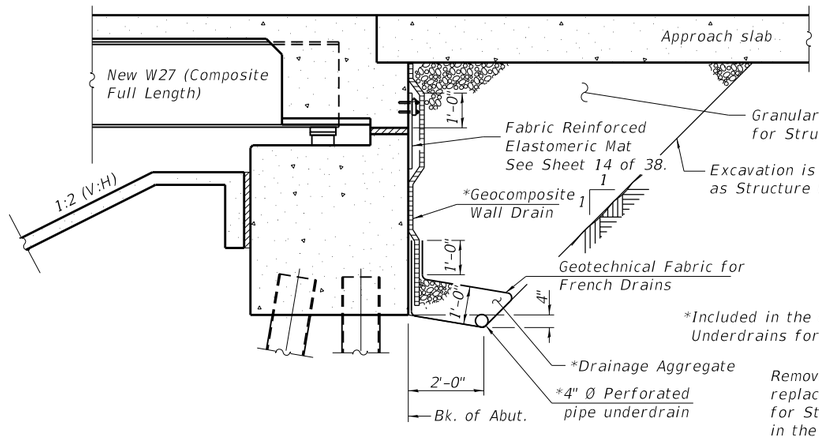
GENERAL NOTES

1. Calculated Weight of Structural Steel = 187,000 lbs. (Gr 50)
   23,700 lbs. (Gr 36)
2. Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts ⅞ in. ϕ, holes 15/16 in. ϕ, unless otherwise noted.
3. No field welding is permitted except as specified in the contract documents.
4. Reinforcement bars designated (E) shall be epoxy coated.
5. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
6. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛ in (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
7. Concrete Sealer shall be applied to the designated areas of the piers.
8. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
9. 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 that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated 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 shall be Interstate Green, Munsell No. 7.5G 4/8.
10. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
11. Slope wall shall be reinforced with welded wire fabric, 6 in x 6in – W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
12. Slipforming of the parapets is not allowed.
13. The finishing machine rails shall be placed on the top flange of the exterior beams.

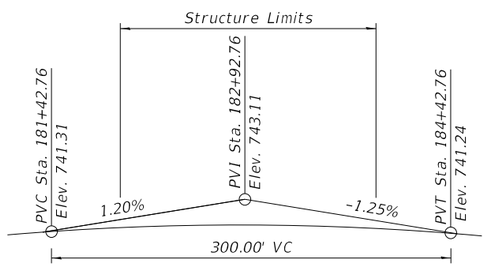
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		33.2	33.2
Slopewall Removal	Sq. Yd.		370	370
Protective Shield	Sq. Yd.	598		598
Structure Excavation	Cu. Yd.		226	226
Concrete Structures	Cu. Yd.	22.1	173.2	195.3
Concrete Superstructure	Cu. Yd.	379.9		379.9
Bridge Deck Grooving	Sq. Yd.	941		941
Protective Coat	Sq. Yd.	1,771		1,771
Concrete Superstructure (Approach Slab)	Cu. Yd.	125.8		125.8
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	9,891		9,891
Reinforcement Bars, Epoxy Coated	Pound	157,740	72,110	229,850
Bridge Fence Railing	Foot	278		278
Parapet Railing	Foot	278		278
Slope Wall, 4 inch	Sq. Yd.		478	478
Furnishing Metal Shell Piles 12" x 0.250"	Foot		135	135
Furnishing Metal Shell Piles 16" x 0.375"	Foot		1,272	1,272
Driving Piles	Foot		1,407	1,407
Test Pile, Metal Shells	Each		3	3
Pile Shoes	Each		28	28
Name Plates	Each		2	2
Elastomeric Bearing Assembly, Type I	Each	28		28
Anchor Bolts. 5/8"	Each	28		28
Anchor Bolts, 3/4"	Each	42		42
Granular Backfill for Structures	Cu. Yd.		382	382
Concrete Sealer	Sq. Ft.		1,603	1,603
Epoxy Crack Injection	Foot		4	4
Geocomposite Wall Drain	Sq. Yd.		99	99
Pipe Underdrain for Structures 4"	Foot		136	136
Protective Shield Removal	L. Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft		125	125

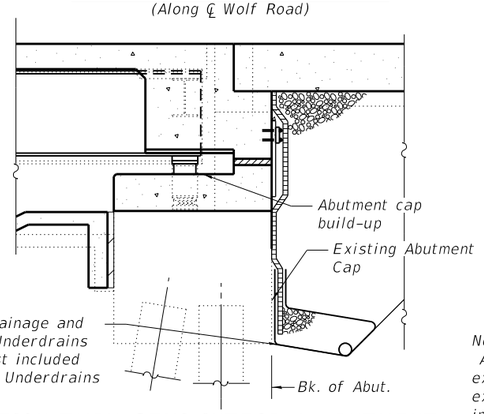


SECTION THRU SEMI-INTEGRAL ABUTMENT
(Widened section shown)
(Horiz. dim. at Rt. L's)

*Included in the cost of Pipe Underdrains for Structures



WOLF ROAD PROFILE GRADE
(Along ℄ Wolf Road)



Remove existing drainage and replace with Pipe Underdrains for Structures. Cost included in the cost of Pipe Underdrains for Structures.

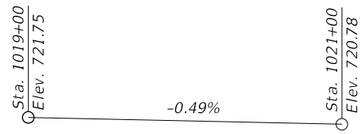
SECTION THRU SEMI-INTEGRAL ABUTMENT
(Existing section shown)
(Horiz. dim. at Rt. L's)

1 Entire sheet revised

STATION 182+92.76
RE-BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. 2020-250-BY
LOADING HL-93
STRUCTURE NO. 099-0192

NAME PLATE
See Std. 515001

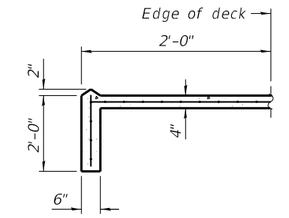
Note: Existing Name Plates shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



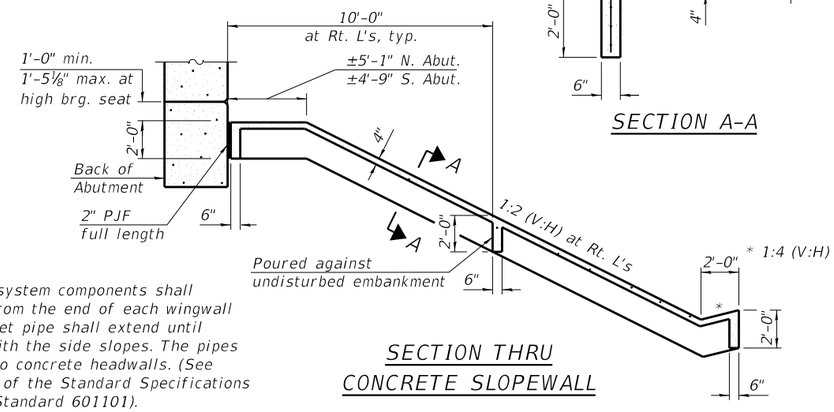
I-80 WB PROFILE GRADE
(Along I-80 WB PGL)

I-80 EB PROFILE GRADE
(Along I-80 EB PGL)

Note:
All drainage system components shall extend 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).



SECTION A-A



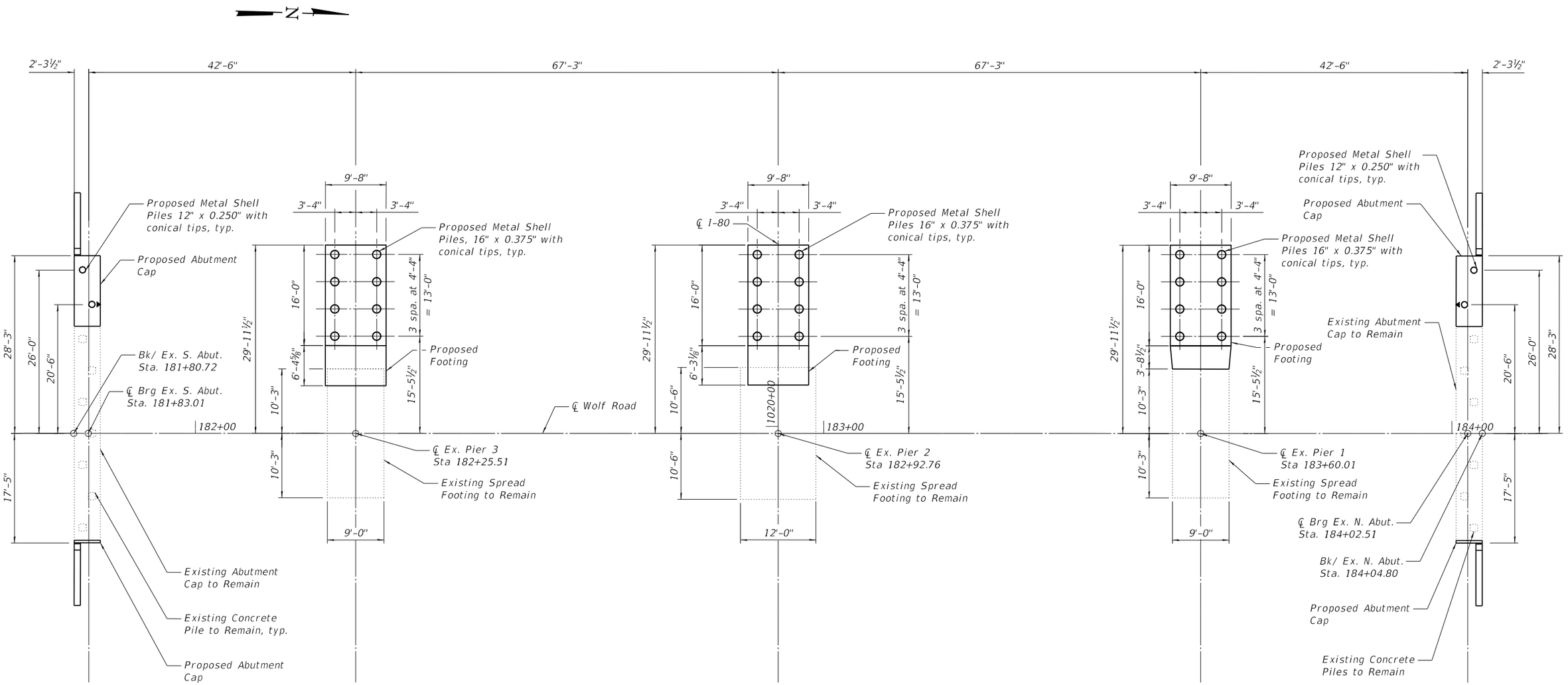
SECTION THRU CONCRETE SLOPEWALL

INDEX OF SHEETS

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-605-0990 F:312-605-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & BILL OF MATERIAL STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 2 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	64
		CONTRACT NO. 62N20		
	ILLINOIS			



FOOTING LAYOUT

1 Entire sheet revised

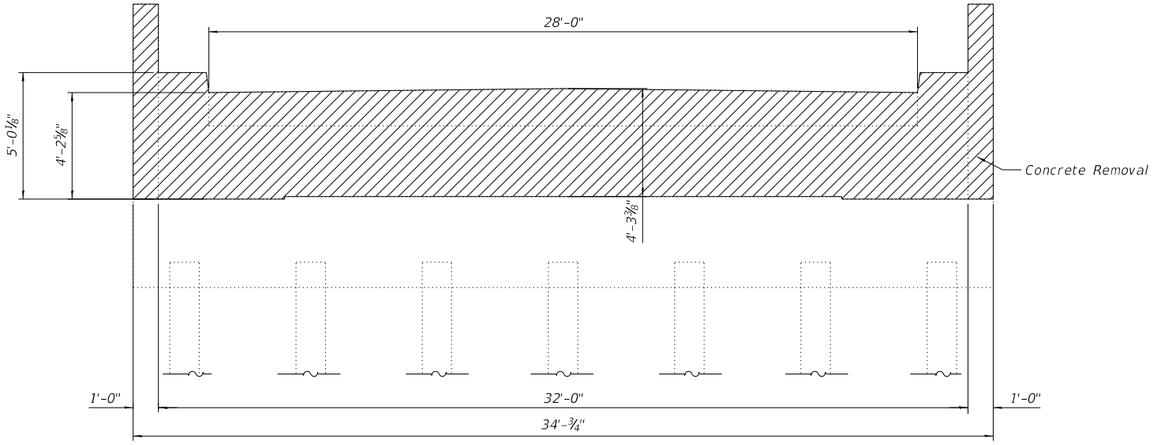
LEGEND

- Vertical Pile
- Battered Pile

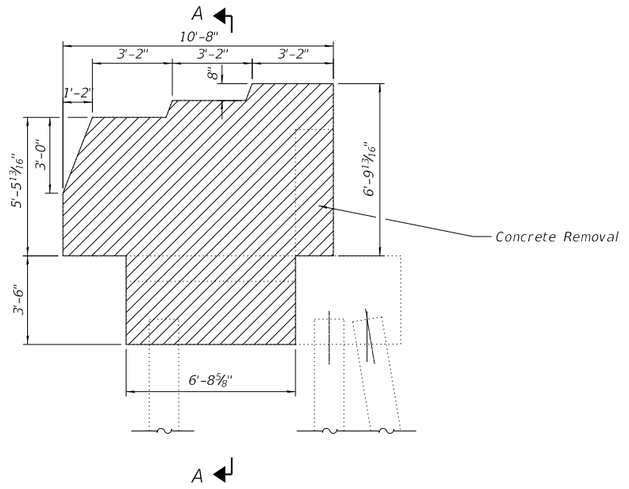
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOUNDATION PLAN STRUCTURE NO. 099-0192	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED MG/ZM	REVISED -			80	2020-250-BY	WILL	133	65
PLOT SCALE =	DRAWN KC	REVISED -						CONTRACT NO. 62N20	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 3 OF 38 SHEETS			ILLINOIS		

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

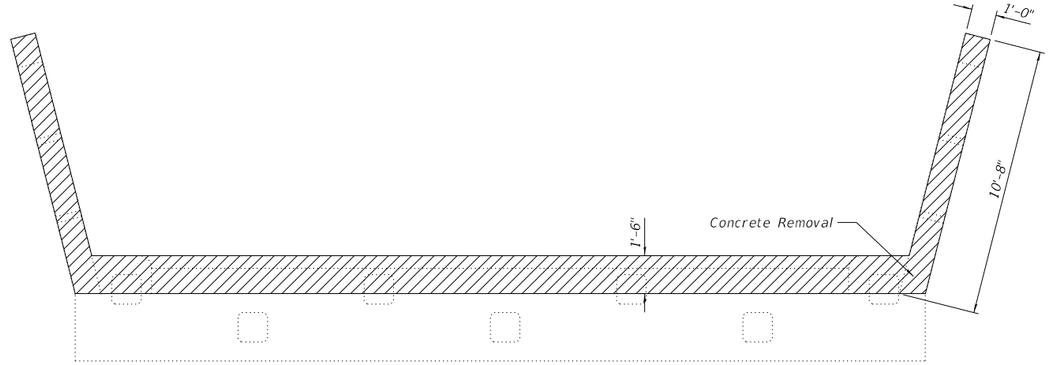
MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT03_FoundationPlan.dgn
4/8/2022 1:52:32 PM



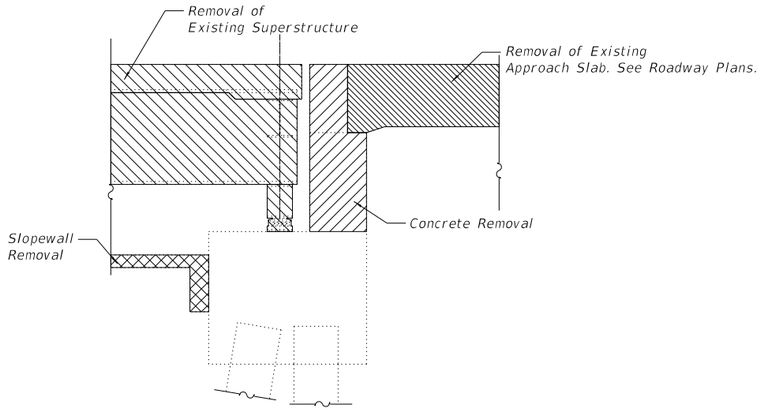
ABUTMENT REMOVAL ELEVATION



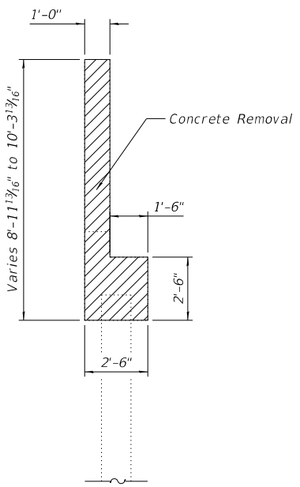
WINGWALL REMOVAL ELEVATION



ABUTMENT REMOVAL PLAN



ABUTMENT SECTION



SECTION A-A

LEGEND

- Concrete Removal
- Removal of Existing Superstructure
- Slopewall Removal
- Removal of Existing Approach Slab. See Roadway Plans

BILL OF MATERIAL

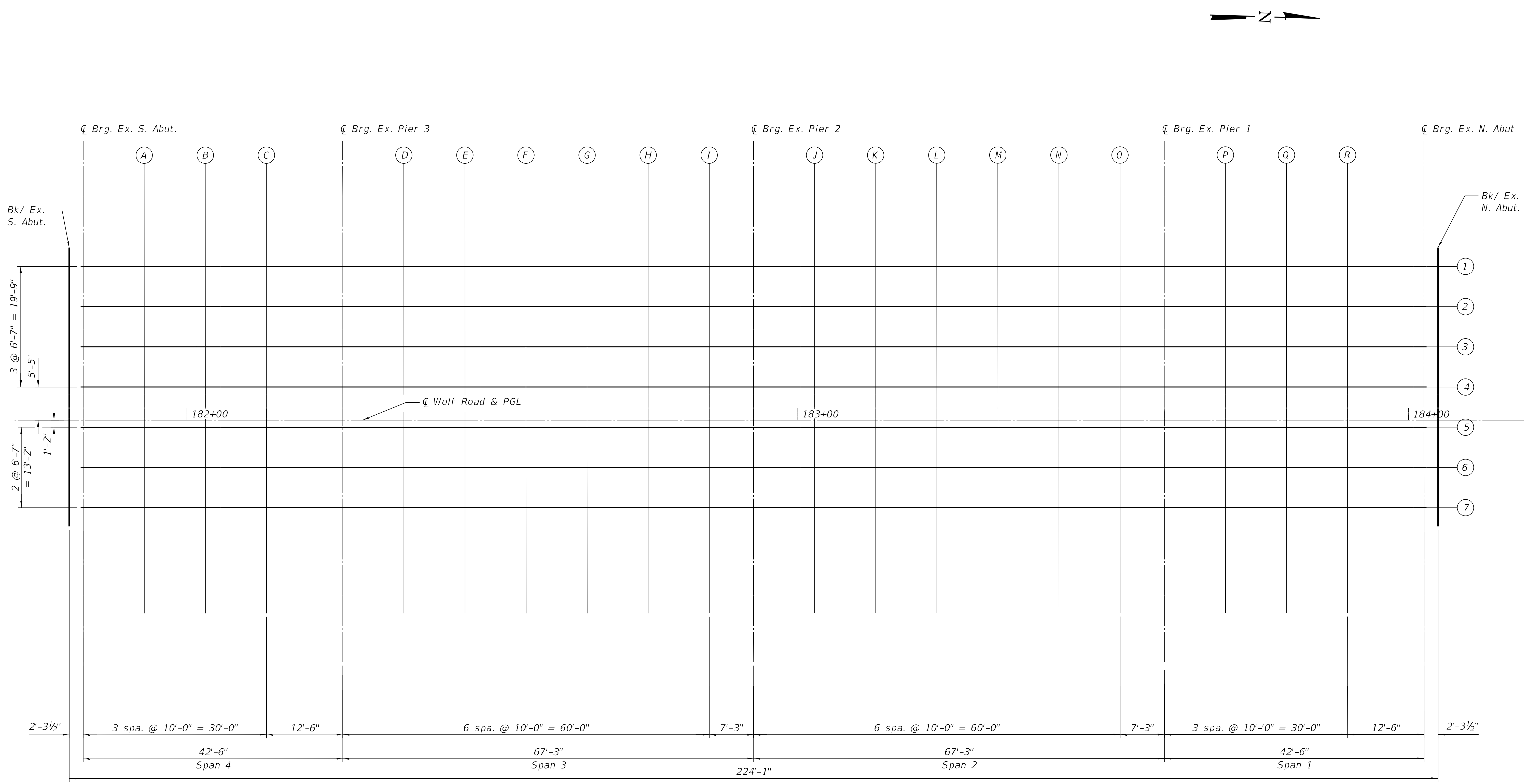
ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	32.5
Removal of Existing Superstructures	Each	1
Slopewall Removal	Sq. Yd.	370
Protective Shield	Sq. Yd.	598
Protective Shield Removal	L. Sum	1

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0900 F:312-606-2415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL PLAN STRUCTURE NO. 099-0192	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED MG/ZM	REVISED -			80	2020-250-BY	WILL	133	66
PLOT SCALE =	DRAWN KC	REVISED -					CONTRACT NO. 62N20		
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 4 OF 38 SHEETS		ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT04_RemovalPlan.dgn
4/8/2022 1:58:45 PM



PLAN

1 Entire sheet revised

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT05_TopofDeckLayout.dgn

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-606-0910 F:312-606-0415

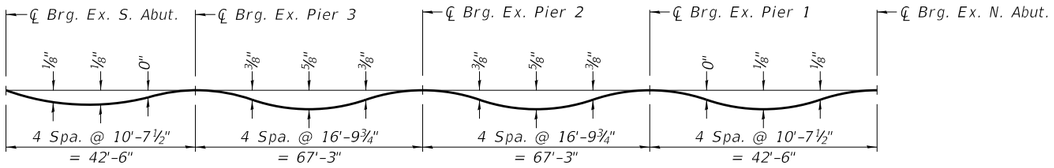
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED MG/ZM	REVISED -	
PLOT SCALE =	DRAWN KC	REVISED -	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -	

TOP OF DECK PLAN
STRUCTURE NO. 099-0192

SHEET 5 OF 38 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	67
		CONTRACT NO. 62N20		
		ILLINOIS		

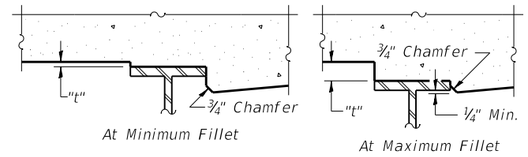
4/8/2022 2:01:51 PM



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on Sheets 7-8 of 38.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below and on Sheets 7-8 of 38. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on Sheets 7-8 of 38, minus the slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	-25.17	741.26	741.26
℄ Brg Ex. S. Abut.	181+83.01	-25.17	741.28	741.28
A	181+93.01	-25.17	741.37	741.38
B	182+03.01	-25.17	741.44	741.45
C	182+13.01	-25.17	741.51	741.51
℄ Brg. Ex. Pier 3	182+25.51	-25.17	741.58	741.58
D	182+35.51	-25.17	741.63	741.65
E	182+45.51	-25.17	741.67	741.72
F	182+55.51	-25.17	741.70	741.77
G	182+65.51	-25.17	741.72	741.79
H	182+75.51	-25.17	741.74	741.78
I	182+85.51	-25.17	741.75	741.76
℄ Brg. Ex. Pier 2	182+92.76	-25.17	741.75	741.75
J	183+02.76	-25.17	741.74	741.76
K	183+12.76	-25.17	741.73	741.77
L	183+22.76	-25.17	741.70	741.77
M	183+32.76	-25.17	741.67	741.74
N	183+42.76	-25.17	741.63	741.68
O	183+52.76	-25.17	741.59	741.60
℄ Brg. Ex. Pier 1	183+60.01	-25.17	741.55	741.55
P	183+70.01	-25.17	741.48	741.49
Q	183+80.01	-25.17	741.42	741.42
R	183+90.01	-25.17	741.34	741.35
℄ Brg Ex. N. Abut.	184+02.51	-25.17	741.23	741.23
Bk/ Ex. N. Abut.	184+04.80	-25.17	741.21	741.21

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	-18.58	741.39	741.39
℄ Brg Ex. S. Abut.	181+83.01	-18.58	741.42	741.42
A	181+93.01	-18.58	741.50	741.51
B	182+03.01	-18.58	741.57	741.58
C	182+13.01	-18.58	741.64	741.64
℄ Brg. Ex. Pier 3	182+25.51	-18.58	741.71	741.71
D	182+35.51	-18.58	741.76	741.78
E	182+45.51	-18.58	741.80	741.85
F	182+55.51	-18.58	741.83	741.90
G	182+65.51	-18.58	741.86	741.92
H	182+75.51	-18.58	741.87	741.91
I	182+85.51	-18.58	741.88	741.89
℄ Brg. Ex. Pier 2	182+92.76	-18.58	741.88	741.88
J	183+02.76	-18.58	741.87	741.89
K	183+12.76	-18.58	741.86	741.90
L	183+22.76	-18.58	741.84	741.90
M	183+32.76	-18.58	741.80	741.87
N	183+42.76	-18.58	741.77	741.81
O	183+52.76	-18.58	741.72	741.73
℄ Brg. Ex. Pier 1	183+60.01	-18.58	741.68	741.68
P	183+70.01	-18.58	741.62	741.62
Q	183+80.01	-18.58	741.55	741.55
R	183+90.01	-18.58	741.47	741.48
℄ Brg Ex. N. Abut.	184+02.51	-18.58	741.36	741.36
Bk/ Ex. N. Abut.	184+04.80	-18.58	741.34	741.34

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	-12.00	741.53	741.53
℄ Brg Ex. S. Abut.	181+83.01	-12.00	741.55	741.55
A	181+93.01	-12.00	741.63	741.64
B	182+03.01	-12.00	741.70	741.71
C	182+13.01	-12.00	741.77	741.77
℄ Brg. Ex. Pier 3	182+25.51	-12.00	741.84	741.84
D	182+35.51	-12.00	741.89	741.91
E	182+45.51	-12.00	741.93	741.98
F	182+55.51	-12.00	741.96	742.03
G	182+65.51	-12.00	741.99	742.05
H	182+75.51	-12.00	742.00	742.04
I	182+85.51	-12.00	742.01	742.02
℄ Brg. Ex. Pier 2	182+92.76	-12.00	742.01	742.01
J	183+02.76	-12.00	742.00	742.02
K	183+12.76	-12.00	741.99	742.03
L	183+22.76	-12.00	741.97	742.03
M	183+32.76	-12.00	741.94	742.00
N	183+42.76	-12.00	741.90	741.94
O	183+52.76	-12.00	741.85	741.86
℄ Brg. Ex. Pier 1	183+60.01	-12.00	741.81	741.81
P	183+70.01	-12.00	741.75	741.75
Q	183+80.01	-12.00	741.68	741.69
R	183+90.01	-12.00	741.60	741.61
℄ Brg Ex. N. Abut.	184+02.51	-12.00	741.49	741.49
Bk/ Ex. N. Abut.	184+04.80	-12.00	741.47	741.47

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF DECK ELEVATIONS I STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 6 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	68
		CONTRACT NO. 62N20		
	ILLINOIS			

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	-5.42	741.63	741.63
℄ Brg Ex. S. Abut.	181+83.01	-5.42	741.65	741.65
A	181+93.01	-5.42	741.73	741.74
B	182+03.01	-5.42	741.80	741.81
C	182+13.01	-5.42	741.87	741.87
℄ Brg. Ex. Pier 3	182+25.51	-5.42	741.94	741.94
D	182+35.51	-5.42	741.99	742.01
E	182+45.51	-5.42	742.03	742.08
F	182+55.51	-5.42	742.06	742.13
G	182+65.51	-5.42	742.09	742.15
H	182+75.51	-5.42	742.10	742.14
I	182+85.51	-5.42	742.11	742.12
℄ Brg. Ex. Pier 2	182+92.76	-5.42	742.11	742.11
J	183+02.76	-5.42	742.10	742.12
K	183+12.76	-5.42	742.09	742.13
L	183+22.76	-5.42	742.07	742.13
M	183+32.76	-5.42	742.03	742.10
N	183+42.76	-5.42	742.00	742.04
O	183+52.76	-5.42	741.95	741.96
℄ Brg. Ex. Pier 1	183+60.01	-5.42	741.91	741.91
P	183+70.01	-5.42	741.85	741.85
Q	183+80.01	-5.42	741.78	741.79
R	183+90.01	-5.42	741.70	741.71
℄ Brg Ex. N. Abut.	184+02.51	-5.42	741.59	741.59
Bk/ Ex. N. Abut.	184+04.80	-5.42	741.57	741.57

