

GENERAL NOTES

- Fasteners shall be ASTM F3125 Grade A325 Type 1, hot dip galvanized bolts in metallized areas. Bolts 7/8 in. Ø, holes 15/16 in. Ø, unless otherwise noted.
- Calculated weight of Structural Steel = 34,830 lbs. (M270 Grade 36)
317,700 lbs. (M270 Grade 50)
- All new structural steel shall be metallized according to the Special Provision for Metallizing of Structural Steel. The metallizing shall meet a Class A AASHTO slip coefficient (0.30 or greater) for bolted connection faying surfaces.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- High Friction Surface Treatment (HFST) shall be applied to all exposed top surfaces of the bridge deck, approach slabs and PCC connector pavements on each side of the bridge in accordance with the Special Provision High Friction Surface Treatment on Bridge Deck Surfaces.
- Overlapping HFST joints shall not be located in the wheel zones of final or temporary traffic lanes. For this purpose, wheel zones are defined as a pair of 2-foot wide zones at 6 feet centers, centered in each traffic lane.
- 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.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The Contractor shall resurvey the Market Street vertical clearance following the superstructure replacement. This work will not be paid for separately, but shall be included with contact lump sum price for "Construction Layout".
- Slipforming of median parapets is not allowed. Slipforming of outside parapets is allowed.
- Southern fascia beam of the EB bridge was damaged due to a vehicle impact, resulting in a closure of the EB shoulder. This beam is severely damaged and the Contractor is advised to put no loads on it. The Contractor should account for this when developing the Demolition Plan.
- The finishing machine rails shall be placed on the top flange of the exterior beams.
- Apply protective coat to the top and traffic faces of parapets.

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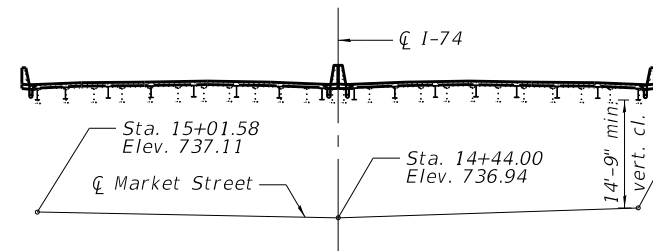
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures No. 1	Each	1	-	1
Concrete Removal	Cu. Yd.	-	57.7	57.7
Slope Wall Removal	Sq. Yd.	-	1,094	1,094
Protective Shield	Sq. Yd.	860	-	860
Structure Excavation	Cu. Yd.	-	403	403
Concrete Structures	Cu. Yd.	-	130.2	130.2
Concrete Superstructure	Cu. Yd.	638.8	-	638.8
Protective Coat	Sq. Yd.	382	-	382
Concrete Superstructure (Approach Slab)	Cu. Yd.	342.0	-	342.0
Furnishing and Erecting Structural Steel	L. Sum	0.2	-	0.2
Stud Shear Connectors	Each	12,912	-	12,912
Reinforcement Bars, Epoxy Coated	Pound	314,130	11,060	325,190
Bar Splicer	Each	-	16	16
Slope Wall 4 Inch	Sq. Yd.	-	851	851
Name Plates	Each	1	-	1
Preformed Joint Seal 2 1/2"	Foot	205	-	205
Elastomeric Bearing Assembly, Type I	Each	-	48	48
Anchor Bolts, 3/4"	Each	-	128	128
Temporary Sheet Piling	Sq. Yd.	-	216	216
Granular Backfill for Structures	Cu. Yd.	-	335	335
Geocomposite Wall Drain	Sq. Yd.	-	177	177
High Friction Surface Treatment for Bridge Deck Surfaces	Sq. Yd.	3,156	-	3,156
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	-	76	76
Drainage Scuppers, DS-11	Each	16	-	16
Drainage System	L. Sum	0.2	-	0.2
Diamond Grinding (Bridge Section)	Sq. Yd.	3,065	-	3,065
Pipe Underdrains for Structures 4"	Foot	-	402	402

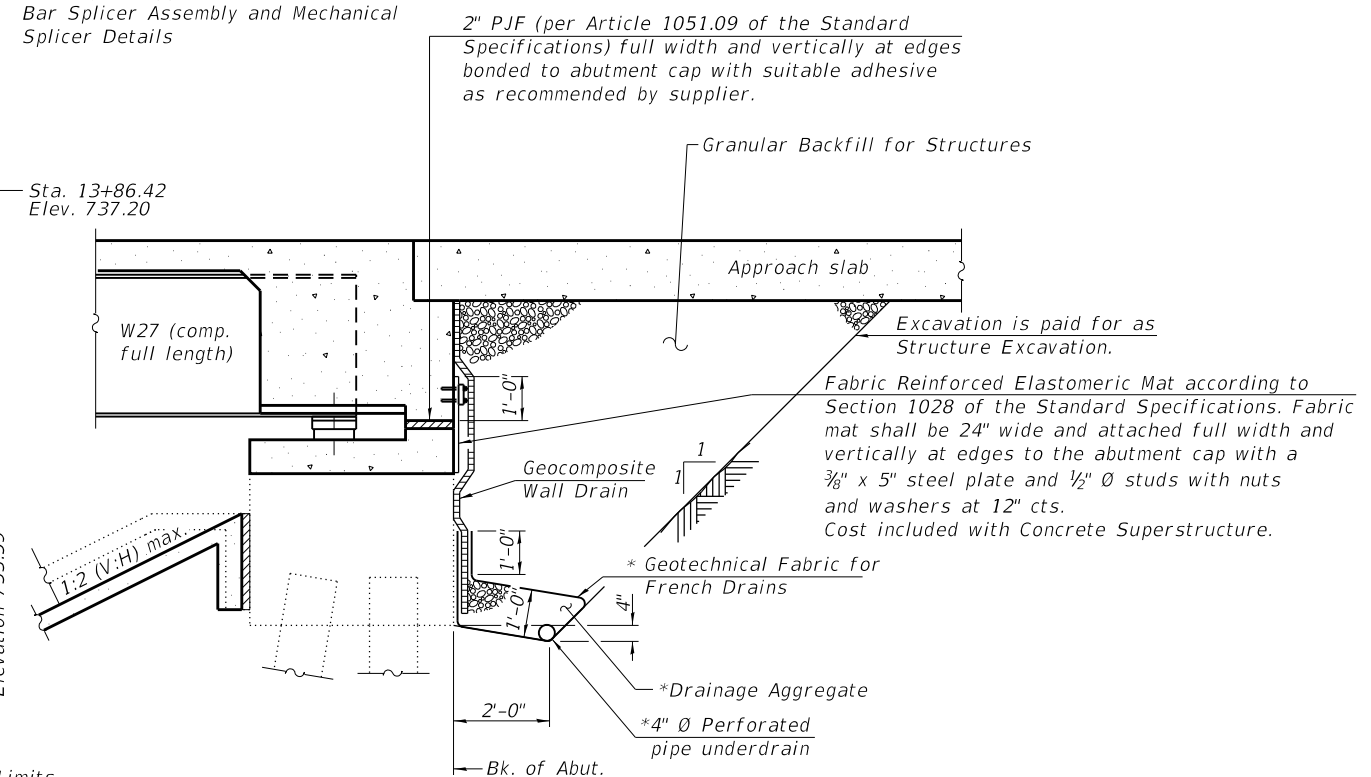
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RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 74
SEC. (14-1)BR.(14HB-2)BR-1
LOADING HL-93
STRUCTURE NO. 010-0020

