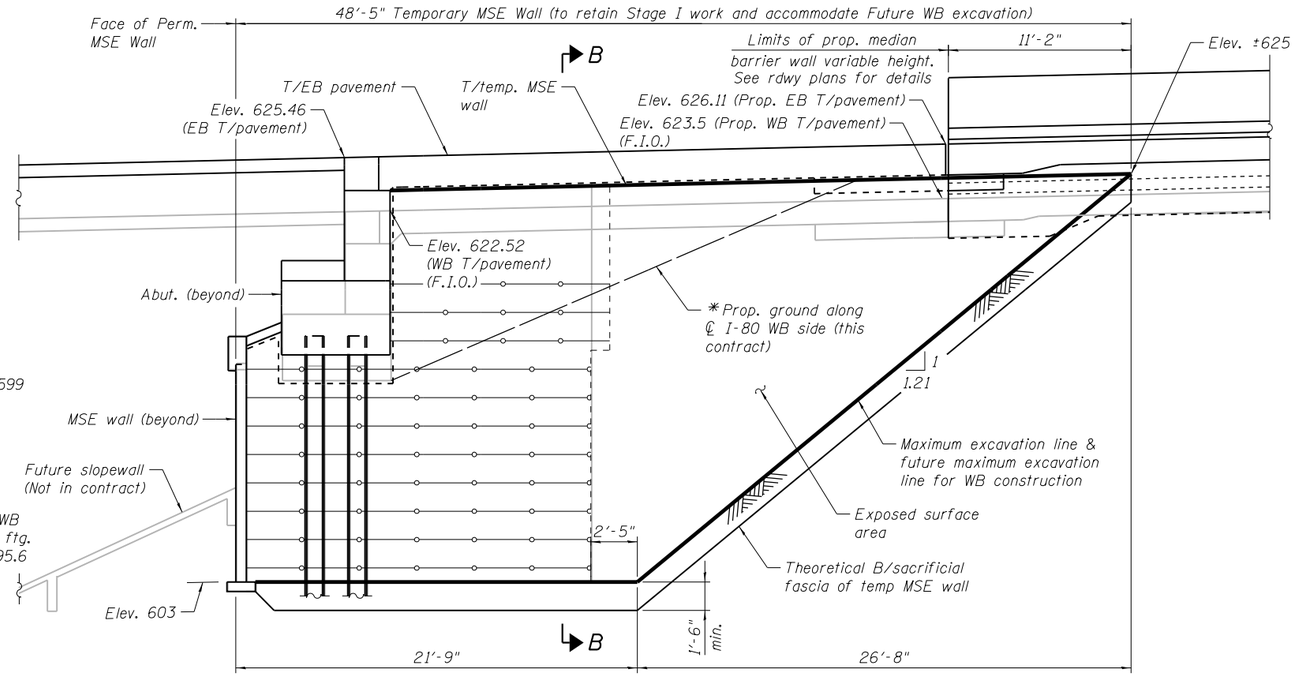


WEST ABUTMENT MSE WALL

(Along ℄ I-80)



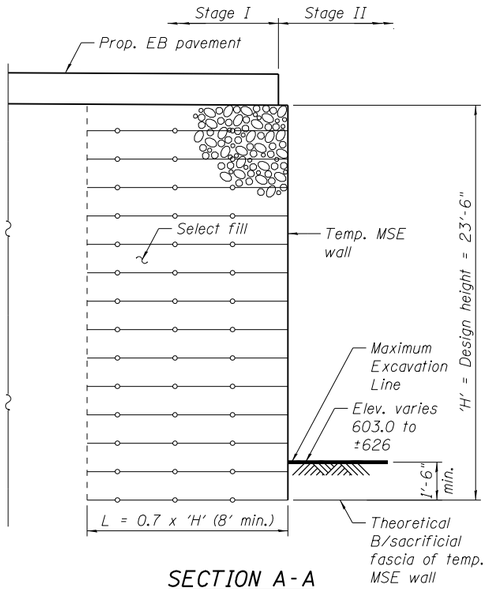
EAST ABUTMENT TEMP. MSE WALL

(Along ℄ I-80)

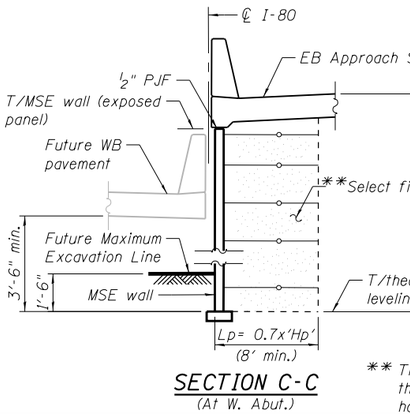
*As directed by the Engineer.

NOTES

1. See Notes 1 and 2 on sheet 44 of 65 .
2. See sheet 4 of 65 for additional information.
3. For Approach Slab Details, see sheets 25 & 26 of 65 .
4. Contractor shall coordinate installation of Median Barrier Base and MSE wall at W. Abutment.
5. See sheet 8 of 65 for Bill of Material.
6. F.I.O. = "For Information Only".



SECTION A-A



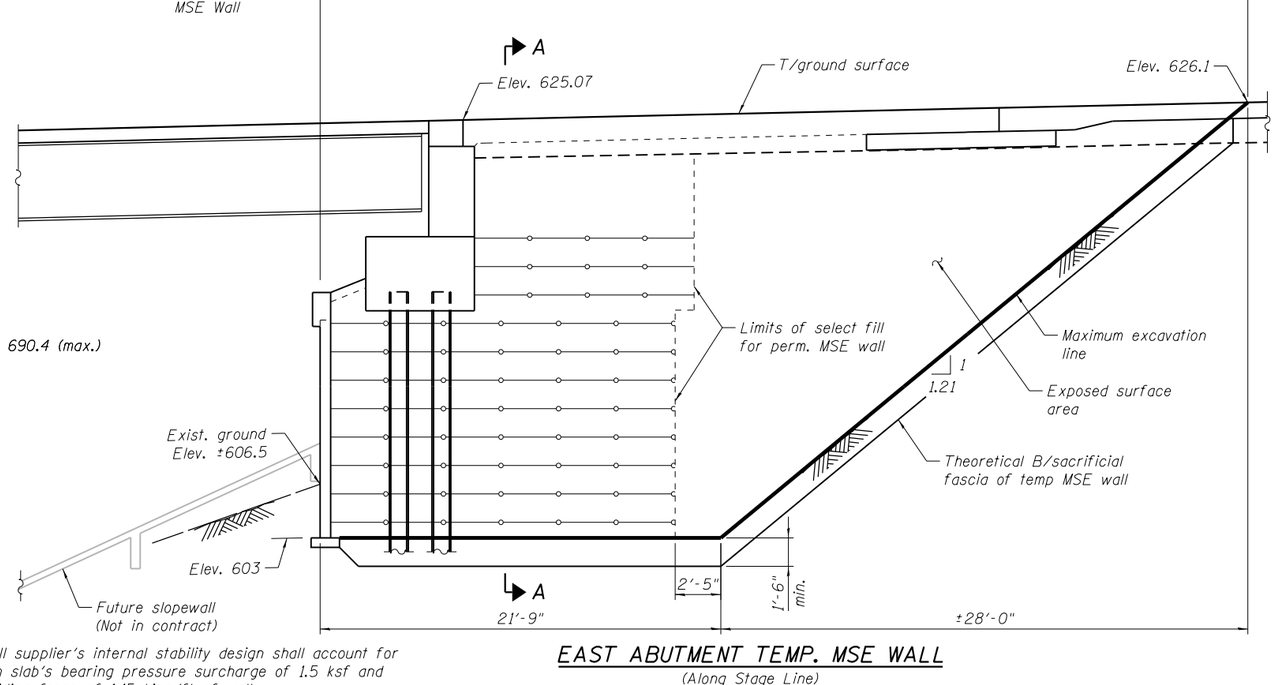
SECTION B-B

(At E. Abut.)

SECTION C-C

(At W. Abut.)

** The MSE wall supplier's internal stability design shall account for the approach slab's bearing pressure surcharge of 1.5 ksf and horizontal sliding force of 1.15 kips/ft of wall.



EAST ABUTMENT TEMP. MSE WALL

(Along Stage Line)

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - DF	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS II
STRUCTURE NO. 099-0904
SHEET NO. 7 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	357
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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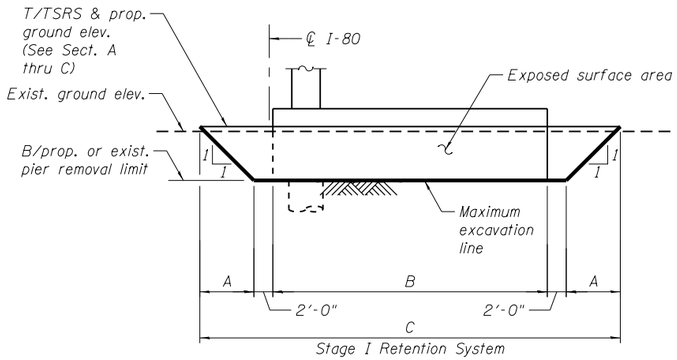
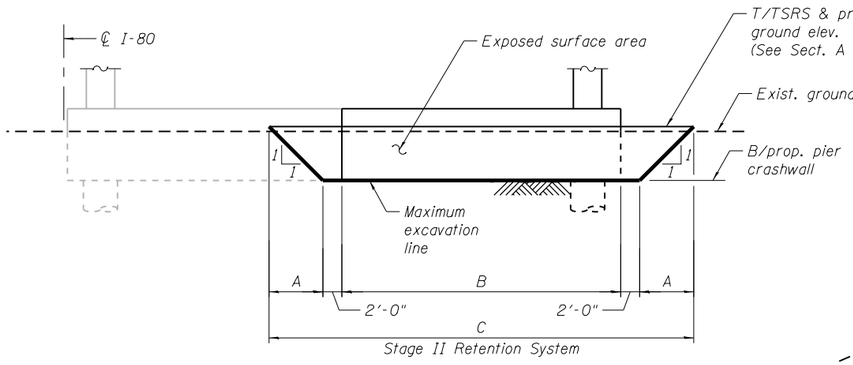


Stage I Retention System

TYPICAL PIER TEMPORARY SOIL RETENTION SYSTEM ELEVATION - STAGE I

(Looking East)
(Loc. Pier 4-B reflected)



Stage II Retention System

TYPICAL PIER TEMPORARY SOIL RETENTION SYSTEM ELEVATION - STAGE II

(Looking East)

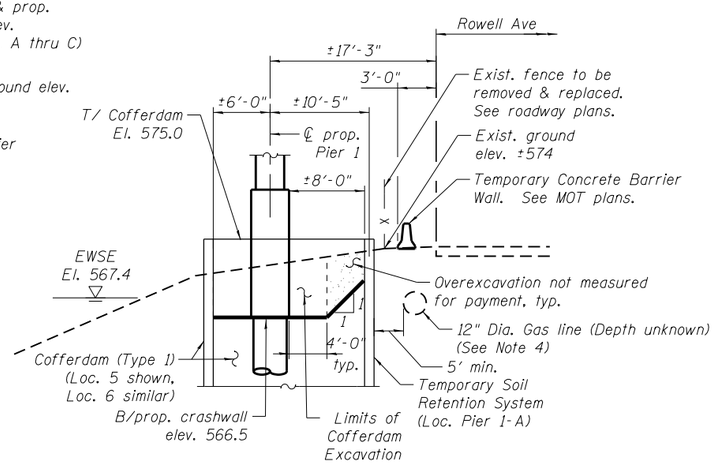
TABLE OF DIMENSIONS

Loc.	A	B	C
Pier 1-A	10'-6"	30'-9"	55'-9"
Pier 4-A	7'-0"	36'-3"	54'-3"
** Pier 4-B	5'-0"	91'-0"	105'-0"

** Loc. Pier 4-B soil retention system to remain in place for Stage I & Stage II construction.

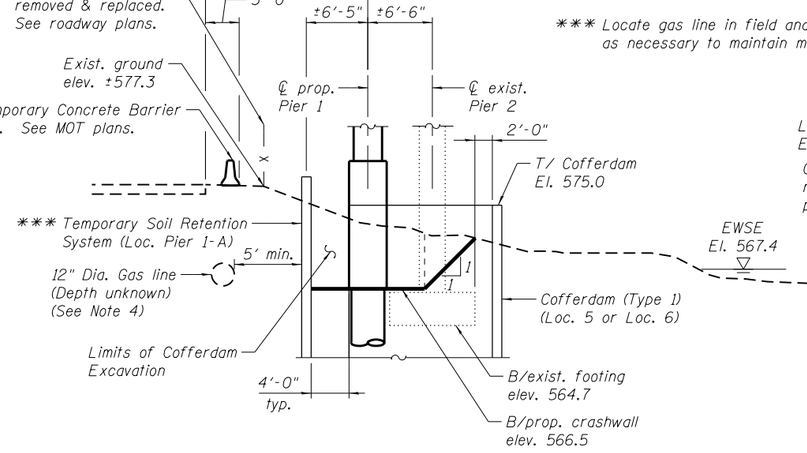
TABLE OF DIMENSIONS

Loc.	A	B	C
Pier 1-A	10'-6"	43'-4"	77'-4"
Pier 4-A	7'-0"	54'-9"	72'-9"



VIEW C-C

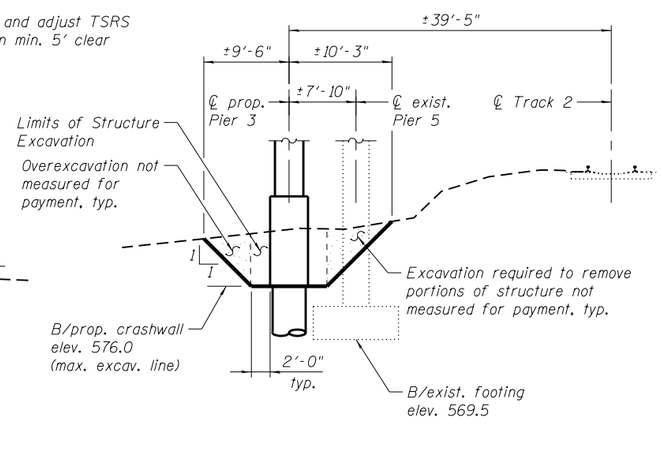
(Looking S. at North End of Pier 1)



VIEW B-B & Bsim-Bsim

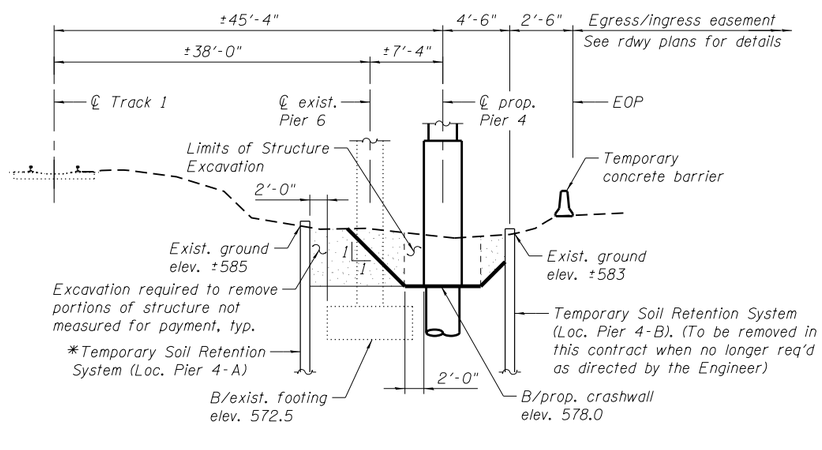
(Looking N. at South End of Pier 1)

*** Locate gas line in field and adjust TSRS as necessary to maintain min. 5' clear



SECTION THRU PIER 3

(No TSRS Required)



SECTION A-A

(Looking North at Pier 4)

NOTES

1. See sheet 4 & 5 of 65 for plan view and section references shown on this sheet.
2. See sheet 6 & 7 of 65 for temporary soil retention system details & MSE wall details at abutments.
3. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
4. The Contractor shall coordinate type of Temporary Soil Retention System and installation methods with Nicor Gas prior to starting the work. The TSRS shall maintain a minimum 5-ft clearance of all Nicor facilities during installation operations, and location of TSRS adjusted as directed by the Engineer to provide minimum clearance. The observed peak particle velocity shall not exceed 25 mm/s and the maximum hammer energy produced by the vibratory hammer shall not exceed 3170 Nm/s per blow during pile driving or other operations required to install the TSRS. Coordination and ground monitoring work will not be measured for payment but shall be included in the cost of Temporary Soil Retention System.
5. Cofferdam (Type 1) (Location 5) limits for Stage I work. Cofferdam (Type 1) (Location 6) limits for Stage II work.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Soil Retention System	Sq. Ft.	3,624
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	1,578
Cofferdam (Type 1) (Location 5)	Each	1
Cofferdam (Type 1) (Location 6)	Each	1
Cofferdam Excavation	Cu. Yd.	320
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	336

* Temporary soil retention system design computations and working drawings shall be submitted to the WCL Railroad for review and approval. See Special Provisions.

HBP Illinois Partners

USER NAME = default	DESIGNED - JGC	REVISED
	CHECKED - DF	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS III
STRUCTURE NO. 099-0904
SHEET NO. 8 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	358
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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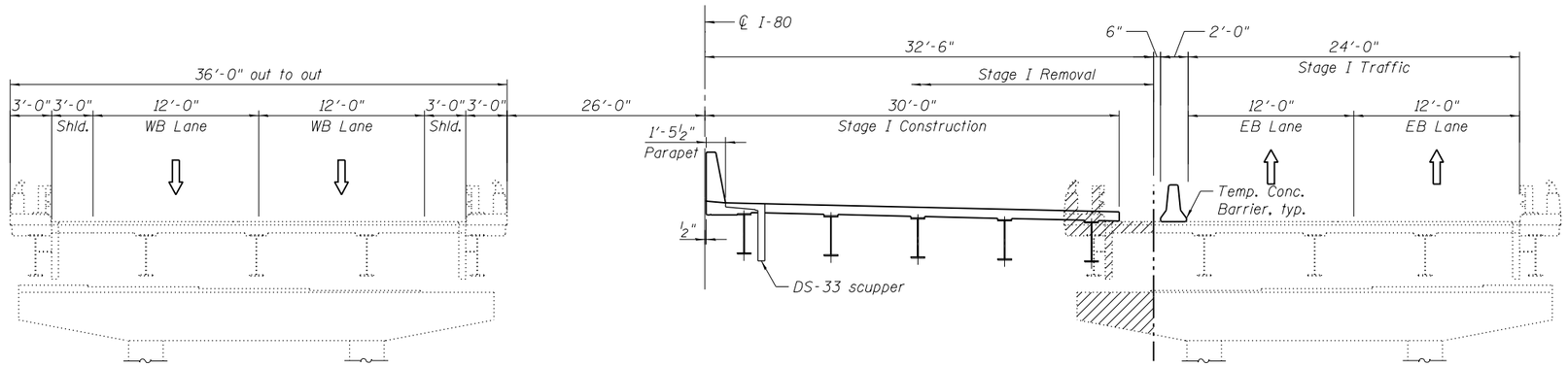
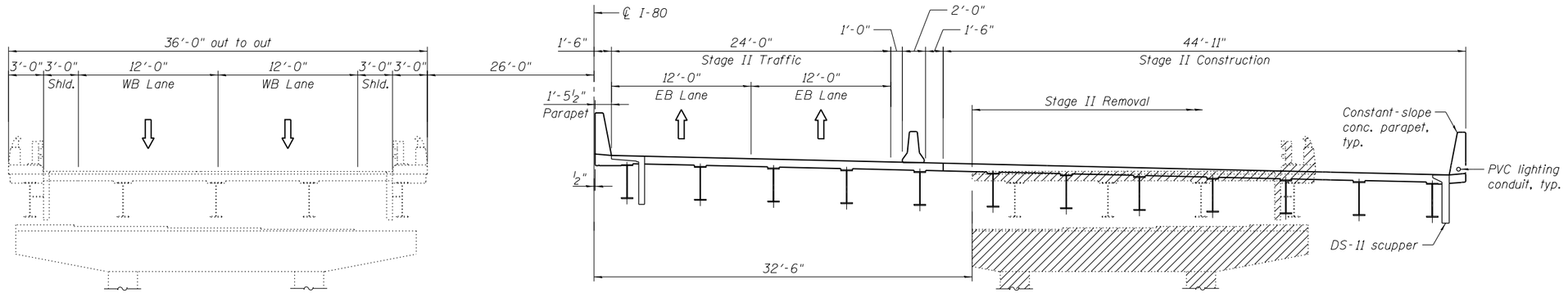


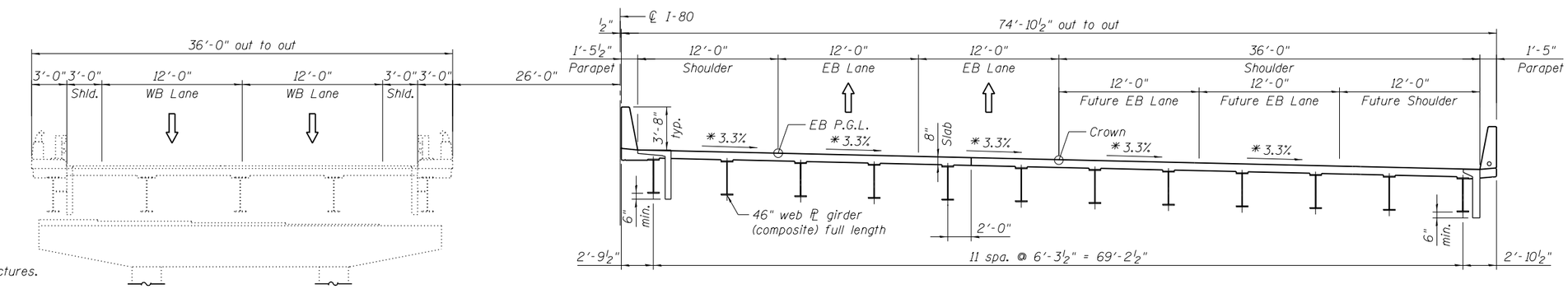
STAGE 1 REMOVAL AND CONSTRUCTION

(Looking East)



STAGE 2 REMOVAL AND CONSTRUCTION

(Traffic configuration for Stage 2A & 3 is as shown for Stage 2)
(Looking East)



END OF CONTRACT

(Looking East)

✱ See sheet 3 of 65 and roadway plans for superelevation transition details.

NOTES

1. Hatched areas indicated Removal of Existing Structures.
2. Dimensions shown are at right L's to ℄ I-80, unless noted otherwise.
3. See MOT plans for additional required traffic stages not shown on this sheet.
4. For details of Temporary Concrete Barrier, see sheet 10 of 65.
5. For quantity of Temporary Concrete Barrier, see roadway plans.
6. The locations of the stage construction joints are different for the superstructure and substructure.

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 9 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	359
			CONTRACT NO. 60W34	
	ILLINOIS	FED. AID PROJECT		

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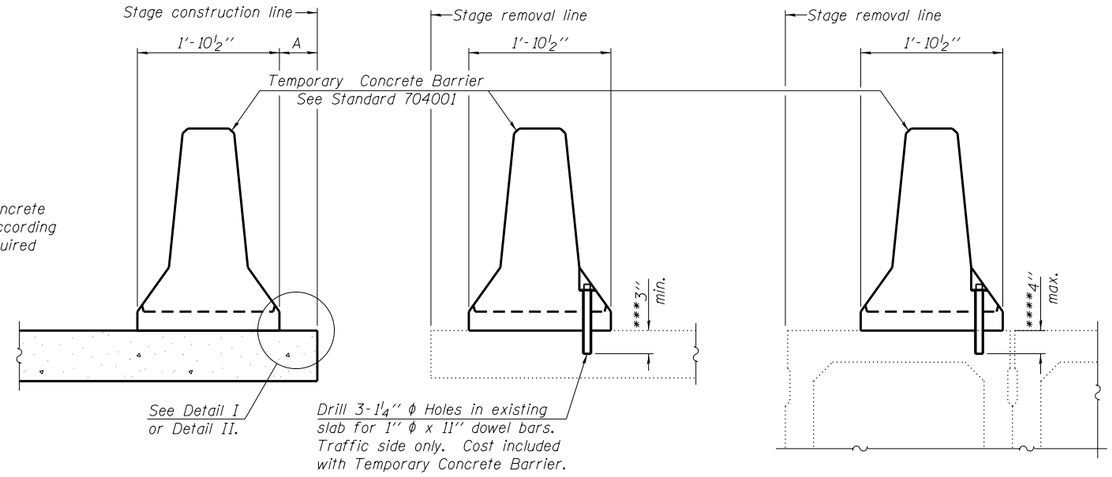
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7' 'x ''W'' steel PL to the top layer of couplers with 2-$\frac{5}{8}$'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel PL to the concrete slab or concrete wearing surface with 2-$\frac{5}{8}$'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

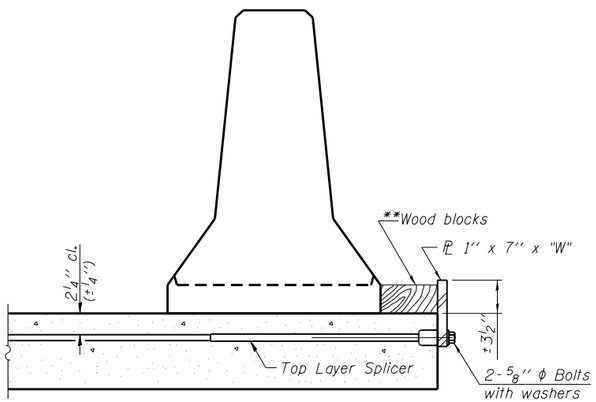
Cost of anchorage is included with Temporary Concrete Barrier.

The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

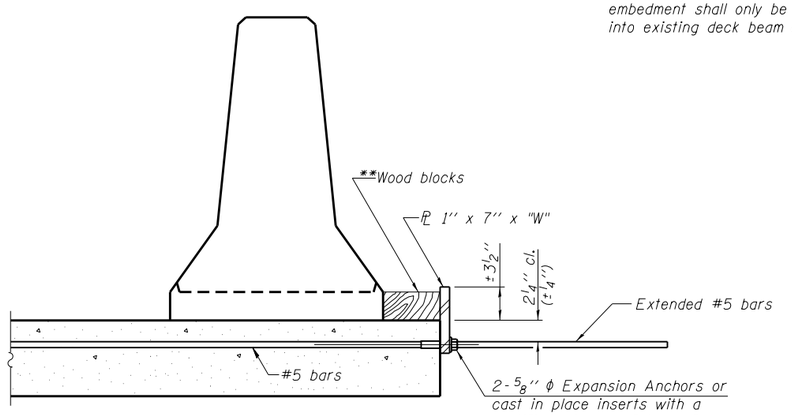
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

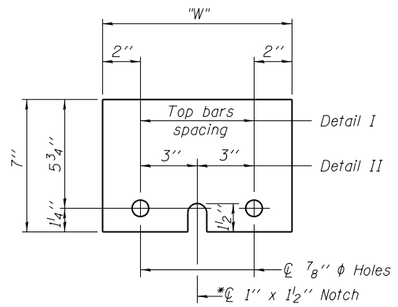
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1'' x 7'' x ''W''

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4''

R-27

7-1-10

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 099-0904
SHEET NO. 10 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	360
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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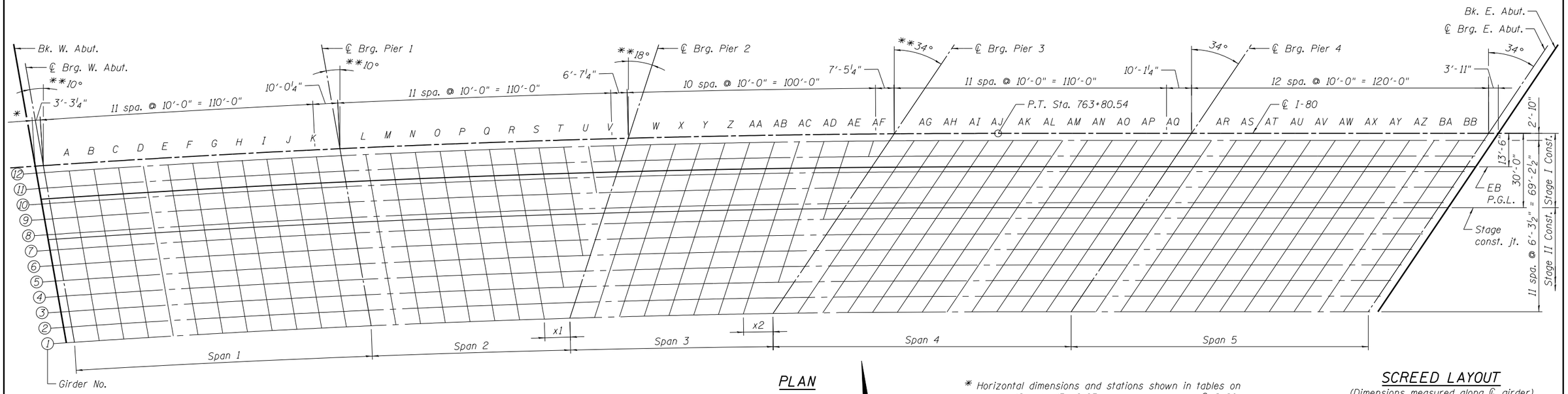
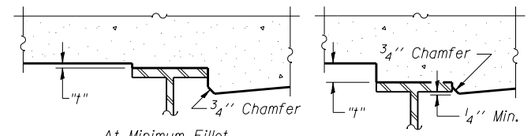


PLAN

* Horizontal dimensions and stations shown in tables on sheets 12 thru 15 of 65 are measured along ℄ I-80.

** Angles shown are measured perpendicular to the local tangent line at sta. 763+80.54.



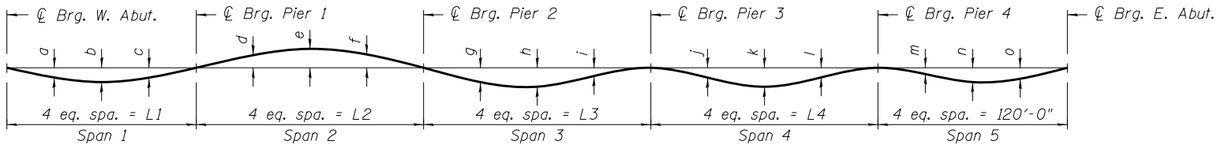
To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on plan view above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 12 thru 16 of 65 minus slab thickness, equals the fillet heights "t" above top flange of beams.

SCREED LAYOUT

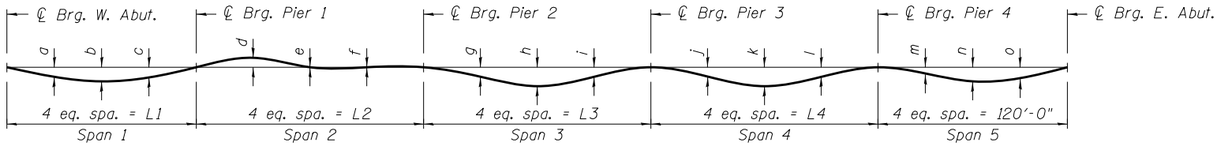
(Dimensions measured along ℄ girder)

Girder No.	x1	x2
1	10'-3 3/4"	11'-11 7/8"
2	13'-5 13/16"	14'-2 11/16"
3	6'-7 13/16"	6'-5 5/16"
4	9'-9 7/8"	8'-8 1/16"
5	2'-11 7/8"	10'-10 13/16"
6	6'-1 15/16"	13'-1 1/2"
7	9'-4"	5'-4 1/8"
8	12'-6"	7'-6 13/16"
9	5'-8"	9'-9 1/2"
10	8'-10 1/16"	12'-0 1/8"
11	2'-0 1/16"	4'-2 11/16"
12	5'-2 1/16"	6'-5 5/16"

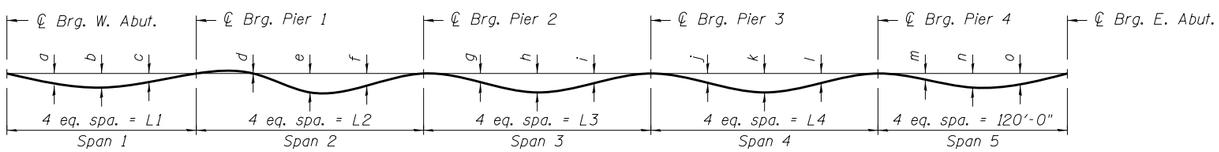
FILLET HEIGHTS



GIRDERS 1 THRU 6



GIRDER 7



GIRDERS 8 THRU 12

DEAD LOAD DEFLECTION DIAGRAMS

(Includes weight of concrete only.)
(L1, L2, L3 & L4 measured along ℄ girder.)

DEAD LOAD DEFLECTION TABLE

Girder No.	Span 1				Span 2				Span 3				Span 4				Span 5		
	a	b	c	L1	d	e	f	L2	g	h	i	L3	j	k	l	L4	m	n	o
1	2 1/8"	2 3/4"	1 1/2"	120'-0 1/2"	1/4"	1/4"	1/8"	80'-3 15/16"	1/4"	1/4"	1/8"	82'-1 3/16"	5/8"	1"	3/8"	120'-5 7/8"	1 1/8"	2 3/8"	2"
2	2"	2 5/8"	1 1/2"	120'-0 1/2"	1/4"	1/4"	1/8"	83'-6"	1/4"	1/4"	1/8"	84'-3 13/16"	5/8"	7/8"	1/4"	120'-5 3/8"	1 1/8"	2 1/4"	1 7/8"
3	2"	2 1/2"	1 3/8"	120'-0 1/2"	1/4"	1/8"	1/8"	86'-8 1/16"	1/4"	1/4"	1/8"	86'-6 1/2"	1/2"	3/4"	1/4"	120'-4 13/16"	1 1/8"	2 1/8"	1 3/4"
4	1 7/8"	2 3/8"	1 3/8"	120'-0 3/8"	1/4"	1/8"	1/8"	89'-10 1/16"	1/4"	3/8"	1/8"	88'-9 1/8"	1/2"	5/8"	1/4"	120'-4 7/16"	1 1/8"	2 1/8"	1 3/4"
5	1 3/4"	2 3/8"	1 1/4"	120'-0 3/8"	1/4"	1/8"	1/8"	93'-0 1/8"	1/4"	3/8"	1/8"	90'-11 3/4"	1/2"	5/8"	1/8"	120'-3 13/16"	1"	2"	1 5/8"
6	1 3/4"	2 1/4"	1 1/4"	120'-0 3/8"	1/4"	1/8"	0"	96'-2 1/16"	1/4"	3/8"	1/8"	93'-2 3/8"	1/2"	5/8"	1/8"	120'-3 1/2"	1"	2"	1 5/8"
7	1 3/4"	2 1/4"	1 1/4"	120'-0 3/8"	1/4"	1/8"	0"	99'-4 1/16"	1/4"	3/8"	1/4"	95'-4 15/16"	3/8"	5/8"	1/8"	120'-3"	1 1/8"	2"	1 5/8"
8	1 5/8"	2 1/8"	1 1/8"	120'-0 3/8"	1/8"	0"	0"	102'-6 1/8"	3/8"	1/2"	1/4"	97'-7 1/16"	3/8"	5/8"	1/4"	120'-2 5/8"	1"	1 7/8"	1 5/8"
9	1 3/4"	2 1/4"	1 1/4"	120'-0 1/4"	1/8"	1/8"	1/8"	105'-8 3/16"	3/8"	1/2"	1/4"	99'-9 15/16"	3/8"	5/8"	1/4"	120'-2 1/4"	1"	2 1/8"	1 3/4"
10	1 7/8"	2 3/8"	1 1/4"	120'-0 1/4"	1/8"	1/8"	1/8"	108'-10 3/16"	3/8"	5/8"	3/8"	102'-0 3/8"	1/2"	5/8"	1/4"	120'-1 15/16"	1 1/8"	2 1/4"	1 7/8"
11	1 7/8"	2 3/8"	1 1/4"	120'-0 1/4"	0"	1/4"	1/8"	112'-0 1/8"	3/8"	5/8"	3/8"	104'-2 7/8"	1/2"	5/8"	1/8"	120'-1 1/16"	1 1/8"	2 3/8"	1 7/8"
12	2"	2 1/2"	1 3/8"	120'-0 1/4"	0"	1/4"	1/8"	115'-2 1/16"	1/2"	3/4"	3/8"	106'-5 3/8"	1/2"	5/8"	1/8"	120'-1 5/16"	1 1/4"	2 3/8"	2"

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 12 thru 16 of 65.

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS LAYOUT
STRUCTURE NO. 099-0904
SHEET NO. 11 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	361
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+99.06	72.04	606.90	606.90
℄ Brg. W. Abut.	760+02.37	72.04	607.01	607.00
A	760+12.50	72.04	607.32	607.39
B	760+22.63	72.04	607.64	607.76
C	760+32.76	72.04	607.95	608.13
D	760+42.89	72.04	608.27	608.48
E	760+53.02	72.04	608.58	608.81
F	760+63.14	72.04	608.90	609.13
G	760+73.27	72.04	609.21	609.42
H	760+83.40	72.04	609.53	609.70
I	760+93.53	72.04	609.84	609.97
J	761+03.66	72.04	610.15	610.23
K	761+13.79	72.04	610.47	610.50
℄ Brg. Pier 1	761+23.94	72.04	610.78	610.78
L	761+34.07	72.04	611.10	611.08
M	761+44.20	72.04	611.41	611.39
N	761+54.33	72.04	611.73	611.71
O	761+64.46	72.04	612.04	612.03
P	761+74.59	72.04	612.36	612.34
Q	761+84.72	72.04	612.67	612.66
R	761+94.85	72.04	612.99	612.98
℄ Brg. Pier 2	762+05.28	72.04	613.31	613.31
W	762+15.42	72.04	613.63	613.63
X	762+25.56	72.04	613.94	613.96
Y	762+35.71	72.04	614.26	614.28
Z	762+45.85	72.04	614.57	614.60
AA	762+55.99	72.04	614.88	614.90
AB	762+66.14	72.04	615.19	615.21
AC	762+76.28	72.04	615.50	615.51
℄ Brg. Pier 3	762+88.41	72.04	615.89	615.89
AG	762+98.60	72.04	616.27	616.27
AH	763+08.78	72.04	616.64	616.65
AI	763+18.97	72.04	617.01	617.04
AJ	763+29.16	72.04	617.38	617.43
AK	763+39.34	72.04	617.74	617.81
AL	763+49.52	72.04	618.10	618.10
AM	763+59.67	72.04	618.46	618.54
AN	763+69.82	72.04	618.82	618.88
AO	763+79.95	72.04	619.17	619.22
AP	763+89.96	72.04	619.51	619.54
AQ	763+99.96	72.04	619.85	619.87
℄ Brg. Pier 4	764+10.09	72.04	620.20	620.20
AR	764+20.09	72.04	620.53	620.53
AS	764+30.09	72.04	620.87	620.89
AT	764+40.09	72.04	621.20	621.26
AU	764+50.09	72.04	621.53	621.63
AV	764+60.09	72.04	621.85	621.99
AW	764+70.09	72.04	622.18	622.35
AX	764+80.09	72.04	622.50	622.70
AY	764+90.09	72.04	622.82	623.02
AZ	765+00.09	72.04	623.13	623.32
BA	765+10.09	72.04	623.44	623.61
BB	765+20.09	72.04	623.76	623.88
℄ Brg. E. Abut.	765+30.09	72.04	624.06	624.13
Bk. E. Abut.	765+34.01	72.04	624.18	624.18

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+98.37	65.75	607.09	607.09
℄ Brg. W. Abut.	760+01.68	65.75	607.19	607.19
A	760+11.79	65.75	607.51	607.57
B	760+21.91	65.75	607.82	607.94
C	760+32.03	65.75	608.14	608.31
D	760+42.15	65.75	608.45	608.65
E	760+52.27	65.75	608.77	608.99
F	760+62.38	65.75	609.08	609.30
G	760+72.50	65.75	609.39	609.59
H	760+82.62	65.75	609.71	609.87
I	760+92.74	65.75	610.02	610.15
J	761+02.86	65.75	610.34	610.41
K	761+12.97	65.75	610.65	610.69
℄ Brg. Pier 1	761+23.11	65.75	610.97	610.97
L	761+33.23	65.75	611.28	611.26
M	761+43.34	65.75	611.60	611.57
N	761+53.46	65.75	611.91	611.89
O	761+63.58	65.75	612.22	612.21
P	761+73.70	65.75	612.54	612.53
Q	761+83.82	65.75	612.85	612.84
R	761+93.94	65.75	613.17	613.16
℄ Brg. Pier 2	762+07.56	65.75	613.59	613.59
W	762+17.69	65.75	613.91	613.91
X	762+27.82	65.75	614.22	614.24
Y	762+37.96	65.75	614.53	614.56
Z	762+48.09	65.75	614.85	614.88
AA	762+58.22	65.75	615.16	615.18
AB	762+68.35	65.75	615.47	615.48
AC	762+78.48	65.75	615.78	615.79
℄ Brg. Pier 3	762+92.85	65.75	616.26	616.26
AG	763+03.02	65.75	616.63	616.63
AH	763+13.19	65.75	616.99	617.00
AI	763+23.37	65.75	617.35	617.38
AJ	763+33.54	65.75	617.71	617.76
AK	763+43.70	65.75	618.06	618.13
AL	763+53.86	65.75	618.41	618.49
AM	763+64.00	65.75	618.76	618.83
AN	763+74.13	65.75	619.11	619.17
AO	763+84.21	65.75	619.45	619.49
AP	763+94.21	65.75	619.79	619.81
AQ	764+04.21	65.75	620.12	620.13
℄ Brg. Pier 4	764+14.34	65.75	620.45	620.45
AR	764+24.34	65.75	620.78	620.78
AS	764+34.34	65.75	621.11	621.13
AT	764+44.34	65.75	621.43	621.49
AU	764+54.34	65.75	621.75	621.85
AV	764+64.34	65.75	622.07	622.20
AW	764+74.34	65.75	622.38	622.55
AX	764+84.34	65.75	622.70	622.88
AY	764+94.34	65.75	623.01	623.20
AZ	765+04.34	65.75	623.31	623.50
BA	765+14.34	65.75	623.62	623.77
BB	765+24.34	65.75	623.92	624.03
℄ Brg. E. Abut.	765+34.34	65.75	624.22	624.28
Bk. E. Abut.	765+38.26	65.75	624.33	624.33

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+97.68	59.46	607.28	607.28
℄ Brg. W. Abut.	760+00.99	59.46	607.38	607.37
A	760+11.09	59.46	607.69	607.75
B	760+21.20	59.46	608.01	608.12
C	760+31.30	59.46	608.32	608.48
D	760+41.41	59.46	608.64	608.83
E	760+51.52	59.46	608.95	609.16
F	760+61.62	59.46	609.26	609.47
G	760+71.73	59.46	609.58	609.77
H	760+81.84	59.46	609.89	610.05
I	760+91.94	59.46	610.21	610.32
J	761+02.05	59.46	610.52	610.59
K	761+12.16	59.46	610.83	610.87
℄ Brg. Pier 1	761+22.28	59.46	611.15	611.15
L	761+32.39	59.46	611.46	611.45
M	761+42.49	59.46	611.78	611.75
N	761+52.60	59.46	612.09	612.07
O	761+62.71	59.46	612.40	612.39
P	761+72.81	59.46	612.72	612.71
Q	761+82.92	59.46	613.03	613.02
R	761+93.03	59.46	613.35	613.34
S	762+03.14	59.46	613.66	613.66
℄ Brg. Pier 2	762+09.84	59.46	613.87	613.87
W	762+19.96	59.46	614.18	614.19
X	762+30.08	59.46	614.50	614.52
Y	762+40.20	59.46	614.81	614.84
Z	762+50.32	59.46	615.13	615.15
AA	762+60.43	59.46	615.43	615.46
AB	762+70.55	59.46	615.74	615.76
AC	762+80.67	59.46	616.05	616.06
AD	762+90.79	59.46	616.39	616.39
℄ Brg. Pier 3	762+97.28	59.46	616.62	616.62
AG	763+07.44	59.46	616.98	616.99
AH	763+17.59	59.46	617.33	617.36
AI	763+27.75	59.46	617.68	617.73
AJ	763+37.90	59.46	618.03	618.03
AK	763+48.05	59.46	618.38	618.44
AL	763+58.19	59.46	618.72	618.78
AM	763+68.31	59.46	619.06	619.11
AN	763+78.43	59.46	619.39	619.43
AO	763+88.45	59.46	619.72	619.75
AP	763+98.45	59.46	620.05	620.06
AQ	764+08.45	59.46	620.38	620.37
℄ Brg. Pier 4	764+18.58	59.46	620.70	620.70
AR	764+28.58	59.46	621.02	621.04
AS	764+38.58	59.46	621.34	621.39
AT	764+48.58	59.46	621.65	621.74
AU	764+58.58	59.46	621.97	622.09
AV	764+68.58	59.46	622.28	622.44
AW	764+78.58	59.46	622.58	622.76
AX	764+88.58	59.46	622.89	623.07
AY	764+98.58	59.46	623.19	623.36
AZ	765+08.58	59.46	623.49	623.64
BA	765+18.58	59.46	623.78	623.90
BB	765+28.58	59.46	624.08	624.14
℄ Brg. E. Abut.	765+38.58	59.46	624.37	624.37
Bk. E. Abut.	765+42.50	59.46	624.48	624.48