℄ WOLF ROAD & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	0.00	741.71	741.71
℄ Brg Ex. S. Abut.	181+83.01	0.00	741.73	741.73
A	181+93.01	0.00	741.81	741.82
B	182+03.01	0.00	741.88	741.89
C	182+13.01	0.00	741.95	741.95
℄ Brg. Ex. Pier 3	182+25.51	0.00	742.02	742.02
D	182+35.51	0.00	742.07	742.09
E	182+45.51	0.00	742.11	742.16
F	182+55.51	0.00	742.14	742.21
G	182+65.51	0.00	742.17	742.23
H	182+75.51	0.00	742.18	742.22
I	182+85.51	0.00	742.19	742.20
℄ Brg. Ex. Pier 2	182+92.76	0.00	742.19	742.19
J	183+02.76	0.00	742.18	742.20
K	183+12.76	0.00	742.17	742.21
L	183+22.76	0.00	742.15	742.21
M	183+32.76	0.00	742.12	742.18
N	183+42.76	0.00	742.08	742.12
O	183+52.76	0.00	742.03	742.04
℄ Brg. Ex. Pier 1	183+60.01	0.00	741.99	741.99
P	183+70.01	0.00	741.93	741.93
Q	183+80.01	0.00	741.86	741.87
R	183+90.01	0.00	741.78	741.79
℄ Brg Ex. N. Abut.	184+02.51	0.00	741.67	741.67
Bk/ Ex. N. Abut.	184+04.80	0.00	741.65	741.65

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	1.17	741.69	741.69
℄ Brg Ex. S. Abut.	181+83.01	1.17	741.71	741.71
A	181+93.01	1.17	741.79	741.80
B	182+03.01	1.17	741.87	741.88
C	182+13.01	1.17	741.93	741.94
℄ Brg. Ex. Pier 3	182+25.51	1.17	742.01	742.01
D	182+35.51	1.17	742.05	742.08
E	182+45.51	1.17	742.09	742.14
F	182+55.51	1.17	742.13	742.19
G	182+65.51	1.17	742.15	742.21
H	182+75.51	1.17	742.17	742.20
I	182+85.51	1.17	742.17	742.18
℄ Brg. Ex. Pier 2	182+92.76	1.17	742.17	742.17
J	183+02.76	1.17	742.17	742.18
K	183+12.76	1.17	742.15	742.20
L	183+22.76	1.17	742.13	742.19
M	183+32.76	1.17	742.10	742.16
N	183+42.76	1.17	742.06	742.10
O	183+52.76	1.17	742.01	742.03
℄ Brg. Ex. Pier 1	183+60.01	1.17	741.97	741.97
P	183+70.01	1.17	741.91	741.91
Q	183+80.01	1.17	741.84	741.85
R	183+90.01	1.17	741.76	741.77
℄ Brg Ex. N. Abut.	184+02.51	1.17	741.65	741.65
Bk/ Ex. N. Abut.	184+04.80	1.17	741.63	741.63

1 Entire sheet revised

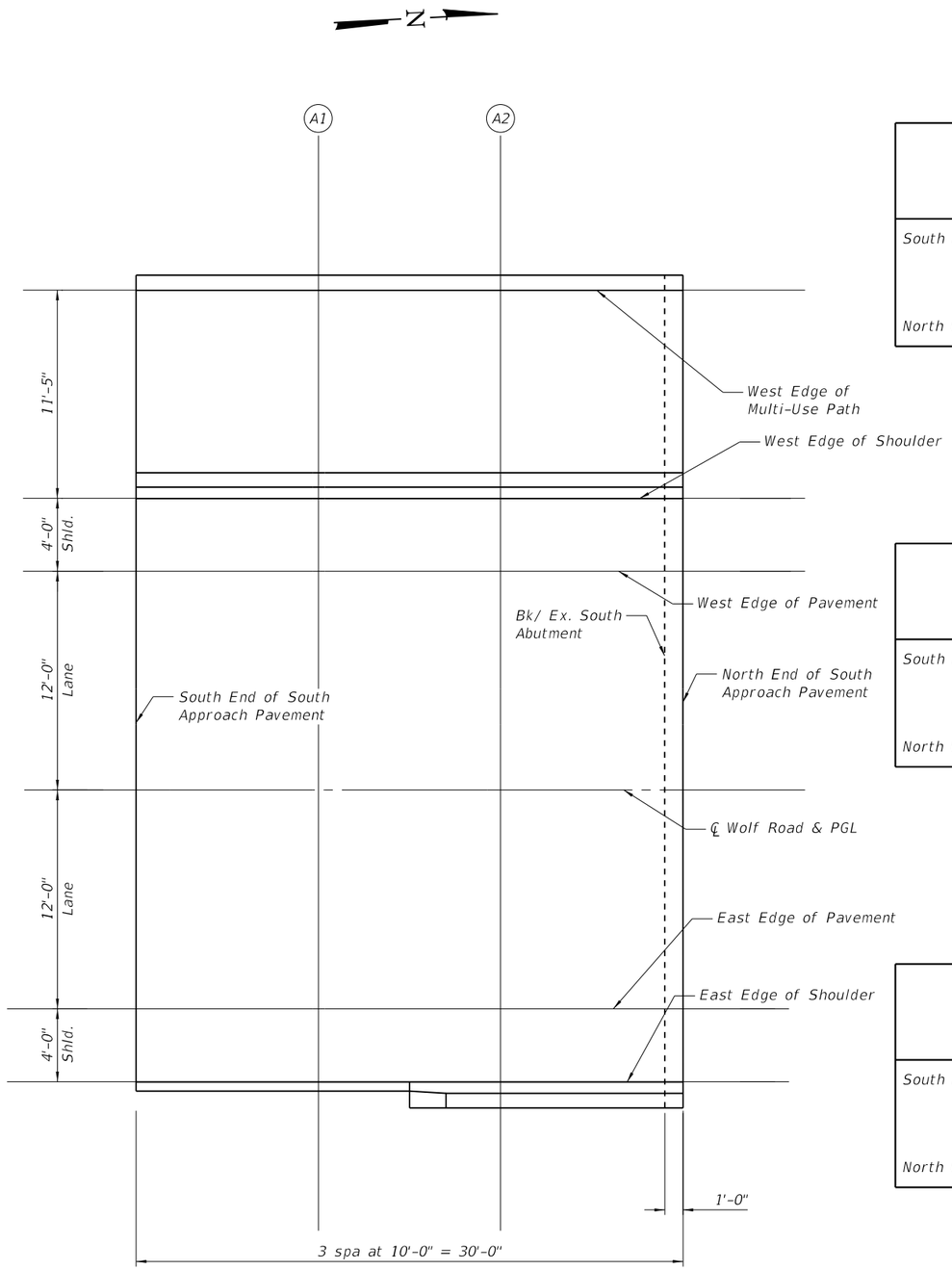
BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	7.75	741.59	741.59
℄ Brg Ex. S. Abut.	181+83.01	7.75	741.61	741.61
A	181+93.01	7.75	741.69	741.70
B	182+03.01	7.75	741.77	741.78
C	182+13.01	7.75	741.84	741.84
℄ Brg. Ex. Pier 3	182+25.51	7.75	741.91	741.91
D	182+35.51	7.75	741.96	741.98
E	182+45.51	7.75	742.00	742.05
F	182+55.51	7.75	742.03	742.09
G	182+65.51	7.75	742.05	742.11
H	182+75.51	7.75	742.07	742.10
I	182+85.51	7.75	742.07	742.08
℄ Brg. Ex. Pier 2	182+92.76	7.75	742.08	742.08
J	183+02.76	7.75	742.07	742.08
K	183+12.76	7.75	742.05	742.10
L	183+22.76	7.75	742.03	742.09
M	183+32.76	7.75	742.00	742.06
N	183+42.76	7.75	741.96	742.00
O	183+52.76	7.75	741.91	741.93
℄ Brg. Ex. Pier 1	183+60.01	7.75	741.87	741.87
P	183+70.01	7.75	741.81	741.81
Q	183+80.01	7.75	741.74	741.75
R	183+90.01	7.75	741.66	741.67
℄ Brg Ex. N. Abut.	184+02.51	7.75	741.56	741.56
Bk/ Ex. N. Abut.	184+04.80	7.75	741.53	741.53

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk/ Ex. S. Abut.	181+80.72	14.33	741.48	741.48
℄ Brg Ex. S. Abut.	181+83.01	14.33	741.50	741.50
A	181+93.01	14.33	741.58	741.59
B	182+03.01	14.33	741.66	741.67
C	182+13.01	14.33	741.72	741.73
℄ Brg. Ex. Pier 3	182+25.51	14.33	741.80	741.80
D	182+35.51	14.33	741.85	741.87
E	182+45.51	14.33	741.89	741.94
F	182+55.51	14.33	741.92	741.99
G	182+65.51	14.33	741.94	742.00
H	182+75.51	14.33	741.96	742.00
I	182+85.51	14.33	741.96	741.97
℄ Brg. Ex. Pier 2	182+92.76	14.33	741.96	741.96
J	183+02.76	14.33	741.96	741.98
K	183+12.76	14.33	741.94	741.99
L	183+22.76	14.33	741.92	741.99
M	183+32.76	14.33	741.89	741.96
N	183+42.76	14.33	741.85	741.90
O	183+52.76	14.33	741.80	741.82
℄ Brg. Ex. Pier 1	183+60.01	14.33	741.76	741.76
P	183+70.01	14.33	741.70	741.70
Q	183+80.01	14.33	741.63	741.64
R	183+90.01	14.33	741.55	741.56
℄ Brg Ex. N. Abut.	184+02.51	14.33	741.45	741.45
Bk/ Ex. N. Abut.	184+04.80	14.33	741.42	741.42

1 Entire sheet revised



PLAN

WEST EDGE OF MULTI-USE PATH

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	-27.42	740.92
A1	181+61.72	-27.42	741.03
A2	181+71.72	-27.42	741.13
North End South Appr. Pav't.	181+81.72	-27.42	741.23

℄ WOLF ROAD & PROFILE GRADE

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	0.00	741.41
A1	181+61.72	0.00	741.52
A2	181+71.72	0.00	741.62
North End South Appr. Pav't.	181+81.72	0.00	741.72

WEST EDGE OF SHOULDER

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	-16.00	741.15
A1	181+61.72	-16.00	741.26
A2	181+71.72	-16.00	741.36
North End South Appr. Pav't.	181+81.72	-16.00	741.46

EAST EDGE OF PAVEMENT

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	12.00	741.23
A1	181+61.72	12.00	741.34
A2	181+71.72	12.00	741.44
North End South Appr. Pav't.	181+81.72	12.00	741.54

WEST EDGE OF PAVEMENT

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	-12.00	741.23
A1	181+61.72	-12.00	741.34
A2	181+71.72	-12.00	741.44
North End South Appr. Pav't.	181+81.72	-12.00	741.54

EAST EDGE OF SHOULDER

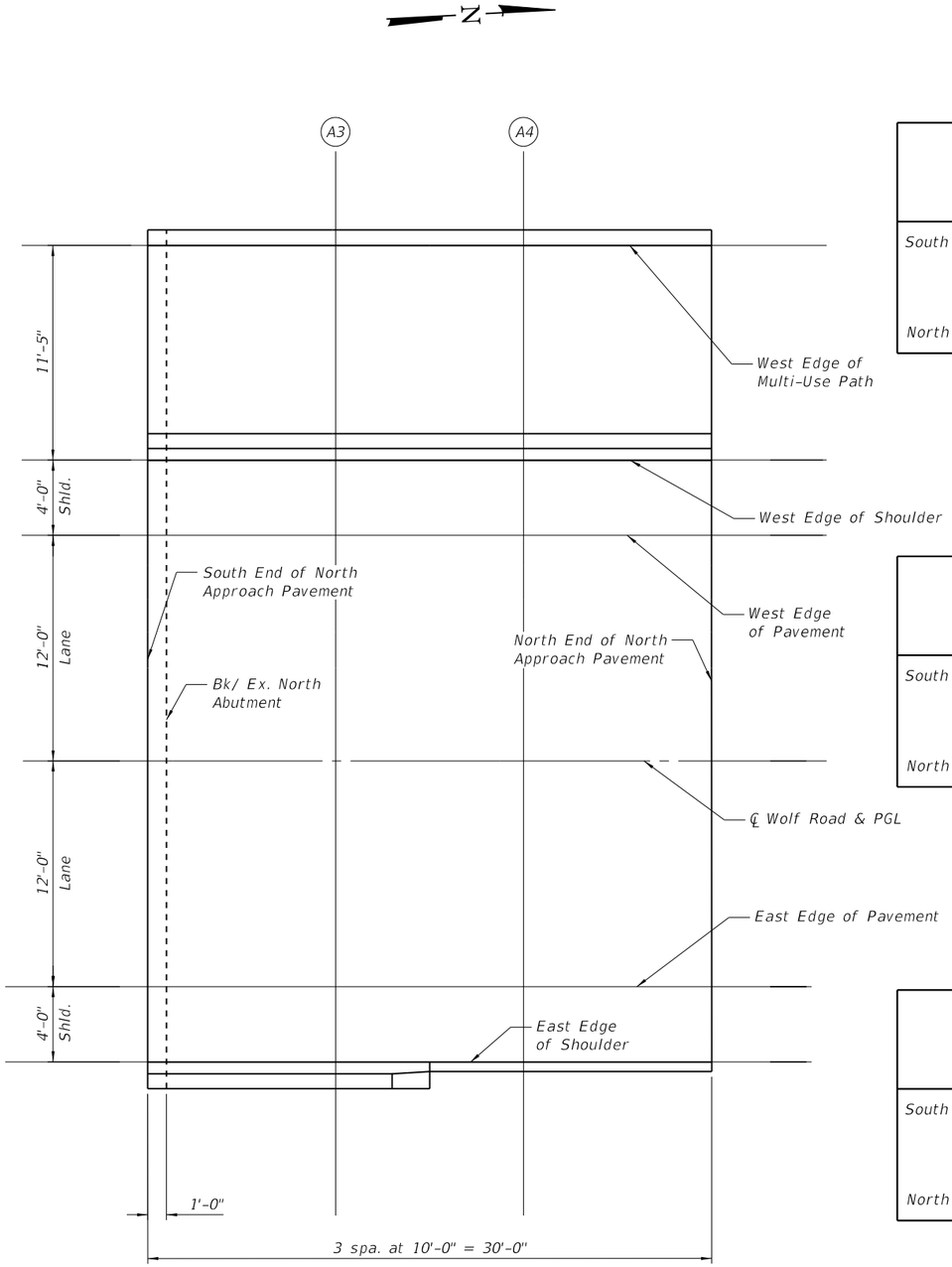
Location	Station	Offset (ft)	Theoretical Grade Elevations
South End South Appr. Pav't.	181+51.72	16.00	741.15
A1	181+61.72	16.00	741.26
A2	181+71.72	16.00	741.36
North End South Appr. Pav't.	181+81.72	16.00	741.46

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . PH312-606-0990 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SOUTH APPROACH SLAB ELEVATIONS STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 9 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	71
		CONTRACT NO. 62N20		
	ILLINOIS			



PLAN

WEST EDGE OF MULTI-USE PATH

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	-27.42	741.17
A3	184+13.80	-27.42	741.07
A4	184+23.80	-27.42	740.97
North End North Appr. Pav't.	184+33.80	-27.42	740.85

℄ WOLF ROAD & PROFILE GRADE

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	0.00	741.66
A3	184+13.80	0.00	741.56
A4	184+23.80	0.00	741.46
North End North Appr. Pav't.	184+33.80	0.00	741.34

WEST EDGE OF SHOULDER

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	-16.00	741.40
A3	184+13.80	-16.00	741.30
A4	184+23.80	-16.00	741.20
North End North Appr. Pav't.	184+33.80	-16.00	741.08

EAST EDGE OF PAVEMENT

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	12.00	741.48
A3	184+13.80	12.00	741.38
A4	184+23.80	12.00	741.28
North End North Appr. Pav't.	184+33.80	12.00	741.16

WEST EDGE OF PAVEMENT

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	-12.00	741.48
A3	184+13.80	-12.00	741.38
A4	184+23.80	-12.00	741.28
North End North Appr. Pav't.	184+33.80	-12.00	741.16

EAST EDGE OF SHOULDER

Location	Station	Offset (ft)	Theoretical Grade Elevations
South End North Appr. Pav't.	184+03.80	16.00	741.40
A3	184+13.80	16.00	741.30
A4	184+23.80	16.00	741.20
North End North Appr. Pav't.	184+33.80	16.00	741.08

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF NORTH APPROACH SLAB ELEVATIONS STRUCTURE NO. 099-0192	F.A.I. RTE. 80
	CHECKED MG/ZM	REVISED -			SECTION 2020-250-BY
PLOT SCALE =	DRAWN KC	REVISED -			COUNTY WILL
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 10 OF 38 SHEETS	TOTAL SHEETS 133
					SHEET NO. 72
					CONTRACT NO. 62N20
					ILLINOIS

N

431–#6 a2(E) bars at 6" cts., top (W side)
431–#6 a3(E) bars at 6" cts., top (E side)
Lap with a(E) bars

8'–0" 8'–0"

⅛" Aluminum sheet joints in parapet

9'–0" 9'–0"

⅛" Aluminum sheet joints in parapet

10"
10'–0"
1'–5"
45'–8" out to out deck
32'–0"
47–#5 v100(E) bars at 12" spa., ea. end
1'–5"

334–#5 d3(E) bars at 8" cts., F.F.
334–#5 d4(E) bars at 8" cts., B.F.

1'–0" typ.

9½"
7½"

334–#5 d2(E) bars at 8" cts.
6"

Back of Ex. S. Abutment
℄ Brg. S. Abutment
45x8–#5 b(E) bars equally spaced at (±) 12" cts., top of slab
44–#6 b1(E) bars at (±) 12" cts. top of slab
℄ Ex. Pier 3
℄ Wolf Road
48x9–#5 b2(E) bars spaced as shown in cross-section, bottom of slab
44–#6 b1(E) bars at (±)12" cts. top of slab
℄ Ex. Pier 2

4–#5 a(E) bars at 12" cts., top of slab, each end
431–#5 a(E) bars at 6" cts., top
259–#5 a1(E) bars at 10" cts., bot.

19'–4" typ.

3x8–#5 b(E) bars, top of slab

7½"
9½"

334–#5 d1(E) bars at 8" cts.

43'–9½"
67'–3"
222'–1" end to end deck
Symmetric about ℄ Pier 2

PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 3'–6"
#6 bar = 4'–10"

45'–8" out to out deck

10" 10'–0" Multi–use path 1'–5" 4'–0" Shoulder 12'–0" Lane 12'–0" Lane 4'–0" Shoulder 1'–5"

6'–5½"
2'–4" Parapet
Parapet Railing
Total drop = 6"
Bridge Fence Railing, Parapet Mounted, R–32
d5(E)
d3(E)
d4(E)
a2(E)
d(E)
d2(E)
2.0% slope
2.0% slope
b1(E)
b(E)
a(E)
1.5% slope
a1(E)
8" slab
2½" clr. (±¼")
1" clr.
℄ Wolf Road
Profile Grade and crown
Total drop = 3½"
1.5% slope
a3(E)
b(E)
2.0% slope
3'–3" Constant slope parapet, typ.
d(E)
d1(E)
b(E)
b2(E), typ.
6½"
7–#5 b2(E) bars at 11" cts, typ. between beams
6½"
① ② ③ ④ ⑤ ⑥ ⑦
3'–1"
1'–2"
6 spaces at 6'–7" = 39'–6"
3'–1"

NEAR PIER

NEAR MIDSPAN

CROSS–SECTION
(Looking North)

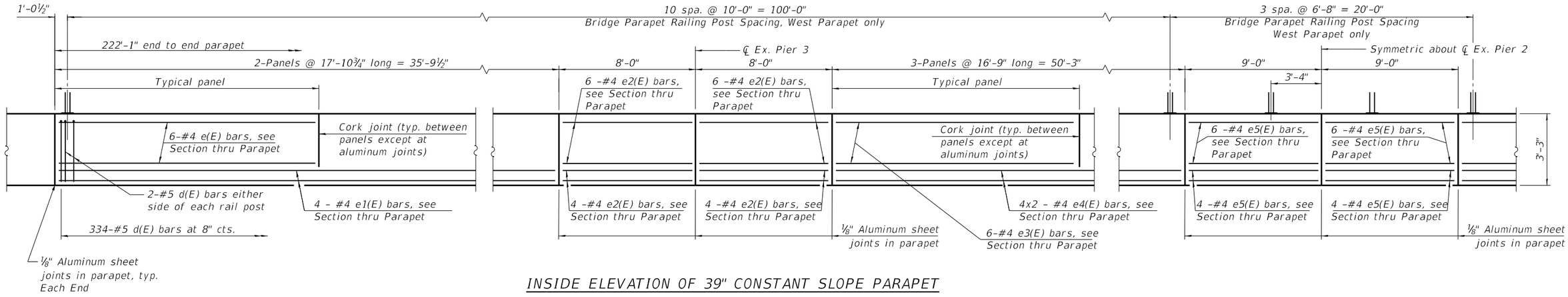
Notes:
See sheet 13 of 38 for superstructure details and Bill of Materials.
Bars indicated thus 20x3–#5 etc. indicates 20 lines of bars with 3 lengths per line

1 Entire sheet revised

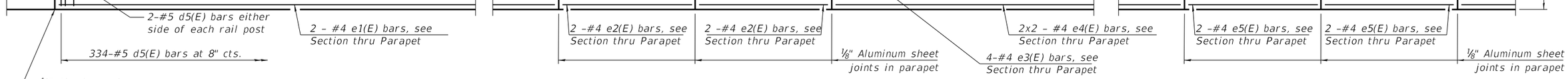
Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0900 F:312-606-2415

USER NAME = kanderson	DESIGNED	KJA	REVISED 1	4/8/2022	KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE PLAN AND SECTION STRUCTURE NO. 099-0192
	CHECKED	MG	REVISED	-			
PLOT SCALE =	DRAWN	MG	REVISED	-			
PLOT DATE = 4/8/2022	CHECKED	KJA	REVISED	-			SHEET 11 OF 38 SHEETS

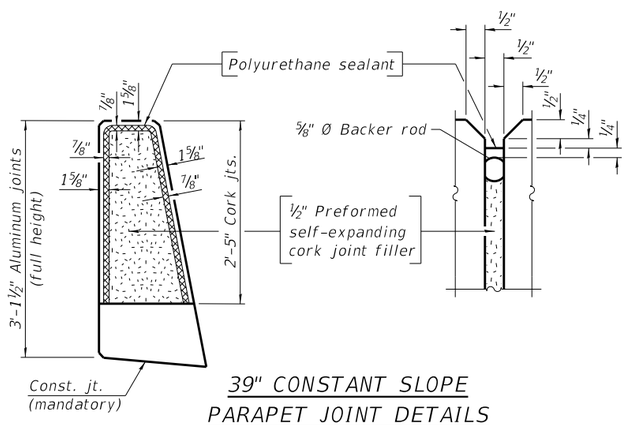
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	73
		CONTRACT NO. 62N20		
	ILLINOIS			



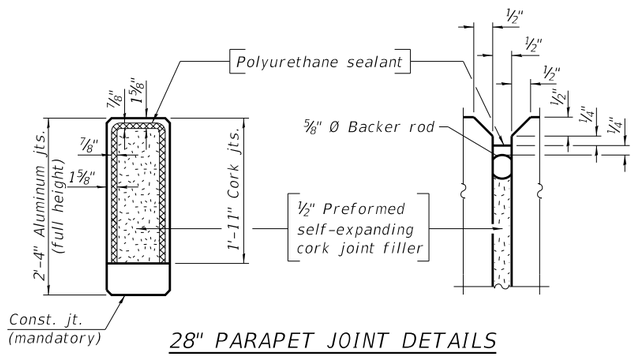
INSIDE ELEVATION OF 39" CONSTANT SLOPE PARAPET



INSIDE ELEVATION OF 28" PARAPET



39" CONSTANT SLOPE PARAPET JOINT DETAILS



28" PARAPET JOINT DETAILS

MINIMUM BAR LAP

#4 bar = 2'-5"

Notes:

See Sheet 13 of 38 for superstructure details and Bill of Materials.

The ⅛" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included in Concrete Superstructure.

The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

1 Entire sheet revised

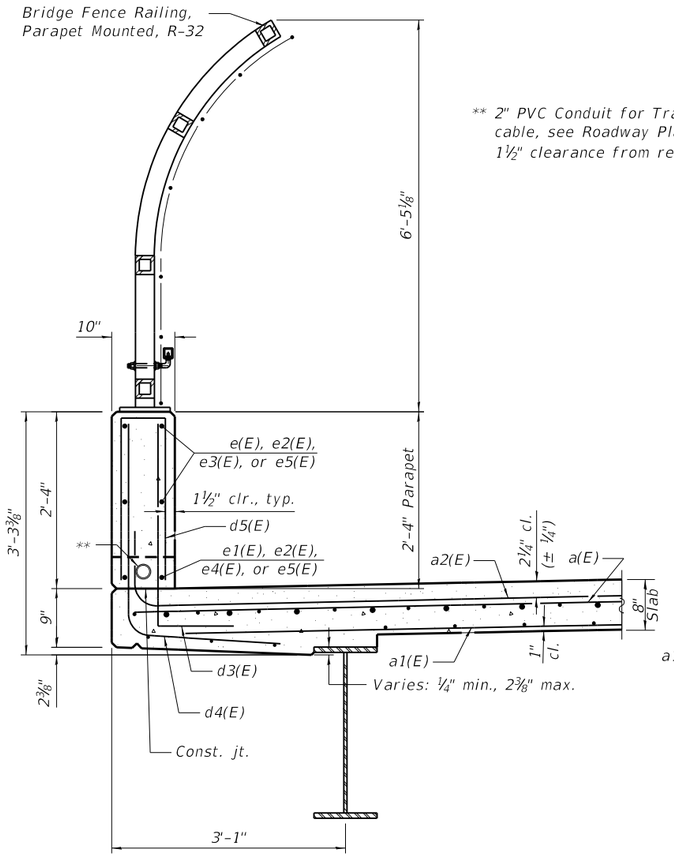
Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

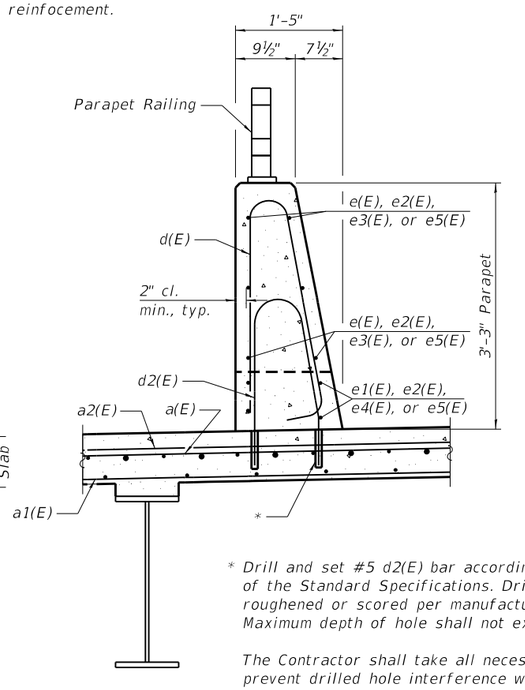
USER NAME = kanderson	DESIGNED	KJA	REVISED 1 4/8/2022	KJA	
	CHECKED	MG	REVISED -		
PLOT SCALE =	DRAWN	MG	REVISED -		
PLOT DATE = 4/8/2022	CHECKED	KJA	REVISED -		

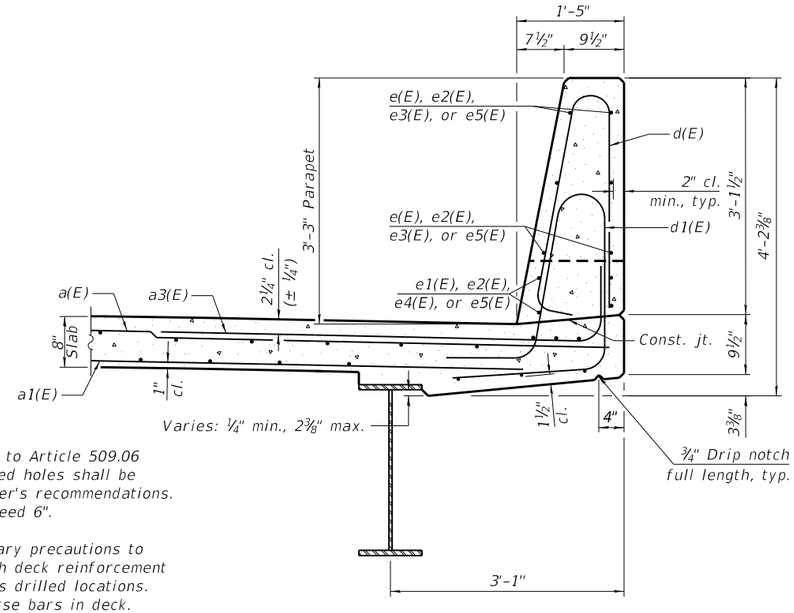
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATION AND DETAILS
STRUCTURE NO. 099-0192
SHEET 12 OF 38 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	74
		CONTRACT NO. 62N20		
	ILLINOIS			



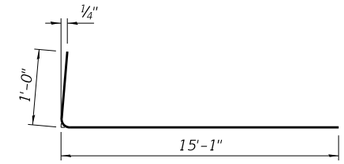




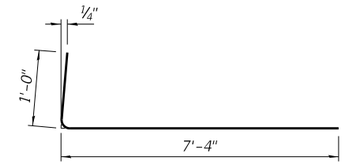
* Drill and set #5 d2(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

The Contractor shall take all necessary precautions to prevent drilled hole interference with deck reinforcement bars. Locate longitudinal bars to miss drilled locations. Locate drilled holes to miss transverse bars in deck.