NAME PLATE
See Std. 515001

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

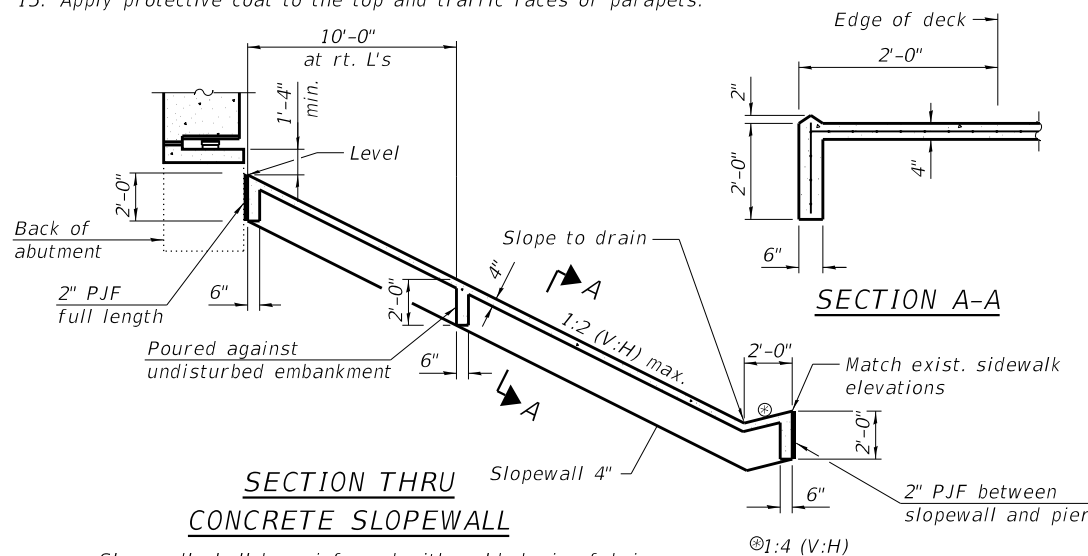


VERTICAL CLEARANCE DIAGRAM
(at Market Street looking east)

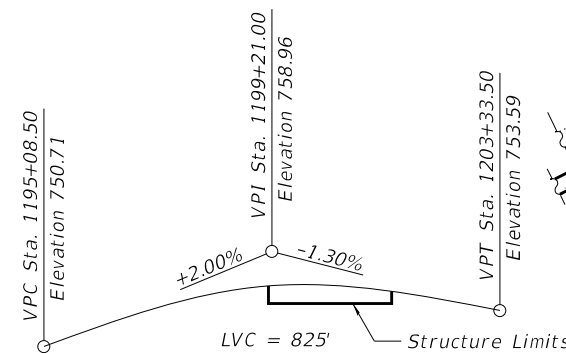


SECTION THRU SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

Notes:
*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)
All pipe underdrain system components shall extend the full width of the abutments between the existing wingwalls. The pipe shall extend under the existing wingwall footings 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).
Structure Excavation required to remove the existing slopewall is included in the cost of Slope Wall Removal.



SECTION THRU CONCRETE SLOPEWALL



PROFILE GRADE I-74
(along median edge of pavement)
(The profile grade shows the final elevation after grinding)

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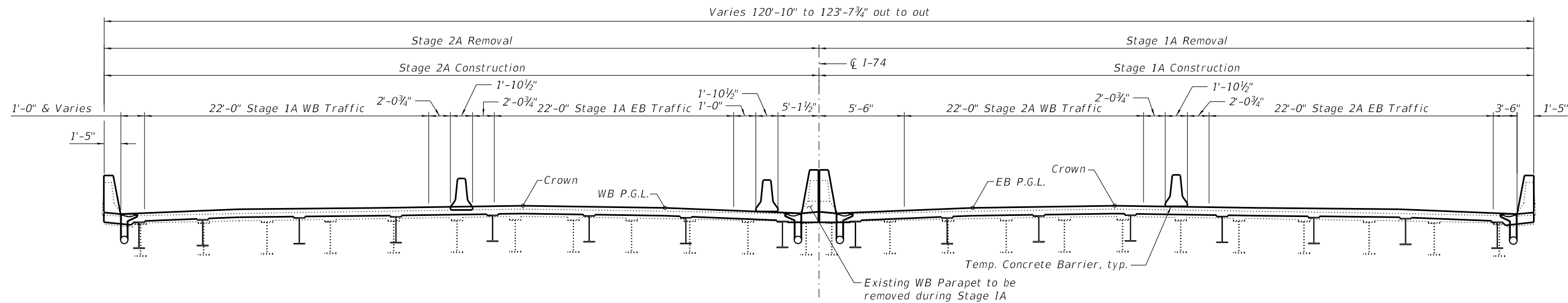
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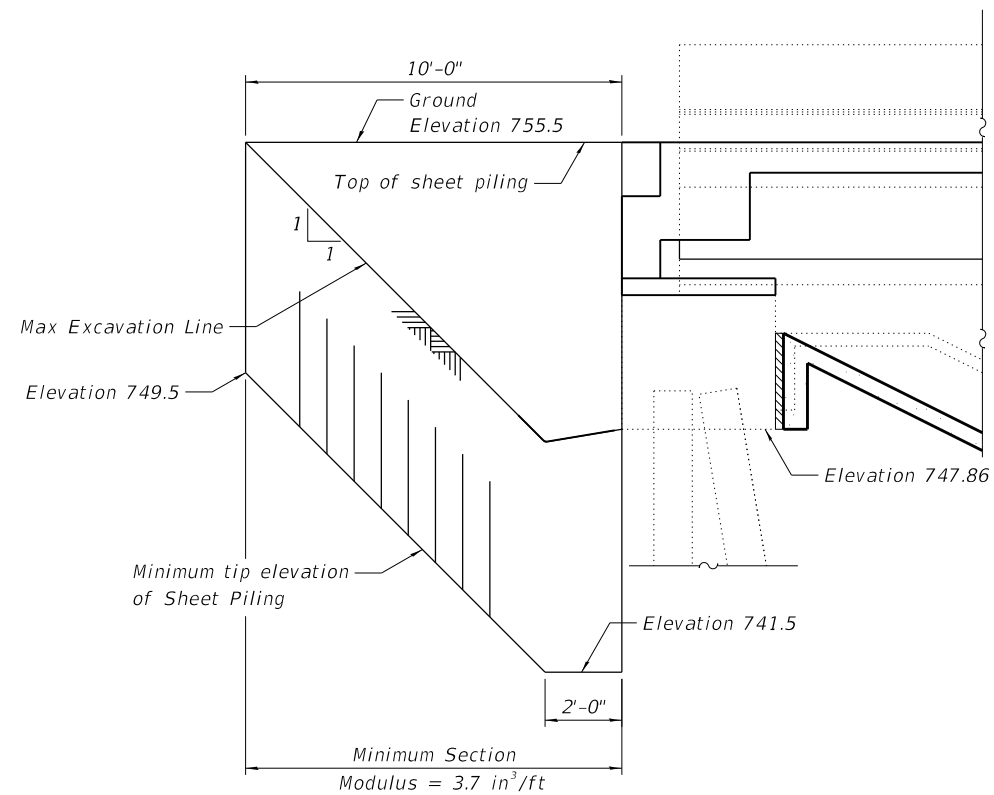
**GENERAL DATA
STRUCTURE NO. 010-0020**

SHEET SM-02 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR. (14HB-2)BR-1	CHAMPAIGN	201	101
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		



CROSS SECTION SHOWING STAGING
(Looking East)



TEMPORARY SHEET PILING AT ABUTMENTS (2 THUS)
(Dimensions taken along Stage Construction Line)
(West Abutment Shown; East Abutment similar)

Notes:

See Roadway Plans for quantity of Temporary Concrete Barrier.