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+96.99	53.17	607.46	607.46
℄ Brg. W. Abut.	760+00.30	53.17	607.57	607.56
A	760+10.39	53.17	607.88	607.94
B	760+20.49	53.17	608.19	608.30
C	760+30.58	53.17	608.51	608.66
D	760+40.68	53.17	608.82	609.01
E	760+50.77	53.17	609.13	609.34
F	760+60.87	53.17	609.45	609.65
G	760+70.96	53.17	609.76	609.94
H	760+81.06	53.17	610.08	610.23
I	760+91.15	53.17	610.39	610.50
J	761+01.25	53.17	610.70	610.77
K	761+11.34	53.17	611.02	611.05
℄ Brg. Pier 1	761+21.45	53.17	611.33	611.33
L	761+31.55	53.17	611.64	611.63
M	761+41.64	53.17	611.96	611.94
N	761+51.74	53.17	612.27	612.25
O	761+61.84	53.17	612.58	612.57
P	761+71.93	53.17	612.90	612.89
Q	761+82.03	53.17	613.21	613.20
R	761+92.12	53.17	613.53	613.52
S	762+02.22	53.17	613.84	613.84
℄ Brg. Pier 2	762+12.12	53.17	614.15	614.15
W	762+22.22	53.17	614.46	614.47
X	762+32.33	53.17	614.78	614.79
Y	762+42.43	53.17	615.09	615.11
Z	762+52.54	53.17	615.40	615.43
AA	762+62.65	53.17	615.71	615.73
AB	762+72.75	53.17	616.02	616.04
AC	762+82.86	53.17	616.33	616.33
AD	762+92.96	53.17	616.67	616.67
℄ Brg. Pier 3	763+01.70	53.17	616.97	616.97
AG	763+11.84	53.17	617.32	617.33
AH	763+21.98	53.17	617.66	617.69
AI	763+32.11	53.17	618.00	618.04
AJ	763+42.25	53.17	618.34	618.40
AK	763+52.39	53.17	618.68	618.74
AL	763+62.51	53.17	619.01	619.07
AM	763+72.62	53.17	619.34	619.39
AN	763+82.69	53.17	619.67	619.71
AO	763+92.69	53.17	619.99	620.01
AP	764+02.69	53.17	620.31	620.32
AQ	764+12.69	53.17	620.63	620.62
℄ Brg. Pier 4	764+22.82	53.17	620.95	620.95
AR	764+32.82	53.17	621.26	621.28
AS	764+42.82	53.17	621.57	621.62
AT	764+52.82	53.17	621.87	621.96
AU	764+62.82	53.17	622.18	622.30
AV	764+72.82	53.17	622.48	622.63
AW	764+82.82	53.17	622.77	622.95
AX	764+92.82	53.17	623.07	623.25
AY	765+02.82	53.17	623.36	623.53
AZ	765+12.82	53.17	623.65	623.80
BA	765+22.82	53.17	623.94	624.05
BB	765+32.82	53.17	624.23	624.29
℄ Brg. E. Abut.	765+42.82	53.17	624.51	624.51
Bk. E. Abut.	765+46.74	53.17	624.62	624.62

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+96.31	46.88	607.65	607.65
℄ Brg. W. Abut.	759+99.61	46.88	607.75	607.75
A	760+09.69	46.88	608.07	608.12
B	760+19.78	46.88	608.38	608.49
C	760+29.86	46.88	608.69	608.84
D	760+39.94	46.88	609.01	609.18
E	760+50.03	46.88	609.32	609.51
F	760+60.11	46.88	609.63	609.83
G	760+70.19	46.88	609.95	610.12
H	760+80.28	46.88	610.26	610.40
I	760+90.36	46.88	610.57	610.68
J	761+00.45	46.88	610.89	610.95
K	761+10.53	46.88	611.20	611.23
℄ Brg. Pier 1	761+20.63	46.88	611.51	611.51
L	761+30.71	46.88	611.83	611.81
M	761+40.80	46.88	612.14	612.12
N	761+50.88	46.88	612.45	612.43
O	761+60.97	46.88	612.77	612.75
P	761+71.05	46.88	613.08	613.07
Q	761+81.13	46.88	613.39	613.38
R	761+91.22	46.88	613.71	613.70
S	762+01.30	46.88	614.02	614.01
T	762+14.39	46.88	614.43	614.42
℄ Brg. Pier 2	762+24.48	46.88	614.74	614.74
W	762+34.57	46.88	615.05	615.06
X	762+44.67	46.88	615.37	615.38
Y	762+54.76	46.88	615.67	615.70
Z	762+64.85	46.88	615.98	616.01
AA	762+74.94	46.88	616.29	616.32
AB	762+85.04	46.88	616.60	616.62
AC	762+95.13	46.88	616.94	616.95
AD	763+05.22	46.88	617.28	617.29
℄ Brg. Pier 3	763+06.11	46.88	617.31	617.31
AG	763+16.23	46.88	617.65	617.66
AH	763+26.35	46.88	617.99	618.01
AI	763+36.47	46.88	618.32	618.36
AJ	763+46.59	46.88	618.65	618.70
AK	763+56.71	46.88	618.98	619.03
AL	763+66.81	46.88	619.30	619.36
AM	763+76.91	46.88	619.62	619.67
AN	763+86.94	46.88	619.94	619.97
AO	763+96.94	46.88	620.25	620.27
AP	764+06.94	46.88	620.57	620.57
AQ	764+16.94	46.88	620.87	620.87
℄ Brg. Pier 4	764+27.07	46.88	621.18	621.18
AR	764+37.07	46.88	621.49	621.50
AS	764+47.07	46.88	621.79	621.84
AT	764+57.07	46.88	622.08	622.17
AU	764+67.07	46.88	622.38	622.50
AV	764+77.07	46.88	622.67	622.82
AW	764+87.07	46.88	622.96	623.13
AX	764+97.07	46.88	623.25	623.42
AY	765+07.07	46.88	623.53	623.70
AZ	765+17.07	46.88	623.81	623.96
BA	765+27.07	46.88	624.09	624.20
BB	765+37.07	46.88	624.37	624.43
℄ Brg. E. Abut.	765+47.07	46.88	624.64	624.65
Bk. E. Abut.	765+50.99	46.88	624.75	624.75

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+95.63	40.58	607.84	607.84
℄ Brg. W. Abut.	759+98.92	40.58	607.94	607.93
A	760+08.99	40.58	608.25	608.30
B	760+19.07	40.58	608.56	608.67
C	760+29.14	40.58	608.88	609.02
D	760+39.21	40.58	609.19	609.37
E	760+49.28	40.58	609.50	609.69
F	760+59.36	40.58	609.82	610.01
G	760+69.43	40.58	610.13	610.30
H	760+79.50	40.58	610.44	610.58
I	760+89.57	40.58	610.76	610.86
J	760+99.65	40.58	611.07	611.13
K	761+09.72	40.58	611.38	611.41
℄ Brg. Pier 1	761+19.81	40.58	611.69	611.69
L	761+29.88	40.58	612.01	611.99
M	761+39.95	40.58	612.32	612.30
N	761+50.02	40.58	612.63	612.62
O	761+60.10	40.58	612.95	612.93
P	761+70.17	40.58	613.26	613.25
Q	761+80.24	40.58	613.57	613.57
R	761+90.32	40.58	613.89	613.88
S	762+00.39	40.58	614.20	614.19
T	762+10.46	40.58	614.51	614.51
℄ Brg. Pier 2	762+16.65	40.58	614.70	614.70
W	762+26.73	40.58	615.02	615.03
X	762+36.81	40.58	615.33	615.35
Y	762+46.89	40.58	615.64	615.67
Z	762+56.97	40.58	615.95	615.98
AA	762+67.05	40.58	616.26	616.29
AB	762+77.13	40.58	616.57	616.59
AC	762+87.21	40.58	616.88	616.90
AD	762+97.29	40.58	617.21	617.22
℄ Brg. Pier 3	763+10.50	40.58	617.65	617.65
AG	763+20.60	40.58	617.98	617.99
AH	763+30.71	40.58	618.31	618.33
AI	763+40.81	40.58	618.63	618.67
AJ	763+50.92	40.58	618.95	619.00
AK	763+61.02	40.58	619.27	619.32
AL	763+71.11	40.58	619.58	619.63
AM	763+81.18	40.58	619.90	619.94
AN	763+91.18	40.58	620.20	620.23
AO	764+01.18	40.58	620.51	620.52
AP	764+11.18	40.58	620.81	620.81
AQ	764+21.18	40.58	621.11	621.11
℄ Brg. Pier 4	764+31.31	40.58	621.41	621.41
AR	764+41.31	40.58	621.71	621.73
AS	764+51.31	40.58	622.00	622.05
AT	764+61.31	40.58	622.29	622.37
AU	764+71.31	40.58	622.57	622.69
AV	764+81.31	40.58	622.86	623.01
AW	764+91.31	40.58	623.14	623.31
AX	765+01.31	40.58	623.42	623.59
AY	765+11.31	40.58	623.69	623.86
AZ	765+21.31	40.58	623.97	624.11
BA	765+31.31	40.58	624.24	624.34
BB	765+41.31	40.58	624.51	624.56
℄ Brg. E. Abut.	765+51.31	40.58	624.77	624.77
Bk. E. Abut.	765+55.23	40.58	624.87	624.87

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+94.95	34.29	608.02	608.02
℄ Brg. W. Abut.	759+98.24	34.29	608.12	608.12
A	760+08.30	34.29	608.44	608.49
B	760+18.36	34.29	608.75	608.85
C	760+28.42	34.29	609.06	609.21
D	760+38.48	34.29	609.38	609.55
E	760+48.54	34.29	609.69	609.88
F	760+58.60	34.29	610.00	610.19
G	760+68.66	34.29	610.31	610.48
H	760+78.73	34.29	610.63	610.77
I	760+88.79	34.29	610.94	611.04
J	760+98.85	34.29	611.25	611.32
K	761+08.91	34.29	611.56	611.59
℄ Brg. Pier 1	761+18.99	34.29	611.88	611.88
L	761+29.05	34.29	612.19	612.18
M	761+39.11	34.29	612.50	612.48
N	761+49.17	34.29	612.81	612.80
O	761+59.23	34.29	613.13	613.12
P	761+69.29	34.29	613.44	613.43
Q	761+79.35	34.29	613.75	613.75
R	761+89.42	34.29	614.06	614.06
S	761+99.48	34.29	614.38	614.37
T	762+09.54	34.29	614.69	614.69
℄ Brg. Pier 2	762+18.91	34.29	614.98	614.98
W	762+28.98	34.29	615.29	615.30
X	762+39.05	34.29	615.61	615.63
Y	762+49.11	34.29	615.92	615.95
Z	762+59.18	34.29	616.22	616.26
AA	762+69.25	34.29	616.53	616.57
AB	762+79.32	34.29	616.84	616.87
AC	762+89.38	34.29	617.16	617.18
AD	762+99.45	34.29	617.48	617.49
AE	763+09.52	34.29	617.81	617.81
℄ Brg. Pier 3	763+14.88	34.29	617.98	617.98
AG	763+24.97	34.29	618.30	618.31
AH	763+35.06	34.29	618.62	618.64
AI	763+45.15	34.29	618.93	618.97
AJ	763+55.24	34.29	619.24	619.29
AK	763+65.32	34.29	619.55	619.60
AL	763+75.39	34.29	619.86	619.91
AM	763+85.43	34.29	620.16	620.20
AN	763+95.43	34.29	620.46	620.49
AO	764+05.43	34.29	620.76	620.77
AP	764+15.43	34.29	621.05	621.05
AQ	764+25.43	34.29	621.34	621.34
℄ Brg. Pier 4	764+35.56	34.29	621.63	621.63
AR	764+45.56	34.29	621.92	621.94
AS	764+55.56	34.29	622.20	622.26
AT	764+65.56	34.29	622.48	622.57
AU	764+75.56	34.29	622.76	622.89
AV	764+85.56	34.29	623.04	623.19
AW	764+95.56	34.29	623.31	623.48
AX	765+05.56	34.29	623.58	623.76
AY	765+15.56	34.29	623.85	624.01
AZ	765+25.56	34.29	624.11	624.25
BA	765+35.56	34.29	624.38	624.48
BB	765+45.56	34.29	624.64	624.69
℄ Brg. E. Abut.	765+55.56	34.29	624.89	624.90
Bk. E. Abut.	765+59.48	34.29	624.99	624.99

STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+94.48	30.00	608.15	608.15
℄ Brg. W. Abut.	759+97.77	30.00	608.25	608.25
A	760+07.82	30.00	608.56	608.61
B	760+17.88	30.00	608.88	608.98
C	760+27.93	30.00	609.19	609.33
D	760+37.98	30.00	609.50	609.67
E	760+48.04	30.00	609.81	609.99
F	760+58.09	30.00	610.13	610.31
G	760+68.14	30.00	610.44	610.60
H	760+78.20	30.00	610.75	610.88
I	760+88.25	30.00	611.06	611.16
J	760+98.30	30.00	611.38	611.44
K	761+08.36	30.00	611.69	611.71
℄ Brg. Pier 1	761+18.43	30.00	612.00	612.00
L	761+28.48	30.00	612.31	612.30
M	761+38.53	30.00	612.63	612.61
N	761+48.59	30.00	612.94	612.93
O	761+58.64	30.00	613.25	613.24
P	761+68.70	30.00	613.56	613.56
Q	761+78.75	30.00	613.87	613.88
R	761+88.80	30.00	614.19	614.19
S	761+98.86	30.00	614.50	614.50
T	762+08.91	30.00	614.81	614.81
℄ Brg. Pier 2	762+20.45	30.00	615.17	615.17
W	762+30.51	30.00	615.48	615.49
X	762+40.57	30.00	615.80	615.82
Y	762+50.63	30.00	616.11	616.14
Z	762+60.69	30.00	616.41	616.45
AA	762+70.74	30.00	616.72	616.76
AB	762+80.80	30.00	617.03	617.06
AC	762+90.86	30.00	617.34	617.37
AD	763+00.92	30.00	617.66	617.68
AE	763+10.98	30.00	617.98	617.99
℄ Brg. Pier 3	763+17.86	30.00	618.20	618.20
AG	763+27.94	30.00	618.51	618.52
AH	763+38.02	30.00	618.82	618.84
AI	763+48.10	30.00	619.13	619.17
AJ	763+58.17	30.00	619.44	619.48
AK	763+68.25	30.00	619.74	619.79
AL	763+78.31	30.00	620.04	620.09
AM	763+88.32	30.00	620.34	620.38
AN	763+98.32	30.00	620.63	620.66
AO	764+08.32	30.00	620.92	620.94
AP	764+18.32	30.00	621.21	621.21
AQ	764+28.32	30.00	621.50	621.49
℄ Brg. Pier 4	764+38.45	30.00	621.78	621.78
AR	764+48.45	30.00	622.06	622.08
AS	764+58.45	30.00	622.34	622.39
AT	764+68.45	30.00	622.62	622.70
AU	764+78.45	30.00	622.89	623.00
AV	764+88.45	30.00	623.16	623.30
AW	764+98.45	30.00	623.42	623.59
AX	765+08.45	30.00	623.69	623.86
AY	765+18.45	30.00	623.95	624.11
AZ	765+28.45	30.00	624.21	624.35
BA	765+38.45	30.00	624.47	624.57
BB	765+48.45	30.00	624.72	624.77
℄ Brg. E. Abut.	765+58.45	30.00	624.97	624.97
Bk. E. Abut.	765+62.37	30.00	625.07	625.07

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+94.27	28.00	608.21	608.21
℄ Brg. W. Abut.	759+97.55	28.00	608.31	608.31
A	760+07.60	28.00	608.62	608.67
B	760+17.65	28.00	608.94	609.03
C	760+27.70	28.00	609.25	609.39
D	760+37.75	28.00	609.56	609.72
E	760+47.80	28.00	609.87	610.05
F	760+57.85	28.00	610.18	610.36
G	760+67.90	28.00	610.50	610.65
H	760+77.95	28.00	610.81	610.94
I	760+88.00	28.00	611.12	611.22
J	760+98.05	28.00	611.43	611.49
K	761+08.10	28.00	611.75	611.77
℄ Brg. Pier 1	761+18.17	28.00	612.06	612.06
L	761+28.22	28.00	612.37	612.36
M	761+38.27	28.00	612.68	612.67
N	761+48.32	28.00	613.00	612.99
O	761+58.37	28.00	613.31	613.30
P	761+68.42	28.00	613.62	613.62
Q	761+78.47	28.00	613.93	613.93
R	761+88.52	28.00	614.24	614.25
S	761+98.57	28.00	614.56	614.56
T	762+08.62	28.00	614.87	614.87
℄ Brg. Pier 2	762+21.16	28.00	615.26	615.26
W	762+31.22	28.00	615.57	615.58
X	762+41.28	28.00	615.88	615.91
Y	762+51.33	28.00	616.20	616.23
Z	762+61.39	28.00	616.50	616.54
AA	762+71.44	28.00	616.81	616.85
AB	762+81.50	28.00	617.12	617.15
AC	762+91.55	28.00	617.43	617.46
AD	763+01.61	28.00	617.75	617.76
AE	763+11.66	28.00	618.06	618.07
℄ Brg. Pier 3	763+19.25	28.00	618.30	618.30
AG	763+29.32	28.00	618.61	618.62
AH	763+39.40	28.00	618.92	618.94
AI	763+49.47	28.00	619.23	619.26
AJ	763+59.54	28.00	619.53	619.57
AK	763+69.61	28.00	619.83	619.88
AL	763+79.66	28.00	620.13	620.18
AM	763+89.67	28.00	620.42	620.46
AN	763+99.67	28.00	620.71	620.74
AO	764+09.67	28.00	621.00	621.02
AP	764+19.67	28.00	621.28	621.29
AQ	764+29.67	28.00	621.57	621.56
℄ Brg. Pier 4	764+39.80	28.00	621.85	621.85
AR	764+49.80	28.00	622.13	622.15
AS	764+59.80	28.00	622.40	622.45
AT	764+69.80	28.00	622.68	622.76
AU	764+79.80	28.00	622.95	623.06
AV	764+89.80	28.00	623.21	623.35
AW	764+99.80	28.00	623.48	623.64
AX	765+09.80	28.00	623.74	623.90
AY	765+19.80	28.00	624.00	624.15
AZ	765+29.80	28.00	624.25	624.39
BA	765+39.80	28.00	624.51	624.61
BB	765+49.80	28.00	624.76	624.81
℄ Brg. E. Abut.	765+59.80	28.00	625.01	625.01
Bk. E. Abut.	765+63.72	28.00	625.10	625.10

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+93.59	21.71	608.40	608.40
℄ Brg. W. Abut.	759+96.87	21.71	608.50	608.49
A	760+06.91	21.71	608.81	608.86
B	760+16.95	21.71	609.12	609.23
C	760+26.99	21.71	609.43	609.58
D	760+37.03	21.71	609.75	609.92
E	760+47.06	21.71	610.06	610.25
F	760+57.10	21.71	610.37	610.56
G	760+67.14	21.71	610.68	610.85
H	760+77.18	21.71	610.99	611.13
I	760+87.22	21.71	611.30	611.41
J	760+97.26	21.71	611.62	611.68
K	761+07.30	21.71	611.93	611.96
℄ Brg. Pier 1	761+17.35	21.71	612.24	612.24
L	761+27.39	21.71	612.55	612.54
M	761+37.43	21.71	612.86	612.85
N	761+47.47	21.71	613.18	613.17
O	761+57.51	21.71	613.49	613.49
P	761+67.54	21.71	613.80	613.81
Q	761+77.58	21.71	614.11	614.12
R	761+87.62	21.71	614.42	614.43
S	761+97.66	21.71	614.74	614.74
T	762+07.70	21.71	615.05	615.05
U	762+17.74	21.71	615.36	615.36
℄ Brg. Pier 2	762+23.41	21.71	615.54	615.54
W	762+33.46	21.71	615.85	615.86
X	762+43.50	21.71	616.16	616.18
Y	762+53.54	21.71	616.47	616.51
Z	762+63.58	21.71	616.78	616.82
AA	762+73.63	21.71	617.08	617.13
AB	762+83.67	21.71	617.39	617.43
AC	762+93.71	21.71	617.70	617.73
AD	763+03.75	21.71	618.01	618.03
AE	763+13.80	21.71	618.32	618.32
℄ Brg. Pier 3	763+23.61	21.71	618.61	618.61
AG	763+33.67	21.71	618.92	618.92
AH	763+43.72	21.71	619.22	619.24
AI	763+53.78	21.71	619.51	619.55
AJ	763+63.83	21.71	619.81	619.85
AK	763+73.88	21.71	620.10	620.15
AL	763+83.91	21.71	620.39	620.44
AM	763+93.91	21.71	620.67	620.72
AN	764+03.91	21.71	620.95	620.99
AO	764+13.91	21.71	621.23	621.25
AP	764+23.91	21.71	621.51	621.51
AQ	764+33.91	21.71	621.79	621.78
℄ Brg. Pier 4	764+44.04	21.71	622.06	622.06
AR	764+54.04	21.71	622.33	622.35
AS	764+64.04	21.71	622.60	622.65
AT	764+74.04	21.71	622.86	622.95
AU	764+84.04	21.71	623.12	623.24
AV	764+94.04	21.71	623.38	623.53
AW	765+04.04	21.71	623.64	623.81
AX	765+14.04	21.71	623.89	624.07
AY	765+24.04	21.71	624.14	624.31
AZ	765+34.04	21.71	624.39	624.53
BA	765+44.04	21.71	624.63	624.74
BB	765+54.04	21.71	624.88	624.93
℄ Brg. E. Abut.	765+64.04	21.71	625.12	625.12
Bk. E. Abut.	765+67.96	21.71	625.21	625.21

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+92.91	15.42	608.58	608.58
℄ Brg. W. Abut.	759+96.19	15.42	608.68	608.68
A	760+06.22	15.42	609.00	609.05
B	760+16.25	15.42	609.31	609.42
C	760+26.27	15.42	609.62	609.78
D	760+36.30	15.42	609.93	610.12
E	760+46.33	15.42	610.24	610.44
F	760+56.36	15.42	610.55	610.75
G	760+66.38	15.42	610.86	611.04
H	760+76.41	15.42	611.18	611.32
I	760+86.44	15.42	611.49	611.60
J	760+96.46	15.42	611.80	611.87
K	761+06.49	15.42	612.11	612.14
℄ Brg. Pier 1	761+16.53	15.42	612.42	612.42
L	761+26.56	15.42	612.73	612.72
M	761+36.59	15.42	613.05	613.04
N	761+46.62	15.42	613.36	613.35
O	761+56.64	15.42	613.67	613.67
P	761+66.67	15.42	613.98	613.99
Q	761+76.70	15.42	614.29	614.31
R	761+86.73	15.42	614.60	614.62
S	761+96.76	15.42	614.92	614.93
T	762+06.78	15.42	615.23	615.23
U	762+16.81	15.42	615.54	615.54
℄ Brg. Pier 2	762+25.66	15.42	615.81	615.81
W	762+55.75	15.42	616.74	616.75
X	762+65.78	15.42	617.05	617.08
Y	762+75.81	15.42	617.36	617.40
Z	762+85.84	15.42	617.66	617.71
AA	762+95.87	15.42	617.97	618.02
AB	763+05.90	15.42	618.27	618.32
AC	763+15.93	15.42	618.57	618.60
AD	763+25.96	15.42	618.86	618.89
AE	763+27.96	15.42	618.92	618.93
℄ Brg. Pier 3	763+33.41	15.42	619.08	619.08
AG	763+38.00	15.42	619.21	619.22
AH	763+48.03	15.42	619.51	619.53
AI	763+58.07	15.42	619.79	619.83
AJ	763+68.11	15.42	620.08	620.13
AK	763+78.15	15.42	620.36	620.42
AL	763+88.16	15.42	620.64	620.70
AM	763+98.16	15.42	620.92	620.96
AN	764+08.16	15.42	621.19	621.22
AO	764+18.16	15.42	621.46	621.48
AP	764+28.16	15.42	621.73	621.73
AQ	764+38.16	15.42	622.00	621.99
℄ Brg. Pier 4	764+48.29	15.42	622.26	622.26
AR	764+58.29	15.42	622.52	622.55
AS	764+68.29	15.42	622.78	622.84
AT	764+78.29	15.42	623.04	623.13
AU	764+88.29	15.42	623.29	623.42
AV	764+98.29	15.42	623.54	623.71
AW	765+08.29	15.42	623.79	623.98
AX	765+18.29	15.42	624.03	624.23
AY	765+28.29	15.42	624.27	624.46
AZ	765+38.29	15.42	624.51	624.67
BA	765+48.29	15.42	624.75	624.87
BB	765+58.29	15.42	624.99	625.05
℄ Brg. E. Abut.	765+68.29	15.42	625.22	625.22
Bk. E. Abut.	765+72.21	15.42	625.31	625.31

EB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+92.71	13.50	608.64	608.64
℄ Brg. W. Abut.	759+95.98	13.50	608.74	608.74
A	760+06.01	13.50	609.05	609.11
B	760+16.03	13.50	609.36	609.48
C	760+26.06	13.50	609.68	609.83
D	760+36.08	13.50	609.99	610.17
E	760+46.10	13.50	610.30	610.50
F	760+56.13	13.50	610.61	610.81
G	760+66.15	13.50	610.92	611.10
H	760+76.18	13.50	611.23	611.38
I	760+86.20	13.50	611.54	611.65
J	760+96.22	13.50	611.86	611.92
K	761+06.25	13.50	612.17	612.20
℄ Brg. Pier 1	761+16.29	13.50	612.48	612.48
L	761+26.31	13.50	612.79	612.78
M	761+36.34	13.50	613.10	613.09
N	761+46.36	13.50	613.41	613.41
O	761+56.38	13.50	613.72	613.73
P	761+66.41	13.50	614.04	614.05
Q	761+76.43	13.50	614.35	614.36
R	761+86.46	13.50	614.66	614.67
S	761+96.48	13.50	614.97	614.98
T	762+06.50	13.50	615.28	615.29
U	762+16.53	13.50	615.59	615.59
℄ Brg. Pier 2	762+26.34	13.50	615.90	615.90
W	762+36.36	13.50	616.21	616.22
X	762+46.39	13.50	616.52	616.55
Y	762+56.42	13.50	616.82	616.86
Z	762+66.44	13.50	617.13	617.18
AA	762+76.47	13.50	617.44	617.49
AB	762+86.50	13.50	617.75	617.79
AC	762+96.52	13.50	618.05	618.09
AD	763+06.55	13.50	618.35	618.37
AE	763+16.58	13.50	618.64	618.65
℄ Brg. Pier 3	763+29.28	13.50	619.01	619.01
AG	763+39.31	13.50	619.30	619.31
AH	763+49.35	13.50	619.59	619.61
AI	763+59.38	13.50	619.88	619.91
AJ	763+69.42	13.50	620.16	620.21
AK	763+79.45	13.50	620.44	620.50
AL	763+89.45	13.50	620.72	620.77
AM	763+99.45	13.50	620.99	621.04
AN	764+09.45	13.50	621.26	621.29
AO	764+19.45	13.50	621.53	621.55
AP	764+29.45	13.50	621.80	621.80
AQ	764+39.45	13.50	622.06	622.06
℄ Brg. Pier 4	764+49.58	13.50	622.32	622.32
AR	764+59.58	13.50	622.58	622.60
AS	764+69.58	13.50	622.84	622.89
AT	764+79.58	13.50	623.09	623.18
AU	764+89.58	13.50	623.34	623.47
AV	764+99.58	13.50	623.59	623.75
AW	765+09.58	13.50	623.83	624.02
AX	765+19.58	13.50	624.08	624.27
AY	765+29.58	13.50	624.31	624.50
AZ	765+39.58	13.50	624.55	624.71
BA	765+49.58	13.50	624.79	624.90
BB	765+59.58	13.50	625.02	625.08
℄ Brg. E. Abut.	765+69.58	13.50	625.25	625.25
Bk. E. Abut.	765+73.50	13.50	625.34	625.34

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS IV
STRUCTURE NO. 099-0904
SHEET NO. 15 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	365
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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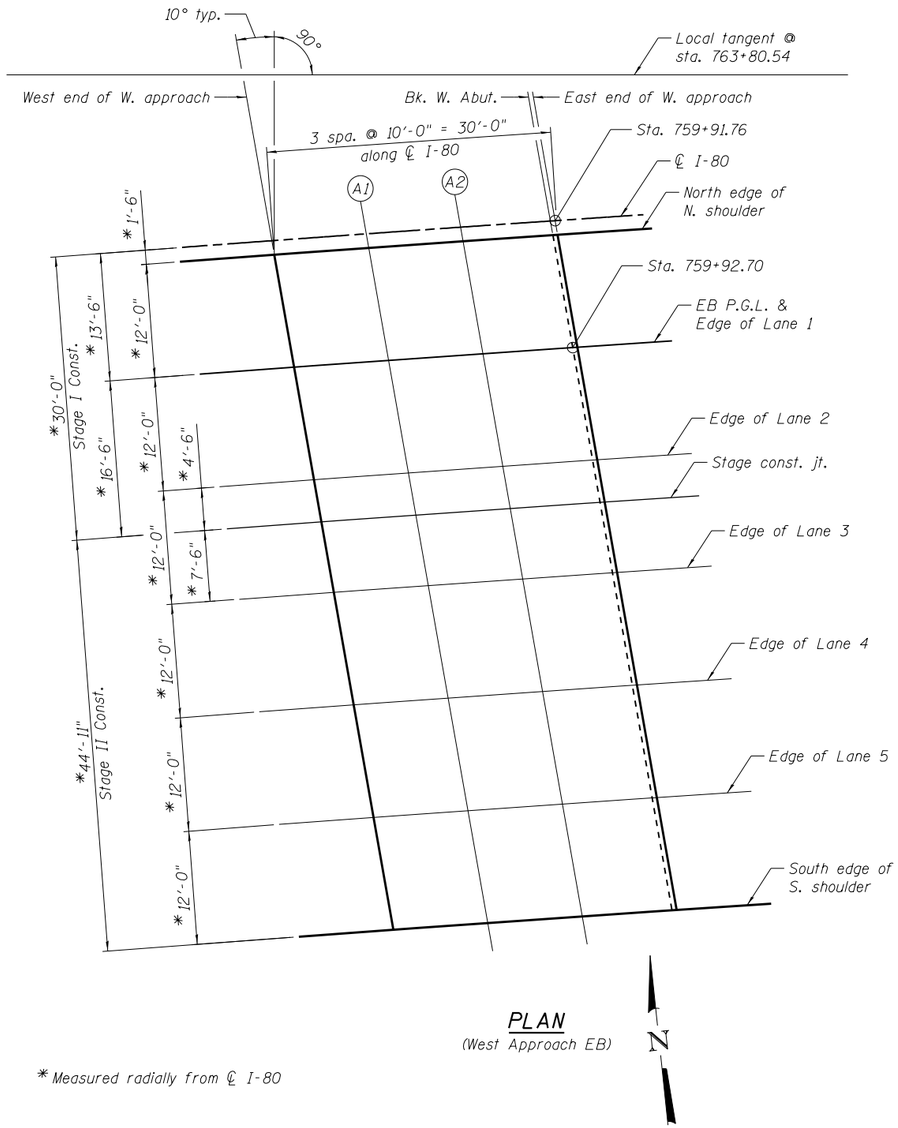
GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+92.24	9.13	608.77	608.77
℄ Brg. W. Abut.	759+95.51	9.13	608.87	608.87
A	760+05.53	9.13	609.18	609.24
B	760+15.54	9.13	609.49	609.60
C	760+25.56	9.13	609.80	609.96
D	760+35.58	9.13	610.12	610.30
E	760+45.59	9.13	610.43	610.62
F	760+55.61	9.13	610.74	610.93
G	760+65.63	9.13	611.05	611.22
H	760+75.64	9.13	611.36	611.50
I	760+85.66	9.13	611.67	611.78
J	760+95.67	9.13	611.98	612.05
K	761+05.69	9.13	612.29	612.32
℄ Brg. Pier 1	761+15.72	9.13	612.61	612.61
L	761+25.74	9.13	612.92	612.91
M	761+35.75	9.13	613.23	613.22
N	761+45.77	9.13	613.54	613.54
O	761+55.79	9.13	613.85	613.86
P	761+65.80	9.13	614.16	614.17
Q	761+75.82	9.13	614.47	614.49
R	761+85.84	9.13	614.78	614.80
S	761+95.85	9.13	615.10	615.11
T	762+05.87	9.13	615.41	615.41
U	762+15.88	9.13	615.72	615.72
V	762+25.90	9.13	616.03	616.03
℄ Brg. Pier 2	762+27.89	9.13	616.09	616.09
W	762+37.91	9.13	616.40	616.41
X	762+47.93	9.13	616.71	616.74
Y	762+57.95	9.13	617.02	617.06
Z	762+67.97	9.13	617.33	617.38
AA	762+77.98	9.13	617.63	617.69
AB	762+88.00	9.13	617.93	617.99
AC	762+98.02	9.13	618.23	618.27
AD	763+08.04	9.13	618.52	618.55
AE	763+18.05	9.13	618.81	618.82
AF	763+28.07	9.13	619.10	619.10
℄ Brg. Pier 3	763+32.29	9.13	619.22	619.22
AG	763+42.31	9.13	619.51	619.51
AH	763+52.34	9.13	619.79	619.81
AI	763+62.36	9.13	620.07	620.10
AJ	763+72.38	9.13	620.34	620.39
AK	763+82.40	9.13	620.62	620.67
AL	763+92.40	9.13	620.89	620.94
AM	764+02.40	9.13	621.16	621.20
AN	764+12.40	9.13	621.42	621.45
AO	764+22.40	9.13	621.68	621.70
AP	764+32.40	9.13	621.94	621.94
AQ	764+42.40	9.13	622.20	622.19
℄ Brg. Pier 4	764+52.53	9.13	622.46	622.46
AR	764+62.53	9.13	622.71	622.73
AS	764+72.53	9.13	622.96	623.02
AT	764+82.53	9.13	623.21	623.31
AU	764+92.53	9.13	623.45	623.59
AV	765+02.53	9.13	623.69	623.86
AW	765+12.53	9.13	623.93	624.13
AX	765+22.53	9.13	624.17	624.36
AY	765+32.53	9.13	624.40	624.59
AZ	765+42.53	9.13	624.63	624.79
BA	765+52.53	9.13	624.86	624.98
BB	765+62.53	9.13	625.09	625.15
℄ Brg. E. Abut.	765+72.53	9.13	625.31	625.31
Bk. E. Abut.	765+76.45	9.13	625.40	625.40

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	759+91.56	2.83	608.96	608.96
℄ Brg. W. Abut.	759+94.83	2.83	609.06	609.05
A	760+04.84	2.83	609.37	609.43
B	760+14.84	2.83	609.68	609.80
C	760+24.85	2.83	609.99	610.15
D	760+34.85	2.83	610.30	610.50
E	760+44.86	2.83	610.61	610.82
F	760+54.86	2.83	610.92	611.13
G	760+64.87	2.83	611.23	611.42
H	760+74.87	2.83	611.54	611.70
I	760+84.88	2.83	611.86	611.97
J	760+94.88	2.83	612.17	612.23
K	761+04.89	2.83	612.48	612.51
℄ Brg. Pier 1	761+14.91	2.83	612.79	612.79
L	761+24.91	2.83	613.10	613.09
M	761+34.92	2.83	613.41	613.40
N	761+44.93	2.83	613.72	613.72
O	761+54.93	2.83	614.03	614.04
P	761+64.94	2.83	614.34	614.36
Q	761+74.94	2.83	614.65	614.68
R	761+84.95	2.83	614.96	614.99
S	761+94.95	2.83	615.27	615.29
T	762+04.96	2.83	615.59	615.60
U	762+14.96	2.83	615.90	615.90
V	762+24.97	2.83	616.21	616.21
℄ Brg. Pier 2	762+30.13	2.83	616.37	616.37
W	762+40.13	2.83	616.68	616.69
X	762+50.14	2.83	616.99	617.02
Y	762+60.14	2.83	617.29	617.34
Z	762+70.15	2.83	617.60	617.66
AA	762+80.15	2.83	617.91	617.97
AB	762+90.16	2.83	618.20	618.26
AC	763+00.17	2.83	618.49	618.54
AD	763+10.17	2.83	618.77	618.81
AE	763+20.18	2.83	619.06	619.07
AF	763+30.18	2.83	619.34	619.34
℄ Brg. Pier 3	763+36.61	2.83	619.51	619.51
AG	763+46.62	2.83	619.79	619.80
AH	763+56.63	2.83	620.06	620.09
AI	763+66.63	2.83	620.33	620.37
AJ	763+76.64	2.83	620.60	620.65
AK	763+86.64	2.83	620.87	620.92
AL	763+96.64	2.83	621.13	621.18
AM	764+06.64	2.83	621.39	621.39
AN	764+16.64	2.83	621.64	621.67
AO	764+26.64	2.83	621.90	621.91
AP	764+36.64	2.83	622.15	622.15
AQ	764+46.64	2.83	622.40	622.39
℄ Brg. Pier 4	764+56.77	2.83	622.65	622.65
AR	764+66.77	2.83	622.89	622.92
AS	764+76.77	2.83	623.13	623.20
AT	764+86.77	2.83	623.37	623.48
AU	764+96.77	2.83	623.61	623.76
AV	765+06.77	2.83	623.84	624.02
AW	765+16.77	2.83	624.07	624.28
AX	765+26.77	2.83	624.30	624.51
AY	765+36.77	2.83	624.53	624.72
AZ	765+46.77	2.83	624.75	624.91
BA	765+56.77	2.83	624.97	625.09
BB	765+66.77	2.83	625.19	625.25
℄ Brg. E. Abut.	765+76.77	2.83	625.40	625.40
Bk. E. Abut.	765+80.69	2.83	625.48	625.48



PLAN
(West Approach EB)

*Measured radially from ℄ I-80

NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+61.91	1.50	608.08
A1	759+71.91	1.50	608.39
A2	759+81.92	1.50	608.70
E. End W. Appr.	759+91.92	1.50	609.01

EB P.G.L. & EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+63.14	13.50	607.72
A1	759+73.16	13.50	608.03
A2	759+83.18	13.50	608.34
E. End W. Appr.	759+93.21	13.50	608.65

EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+64.36	25.50	607.36
A1	759+74.41	25.50	607.67
A2	759+84.45	25.50	607.99
E. End W. Appr.	759+94.50	25.50	608.30

STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+64.83	30.00	607.23
A1	759+74.88	30.00	607.54
A2	759+84.93	30.00	607.85
E. End W. Appr.	759+94.98	30.00	608.17

EDGE OF LANE 3

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+65.60	37.50	607.00
A1	759+75.66	37.50	607.32
A2	759+85.73	37.50	607.63
E. End W. Appr.	759+95.80	37.50	607.94

EDGE OF LANE 4

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+66.84	49.50	606.65
A1	759+76.92	49.50	606.96
A2	759+87.01	49.50	607.27
E. End W. Appr.	759+97.10	49.50	607.59

EDGE OF LANE 5

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+68.08	61.50	606.29
A1	759+78.19	61.50	606.60
A2	759+88.30	61.50	606.92
E. End W. Appr.	759+98.41	61.50	607.23

SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr.	759+69.33	73.50	605.93
A1	759+79.46	73.50	606.25
A2	759+89.59	73.50	606.56
E. End W. Appr.	759+99.72	73.50	606.88

HBP Illinois Partners

USER NAME = default	DESIGNED - JGC	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-0904
SHEET NO. 17 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	367
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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NORTH EDGE OF N. SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+80.99	1.50	625.49
A3	765+90.99	1.50	625.70
A4	766+00.99	1.50	625.91
E. End E. Appr.	766+10.99	1.50	626.11

EB P.G.L. & EDGE OF LANE 1

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+72.90	13.50	625.32
A3	765+82.90	13.50	625.55
A4	765+92.90	13.50	625.77
E. End E. Appr.	766+02.90	13.50	625.99

EDGE OF LANE 2

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+64.80	25.50	625.13
A3	765+74.80	25.50	625.37
A4	765+84.80	25.50	625.61
E. End E. Appr.	765+94.80	25.50	625.85

STAGE CONST. JT.