SECTION THRU PARAPET



BAR a2(E)

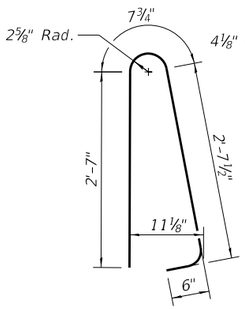


BAR a3(E)

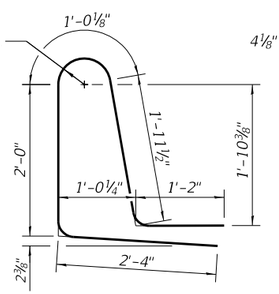
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	439	#5	45'-4"	
a1(E)	259	#5	45'-4"	
a2(E)	431	#6	16'-1"	
a3(E)	431	#6	8'-4"	
b(E)	384	#5	30'-10"	
b1(E)	132	#6	38'-8"	
b2(E)	432	#5	27'-8"	
d(E)	714	#5	6'-5"	
d1(E)	334	#5	8'-6"	
d2(E)	334	#5	4'-11"	
d3(E)	334	#5	3'-6"	
d4(E)	334	#5	3'-7"	
d5(E)	380	#5	4'-7"	
e(E)	64	#4	17'-7"	
e1(E)	20	#4	35'-6"	
e2(E)	104	#4	7'-8"	
e3(E)	96	#4	16'-5"	
e4(E)	40	#4	26'-2"	
e5(E)	52	#4	8'-8"	
m10(E)	8	#6	45'-4"	
m11(E)	48	#6	6'-3"	
m12(E)	16	#6	2'-9"	
m13(E)	4	#4	45'-4"	
s10(E)	100	#5	6'-2"	
s11(E)	100	#5	8'-0"	
u10(E)	100	#4	3'-6"	
v100(E)	94	#5	3'-1"	
Reinforcement Bars, Epoxy Coated		Lbs.	102,040	
Concrete Superstructure		Cu. Yds.	362.5	
Bridge Deck Grooving		Sq. Yd.	741	
Protective Coat		Sq. Yd.	1,398	

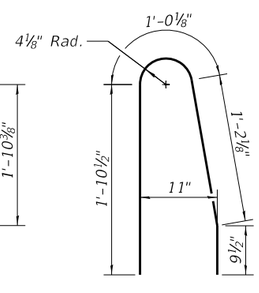
Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



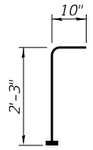
BAR d(E)



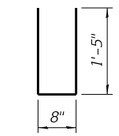
BAR d1(E)



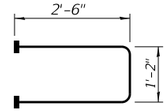
BAR d2(E)



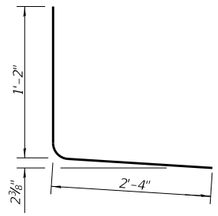
BAR v100(E)
(Headed)



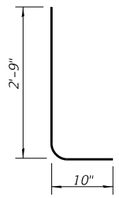
BAR u10(E)



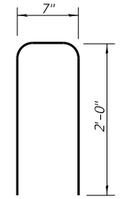
BAR s10(E)
(Headed)



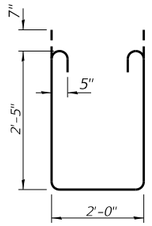
BAR d3(E)



BAR d4(E)



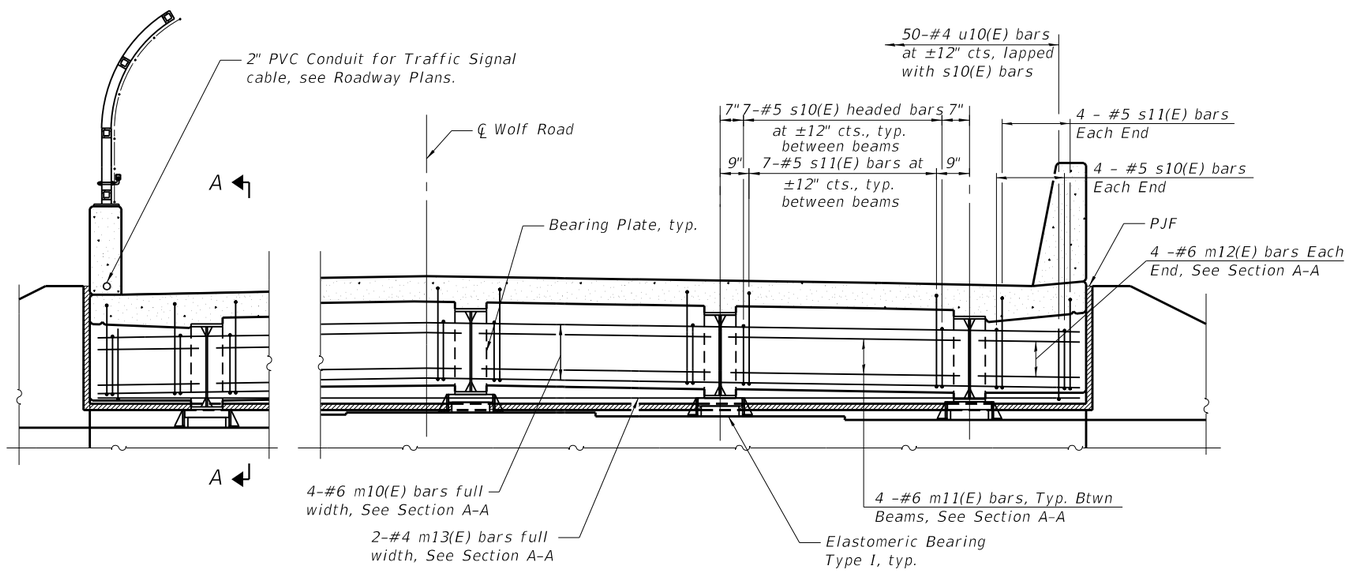
BAR d5(E)



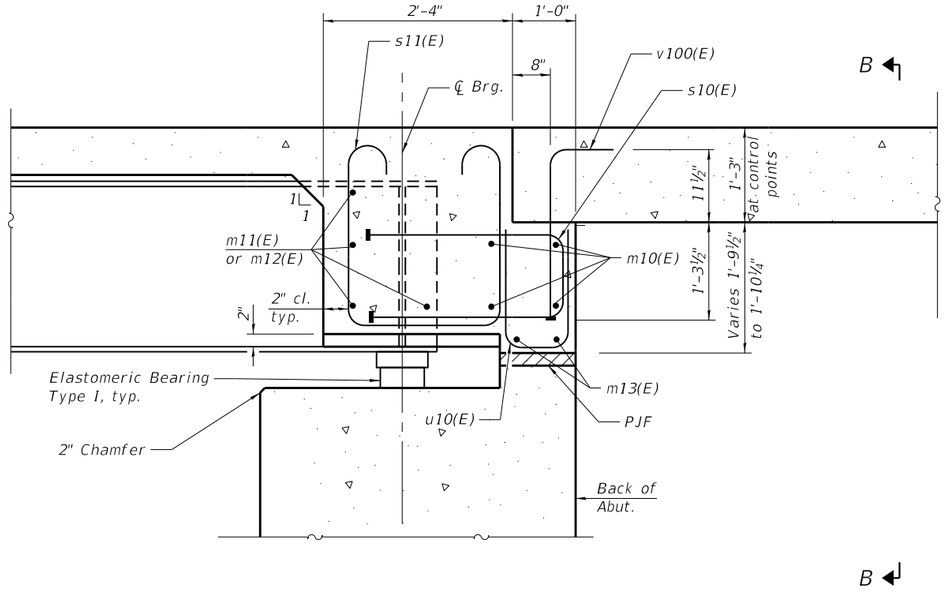
BAR s11(E)

Notes:
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

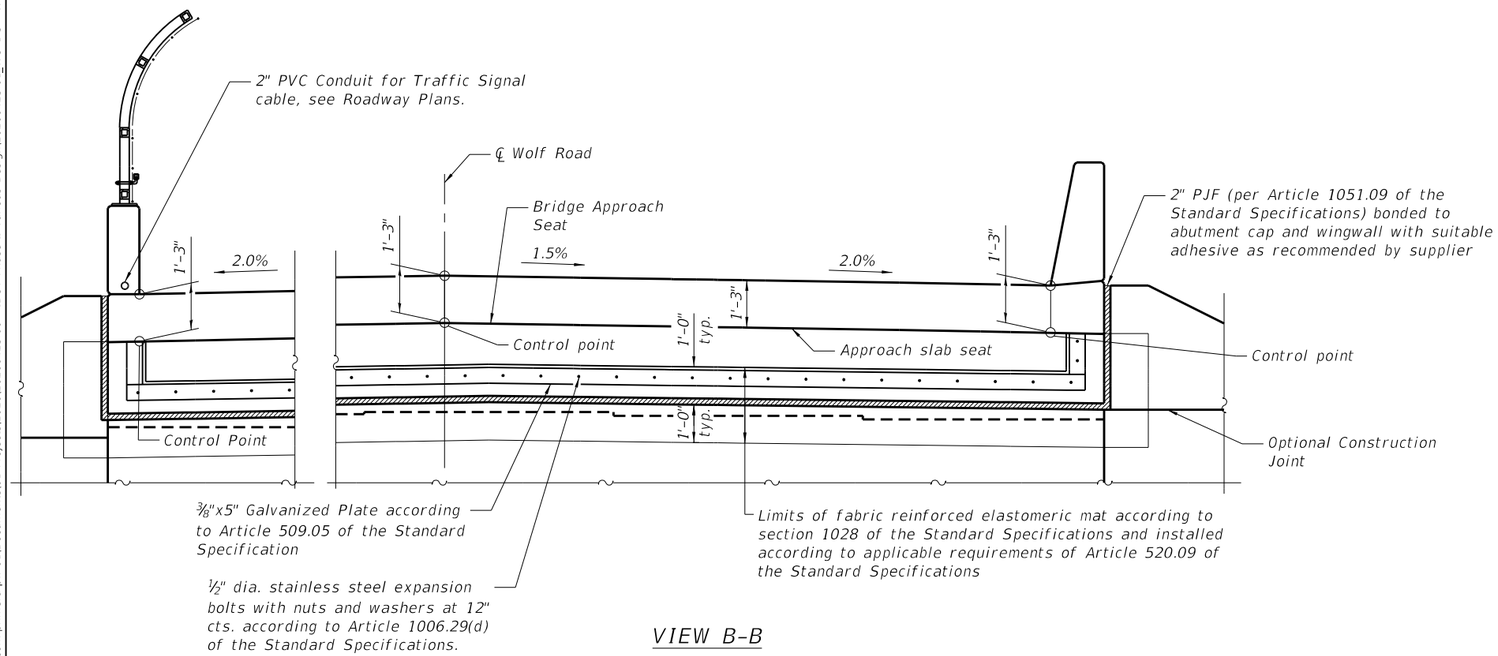
1 Entire sheet revised



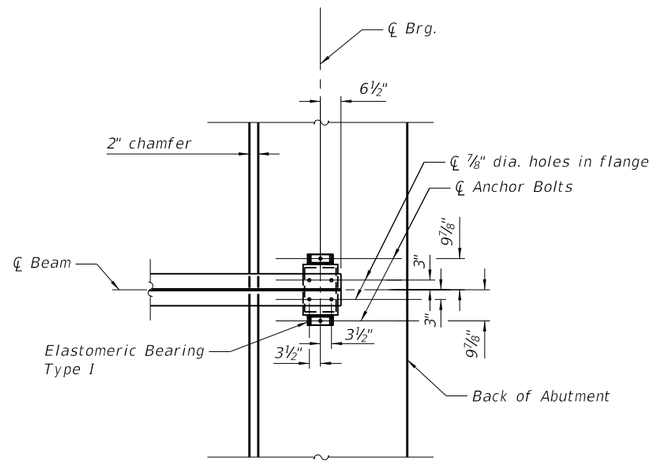
DIAPHRAGM AT ABUTMENT



SECTION A-A



VIEW B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:

See sheet 13 of 38 for superstructure details and Bill of Material.

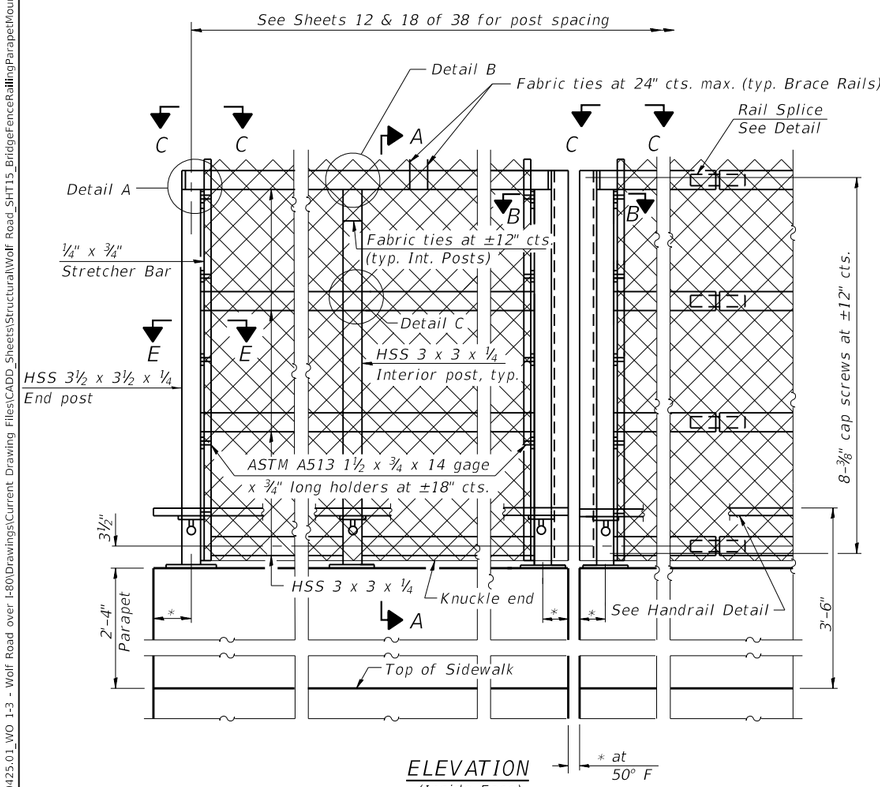
Cost of fabric reinforced elastomeric mat, galvanized plate, preformed joint filler, stainless steel expansion bolts with nuts and washers and installation are included in the cost of Concrete Superstructure.

1 Entire sheet revised

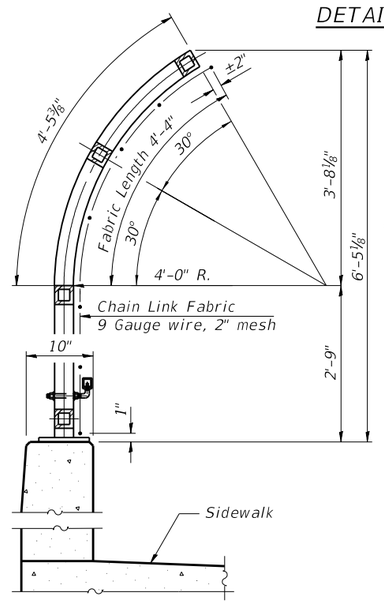
Primera 100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-406-0910 F:312-406-0415	USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIAPHRAGM DETAILS STRUCTURE NO. 099-0192
		CHECKED MG	REVISED -		
	PLOT SCALE =	DRAWN MG	REVISED -		SHEET 14 OF 38 SHEETS
	PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	76
		CONTRACT NO. 62N20		
	ILLINOIS			

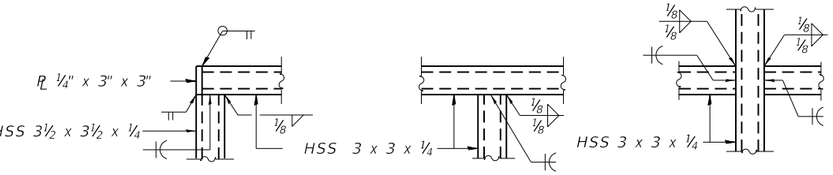
MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT14_DiaphragmDetails.dgn
4/8/2022 2:32:33 PM



ELEVATION
(Inside Face)

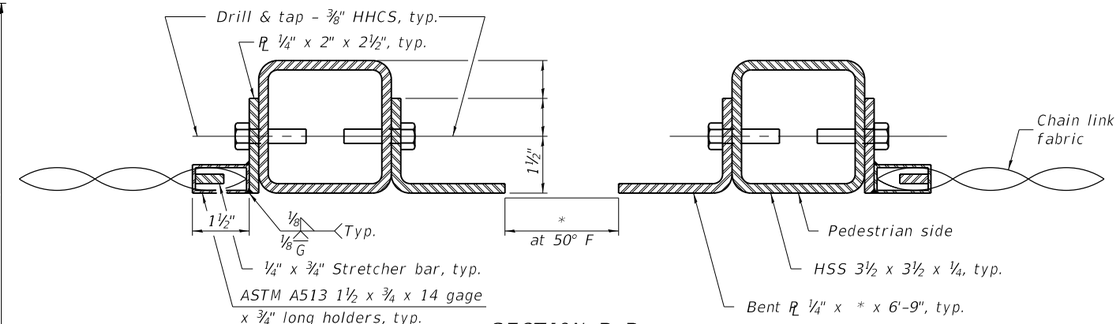


SECTION A-A

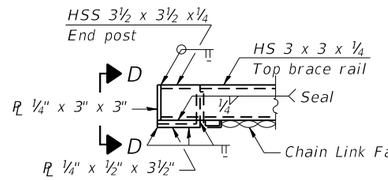


DETAIL A DETAIL B DETAIL C

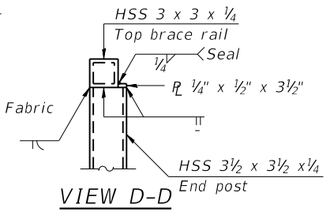
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



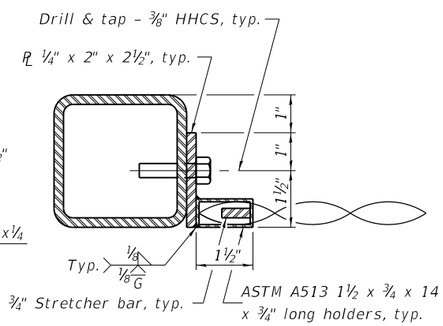
SECTION B-B
(At Expansion Joint)



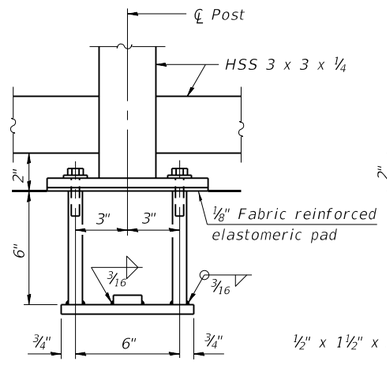
VIEW C-C

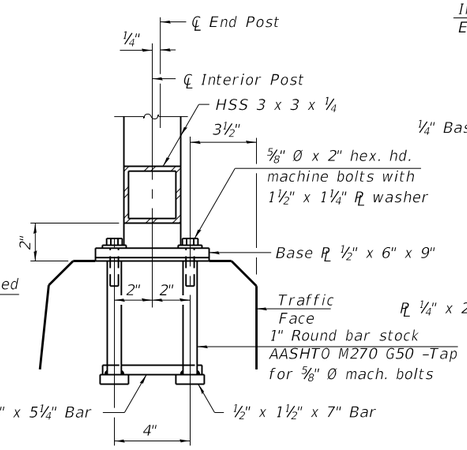


VIEW D-D



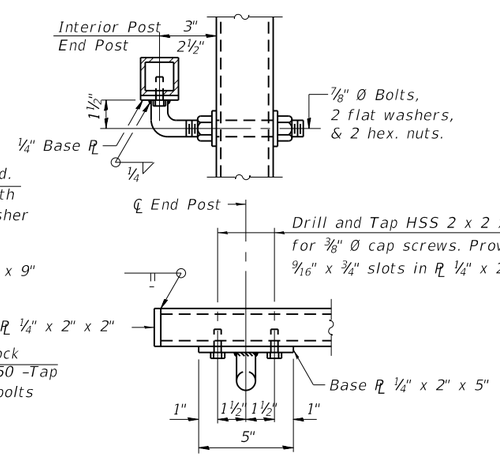
SECTION E-E



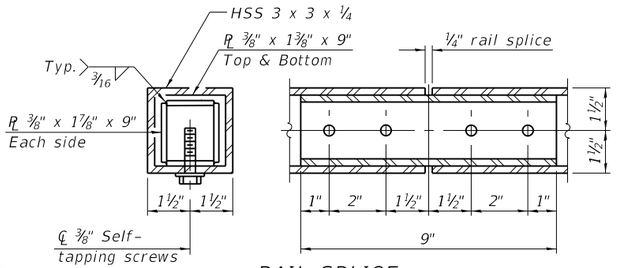


ANCHOR BOLT DETAILS

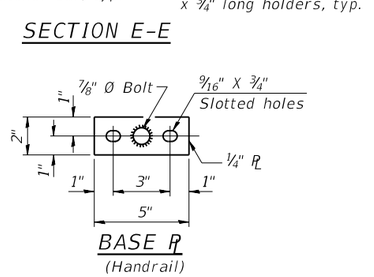
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



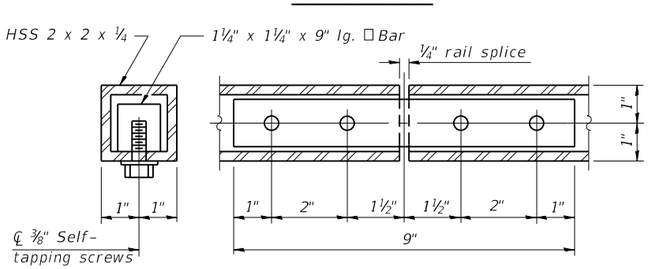
HANDRAIL DETAIL



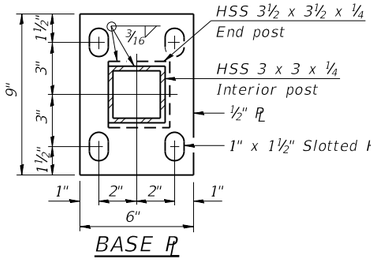
RAIL SPLICE



BASE PL
(Handrail)



HANDRAIL SPLICE



BASE PL

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	278

Note:
CVN testing may be omitted for the railing.