See sheet SM-04 of 36 for details of Temporary Concrete Barrier.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

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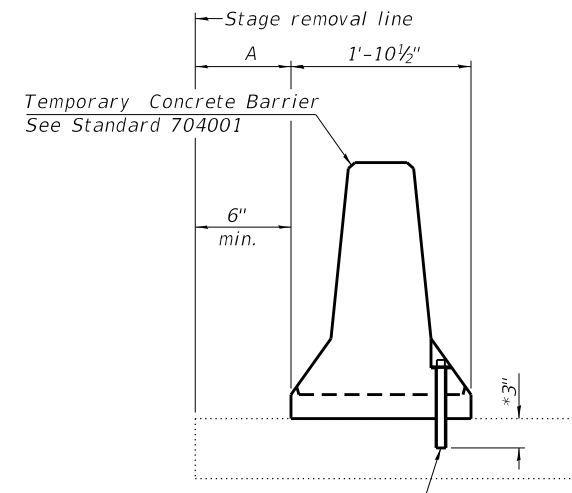
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**STATE OF ILLINOIS
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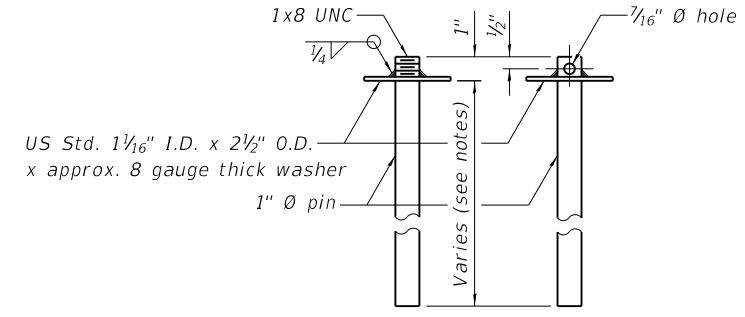
**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 010-0020**

SHEET SM-03 OF SM-35 SHEETS

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74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	102
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".



RESTRAINING PIN

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

SECTION THRU EXISTING SLAB

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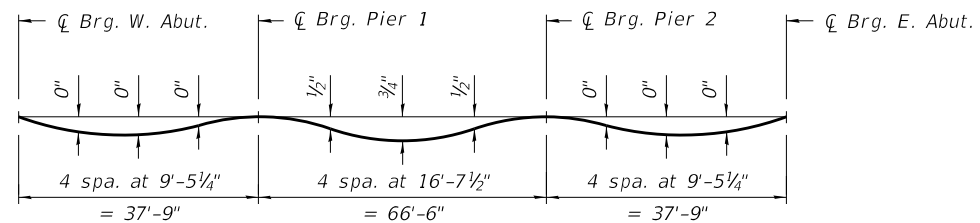
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 010-0020**

SHEET SM-04 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS			FED. AID PROJECT	

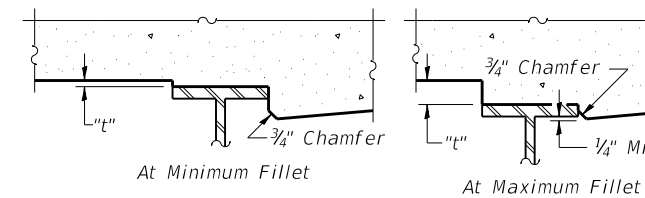


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

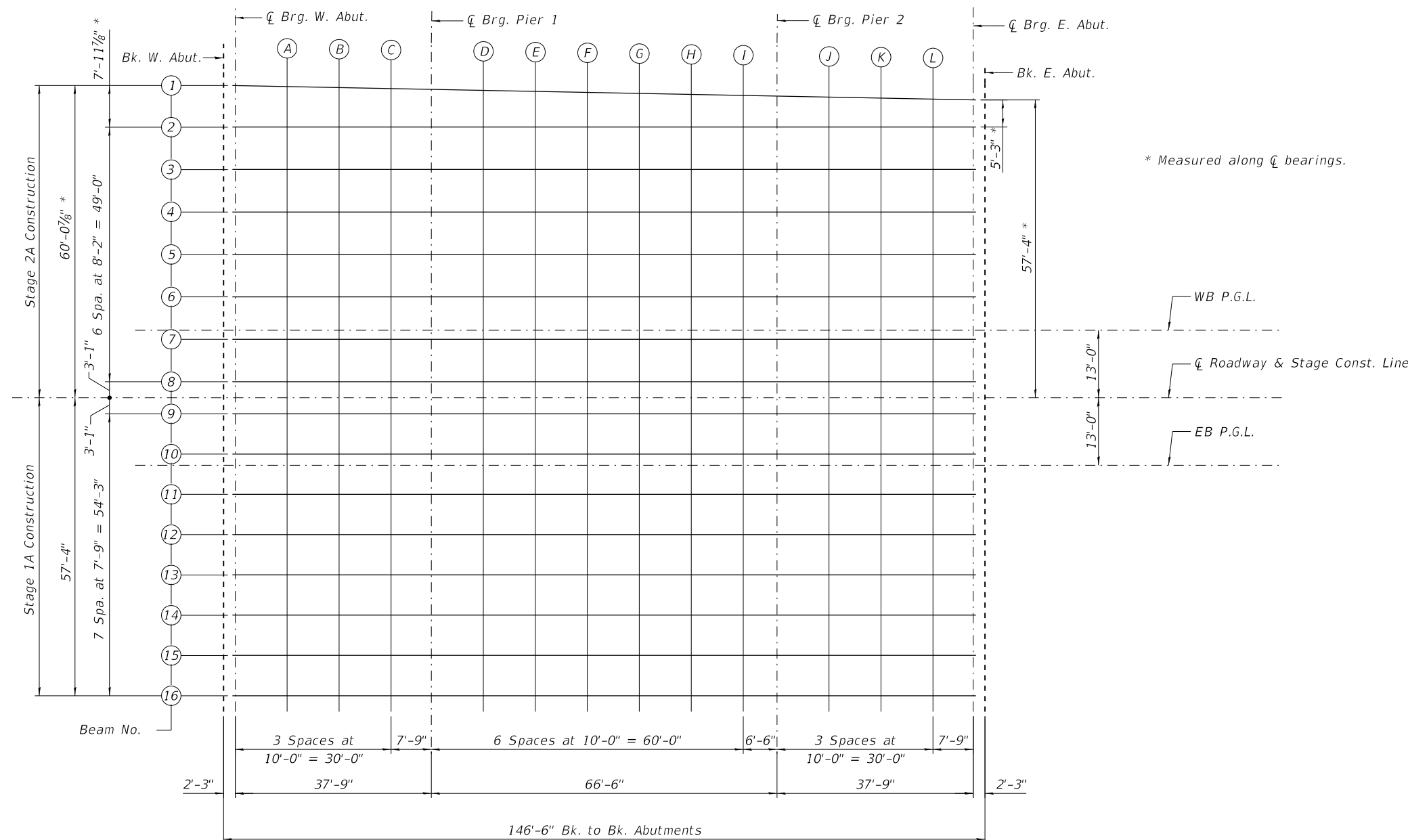
Note:

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 and grinding as shown on sheets SM-06 thru SM-08 of 36.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets SM-06 thru SM-08 of 36, minus the initial slab thickness prior to grinding, equals the fillet heights "t" above top flange of beams. The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets SM-06 thru SM-08 of 36. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



PLAN

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0020**

SHEET SM-05 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	104
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

Note:
Offsets measured from C roadway.