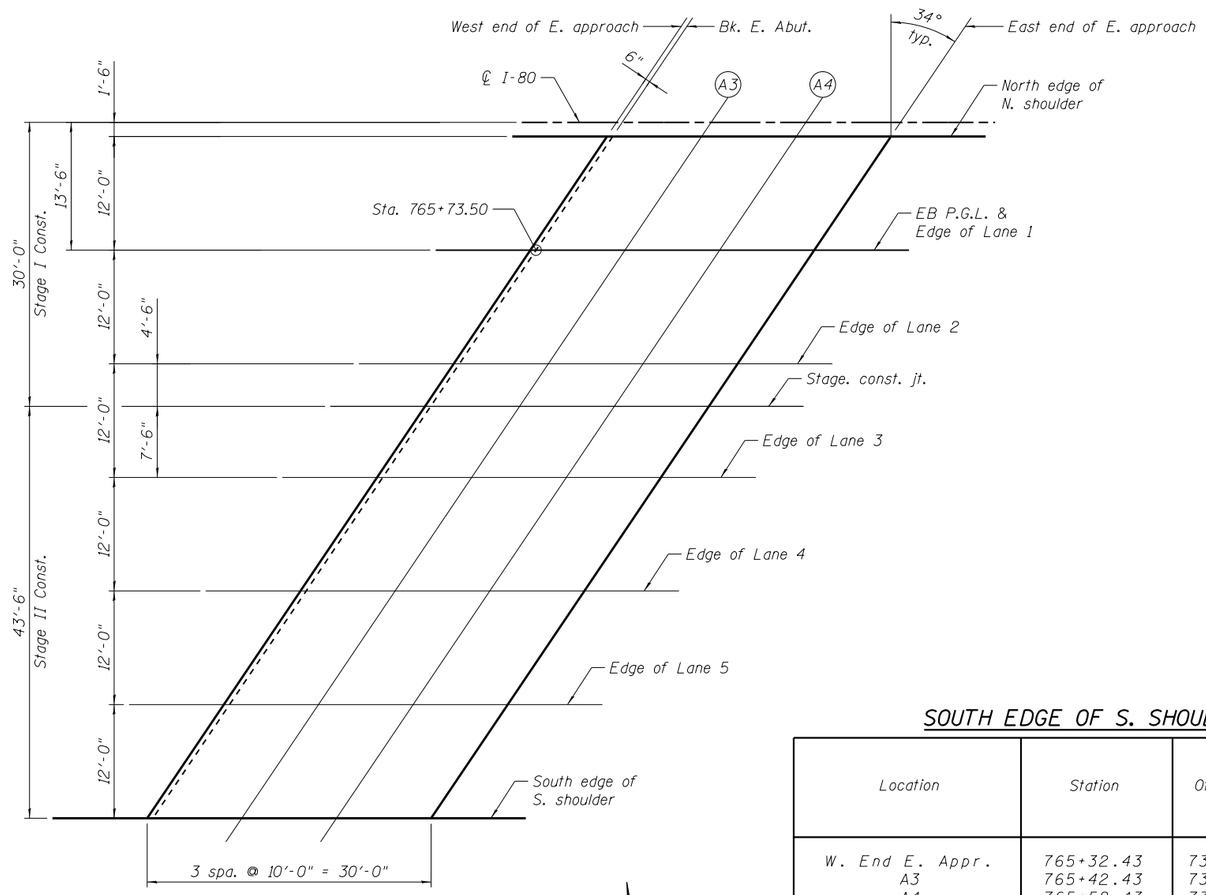
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+61.77	30.00	625.06
A3	765+71.77	30.00	625.30
A4	765+81.77	30.00	625.55
E. End E. Appr.	765+91.77	30.00	625.79

EDGE OF LANE 3

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+56.71	37.50	624.92
A3	765+66.71	37.50	625.18
A4	765+76.71	37.50	625.43
E. End E. Appr.	765+86.71	37.50	625.68

EDGE OF LANE 4

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+48.61	49.50	624.68
A3	765+58.61	49.50	624.95
A4	765+68.61	49.50	625.22
E. End E. Appr.	765+78.61	49.50	625.49



PLAN
(East Approach EB)

N

SOUTH EDGE OF S. SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+32.43	73.50	624.13
A3	765+42.43	73.50	624.43
A4	765+52.43	73.50	624.74
E. End E. Appr.	765+62.43	73.50	625.04

EDGE OF LANE 5

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr.	765+40.52	61.50	624.42
A3	765+50.52	61.50	624.71
A4	765+60.52	61.50	624.99
E. End E. Appr.	765+70.52	61.50	625.28

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	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-0904
SHEET NO. 18 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	368
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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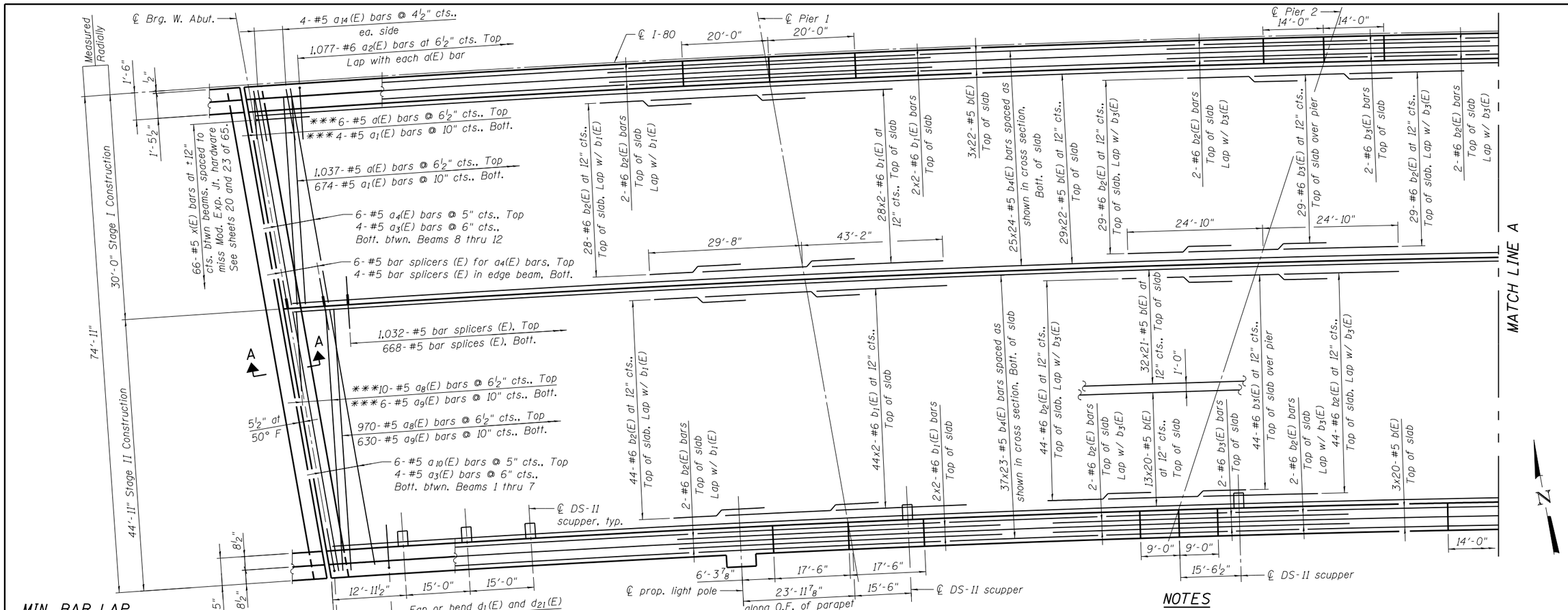


MIN. BAR LAP

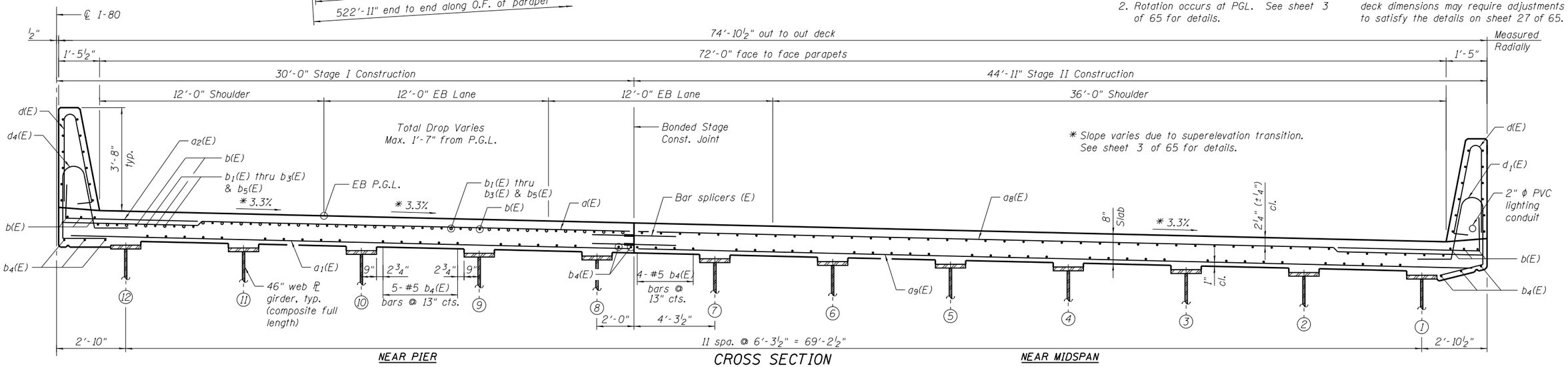
#5 - 3'-3"
#6 - 3'-10"

PLAN

*** Order a(E), a_1(E), a_8(E), and a_9(E) bars full length. Field cut to fit skew.

NOTES

1. See sheet 20 of 65 for superstructure notes and Section A-A.
2. Rotation occurs at PGL. See sheet 3 of 65 for details.
3. Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on sheet 27 of 65.



NEAR PIER — NEAR MIDSPAN

CROSS SECTION

(Looking East)

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

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SUPERSTRUCTURE PLAN & CROSS SECTION
STRUCTURE NO. 099-0904
SHEET NO. 19 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	369
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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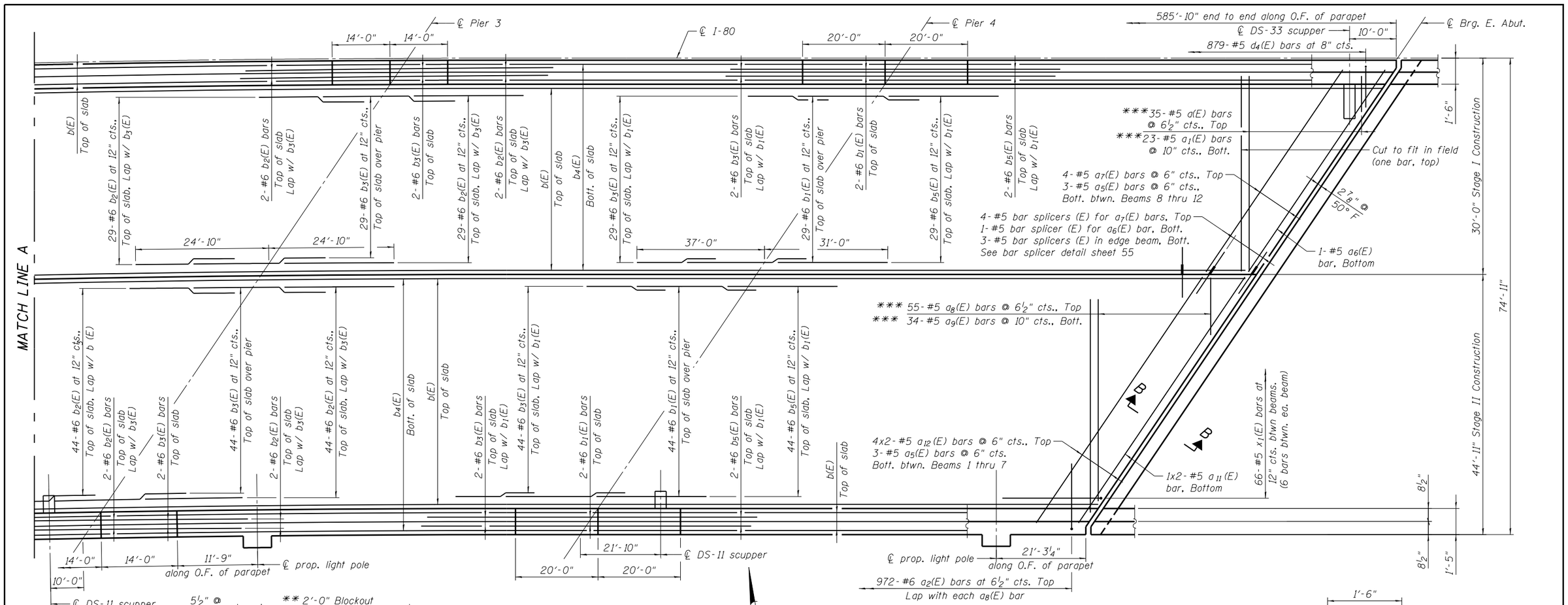
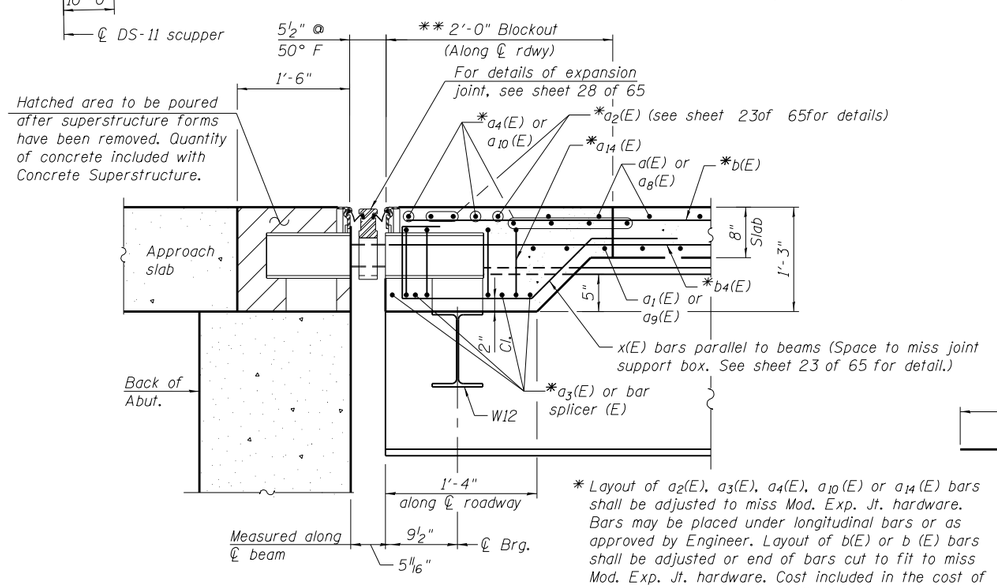




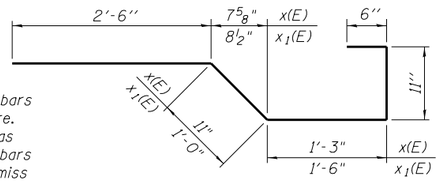
SECTION A-A

* Layout of $a_2(E)$, $a_3(E)$, $a_4(E)$, $a_{10}(E)$ or $a_{14}(E)$ bars shall be adjusted to miss Mod. Exp. Jt. hardware. Bars may be placed under longitudinal bars or as approved by Engineer. Layout of b(E) or b (E) bars shall be adjusted or end of bars cut to fit to miss Mod. Exp. Jt. hardware. Cost included in the cost of Reinforcement Bars, Epoxy Coated. See approved modular joint shop drawings.

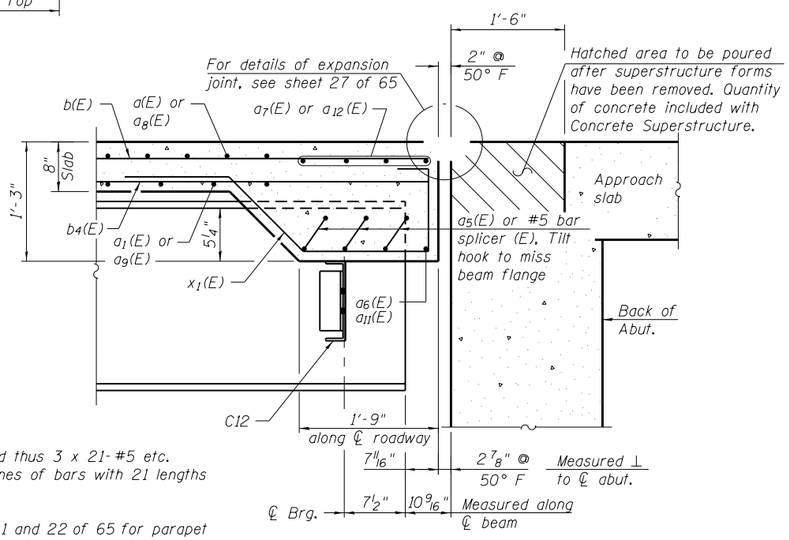
PLAN

** Blockout dimension to be verified by Contractor with joint manufacturer.

*** Order a(E), $a_1(E)$, $a_8(E)$, and $a_9(E)$ bars full length at half the number shown. Cut to fit skew and use remainder of bars in the same level in the same corner. See cutting diagram on sheet 24 of 65.



BAR x(E) & $x_1(E)$



SECTION B-B

NOTES

1. Bars indicated thus 3 x 21-#5 etc. indicates 3 lines of bars with 21 lengths per line.
2. See sheets 21 and 22 of 65 for parapet joint spacing and reinforcement.
3. See sheets 23 and 24 of 65 for Superstructure details and Bill of Material.

HBP Illinois Partners	USER NAME = default	DESIGNED - JGC	REVISED
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	PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
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SUPERSTRUCTURE PLAN & DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 20 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	370
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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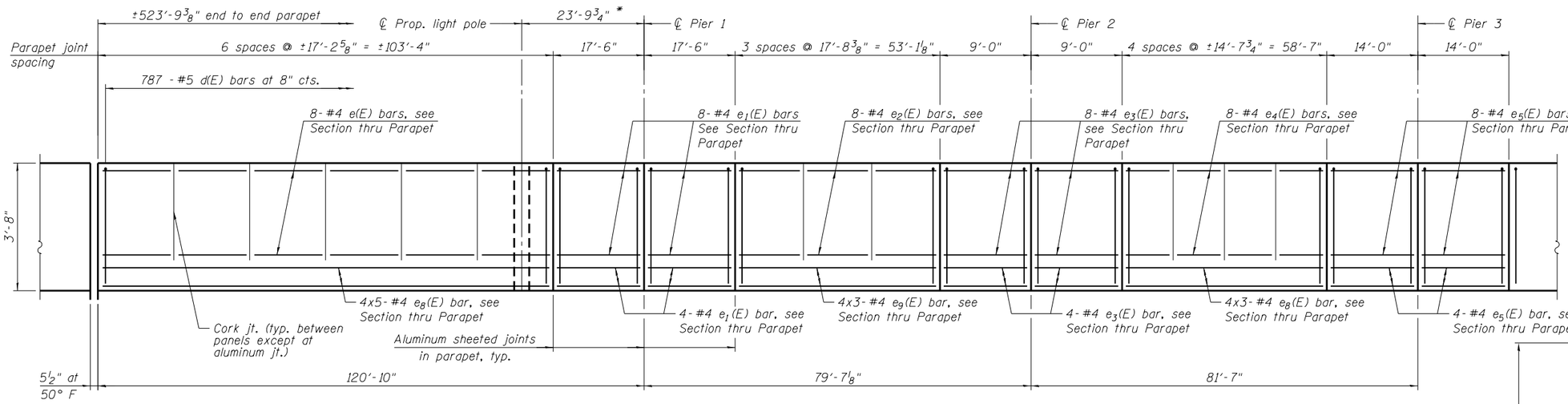
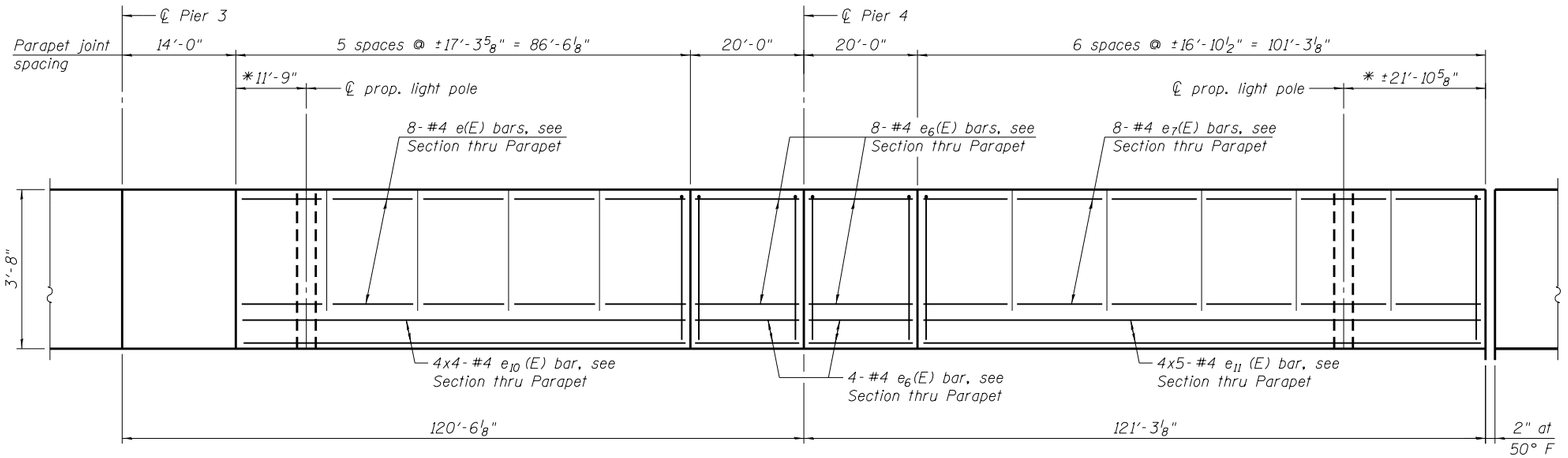
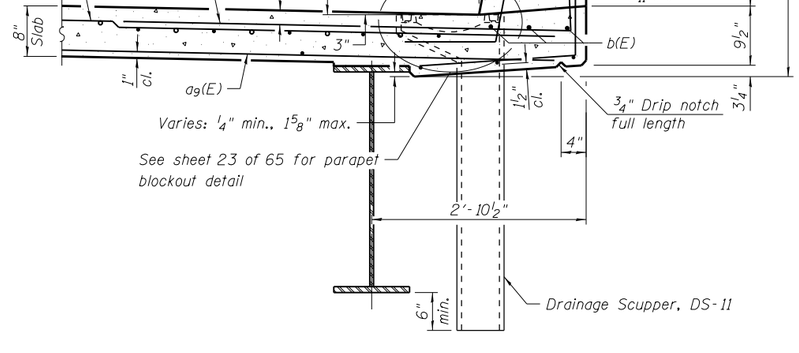


REFLECTED PARTIAL INSIDE ELEVATION OF OUTSIDE PARAPET

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

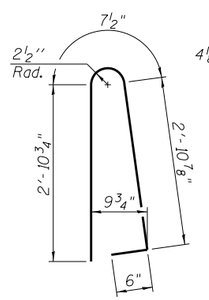
* Measured along inside face of parapet.



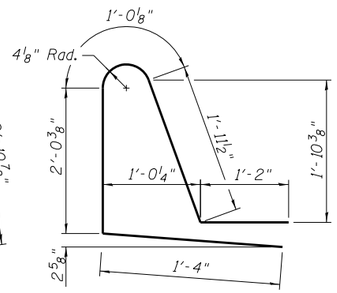


SECTION THRU OUTSIDE PARAPET

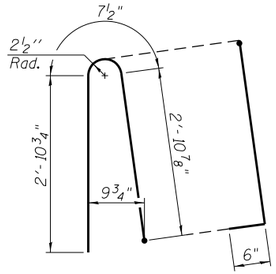
REFLECTED PARTIAL INSIDE ELEVATION OF OUTSIDE PARAPET



BAR d(E)



BAR d_1(E)



ALTERNATE BAR d(E)
(For 44" constant slope parapet when conduit is present)

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

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SUPERSTRUCTURE DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 21 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	371
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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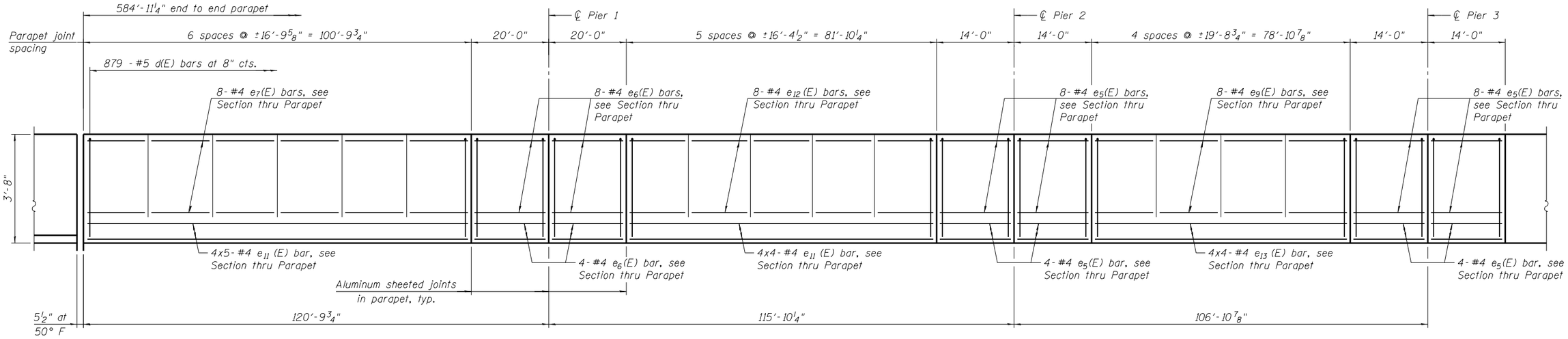
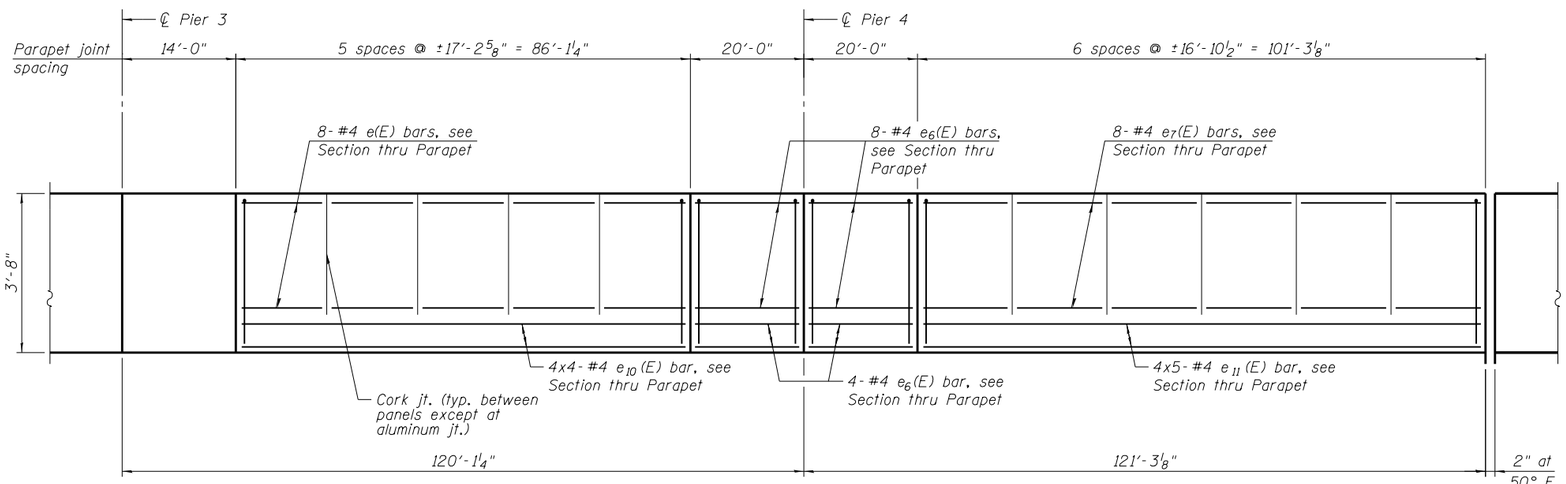


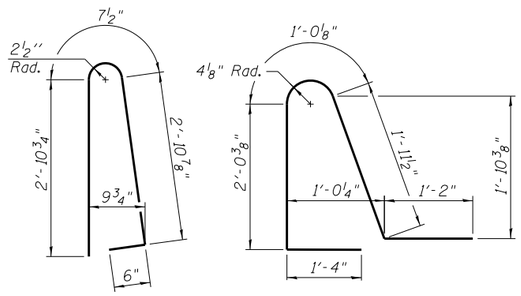
PARTIAL INSIDE ELEVATION OF MEDIAN PARAPET

(Slipforming not allowed)



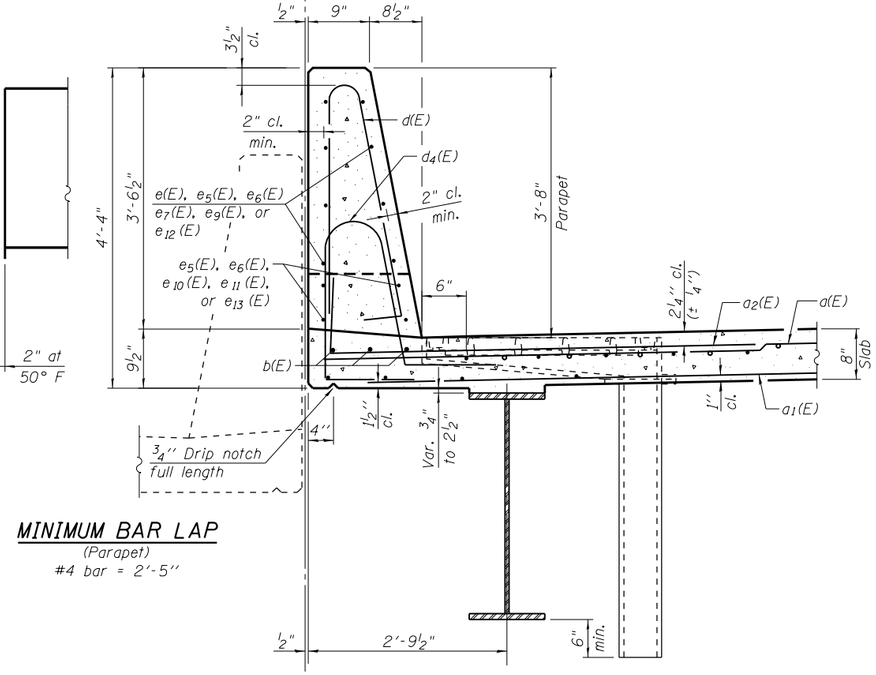
PARTIAL INSIDE ELEVATION OF MEDIAN PARAPET

(Slipforming not allowed)



BAR d(E)

BAR d4(E)



MINIMUM BAR LAP

(Parapet)

#4 bar = 2'-5"

SECTION THRU MEDIAN PARAPET

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS II
STRUCTURE NO. 099-0904

SHEET NO. 22 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	372
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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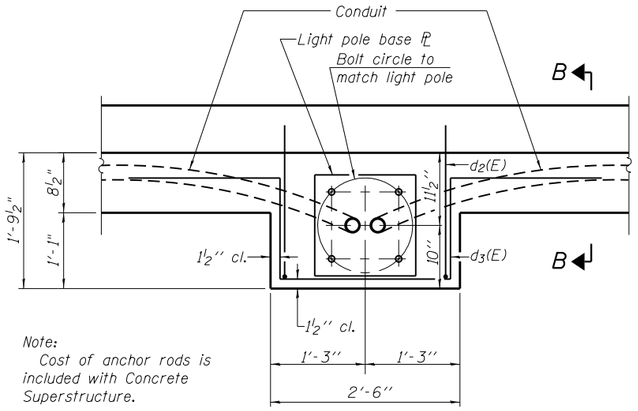
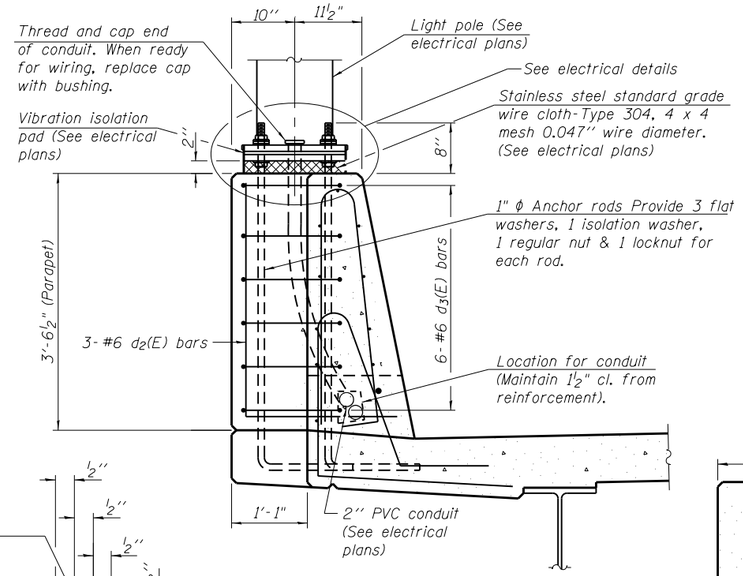
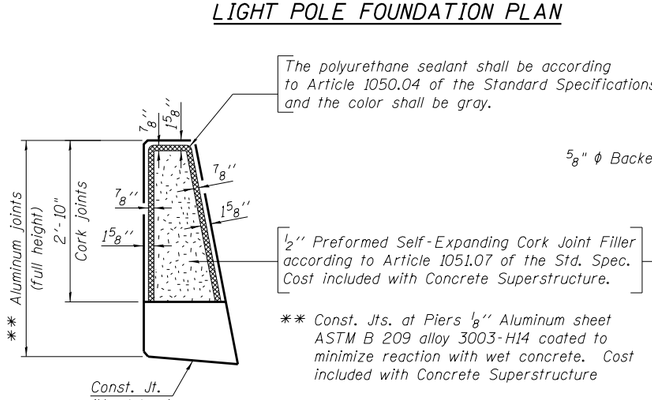


Note:
Cost of anchor rods is included with Concrete Superstructure.

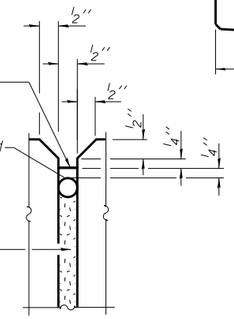
LIGHT POLE FOUNDATION PLAN



SECTION B-B

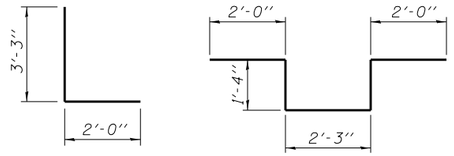


** Const. Jts. at Piers $\frac{1}{8}"$ Aluminum sheet ASTM B 209 alloy 3003-H14 coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure



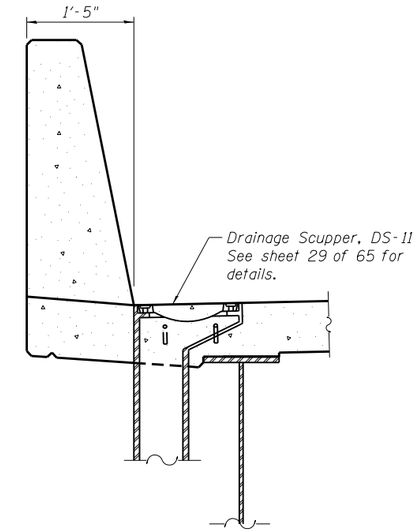
PARAPET JOINT DETAILS

Outside parapet shown, median parapet similar

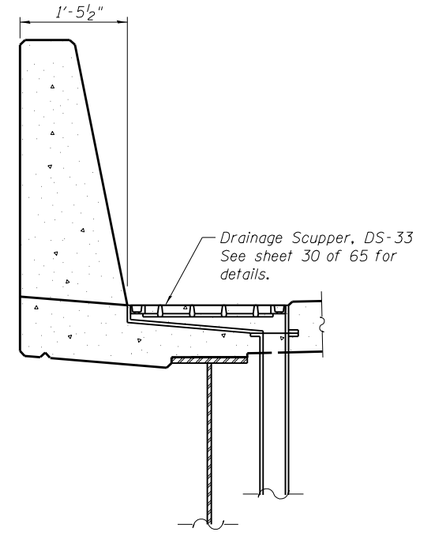


BAR $d_2(E)$

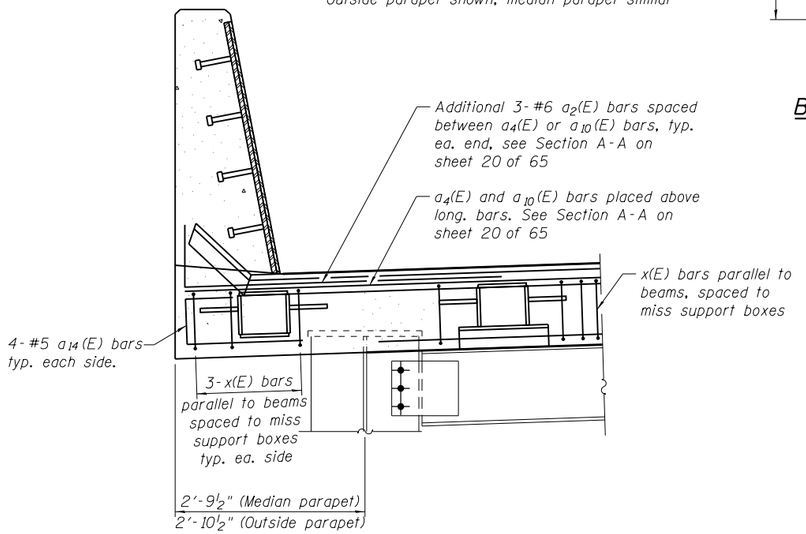
BAR $d_3(E)$



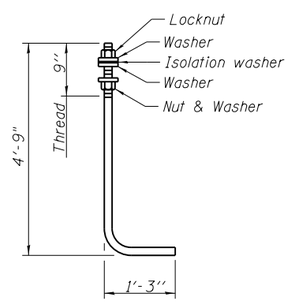
SECTION A-A



SECTION C-C

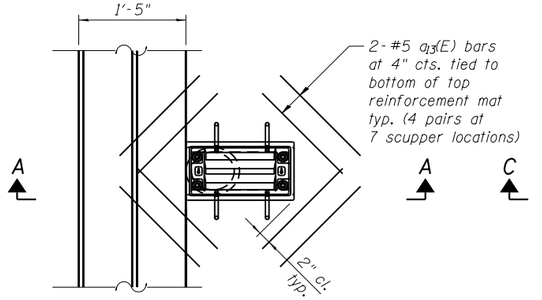


SLAB EDGE TREATMENT AT WEST ABUTMENT EXP. JOINT



ANCHOR ROD

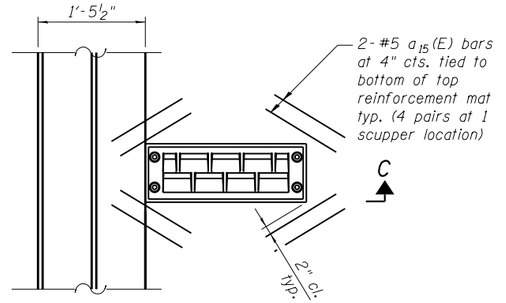
1" Diameter ASTM F 1554 Grade 105
Full length hot dipped galvanized



PLAN

Note: Cut longitudinal reinforcement to clear drainage scuppers. Space transverse bars to miss scupper.

DETAIL AT SCUPPER DS-11



PLAN

Note: Cut longitudinal reinforcement to clear drainage scuppers. Space transverse bars to miss scupper.

DETAIL AT SCUPPER DS-33

USER NAME = default	DESIGNED - JGC	REVISED	
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PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

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SUPERSTRUCTURE DETAILS III
STRUCTURE NO. 099-0904
SHEET NO. 23 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	373
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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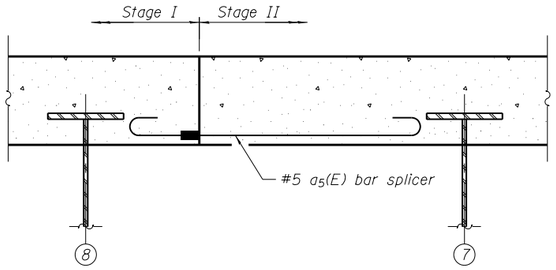
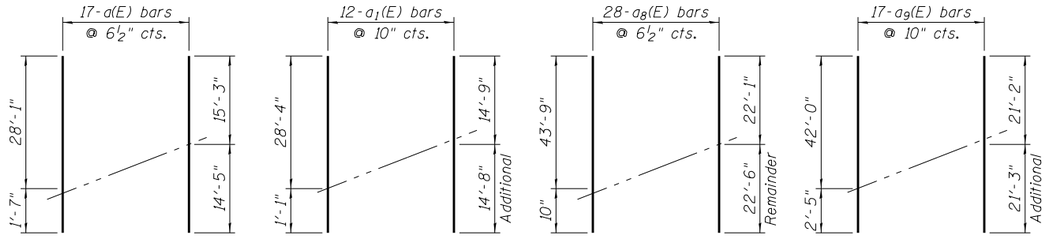


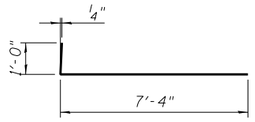
E. ABUT. DIAPHRAGM AT STAGE LINE



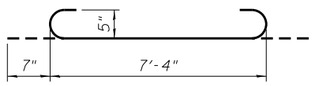
BAR a(E) BAR a1(E) BAR a8(E) BAR a9(E)

BAR CUTTING DIAGRAMS

Order bars full length. Cut as shown, use remainder in same level at same corner. Bar noted as "Additional" is a portion of one bar left over and is not required. Bar shall be disposed of according to Section 501.

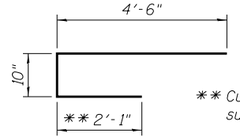


BAR a2(E)



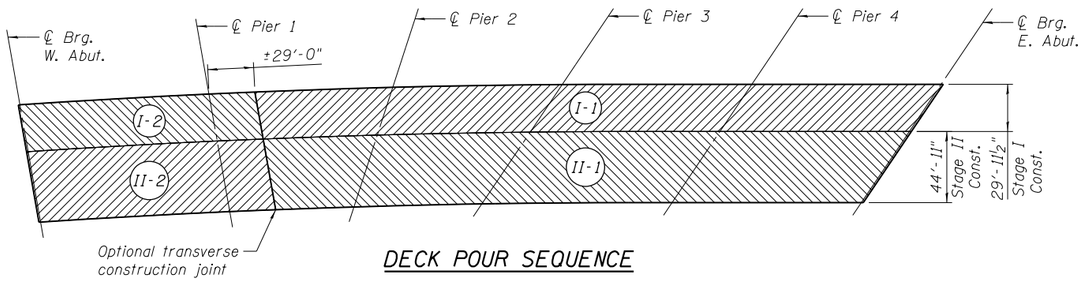
BAR a5(E)

(Order full length & cut to fit between beams 7 & 8. See Bar Splicer Detail sheet 55 of 65.)



BAR a14(E)

** Cut to fit to miss support boxes



DECK POUR SEQUENCE

DECK POUR NOTES

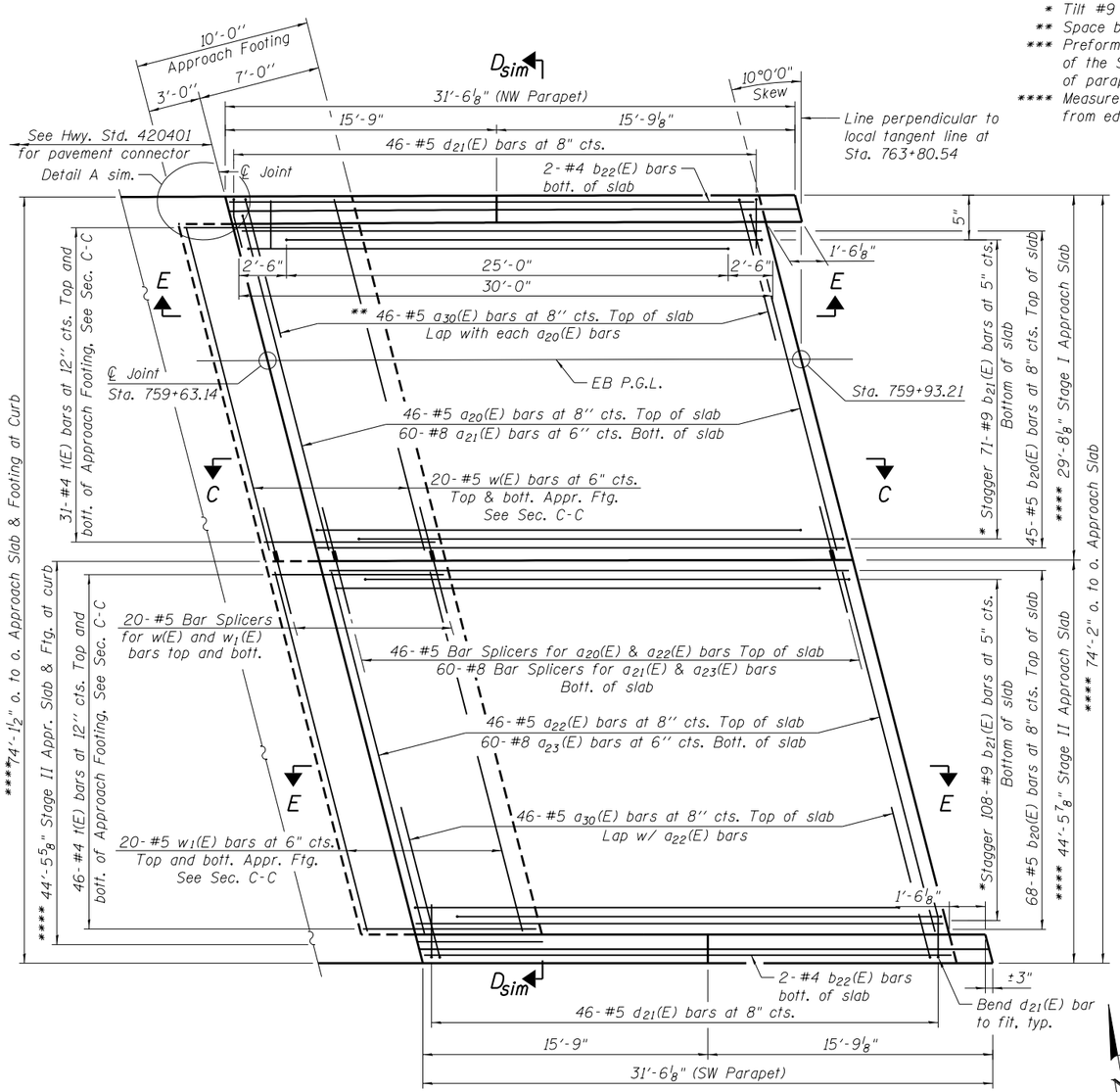
1. When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
   1) At least 72 hours shall have elapsed from the end of the previous pour.
   2) The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4000 psi.