*Variable - See Plans
(10'-0" Maximum Post Spacing)

1 Entire sheet revised

R-32

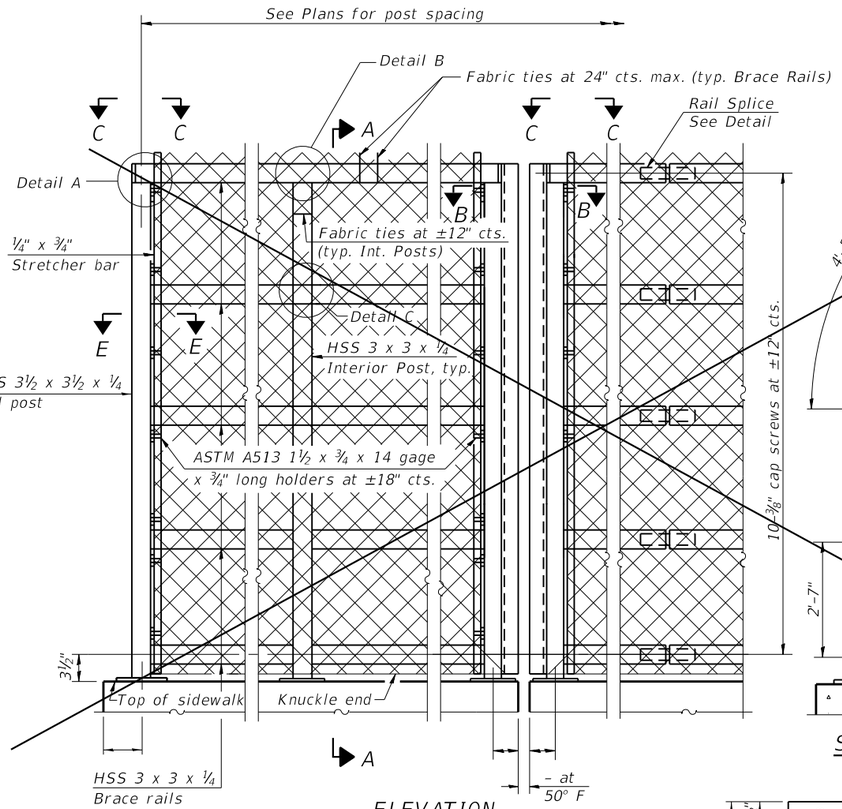
1-14-2019

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-606-0910 F:312-606-0415

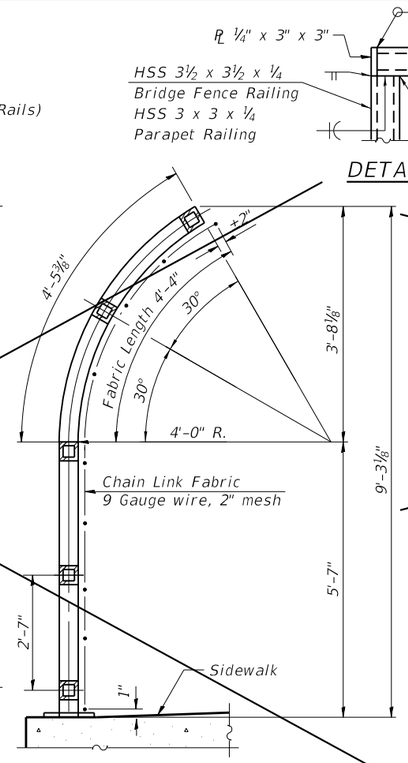
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE FENCE RAILING, PARAPET MOUNTED STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 15 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	77
		CONTRACT NO. 62N20		
		ILLINOIS		

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

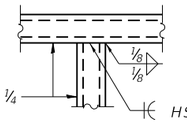


ELEVATION
(Inside Face)

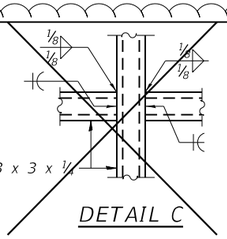


SECTION A-A

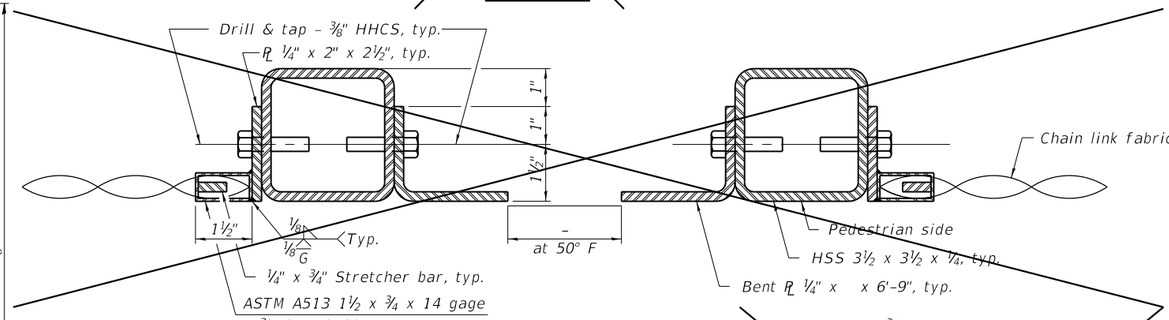
DETAIL A



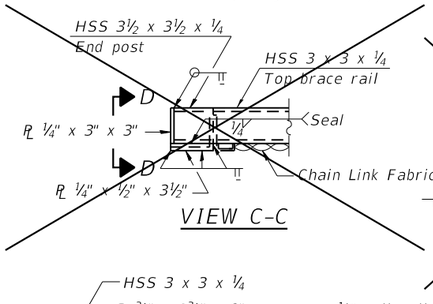
DETAIL B



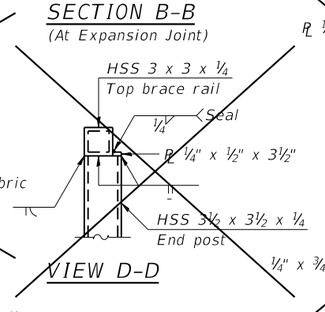
DETAIL C



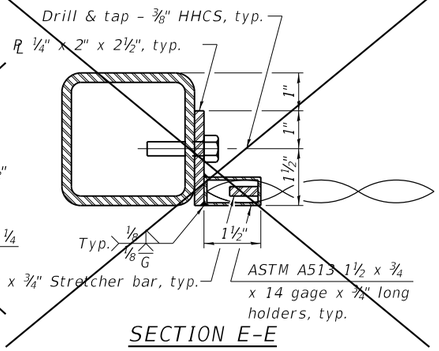
SECTION B-B
(At Expansion Joint)



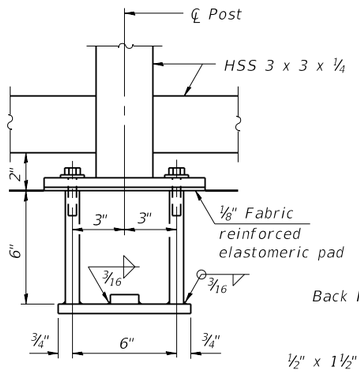
VIEW C-C

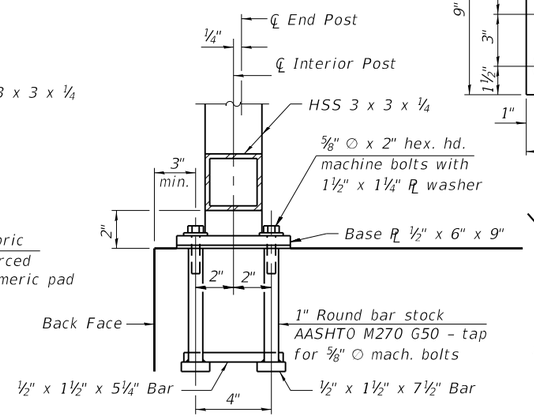


VIEW D-D



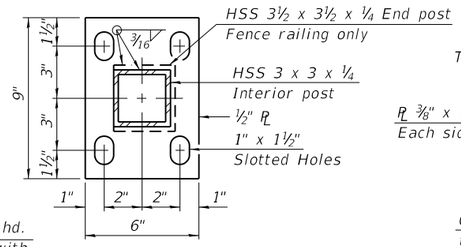
SECTION E-E



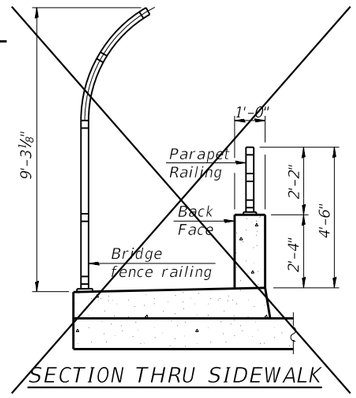


ANCHOR BOLT DETAILS

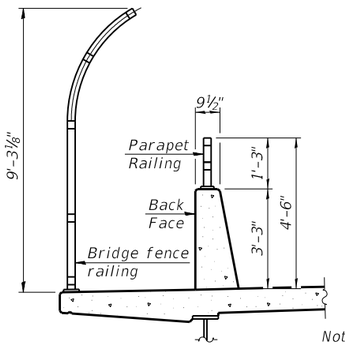
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" ∅ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



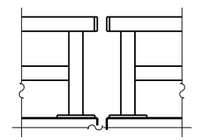
BASE PL



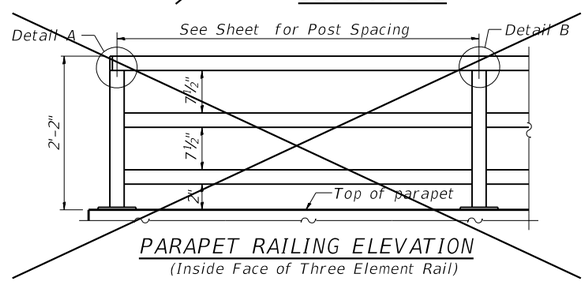
SECTION THRU SIDEWALK



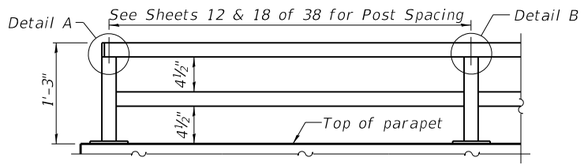
SECTION THRU DECK



PARAPET RAILING ELEVATION AT EXPANSION JOINT
(Two element rail shown – Three element rail similar)



PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)



PARAPET RAILING ELEVATION
(Inside face of two element rail)

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
CVN testing may be omitted for the Bridge Fence Railing.

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	278

1 Entire sheet revised

R-33 1-14-2019 (10'-0" Maximum Post Spacing)

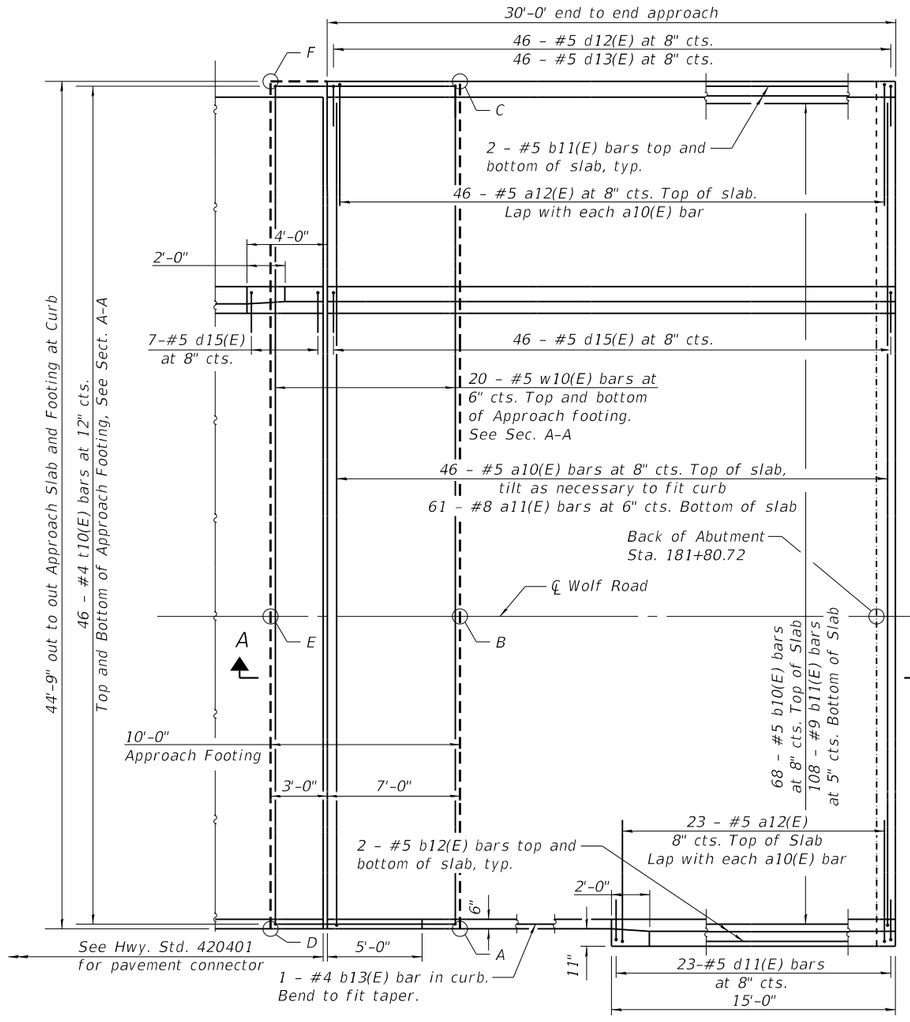
Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	
	CHECKED MG/ZM	REVISED -	
PLOT SCALE =	DRAWN KC	REVISED -	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -	

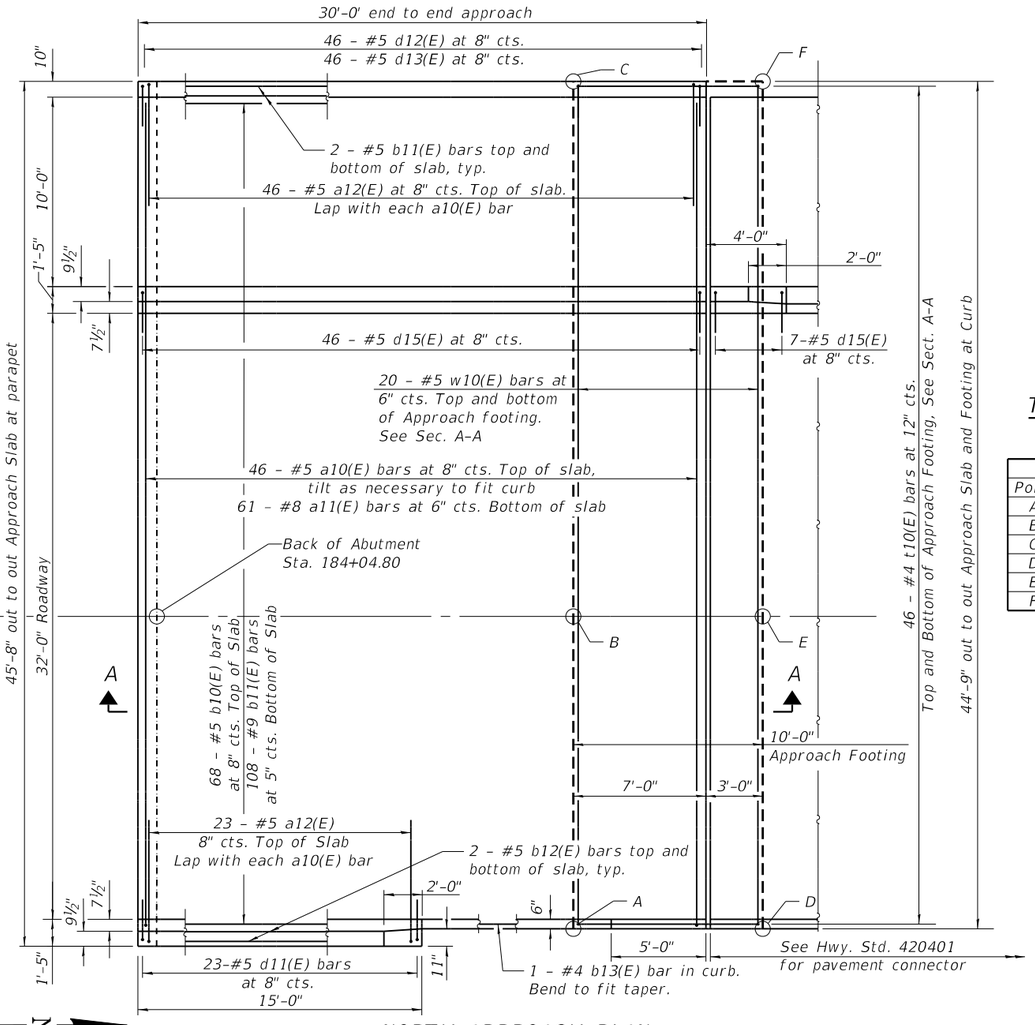
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET RAILING
STRUCTURE NO. 099-0192
SHEET 16 OF 38 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	78
		CONTRACT NO. 62N20		
	ILLINOIS			



SOUTH APPROACH PLAN



NORTH APPROACH PLAN

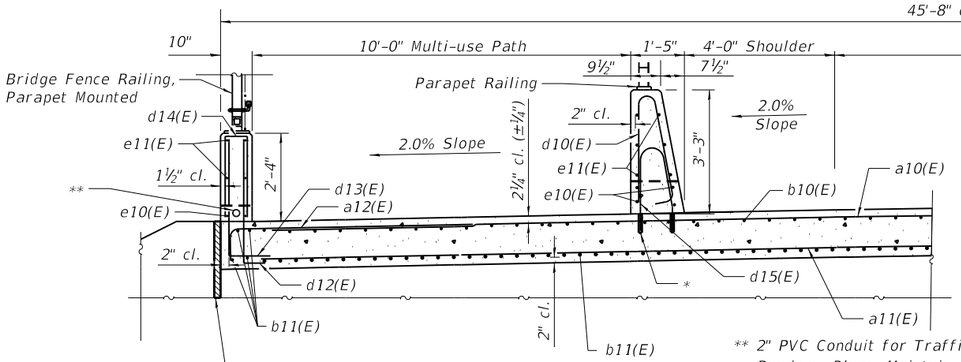
N

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	North Approach		South Approach	
Point	Top	Bottom	Top	Bottom
A	739.90	739.07	739.97	739.14
B	740.17	739.34	740.24	739.41
C	739.68	738.85	739.74	738.91
D	739.79	738.96	739.86	738.03
E	740.06	739.23	740.13	739.30
F	739.56	738.73	739.63	738.80

* Drill and set #5 d15(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

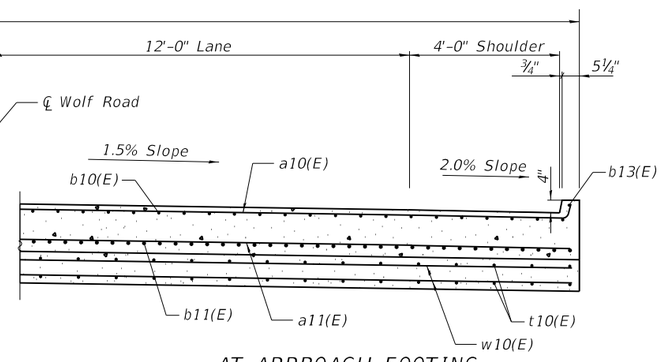
The Contractor shall take all necessary precautions to prevent drilled hole interference with slab reinforcement bars. Locate longitudinal bars to miss drilled locations. Located drilled holes to miss transverse bars in slab.



NEAR ABUTMENT
(Looking North)

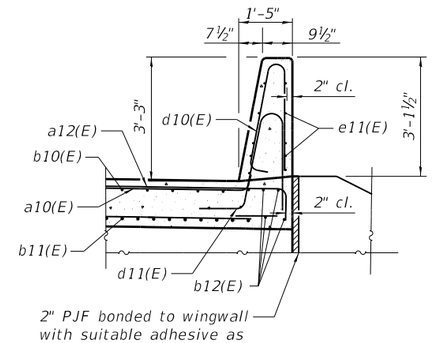
** 2" PVC Conduit for Traffic Signal cable, see Roadway Plans. Maintain 1½" clearance from reinforcement.

1 Entire sheet revised



CROSS SECTION
(Looking North)

AT APPROACH FOOTING

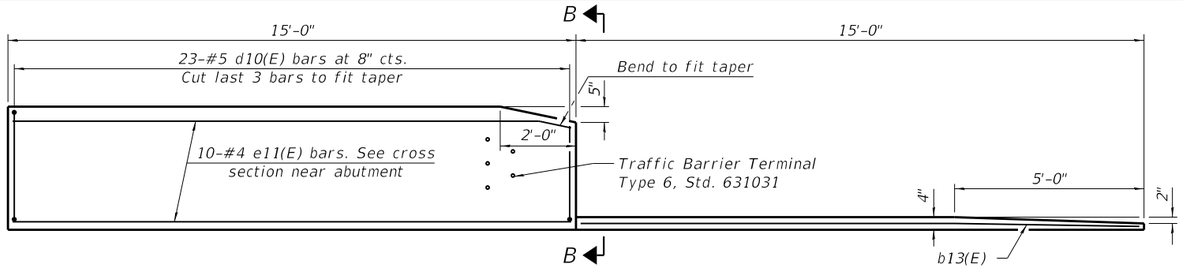


EAST 39" CONSTANT SLOPE PARAPET AT ABUTMENT

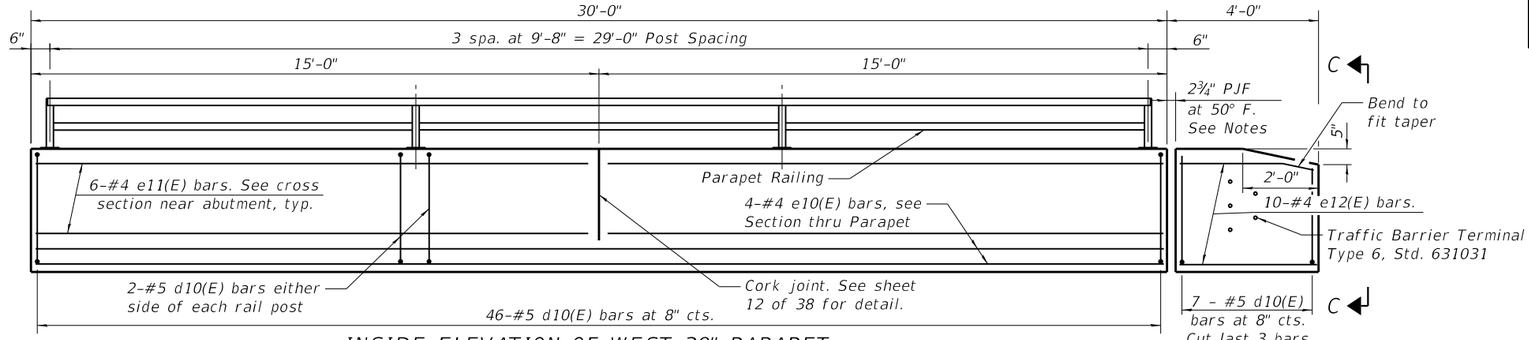
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB PLAN AND SECTION STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 17 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	79
		CONTRACT NO. 62N20		
	ILLINOIS			

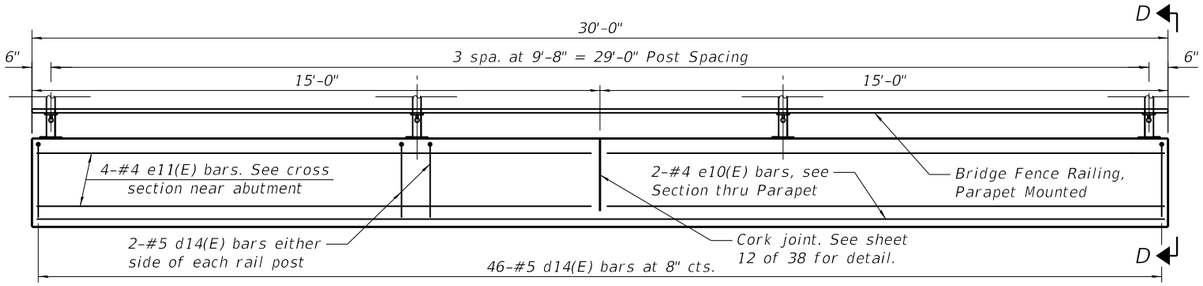
Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-2415



INSIDE ELEVATION OF EAST 39" PARAPET AND CURB



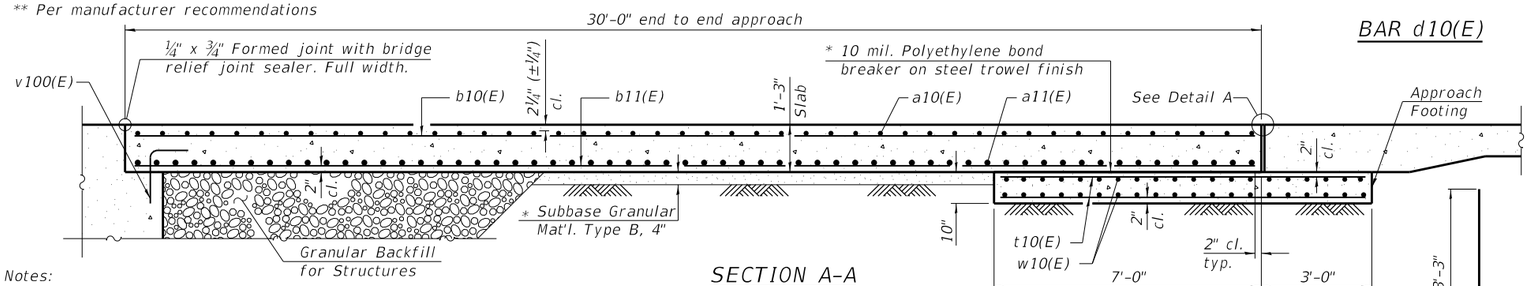
INSIDE ELEVATION OF WEST 39" PARAPET



INSIDE ELEVATION OF WEST 28" PARAPET

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations



SECTION A-A

Notes:

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 bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

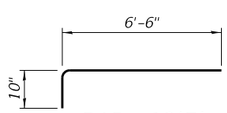
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

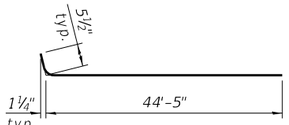
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

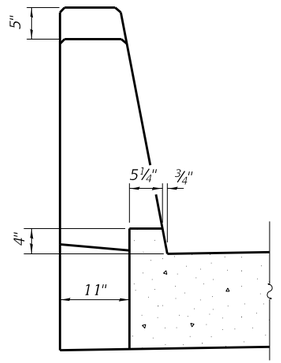
For Granular Backfill for Structures and drainage treatment details, see sheet 26 of 38.



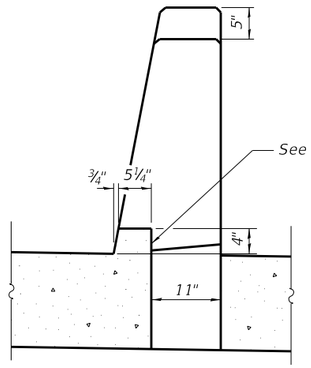
BAR a12(E)



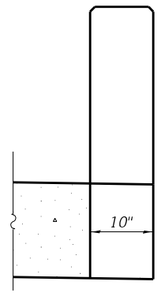
BAR a10(E)



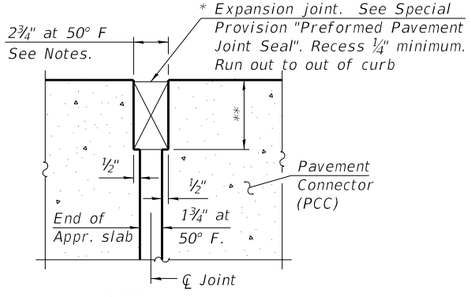
VIEW B-B



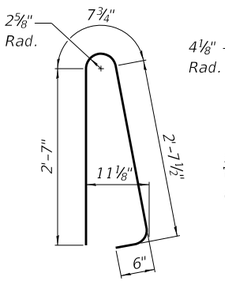
VIEW C-C



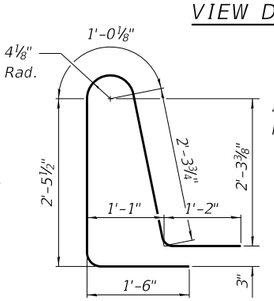
VIEW D-D



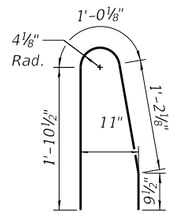
DETAIL A



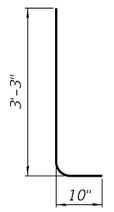
BAR d10(E)



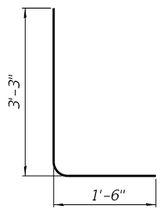
BAR d11(E)



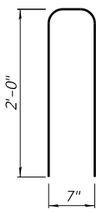
BAR d15(E)



BAR d12(E)



BAR d13(E)



BAR d14(E)

TWO APPROACHES
BILL OF MATERIAL

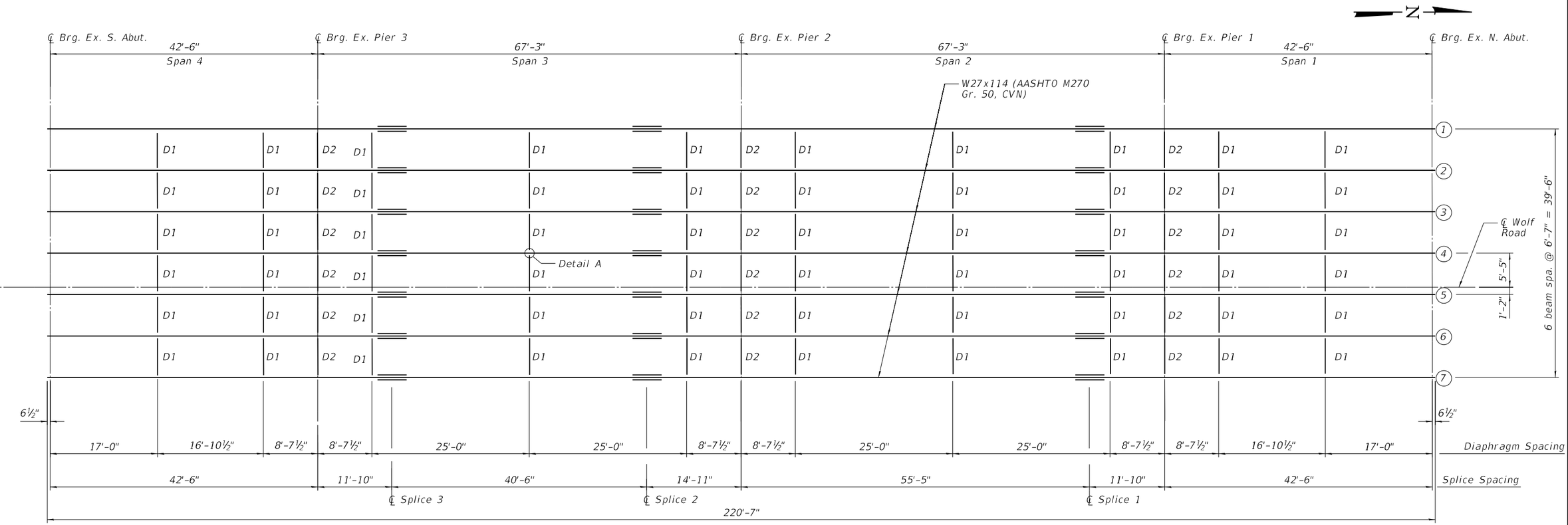
Bar	No.	Size	Length	Shape
a10(E)	92	#5	44'-11"	
a11(E)	122	#8	45'-4"	
a12(E)	138	#5	7'-4"	
b10(E)	136	#5	29'-8"	
b11(E)	224	#9	29'-8"	
b12(E)	8	#5	14'-8"	
b13(E)	2	#4	14'-8"	
d10(E)	168	#5	6'-5"	
d11(E)	46	#5	8'-6"	
d12(E)	92	#5	4'-1"	
d13(E)	92	#5	4'-9"	
d14E)	108	#5	4'-7"	
d15E)	106	#5	4'-11"	
e10(E)	12	#4	29'-8"	
e11(E)	60	#4	14'-8"	
e12(E)	20	#4	3'-8"	
t10(E)	92	#4	9'-8"	
w10(E)	80	#5	44'-5"	
Concrete Superstructure		Cu. Yd.	17.4	
Concrete Superstructure (Approach Slab)		Cu. Yd.	125.8	
Concrete Structures		Cu. Yd.	22.1	
Reinforcement Bars, Epoxy Coated		Pound	55,700	
Bridge Deck Grooving		Sq. Yd.	200	
Protective Coat		Sq. Yd.	373	

1 Entire sheet revised

(Sheet 2 of 2)

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO, IL 60606 . P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 099-0192	F.A.I. RTE. 80
	CHECKED MG/ZM	REVISED -			SECTION 2020-250-BY
PLOT SCALE =	DRAWN KC	REVISED -			COUNTY WILL
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 18 OF 38 SHEETS	TOTAL SHEETS 133
					SHEET NO. 80
					CONTRACT NO. 62N20
					ILLINOIS



FRAMING PLAN

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

Note:
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.
See sheet 20 of 38 for Detail A.