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-60.11	755.13	755.15
C Brg. W. Abut.	1199+35.10	-60.07	755.14	755.16
A	1199+45.10	-59.88	755.17	755.19
B	1199+55.10	-59.68	755.20	755.22
C	1199+65.10	-59.49	755.22	755.24
C Brg. Pier 1	1199+72.85	-59.34	755.24	755.26
D	1199+82.85	-59.15	755.25	755.29
E	1199+92.85	-58.96	755.27	755.32
F	1200+02.85	-58.76	755.27	755.34
G	1200+12.85	-58.57	755.28	755.35
H	1200+22.85	-58.38	755.28	755.34
I	1200+32.85	-58.19	755.27	755.31
C Brg. Pier 2	1200+39.35	-58.06	755.27	755.29
J	1200+49.35	-57.87	755.26	755.28
K	1200+59.35	-57.68	755.24	755.26
L	1200+69.35	-57.48	755.23	755.25
C Brg. E. Abut.	1200+77.10	-57.33	755.21	755.23
Bk. E. Abut.	1200+79.35	-57.29	755.20	755.22

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-52.08	755.29	755.31
C Brg. W. Abut.	1199+35.10	-52.08	755.30	755.32
A	1199+45.10	-52.08	755.33	755.35
B	1199+55.10	-52.08	755.35	755.37
C	1199+65.10	-52.08	755.37	755.39
C Brg. Pier 1	1199+72.85	-52.08	755.38	755.40
D	1199+82.85	-52.08	755.40	755.44
E	1199+92.85	-52.08	755.40	755.48
F	1200+02.85	-52.08	755.41	755.50
G	1200+12.85	-52.08	755.41	755.49
H	1200+22.85	-52.08	755.40	755.48
I	1200+32.85	-52.08	755.40	755.44
C Brg. Pier 2	1200+39.35	-52.08	755.39	755.41
J	1200+49.35	-52.08	755.37	755.39
K	1200+59.35	-52.08	755.36	755.37
L	1200+69.35	-52.08	755.33	755.36
C Brg. E. Abut.	1200+77.10	-52.08	755.31	755.34
Bk. E. Abut.	1200+79.35	-52.08	755.31	755.33

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-43.92	755.46	755.48
C Brg. W. Abut.	1199+35.10	-43.92	755.46	755.48
A	1199+45.10	-43.92	755.49	755.51
B	1199+55.10	-43.92	755.51	755.53
C	1199+65.10	-43.92	755.53	755.55
C Brg. Pier 1	1199+72.85	-43.92	755.55	755.57
D	1199+82.85	-43.92	755.56	755.61
E	1199+92.85	-43.92	755.57	755.64
F	1200+02.85	-43.92	755.57	755.66
G	1200+12.85	-43.92	755.57	755.66
H	1200+22.85	-43.92	755.57	755.63
I	1200+32.85	-43.92	755.56	755.60
C Brg. Pier 2	1200+39.35	-43.92	755.55	755.57
J	1200+49.35	-43.92	755.54	755.55
K	1200+59.35	-43.92	755.52	755.54
L	1200+69.35	-43.92	755.50	755.52
C Brg. E. Abut.	1200+77.10	-43.92	755.48	755.50
Bk. E. Abut.	1200+79.35	-43.92	755.47	755.49

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-35.75	755.61	755.64
C Brg. W. Abut.	1199+35.10	-35.75	755.62	755.64
A	1199+45.10	-35.75	755.65	755.67
B	1199+55.10	-35.75	755.67	755.69
C	1199+65.10	-35.75	755.69	755.71
C Brg. Pier 1	1199+72.85	-35.75	755.70	755.72
D	1199+82.85	-35.75	755.72	755.76
E	1199+92.85	-35.75	755.72	755.80
F	1200+02.85	-35.75	755.73	755.82
G	1200+12.85	-35.75	755.73	755.82
H	1200+22.85	-35.75	755.72	755.79
I	1200+32.85	-35.75	755.72	755.75
C Brg. Pier 2	1200+39.35	-35.75	755.71	755.73
J	1200+49.35	-35.75	755.70	755.71
K	1200+59.35	-35.75	755.68	755.70
L	1200+69.35	-35.75	755.65	755.68
C Brg. E. Abut.	1200+77.10	-35.75	755.63	755.66
Bk. E. Abut.	1200+79.35	-35.75	755.63	755.65

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-27.58	755.74	755.76
C Brg. W. Abut.	1199+35.10	-27.58	755.74	755.76
A	1199+45.10	-27.58	755.77	755.79
B	1199+55.10	-27.58	755.79	755.81
C	1199+65.10	-27.58	755.81	755.83
C Brg. Pier 1	1199+72.85	-27.58	755.83	755.85
D	1199+82.85	-27.58	755.84	755.88
E	1199+92.85	-27.58	755.85	755.92
F	1200+02.85	-27.58	755.85	755.94
G	1200+12.85	-27.58	755.85	755.94
H	1200+22.85	-27.58	755.85	755.91
I	1200+32.85	-27.58	755.84	755.88
C Brg. Pier 2	1200+39.35	-27.58	755.83	755.85
J	1200+49.35	-27.58	755.82	755.83
K	1200+59.35	-27.58	755.80	755.82
L	1200+69.35	-27.58	755.78	755.80
C Brg. E. Abut.	1200+77.10	-27.58	755.76	755.78
Bk. E. Abut.	1200+79.35	-27.58	755.75	755.77

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-19.42	755.69	755.71
C Brg. W. Abut.	1199+35.10	-19.42	755.70	755.72
A	1199+45.10	-19.42	755.73	755.75
B	1199+55.10	-19.42	755.75	755.77
C	1199+65.10	-19.42	755.77	755.78
C Brg. Pier 1	1199+72.85	-19.42	755.78	755.80
D	1199+82.85	-19.42	755.79	755.84
E	1199+92.85	-19.42	755.80	755.88
F	1200+02.85	-19.42	755.81	755.90
G	1200+12.85	-19.42	755.81	755.90
H	1200+22.85	-19.42	755.80	755.87
I	1200+32.85	-19.42	755.79	755.83
C Brg. Pier 2	1200+39.35	-19.42	755.79	755.81
J	1200+49.35	-19.42	755.77	755.79
K	1200+59.35	-19.42	755.75	755.77
L	1200+69.35	-19.42	755.73	755.75
C Brg. E. Abut.	1200+77.10	-19.42	755.71	755.73
Bk. E. Abut.	1200+79.35	-19.42	755.71	755.73

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0020

SHEET SM-06 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	105
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

Note:
Offsets measured from C roadway.