SUPERSTRUCTURE BILL OF MATERIAL

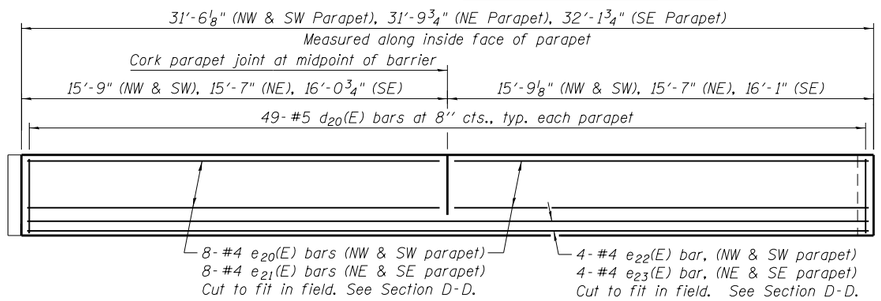
	Bar	No.	Size	Length	Shape
	a(E)	1061	#5	29'-8"	
	a1(E)	690	#5	29'-5"	
	a2(E)	2055	#6	8'-4"	
	a3(E)	40	#5	6'-0"	
	a4(E)	6	#5	30'-0"	
*	a5(E)	33	#5	8'-6"	
	a6(E)	1	#5	35'-8"	
	a7(E)	4	#5	35'-9"	
	a8(E)	1008	#5	44'-7"	
	a9(E)	653	#5	44'-5"	
	a10(E)	6	#5	45'-1"	
	a11(E)	2	#5	28'-8"	
	a12(E)	8	#5	28'-9"	
	a13(E)	56	#5	1'-6"	
	a14(E)	8	#5	7'-5"	
	a15(E)	8	#5	2'-0"	
	b(E)	1696	#5	29'-10"	
	b1(E)	229	#6	32'-0"	
	b2(E)	384	#6	16'-6"	
	b3(E)	231	#6	25'-0"	
	b4(E)	1451	#5	27'-9"	
	b5(E)	77	#6	19'-0"	
	d(E)	1666	#5	6'-11"	
	d1(E)	787	#5	7'-6"	
	d2(E)	9	#6	5'-3"	
	d3(E)	18	#6	8'-11"	
	d4(E)	879	#5	7'-6"	
	e(E)	128	#4	17'-0"	
	e1(E)	24	#4	17'-2"	
	e2(E)	24	#4	17'-5"	
	e3(E)	24	#4	8'-8"	
	e4(E)	32	#4	14'-4"	
	e5(E)	72	#4	13'-8"	
	e6(E)	72	#4	19'-8"	
	e7(E)	144	#4	16'-6"	
	e8(E)	32	#4	22'-8"	
	e9(E)	44	#4	19'-5"	
	e10(E)	32	#4	23'-6"	
	e11(E)	76	#4	22'-4"	
	e12(E)	40	#4	16'-1"	
	e13(E)	16	#4	21'-7"	
	x(E)	72	#5	6'-1"	
	x1(E)	66	#5	6'-5"	
	Reinforcement Bars, Epoxy Coated			Pound	319,940
	Concrete Superstructure			Cu. Yd.	1,284.8
	Bridge Deck Grooving			Sq. Yd.	4,312
	Protective Coat			Sq. Yd.	4,983

* 3-#5 a5(E) bar splicers to be furnished by bar splicer supplier and cost included with Bar Splicers. See sheet 55 of 65 for details.

* Tilt #9 b_{21}(E) bars as required to maintain clearance.
** Space between a_{20}(E) or a_{25}(E) bars, typ. each parapet.
*** Preformed expansion joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.
**** Measured perpendicular to local tangent @ Sta. 763+80.54 from edge of approach slab.

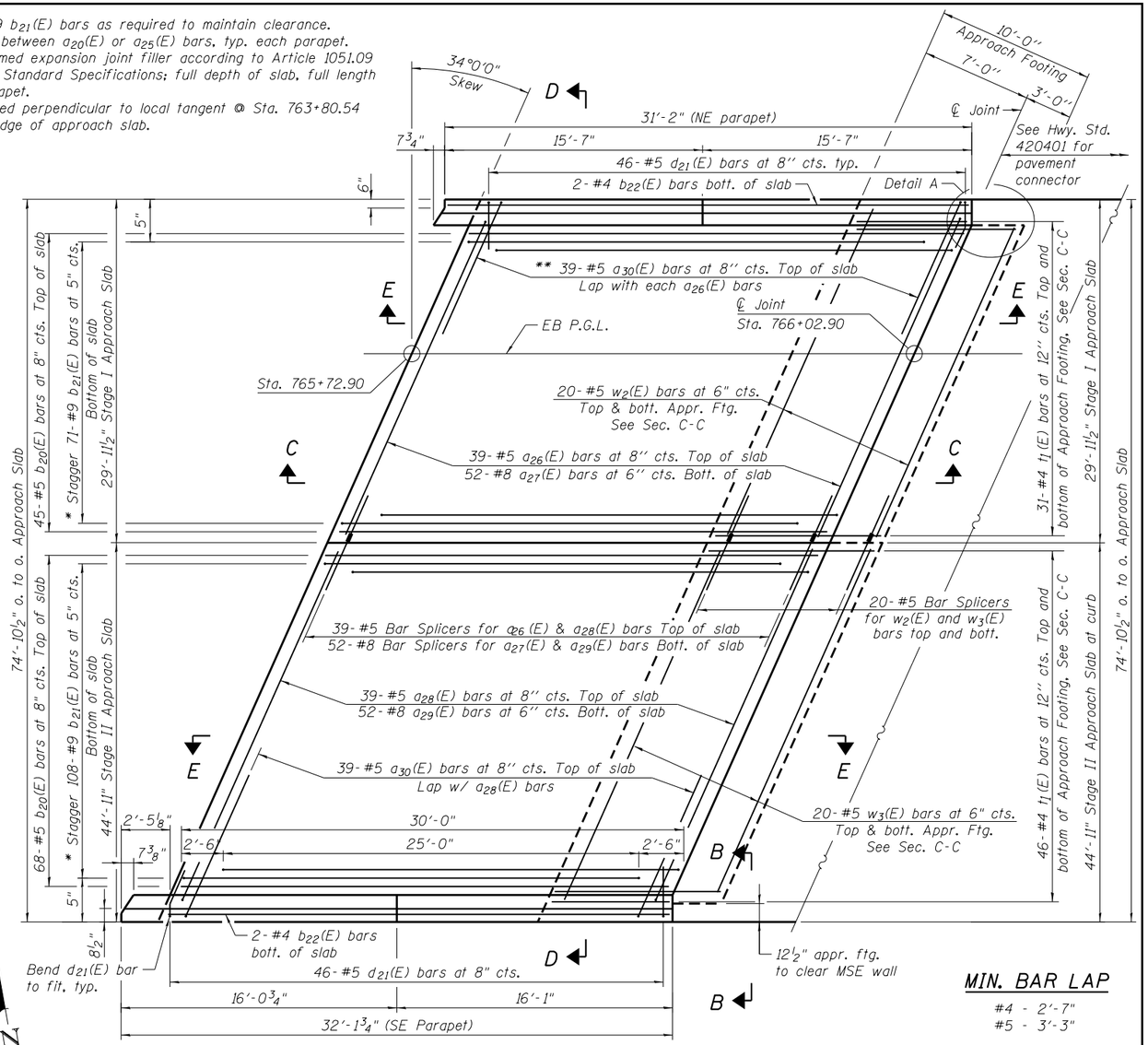


WEST APPROACH PLAN



VIEW E-E

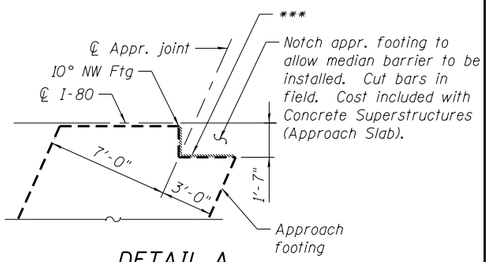
NW parapet shown, NE parapet similar (except as noted)



EAST APPROACH PLAN

MIN. BAR LAP

#4 - 2'-7"
#5 - 3'-3"



DETAIL A

Reinforcement not shown for clarity

Notes:
See sheet 26 of 65 for Sections C-C & D-D, H-H, & I-I, Views B-B & F-F, and additional notes.

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB PLAN
STRUCTURE NO. 099-0904
SHEET NO. 25 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	375
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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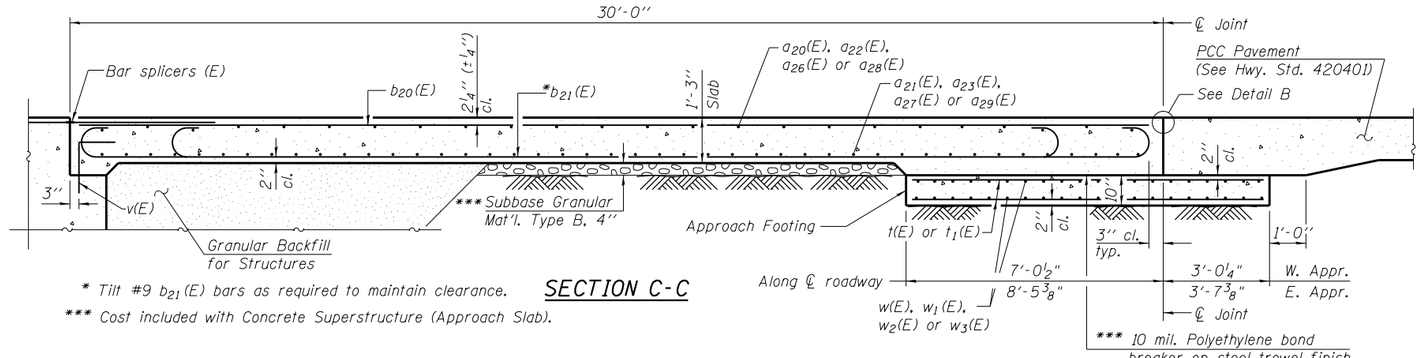
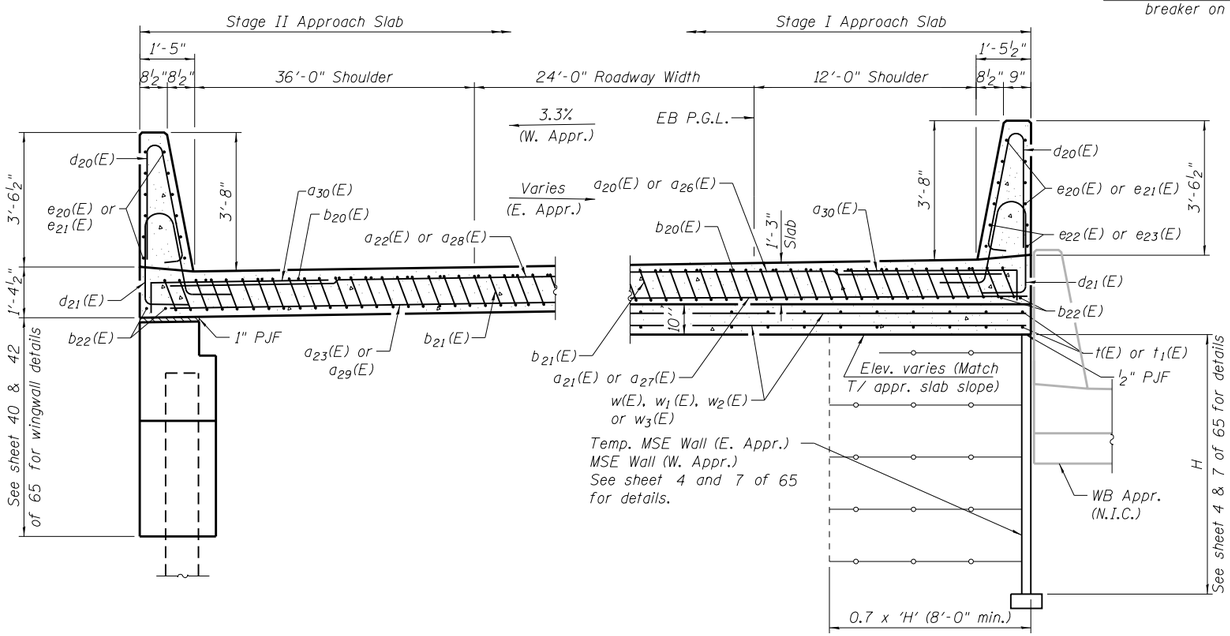


* Tilt #9 b_{21}(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure (Approach Slab).

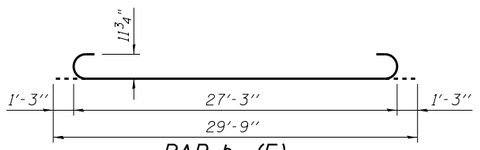
SECTION C-C



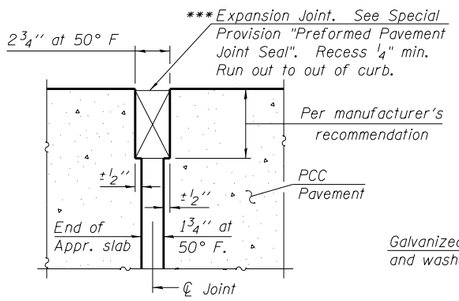
SECTION THROUGH OUTSIDE PARAPET
(Near Abutment)

SECTION MEDIAN PARAPET
(At Approach Footing)

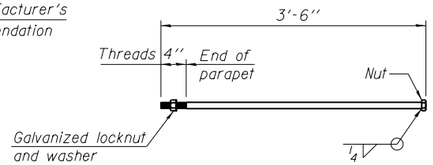
SECTION D-D
(See Plan for dimensions not shown)



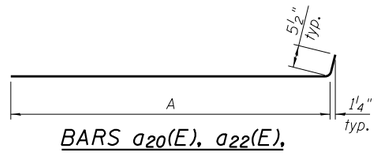
BAR b_{21}(E)



DETAIL B

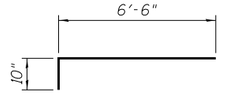


***1"ϕ ANCHOR BOLT
(Anchor Bolt assemblies shall be Galvanized according to Article 1006.09 of the Standard Specifications)

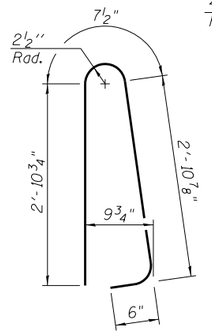


BARS a_{20}(E), a_{22}(E), a_{26}(E) & a_{28}(E)

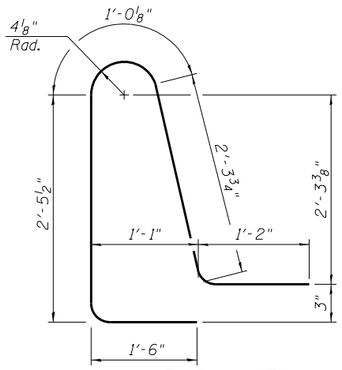
	A
a_{20}(E)	28'-9½"
a_{22}(E)	43'-6½"
a_{26}(E)	34'-6½"
a_{28}(E)	52'-7½"



BAR a_{30}(E)



BAR d_{20}(E)



BAR d_{21}(E)

Notes:
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets 40 and 41 of 65.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 55 of 65.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 44 of 65.
For additional parapet details, see sheets 40, 41 and 42 of 65.
For parapet joint details, see sheet 23 of 65. Cost of joint material included in the cost of Concrete Superstructure.

WEST APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{20}(E)	46	#5	29'-3"	
a_{21}(E)	60	#8	29'-11"	
a_{22}(E)	46	#5	44'-0"	
a_{23}(E)	60	#8	44'-11"	
a_{30}(E)	92	#5	7'-4"	
b_{20}(E)	113	#5	29'-8"	
b_{21}(E)	179	#9	29'-9"	
b_{22}(E)	4	#5	29'-7"	
d_{20}(E)	98	#5	7'-0"	
d_{21}(E)	92	#5	8'-6"	
e_{20}(E)	32	#4	15'-6"	
e_{22}(E)	8	#4	31'-2"	
t(E)	154	#4	9'-10"	
w(E)	40	#5	29'-9"	
w_1(E)	40	#5	43'-4"	
Concrete Superstructure (Approach Slab)			Cu. Yd.	109.6
Concrete Structures			Cu. Yd.	22.2
Concrete Superstructure			Cu. Yd.	8.9
Reinforcement Bars, Epoxy Coated			Pound	44,030
Bridge Deck Grooving			Sq. Yd.	234
Protective Coat			Sq. Yd.	271

EAST APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{26}(E)	39	#5	35'-0"	
a_{27}(E)	52	#8	35'-10"	
a_{28}(E)	39	#5	53'-1"	
a_{29}(E)	52	#8	53'-10"	
a_{30}(E)	78	#5	7'-4"	
b_{20}(E)	113	#5	29'-8"	
b_{21}(E)	179	#9	29'-9"	
b_{22}(E)	4	#5	29'-7"	
d_{20}(E)	98	#5	7'-0"	
d_{21}(E)	92	#5	8'-6"	
e_{21}(E)	32	#4	15'-4"	
e_{23}(E)	8	#4	31'-6"	
t_1(E)	154	#4	11'-6"	
w_2(E)	40	#5	35'-10"	
w_3(E)	40	#5	53'-10"	
Concrete Superstructure (Approach Slab)			Cu. Yd.	112.0
Concrete Structures			Cu. Yd.	26.8
Concrete Superstructure			Cu. Yd.	9.1
Reinforcement Bars, Epoxy Coated			Pound	45,310
Bridge Deck Grooving			Sq. Yd.	234
Protective Coat			Sq. Yd.	272

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USER NAME = default	DESIGNED - JGC	REVISED
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PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 26 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	376
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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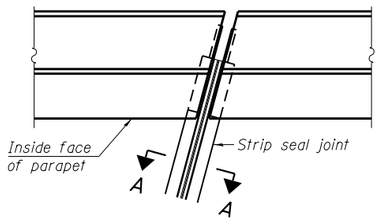
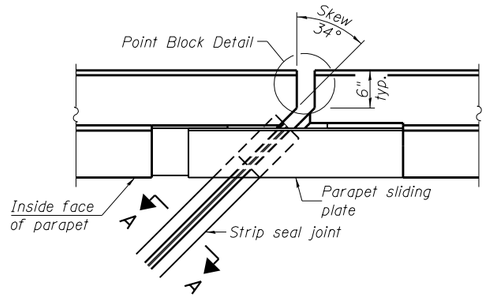
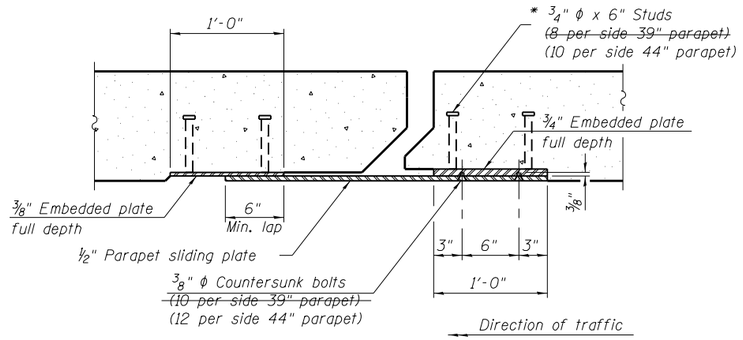


FOR SKEWS <= 30°

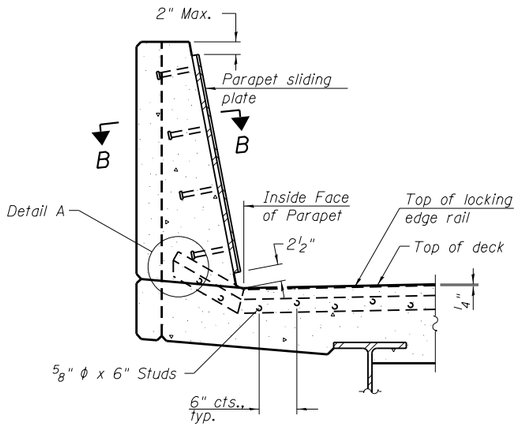


FOR SKEWS > 30°

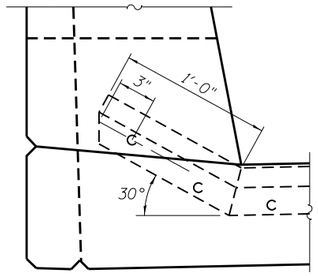


SECTION B-B

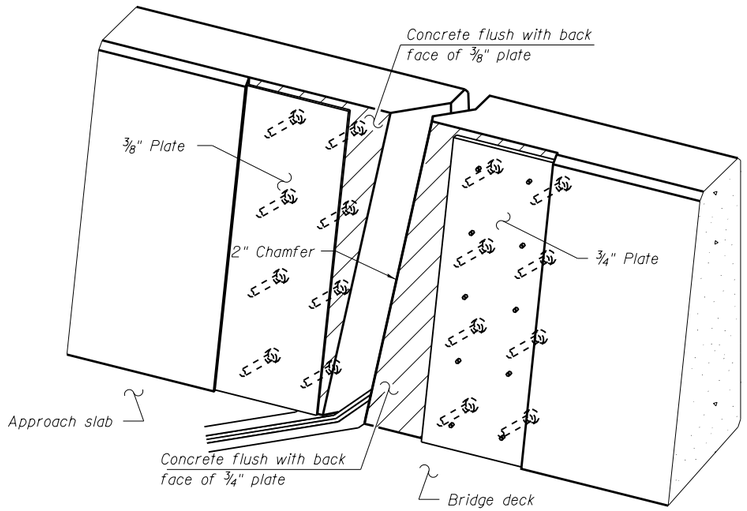
PLAN AT PARAPET



SECTION THRU PARAPET



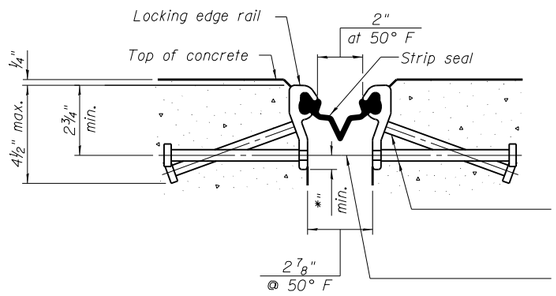
DETAIL A



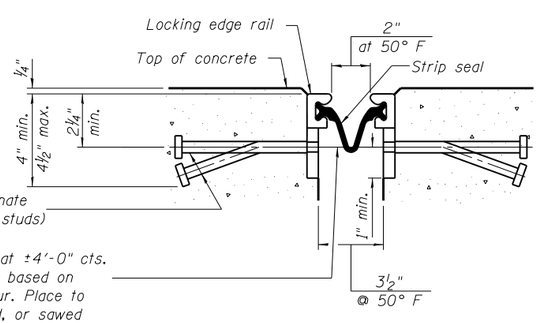
TRIMETRIC VIEW
(Showing embedded plates only)

NOTES

1. 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.
2. The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
3. The manufacturer's recommended installation methods shall be followed.
4. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
5. The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
6. Cost of parapet sliding plates, embedded plates, countersunk bolts, and anchorage studs included with Preformed Joint Strip Seal.
7. 39" constant-slope barrier shown, 44" constant-slope similar as noted.
8. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.
9. Details to be verified with pending base sheet for IDOT constant-slope barrier.



SHOWING ROLLED RAIL JOINT



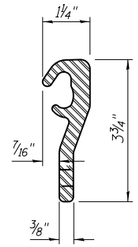
SHOWING WELDED RAIL JOINT

* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

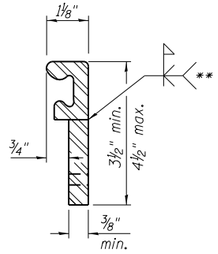
3/8" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



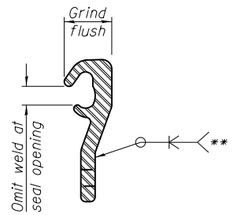
ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



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	90

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 099-0904
SHEET NO. 27 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	377
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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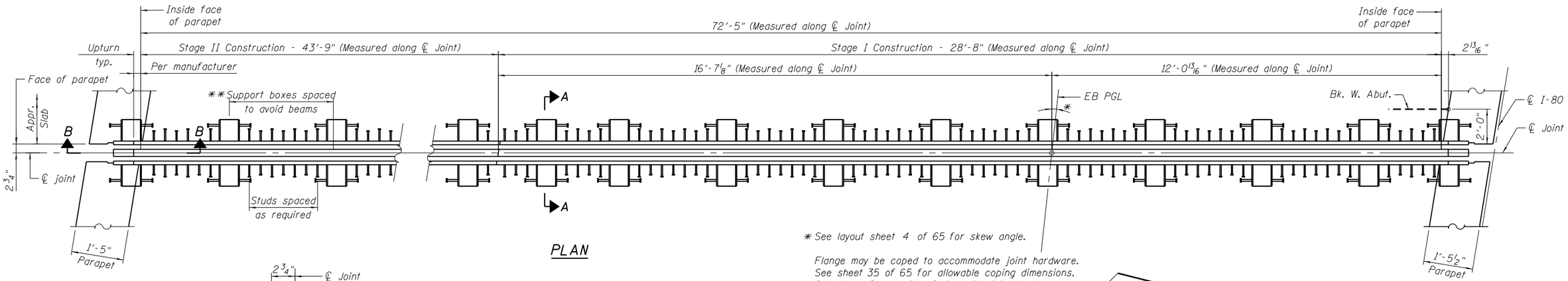
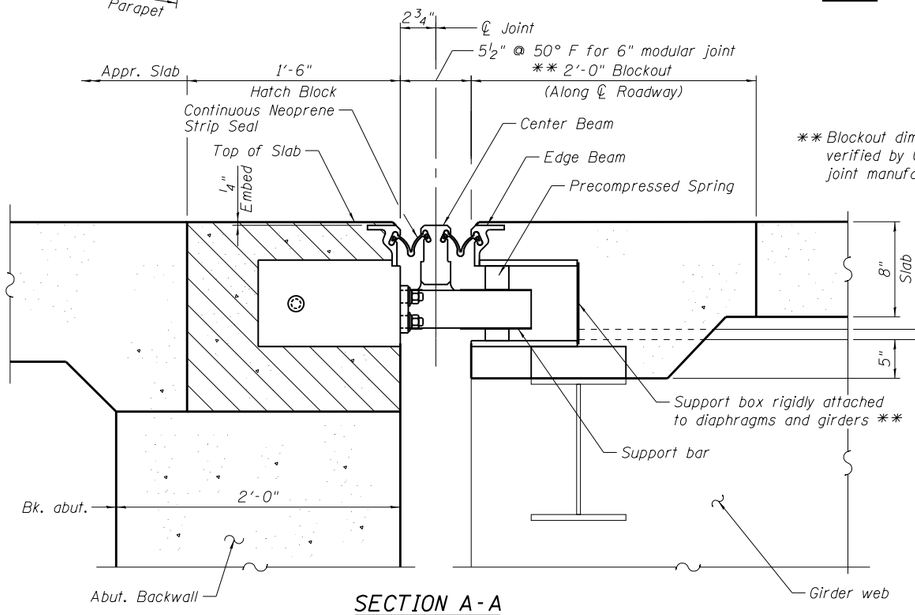
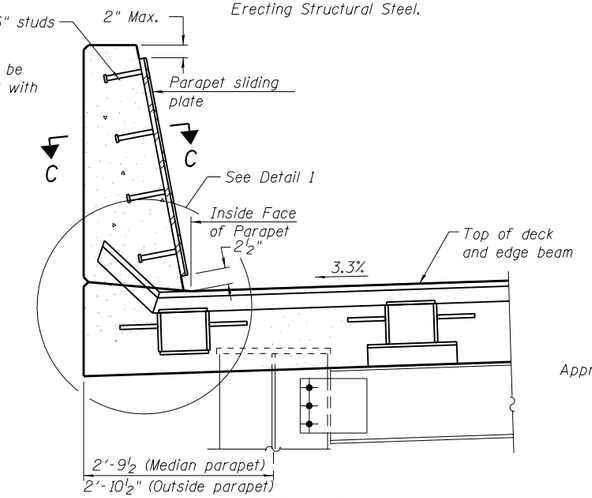


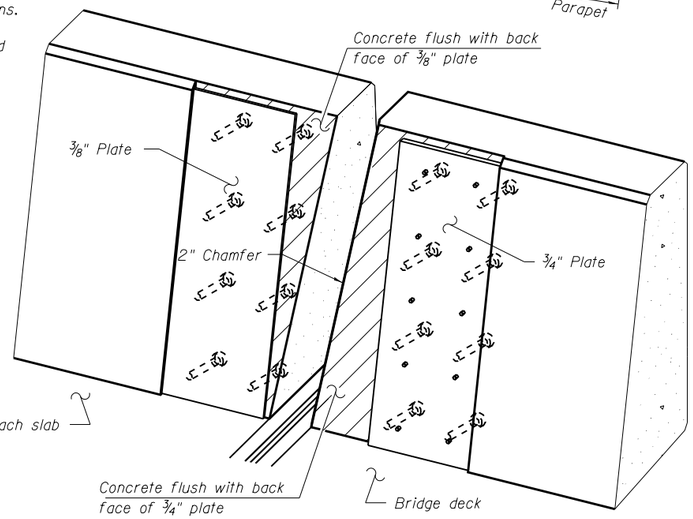


SECTION A-A
(Dim. ⊥ to ℄ abut. U.N.O.)

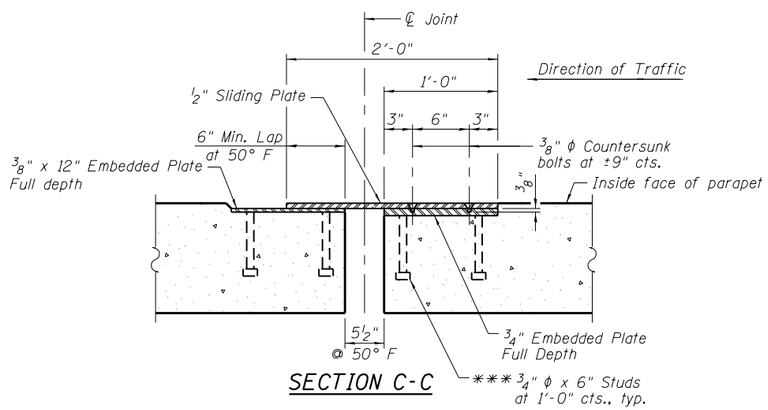
** Blockout dimension to be verified by Contractor with joint manufacturer.



SECTION B-B

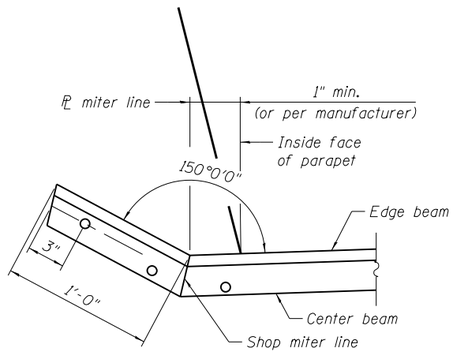


TRIMETRIC VIEW
(Showing embedded plates only)



SECTION C-C

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



DETAIL 1

NOTES

1. Modular Expansion Joint shall be a pre-approved system as listed in the Special Provision.
2. Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer.
3. Joint shall be fabricated to conform to the roadway cross-slope.
4. All structural steel elements including the embedded and sliding plates shall be fabricated with AASHTO M270, Grade 50 steel.
5. See Framing Plans for beam locations.
6. For end of deck details, see sheet 20 of 65. Required adjustments to reinforcement bars due to the actual joint used shall be made at no additional cost to the Department.
7. For parapet sliding plates, embedded plates, and anchorage studs details, see Sheet65 of . Details for 44" Parapet with skew less than 30-deg shall be used, and general notes shall be applicable. Parapet plates, studs, countersunk bolts, and anchorage studs are included in the cost of Modular Expansion Joint 6".
8. The joint configuration depicted is conceptual only. Actual dimensions and details may differ based on the manufacturer.
9. The joint opening and deck dimensions detailed on the superstructure are based on the distance beween the top of the edge beams shown on this sheet. The opening and deck dimensions shall be modified according to the manufacturer's recommendations to accommodate the configuration of the actual joint used. Required modifications shall be made at no additional cost to the Department.
10. Modular expansion joints shall be assembled in their final relative position wih the ends in place for shop inspection and acceptance.

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint 6"	Foot	76

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR JOINT
STRUCTURE NO. 099-0904
SHEET NO. 28 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	378
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

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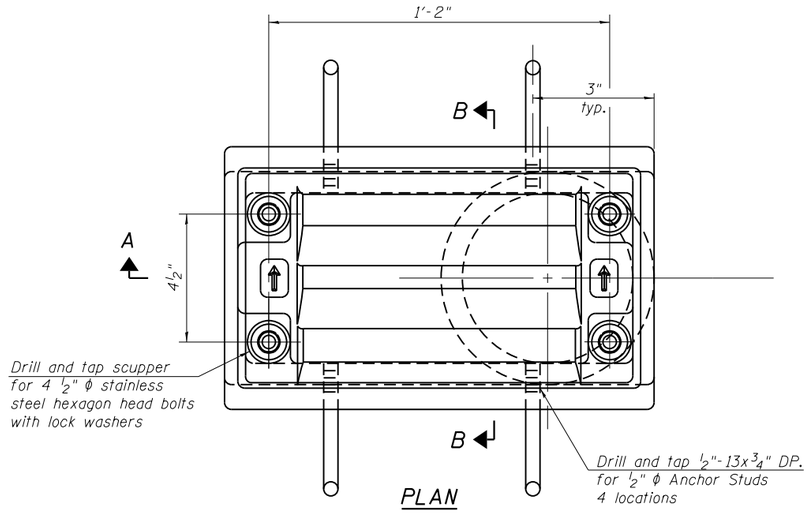
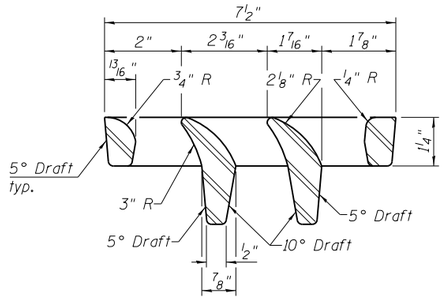
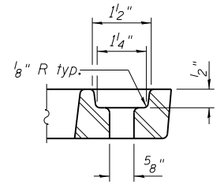


PLAN



VANE GRATE DETAIL



BOLT HOLE 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.

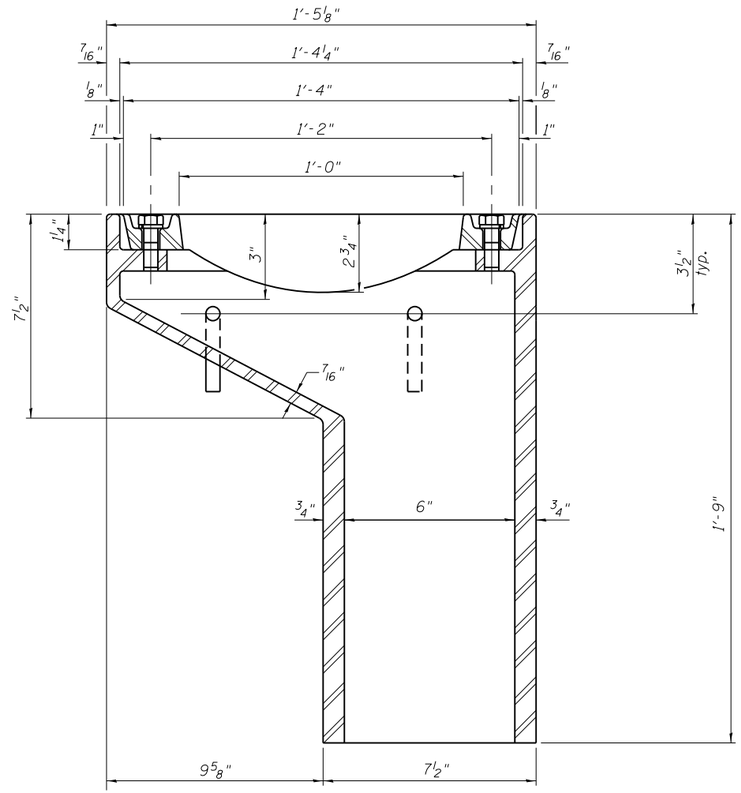
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted 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, DS-11.

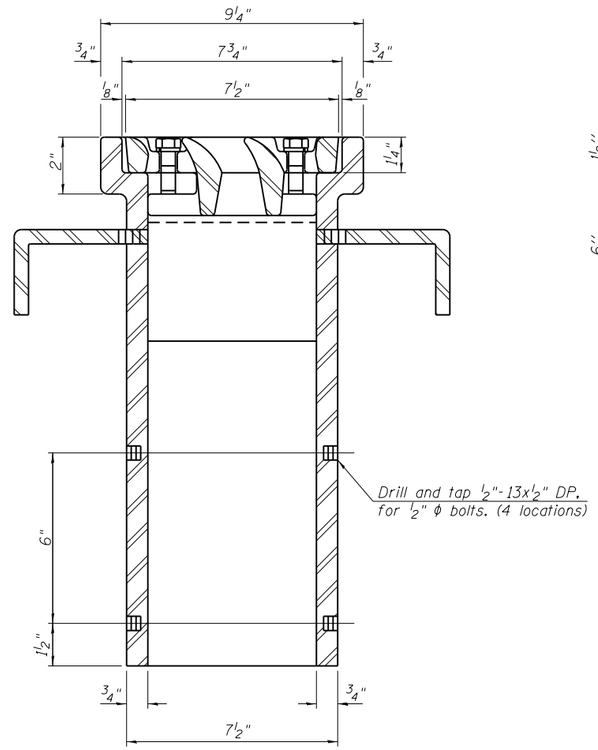
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

See sheet 31 of 65 for Drainage System Details.

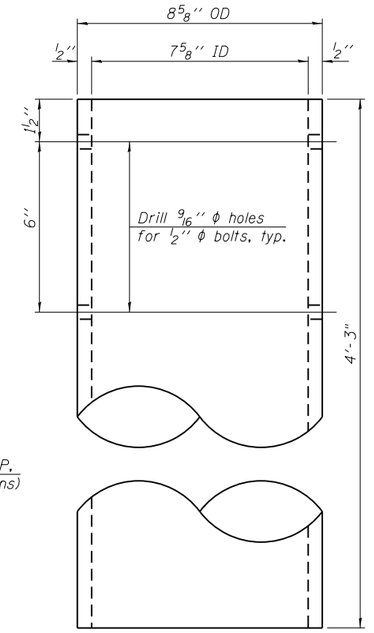


SECTION A-A

See sheet 21 of 65 for scupper location relative to parapet.

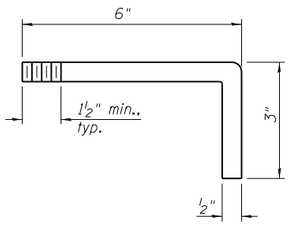


SECTION B-B



DOWNSPOUT

(Only at 1 scupper adjacent to W. Abut.)



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	7

USER NAME = default	DESIGNED - JGC	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 099-0904
SHEET NO. 29 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	379
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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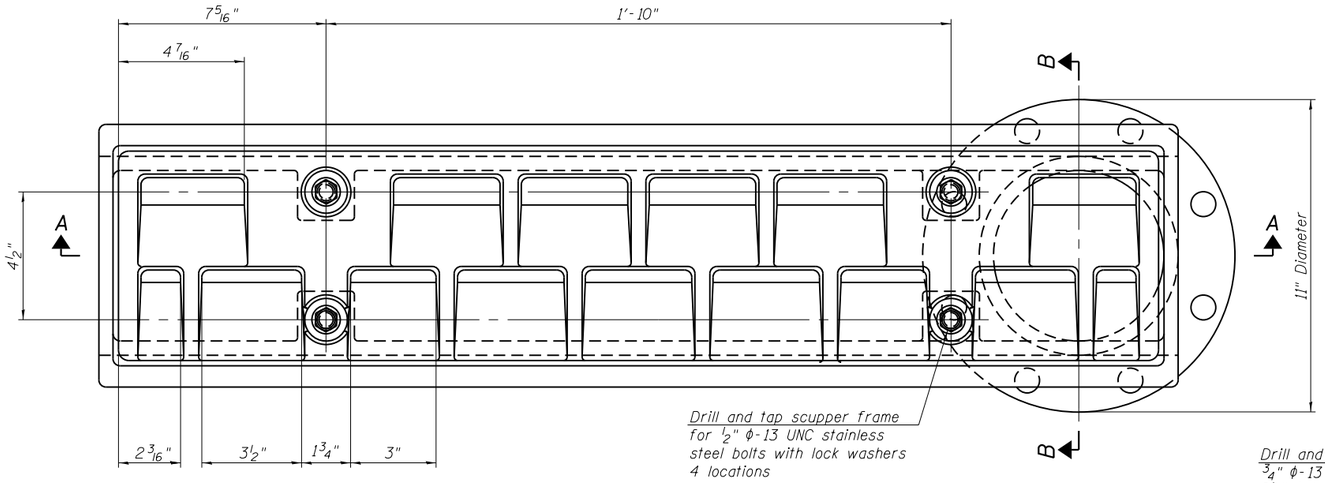
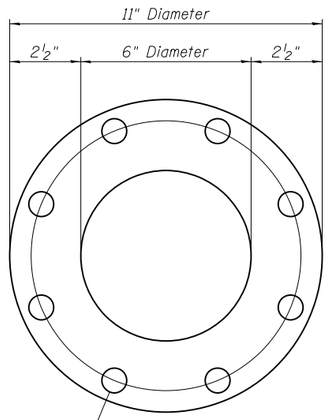


PLAN



BOTTOM VIEW OF FLANGE ONLY

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be 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 frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

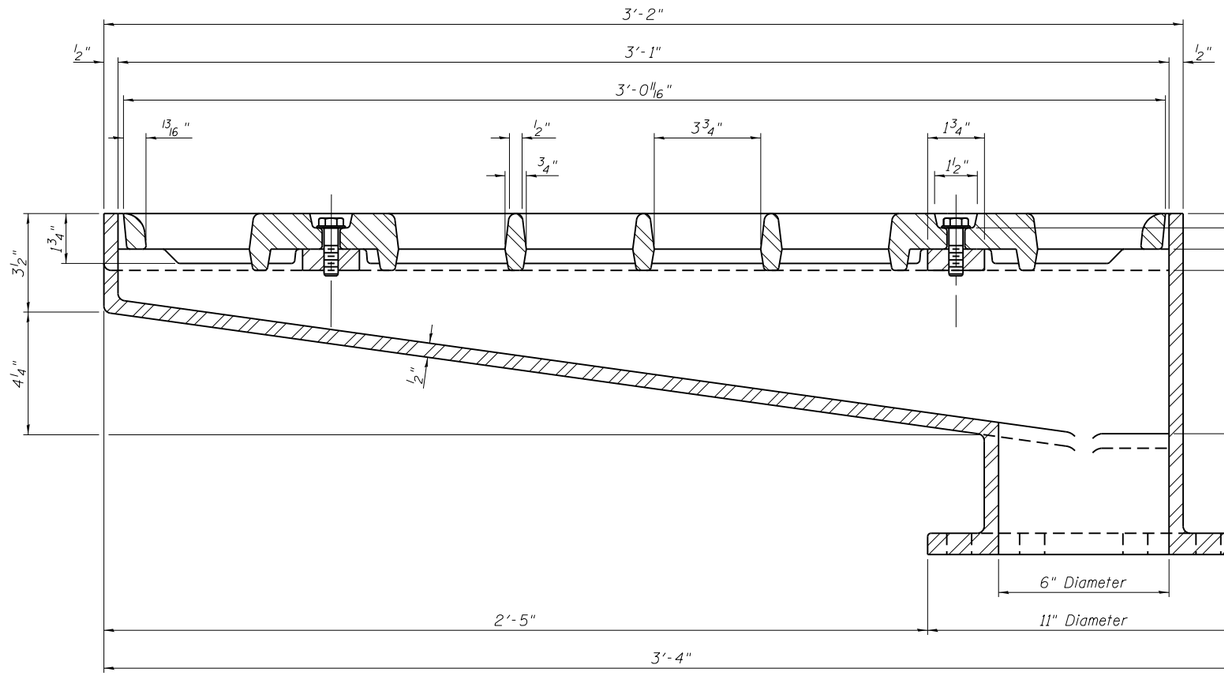
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet 2 of 65.