*TOP OF BEAM ELEVATIONS

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7
℄ Brg. S. Abut.	740.58	740.71	740.84	740.94	741.00	740.90	740.79
℄ Ex. Pier 3	740.80	740.93	741.06	741.16	741.23	741.13	741.02
℄ Splice 3	740.87	740.99	741.13	741.23	741.29	741.19	741.08
℄ Splice 2	740.98	741.10	741.23	741.33	741.40	741.30	741.19
℄ Ex. Pier 2	740.95	741.07	741.21	741.30	741.37	741.27	741.16
℄ Splice 1	740.84	740.97	741.10	741.20	741.26	741.16	741.05
℄ Ex. Pier 1	740.77	740.90	741.03	741.13	741.19	741.09	740.98
℄ Brg. N. Abut.	740.52	740.65	740.78	740.88	740.95	740.85	740.74

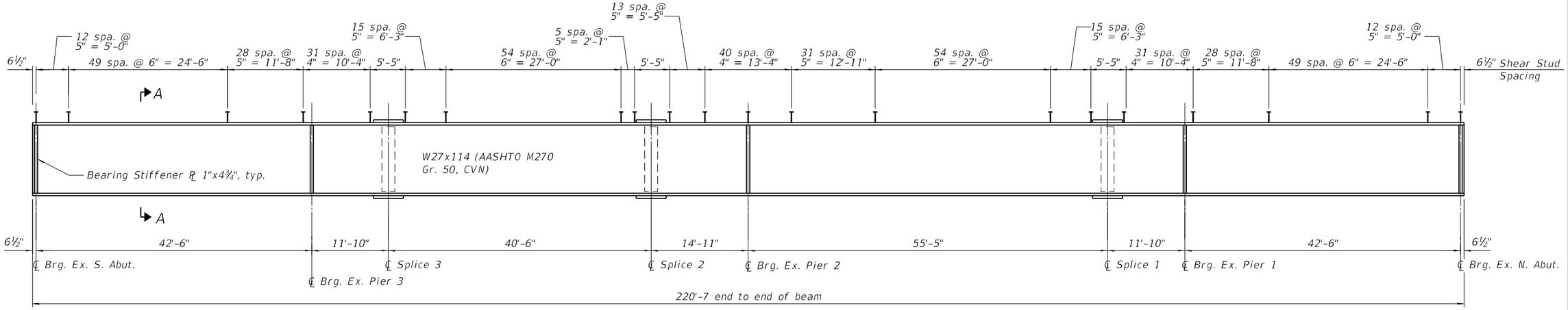
*For fabrication use only.

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-2415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN STRUCTURE NO. 099-0192	
	CHECKED MG	REVISED -			
PLOT SCALE =	DRAWN MG	REVISED -		SHEET 19 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

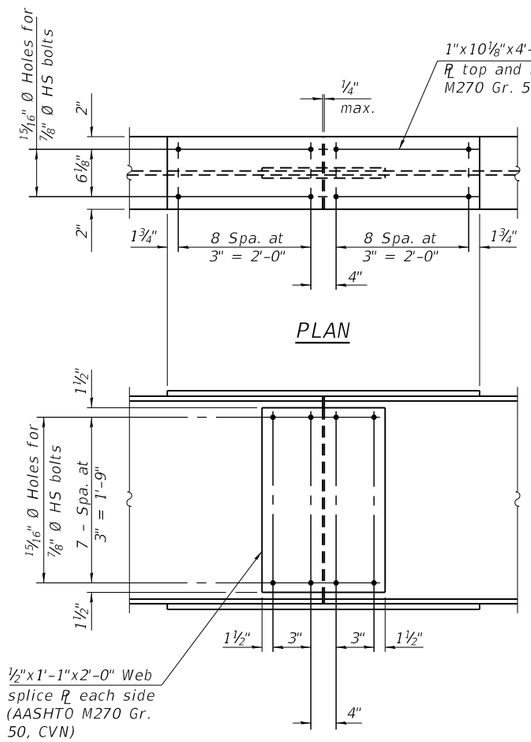
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	81
		CONTRACT NO. 62N20		
	ILLINOIS			



GIRDER ELEVATION

(Looking West)

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



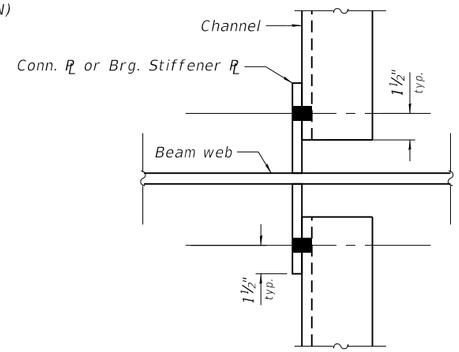
PLAN

ELEVATION

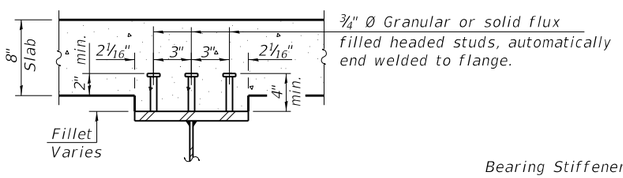
SPLICE DETAIL

(3 Required per beam - Total 21)

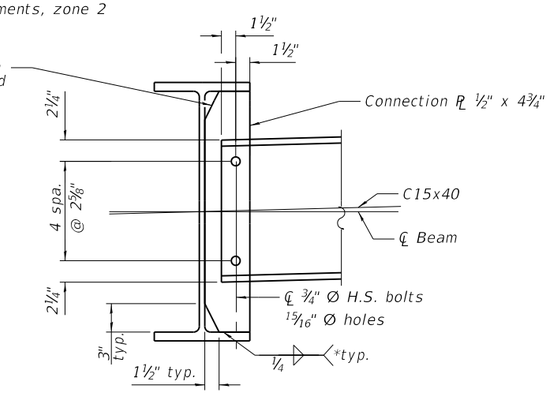
"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2



DETAIL A



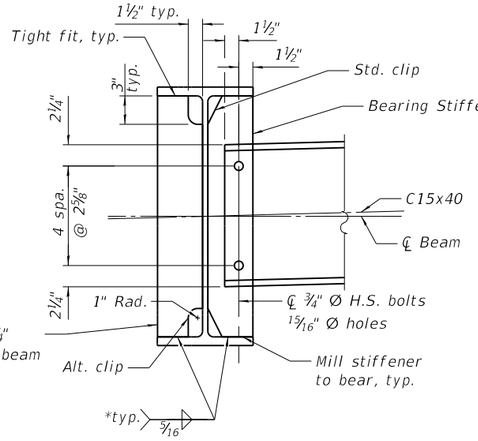
SECTION A-A



INTERIOR DIAPHRAGM D1

(60 required)

* Stop welds ¼" (±⅛") from edges.



INTERIOR DIAPHRAGM D2

(18 required)

Notes:

Two hardened washers required for each set of oversized holes.

Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department.

BILL OF MATERIAL

Item	Unit	Total
Stud Shear Connectors	Each	9,891

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATION AND DETAILS STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 20 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	82
		CONTRACT NO. 62N20		
	ILLINOIS			

INTERIOR GIRDER MOMENT TABLE					
		0.4 Sp. 1 or 0.6 Sp. 4	Pier 1 or Pier 3	0.5 Sp. 2 or 0.5 Sp. 3	Pier 2
Is	(in^4)	4080	4080	4080	4080
Ic(n)	(in^4)	11630	---	11630	---
Ic(3n)	(in^4)	8925	---	8925	---
Ic(cr)	(in^4)	---	6073	---	6073
Ss	(in^3)	299	299	299	299
Sc(n)	(in^3)	440.8	---	440.8	---
Sc(3n)	(in^3)	409.0	---	409.0	---
Sc(cr)	(in^3)	---	361.0	---	361.0
DC1	(k/')	0.810	0.810	0.810	0.810
MDC1	('k)	75.9	249.4	166.7	333.3
DC2	(k/')	0.294	0.294	0.294	0.294
MDC2	('k)	27.5	90.5	60.5	121.0
DW	(k/')	0.229	0.229	0.229	0.229
MDW	('k)	21.4	70.5	47.1	94.2
LLDF		0.558	0.550	0.522	0.522
M_{L+IM}	('k)	397.1	497.9	498.9	536.2
f_l (Strength I)	(ksi)	0.0	0.0	0.0	0.0
Mu + ⅓f_l S_{xc}	('k)	856.4	1402.0	1227.6	1647.5
Ø*f* Mn	('k)	2245.0	1891.0	2245.0	1884.0
*f*s DC1	(ksi)	3.05	10.01	6.69	13.37
*f*s DC2	(ksi)	0.81	3.00	1.78	4.02
*f*s DW	(ksi)	0.63	2.34	1.38	3.13
*f*s ($_L$+IM)	(ksi)	10.81	16.55	13.58	17.82
f_l (Service II)	(ksi)	0.0	0.0	0.0	0.0
*f*s +$^{fl}/_2$ (Service II)	(ksi)	18.54	36.87	27.50	43.68
0.95Rh Fyf	(ksi)	47.5	47.5	47.5	47.5
*f*s + ⅓f_l (Total)(Strength I)	(ksi)	---	---	---	---
Ø*f* Fn	(ksi)	---	---	---	---
Vf	(k)	---	61.2	---	56.9

GIRDER REACTION TABLE							
		Abutment		Pier 1 or Pier 3		Pier 2	
		Interior	Exterior	Interior	Exterior	Interior	Exterior
LLDF		0.713	0.547	0.713	0.547	0.713	0.547
OCF		---	---	---	---	---	---
R_{DC1}	(k)	42.7*	41.5*	49.1	52.1	57.0	60.6
R_{DC2}	(k)	4.1	2.5	17.8	10.6	20.6	12.3
R_{DW}	(k)	6.6	6.6	13.9	13.9	16.2	16.2
R_L	(k)	54.5	41.8	94.0	72.1	98.3	75.4
R_{Im}	(k)	12.6	9.7	21.0	16.1	21.1	16.2
R_{Total}	(k)	120.5	102.0	195.8	164.8	213.2	180.7

* R_{DC1} includes service reaction due to weight of approach slab and parapet on approach slab.

Is, Ss: 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 $in.^3$).

Ic(n), Sc(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 $in.^3$).

Ic(3n), Sc(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 $in.^3$).

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

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

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

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

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

LLDF: Live Load Distribution Factor

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

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

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

*f*l (Strength I): Unfactored lateral flange stresses for Strength I Load Combination (ksi)

Mu (+⅓ *f*l Sxc): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_{L+IM} + ⅓*f*l Sxc

Ø*f* Mn: 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).
MDC1/ Snc

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

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

*f*l (Service II): Unfactored lateral flange stresses for Service II Load Combinations (ksi)

*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} / Sc(n) or M_{L+IM} / Sc(cr) as applicable.

*f*s + *f*l/2 (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 *f*s($_{L+IM}$) + ½*f*l

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

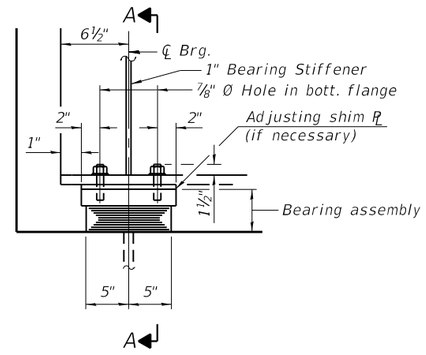
*f*s + ⅓*f*l (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 *f*s($_{L+IM}$)

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

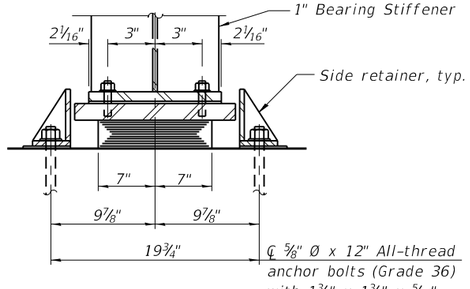
Vf: Maximum factored shear range in span computed according to Article 6.10.10.

OCF: Obtuse Correction Factor

1 Entire sheet revised

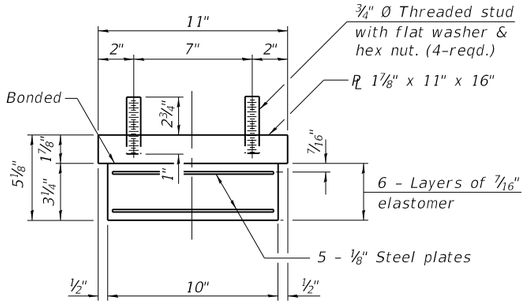


ELEVATION AT ABUTMENT



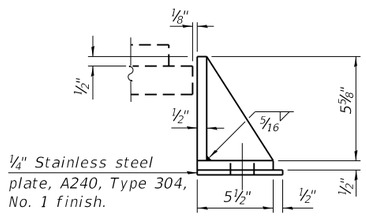
SECTION A-A

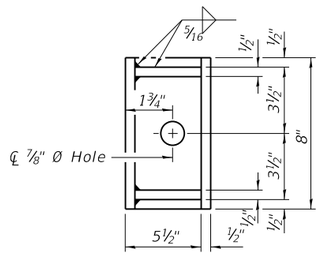
TYPE I ELASTOMERIC EXP. BRG.
(14 Required)



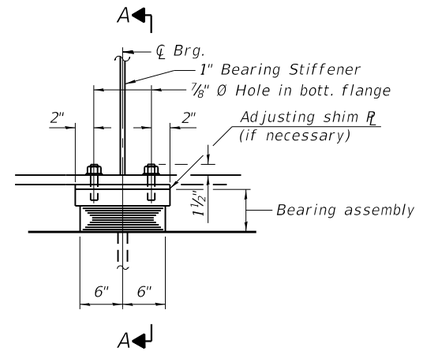
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.

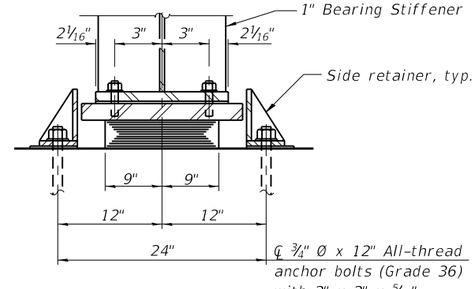




SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

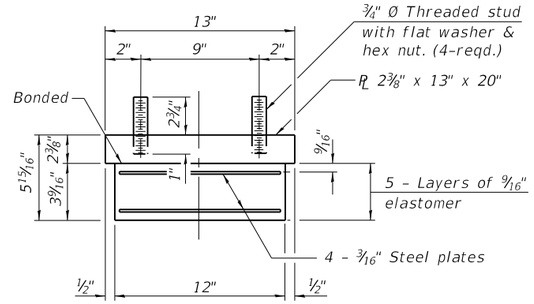


ELEVATION AT PIER 1 & 3



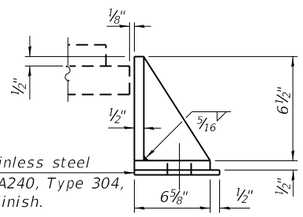
SECTION A-A

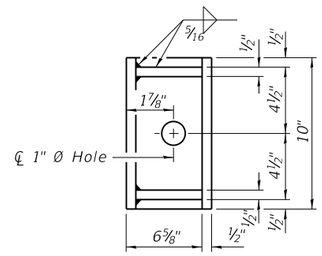
TYPE I ELASTOMERIC EXP. BRG.
(14 Required)



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.





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

Notes:

Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.

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.

Two ⅛ in adjusting shims shall be provided for each bearing in addition to all other plates or shims placed as shown on bearing details.

BILL OF MATERIAL

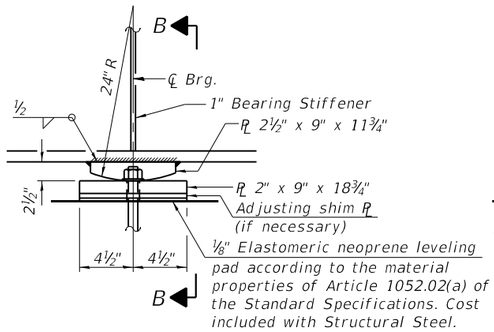
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	28
Anchor Bolts, ⅝"	Each	28
Anchor Bolts, ¾"	Each	28

1 Entire sheet revised

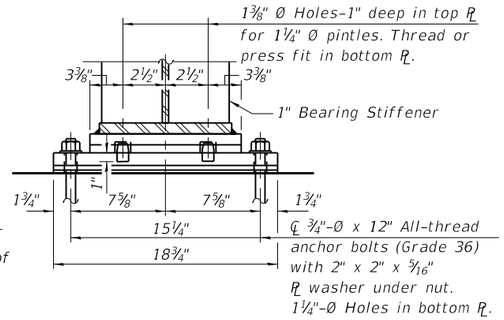
Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO, IL 60606 . P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING DETAILS I STRUCTURE NO. 099-0192	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED MG/ZM	REVISED -			80	2020-250-BY	WILL	133	84
PLOT SCALE =	DRAWN KC	REVISED -							
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 22 OF 38 SHEETS			CONTRACT NO. 62N20		
						ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT22_BearingDetailsI.dgn
4/8/2022 3:05:16 PM



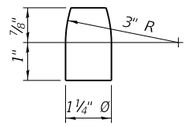
ELEVATION AT PIER 2



SECTION B-B

FIXED BEARING

(7 Required)



PINTLE

Notes:
Two ⅛ in adjusting shims shall be provided for each bearing in addition to all other plates or shims placed as shown on bearing details.

BILL OF MATERIAL

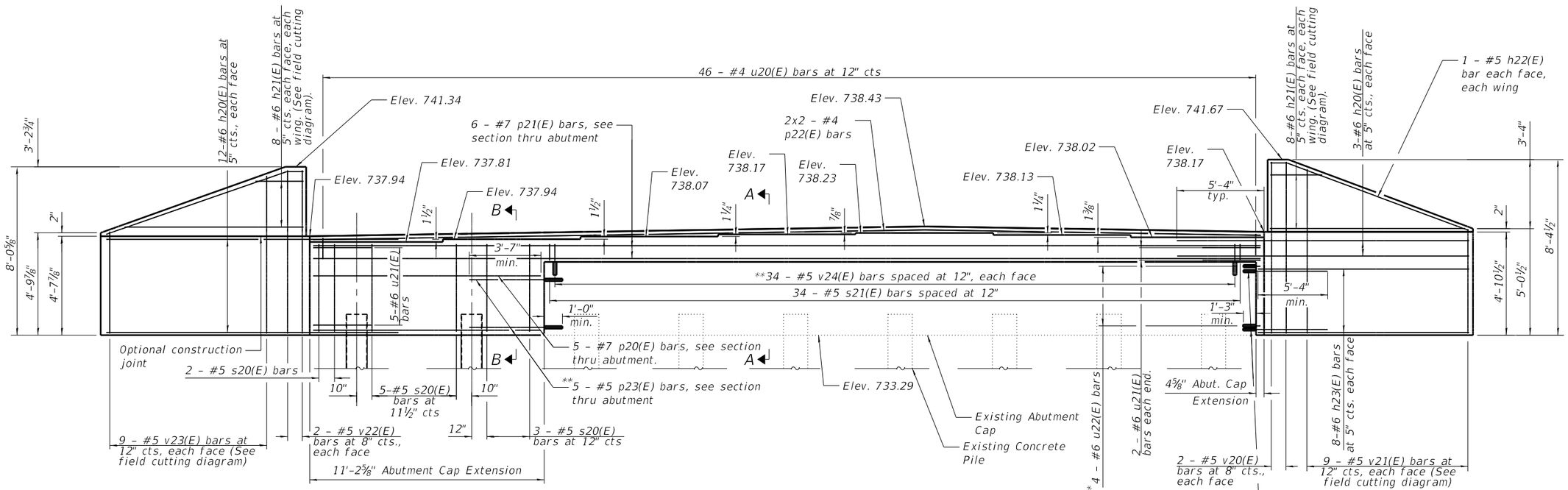
Item	Unit	Total
Anchor Bolts, ¾"	Each	14

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO, IL 60606 . P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING DETAILS II STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 23 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	85
		CONTRACT NO. 62N20		
	ILLINOIS			



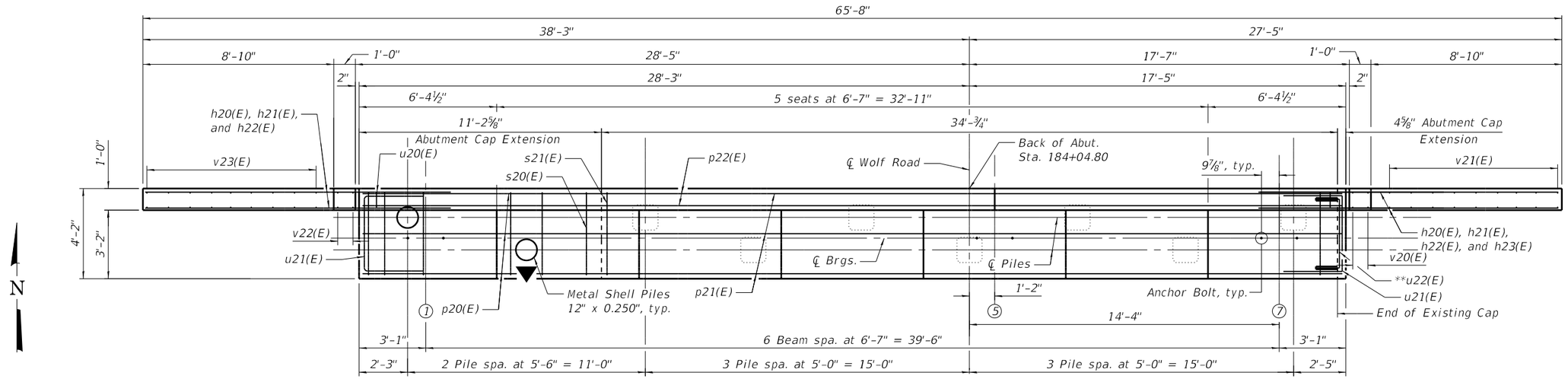
** Epoxy grout bars in accordance with Article 584 of the Standard Specifications. Cost is included with Reinforcement bars, epoxy coated.

ELEVATION

(Looking North)

MINIMUM BAR LAP

#4 bar = 2'–11"
#5 bar = 3'–7"
#6 bar = 5'–4"



PLAN

LEGEND

Vertical Pile

Battered Pile

PILE DATA

Type: Metal Shell Piles 12" x 0.250" with conical tips (pile shoes)
Nominal Required Bearing: 354 kips
Factored Resistance Available: 195 kips
Est. Length: 45 ft
No. Production Piles: 1
No. Test Piles: 1

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For Bill of Material, see sheet 26 of 38.
For details of piles see sheet 31 of 38.

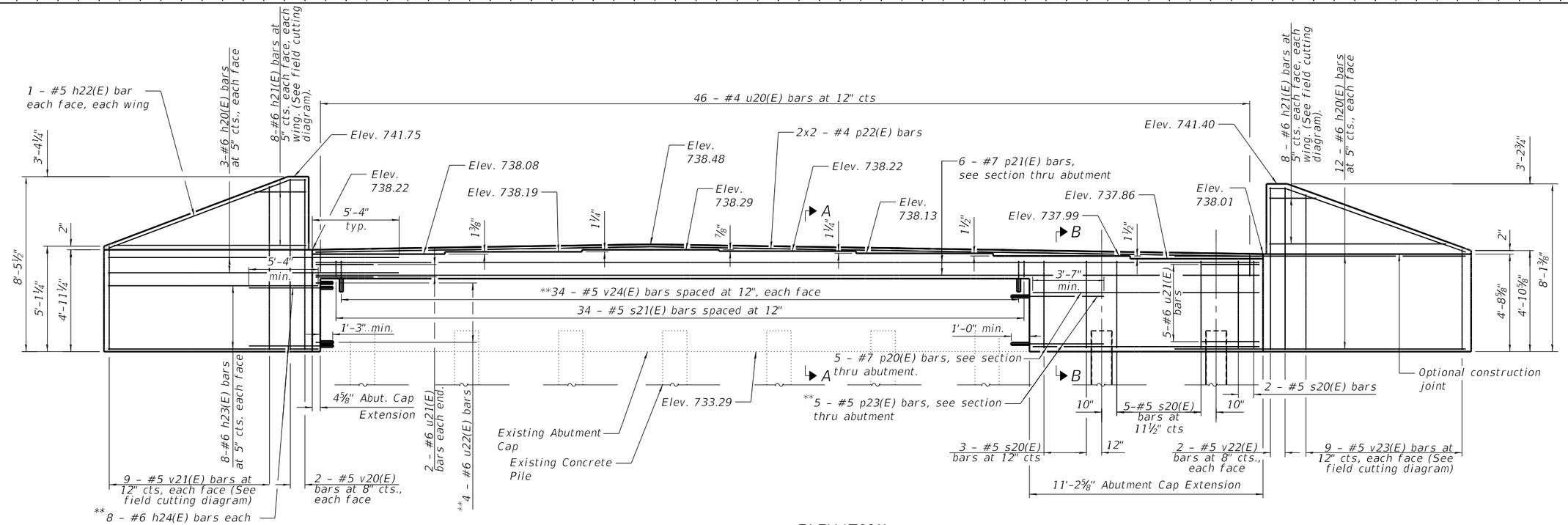
1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-2415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH ABUTMENT PLAN AND ELEVATION STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 24 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	86
		CONTRACT NO. 62N20		
	ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT24_NorthAbutmentPlan&Elevation.dgn
4/8/2022 3:11:14 PM



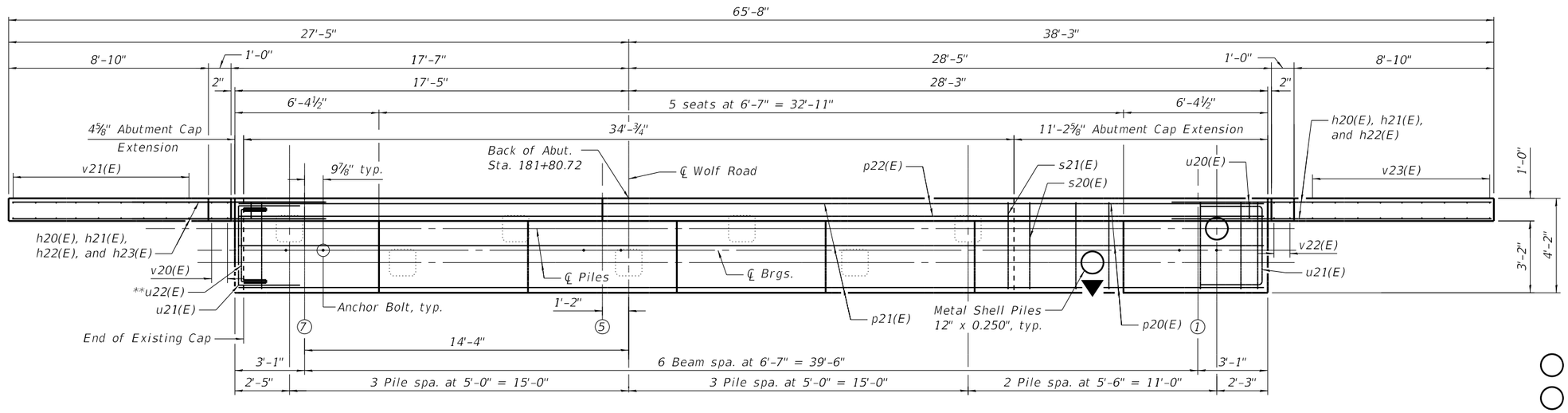
** Epoxy grout bars in accordance with Article 584 of the Standard Specifications. Cost is included with Reinforcement bars, epoxy coated.