WB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-13.00	755.60	755.62
C Brg. W. Abut.	1199+35.10	-13.00	755.60	755.62
A	1199+45.10	-13.00	755.63	755.65
B	1199+55.10	-13.00	755.65	755.67
C	1199+65.10	-13.00	755.67	755.69
C Brg. Pier 1	1199+72.85	-13.00	755.68	755.71
D	1199+82.85	-13.00	755.70	755.74
E	1199+92.85	-13.00	755.71	755.78
F	1200+02.85	-13.00	755.71	755.80
G	1200+12.85	-13.00	755.71	755.80
H	1200+22.85	-13.00	755.71	755.77
I	1200+32.85	-13.00	755.70	755.73
C Brg. Pier 2	1200+39.35	-13.00	755.69	755.71
J	1200+49.35	-13.00	755.68	755.69
K	1200+59.35	-13.00	755.66	755.68
L	1200+69.35	-13.00	755.64	755.66
C Brg. E. Abut.	1200+77.10	-13.00	755.62	755.64
Bk. E. Abut.	1200+79.35	-13.00	755.61	755.63

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-11.25	755.56	755.58
C Brg. W. Abut.	1199+35.10	-11.25	755.57	755.59
A	1199+45.10	-11.25	755.59	755.62
B	1199+55.10	-11.25	755.62	755.64
C	1199+65.10	-11.25	755.64	755.65
C Brg. Pier 1	1199+72.85	-11.25	755.65	755.67
D	1199+82.85	-11.25	755.66	755.71
E	1199+92.85	-11.25	755.67	755.75
F	1200+02.85	-11.25	755.67	755.77
G	1200+12.85	-11.25	755.67	755.76
H	1200+22.85	-11.25	755.67	755.74
I	1200+32.85	-11.25	755.66	755.70
C Brg. Pier 2	1200+39.35	-11.25	755.66	755.68
J	1200+49.35	-11.25	755.64	755.66
K	1200+59.35	-11.25	755.62	755.64
L	1200+69.35	-11.25	755.60	755.62
C Brg. E. Abut.	1200+77.10	-11.25	755.58	755.60
Bk. E. Abut.	1200+79.35	-11.25	755.57	755.60

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	-3.08	755.40	755.42
C Brg. W. Abut.	1199+35.10	-3.08	755.40	755.42
A	1199+45.10	-3.08	755.43	755.45
B	1199+55.10	-3.08	755.45	755.47
C	1199+65.10	-3.08	755.47	755.49
C Brg. Pier 1	1199+72.85	-3.08	755.49	755.51
D	1199+82.85	-3.08	755.50	755.54
E	1199+92.85	-3.08	755.51	755.58
F	1200+02.85	-3.08	755.51	755.60
G	1200+12.85	-3.08	755.51	755.59
H	1200+22.85	-3.08	755.51	755.57
I	1200+32.85	-3.08	755.50	755.53
C Brg. Pier 2	1200+39.35	-3.08	755.49	755.51
J	1200+49.35	-3.08	755.48	755.49
K	1200+59.35	-3.08	755.46	755.48
L	1200+69.35	-3.08	755.44	755.46
C Brg. E. Abut.	1200+77.10	-3.08	755.42	755.44
Bk. E. Abut.	1200+79.35	-3.08	755.41	755.43

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	3.08	755.40	755.42
C Brg. W. Abut.	1199+35.10	3.08	755.40	755.42
A	1199+45.10	3.08	755.43	755.45
B	1199+55.10	3.08	755.45	755.47
C	1199+65.10	3.08	755.47	755.49
C Brg. Pier 1	1199+72.85	3.08	755.49	755.51
D	1199+82.85	3.08	755.50	755.54
E	1199+92.85	3.08	755.51	755.58
F	1200+02.85	3.08	755.51	755.60
G	1200+12.85	3.08	755.51	755.59
H	1200+22.85	3.08	755.51	755.57
I	1200+32.85	3.08	755.50	755.53
C Brg. Pier 2	1200+39.35	3.08	755.49	755.51
J	1200+49.35	3.08	755.48	755.49
K	1200+59.35	3.08	755.46	755.48
L	1200+69.35	3.08	755.44	755.46
C Brg. E. Abut.	1200+77.10	3.08	755.42	755.44
Bk. E. Abut.	1200+79.35	3.08	755.41	755.43

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	10.83	755.55	755.57
C Brg. W. Abut.	1199+35.10	10.83	755.56	755.58
A	1199+45.10	10.83	755.59	755.61
B	1199+55.10	10.83	755.61	755.63
C	1199+65.10	10.83	755.63	755.64
C Brg. Pier 1	1199+72.85	10.83	755.64	755.66
D	1199+82.85	10.83	755.65	755.70
E	1199+92.85	10.83	755.66	755.74
F	1200+02.85	10.83	755.67	755.76
G	1200+12.85	10.83	755.67	755.75
H	1200+22.85	10.83	755.66	755.73
I	1200+32.85	10.83	755.65	755.69
C Brg. Pier 2	1200+39.35	10.83	755.65	755.67
J	1200+49.35	10.83	755.63	755.65
K	1200+59.35	10.83	755.61	755.63
L	1200+69.35	10.83	755.59	755.61
C Brg. E. Abut.	1200+77.10	10.83	755.57	755.59
Bk. E. Abut.	1200+79.35	10.83	755.57	755.59

EB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	13.00	755.60	755.62
C Brg. W. Abut.	1199+35.10	13.00	755.60	755.62
A	1199+45.10	13.00	755.63	755.65
B	1199+55.10	13.00	755.65	755.67
C	1199+65.10	13.00	755.67	755.69
C Brg. Pier 1	1199+72.85	13.00	755.68	755.71
D	1199+82.85	13.00	755.70	755.74
E	1199+92.85	13.00	755.71	755.78
F	1200+02.85	13.00	755.71	755.80
G	1200+12.85	13.00	755.71	755.80
H	1200+22.85	13.00	755.71	755.77
I	1200+32.85	13.00	755.70	755.73
C Brg. Pier 2	1200+39.35	13.00	755.69	755.71
J	1200+49.35	13.00	755.68	755.69
K	1200+59.35	13.00	755.66	755.68
L	1200+69.35	13.00	755.64	755.66
C Brg. E. Abut.	1200+77.10	13.00	755.62	755.64
Bk. E. Abut.	1200+79.35	13.00	755.61	755.63

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0020**

SHEET SM-07 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	106
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

Note:
Offsets measured from C roadway.