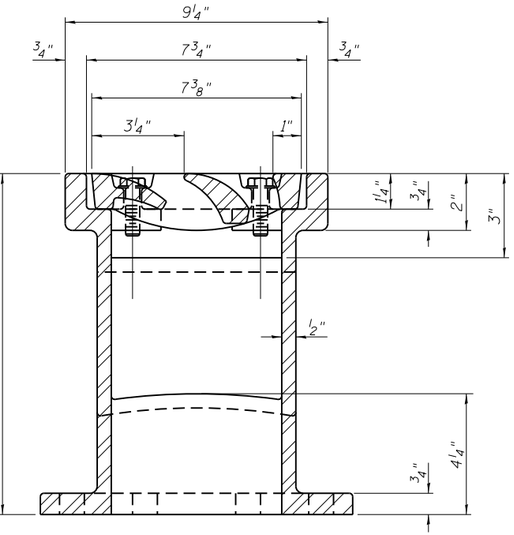
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the grate, frame, downspout, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-33.

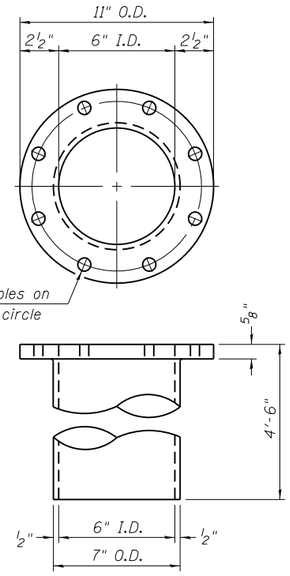


SECTION A-A

See sheet 22 of 65 for scupper location relative to parapet.



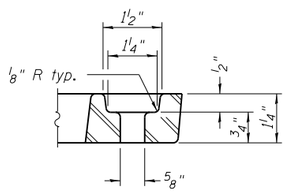
SECTION B-B



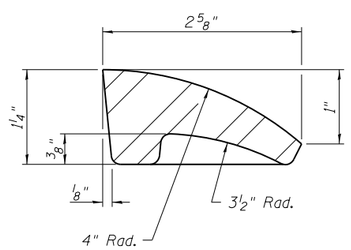
DOWNSHOUT

BILL OF MATERIAL

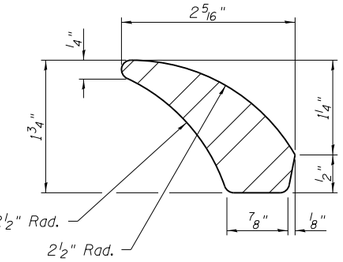
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	1



GRATE BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

HBP Illinois Partners	USER NAME = default	DESIGNED - JGC	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
	PLOT DATE = 6/26/2020	CHECKED - JGC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-33M
STRUCTURE NO. 099-0904
SHEET NO. 30 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	380
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

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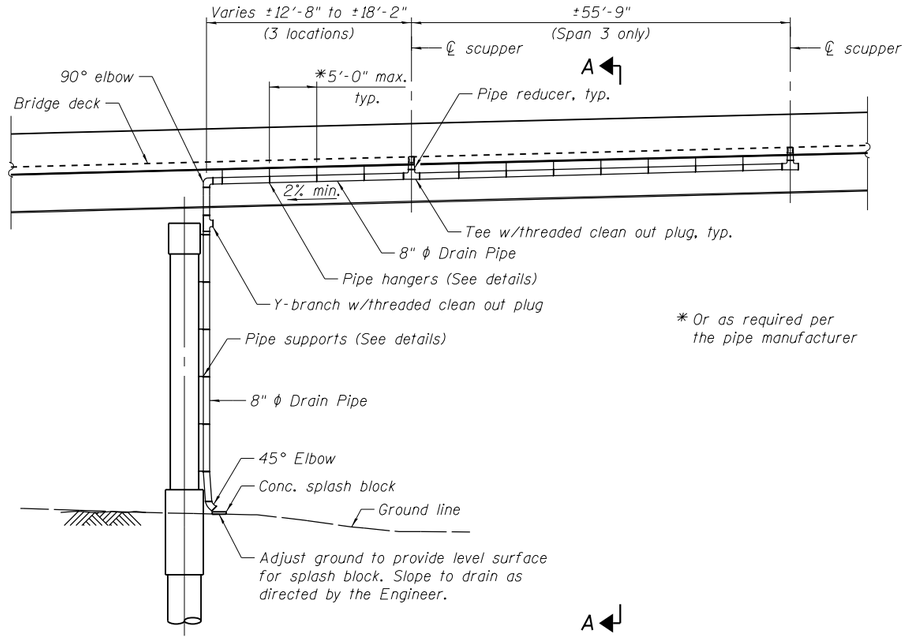
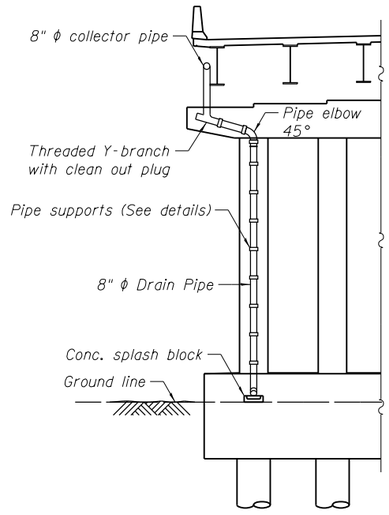


* Or as required per the pipe manufacturer

TYPICAL ELEVATION

(Looking North at Piers 1, 2 & 4)

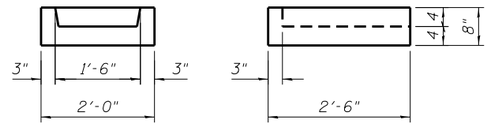


VIEW A-A

(Looking West)

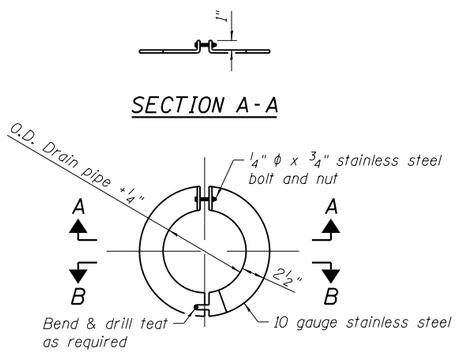
Notes:

1. For Drainage scupper locations, see sheets 21 and 22 of 65.
2. For Drainage scupper details, see sheet 29 and 30 of 65.
3. Pipe supports shall be provided on all horizontal pipes at each tee, elbow, or change in direction and at intermediate points not more than 5'-0" on centers.
4. Collector pipe hangers shall have a load capacity of not less than 2,000 lbs. and shall be designed so as not to apply excessive compressive stress to the pipe.
5. Pipe supports shall be provided on all vertical drain pipes at not more than 12'-0" on centers, or as approved by the Engineer.
6. Reducers shall be sized to accomodate a longitudinal movement of 3" in each direction.



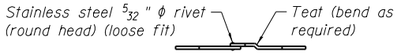
TYPICAL SECTION ELEVATION

PRECAST CONCRETE SPLASH BLOCK



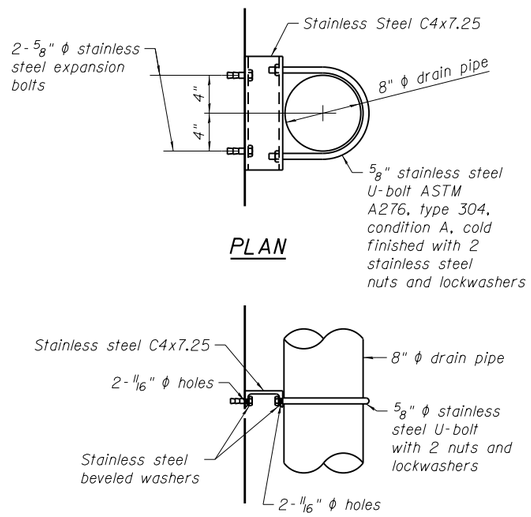
PLAN

(Looking down)



SECTION B-B

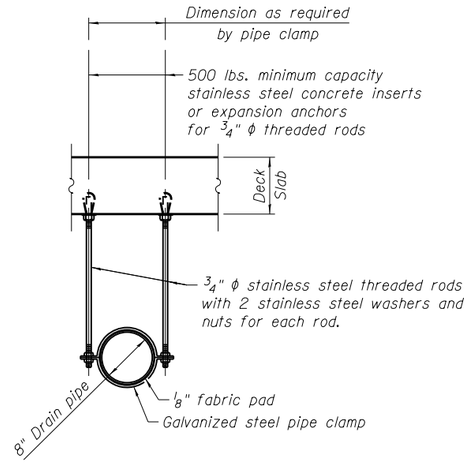
EXPANSION COLLAR DETAILS



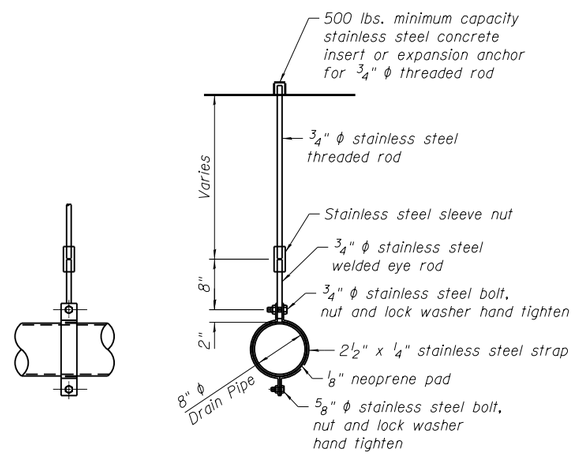
PLAN

ELEVATION

VERTICAL DRAIN PIPE SUPPORT DETAILS



COLLECTOR PIPE HANGER DETAILS



ELEVATION TYPICAL SECTION

ALTERNATE COLLECTOR PIPE HANGER DETAILS

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Drainage System	L. Sum	1.0

USER NAME = default	DESIGNED - DF	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 9/28/2020	CHECKED - DF	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 31 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	381
		CONTRACT NO. 60W34		
		ILLINOIS	FED. AID PROJECT	

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NOTES

1. Diaphragm spacing is measured along ℄ girders. See sheet 34 of 65 for table of dimensions.
2. Span lengths are measured along ℄ girders. See sheet 34 of 65 for table of dimensions.

GIRDER DEFLECTION ANGLE & OFFSET

Girder No.	Kink ∝	Δ_1	Δ_2
1	0° 18' 42"	0"	$3\frac{15}{16}$"
2	0° 16' 9"	$\frac{7}{32}$"	$3\frac{7}{16}$"
3	0° 13' 48"	$\frac{3}{8}$"	$2\frac{15}{16}$"
4	0° 11' 38"	$\frac{1}{2}$"	$2\frac{7}{16}$"
5	0° 9' 39"	$\frac{9}{16}$"	$2\frac{1}{32}$"
6	0° 7' 52"	$\frac{9}{16}$"	$1\frac{27}{32}$"
7	0° 6' 15"	$\frac{9}{16}$"	$1\frac{15}{16}$"
8	0° 5' 0"	$\frac{1}{2}$"	1"
9	0° 3' 36"	$\frac{7}{16}$"	$\frac{3}{4}$"
10	0° 2' 33"	$\frac{5}{16}$"	$\frac{17}{32}$"
11	0° 1' 40"	$\frac{1}{4}$"	$\frac{3}{8}$"
12	0° 0' 59"	$\frac{5}{32}$"	$\frac{3}{16}$"

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 099-0904
SHEET NO. 32 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	382
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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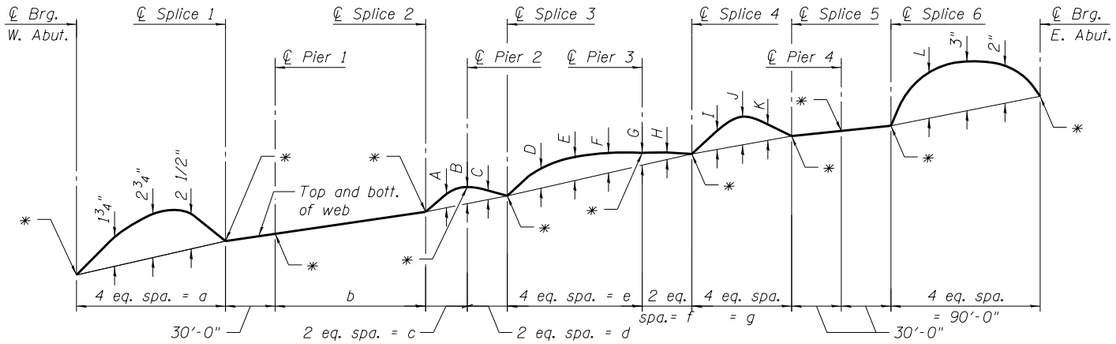

CAMBER DIAGRAM

CAMBER DIMENSIONS

Girder No.	A	B	C	D	E	F	G	H	I	J	K	L
12	3/4"	1"	3/4"	1 1/4"	1 1/2"	1 1/4"	3/4"	1/2"	1 1/4"	1 3/4"	1 1/4"	2 1/2"
11	3/4"	1"	3/4"	1 1/4"	1 1/2"	1"	3/4"	1/2"	1 1/4"	1 3/4"	1 1/4"	2 1/2"
10	3/4"	1"	3/4"	1"	1 1/4"	1"	3/4"	1/2"	1 1/4"	1 3/4"	1 1/4"	2 1/2"
9	3/4"	1"	3/4"	1"	1 1/4"	1"	3/4"	1/2"	1 1/2"	1 3/4"	1 1/2"	2 1/2"
8	3/4"	1"	3/4"	3/4"	1 1/4"	1"	3/4"	1/2"	1 1/2"	1 3/4"	1 1/2"	2 1/4"
7	1"	1 1/4"	1"	-	-	-	-	-	1 1/2"	1 3/4"	1 1/2"	2 1/4"
6	1"	1 1/4"	1"	-	-	-	-	-	1 1/2"	1 3/4"	1 1/2"	2 1/4"
5	1"	1 1/4"	1"	-	-	-	-	-	1 1/2"	1 3/4"	1 1/2"	2 1/4"
4	1"	1 1/4"	1"	-	-	-	-	-	1 1/2"	1 3/4"	1 1/2"	2 1/4"
3	1"	1 1/4"	1"	-	-	-	-	-	1 1/2"	1 3/4"	1 1/2"	2 1/4"
2	1"	1 1/4"	1"	-	-	-	-	-	1 3/4"	2"	1 3/4"	2 1/4"
1	1"	1 1/4"	1"	-	-	-	-	-	1 3/4"	2"	1 3/4"	2 1/4"

*TOP OF WEB ELEVATIONS

(For Fabrication use only)

Girder No.	℄ Brg. W. Abut.	℄ Splice 1	℄ Pier 1	℄ Splice 2	℄ Pier 2	℄ Splice 3	℄ Pier 3	℄ Splice 4	℄ Splice 5	℄ Pier 4	℄ Splice 6	℄ Brg. E. Abut.
12	608.23	611.00	611.90	614.61	615.52	616.29	618.68	619.47	620.95	621.74	622.53	624.55
11	608.04	610.82	611.72	614.36	615.26	616.02	618.39	619.20	620.76	621.57	622.39	624.49
10	607.86	610.64	611.54	614.07	614.97	615.72	618.09	618.92	620.54	621.37	622.20	624.38
9	607.67	610.45	611.35	613.79	614.68	615.41	617.76	618.61	620.31	621.16	622.02	624.28
8	607.48	610.26	611.16	613.51	614.40	615.13	617.46	618.33	620.08	620.95	621.83	624.17
7	607.30	610.09	610.99	613.23	614.14	614.86	617.11	618.07	619.83	620.74	621.65	624.06
6	607.11	609.92	610.81	612.96	613.87	614.59	616.80	617.76	619.58	620.52	621.45	623.94
5	606.93	609.74	610.63	612.67	613.59	614.31	616.47	617.45	619.34	620.29	621.24	623.81
4	606.74	609.55	610.45	612.39	613.30	614.01	616.12	617.11	619.07	620.05	621.03	623.67
3	606.55	609.37	610.26	612.11	613.02	613.73	615.77	616.77	618.79	619.80	620.80	623.52
2	606.37	609.19	610.08	611.83	612.74	613.45	615.43	616.43	618.52	619.55	620.58	623.37
1	606.18	609.01	609.90	611.55	612.45	613.16	615.07	616.07	618.24	619.30	620.35	623.22

NOTES

1. See Girder Dimensions table on sheet 34 of 65 for camber dimensions not shown here.

INTERIOR GIRDER MOMENT TABLE									
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.6 Sp. 5
I_s	(in^4)	23,755	35,844	35,844	23,755	23,755	23,755	23,755	35,844	23,755
$I_c(n)$	(in^4)	54,447	-	70,440	-	54,447	-	54,447	-	54,447
$I_c(3n)$	(in^4)	40,045	-	52,892	-	40,045	-	40,045	-	40,045
$I_c(cr)$	(in^4)	-	40,428	-	28,393	-	28,393	-	40,428	-
S_s	(in^3)	1,066	1,498	1,498	1,066	1,066	1,066	1,066	1,498	1,066
$S_c(n)$	(in^3)	1,386	-	1,832	-	1,422	-	1,386	-	1,386
$S_c(3n)$	(in^3)	1,277	-	1,700	-	1,277	-	1,277	-	1,277
$S_c(cr)$	(in^3)	-	1,562	-	1,140	-	1,140	-	1,562	-
S_{xc}	(in^3)	1,285	1,542	1,801	1,125	1,370	1,123	1,342	1,542	1,288
DC1	(k/')	0.88	0.95	0.95	0.88	0.88	0.88	0.88	0.95	0.88
M_{DC1}	('k)	935	1,554	372	734	423	844	409	1,587	911
DC2	(k/')	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190	0.190
M_{DC2}	('k)	212	312	76	156	93	190	93	330	205
DW	(k/')	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
M_{DW}	('k)	349	512	123	257	152	309	153	541	337
LLDF		0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.519	0.519
M_{L+IM}	('k)	1,549	1,617	1,255	1,233	1,135	1,336	1,268	1,582	1,460
f_f (Strength I)	(ksi)	2.63	0.45	0.81	0.56	1.25	0.83	1.73	-	-
$M_u + \frac{1}{3} f_f S_{xc}$	('k)	4,763	5,915	2,981	3,673	2,907	4,120	3,140	5,977	4,456
$\phi_f M_n$	('k)	-		-		-		-		-
f_s DC1	(ksi)	10.53	12.23	2.98	8.26	4.77	9.50	4.60	12.72	10.26
f_s DC2	(ksi)	1.99	2.40	0.54	1.64	0.87	2.00	0.87	2.53	1.93
f_s DW	(ksi)	3.28	3.93	0.87	2.70	1.43	3.25	1.44	4.16	3.17
f_s (L+IM)	(ksi)	13.41	12.42	8.22	12.98	9.58	14.06	10.98	12.15	12.64
f_f (Service II)	(ksi)	1.98	0.34	0.61	0.42	0.94	0.63	1.30	-	-
$f_s + f_f/2$ (Service II)	(ksi)	34.23	34.88	15.38	29.68	19.99	33.34	21.84	35.21	31.79
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50
$f_s + f_f/3$ (Total)(Strength I)	(ksi)	44.93	46.07	20.36	39.33	26.37	44.13	28.79	46.57	42.11
$\phi_f F_n$	(ksi)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Vr	(k)	62.8	65.6	43.0	71.6	44.0	71.3	46.4	66.7	64.0

INTERIOR GIRDER REACTION TABLE - GIRDER #9							
		W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.
LLDF	(k)	0.75	0.73	0.73	0.73	0.71	0.796
R_{DC1}	(k)	41.1	129.4	91.6	95.9	130.5	40.6
R_{DC2}	(k)	9.4	26.6	19.4	21.0	27.3	9.0
R_{DW}	(k)	15.0	43.7	31.9	34.5	44.9	14.7
R_{L+IM}	(k)	95.2	180.2	166.0	168.9	182.5	95.6
R_{Total}	(k)	160.7	379.9	308.9	320.3	385.2	159.9

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 $in.^3$).

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 ($in.^3$).

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.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

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

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

$f_s + f_f/2$ (Service II): Sum of stresses as computed below (ksi).
$f_{s\,DC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM) + f_f/2$

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

$f_s + f_f/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM) + f_f/3$

$\phi_f F_n$: 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.
Note:
M_{L+IM} and R_{L+IM} include the effects of centrifugal force and superelevation.

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED	
		CHECKED - BK	REVISED	
	PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL I
STRUCTURE NO. 099-0904
SHEET NO. 33 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	383
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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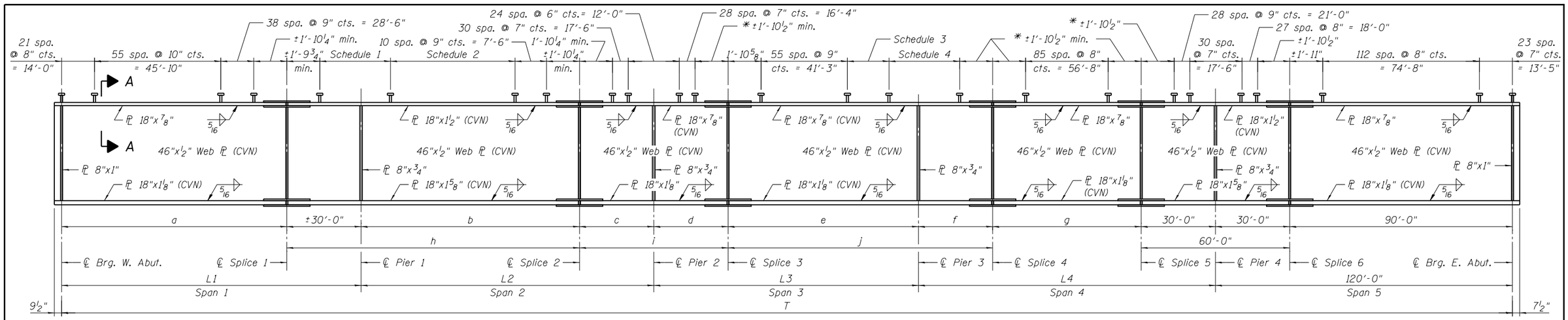


GIRDER ELEVATION

**Radius of girder from west abutment to splice 4.
Girders are straight from splice 4 to east abutment.
See sheet 32 of 65 for splice ℄ kink angles.

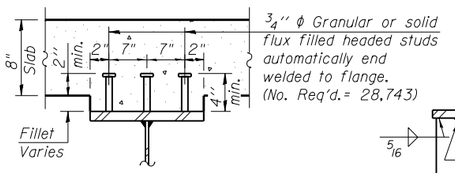
*Adjust spacing of last row of studs adjacent to Splice ℄ to provide a min. of 2¼" clearance from ℄ stud to edge of Splice ℄ or as directed by the Engineer.

GIRDER DIMENSIONS

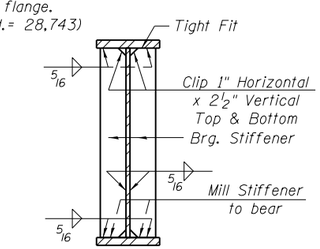
Girder No.	**Radius	a	b	c	d	e	f	g	h	i	j
1	5645.96	90'-0 3/8"	55'-9 13/16"	24'-6 1/8"	25'-0 1/8"	57'-1 1/16"	29'-11 7/8"	60'-6"	85'-9 15/16"	49'-6 1/4"	87'-0 15/16"
2	5652.25	90'-0 3/8"	58'-11 7/8"	24'-6 1/8"	25'-0"	59'-3 13/16"	29'-11 3/4"	60'-5 5/8"	89'-0"	49'-5 7/8"	89'-3 5/8"
3	5658.54	90'-0 3/8"	62'-2 1/16"	24'-6"	24'-11 7/8"	61'-6 5/8"	29'-11 1/2"	60'-5 1/4"	92'-2 3/16"	49'-5 7/8"	91'-6 1/8"
4	5664.83	90'-0 3/8"	65'-4 1/16"	24'-6"	25'-0"	63'-9 1/8"	29'-11 3/8"	60'-5 1/16"	95'-4 1/16"	49'-6"	93'-8 1/2"
5	5671.13	90'-0 3/8"	68'-6 1/8"	24'-6"	24'-11 7/8"	65'-11 7/8"	29'-11 3/16"	60'-4 11/16"	98'-6 1/8"	49'-5 5/8"	95'-11 1/16"
6	5677.42	90'-0 3/8"	71'-8 3/16"	24'-5 7/8"	24'-11 7/8"	68'-2 1/2"	29'-10 15/16"	60'-4 7/16"	101'-8 3/16"	49'-5 5/8"	98'-1 7/16"
7	5683.71	90'-0 3/8"	74'-10 3/16"	24'-5 7/8"	24'-11 7/8"	70'-5 1/16"	29'-10 13/16"	60'-4 3/16"	104'-10 3/16"	49'-5 3/4"	100'-3 13/16"
8	5690.00	90'-0 1/4"	78'-0 1/4"	24'-5 7/8"	24'-11 3/4"	72'-7 1/16"	29'-10 9/16"	60'-4 1/16"	108'-0 3/8"	49'-5 3/8"	102'-6 1/4"
9	5696.29	90'-0 1/4"	81'-2 3/8"	24'-5 3/4"	24'-11 3/4"	74'-10 3/16"	29'-10 7/16"	60'-3 13/16"	111'-2 3/8"	49'-5 3/8"	104'-8 5/8"
10	5702.58	90'-0 1/4"	84'-4 7/16"	24'-5 3/4"	24'-11 5/8"	77'-0 3/4"	29'-10 3/16"	60'-3 3/4"	114'-4 7/16"	49'-5 3/8"	106'-10 15/16"
11	5708.88	90'-0 1/4"	87'-6 1/2"	24'-5 5/8"	24'-11 5/8"	79'-3 1/4"	29'-10 1/16"	60'-3 5/8"	117'-6 1/2"	49'-5 1/4"	109'-1 5/16"
12	5715.17	90'-0 1/4"	90'-8 3/8"	24'-5 5/8"	24'-11 5/8"	81'-5 3/4"	29'-9 13/16"	60'-3 1/2"	120'-8 3/8"	49'-5 1/4"	111'-3 9/16"

SPAN DIMENSIONS

Girder No.	L1	L2	L3	L4	T
1	120'-0 1/2"	80'-3 15/16"	82'-1 3/16"	120'-5 7/8"	522'-11 1/2"
2	120'-0 1/2"	83'-6"	84'-3 13/16"	120'-5 3/8"	528'-3 3/4"
3	120'-0 1/2"	86'-8 1/16"	86'-6 1/2"	120'-4 13/16"	533'-7 13/16"
4	120'-0 3/8"	89'-10 1/16"	88'-9 1/8"	120'-4 7/16"	539'-0"
5	120'-0 3/8"	93'-0 1/8"	90'-11 3/4"	120'-3 13/16"	544'-4 1/16"
6	120'-0 3/8"	96'-2 1/16"	93'-2 3/8"	120'-3 1/2"	549'-8 1/4"
7	120'-0 3/8"	99'-4 1/16"	95'-4 15/16"	120'-3"	555'-0 3/8"
8	120'-0 3/8"	102'-6 1/8"	97'-7 7/16"	120'-2 5/8"	560'-4 9/16"
9	120'-0 1/4"	105'-8 3/16"	99'-9 15/16"	120'-2 1/4"	565'-8 5/8"
10	120'-0 1/4"	108'-10 3/16"	102'-0 3/8"	120'-1 15/16"	571'-0 3/4"
11	120'-0 1/4"	112'-0 1/8"	104'-2 7/8"	120'-1 11/16"	576'-4 15/16"
12	120'-0 1/4"	115'-2 1/16"	106'-5 3/8"	120'-1 5/16"	581'-9"



SECTION A-A



SECTION AT ABUTMENTS AND PIERS

SHEAR STUD SPACING

Girder No.	Schedule 1	Schedule 2	Schedule 3	Schedule 4
1	60 spa. @ 8" cts. =40'-0"	38 spa. @ 11" cts. = 34'-10"	25 spa. @ 7" cts. = 14'-7"	55 spa. @ 6" cts. = 27'-6"
2	62 spa. @ 8" cts. = 41'-4"	40 spa. @ 11" cts. = 36'-8"	28 spa. @ 7" cts. = 16'-4"	56 spa. @ 6" cts. = 28'-0"
3	64 spa. @ 8" cts. = 42'-8"	42 spa. @ 11" cts. = 38'-6"	32 spa. @ 7" cts. = 18'-8"	56 spa. @ 6" cts. = 28'-0"
4	66 spa. @ 8" cts. = 44'-0"	44 spa. @ 11" cts. = 40'-4"	42 spa. @ 7" cts. = 24'-6"	56 spa. @ 6" cts. = 28'-0"
5	68 spa. @ 8" cts. = 45'-4"	46 spa. @ 11" cts. = 42'-2"	46 spa. @ 7" cts. = 26'-10"	56 spa. @ 6" cts. = 28'-0"
6	70 spa. @ 8" cts. = 46'-8"	48 spa. @ 11" cts. = 44'-0"	48 spa. @ 7" cts. = 28'-0"	58 spa. @ 6" cts. = 29'-0"
7	72 spa. @ 8" cts. = 48'-0"	50 spa. @ 11" cts. = 45'-10"	50 spa. @ 7" cts. = 29'-2"	60 spa. @ 6" cts. = 30'-0"
8	74 spa. @ 8" cts. = 49'-4"	52 spa. @ 11" cts. = 47'-8"	52 spa. @ 7" cts. = 30'-4"	62 spa. @ 6" cts. = 31'-0"
9	76 spa. @ 8" cts. = 50'-8"	54 spa. @ 11" cts. = 49'-6"	54 spa. @ 7" cts. = 31'-6"	64 spa. @ 6" cts. = 32'-0"
10	75 spa. @ 8" cts. = 50'-0"	58 spa. @ 11" cts. = 53'-2"	56 spa. @ 7" cts. = 32'-8"	66 spa. @ 6" cts. = 33'-0"
11	76 spa. @ 8" cts. = 50'-8"	61 spa. @ 11" cts. = 55'-11"	62 spa. @ 7" cts. = 36'-2"	63 spa. @ 6" cts. = 31'-6"
12	78 spa. @ 8" cts. = 52'-0"	63 spa. @ 11" cts. = 57'-9"	60 spa. @ 7" cts. = 35'-0"	61 spa. @ 6" cts. = 30'-6"

DIAPHRAGM SPACING

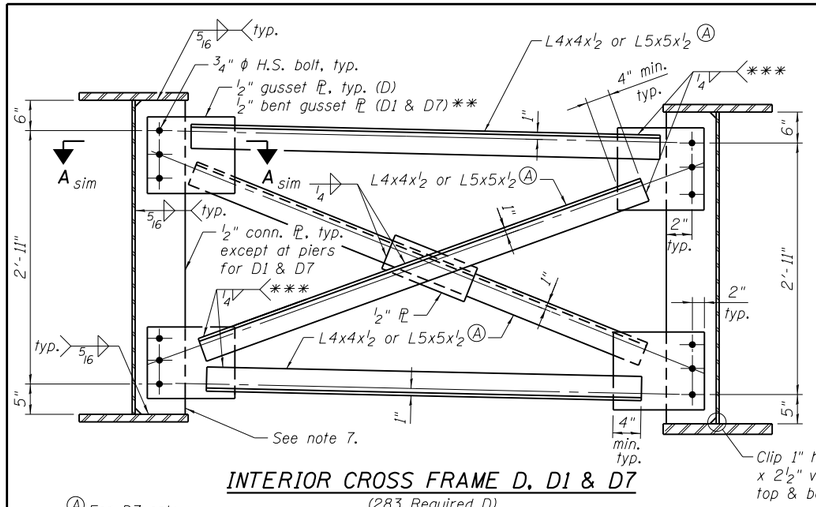
Girder No.	d1	d2	d3	d4	d4'	d5	d6	d7
1	18'-0 3/16"	20'-10 13/16"	-	-	5'-6 7/16"	9'-10 3/4"	9'-11 7/8"	24'-7 7/8"
2	18'-0 7/16"	20'-11 1/16"	-	-	3'-3 1/16"	9'-10 7/8"	10'-0"	24'-8 7/16"
3	18'-0 7/16"	13'-6"	10'-7 1/8"	-	3'-3"	10'-1 1/2"	12'-0"	24'-7 7/8"
4	18'-0 3/8"	13'-6"	13'-9 3/16"	-	3'-2 15/16"	12'-4 1/8"	12'-0"	24'-7 3/8"
5	18'-0 3/8"	17'-5 3/16"	13'-0"	-	3'-2 15/16"	13'-11 7/8"	12'-6 7/8"	24'-6 15/16"
6	18'-0 3/8"	20'-6"	13'-1 1/4"	-	3'-2 7/8"	11'-9 3/8"	17'-0"	24'-6 1/2"
7	18'-0 5/16"	20'-6"	16'-3 1/4"	-	3'-2 13/16"	13'-4 15/16"	17'-7"	24'-6 1/16"
8	18'-0 5/16"	20'-6"	19'-5 1/4"	-	3'-2 13/16"	11'-2 7/16"	22'-0"	24'-5 11/16"
9	18'-0 5/16"	20'-6"	13'-3 1/4"	9'-4 1/16"	3'-2 3/4"	13'-4 15/16"	22'-0"	24'-5 5/16"
10	18'-0 1/4"	20'-6"	14'-2"	11'-7 5/16"	3'-2 11/16"	15'-7 7/16"	22'-0"	24'-5"
11	18'-0 1/4"	20'-6"	19'-7 3/16"	9'-4 1/8"	3'-2 11/16"	17'-9 15/16"	22'-0"	24'-4 11/16"
12	18'-0 1/4"	20'-6"	20'-6"	11'-7 5/16"	3'-2 5/8"	20'-0 3/8"	22'-0"	24'-4 3/8"

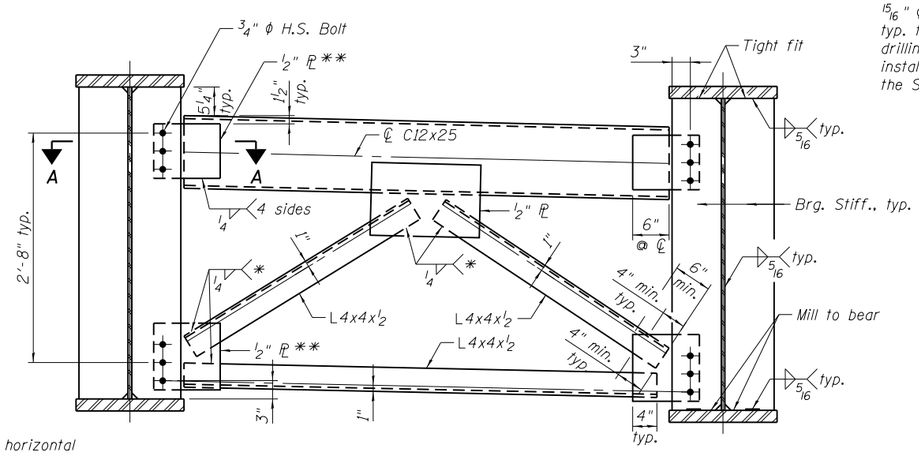
LAYOUT DIMENSIONS

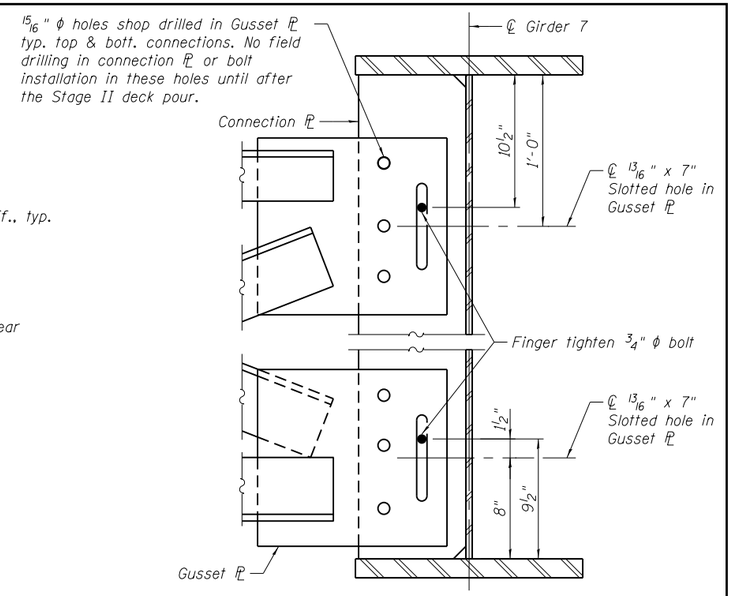
Girder No.	℄ Brg. W. Abut.		℄ Splice 1		℄ Pier 1		℄ Splice 2		℄ Pier 2		℄ Splice 3		℄ Pier 3		℄ Splice 4		℄ Splice 5		℄ Pier 4		℄ Splice 6		℄ Brg. E. Abut.	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	-373'-1 11/16"	84'-4 5/8"	-283'-3 1/8"	79'-1 13/16"	-253'-3 7/16"	77'-8 11/16"	-197'-6 1/8"	75'-5 15/16"	-173'-0 3/16"	74'-8 5/16"	-148'-0 3/16"	73'-11 13/16"	-90'-11 1/4"	72'-9 5/16"	-60'-11 3/8"	72'-4 7/16"	-0'-5 3/8"	72'-0 1/2"	29'-6 5/8"	72'-0 1/2"	59'-6 5/8"	72'-0 1/2"	149'-6 5/8"	72'-0 1/2"
2	-374'-2 7/8"	78'-1 13/16"	-284'-4 5/16"	72'-10 7/8"	-254'-4 1/16"	71'-5 3/4"	-195'-5 1/4"	69'-1 9/16"	-170'-11 3/8"	68'-4 1/16"	-145'-11 1/2"	67'-7 5/8"	-86'-7 13/16"	66'-4 15/16"	-56'-8 1/8"	66'-0 7/16"	3'-9 9/16"	65'-9"	33'-9 9/16"	65'-9"	63'-9 9/16"	65'-9"	153'-9 9/16"	65'-9"
3	-375'-4 1/16"	71'-11 1/16"	-285'-5 9/16"	66'-7 15/16"	-255'-5 7/8"	65'-2 3/4"	-193'-4 7/16"	62'-9 3/16"	-168'-10 5/8"	61'-11 3/4"	-143'-10 3/4"	61'-3 7/16"	-82'-4 3/8"	60'-0 11/16"	-52'-4 7/8"	59'-8 7/16"	8'-0 1/2"	59'-5 1/2"	38'-0 1/2"	59'-5 1/2"	68'-0 1/2"	59'-5 1/2"	158'-0 1/2"	59'-5 1/2"
4	-376'-5 1/4"	65'-8 1/4"	-286'-6 3/4"	60'-5"	-256'-7 1/8"	58'-11 3/4"	-191'-3 5/8"	56'-4 3/4"	-166'-9 13/16"	55'-7 1/2"	-141'-10"	54'-11 5/16"	-78'-0 15/16"	53'-8 7/16"	-48'-1 5/8"	53'-4 1/16"	12'-3 7/16"	53'-2"	42'-3 7/16"	53'-2"	72'-3 7/16"	53'-2"	162'-3 7/16"	53'-2"
5	-377'-6 7/16"	59'-5 1/2"	-287'-7 15/16"	54'-2 1/8"	-257'-8 5/16"	52'-8 13/16"	-189'-2 13/16"	50'-0 3/8"	-164'-9 1/16"	49'-3 1/4"	-139'-9 1/4"	48'-7 3/16"	-73'-9 9/16"	47'-4 1/4"	-43'-10 3/8"	47'-0 9/16"	16'-6 5/16"	46'-10 1/2"	46'-6 5/16"	46'-10 1/2"	76'-6 5/16"	46'-10 1/2"	166'-6 5/16"	46'-10 1/2"
6	-378'-7 5/8"	53'-2 11/16"	-288'-9 3/16"	47'-11 3/16"	-258'-9 9/16"	46'-5 15/16"	-187'-2"	43'-8"	-162'-8 1/4"	42'-11"	-137'-8 1/2"	42'-3 1/16"	-69'-6 3/16"	41'-0 1/8"	-39'-7 1/4"	40'-8 5/8"	20'-9 1/4"	40'-7"	50'-9 1/4"	40'-7"	80'-9 1/4"	40'-7"	170'-9 1/4"	40'-7"
7	-379'-8 13/16"	46'-11 7/8"	-289'-10 3/8"	41'-8 1/4"	-259'-10 3/4"	40'-2 7/8"	-185'-1 3/16"	37'-3 11/16"	-160'-7 1/2"	36'-6 3/4"	-135'-7 3/4"	35'-10 15/16"	-65'-2 13/16"	34'-8"	-35'-4 1/16"	34'-4 13/16"	25'-0 3/16"	34'-3 1/2"	55'-0 3/16"	34'-3 1/2"	85'-0 3/16"	34'-3 1/2"	175'-0 3/16"	34'-3 1/2"
8	-380'-10"	40'-9 8/16"	-290'-11 9/16"	35'-5 5/16"	-261'-0"	33'-11 7/8"	-183'-0 3/8"	30'-11 5/16"	-158'-6 3/4"	30'-2 1/2"	-133'-7 1/16"	29'-6 13/16"	-60'-11 1/2"	28'-3 15/16"	-31'-0 15/16"	28'-1"	29'-3 1/8"	28'-0"	59'-3 1/8"	28'-0"	89'-3 1/8"	28'-0"	179'-3 1/8"	28'-0"
9	-381'-11 3/16"	34'-6 5/16"	-292'-0 13/16"	29'-2 7/16"	-262'-1 3/16"	27'-8 7/8"	-180'-11 9/16"	24'-7"	-156'-6"	23'-10 5/16"	-131'-6 5/16"	23'-2 3/4"	-56'-8 1/4"	21'-11 7/8"	-26'-9 13/16"	21'-9 1/4"	33'-6 1/16"	21'-8 1/2"	63'-6 1/16"	21'-8 1/2"	93'-6 1/16"	21'-8 1/2"	183'-6 1/16"	21'-8 1/2"
10	-383'-0 3/8"	28'-3 7/16"	-293'-2"	22'-11 1/2"	-263'-2 7/16"	21'-5 15/16"	-178'-10 13/16"	18'-2 11/16"	-154'-5 3/16"	17'-6 1/8"	-129'-5 5/8"	16'-10 5/8"	-52'-5"	15'-7 7/8"	-22'-6 3/4"	15'-5 9/16"	37'-8 15/16"	15'-5"	67'-8 15/16"	15'-5"	97'-8 15/16"	15'-5"	187'-8 15/16"	15'-5"
11	-384'-1 9/16"	22'-0 3/4"	-294'-3 1/4"	16'-8 9/16"	-264'-3 5/8"	15'-2 15/16"	-176'-10"	11'-10 3/8"	-152'-4 7/16"	11'-1 15/16"	-127'-4 7/8"	10'-6 9/16"	-48'-1 3/4"	9'-3 15/16"	-18'-3 3/4"	9'-1 7/8"	41'-11 7/8"	9'-1 1/2"	71'-11 7/8"	9'-1 1/2"	101'-11 7/8"	9'-1 1/2"	191'-11 7/8"	9'-1 1/2"
12	-385'-2 3/4"	15'-10"	-295'-4 7/16"	10'-5 5/8"	-265'-4 7/8"	9'-0"	-174'-9 3/16"	5'-6 1/16"	-150'-3 1/16"	4'-9 3/4"	-125'-4 3/16"	4'-2 1/2"	-43'-10 9/16"	3'-0"	-14'-0 11/16"	2'-10 3/16"	46'-2 13/16"	2'-10"	76'-2 13/16"	2'-10"	106'-2 13/16"	2'-10"	196'-2 13/16"	2'-10"

NOTES

1. All structural steel shall be AASHTO M 270 Grade 50 steel.
2. Load carrying components designated "CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.
3. See sheet 32 of 65 for offset locations 'X' & 'Y' as shown in table of Layout Dimensions.