ELEVATION

(Looking South)

MINIMUM BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-7"
#6 bar = 5'-4"



PLAN

LEGEND

Vertical Pile

Battered Pile

PILE DATA

Type: Metal Shell Piles 12" x 0.250" with conical tips (pile shoes)
Nominal Required Bearing: 359 kips
Factored Resistance Available: 197 kips
Est. Length: 45 ft
No. Production Piles: 2
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For Bill of Material, see sheet 26 of 38.
For details of piles see sheet 31 of 38.

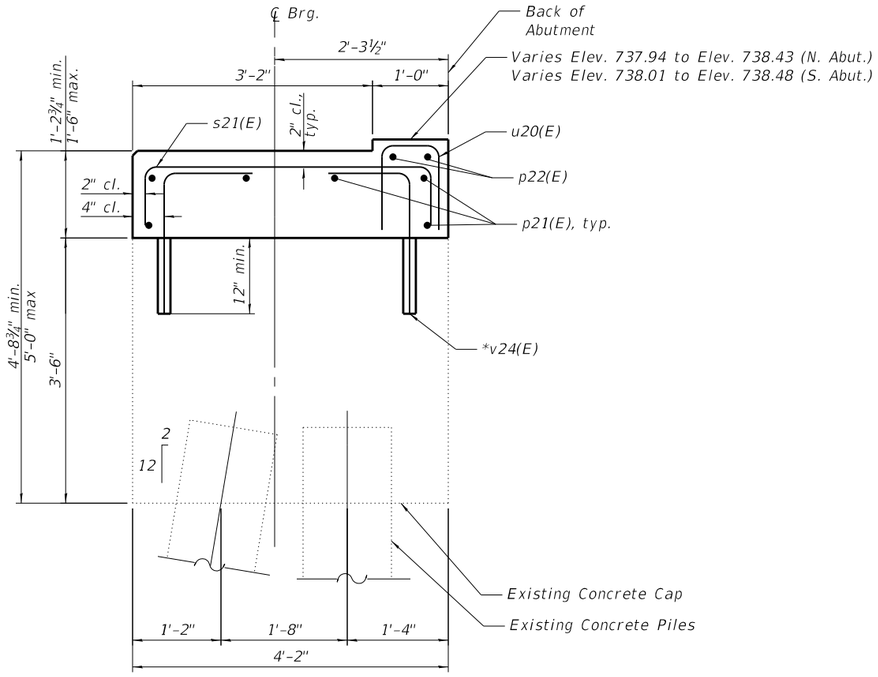
1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

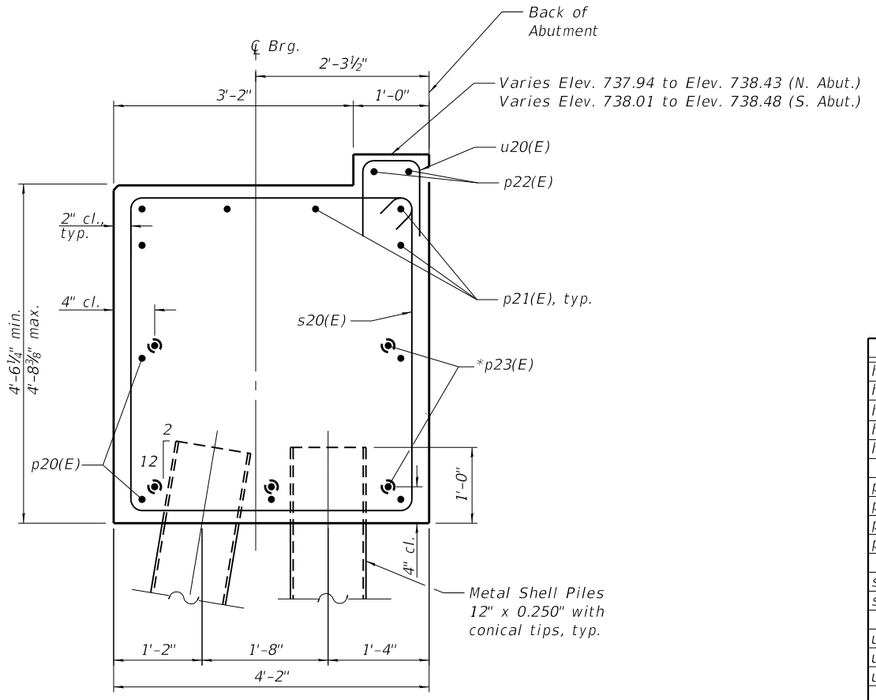
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT PLAN AND ELEVATION STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 25 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	87
		CONTRACT NO. 62N20		
	ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT25_SouthAbutmentPlan&Elevation.dgn
4/8/2022 3:13:23 PM



SECTION A-A

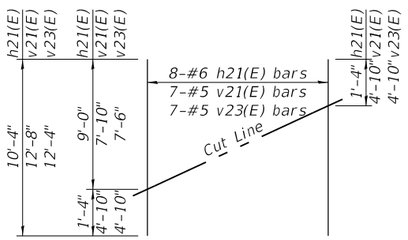


SECTION B-B

* Epoxy grout bars in accordance with Article 584 of the Standard Specifications. Cost is included with Reinforcement bars, epoxy coated.

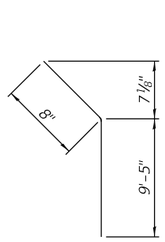
TWO ABUTMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	60	#6	15'-2"	
h21(E)	32	#6	10'-4"	
h22(E)	8	#5	10'-1"	
h23(E)	32	#6	9'-8"	
h24(E)	32	#6	7'-2"	
p20(E)	10	#7	10'-11"	
p21(E)	12	#7	45'-4"	
p22(E)	8	#4	25'-7"	
p23(E)	10	#5	4'-7"	
s20(E)	20	#5	16'-7"	
s21(E)	68	#5	6'-2"	
u20(E)	92	#4	3'-0"	
u21(E)	14	#6	8'-6"	
u22(E)	8	#6	6'-0"	
v20(E)	8	#5	8'-2"	
v21(E)	18	#5	12'-8"	
v22(E)	8	#5	7'-10"	
v23(E)	18	#5	12'-1"	
v24(E)	136	#5	3'-5"	
Structure Excavation	Cu. Yd.		63	
Concrete Structures	Cu. Yd.		41.3	
Reinforcement Bars, Epoxy Coated	Pound		6,580	
Furn. Metal Shell Piles 12" x 0.250"	Foot		135	
Test Pile, Metal Shells	Each		1	
Driving Piles	Foot		135	
Pile Shoes	Each		4	
Slope Wall, 4 inch	Sq. Yd.		478	
Granular Backfill for Structures	Cu. Yd.		382	
Geocomposite Wall Drain	Sq. Yd.		99	
Pipe Underdrain for Structures, 4 in	Foot		136	

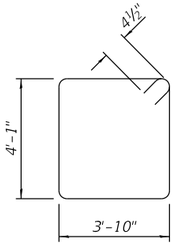


FIELD CUTTING DIAGRAM

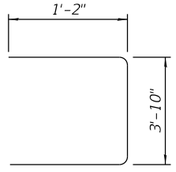
Order h21(E), v21(E) and v23(E) full length. Cut as shown and use remainder of bars in opposite wing.



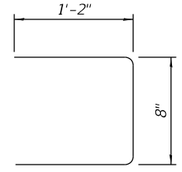
BAR h22(E)



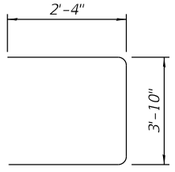
BAR s20(E)



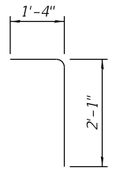
BAR s21(E)



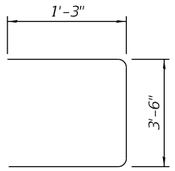
BAR u20(E)



BAR u21(E)



BAR v24(E)



BAR u22(E)

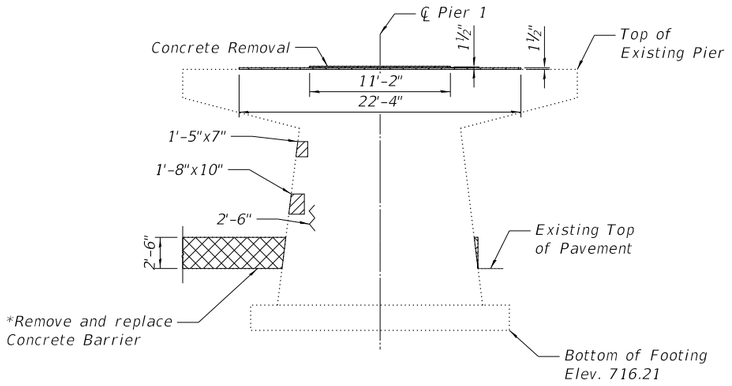
Notes:
Pour steps monolithically with cap.
For details of piles see sheet 31 of 38.

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

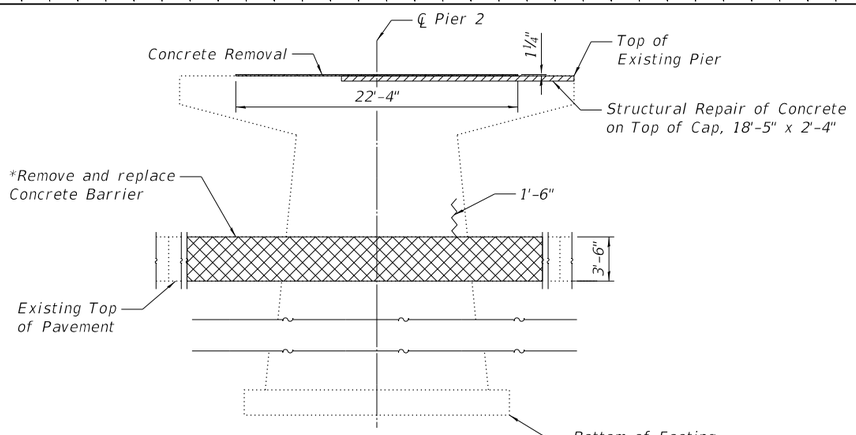
USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT DETAILS STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 26 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	88
		CONTRACT NO. 62N20		
	ILLINOIS			



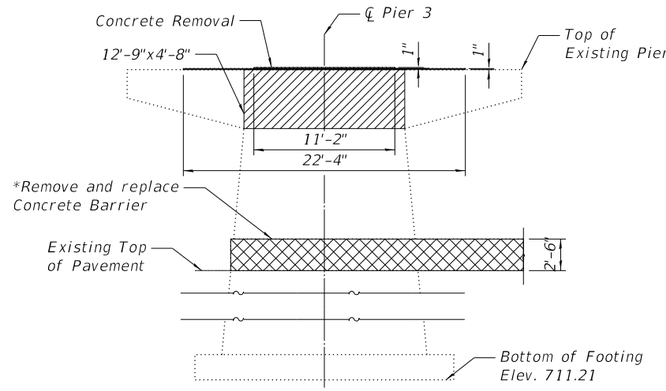
EXISTING PIER 1 REPAIR

(North Face)



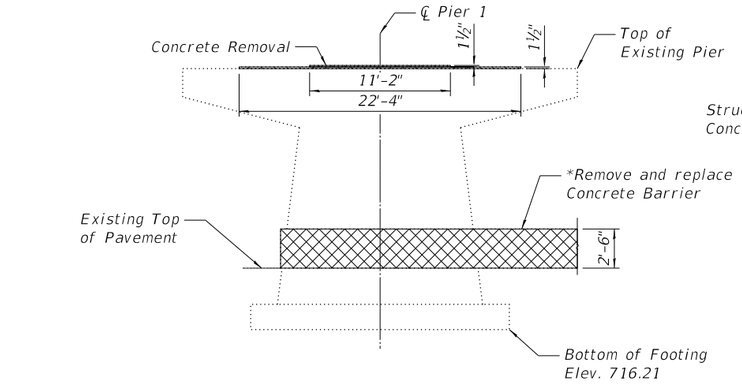
EXISTING PIER 2 REPAIR

(North Face)



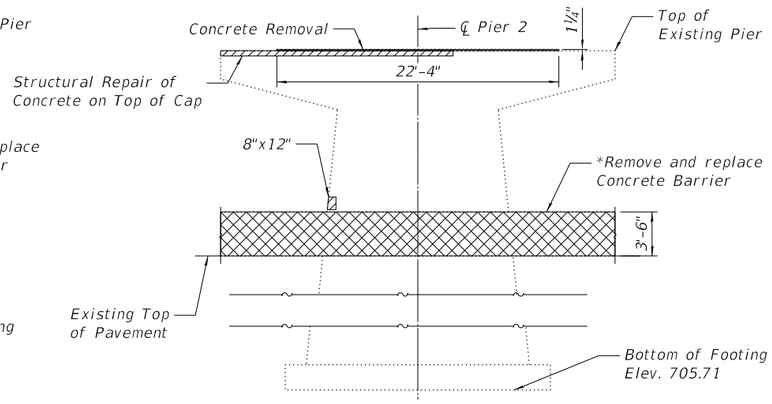
EXISTING PIER 3 REPAIR

(North Face)



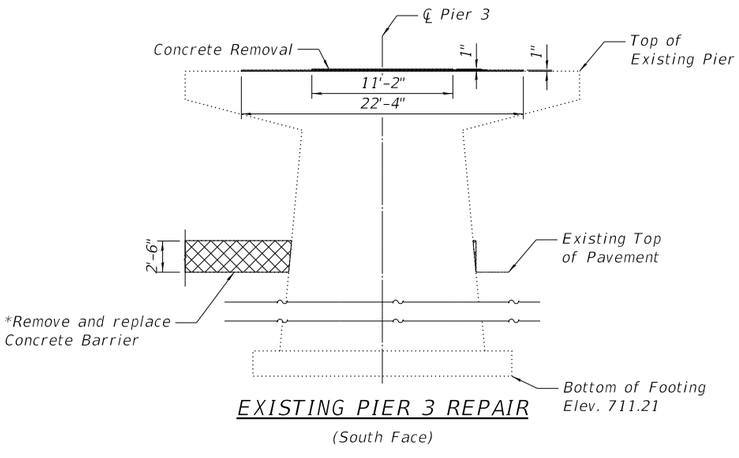
EXISTING PIER 1 REPAIR

(South Face)



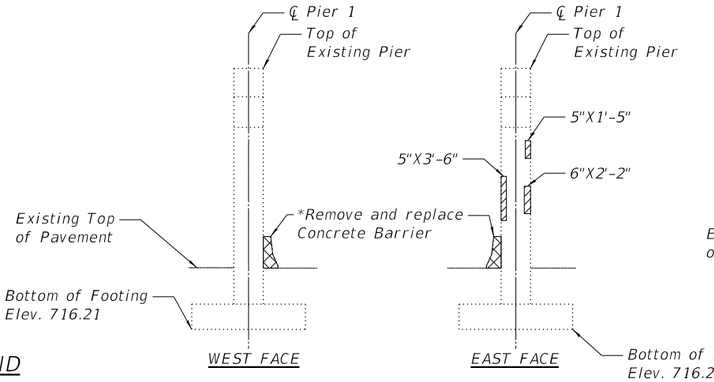
EXISTING PIER 2 REPAIR

(South Face)

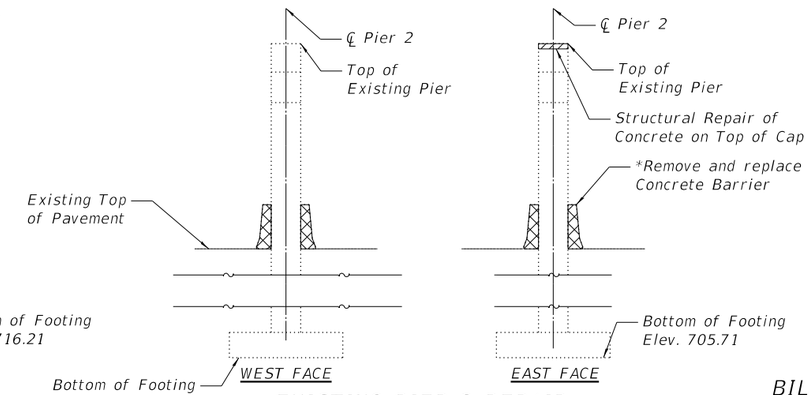


EXISTING PIER 3 REPAIR

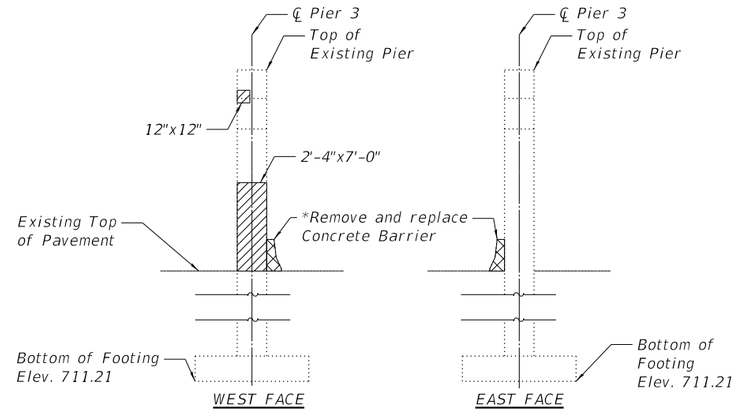
(South Face)



EXISTING PIER 1 REPAIR



EXISTING PIER 2 REPAIR



EXISTING PIER 3 REPAIR

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Epoxy Crack Injection
- Concrete Removal
- Concrete Barrier to be Removed See Roadway Plans

* See Roadway Plans

1 Entire sheet revised

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or less than 5 inches)	Sq. Ft.	125
Epoxy Crack Injection	Foot	4
Concrete Removal	Cu. Yd	0.7

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-2415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA
	CHECKED MG/ZM	REVISED -
PLOT SCALE =	DRAWN KC	REVISED -
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

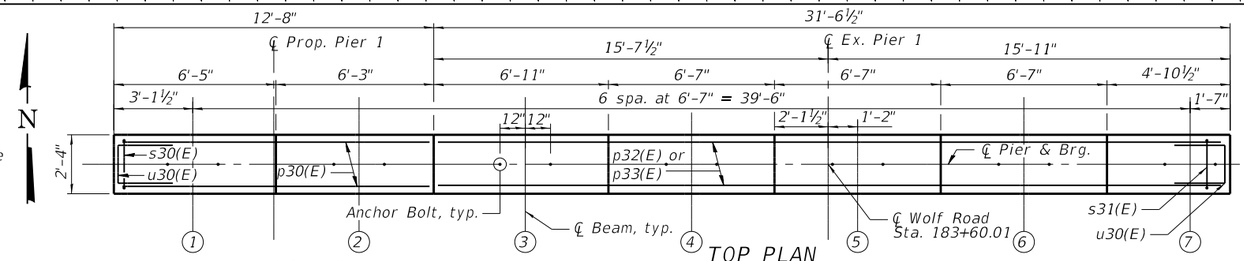
PIER REPAIR DETAILS
STRUCTURE NO. 099-0192
SHEET 27 OF 38 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	89
		CONTRACT NO. 62N20		
	ILLINOIS			

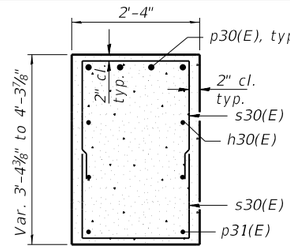
MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT27 PierRepairDetails.dgn
4/8/2022 3:22:23 PM

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Contractor shall be responsible for using driving methods that do not damage the existing structure during pile installation, nor cause settlement or differential movement of the existing spread footing.
All exposed surface areas shall be treated with Concrete Sealer. Concrete Sealer shall only be applied to new concrete.
For details of piles see sheet 31 of 38.

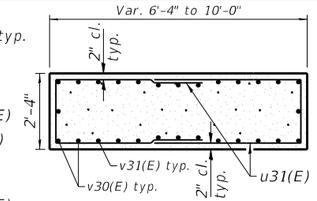
TOP PLAN



SECTION A–A

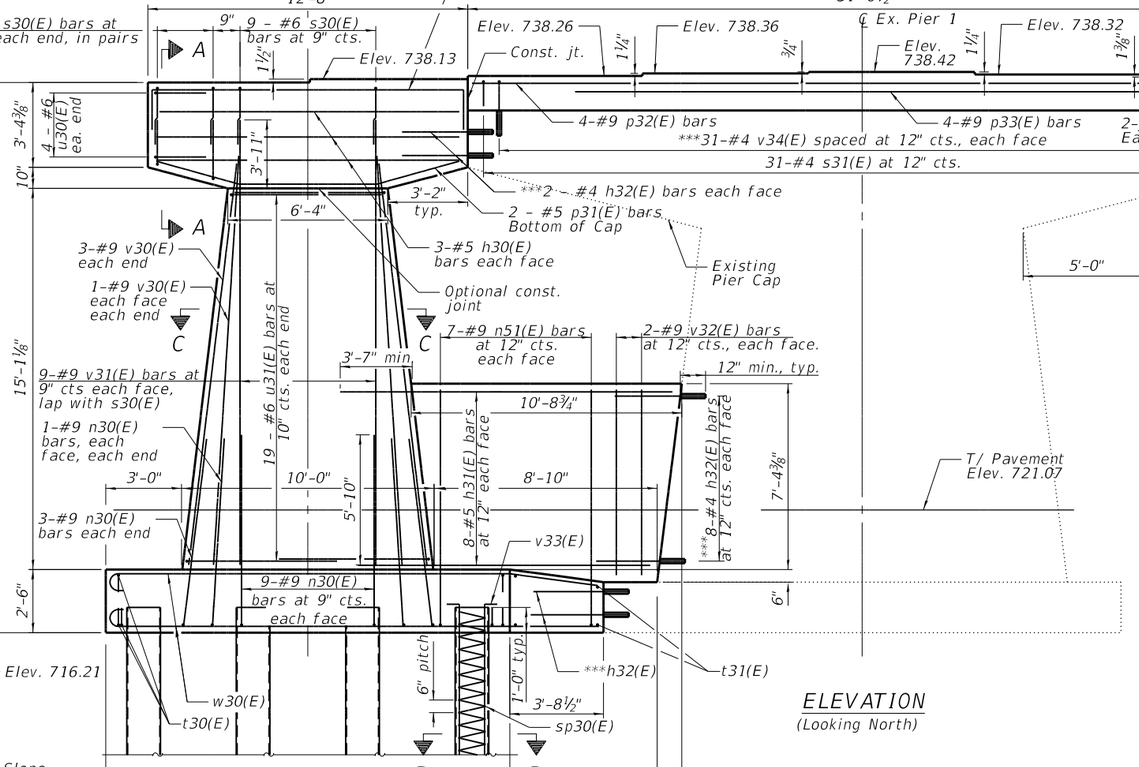


SECTION C–C



MINIMUM BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 5'-8"



END VIEW

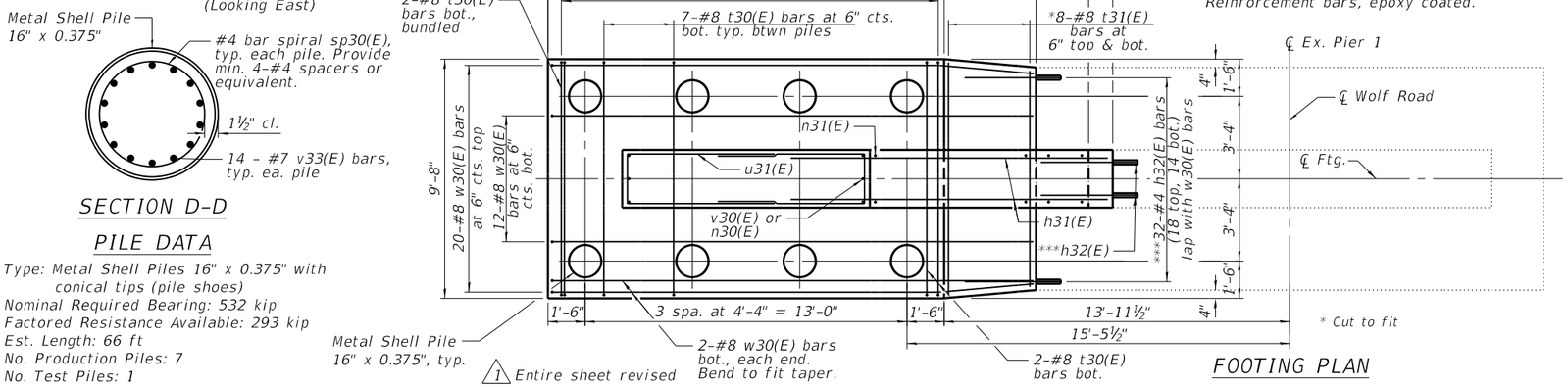
(Looking East)

* 44" Constant Slope Barrier (See Rdwy. plans)

ELEVATION

(Looking North)

*** Epoxy grout bars in accordance with Article 584 of the Standard Specifications. Cost is included with Reinforcement bars, epoxy coated.