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	18.58	755.68	755.70
C Brg. W. Abut.	1199+35.10	18.58	755.69	755.71
A	1199+45.10	18.58	755.71	755.74
B	1199+55.10	18.58	755.74	755.76
C	1199+65.10	18.58	755.76	755.77
C Brg. Pier 1	1199+72.85	18.58	755.77	755.79
D	1199+82.85	18.58	755.78	755.83
E	1199+92.85	18.58	755.79	755.86
F	1200+02.85	18.58	755.79	755.88
G	1200+12.85	18.58	755.79	755.88
H	1200+22.85	18.58	755.79	755.85
I	1200+32.85	18.58	755.78	755.82
C Brg. Pier 2	1200+39.35	18.58	755.77	755.80
J	1200+49.35	18.58	755.76	755.78
K	1200+59.35	18.58	755.74	755.76
L	1200+69.35	18.58	755.72	755.74
C Brg. E. Abut.	1200+77.10	18.58	755.70	755.72
Bk. E. Abut.	1200+79.35	18.58	755.69	755.71

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	26.33	755.76	755.78
C Brg. W. Abut.	1199+35.10	26.33	755.76	755.78
A	1199+45.10	26.33	755.79	755.81
B	1199+55.10	26.33	755.81	755.83
C	1199+65.10	26.33	755.83	755.85
C Brg. Pier 1	1199+72.85	26.33	755.84	755.87
D	1199+82.85	26.33	755.86	755.90
E	1199+92.85	26.33	755.87	755.94
F	1200+02.85	26.33	755.87	755.96
G	1200+12.85	26.33	755.87	755.96
H	1200+22.85	26.33	755.87	755.93
I	1200+32.85	26.33	755.86	755.89
C Brg. Pier 2	1200+39.35	26.33	755.85	755.87
J	1200+49.35	26.33	755.84	755.85
K	1200+59.35	26.33	755.82	755.84
L	1200+69.35	26.33	755.80	755.82
C Brg. E. Abut.	1200+77.10	26.33	755.78	755.80
Bk. E. Abut.	1200+79.35	26.33	755.77	755.79

BEAM 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	34.08	755.64	755.66
C Brg. W. Abut.	1199+35.10	34.08	755.65	755.67
A	1199+45.10	34.08	755.67	755.70
B	1199+55.10	34.08	755.70	755.72
C	1199+65.10	34.08	755.72	755.73
C Brg. Pier 1	1199+72.85	34.08	755.73	755.75
D	1199+82.85	34.08	755.74	755.79
E	1199+92.85	34.08	755.75	755.82
F	1200+02.85	34.08	755.75	755.84
G	1200+12.85	34.08	755.75	755.84
H	1200+22.85	34.08	755.75	755.81
I	1200+32.85	34.08	755.74	755.78
C Brg. Pier 2	1200+39.35	34.08	755.73	755.76
J	1200+49.35	34.08	755.72	755.74
K	1200+59.35	34.08	755.70	755.72
L	1200+69.35	34.08	755.68	755.70
C Brg. E. Abut.	1200+77.10	34.08	755.66	755.68
Bk. E. Abut.	1200+79.35	34.08	755.65	755.67

BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	41.83	755.50	755.52
C Brg. W. Abut.	1199+35.10	41.83	755.51	755.53
A	1199+45.10	41.83	755.53	755.55
B	1199+55.10	41.83	755.56	755.58
C	1199+65.10	41.83	755.58	755.59
C Brg. Pier 1	1199+72.85	41.83	755.59	755.61
D	1199+82.85	41.83	755.60	755.65
E	1199+92.85	41.83	755.61	755.68
F	1200+02.85	41.83	755.61	755.70
G	1200+12.85	41.83	755.61	755.70
H	1200+22.85	41.83	755.61	755.67
I	1200+32.85	41.83	755.60	755.64
C Brg. Pier 2	1200+39.35	41.83	755.59	755.62
J	1200+49.35	41.83	755.58	755.60
K	1200+59.35	41.83	755.56	755.58
L	1200+69.35	41.83	755.54	755.56
C Brg. E. Abut.	1200+77.10	41.83	755.52	755.54
Bk. E. Abut.	1200+79.35	41.83	755.51	755.53

BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	49.58	755.34	755.36
C Brg. W. Abut.	1199+35.10	49.58	755.35	755.37
A	1199+45.10	49.58	755.38	755.40
B	1199+55.10	49.58	755.40	755.42
C	1199+65.10	49.58	755.42	755.44
C Brg. Pier 1	1199+72.85	49.58	755.43	755.45
D	1199+82.85	49.58	755.45	755.49
E	1199+92.85	49.58	755.45	755.53
F	1200+02.85	49.58	755.46	755.55
G	1200+12.85	49.58	755.46	755.54
H	1200+22.85	49.58	755.45	755.52
I	1200+32.85	49.58	755.45	755.48
C Brg. Pier 2	1200+39.35	49.58	755.44	755.46
J	1200+49.35	49.58	755.42	755.44
K	1200+59.35	49.58	755.41	755.43
L	1200+69.35	49.58	755.38	755.41
C Brg. E. Abut.	1200+77.10	49.58	755.36	755.39
Bk. E. Abut.	1200+79.35	49.58	755.36	755.38

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	1199+32.85	57.33	755.19	755.21
C Brg. W. Abut.	1199+35.10	57.33	755.20	755.22
A	1199+45.10	57.33	755.22	755.24
B	1199+55.10	57.33	755.25	755.27
C	1199+65.10	57.33	755.27	755.28
C Brg. Pier 1	1199+72.85	57.33	755.28	755.30
D	1199+82.85	57.33	755.29	755.33
E	1199+92.85	57.33	755.30	755.37
F	1200+02.85	57.33	755.30	755.39
G	1200+12.85	57.33	755.30	755.38
H	1200+22.85	57.33	755.30	755.36
I	1200+32.85	57.33	755.29	755.33
C Brg. Pier 2	1200+39.35	57.33	755.28	755.31
J	1200+49.35	57.33	755.27	755.29
K	1200+59.35	57.33	755.25	755.27
L	1200+69.35	57.33	755.23	755.25
C Brg. E. Abut.	1200+77.10	57.33	755.21	755.23
Bk. E. Abut.	1200+79.35	57.33	755.20	755.22

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0020

SHEET SM-08 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	107
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	1.46	755.26	755.28
A1	1199+13.85	1.46	755.30	755.32
A2	1199+23.85	1.46	755.34	755.36
E. End W. Appr. Slab	1199+33.85	1.46	755.37	755.39
W. End E. Appr. Slab	1200+78.35	1.46	755.38	755.40
A3	1200+88.35	1.46	755.35	755.37
A4	1200+98.35	1.46	755.32	755.34
E. End E. Appr. Slab	1201+08.35	1.46	755.28	755.30

NORTH EDGE OF PAVEMENT & EB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	13.00	755.49	755.51
A1	1199+13.85	13.00	755.53	755.55
A2	1199+23.85	13.00	755.57	755.59
E. End W. Appr. Slab	1199+33.85	13.00	755.60	755.62
W. End E. Appr. Slab	1200+78.35	13.00	755.61	755.63
A3	1200+88.35	13.00	755.58	755.60
A4	1200+98.35	13.00	755.55	755.57
E. End E. Appr. Slab	1201+08.35	13.00	755.51	755.53