INTERIOR CROSS FRAME D, D1 & D7

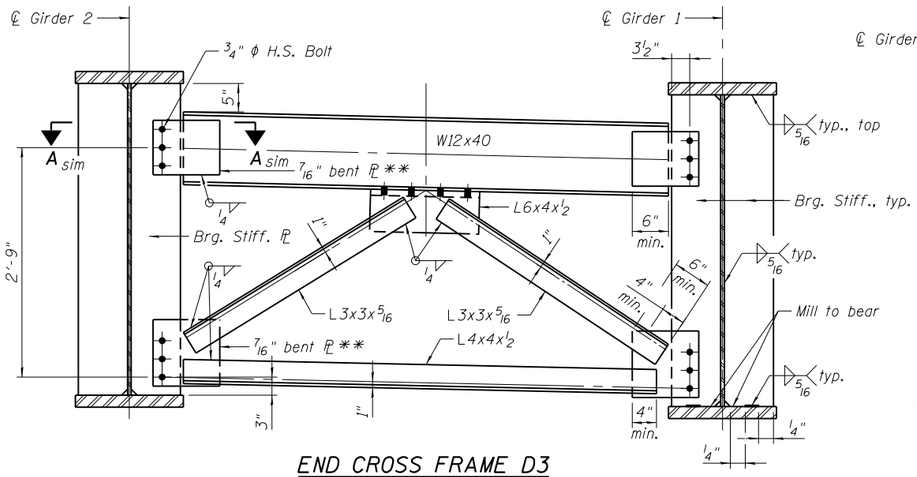
Ⓐ For D7 only

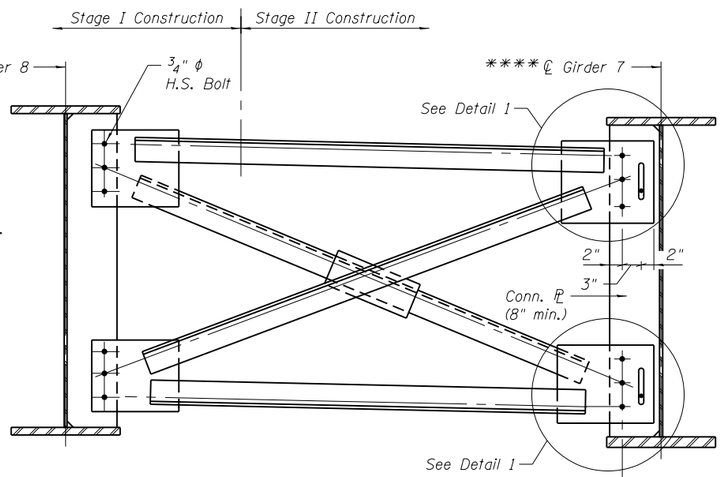
(283 Required D)
(22 Required D1)
(22 Required D7)

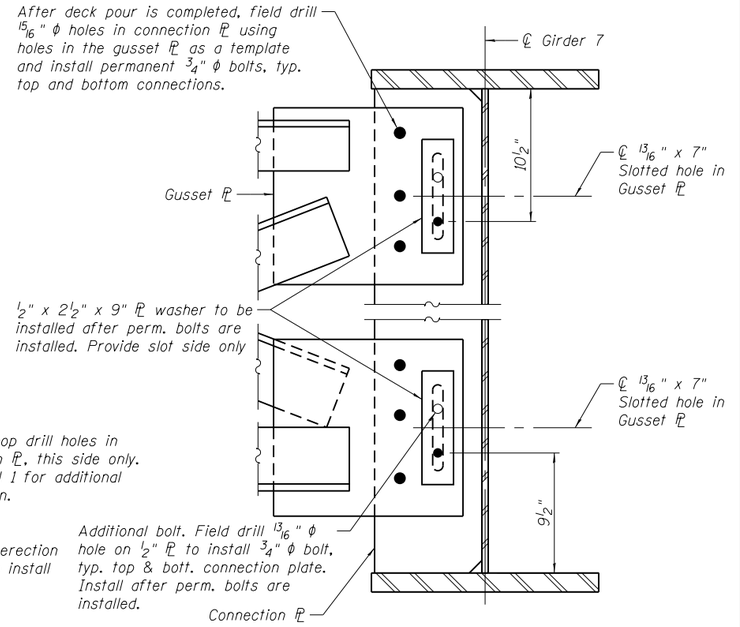
END CROSS FRAME D2

(10 Required)

DETAIL 1 - BEFORE STAGE II DECK POUR







END CROSS FRAME D3

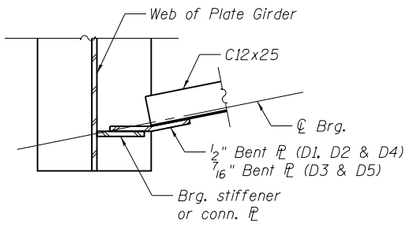
(10 Required)

STAGE LINE INTERIOR CROSS FRAME D6

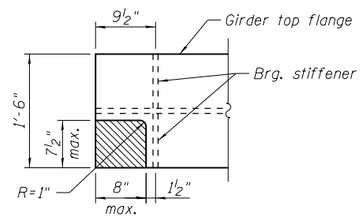
(28 Required)
(See D for details and dimensions not shown)

Note:
Do not shop drill holes in connection PL, this side only. See Detail 1 for additional information.

DETAIL 1 - AFTER STAGE II DECK POUR



SECTION A-A



TOP FLANGE COPING DETAIL

(See Note 6)
(Only at locations needed)

NOTES

1. See sheet 32 of 65 for cross frame locations.
2. All cross frames between girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
3. Each hole for all cross-frame connection bolts shall be 15/16" ϕ unless noted otherwise.
4. Two hardened washers are required for each set of holes.
5. For end cross frames D4 and D5 at stage line, see sheet 36 of 65.
6. Contractor shall verify with joint manufacturer if top flange of girders at the west abutment require to be coped to accommodate modular joint hardware. Top flange may be coped within max. dimensions shown. If coping requirements differ, Contractor shall submit proposed details to the Engineer for approval. No field cutting or modifications will be permitted. Cost included with Furnishing and Erecting Structural Steel.
7. Provide connection plates on outside face of girder 1 for future cross frame connection (27 cross frame locations). Holes shall not be provided in this Contract. Provide bearing stiffener at ℄ substructure locations.

* Weld on near side of 1/2" PL.

** PL shall be bent to match pier or abut. skew.

*** 3 sides, on one face of gusset PL or channel only, typ.

**** Girder 7 shown in location corresponding to after the Stage II deck pour.

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USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 35 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	385
		CONTRACT NO. 60W34		
ILLINOIS	FED. AID PROJECT			

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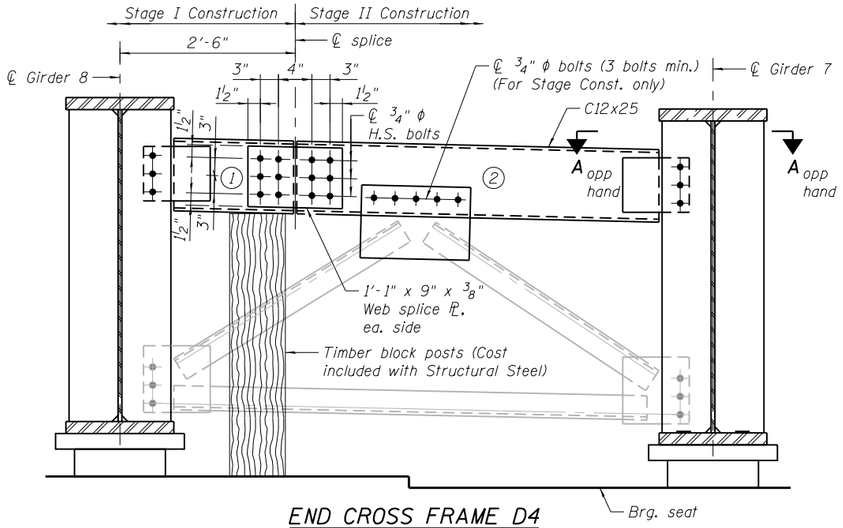
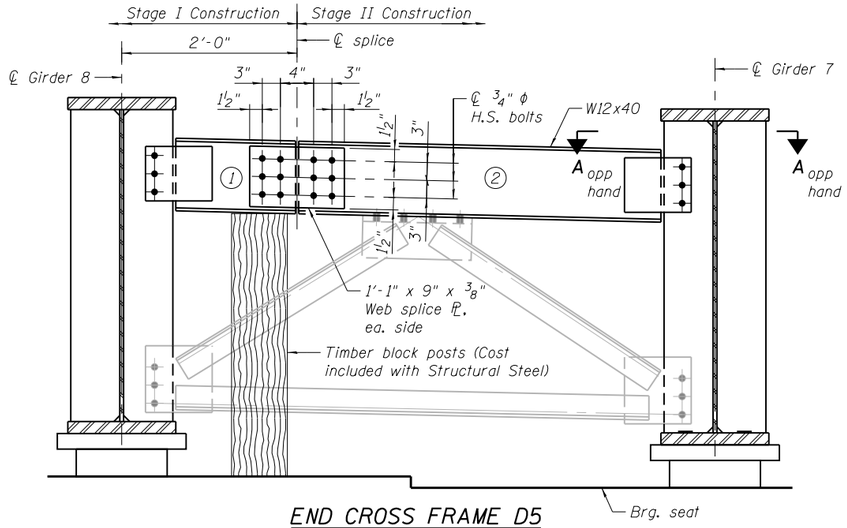


END CROSS FRAME D4

(1 Required)
(See cross frame D2 for details & dimensions not shown)
See sheet 35 of 65 for Section A-A



END CROSS FRAME D5

(1 Required)
(See cross frame D3 for details & dimensions not shown)
See sheet 35 of 65 for Section A-A

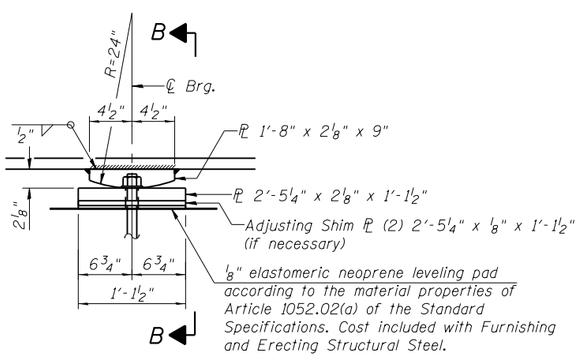
NOTES

1. See sheet 35 of 65 for diaphragm notes.
2. All structural steel shall be AASHTO M270 Grade 50 steel.
3. Load carrying components designated "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.
4. Fixed bearing 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.
5. Anchor bolts with fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place. Prior to pouring abutment or pier caps, Contractor shall verify rebar clearances with either anchor bolt installation method.
6. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
7. The structural steel plates and pintles of the Bearing shall conform to the requirements of AASHTO M 270 Grade 50.
8. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
9. Shim Pl and other steel members required for the fixed bearing assembly shall be included in the cost of Furnishing and Erecting Structural Steel.

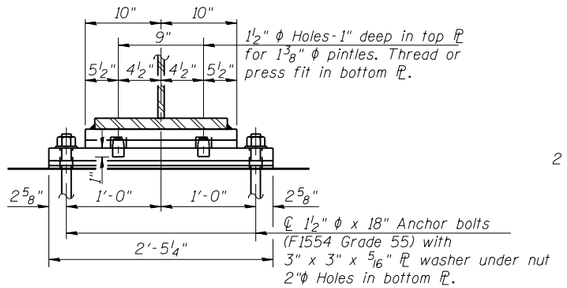
END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

1. Order C12 or W12 in two sections.
2. Attach section (1) of C12 or W12 to girder.
3. Place timber block posts between section (1) of C12 or W12 and abutment bearing section.
4. Attach section (2) of C12 or W12 to both Girder 5 and section (1) of C12 or W12 during Stage II Construction with splice plates.
5. Remove timber block posts.

Note: The Contractor may submit an alternate stage construction sequence for end cross frame D4 or D5. Any alternate sequence must be approved by the Engineer prior to ordering any material.



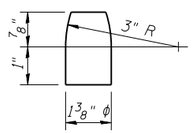
ELEVATION AT PIER



SECTION B-B

FIXED BEARING - PIER 3 & 4

(12 req'd Pier 3)
(12 req'd Pier 4)

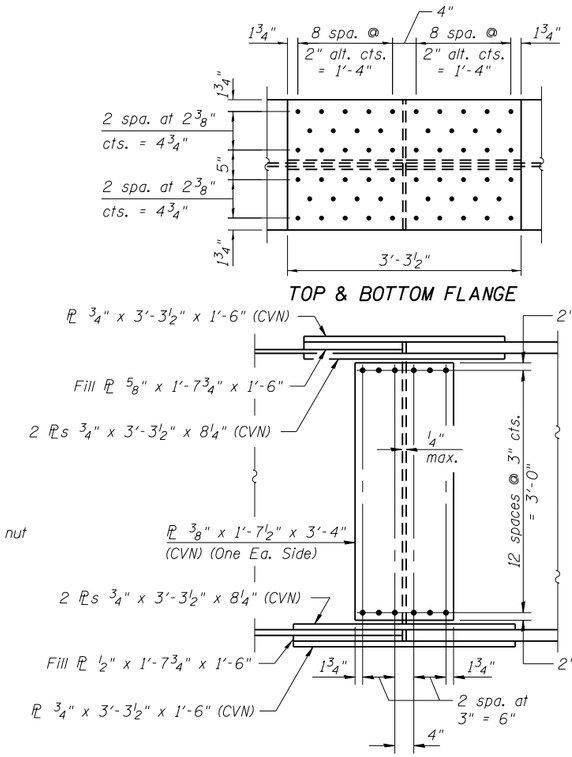


PINTLE

Note:
Cost of Anchor Bolts shall be measured for payment as Anchor Bolts, 1½"

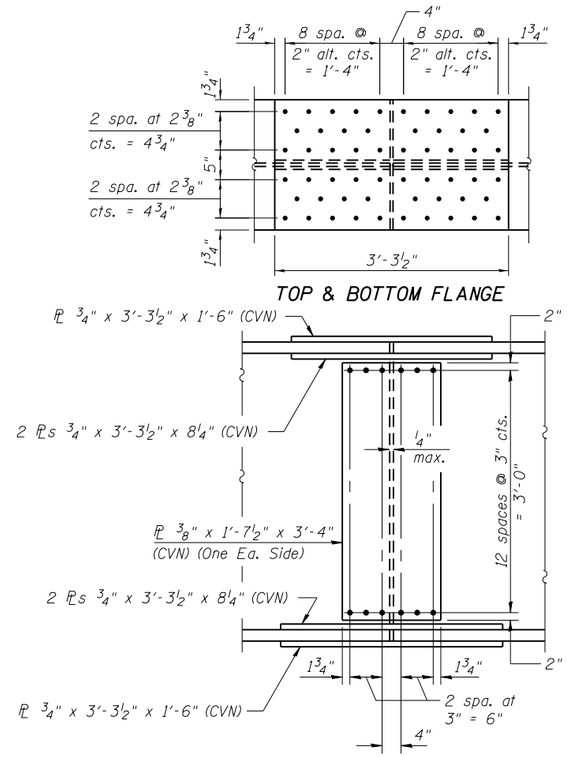
BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1½" ϕ	Each	48



*FIELD SPLICE DETAIL 1, 2, 5 & 6

(48 Required)
(Field splice detail 2 & 6 opposite hand)



*FIELD SPLICE DETAIL 3 & 4

(24 Required)

*See sheet 32 of 65 for girder deflection angles at Splice 4 and 5.

USER NAME = default	DESIGNED - DF	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED	

HBP Illinois Partners

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS II
STRUCTURE NO. 099-0904
SHEET NO. 36 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	386
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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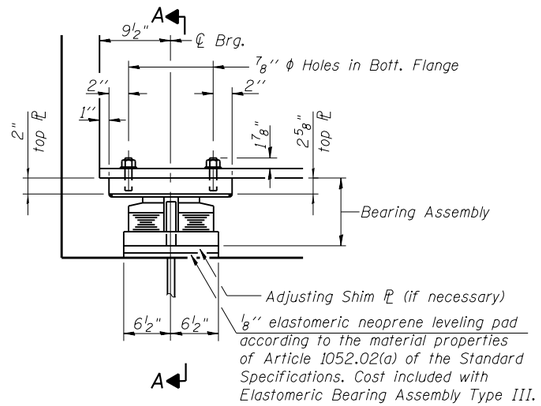
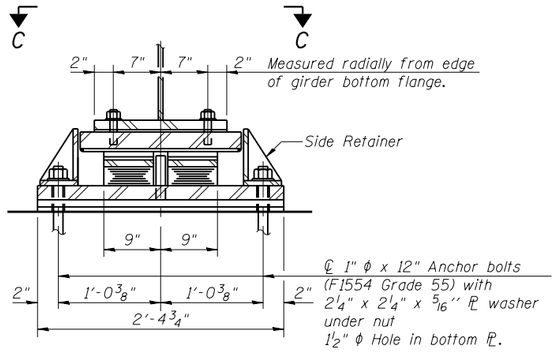
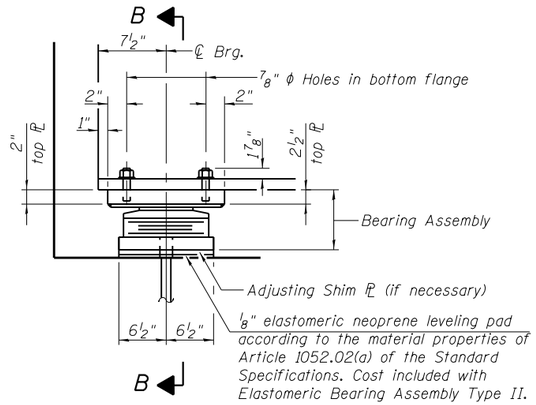


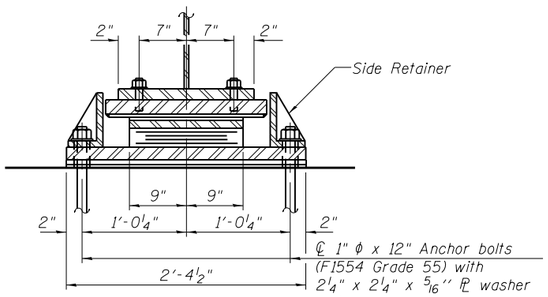
ELEVATION AT W. ABUT.



SECTION A-A



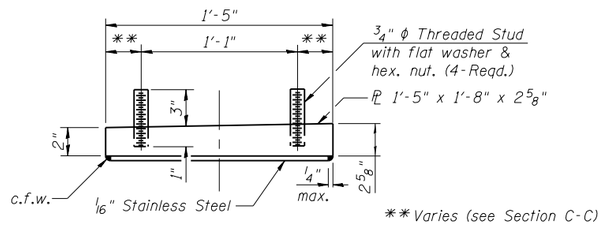
ELEVATION AT E. ABUT.



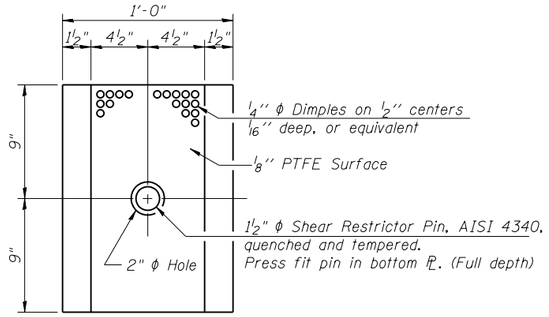
SECTION B-B

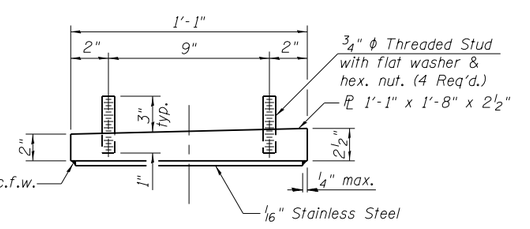
TYPE III ELASTOMERIC EXP. BRG. - W. ABUT.

TYPE II ELASTOMERIC EXP. BRG. - E. ABUT.



TOP BEARING ASSEMBLY

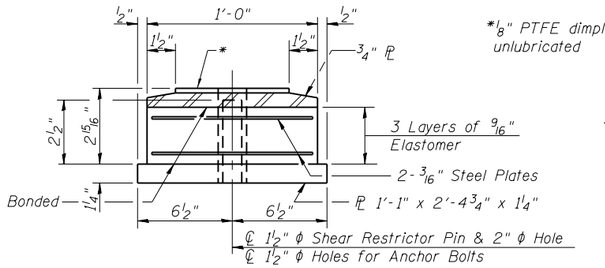




TOP BEARING ASSEMBLY

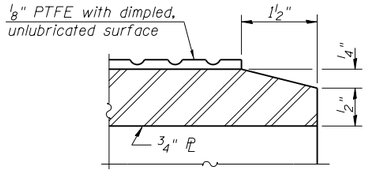
*⅛" PTFE dimpled, unlubricated

PLAN-PTFE SURFACE

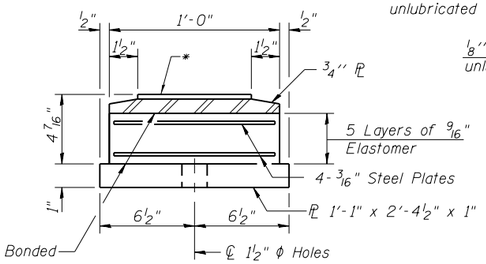


BOTTOM BEARING ASSEMBLY

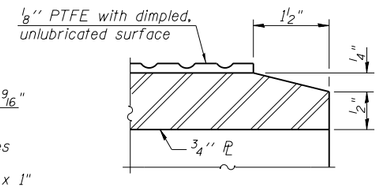
*⅛" PTFE dimpled, unlubricated



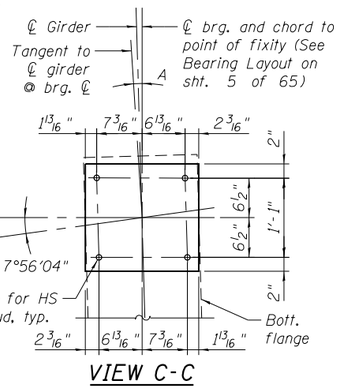
SECTION THRU PTFE



BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE



VIEW C-C

Angle A	
Location	W. Abut.
G-12	1° 47' 57.4"
G-11	1° 47' 33.0"
G-10	1° 47' 08.5"
G-9	1° 46' 44.0"
G-8	1° 46' 19.4"
G-7	1° 45' 54.7"
G-6	1° 45' 30.0"
G-5	1° 45' 05.3"
G-4	1° 44' 40.4"
G-3	1° 44' 15.6"
G-2	1° 43' 50.6"
G-1	1° 43' 25.6"

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.

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

The ⅛" 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.

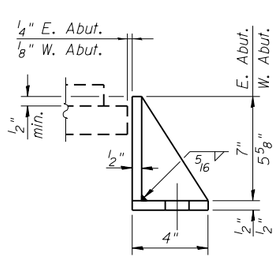
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

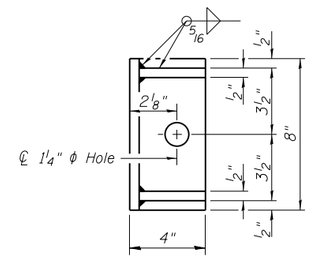
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included in Elastomeric Bearing Assembly of the type specified.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

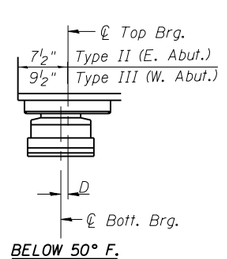
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.



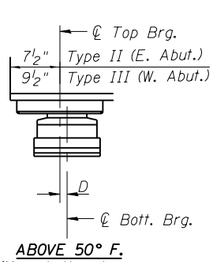


SIDE RETAINER

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



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.

D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Elastomeric Bearing Assembly Type III	Each	12
Anchor Bolts, 1" ϕ	Each	48

USER NAME = default	DESIGNED - IYL	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - IYL	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 37 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	387
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

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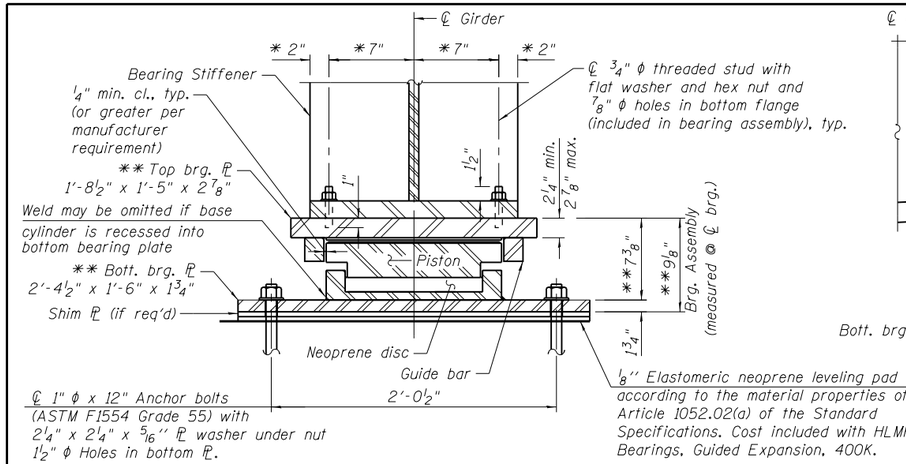
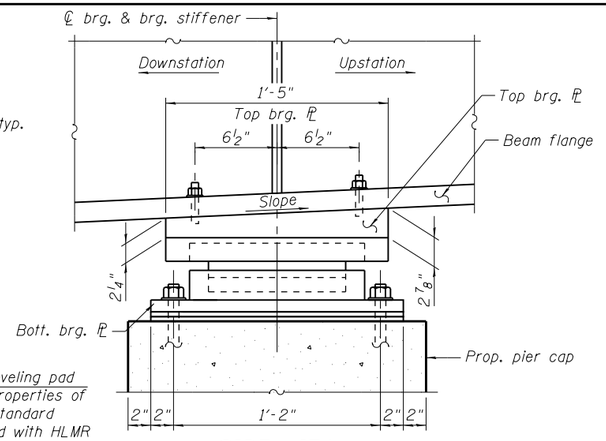
GUIDED EXPANSION HLMR BEARING

(24 Required)





SIDE VIEW

Looking North

Angle A		
Location	Pier 1	Pier 2
G-12	1° 12′ 10.7"	0° 32′ 41.2"
G-11	1° 11′ 41.5"	0° 34′ 01.7"
G-10	1° 11′ 12.1"	0° 35′ 22.4"
G-9	1° 10′ 42.7"	0° 36′ 43.3"
G-8	1° 10′ 13.3"	0° 38′ 00.4"
G-7	1° 09′ 43.7"	0° 39′ 25.8"
G-6	1° 09′ 14.1"	0° 40′ 47.2"
G-5	1° 08′ 44.4"	0° 42′ 08.9"
G-4	1° 08′ 14.7"	0° 43′ 30.8"
G-3	1° 07′ 44.9"	0° 44′ 52.8"
G-2	1° 07′ 15.0"	0° 46′ 15.1"
G-1	1° 06′ 45.1"	0° 47′ 37.6"

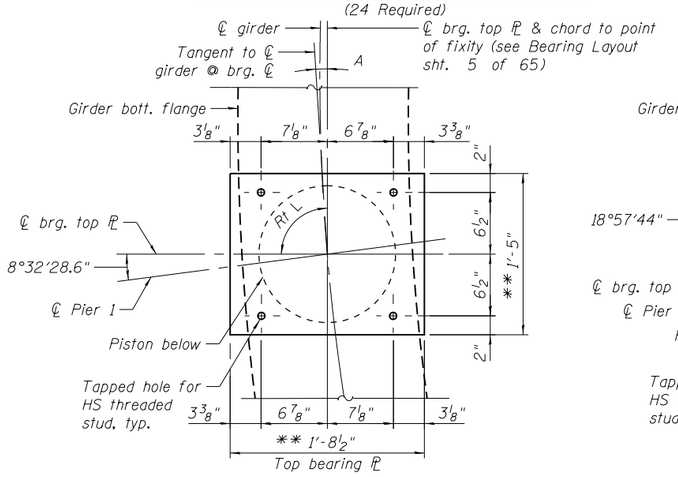
HLMR BEARING DESIGN INFORMATION

Design Information	Pier 1	Pier 2
Vertical Design Load (kips)	360	285
HLMR Bearing Capacity (kips)	400	400
Type	Guided Expansion	Guided Expansion
Lateral Design Load (kips), Hu	68	54
Total Required Movement (in)	2.25	1.25
Design Rotation (Radians), θu	0.0072	0.0033
Girder Slope	3.0%	3.3%
Expansion Length (ft)	285	170

Notes: Vertical Design Load (Service I) = Total Vertical Dead Load + Live Load (No Impact)

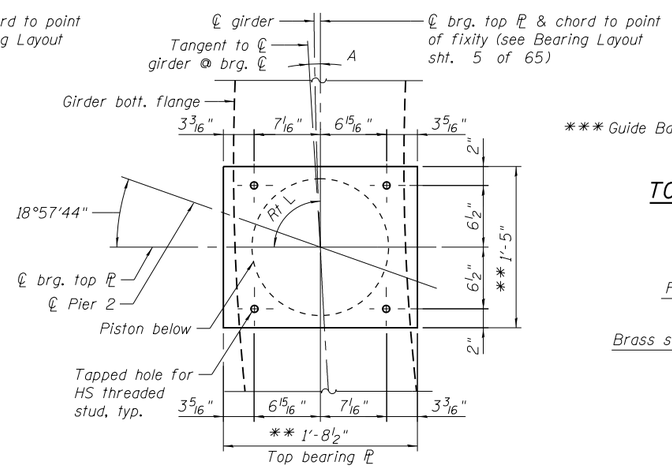
BILL OF MATERIAL

Item	Unit	Total
HLMR Bearings, Guided Expansion, 400K	Each	24
Anchor Bolts, 1"	Each	96



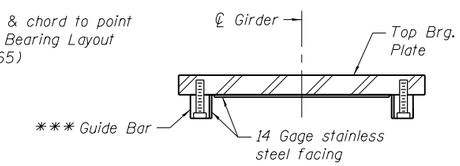
PIER 1 TOP BEARING ℗ AND PISTON PLAN

Guide bars not shown for clarity

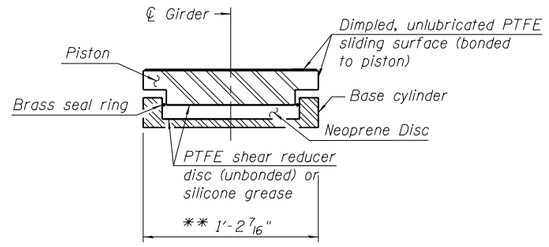


PIER 2 TOP BEARING ℗ AND PISTON PLAN

Guide bars not shown for clarity



TOP BEARING PLATE ASSEMBLY



PISTON ASSEMBLY

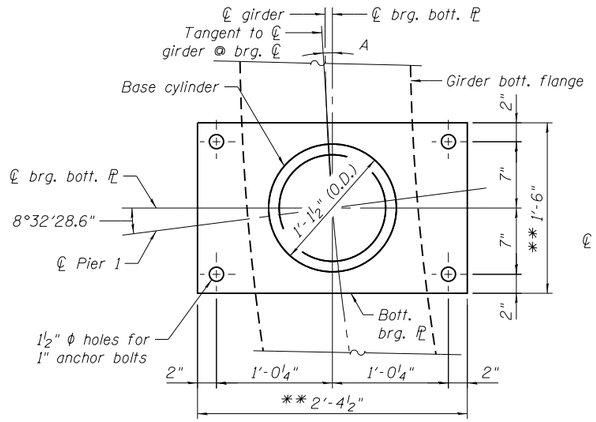
* Measured radially from edge of girder bottom flange.

** Dimension may vary depending on manufacturer's design.

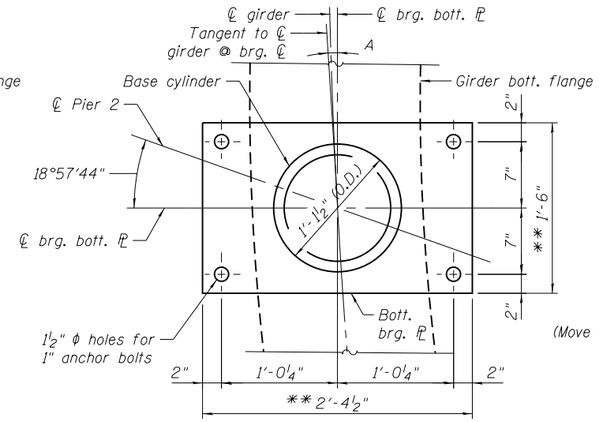
*** As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.

NOTES

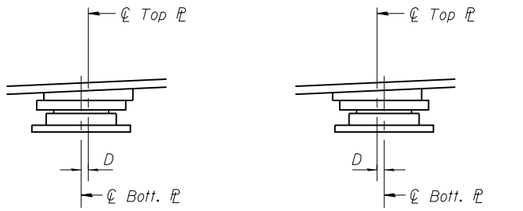
1. The ⅛" PTFE sheets shall be bonded directly to the piston with a two component medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MM-A-134, Type 1. The bond agent shall be applied to the full area of the contact surfaces.
2. The Vertical Design Load in table is the actual controlling vertical service load.
3. HLMR Bearings dimensions and details are based on a specific manufacturer's design tables. Actual dimensions and details may differ. Contractor to verify bearing heights and adjust bearing seat elevations as necessary based on the actual bearings provided and propose plan modifications as necessary for review and approval by the Engineer. Cost included with HLMR Bearings, Guided Expansion, 400K.
4. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
5. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
6. 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.
7. Anchor bolts for HLMR bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after bearings are in place, and prior to cross frame installation to avoid interference during installation or Contractor shall remove cross frame as needed to avoid interference with drilling operation. This work shall be included in the cost of HLMR Bearings, of the type specified.
8. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
9. Anchor bolts with fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place. Prior to pouring abutment or pier caps, Contractor shall verify rebar clearances with either anchor bolt installation method.



PIER 1 BOTTOM BEARING ℗ AND BASE CYLINDER PLAN



PIER 2 BOTTOM BEARING ℗ AND BASE CYLINDER PLAN



SETTING ANCHOR BOLTS AT EXP. BRG.

D=⅛" per each 100′ of expansion for every 15° temp. change from the normal temp. of 50° F.

USER NAME = default	DESIGNED - IYL	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - IYL	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS II
STRUCTURE NO. 099-0904
SHEET NO. 38 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	388
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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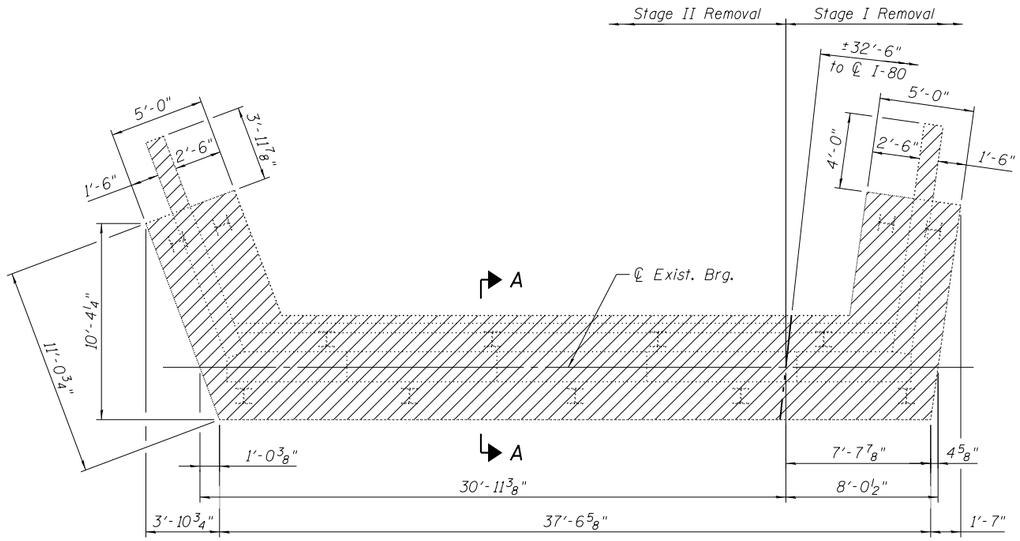
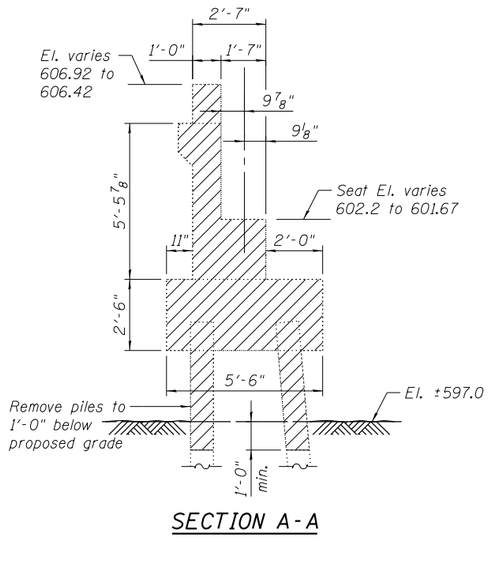
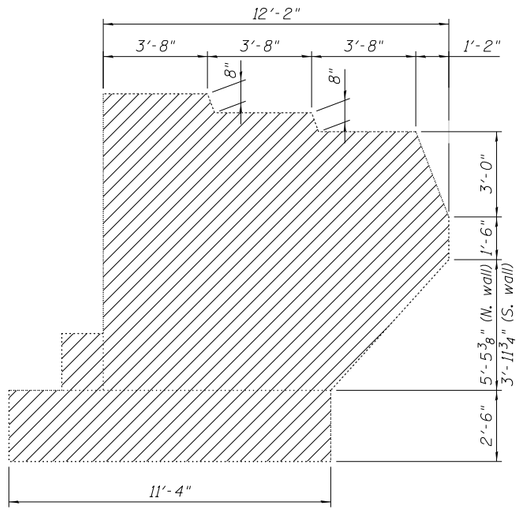


PLAN - WEST ABUTMENT

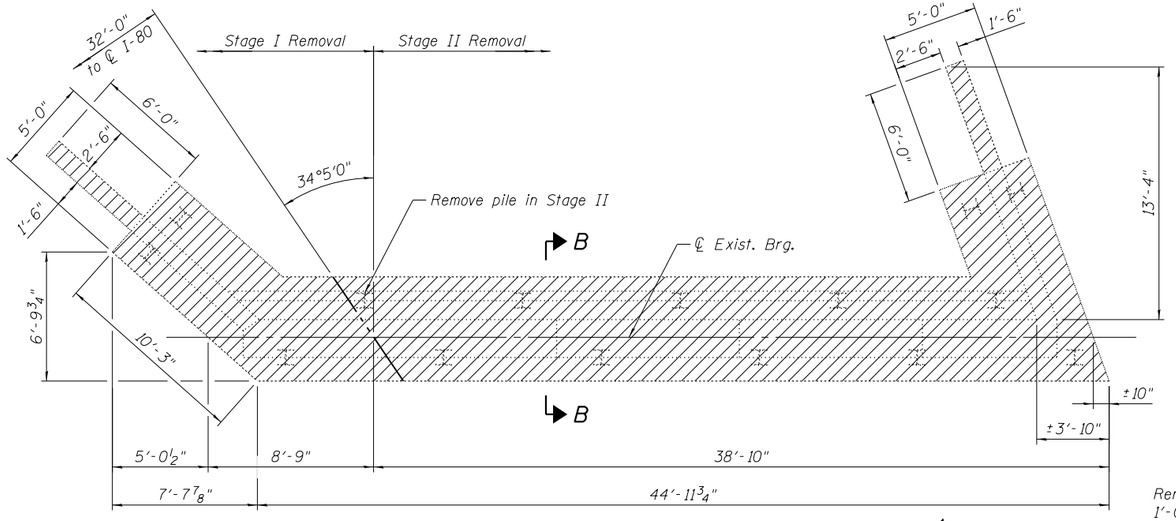


SECTION A-A

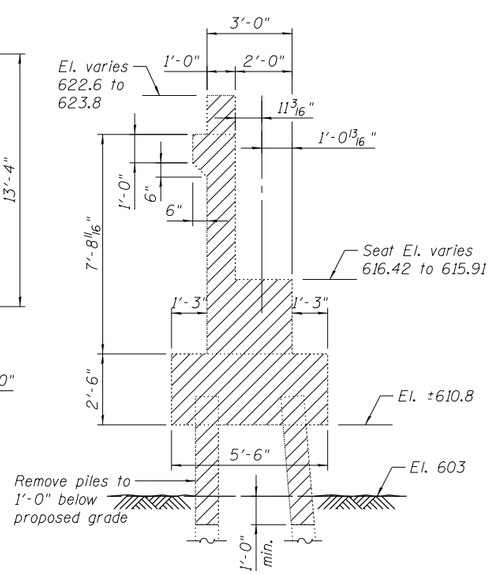


WINGWALL ELEVATION

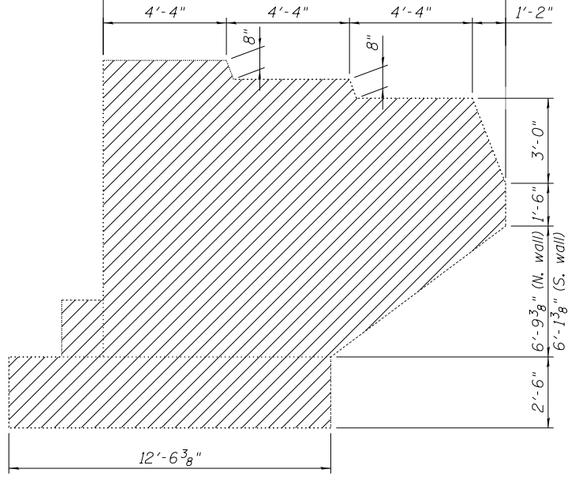
(West Abutment)



PLAN - EAST ABUTMENT



SECTION B-B



WINGWALL ELEVATION

(East Abutment)

LEGEND

Removal of Existing Structures No. 2

NOTES

1. Removals shall be paid for as Removal of Existing Structures No. 2.
2. See sheet 9 of 65 for superstructure removal.

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REMOVAL
STRUCTURE NO. 099-0904
SHEET NO. 39 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	389
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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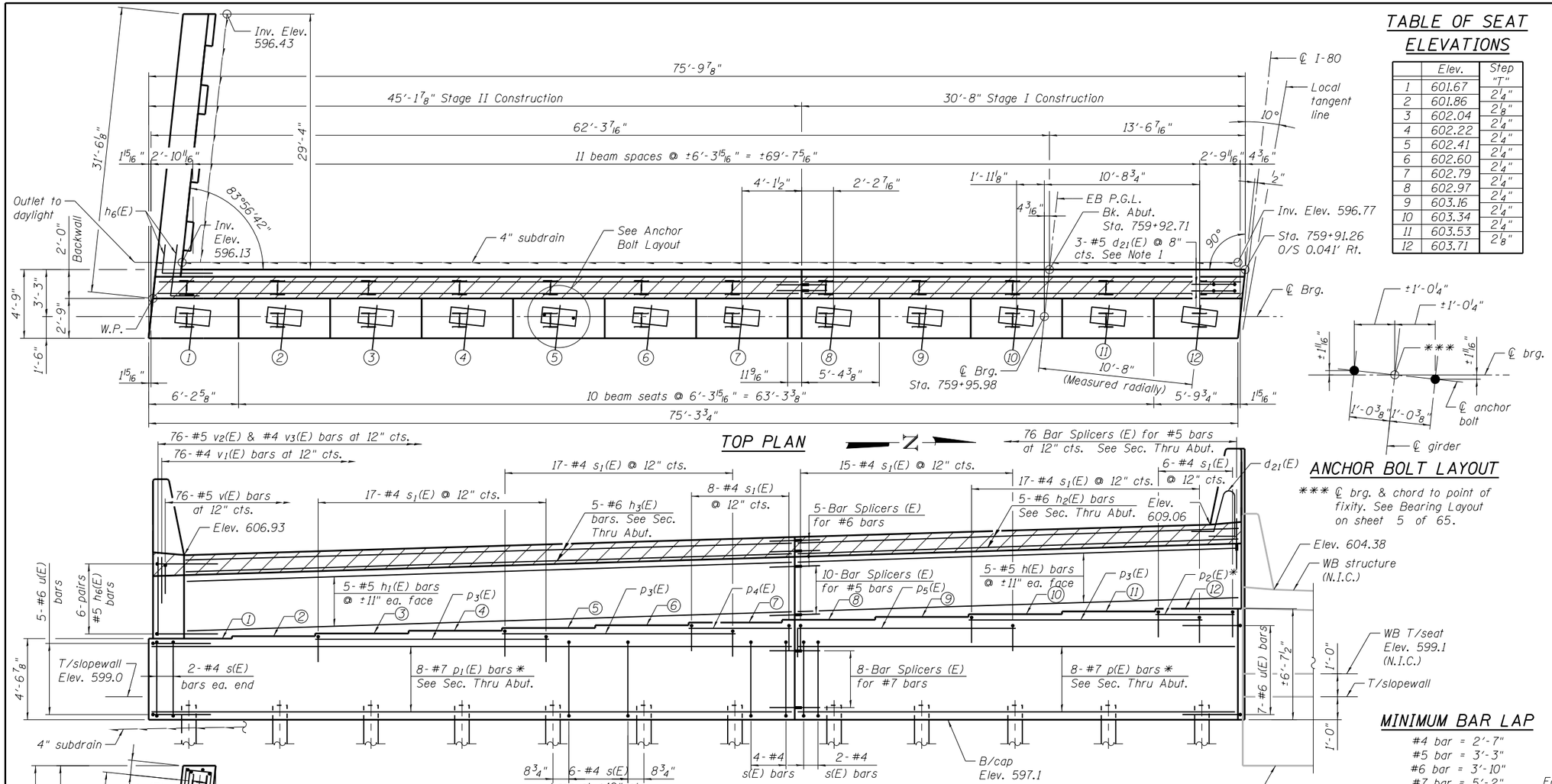


TABLE OF SEAT ELEVATIONS

	Elev.	Step "T"
1	601.67	
2	601.86	2 1/4"
3	602.04	2 1/8"
4	602.22	2 1/4"
5	602.41	2 1/4"
6	602.60	2 1/4"
7	602.79	2 1/4"
8	602.97	2 1/4"
9	603.16	2 1/4"
10	603.34	2 1/4"
11	603.53	2 1/4"
12	603.71	2 1/8"

WEST ABUTMENT BILL OF MATERIAL

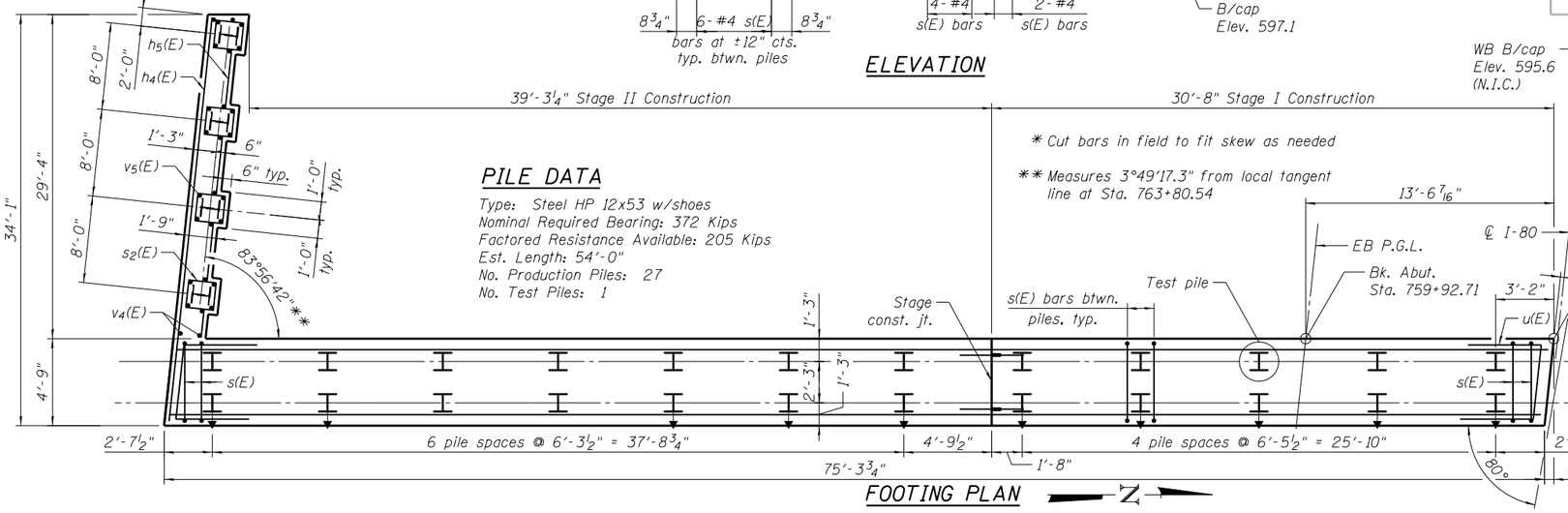
Bar	No.	Size	Length	Shape
d21(E)	6	#5	8'-6"	
h(E)	10	#5	30'-4"	
h1(E)	10	#5	43'-7"	
h2(E)	5	#6	30'-4"	
h3(E)	5	#6	43'-1"	
h4(E)	9	#5	31'-3"	
h5(E)	36	#5	7'-0"	
h6(E)	12	#5	5'-6"	
p(E)	8	#7	30'-2"	
p1(E)	8	#7	44'-10"	
p2(E)	3	#5	5'-7"	
p3(E)	9	#5	16'-2"	
p4(E)	3	#5	7'-7"	
p5(E)	3	#5	15'-9"	
s(E)	70	#4	17'-11"	
s1(E)	80	#4	8'-5"	
s2(E)	24	#4	6'-9"	
u(E)	12	#6	12'-5"	
v(E)	76	#5	3'-9"	
v1(E)	76	#4	3'-0"	
v2(E)	76	#5	6'-4"	
v3(E)	76	#4	7'-2"	
v4(E)	60	#5	7'-11"	
v5(E)	16	#5	6'-7"	

Pile Shoes	Each	28
Structure Excavation	Cu. Yd.	405.0
Concrete Structures	Cu. Yd.	113.6
Reinforcement Bars, Epoxy Coated	Pound	7,010
Furnishing Steel Piles, HP 12x53	Foot	1,458
Driving Piles	Foot	1,458
Test Pile, Steel HP 12x53	Each	1
Concrete Sealer	Sq. Ft.	1,280
Granular Backfill for Structures	Cu. Yd.	228.8
Geocomposite Wall Drain	Sq. Yd.	115
Pipe Underdrains for Structures 4"	Foot	150

For details of Bar Splicers, see sheet 55 of 65.
For details of piles see sheet 54 of 65.
For wingwall details see sheet 42 of 65.