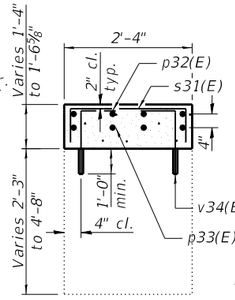
FOOTING PLAN

SECTION D–D

PILE DATA

Type: Metal Shell Piles 16" x 0.375" with conical tips (pile shoes)
Nominal Required Bearing: 532 kip
Factored Resistance Available: 293 kip
Est. Length: 66 ft
No. Production Piles: 7
No. Test Piles: 1

SECTION B–B

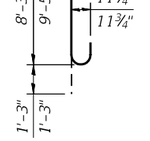


BILL OF MATERIAL

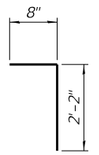
Bar	No.	Size	Length	Shape
h30(E)	6	#5	12'-4"	
h31(E)	16	#5	14'-2"	
h32(E)	52	#4	4'-1"	
n30(E)	28	#9	9'-6"	
n31(E)	14	#9	10'-8"	
p30(E)	4	#9	15'-6"	
p31(E)	2	#5	12'-6"	
p32(E)	4	#9	31'-2"	
p33(E)	4	#9	22'-9"	
s30(E)	25	#6	8'-2"	
s31(E)	31	#4	4'-0"	
** sp30(E)	8	#4	41'-6"	
t30(E)	57	#8	11'-2"	
t31(E)	16	#8	9'-4"	
u30(E)	12	#6	10'-8"	
u31(E)	38	#6	14'-0"	
v30(E)	10	#9	15'-11"	
v31(E)	18	#9	18'-11"	
v32(E)	4	#9	7'-0"	
v33(E)	112	#7	42'-8"	
v34(E)	62	#4	2'-10"	
w30(E)	36	#8	20'-3"	
Structure Excavation		Cu. Yd.	57	
Concrete Structures		Cu. Yd.	42.7	
Reinforcement Bars, Epoxy Coated		Pound	21,470	
Furn. Metal Shell Piles 16"x0.375"		Foot	462	
Test Pile, Metal Shells		Each	1	
Driving Piles		Foot	462	
Pile Shoes		Each	8	
Concrete Sealer		Sq. Ft.	525	
Name Plate		Each	1	

** Length is height of spiral
Minimum lap for spirals = 2'-7"

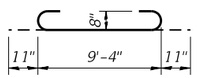
BAR n30(E) & n31(E)



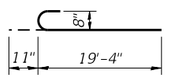
BAR v34(E)



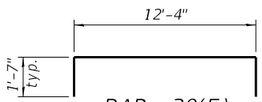
BAR t30(E)



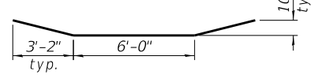
BAR w30(E)



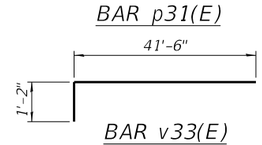
BAR p30(E)



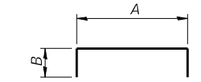
BAR p31(E)



BAR v33(E)



BARS s30(E), s31(E) u30(E) & u31(E)



A & B DIMENSIONS

Bar	A	B
s30(E)	2'-0"	3'-1"
s31(E)	2'-0"	1'-0"
u30(E)	2'-0"	4'-4"
u31(E)	2'-0"	6'-0"

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-606-0910 F:312-606-0415
USER NAME = kanderson | DESIGNED KJA | REVISED 1 4/8/2022 KJA
PLOT SCALE = | CHECKED MG/ZM | REVISED - KJA
PLOT DATE = 4/8/2022 | DRAWN KC | REVISED - KJA
CHECKED KJA | REVISED - KJA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 WIDENING
STRUCTURE NO. 099-0192
SHEET 28 OF 38 SHEETS

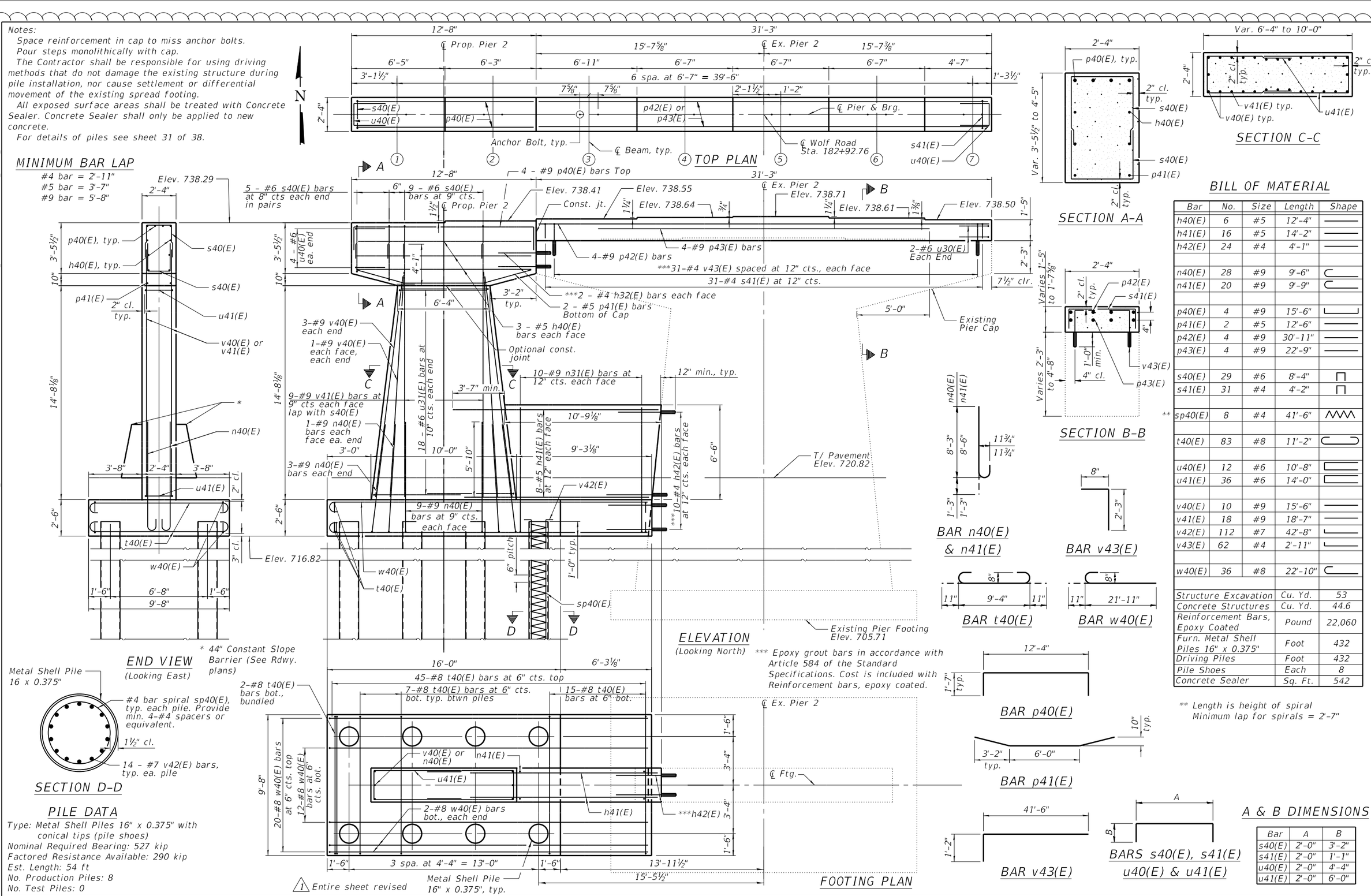
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	90
		CONTRACT NO. 62N20		
	ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT28_Pier1Widening.dgn
4/8/2022 3:25:38 PM

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Contractor shall be responsible for using driving methods that do not damage the existing structure during pile installation, nor cause settlement or differential movement of the existing spread footing.
All exposed surface areas shall be treated with Concrete Sealer. Concrete Sealer shall only be applied to new concrete.
For details of piles see sheet 31 of 38.

MINIMUM BAR LAP

#4 bar = 2'-11"
#5 bar = 3'-7"
#9 bar = 5'-8"



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h40(E)	6	#5	12'-4"	
h41(E)	16	#5	14'-2"	
h42(E)	24	#4	4'-1"	
n40(E)	28	#9	9'-6"	
n41(E)	20	#9	9'-9"	
p40(E)	4	#9	15'-6"	
p41(E)	2	#5	12'-6"	
p42(E)	4	#9	30'-11"	
p43(E)	4	#9	22'-9"	
s40(E)	29	#6	8'-4"	
s41(E)	31	#4	4'-2"	
** sp40(E)	8	#4	41'-6"	
t40(E)	83	#8	11'-2"	
u40(E)	12	#6	10'-8"	
u41(E)	36	#6	14'-0"	
v40(E)	10	#9	15'-6"	
v41(E)	18	#9	18'-7"	
v42(E)	112	#7	42'-8"	
v43(E)	62	#4	2'-11"	
w40(E)	36	#8	22'-10"	
Structure Excavation	Cu. Yd.		53	
Concrete Structures	Cu. Yd.		44.6	
Reinforcement Bars, Epoxy Coated	Pound		22,060	
Furn. Metal Shell Piles 16" x 0.375"	Foot		432	
Driving Piles	Foot		432	
Pile Shoes	Each		8	
Concrete Sealer	Sq. Ft.		542	

** Length is height of spiral
Minimum lap for spirals = 2'-7"

A	B
2'-0"	3'-2"
2'-0"	1'-1"
2'-0"	4'-4"
2'-0"	6'-0"

BARS s40(E), s41(E) u40(E) & u41(E)

1 Entire sheet revised

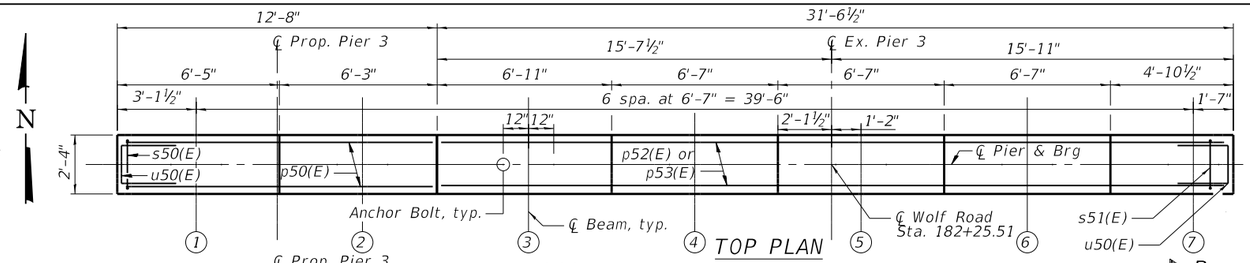
Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 2 WIDENING STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 29 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

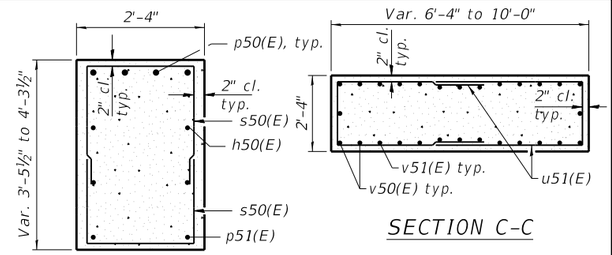
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	91
		CONTRACT NO. 62N20		
	ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20200200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT29_Pier2Widening.dgn
4/8/2022 3:26:31 PM

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Contractor shall be responsible for using driving methods that do not damage the existing structure during pile installation, nor cause settlement or differential movement of the existing spread footing.
All exposed surface areas shall be treated with Concrete Sealer. Concrete Sealer shall only be applied to new concrete.
For details of piles see sheet 31 of 38.



TOP PLAN

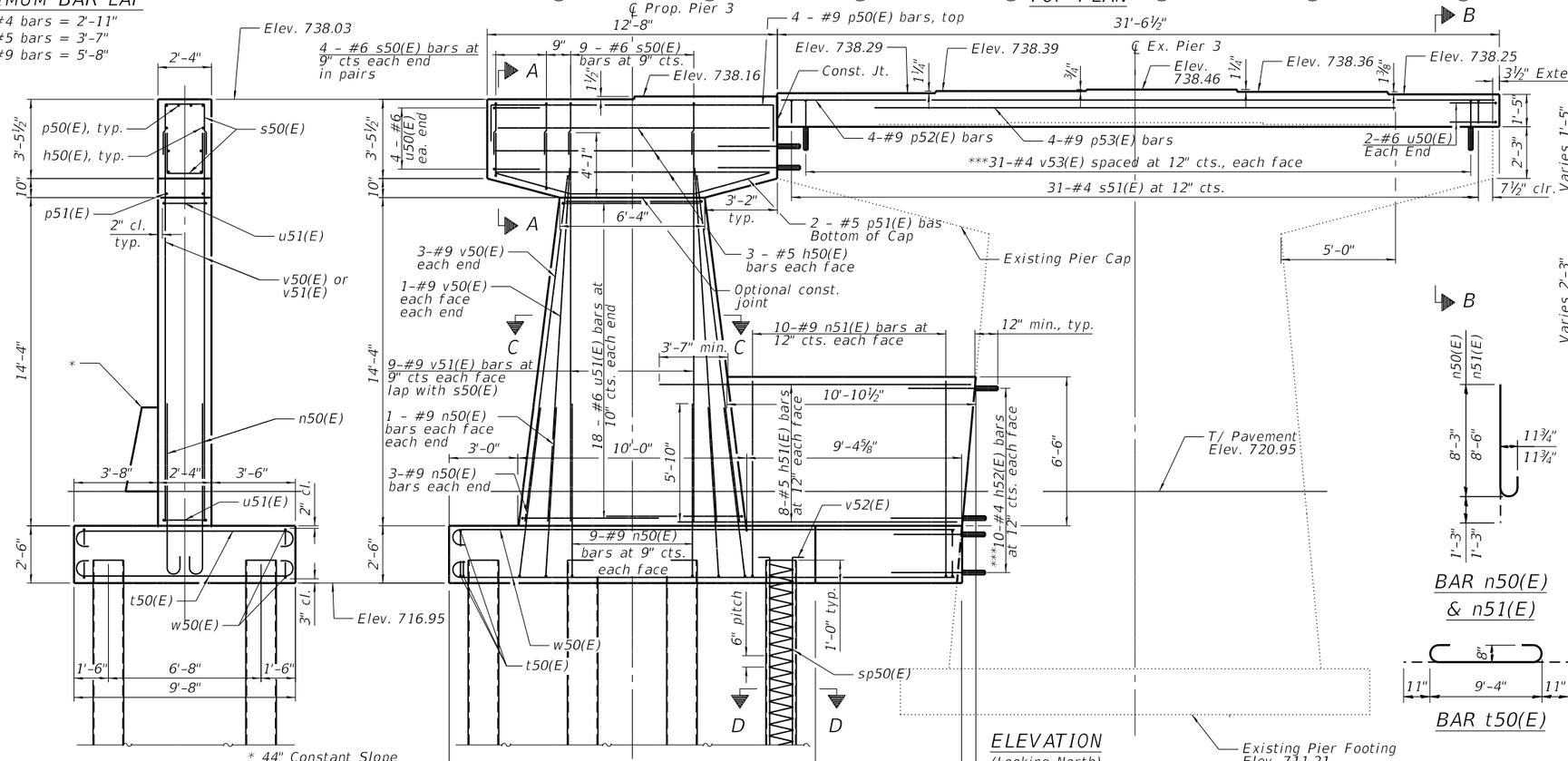


SECTION A-A

SECTION C-C

MINIMUM BAR LAP

#4 bars = 2'-11"
#5 bars = 3'-7"
#9 bars = 5'-8"



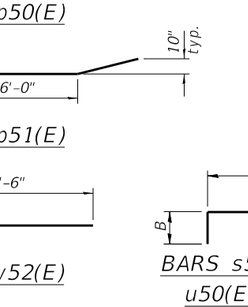
* 44" Constant Slope Barrier (See Rdwy. plans)

ELEVATION
(Looking North)

Existing Pier Footing Elev. 711.21

*** Epoxy grout bars in accordance with Article 584 of the Standard Specifications. Cost is included with Reinforcement bars, epoxy coated.

SECTION B-B



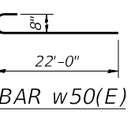
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h50(E)	6	#5	12'-4"	
h51(E)	16	#5	14'-4"	
h52(E)	24	#4	4'-1"	
n50(E)	28	#9	9'-6"	
n51(E)	20	#9	9'-9"	
p50(E)	4	#9	15'-6"	
p51(E)	2	#5	12'-6"	
p52(E)	4	#9	31'-2"	
p53(E)	4	#9	22'-9"	
s50(E)	25	#6	8'-4"	
s51(E)	31	#4	4'-2"	
** sp50(E)	8	#4	41'-6"	
t50(E)	83	#8	11'-2"	
u50(E)	12	#6	10'-8"	
u51(E)	36	#6	14'-0"	
v50(E)	10	#9	15'-2"	
v51(E)	18	#9	18'-3"	
v52(E)	112	#7	42'-8"	
v53(E)	62	#4	2'-11"	
w50(E)	36	#8	22'-11"	
Structure Excavation	Cu. Yd.		53	
Concrete Structures	Cu. Yd.		44.6	
Reinforcement Bars, Epoxy Coated	Pound		22,000	
Furn. Metal Shell Piles 16" x 0.375"	Foot		378	
Test Pile, Metal Shells	Each		1	
Driving Piles	Foot		378	
Pile Shoes	Each		8	
Concrete Sealer	Sq. Ft.		536	
Name Plate	Each		1	

** Length is height of spiral
Minimum lap for spirals = 2'-7"

BAR n50(E) & n51(E)

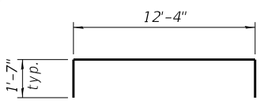
BAR v53(E)



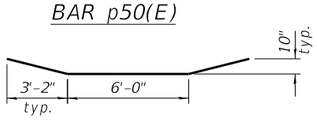
BAR t50(E)

BAR w50(E)

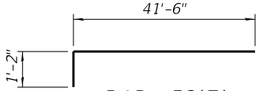
BAR p50(E)



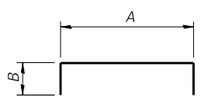
BAR p51(E)



BAR v52(E)



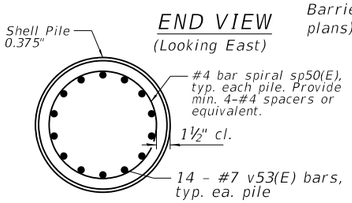
BARS s50(E), s51(E) u50(E) & u51(E)



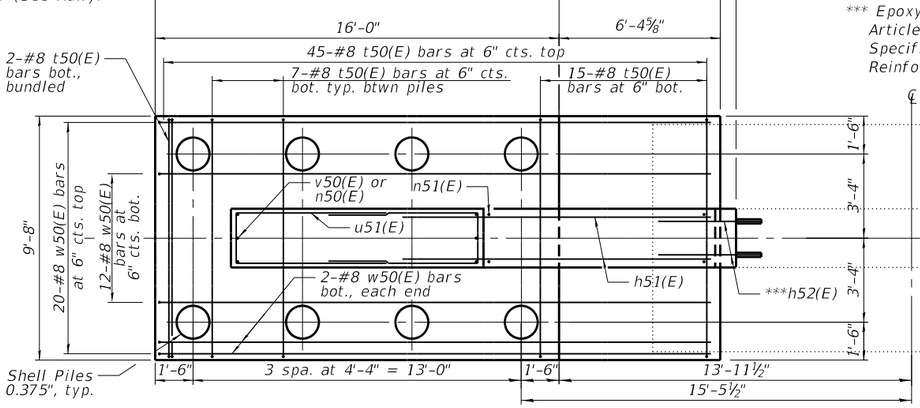
A & B DIMENSIONS

Bar	A	B
s50(E)	2'-0"	3'-2"
s51(E)	2'-0"	1'-1"
u50(E)	2'-0"	4'-4"
u51(E)	2'-0"	6'-0"

END VIEW
(Looking East)



SECTION D-D



FOOTING PLAN

PILE DATA

Type: Metal Shell Piles 16" x 0.375" with conical tips (pile shoes)
Nominal Required Bearing: 523 kip
Factored Resistance Available: 287 kip
Est. Length: 54 ft
No. Production Piles: 7
No. Test Piles: 1

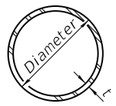
1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 3 WIDENING STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 30 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

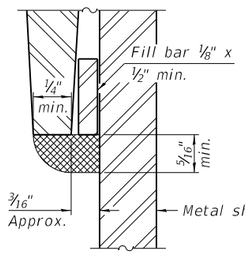
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	92
		CONTRACT NO. 62N20		
		ILLINOIS		

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20200200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT30_Pier3Widening.dgn
4/8/2022 3:28:17 PM

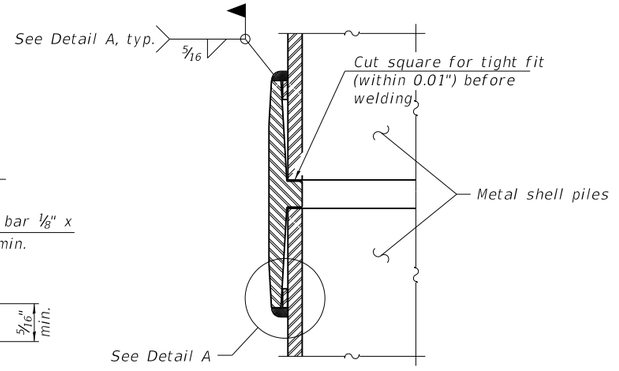


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³/ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470

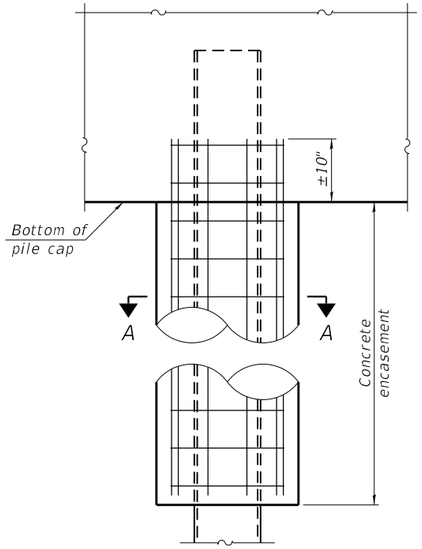


DETAIL A

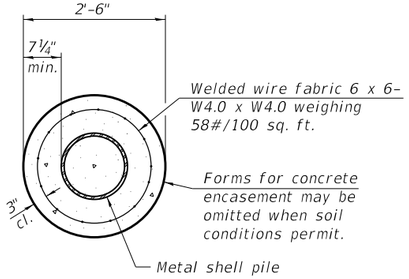


WELDED COMMERCIAL SPLICE

Notes:
The ⅛" x ½" min. fill bar may be constructed of 2 bars with a ⅛" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.



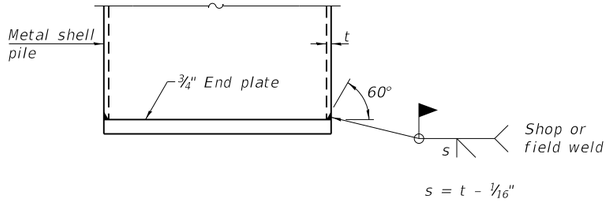
ELEVATION



SECTION A–A

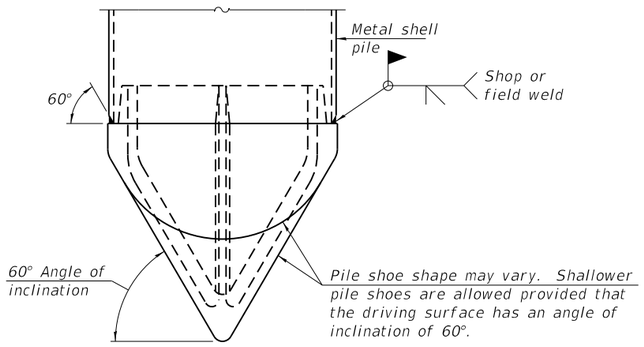
INDIVIDUAL PILE CONCRETE ENCASEMENT

(When specified)



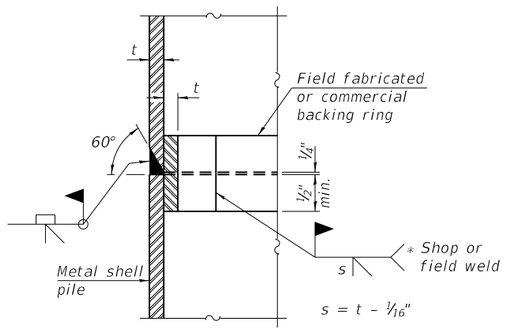
s = t – 1/16"

END PLATE ATTACHMENT



PILE SHOE ATTACHMENT

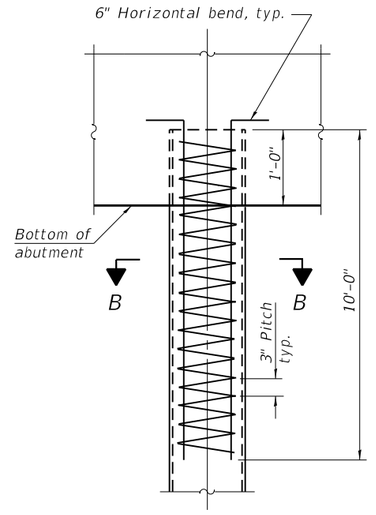
(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80–50 or AASHTO M 103 Grade 65–35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).