CROWN

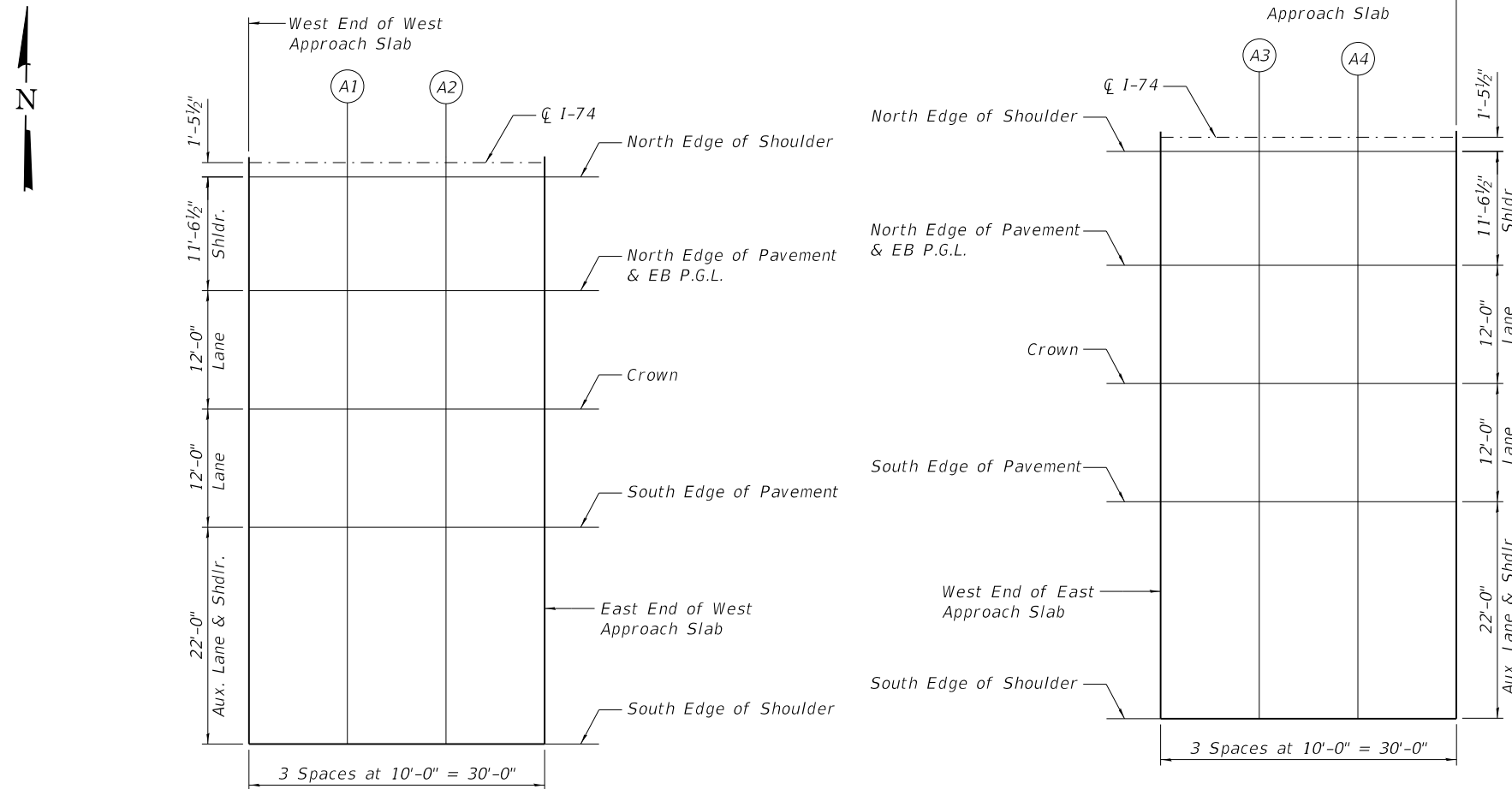
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	25.00	755.67	755.69
A1	1199+13.85	25.00	755.71	755.73
A2	1199+23.85	25.00	755.75	755.77
E. End W. Appr. Slab	1199+33.85	25.00	755.78	755.80
W. End E. Appr. Slab	1200+78.35	25.00	755.79	755.81
A3	1200+88.35	25.00	755.76	755.78
A4	1200+98.35	25.00	755.73	755.75
E. End E. Appr. Slab	1201+08.35	25.00	755.69	755.71

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	37.00	755.49	755.51
A1	1199+13.85	37.00	755.53	755.55
A2	1199+23.85	37.00	755.57	755.59
E. End W. Appr. Slab	1199+33.85	37.00	755.60	755.62
W. End E. Appr. Slab	1200+78.35	37.00	755.61	755.63
A3	1200+88.35	37.00	755.58	755.60
A4	1200+98.35	37.00	755.55	755.57
E. End E. Appr. Slab	1201+08.35	37.00	755.51	755.53

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	59.00	755.05	755.07
A1	1199+13.85	59.00	755.09	755.11
A2	1199+23.85	59.00	755.13	755.15
E. End W. Appr. Slab	1199+33.85	59.00	755.16	755.18
W. End E. Appr. Slab	1200+78.35	59.00	755.17	755.19
A3	1200+88.35	59.00	755.14	755.16
A4	1200+98.35	59.00	755.11	755.13
E. End E. Appr. Slab	1201+08.35	59.00	755.07	755.09



PLAN - EB APPROACH SLABS

Note: Offsets measured from \bar{C} roadway.

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Consulting Engineers
Springfield, Illinois

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	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF EB APPROACH SLAB ELEVATIONS
STRUCTURE NO. 010-0020**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	108
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	-63.64	754.96	754.98
A1	1199+13.85	-63.03	755.01	755.03
A2	1199+23.85	-62.42	755.06	755.08
E. End W. Appr. Slab	1199+33.85	-61.81	755.10	755.12
W. End E. Appr. Slab	1200+78.35	-59.00	755.17	755.19
A3	1200+88.35	-59.00	755.14	755.16
A4	1200+98.35	-59.00	755.11	755.13
E. End E. Appr. Slab	1201+08.35	-59.00	755.07	755.09

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	-37.00	755.49	755.51
A1	1199+13.85	-37.00	755.53	755.55
A2	1199+23.85	-37.00	755.57	755.59
E. End W. Appr. Slab	1199+33.85	-37.00	755.60	755.62
W. End E. Appr. Slab	1200+78.35	-37.00	755.61	755.63
A3	1200+88.35	-37.00	755.58	755.60
A4	1200+98.35	-37.00	755.55	755.57
E. End E. Appr. Slab	1201+08.35	-37.00	755.51	755.53