TOP PLAN

ELEVATION



FOOTING PLAN

PILE DATA

Type: Steel HP 12x53 w/shoes
Nominal Required Bearing: 372 Kips
Factored Resistance Available: 205 Kips
Est. Length: 54'-0"
No. Production Piles: 27
No. Test Piles: 1

ANCHOR BOLT LAYOUT

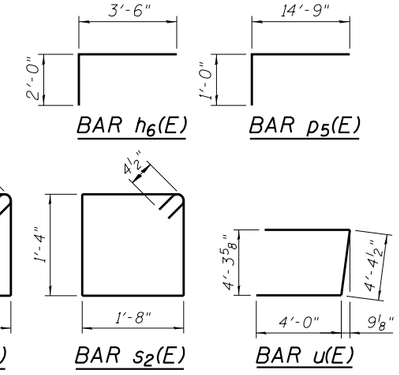
*** ℄ brg. & chord to point of fixity. See Bearing Layout on sheet 5 of 65.

MINIMUM BAR LAP

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

NOTES

1. See approach slab sheet 25 & 26 of 65 for additional details. Modular jt. housing shall not interfere w/ reinf. bars.



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	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED	
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 099-0904
SHEET NO. 40 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	390
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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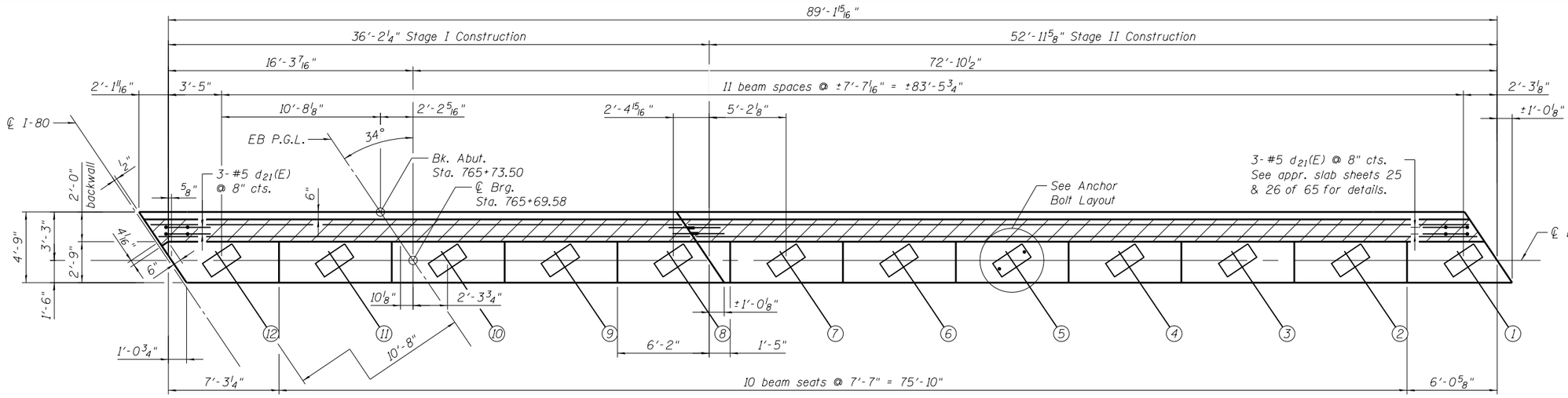
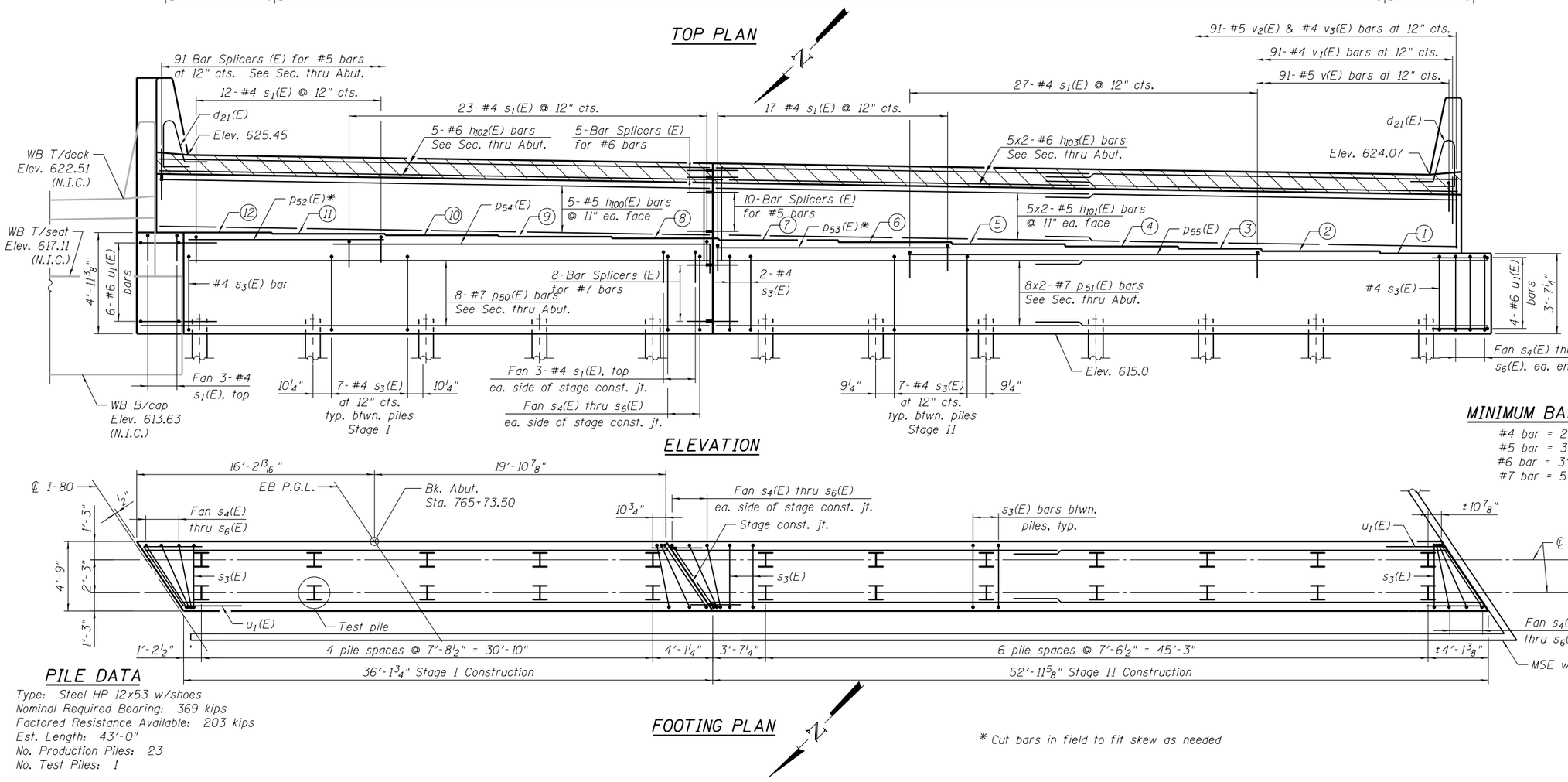


TOP PLAN



ELEVATION

PILE DATA

Type: Steel HP 12x53 w/shoes
Nominal Required Bearing: 369 kips
Factored Resistance Available: 203 kips
Est. Length: 43'-0"
No. Production Piles: 23
No. Test Piles: 1

FOOTING PLAN

* Cut bars in field to fit skew as needed

EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$d_{21}(E)$	6	#5	8'-6"	
$h_{100}(E)$	10	#5	35'-10"	
$h_{101}(E)$	20	#5	28'-1"	
$h_{102}(E)$	5	#6	35'-10"	
$h_{103}(E)$	10	#6	28'-5"	
$p_{50}(E)$	8	#7	35'-10"	
$p_{51}(E)$	16	#7	29'-1"	
$p_{52}(E)$	3	#5	15'-6"	
$p_{53}(E)$	3	#5	18'-0"	
$p_{54}(E)$	3	#5	25'-4"	
$p_{55}(E)$	3	#5	26'-3"	
$s_1(E)$	88	#4	8'-5"	
$s_3(E)$	74	#4	16'-1"	
$s_4(E)$	4	#4	16'-3"	
$s_5(E)$	4	#4	16'-11"	
$s_6(E)$	4	#4	17'-11"	
$u_1(E)$	10	#6	13'-3"	
$v(E)$	91	#5	3'-9"	
$v_1(E)$	91	#4	3'-0"	
$v_2(E)$	91	#5	6'-4"	
$v_3(E)$	91	#4	7'-2"	
Pile Shoes			Each	24
Structure Excavation			Cu. Yd.	869.9
Concrete Structures			Cu. Yd.	95.8
Reinforcement Bars, Epoxy Coated			Pound	6,720
Furnishing Steel Piles, HP 12x53			Foot	989
Driving Piles			Foot	989
Test Pile, Steel HP 12x53			Each	1
Concrete Sealer			Sq. Ft.	1,132

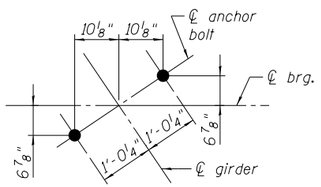
For details of Bar Splicers, see sheet 55 of 65.
For details of piles see sheet 54 of 65.

TABLE OF SEAT ELEVATIONS

	Elev.	Step "T"
1	618.60	
2	618.76	1 3/4"
3	618.91	1 3/4"
4	619.06	1 3/4"
5	619.20	1 5/8"
6	619.32	1 1/2"
7	619.45	1 1/2"
8	619.56	1 3/8"
9	619.67	1 3/8"
10	619.77	1 1/4"
11	619.88	1 3/8"
12	619.95	0 3/4"

MINIMUM BAR LAP

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



ANCHOR BOLT LAYOUT

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USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 099-0904
SHEET NO. 41 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	391
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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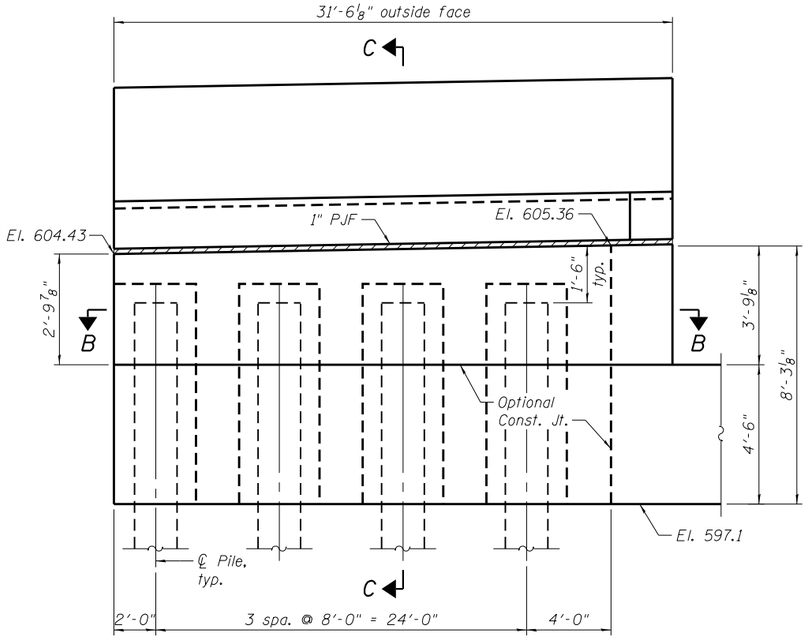
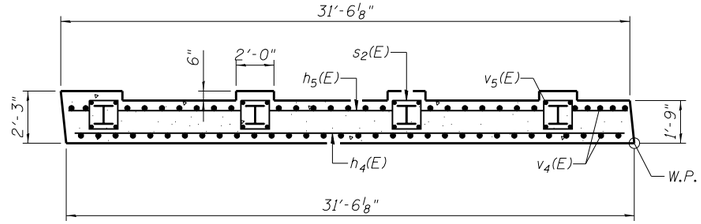
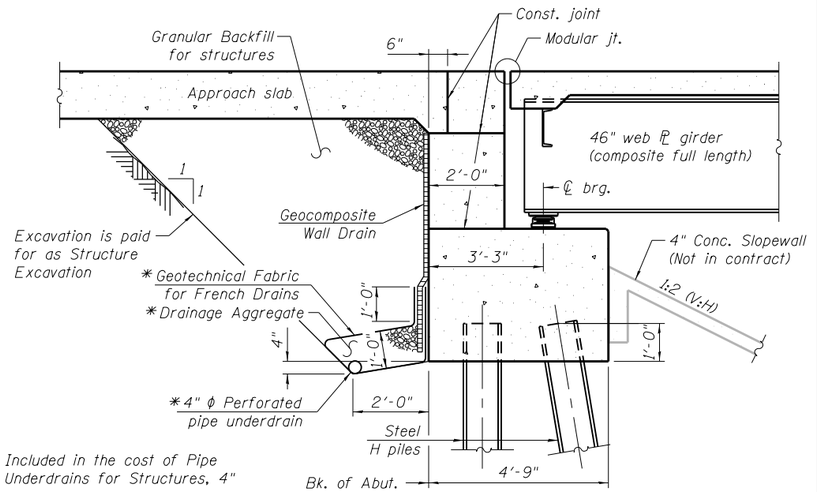


WING WALL ELEVATION

Showing dimensions along wingwall (W. Abut. only)



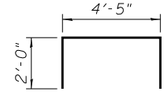
SECTION B-B



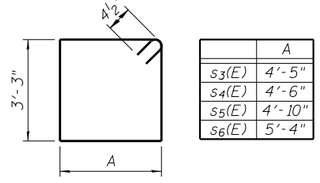
* Included in the cost of Pipe Underdrains for Structures, 4"

SECTION THRU WEST ABUTMENT

(Horiz. dim. @ Rt. L's)

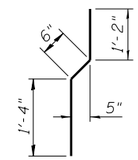


BAR $s_1(E)$

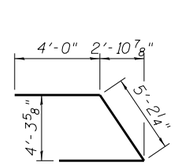


	A
$s_3(E)$	4'-5"
$s_4(E)$	4'-6"
$s_5(E)$	4'-10"
$s_6(E)$	5'-4"

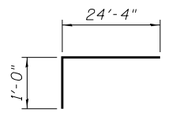
BARS $s_3(E)$, $s_4(E)$, $s_5(E)$ & $s_6(E)$



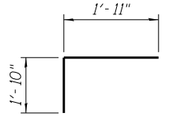
BAR $v_1(E)$



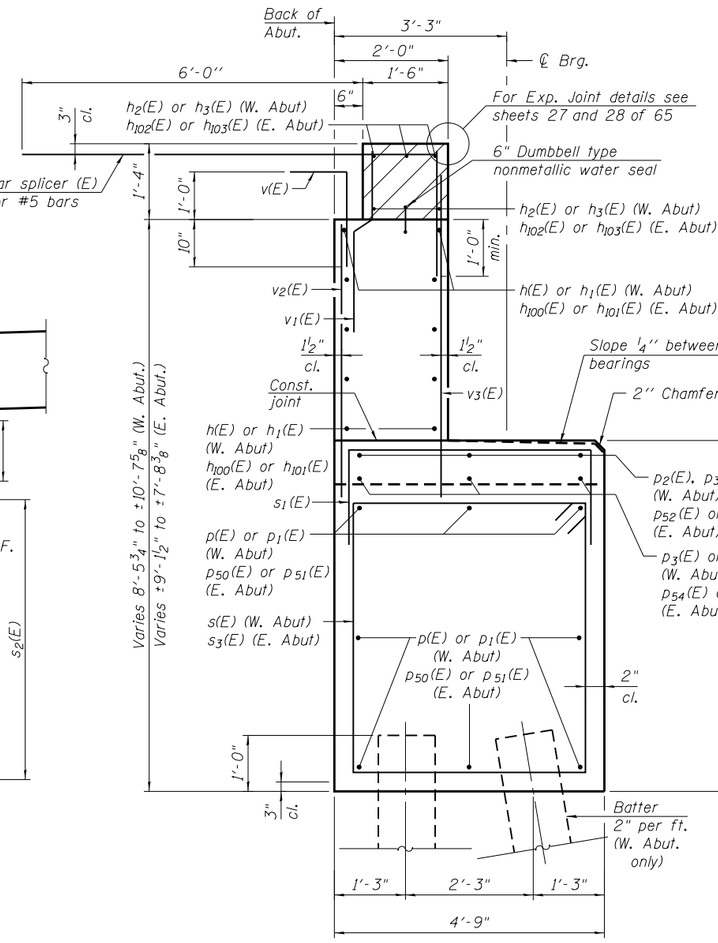
BAR $u_1(E)$



BAR $p_{54}(E)$



BAR v(E)

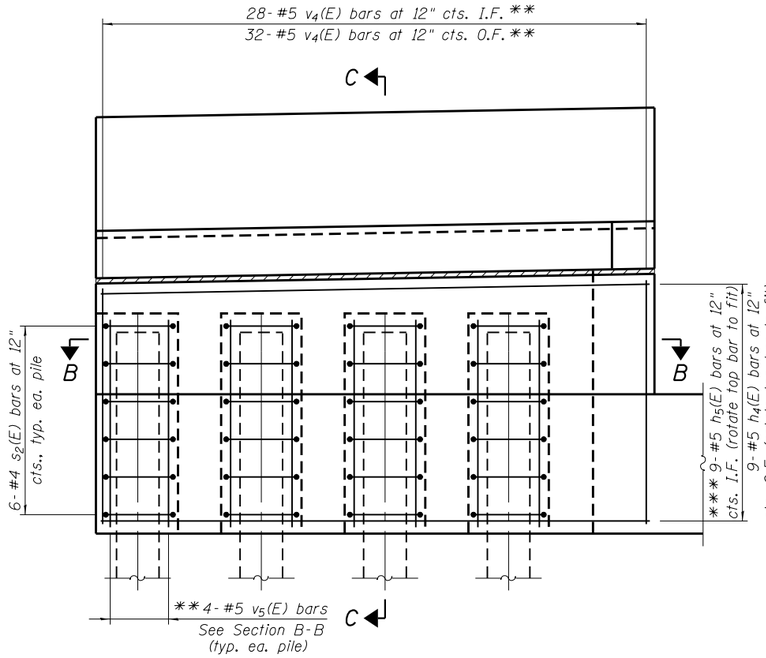


Varies 8'-5 3/4" to ±10'-7 5/8" (W. Abut.)
Varies ±9'-1 1/2" to ±7'-8 3/8" (E. Abut.)

4'-6 7/8" min., 6'-7 1/2" max.
3'-6 5/8" min., 4'-11 3/8" max.

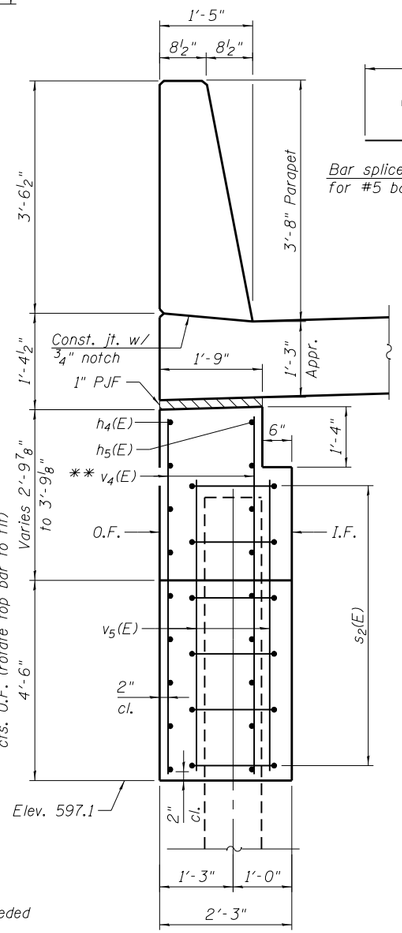
SECTION THRU ABUT.

Showing W. Abut., E. Abut. similar



WING WALL ELEVATION

Showing reinforcement (W. Abut. only)



SECTION C-C

** Cut to fit in field as needed

*** Cut bar to use at either end of wingwall

Notes:

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

Space reinforcement in cap to miss anchor bolts.

Pour steps monolithically with cap.

Quantity of concrete in end post included with Concrete Superstructure on sheet 24 of 65.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 42 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	392
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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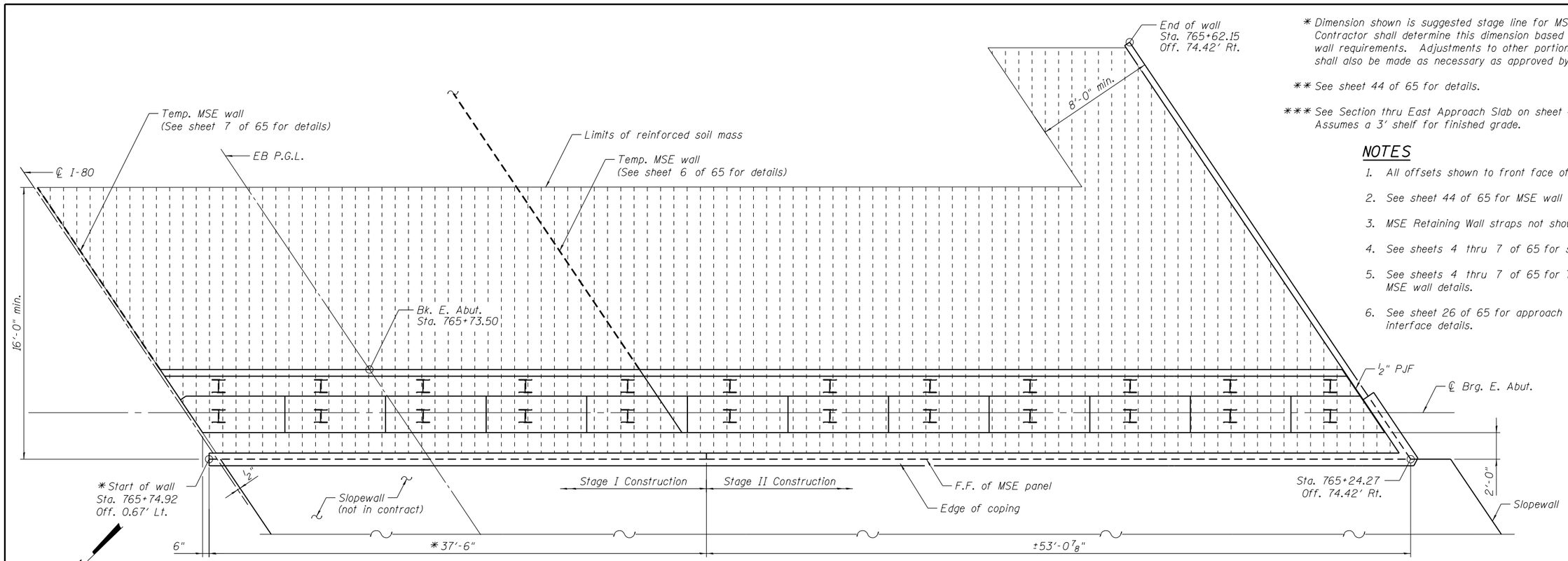
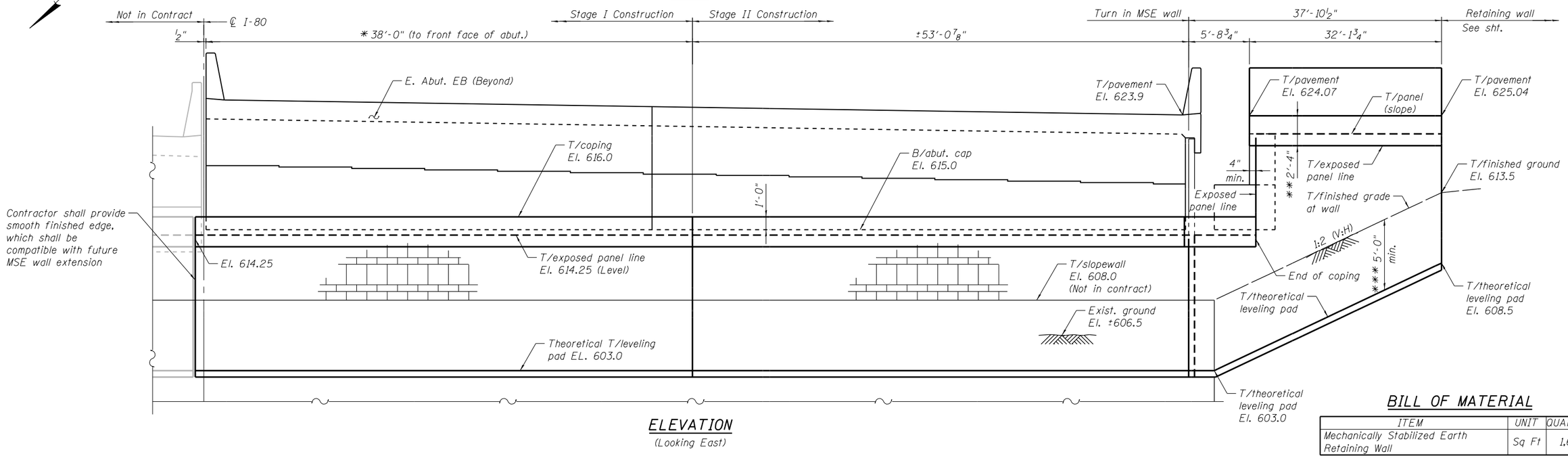


PLAN



ELEVATION
(Looking East)

* Dimension shown is suggested stage line for MSE wall limits. Contractor shall determine this dimension based on temp. MSE wall requirements. Adjustments to other portions of the wall shall also be made as necessary as approved by the Engineer.

** See sheet 44 of 65 for details.

*** See Section thru East Approach Slab on sheet 44 of 65. Assumes a 3' shelf for finished grade.

NOTES

1. All offsets shown to front face of MSE wall panel.
2. See sheet 44 of 65 for MSE wall details.
3. MSE Retaining Wall straps not shown for clarity.
4. See sheets 4 thru 7 of 65 for staging details.
5. See sheets 4 thru 7 of 65 for TSRS & temp. MSE wall details.
6. See sheet 26 of 65 for approach slab/MSE wall interface details.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Mechanically Stabilized Earth Retaining Wall	Sq Ft	1,660

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
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PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE WALL AT EAST ABUTMENT
STRUCTURE NO. 099-0904
SHEET NO. 43 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	393
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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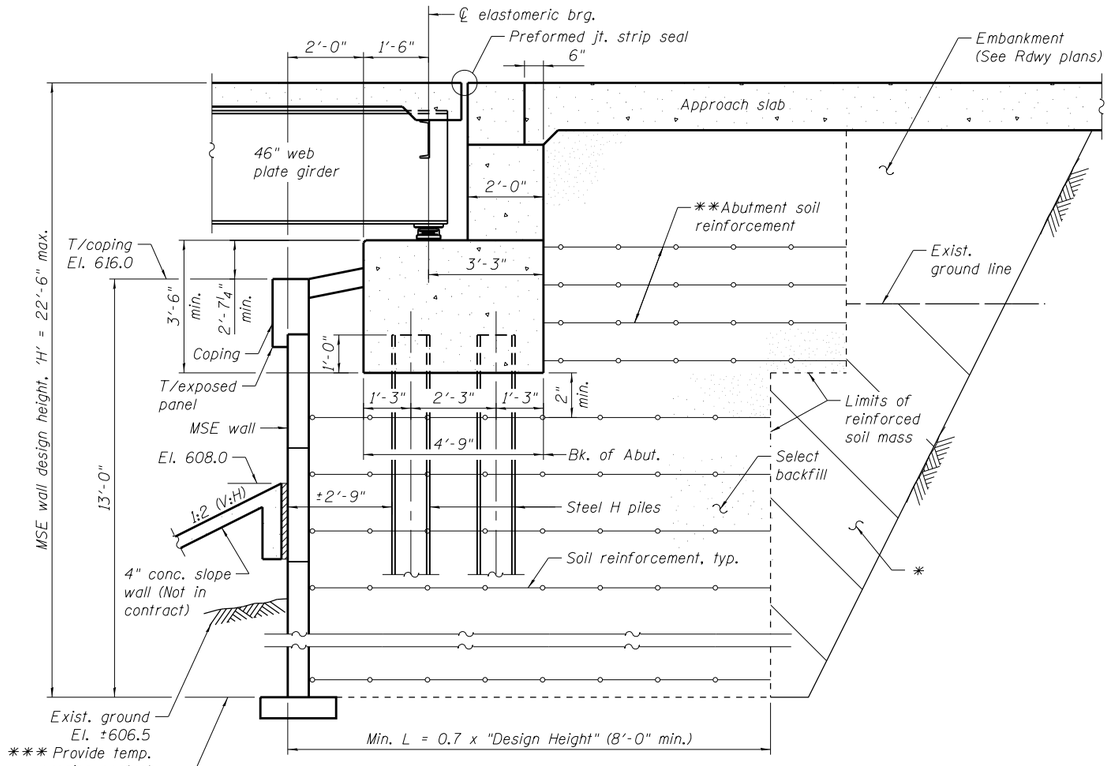
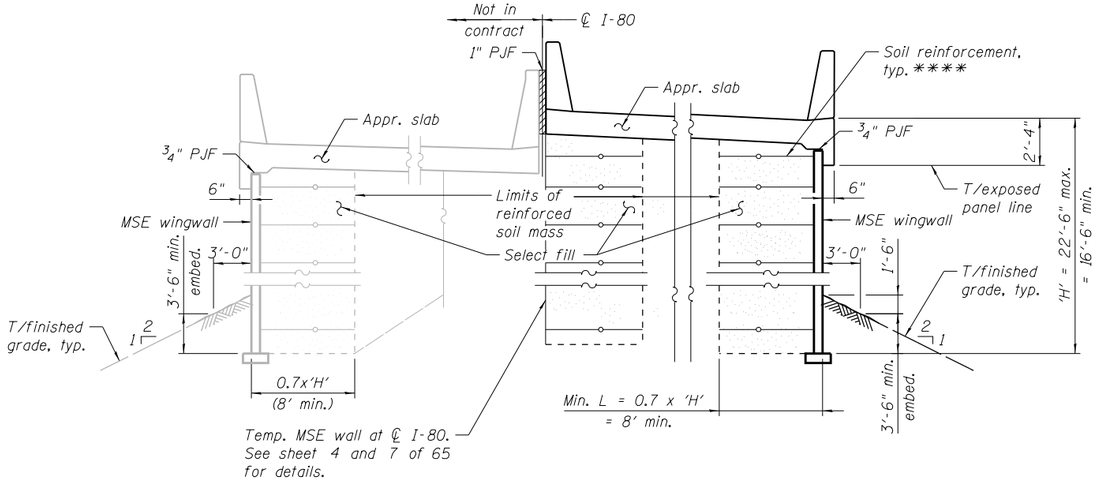
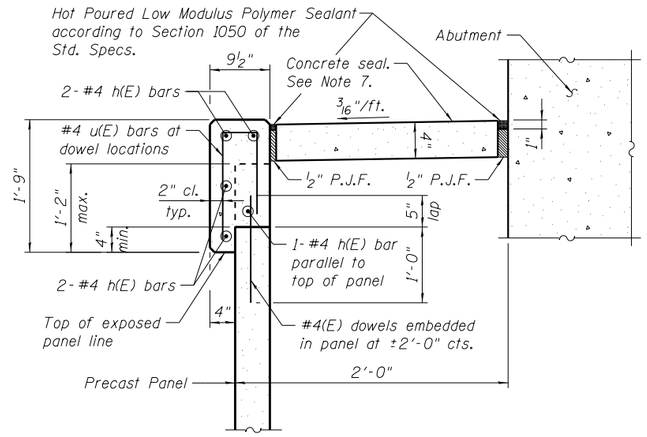


SECTION THRU MSE WALL AND EAST ABUTMENT

(Dim. @ Rt. L's)

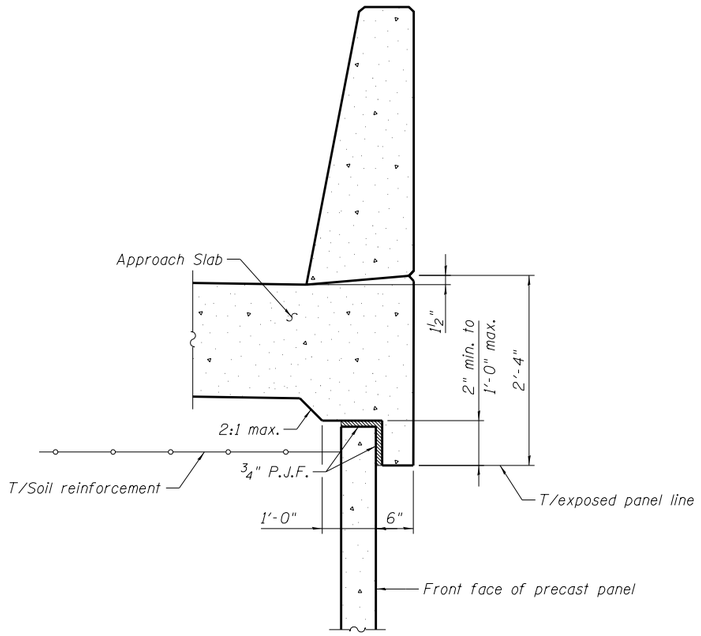


SECTION THRU EAST APPROACH SLAB



CAST-IN-PLACE COPING DETAIL AT ABUTMENT

(Precast Coping Cannot Be Substituted)
(Horiz. dim. @ Rt. L's)



CAST-IN-PLACE COPING DETAIL AT WINGWALL

* Overexcavation beyond Structure Excavation. This area not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.

** The MSE Wall Supplier shall design the abutment soil reinforcement to resist a horizontal force of 3.75 k/ft of abutment.

*** Slope wall will be constructed in a future contract. The Contractor shall install necessary erosion control elements as shown on the roadway plans.

**** For Portions of MSE wall beneath approach slab, the MSE wall supplier's internal stability design shall account for the anchorage slab's bearing pressure of 1.5 ksf and horizontal sliding force of 1.15 kips/ft of wall.

NOTES

1. Shop Drawings submittal by MSE Wall Supplier shall include all dimensions, elevations and details necessary to accomodate bridge skew, bridge piles, temporary shoring, and any other structural system shown on the plans. Cost included with Mechanically Stabilized Earth Retaining Wall.
2. No precoring required for piles at abutments. Piles shall be driven prior to placement of the reinforced select backfill.
3. Cost of P.J.F., C.I.P. Coping and reinforcement, Sealant, and Concrete Seal shall be included with the cost of Mechanically Stabilized Earth Retaining Wall.
4. For MSE Wall Plan and Elevation, see sheet 43 of 65.
5. For Abutment Details see sheets 40 and 41 of 65.
6. For Approach Slab Details, see sheets 25 and 26 of 65.
7. The Concrete Seal shall be installed according to Articles 511.02, 511..03 and 511.04 of the Standard Specifications. The cost of Concrete Seal shall be included in the cost of Mechanically Stabilized Earth Retaining Wall.