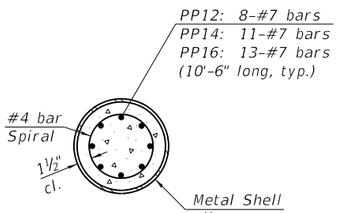
s = t – 1/16"

COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B–B

REINFORCEMENT AT ABUTMENTS

(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

F–MS 1-1-2020

1 Entire sheet revised

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	METAL SHELL PILE DETAILS STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 31 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	93
		CONTRACT NO. 62N20		
	ILLINOIS			

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-406-0910 F:312-406-0415

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT31_SteelPilesDetails.dgn
4/8/2022 4:06:13 PM

gonzalez

SOIL BORING LOG

Log of Boring **GC-01** Sheet 1 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/27/2021 to 01/27/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	184+50.8, 2.4' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.5 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	33.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	38.00 ft
LAT/LONG:	41.552876, -87.890101	HAMMER EFFICIENCY:	88.8 %	▼ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Material Description	Elevation (ft): 741.5	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
1	ASPHALT 0.8 / 740.7												
2	CONCRETE 1.6 / 739.9	740											
3	CRUSHED STONE 2.1 / 739.4												
4	CLAY: Soft, brown, moist, low plastic, some fine sand, trace gravel; (FILL)	738	SS-1	5 (28)	1-2-2 N = 4	0.5 B		20					
5													
6	CLAY (A-7-6(18)): Stiff, brown to greenish brown, moist, low plastic, with fine to coarse sand, trace gravel; (FLL) 5.8 / 735.7	736	SS-2	17 (95)	3-5-6 N = 11	6.5 B		16					
7													
8		734											
9			SS-3	13 (72)	4-5-8 N = 13	3.8 B		17		44	21		
10													
11		732											
12			SS-4	17 (95)	3-5-6 N = 11	3.1 S		25					
13	CLAY: Stiff, brown and gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL) 12.6 / 728.9	730											
14													
15		728	SS-5	17 (95)	5-6-9 N = 15	2.1 S		16					
16													
17		726											
18			SS-6	18 (100)	3-5-7 N = 12	2.9 S		17					
19													
20		724											
			SS-7	17 (95)	7-7-10 N = 17	4.6 B		18					

gonzalez

SOIL BORING LOG

Log of Boring **GC-01** Sheet 2 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/27/2021 to 01/27/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	184+50.8, 2.4' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.5 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	33.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	38.00 ft
LAT/LONG:	41.552876, -87.890101	HAMMER EFFICIENCY:	88.8 %	▼ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Material Description	Elevation (ft): 741.5	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
22	CLAY: Stiff, brown and gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)	720	SS-8	16 (89)	5-6-8 N = 14	4.6 B		17					
23													
24	24.1 / 717.4 CLAY (A-6(12)): Stiff, brown and gray, dry to moist, low plastic, some fine to coarse sand, trace gravel; (GLACIAL TILL)	718	SS-9	16 (89)	4-6-10 N = 16	5.0 S		18					
25													
26		716											
27			SS-10	16 (89)	3-5-8 N = 13	3.5 B		18					
28													
29		714											
30			SS-11	16 (89)	3-5-6 N = 11	3.5 B		18		33	15		
31													
32		712											
33	▽												
34		710											
35													
36		708											
37	37.3 / 704.2 CLAY: Stiff, gray, moist, low plastic, some gravel, some fine sand; (GLACIAL TILL)		SS-12	17 (95)	3-6-13 N = 19	4.4 B		17					
38		706											
39													
40		704											
41			SS-13	13 (72)	8-17-20 N = 37		3.8 P	17					
		702											
		700											

gonzalez

SOIL BORING LOG

Log of Boring **GC-01** Sheet 3 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/27/2021 to 01/27/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	184+50.8, 2.4' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.5 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	33.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	38.00 ft
LAT/LONG:	41.552876, -87.890101	HAMMER EFFICIENCY:	88.8 %	▼ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Material Description	Elevation (ft): 741.5	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
43	CLAY: Stiff, gray, moist, low plastic, some gravel, some fine sand; (GLACIAL TILL)	690											
44			SS-14	0 (0)	4-7-10 N = 17								
45		688											
46													
47		686											
48													
49		684	SS-15	18 (100)	3-5-7 N = 12	2.7 B		13					
50													
51		682											
52	52.1 / 689.4 Clay LOAM: Stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)												
53		680	SS-16	13 (72)	5-8-10 N = 18	2.2 B		14					
54													
55		678											
56	55.7 / 685.8 Clay LOAM: Stiff, gray, moist, low plastic, some fine sand, some gravel; (GLACIAL TILL)												
57		676											
58													
59		674	SS-17	18 (100)	4-6-8 N = 14	1.8 B		15					
60													
61		672											
62	62.2 / 679.3 Clay LOAM: Stiff, brown, moist, low												

1 Entire sheet revised

Primera 100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P(312-606-0910 F(312-606-0415	USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS I STRUCTURE NO. 099-0192	F.A.I. RTE. 80	SECTION 2020-250-BY
		CHECKED MG/ZM	REVISED -				COUNTY WILL
	PLOT SCALE =	DRAWN KC	REVISED -				TOTAL SHEETS 133
	PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 32 OF 38 SHEETS		SHEET NO. 94
							CONTRACT NO. 62N20
							ILLINOIS

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\2020\20200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT32_BoringLogsI.dgn
4/8/2022 3:33:53 PM

gonzalez

SOIL BORING LOG

Log of Boring **GC-01**
Sheet 4 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/27/2021 to 01/27/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	184+50.8, 2.4' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.5 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	33.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	38.00 ft
LAT/LONG:	41.552876, -87.890101	HAMMER EFFICIENCY:	88.8 %	▽ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 741.5	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
64		Clay LOAM: Stiff, brown, moist, low plastic, with fine sand, some gravel; (GLACIAL TILL)	678	SS-18	18 (100)	5-11-23 N = 34	1.6 B		13				64	
65													65	
66		66.2 675.3	676										66	
67		SAND: Medium dense, gray, wet, fine- to coarse-grained, trace gravel; (GLACIAL TILL)											67	
68			674										68	
69		69.6 671.9		SS-19A	18 (100)	11-13-11 N = 24	3.1 B						69	
70		CLAY: Dense, brown, moist, low plastic, with fine sand, some gravel; (GLACIAL TILL)	672	SS-19B					15				70	
71													71	
72			670										72	
73													73	
74		75.0 666.5	668	SS-20	13 (72)	8-11-10 N = 21	1.3 B		19				74	
75		Boring terminated at 75.0'											75	
76			666										76	
77													77	
78			664										78	
79													79	
80			662										80	
81													81	
82			660										82	
83			658										83	

gonzalez

SOIL BORING LOG

Log of Boring **GC-02**
Sheet 1 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/20/2021 to 01/20/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	183+45.8, 17.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.6 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	50.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	41.00 ft
LAT/LONG:	41.552588, -87.890175	HAMMER EFFICIENCY:	88.8 %	▽ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
1		CONCRETE	1.0 720.6										1	
2		CRUSHED STONE	720	SS-1	12 (67)	16-10-8 N = 18							2	
3		3.2 718.4											3	
4		CLAY: Stiff, brown, moist, low plastic, with fine sand; (GLACIAL TILL)	716	SS-2	13 (72)	6-5-9 N = 14	2.7 B		16				4	
5													5	
6			714	SS-3	17 (95)	3-4-6 N = 10	2.7 B		17				6	
7													7	
8			712	SS-4	18 (100)	4-4-5 N = 9	3.5 B		12				8	
9													9	
10			710	SS-5	2 (11)	3-4-5 N = 9			16				10	
11													11	
12			708	SS-6	15 (83)	2-4-6 N = 10	3.7 B		18		33	14	12	
13		13.3 708.3											13	
14		CLAY (A-6(11)): Stiff, gray, moist, low plastic, some fine to coarse sand, some gravel; (GLACIAL TILL)	706	SS-7	0 (0)	4-6-1 N = 7			19				14	
15													15	
16			704										16	
17													17	
18			702	SS-8	18 (100)	3-4-7 N = 11	2.7 B		18				18	
19													19	
20													20	

gonzalez

SOIL BORING LOG

Log of Boring **GC-02**
Sheet 2 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/20/2021 to 01/20/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	183+45.8, 17.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.6 ft	SAMPLING METHOD:	2" Split Spoon	▽ First Encounter:	50.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	▼ Upon Completion:	41.00 ft
LAT/LONG:	41.552588, -87.890175	HAMMER EFFICIENCY:	88.8 %	▽ After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
22		CLAY (A-6(11)): Stiff, gray, moist, low plastic, some fine to coarse sand, some gravel; (GLACIAL TILL)	700	SS-9	15 (83)	1-3-4 N = 7	1.0 B		13				22	
23													23	
24			698	SS-10	16 (89)	2-3-9 N = 12	1.6 B		15				24	
25													25	
26			696	SS-11	18 (100)	3-5-5 N = 10	1.5 B		12				26	
27													27	
28			694										28	
29				SS-12	18 (100)	3-4-7 N = 11	3.5 B		12				29	
30			692										30	
31													31	
32		31.8 689.8											32	
33		Clay LOAM (A-4(2)): Medium stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)	690										33	
34													34	
35			688	SS-13	16 (89)	3-7-8 N = 15	1.3 B		15		22	7	35	
36													36	
37			686										37	
38													38	
39			684										39	
40													40	
41			682	SS-14	18 (100)	1-3-6 N = 9	2.7 B		12				41	
			680											

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P(312-606-0910 F(312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**BORING LOGS II STRUCTURE NO. 099-0192**	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 33 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	95
		CONTRACT NO. 62N20		
	ILLINOIS			

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT33_BoringLogsII.dgn
4/8/2022 3:36:14 PM

gonzalez

SOIL BORING LOG

Log of Boring **GC-02** Sheet 3 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/20/2021 to 01/20/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	183+45.8, 17.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	50.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	41.00 ft
LAT/LONG:	41.552588, -87.890175	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
43		Clay LOAM (A-4(2)): Medium stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)											43	
44			678	SS-15	15 (83)	2-4-11 N = 15	1.6 B		13				44	
45													45	
46			676										46	
47													47	
48			674										48	
49				SS-16	0 (0)	6-12-14 N = 26							49	
50		50.0 671.6	672										50	
51		CLAY: Very stiff, brown, moist to dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)											51	
52			670	SS-17	18 (100)	3-4-8 N = 12	0.7 B		15				52	
53													53	
54			668	SS-18	18 (100)	6-9-14 N = 23	2.9 B		14				54	
55													55	
56		56.7 664.9	666										56	
57		CLAY: Stiff, brown, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)											57	
58			664										58	
59				SS-19	17 (95)	7-12-6 N = 18	0.9 B		15				59	
60			662										60	
61													61	
62			660										62	

gonzalez

SOIL BORING LOG

Log of Boring **GC-02** Sheet 4 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/20/2021 to 01/20/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	183+45.8, 17.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	50.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	41.00 ft
LAT/LONG:	41.552588, -87.890175	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATON:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
64		CLAY: Stiff, brown, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL) 64.1 657.5	650	SS-20	11 (61)	14-18-20 N = 38			20				64	
65		SAND: Dense, brown, wet, fine- to coarse-grained, with gravel; (GLACIAL TILL) 64.7 656.9											65	
66		SILT: Medium stiff, brown, wet, low plastic, some fine sand; (GLACIAL TILL)	656										66	
67													67	
68		Silty LOAM: Very stiff, gray, moist, low plastic, with fine sand, some gravel; (GLACIAL TILL) 67.8 653.8	654										68	
69				SS-21	18 (100)	6-8-10 N = 18	2.0 B		13				69	
70			652										70	
71													71	
72			650										72	
73													73	
74		CLAY: Very stiff, gray, dry, low plastic, some fine to coarse sand, some gravel; (GLACIAL TILL) 74.2 647.4	648	SS-22	18 (100)	8-8-10 N = 18	4.7 B		17				74	
75													75	
76			646										76	
77													77	
78		SAND: Medium dense, gray, moist, fine- to coarse-grained, with gravel; (GLACIAL TILL) 78.2 643.4	644										78	
79		79.3 642.3		SS-23	13 (72)	7-4-8 N = 12			9				79	
80		CLAY: Stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL) 80.0 641.6	642										80	
81		Boring terminated at 80.0'											81	
82			640										82	
83													83	
			630											

gonzalez

SOIL BORING LOG

Log of Boring **GC-03** Sheet 1 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/21/2021 to 01/22/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+94.7, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.2 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	58.50 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	- Dry. Caved at 58.5'
LAT/LONG:	41.552448, -87.890183	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.2	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
1		CONCRETE 1.3 719.9	720										1	
2		CRUSHED STONE		SS-1	13 (72)	13-10-6 N = 16			7				2	
3		3.4 717.8	718										3	
4		CLAY: Medium stiff, brown, moist, low plastic, some fine sand; (FILL)		SS-2	14 (78)	6-6-6 N = 12		1.5 P	18				4	
5		5.2 715.5	716										5	
6		Clay LOAM (A-4(4)): Medium stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)		SS-3	11 (61)	3-3-4 N = 7	1.6 B		16		25	8	6	
7			714										7	
8													8	
9				SS-4	4 (22)	2-4-7 N = 11		1.8 P	14				9	
10			712										10	
11													11	
12				SS-5	14 (78)	2-2-4 N = 6	1.8 B		15				12	
13			710										13	
14													14	
15				SS-6	17 (95)	3-4-7 N = 11	3.6 B		16				15	
16			708										16	
17													17	
18				SS-7	13 (72)	3-4-6 N = 10	2.5 B		14		24	8	18	
19			706										19	
20													20	
			704											
				SS-8	13 (72)	3-4-8 N = 12	3.9 B		17					
			702											

1 Entire sheet revised

gonzalez

SOIL BORING LOG

Log of Boring **GC-03**
Sheet 2 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-5HB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/21/2021 to 01/22/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+94.7, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.2 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	58.50 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	- Dry. Caved at 58.5'
LAT/LONG:	41.552448, -87.890183	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.2	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
22		Clay LOAM (A-4(4)): Medium stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)	700	SS-9	13 (72)	3-3-7 N = 10	3.6 B		20				22	
23		23.3 697.9	698										23	
24		SAND: Medium dense, gray, moist, fine-to coarse-grained, with gravel; (GLACIAL TILL) 24.0 697.2		SS-10	16 (89)	10-4-5 N = 9	1.6 B		14				24	
25		Clay LOAM: Stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)	696										25	
26													26	
27			694	SS-11	18 (100)	2-6-6 N = 12	3.0 B		14				27	
28													28	
29		29.2 691.9	692	SS-12	14 (78)	3-3-6 N = 9	1.5 B		13				29	
30		Clay LOAM: Stiff, gray, moist, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL)											30	
31			690										31	
32													32	
33			688										33	
34				SS-13	18 (100)	4-7-11 N = 18	1.2 B		14				34	
35			686										35	
36													36	
37			684										37	
38													38	
39		39.5 681.7	682	SS-14A	17 (95)	5-5-6 N = 11	3.5 B		16				39	
40		Clay LOAM (A-4(0)): Soft, gray, moist, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL) 40.3 680.9		SS-14B					16	20	4		40	
41		Clay LOAM: Stiff, gray, moist, low plastic, some fine sand; (GLACIAL TILL)	680										41	

gonzalez

SOIL BORING LOG

Log of Boring **GC-03**
Sheet 3 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-5HB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/21/2021 to 01/22/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+94.7, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.2 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	58.50 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	- Dry. Caved at 58.5'
LAT/LONG:	41.552448, -87.890183	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.2	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
43		Clay LOAM: Stiff, gray, moist, low plastic, some fine sand; (GLACIAL TILL)	678										43	
44				SS-15	0 (0)	10-10-12 N = 22							44	
45			676										45	
46													46	
47			674	SS-16	18 (100)	4-5-8 N = 13	2.9 B		16				47	
48													48	
49			672	SS-17	13 (72)	7-7-9 N = 16	3.4 B		18				49	
50		49.8 671.4											50	
51		Clay LOAM: Soft, gray, moist to wet, low plastic, with fine sand, some gravel; (GLACIAL TILL) 50.8 670.4	670										51	
52		Clay LOAM: Stiff, gray, moist, low plastic, some fine to coarse sand, some gravel; (GLACIAL TILL)											52	
53			668										53	
54				SS-18	18 (100)	6-7-8 N = 15	3.2 B		14				54	
55		54.9 666.3	666										55	
56		SAND: Medium dense, brown, moist, fine-grained; (GLACIAL TILL)											56	
57		57.4 663.8											57	
58		CLAY: Stiff, brown, wet, low plastic, with gravel, some fine to coarse sand; (GLACIAL TILL)	664										58	
59													59	
60			662	SS-19	4 (22)	7-10-6 N = 16			17				60	
61													61	
62			660										62	

gonzalez

SOIL BORING LOG

Log of Boring **GC-03**
Sheet 4 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-5HB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/21/2021 to 01/22/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+94.7, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.2 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	58.50 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	- Dry. Caved at 58.5'
LAT/LONG:	41.552448, -87.890183	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.2	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
64		CLAY: Stiff, brown, wet, low plastic, with gravel, some fine to coarse sand; (GLACIAL TILL)	658	SS-20	16 (89)	6-18-12 N = 30	4.8 B		18				64	
65			656										65	
66													66	
67		67.4 653.8	654										67	
68		Silt LOAM: Stiff, gray, dry, low plastic, with fine sand; (GLACIAL TILL)											68	
69			652	SS-21	18 (100)	8-8-8 N = 16	4.5 B		15				69	
70													70	
71			650										71	
72		72.3 649.1											72	
73		CLAY: Stiff, gray, moist, low plastic, some fine sand; (GLACIAL TILL)	648										73	
74				SS-22	18 (100)	4-6-8 N = 14	2.6 B		25				74	
75		75.0 646.2 Boring terminated at 75.0'	646										75	
76													76	
77			644										77	
78													78	
79			642										79	
80													80	
81			640										81	
82													82	
83			638										83	

1 Entire sheet revised

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20200200425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT35_BoringLogsIV.dgn
4/8/2022 3:41:30 PM

Primera
100 S. WACKER DRIVE SUITE 700 . CHICAGO IL 60606 . P:(312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS IV STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -		SHEET 35 OF 38 SHEETS	
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -			

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	97
		CONTRACT NO. 62N20		
	ILLINOIS			

SOIL BORING LOG

Log of Boring **GC-04**
Sheet 1 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/22/2021 to 01/23/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+28.0, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.7 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	36.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	31.00 ft - Caved at 46'
LAT/LONG:	41.552272, -87.890172	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.7	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
1		CONCRETE (1.0 / 720.7)											1	
2		CRUSHED STONE (3.3 / 718.4)	720	SS-1	8 (45)	12-11-10 N = 21							2	
3		CLAY: Stiff, brown, dry, low plastic; (FILL) (5.3 / 716.4)	718										3	
4				SS-2	1 (5)	5-7-9 N = 16			15				4	
5		Clay LOAM (A-4(3)): Stiff, gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)	716										5	
6				SS-3	13 (72)	2-4-6 N = 10	1.8	B	16				6	
7			714										7	
8				SS-4	14 (78)	2-3-5 N = 8	1.5	B	15		24	8	8	
9			712										9	
10				SS-5	15 (83)	2-4-6 N = 10	2.9	B	15				10	
11			710										11	
12				SS-6	14 (78)	3-5-8 N = 13	3.3	B	15				12	
13			708										13	
14				SS-7	17 (95)	3-4-7 N = 11	3.3	B	14				14	
15			706										15	
16				SS-8	18 (100)	3-5-8 N = 13	3.2	P	19				16	
17			704										17	
18													18	
19			702										19	
20													20	

SOIL BORING LOG

Log of Boring **GC-04**
Sheet 2 of **4**

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/22/2021 to 01/23/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+28.0, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.7 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	36.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	31.00 ft - Caved at 46'
LAT/LONG:	41.552272, -87.890172	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.7	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
22		Clay LOAM (A-4(3)): Stiff, gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)	700	SS-9	18 (100)	5-7-9 N = 16	4.0	B	15				22	
23													23	
24			698	SS-10	18 (100)	4-7-9 N = 16	4.4	B	16				24	
25													25	
26			696										26	
27		SAND: Loose, gray, dry, fine- to coarse-grained, some gravel; (GLACIAL TILL) (26.5 / 695.2)		SS-11	12 (67)	4-9-9 N = 18	1.9	B	14				27	
28			694										28	
29		Clay LOAM: Stiff, gray, moist, low plastic, some fine sand, trace gravel; (GLACIAL TILL) (29.2 / 692.5)		SS-12	14 (78)	7-4-5 N = 9	1.6	B	13				29	
30			692										30	
31													31	
32			690										32	
33													33	
34			688	SS-13	0 (0)	5-5-6 N = 11							34	
35													35	
36			686										36	
37				SS-14	18 (100)	0-3-4 N = 7	1.8	B	16				37	
38			684										38	
39				SS-15	18 (100)	9-7-11 N = 18	2.7	B	16				39	
40			682										40	
41													41	
			680											

SOIL BORING LOG

Log of Boring **GC-04**
Sheet 3 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/22/2021 to 01/23/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+28.0, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.7 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	36.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	31.00 ft - Caved at 46'
LAT/LONG:	41.552272, -87.890172	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.7	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
43		Clay LOAM: Stiff, gray, moist, low plastic, some fine sand, trace gravel; (GLACIAL TILL)	678	SS-16	18 (100)	3-6-8 N = 14	3.6	B	14				43	
44													44	
45			676										45	
46													46	
47			674										47	
48													48	
49			672	SS-17	14 (78)	3-6-14 N = 20	3.7	B	14				49	
50													50	
51			670										51	
52													52	
53			668	SS-18	18 (100)	6-8-10 N = 18	2.5	B	17				53	
54													54	
55			666										55	
56													56	
57			664										57	
58													58	
59			662	SS-19	0 (0)	8-7-8 N = 15							59	
60													60	
61			660										61	
62		CLAY (A-6(19)): Stiff, gray, dry, low plastic, trace sand; (GLACIAL TILL) (62.1 / 659.6)											62	

1 Entire sheet revised

Primera	USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS V STRUCTURE NO. 099-0192	F.A.I. RTE.	SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:(312)-606-0910 F:(312)-606-0415		CHECKED MG/ZM	REVISED -			80	2020-250-BY / WILL / 133 / 98
	PLOT SCALE =	DRAWN KC	REVISED -				CONTRACT NO. 62N20
	PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 36 OF 38 SHEETS		ILLINOIS

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202002000425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT36_BoringLogsV.dgn
4/8/2022 3:44:06 PM

gonzalez

SOIL BORING LOG

Log of Boring **GC-04**
Sheet 4 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/22/2021 to 01/23/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	182+28.0, 20.0' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	721.7 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	36.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	31.00 ft - Caved at 46'
LAT/LONG:	41.552272, -87.890172	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 721.7	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
64		CLAY (A-6(19)): Stiff, gray, dry, low plastic, trace sand; (GLACIAL TILL)	658	SS-20	18 (100)	8-12-18 N = 30	6.6 B		22		39	18	64	
69			652	SS-21	0 (0)	9-8-12 N = 20			22				69	
74			648	SS-22	18 (100)	3-6-8 N = 14	2.9 B		23				74	
77.2		Silty LOAM: Stiff, gray, wet, low plastic, with fine sand; (GLACIAL TILL)	644.5											
79.2		SAND: Dense, gray, wet, fine- to coarse-grained, with gravel; (GLACIAL TILL)	642.5	SS-23	14 (78)	19-17-26 N = 43	0.7 B		17				79	
80.0		Boring terminated at 80.0'	641.7											

gonzalez

SOIL BORING LOG

Log of Boring **GC-05**
Sheet 1 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/28/2021 to 01/28/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	181+26.7, 2.6' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	51.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	59.00 ft
LAT/LONG:	41.551993, -87.890078	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 741.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
0		0.4 ASPHALT	741.2										0	
1		1.2 CONCRETE	740.4										1	
2		1.6 CRUSHED STONE	740.0										2	
3		CLAY: Stiff, greenish brown, dry, low plastic, some fine sand; (FILL)	740	SS-1	0 (0)	3-2-2 N = 4							3	
4			738	SS-2	13 (72)	2-4-4 N = 8	2.5 B		18				4	
5			736	SS-3	15 (83)	5-5-8 N = 13	3.5 B		21				5	
6			734	SS-4	14 (78)	4-3-4 N = 7	3.8 B		18				6	
10.7		CLAY: Stiff, brown, dry, low plastic, some gravel, some fine to coarse sand; (FILL)	730.9	SS-5	16 (89)	6-9-13 N = 22	5.1 B		18				10	
14.4		CLAY (A-6(13)): Stiff, brown and gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)	727.2	SS-6A	18 (100)	22-23-8 N = 31	5.5 S		15				14	
				SS-6B										
			726	SS-7	16 (89)	5-6-9 N = 15	3.9 B		17		36	16		
			724	SS-8	18 (100)	8-9-12 N = 21	5.9 B		16					

gonzalez

SOIL BORING LOG

Log of Boring **GC-05**
Sheet 2 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/28/2021 to 01/28/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	181+26.7, 2.6' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	51.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	59.00 ft
LAT/LONG:	41.551993, -87.890078	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 741.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac. Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
22		CLAY (A-6(13)): Stiff, brown and gray, dry, low plastic, with fine to coarse sand, trace gravel; (GLACIAL TILL)	720	SS-9A	13 (72)	5-6-8 N = 14	8.8 S		16				22	
22.5		CLAY: Stiff, brown, dry, low plastic, with gravel, with fine to coarse sand; (GLACIAL TILL)	719.1	SS-9B										
24		Clay LOAM: Stiff, brown, dry, low plastic, some fine sand, trace gravel; (GLACIAL TILL)	718	SS-10	3 (17)	4-5-9 N = 14			16				24	
26			716	SS-11	18 (100)	6-7-10 N = 17	5.3 B		18				26	
28			714										28	
29			712	SS-12	18 (100)	3-4-7 N = 11	2.9 B		15				29	
34			708	SS-13	3 (14)	13-12-15 N = 27		4.2 P	13				34	
39			704	SS-14	18 (100)	7-7-10 N = 17	2.7 B		15				39	
41			702										41	

1 Entire sheet revised

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS VI STRUCTURE NO. 099-0192	
	CHECKED MG/ZM	REVISED -			
PLOT SCALE =	DRAWN KC	REVISED -			
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 37 OF 38 SHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2020-250-BY	WILL	133	99
		CONTRACT NO. 62N20		
	ILLINOIS			

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P(312-606-0910 F(312-606-0415

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT37_BoringLogsVI.dgn
4/8/2022 3:46:25 PM

gonzalez

SOIL BORING LOG

Log of Boring **GC-05**
Sheet 3 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/28/2021 to 01/28/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	181+26.7, 2.6' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	51.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	59.00 ft
LAT/LONG:	41.551993, -87.890078	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 741.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
43		Clay LOAM: Stiff, brown, dry, low plastic, some fine sand, trace gravel; (GLACIAL TILL)	698	SS-15	18 (100)	5-6-10 N = 16	3.5 B		16				43	
44													44	
45			694										45	
46													46	
47													47	
48			690	SS-16	15 (83)	6-8-14 N = 22		2.0 P					48	
49		SAND: Loose, gray, wet, fine-grained; (GLACIAL TILL) 49.1 / 49.5 / 692.5 / 692.1											49	
50		SILT: Dense, gray, wet, low plastic, some fine sand; (GLACIAL TILL) 50.4 / 691.2	686										50	
51		SAND: Medium dense, gray, wet, fine- to coarse-grained, some gravel; (GLACIAL TILL)											51	
52		Clay LOAM (A-4(3)): Stiff, gray, moist, low plastic, with fine to coarse sand, with gravel; (GLACIAL TILL)											52	
53			682										53	
54				SS-17	16 (89)	4-7-9 N = 16	3.0 B		14		24	8	54	
55			678										55	
56													56	
57			674										57	
58													58	
59			670	SS-18	18 (100)	5-7-8 N = 15	1.3 B		14				59	
60													60	
61			666										61	
62													62	

gonzalez

SOIL BORING LOG

Log of Boring **GC-05**
Sheet 4 of 4

ROUTE:	Federal Aid Urban - 2688	DESCRIPTION:	Wolf Road over I-80		
SECTION:	99-SHB-4	DRILLER:	Rubino Engineering, Inc.	DATE(S) DRILLED:	01/28/2021 to 01/28/2021
COUNTY:	Will	DRILLED BY:	Joe Kenny	LOGGED BY:	Nikki Kurfman (Gonzalez)
STRUCT. NO.:	099-0192	DRILL RIG TYPE:	Geoprobe 7822DT	BACKFILL:	Cuttings and pavement patch
STATION & OFFSET:	181+26.7, 2.6' LT	DRILLING METHOD:	3-1/4" hollow stem auger	Ground Water Observation(s):	
SURFACE ELEV.:	741.6 ft	SAMPLING METHOD:	2" Split Spoon	First Encounter:	51.00 ft
VERTICAL DATUM:	NAVD83	HAMMER TYPE:	Auto Hammer (140 lb)	Upon Completion:	59.00 ft
LAT/LONG:	41.551993, -87.890078	HAMMER EFFICIENCY:	88.8 %	After Drilling:	24.0 hr after - Filled
LOCATION:	NE 1/4, SEC. 6, T35N, R12E, 3rd PM	REMARKS:			

Depth (ft)	Graphic	Material Description	Elevation (ft): 741.6	Sample Number	Recovery, in. (%)	Sampling Resist. Or Core RQD(%)	Rimac, Qu (tsf)	Pocket Pen. Qu (tsf)	Moisture Content (%)	Dry Unit Weight (pcf)	Liquid Limit	Plasticity Index	Depth (ft)	Remarks
64		Clay LOAM (A-4(3)): Stiff, gray, moist, low plastic, with fine to coarse sand, with gravel; (GLACIAL TILL)	678	SS-19	18 (100)	3-4-6 N = 10	1.2 B		15				64	
65													65	
66			676										66	
67													67	
68			674										68	
69				SS-20	17 (95)	4-7-12 N = 19	3.5 B		15				69	
70			672										70	
71													71	
72			670										72	
73													73	
74			668	SS-21	16 (89)	6-7-8 N = 15	3.9 B		15				74	
75		CLAY: Medium stiff, gray, wet, low plastic, with fine to coarse sand, some gravel; (GLACIAL TILL) 74.5 / 75.0 / 667.1 / 666.6 Boring terminated at 75.0'											75	
76			666										76	
77													77	
78			664										78	
79													79	
80			662										80	
81													81	
82			660										82	
83													83	
			658											

1 Entire sheet revised

Primera
100 S. WACKER DRIVE SUITE 700 , CHICAGO IL 60606 , P:312-606-0910 F:312-606-0415

USER NAME = kanderson	DESIGNED KJA	REVISED 1 4/8/2022 KJA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS VII STRUCTURE NO. 099-0192	F.A.I. RTE.	SECTION	COUNTY
	CHECKED MG/ZM	REVISED -			80	2020-250-BY	WILL
PLOT SCALE =	DRAWN KC	REVISED -					
PLOT DATE = 4/8/2022	CHECKED KJA	REVISED -		SHEET 38 OF 38 SHEETS		ILLINOIS	

TOTAL SHEETS	SHEET NO.
133	100

CONTRACT NO. 62N20

MODEL: Default
FILE NAME: pw:\\primera-pw.bentley.com:primera-pw-01\Documents\01 Projects\20202020425.00 - IDOT Phase II Various Design\20200425.01_WO 1-3 - Wolf Road over I-80\Drawings\Current Drawing Files\CADD_Sheets\Structural\Wolf Road_SHT38_BoringLogsVII.dgn
4/8/2022 4:13:17 PM