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USER NAME = default	DESIGNED - DF	REVISED
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PLOT SCALE = $SCALE$	DRAWN - LAM	REVISED
PLOT DATE = 9/28/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT & MSE WALL DETAILS
STRUCTURE NO. 099-0904
SHEET NO. 44 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	394
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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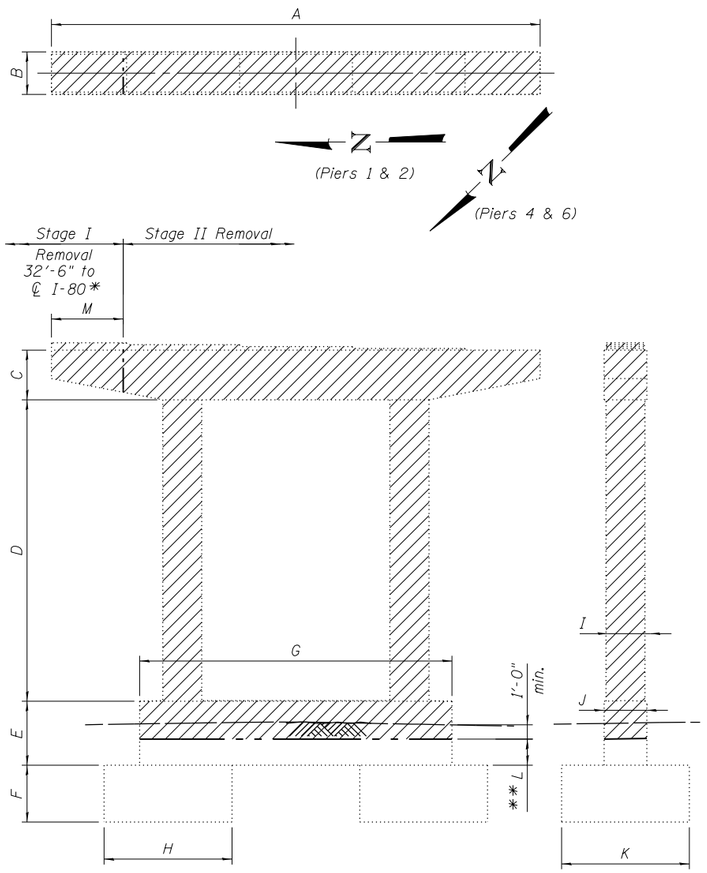
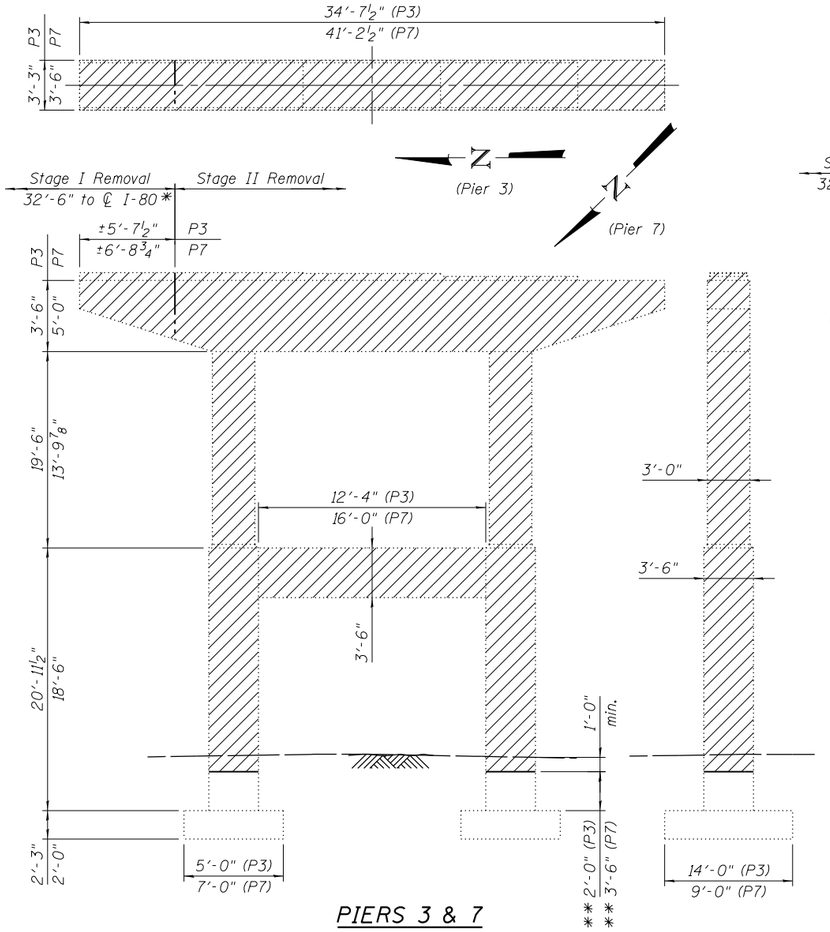
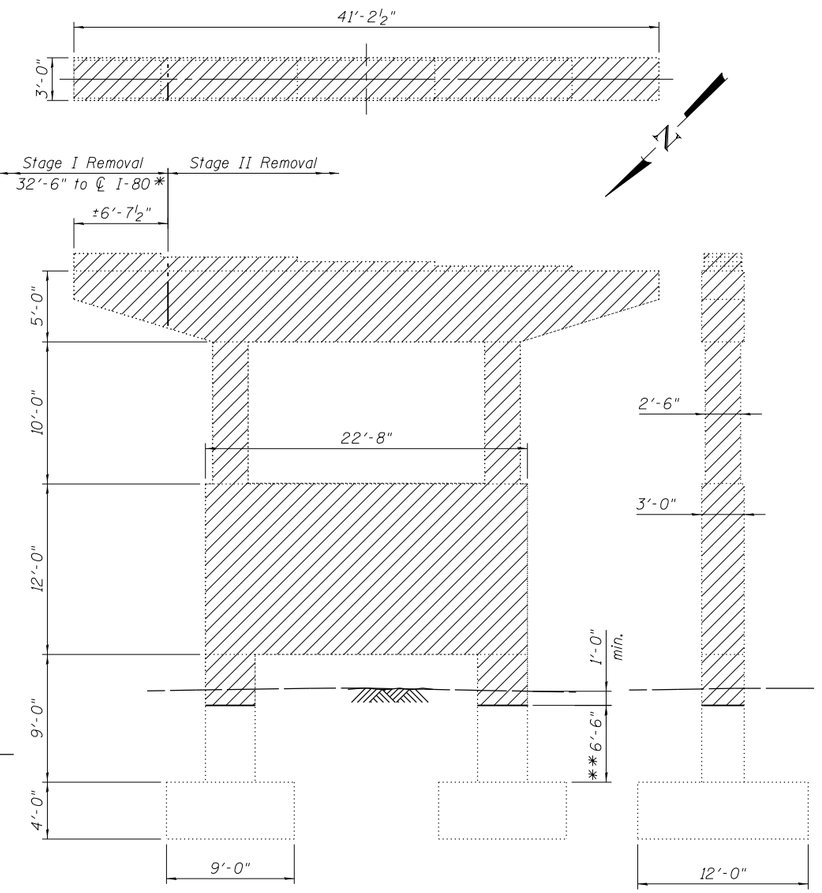


PIERS 1, 2, 4 & 6



PIERS 3 & 7



PIER 5

* Measured perpendicular to ℄ I-80

** Remove existing pier 1' minimum below proposed ground.

TABLE OF DIMENSIONS

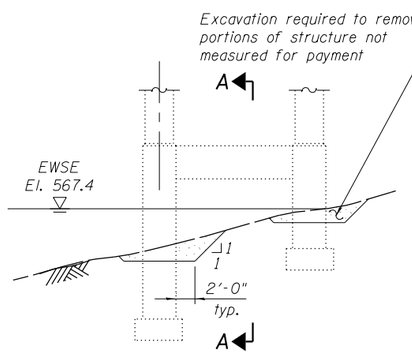
Pier	A	B	C	D	E	F	G	H	I	J	K	L**	M
1	34'-5"	3'-0"	3'-6"	21'-2 11/16"	4'-6"	4'-0"	20'-0"	9'-0"	2'-9"	3'-0"	9'-0"	0	±5'-0 5/8"
2	34'-5"	3'-0"	3'-6"	23'-0 1/8"	12'-6 5/8"	2'-0"	19'-6"	5'-0"	2'-6"	3'-0"	10'-0"	1'-6"	±5'-0 3/4"
4	41'-9 3/4"	3'-6"	4'-0"	13'-4 1/16"	16'-6 3/8"	2'-6"	23'-4"	7'-0"	3'-0"	3'-6"	10'-0"	2'-6"	±6'-9 3/4"
6	41'-2½"	3'-0"	5'-0"	14'-8"	18'-5"	2'-0"	22'-8"	7'-0"	2'-6"	3'-0"	9'-0"	8'-0"	±6'-8 3/4"

LEGEND

Removal of Existing Structures No. 2

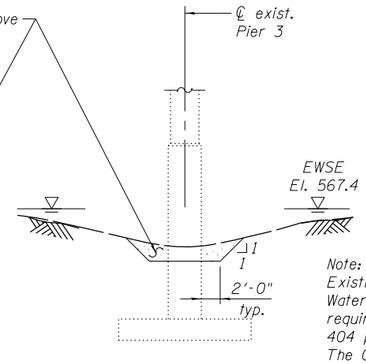
NOTES

1. Removals shall be paid for as Removal of Existing Structures No. 2.
2. See sheet 9 of 65 for superstructure removal.



EXISTING PIER 3

(Looking East)



SECTION A-A

Note:
Existing Pier 3 removal will be performed within designated Waters of the US, and the Contractor shall comply with all requirements of the US Army Corps of Engineers (USACOE) 404 permit. See General Note 24 on roadway plan sheet no 4. The Contractor will be required to submit an instream work plan to the Department for review and approval. Any material, labor, or equipment necessary to perform existing pier removals shall be included in the cost of Removal of Existing Structures No. 2.

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PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REMOVAL
STRUCTURE NO. 099-0904
SHEET NO. 45 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	395
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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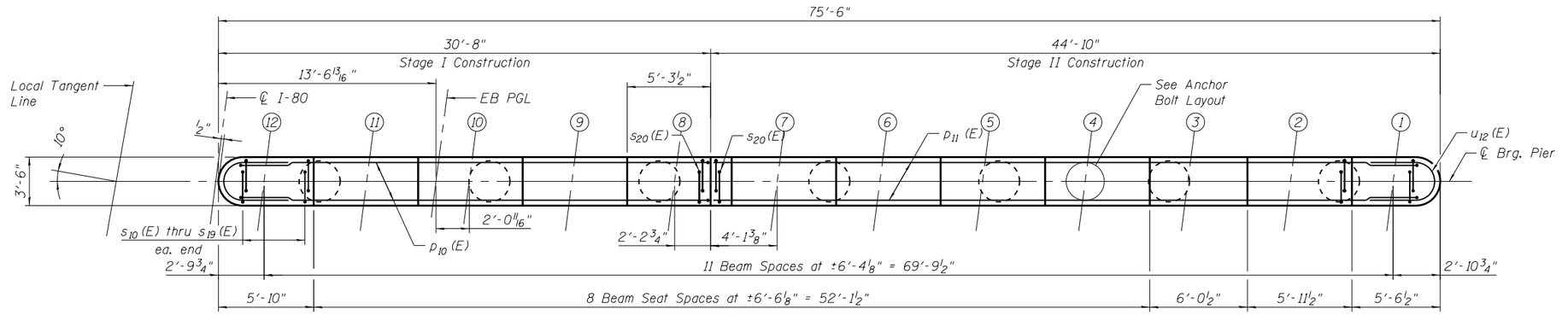
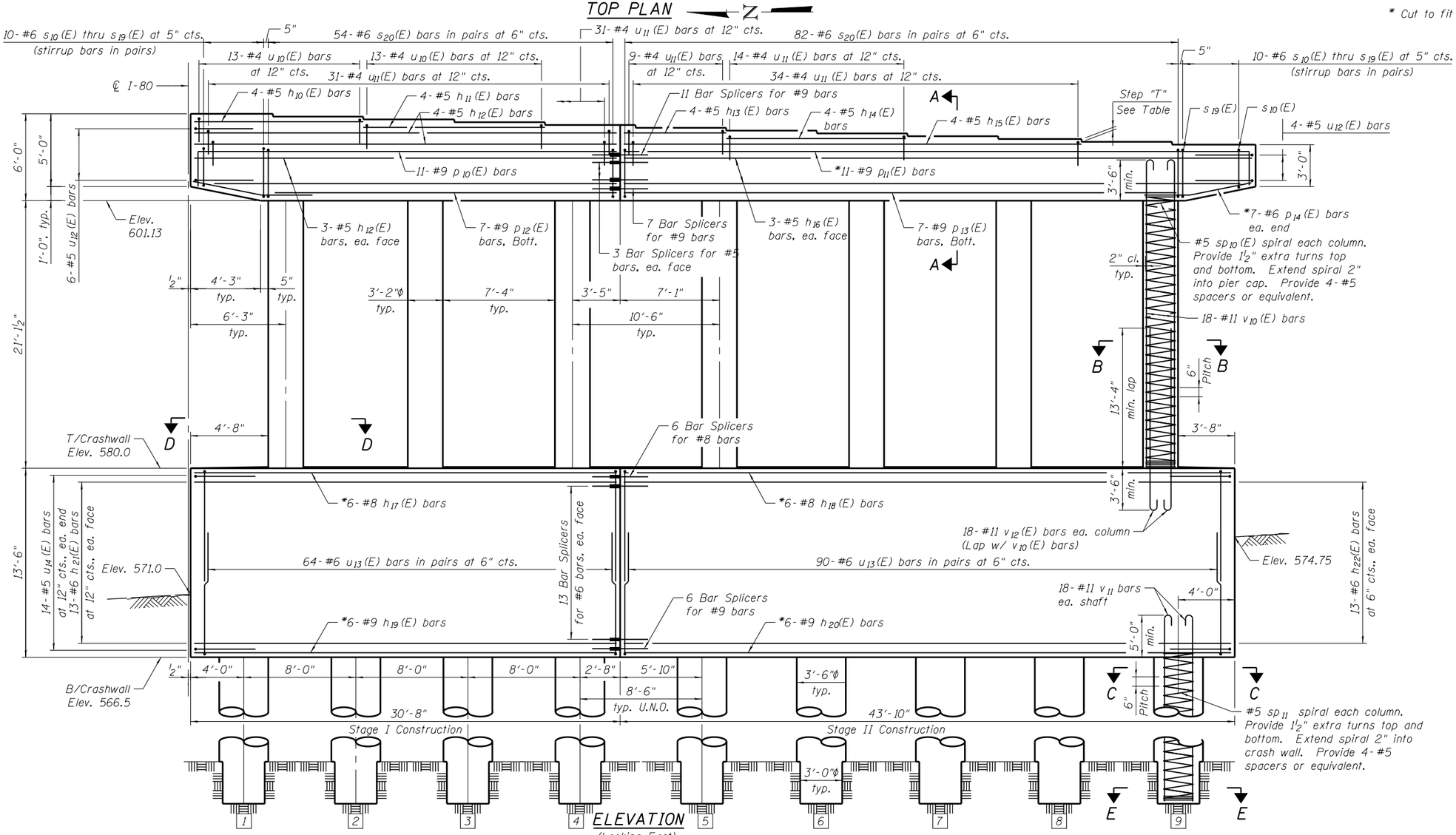


TOP PLAN



ELEVATION
(Looking East)

PIER GENERAL NOTES

1. Cast steps monolithically with cap.
2. Space cap reinforcement to miss anchor bolts.
3. Contractor to space drilled shaft and column rebar so as not to interfere with crashwall and cap reinforcement.
4. See sheet 47 of 65 for Bill of Material, Section A-A, B-B, C-C, D-D, E-E, Bar Diagram and Drilled Shaft details.
5. For Anchor Bolt layout plan, see sheet 47 of 65.
6. See Sheet 4 of 65 for additional cofferdam details.
7. Drill and construct the odd-numbered shafts prior to drilling the even-numbered shafts.

* Cut to fit in field.

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
12	607.13	2 1/4"
11	606.95	2"
10	606.78	2 3/8"
9	606.58	2 1/8"
8	606.40	2 1/8"
7	606.21	2"
6	606.05	2 1/4"
5	605.84	2 1/8"
4	605.66	2 1/8"
3	605.48	2 1/8"
2	605.32	2 1/8"
1	605.13	2 1/4"

MINIMUM BAR LAP

#6 bar = 3'-10"

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
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	PLOT SCALE = $SCALE$	DRAWN - MTR	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 46 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	396
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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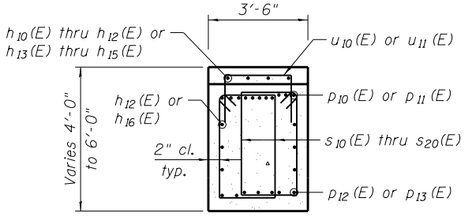
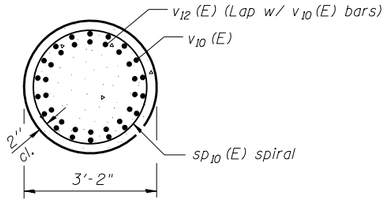
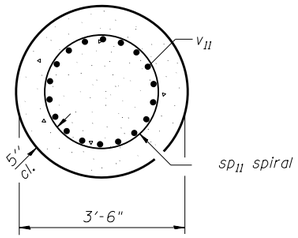


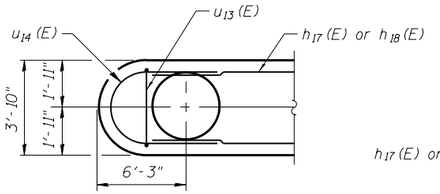
SECTION A-A



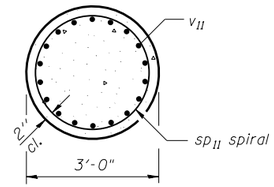
SECTION B-B



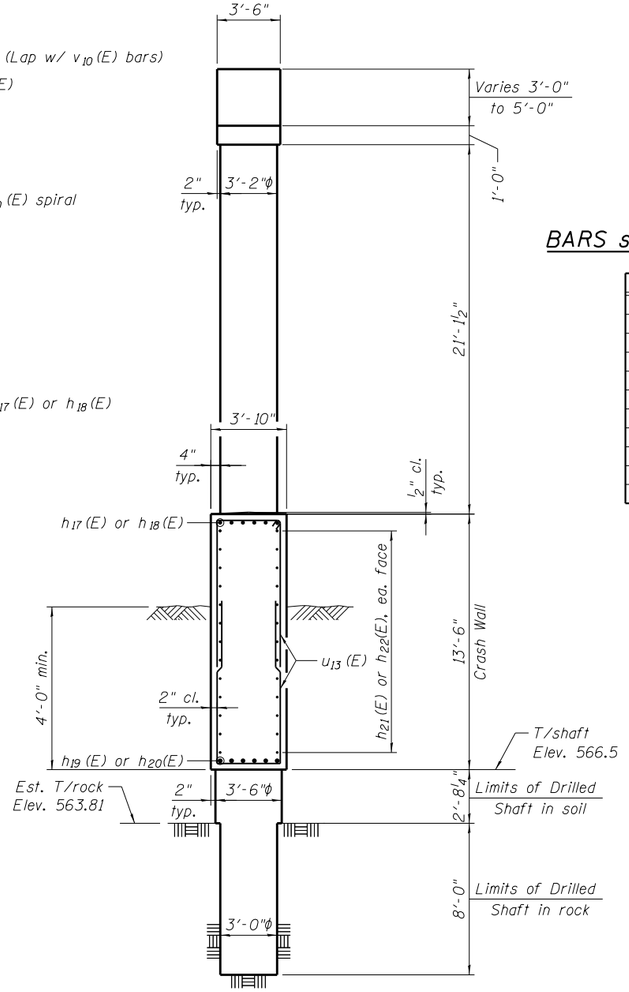
SECTION C-C



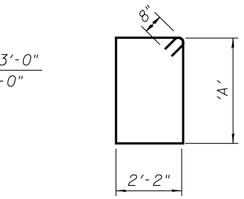
SECTION D-D



SECTION E-E

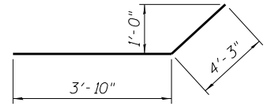


END VIEW

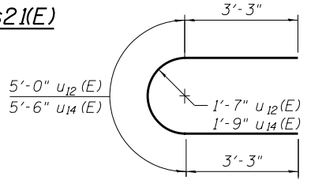


BARS s11(E) thru s21(E)

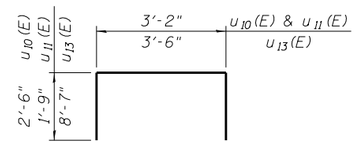
Bar	'A'
s_{10}(E)	2'-8½"
s_{11}(E)	2'-10"
s_{12}(E)	2'-11"
s_{13}(E)	3'-0"
s_{14}(E)	3'-1½"
s_{15}(E)	3'-2½"
s_{16}(E)	3'-3½"
s_{17}(E)	3'-4½"
s_{18}(E)	3'-6"
s_{19}(E)	3'-7"
s_{20}(E)	3'-8"



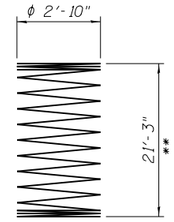
BAR p14(E)



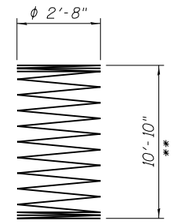
BARS u12(E) & u14(E)



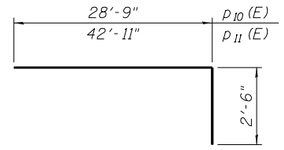
BARS u10(E), u11(E) & u13(E)



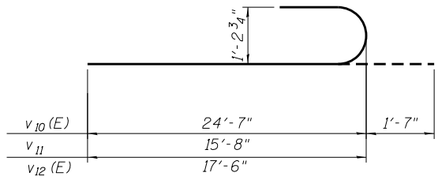
BAR sp10(E)



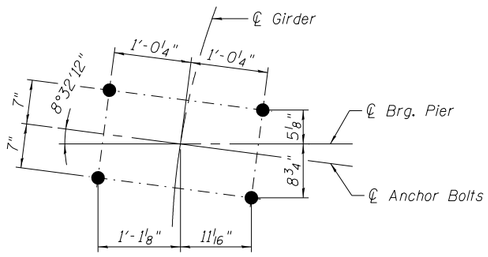
BAR sp11



BAR p10(E) & p11(E)



BARS v10(E), v11 & v12(E)



ANCHOR BOLT LAYOUT

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
*	h_{10}(E)	4	#5	12'-1"	
	h_{11}(E)	4	#5	12'-9"	
	h_{12}(E)	14	#5	30'-5"	
	h_{13}(E)	4	#5	7'-6"	
	h_{14}(E)	4	#5	13'-0"	
	h_{15}(E)	4	#5	31'-1"	
*	h_{16}(E)	6	#5	44'-7"	
*	h_{17}(E)	6	#8	30'-4"	
*	h_{18}(E)	6	#8	44'-6"	
*	h_{19}(E)	6	#9	30'-4"	
	h_{20}(E)	6	#9	44'-6"	
	h_{21}(E)	26	#6	28'-11"	
	h_{22}(E)	26	#6	43'-1"	
	p_{10}(E)	11	#9	31'-3"	
*	p_{11}(E)	11	#9	45'-5"	
	p_{12}(E)	7	#9	28'-11"	
	p_{13}(E)	7	#9	43'-1"	
*	p_{14}(E)	14	#6	8'-1"	
	s_{10}(E)	4	#6	11'-1"	
	s_{11}(E)	4	#6	11'-4"	
	s_{12}(E)	4	#6	11'-6"	
	s_{13}(E)	4	#6	11'-8"	
	s_{14}(E)	4	#6	11'-11"	
	s_{15}(E)	4	#6	12'-1"	
	s_{16}(E)	4	#6	12'-3"	
	s_{17}(E)	4	#6	12'-5"	
	s_{18}(E)	4	#6	12'-8"	
	s_{19}(E)	4	#6	12'-10"	
	s_{20}(E)	272	#6	13'-0"	
**	sp_{10}(E)	7	#5	21'-3"	
**	sp_{11}	9	#5	10'-10"	
	u_{10}(E)	26	#4	8'-2"	
	u_{11}(E)	119	#4	6'-8"	
	u_{12}(E)	10	#5	11'-6"	
	u_{13}(E)	308	#6	20'-8"	
	u_{14}(E)	28	#5	12'-0"	
	v_{10}(E)	126	#11	26'-2"	
	v_{11}	162	#11	17'-3"	
	v_{12}(E)	126	#11	19'-1"	

Concrete Structures	Cu. Yd.	235.0
Reinforcement Bars	Pound	16,800
Reinforcement Bars, Epoxy Coated	Pound	61,320
Drilled Shaft in Soil	Cu. Yd.	8.7
Drilled Shaft in Rock	Cu. Yd.	18.9

Minimum lap for spirals = 3'-3"
* Cut to fit in field
** Length is height of spiral

NOTES

1. See sheet 4 of 65 for cofferdam details.

USER NAME = default	DESIGNED - DF	REVISED	
	CHECKED - BK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - MTR	REVISED	
PLOT DATE = 8/18/2020	CHECKED - DF	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS II
STRUCTURE NO. 099-0904
SHEET NO. 47 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	397
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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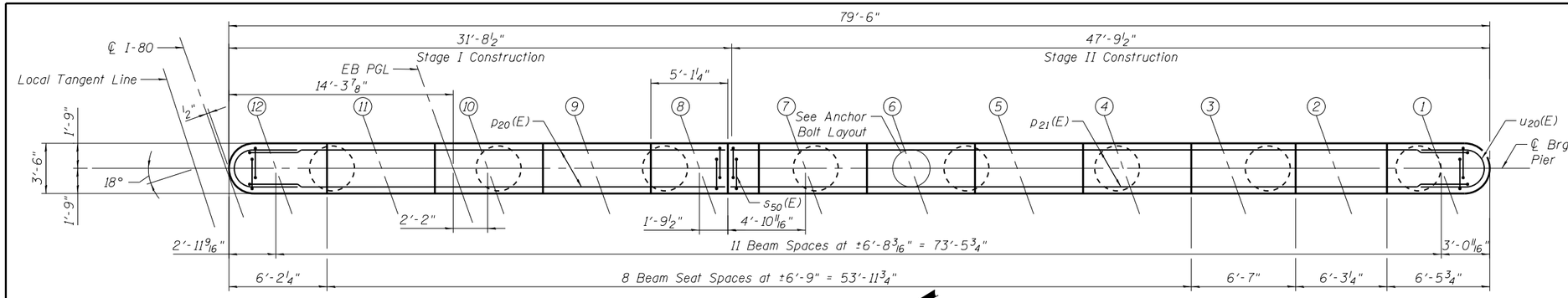
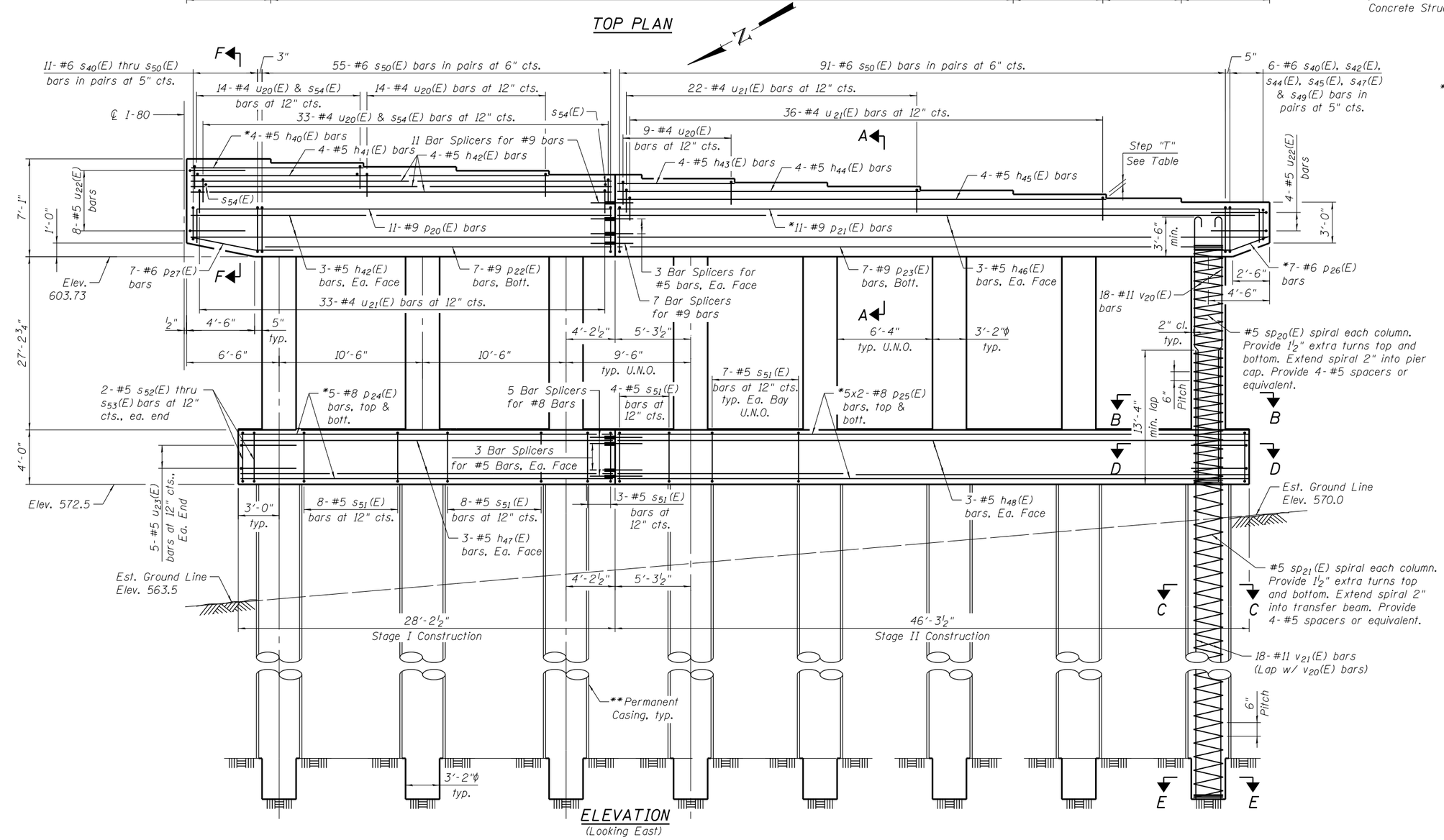


TOP PLAN



ELEVATION
(Looking East)

NOTES

1. For Pier General Notes see sheet 46 of 65.
2. See sheet 49 of 65 for Bill of Material, Section A-A, B-B, C-C, D-D & E-E, and Bar Diagram.
3. For Anchor Bolt Layout Plan see sheet 49 of 65.
4. If a portion of the drilled shaft web walls or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
5. The construction of this pier may require an in-stream work plan and shall comply with the US Army Corps of Engineers permit 404. This work shall be included in the cost of Concrete Structures.

* Cut to fit in field

** Contractor is responsible for determining the casing thickness. See Article 516.06(d) of the Standard Specifications.

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
12	610.80	3⅛"
11	610.53	3½"
10	610.25	3⅝"
9	609.94	3¾"
8	609.65	3⅛"
7	609.39	3¼"
6	609.14	3⅜"
5	608.86	3½"
4	608.57	3⅜"
3	608.29	3⅜"
2	608.01	3⅜"
1	607.73	

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - MTR	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 48 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	398
		CONTRACT NO. 60W34		
	ILLINOIS FED. AID PROJECT			

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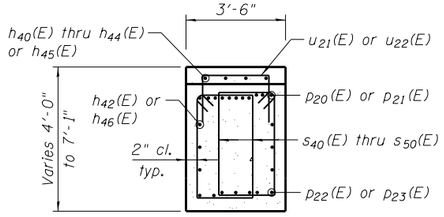
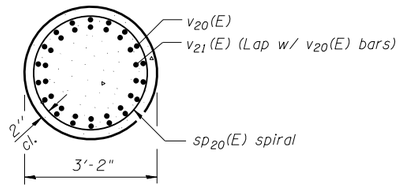
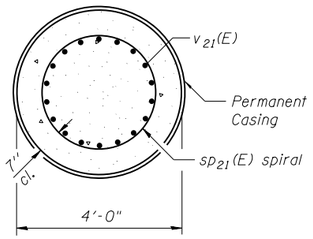


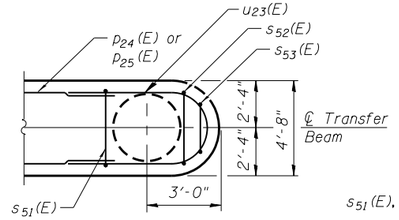
SECTION A-A



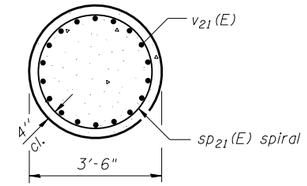
SECTION B-B



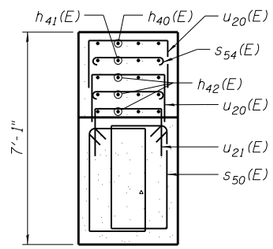
SECTION C-C



SECTION D-D

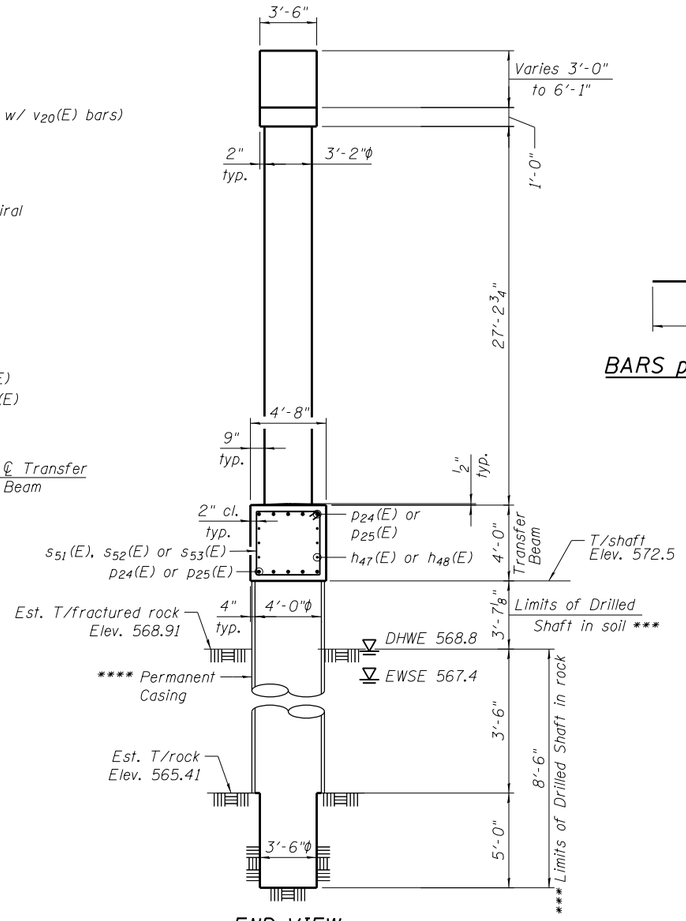


SECTION E-E

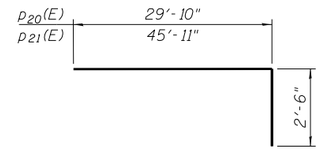


SECTION F-F

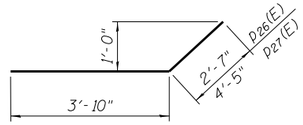
(Note $p_{20}(E)$ not shown for clarity)



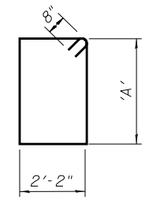
END VIEW



BARS p20(E) & p21(E)

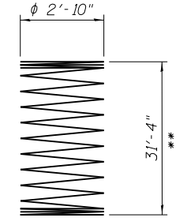


BARS p26(E) & p27(E)

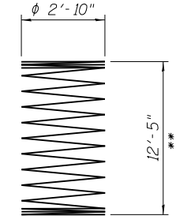


BARS s40(E) thru s50E)

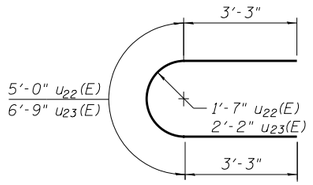
Bar	'A'
$s_{40}(E)$	2'-8½"
$s_{41}(E)$	2'-9½"
$s_{42}(E)$	2'-11"
$s_{43}(E)$	3'-0"
$s_{44}(E)$	3'-1"
$s_{45}(E)$	3'-2"
$s_{46}(E)$	3'-3"
$s_{47}(E)$	3'-4½"
$s_{48}(E)$	3'-5½"
$s_{49}(E)$	3'-6½"
$s_{50}(E)$	3'-8"



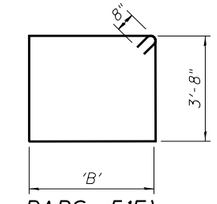
BAR sp20(E)



BAR sp21(E)



BARS u22(E) & u23(E)



BARS s51E), s52E) & s53E)

Bar	'B'
$s_{51}(E)$	4'-4"
$s_{52}(E)$	3'-9"
$s_{53}(E)$	1'-2"

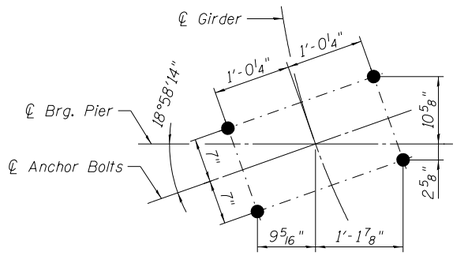
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
*	$h_{40}(E)$	4	#5	12'-8"	
	$h_{41}(E)$	4	#5	26'-2"	
	$h_{42}(E)$	18	#5	31'-5"	
	$h_{43}(E)$	4	#5	8'-0"	
	$h_{44}(E)$	4	#5	21'-6"	
	$h_{45}(E)$	4	#5	34'-10"	
	$h_{46}(E)$	6	#5	48'-6"	
	$h_{47}(E)$	6	#5	27'-5"	
	$h_{48}(E)$	6	#5	47'-0"	
	$p_{20}(E)$	11	#9	32'-4"	
*	$p_{21}(E)$	11	#9	48'-5"	
	$p_{22}(E)$	7	#9	27'-2"	
	$p_{23}(E)$	7	#9	43'-5"	
*	$p_{24}(E)$	10	#8	32'-1"	
*	$p_{25}(E)$	20	#8	28'-6"	
*	$p_{26}(E)$	7	#6	6'-5"	
	$p_{27}(E)$	7	#6	8'-3"	
	$s_{40}(E)$	4	#6	11'-1"	
	$s_{41}(E)$	2	#6	11'-3"	
	$s_{42}(E)$	4	#6	11'-6"	
	$s_{43}(E)$	2	#6	11'-8"	
	$s_{44}(E)$	4	#6	11'-10"	
	$s_{45}(E)$	4	#6	12'-0"	
	$s_{46}(E)$	2	#6	12'-2"	
	$s_{47}(E)$	4	#6	12'-5"	
	$s_{48}(E)$	2	#6	12'-7"	
	$s_{49}(E)$	4	#6	12'-9"	
	$s_{50}(E)$	292	#6	13'-0"	
	$s_{51}(E)$	51	#5	17'-4"	
	$s_{52}(E)$	2	#5	16'-2"	
	$s_{53}(E)$	2	#5	11'-0"	
	$s_{54}(E)$	47	#4	4'-2"	
**	$sp_{20}(E)$	8	#5	31'-5"	
**	$sp_{21}(E)$	8	#5	12'-5"	
	$u_{20}(E)$	70	#4	8'-8"	
	$u_{21}(E)$	91	#4	6'-8"	
	$u_{22}(E)$	12	#5	11'-6"	
	$u_{23}(E)$	10	#5	13'-3"	
	$v_{20}(E)$	144	#11	36'-4"	
	$v_{21}(E)$	144	#11	26'-0"	
	Concrete Structures		Cu. Yd.	171.9	
	Reinforcement Bars, Epoxy Coated		Pound	72,160	
	Drilled Shaft in Soil		Cu. Yd.	13.4	
	Drilled Shaft in Rock		Cu. Yd.	27.3	
	Permanent Casing		Foot	64	
	Crosshole Sonic Logging Access Ducts		Foot	290	
	Crosshole Sonic Logging Testing		Each	8	

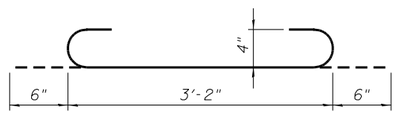
Minimum lap for spirals = 3'-3"
*Cut to fit in field
**Length is height of spiral

*** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

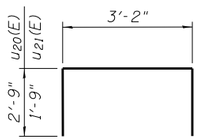
**** Contractor is responsible for determining the casing thickness. See Article 516.06(d) of the Standard Specifications.



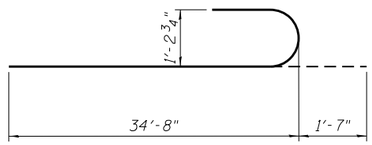
ANCHOR BOLT LAYOUT



BAR s54(E)



BARS u20(E) & u21(E)



BAR v20(E)

HBP Illinois Partners	USER NAME = default	DESIGNED - DF	REVISED
		CHECKED - BK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - MTR	REVISED
	PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS II
STRUCTURE NO. 099-0904
SHEET NO. 49 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	399
		CONTRACT NO. 60W34		
	ILLINOIS	FED. AID PROJECT		

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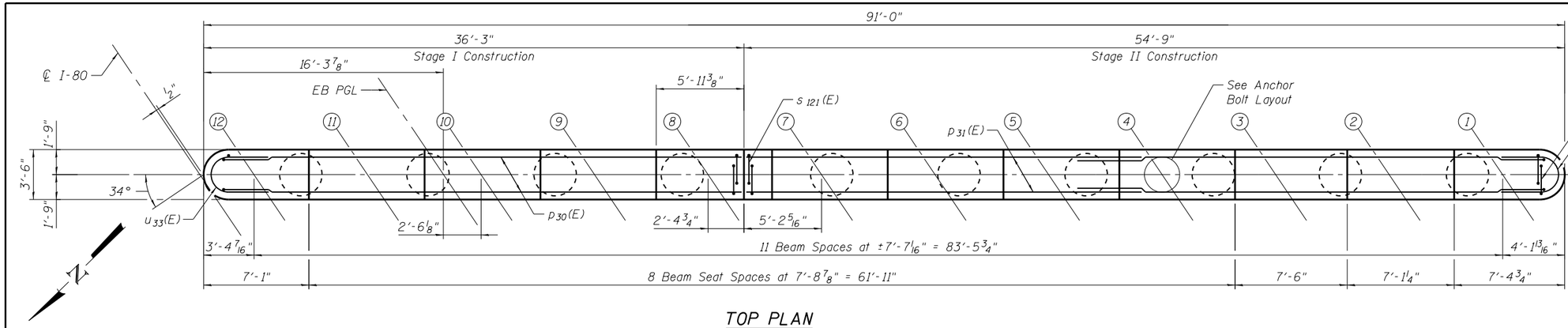
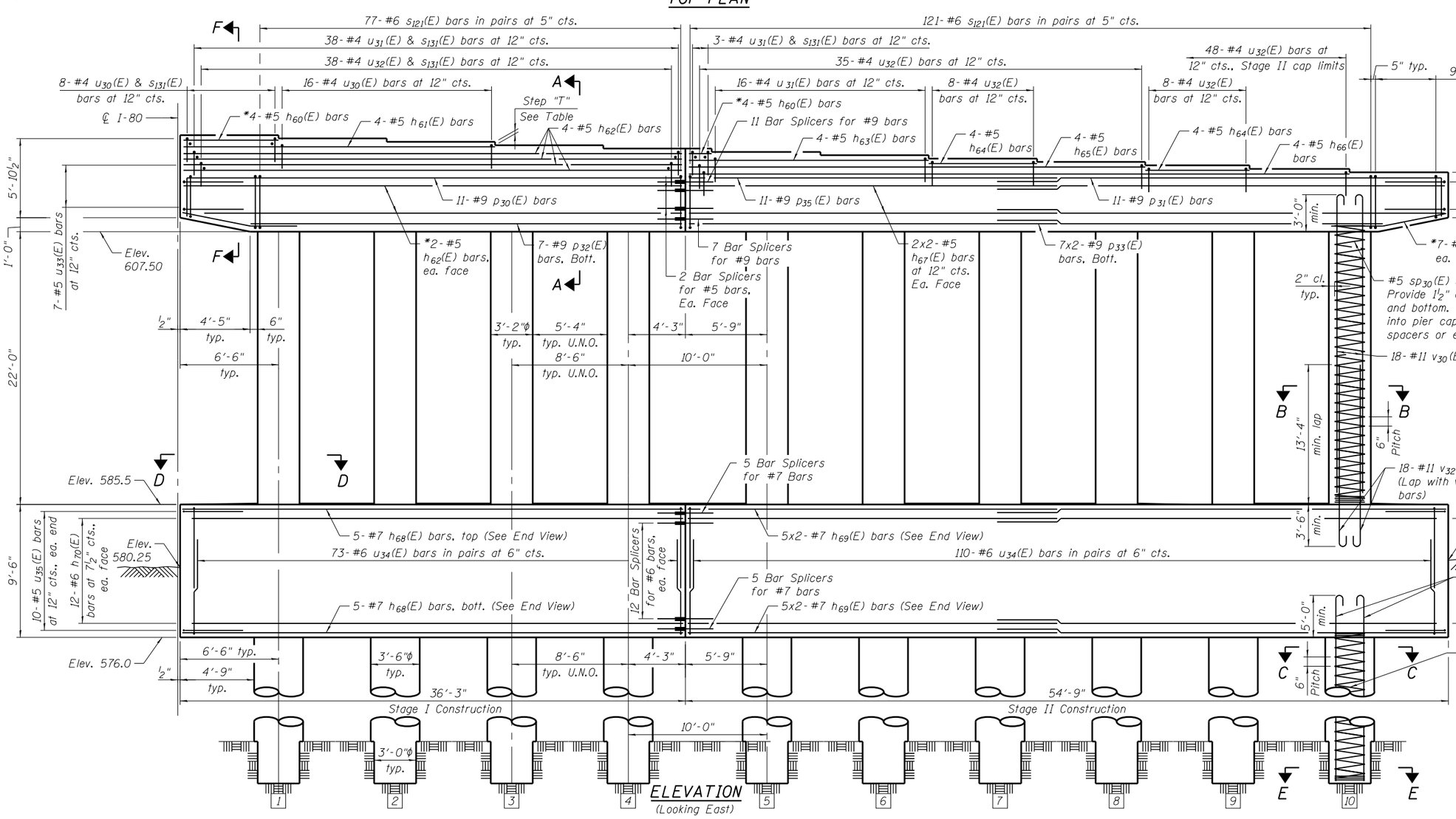


NOTES

1. For Pier General Notes see sheet 46 of 65.
2. See sheet 51 of 65 for Bill of Material, Section A-A, B-B, C-C, D-D, E-E, End View and Bar Diagram.
3. For Anchor Bolt Layout Plan sheet 51 of 65.
4. Drill and construct the odd-numbered shafts prior to drilling the even-numbered shafts.

TOP PLAN



ELEVATION
(Looking East)

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
12	614.37	3 1/2"
11	614.07	3 5/8"
10	613.77	3 7/8"
9	613.45	3 3/4"
8	613.14	4 1/4"
7	612.79	3 3/4"
6	612.48	4"
5	612.15	4 1/4"
4	611.80	4 1/4"
3	611.45	4 1/8"
2	611.11	4 1/4"
1	610.75	

* Cut to fit in field

HBP Illinois Partners

USER NAME = default	DESIGNED - DF	REVISED
	CHECKED - BK	REVISED
PLOT SCALE = $SCALE$	DRAWN - MTR	REVISED
PLOT DATE = 6/26/2020	CHECKED - DF	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS I
STRUCTURE NO. 099-0904
SHEET NO. 50 OF 65 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-008B	WILL	511	400
		CONTRACT NO. 60W34		
		ILLINOIS FED. AID PROJECT		

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