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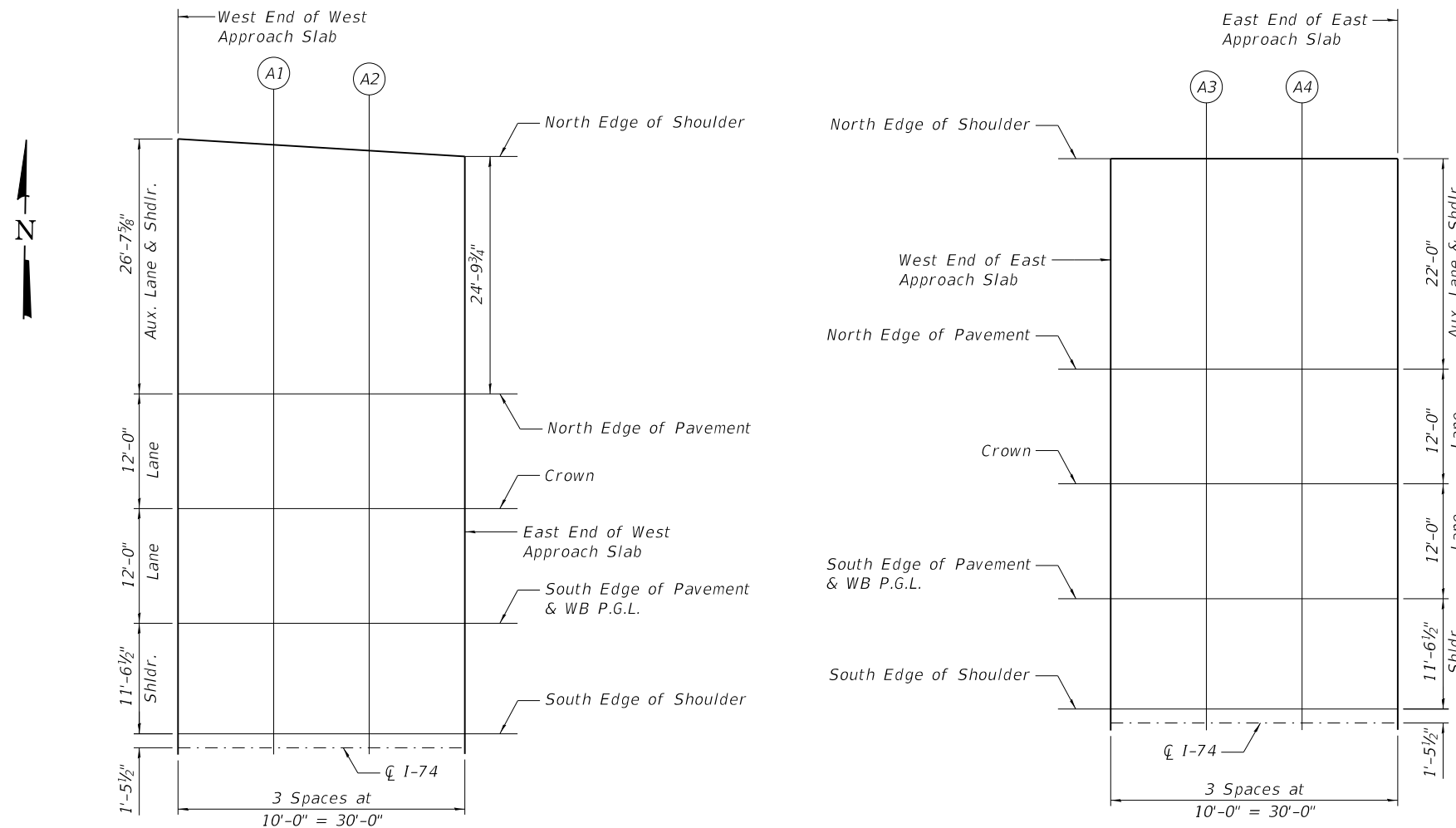
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	-25.00	755.67	755.69
A1	1199+13.85	-25.00	755.71	755.73
A2	1199+23.85	-25.00	755.75	755.77
E. End W. Appr. Slab	1199+33.85	-25.00	755.78	755.80
W. End E. Appr. Slab	1200+78.35	-25.00	755.79	755.81
A3	1200+88.35	-25.00	755.76	755.78
A4	1200+98.35	-25.00	755.73	755.75
E. End E. Appr. Slab	1201+08.35	-25.00	755.69	755.71

SOUTH EDGE OF PAVEMENT & WB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	-13.00	755.49	755.51
A1	1199+13.85	-13.00	755.53	755.55
A2	1199+23.85	-13.00	755.57	755.59
E. End W. Appr. Slab	1199+33.85	-13.00	755.60	755.62
W. End E. Appr. Slab	1200+78.35	-13.00	755.61	755.63
A3	1200+88.35	-13.00	755.58	755.60
A4	1200+98.35	-13.00	755.55	755.57
E. End E. Appr. Slab	1201+08.35	-13.00	755.51	755.53

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Slab	1199+03.85	-1.46	755.26	755.28
A1	1199+13.85	-1.46	755.30	755.32
A2	1199+23.85	-1.46	755.34	755.36
E. End W. Appr. Slab	1199+33.85	-1.46	755.37	755.39
W. End E. Appr. Slab	1200+78.35	-1.46	755.38	755.40
A3	1200+88.35	-1.46	755.35	755.37
A4	1200+98.35	-1.46	755.32	755.34
E. End E. Appr. Slab	1201+08.35	-1.46	755.28	755.30



PLAN - WB APPROACH SLABS

Note:
Offsets measured from ζ roadway.

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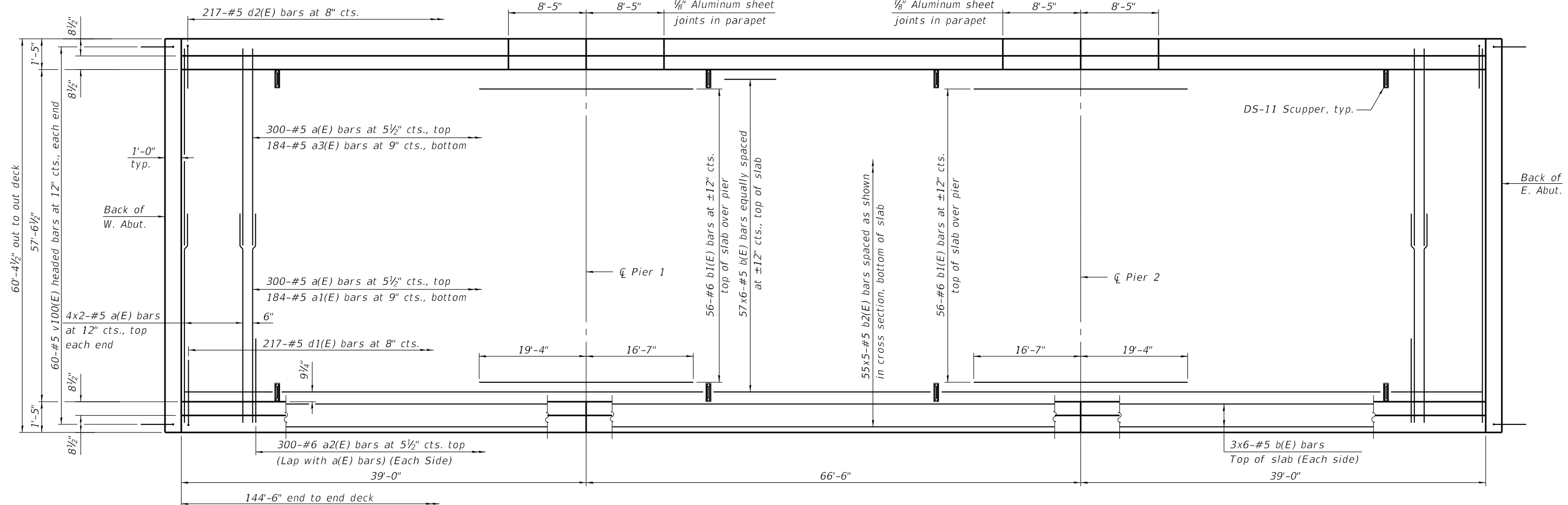
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF WB APPROACH SLAB ELEVATIONS
STRUCTURE NO. 010-0020**

SHEET SM-10 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

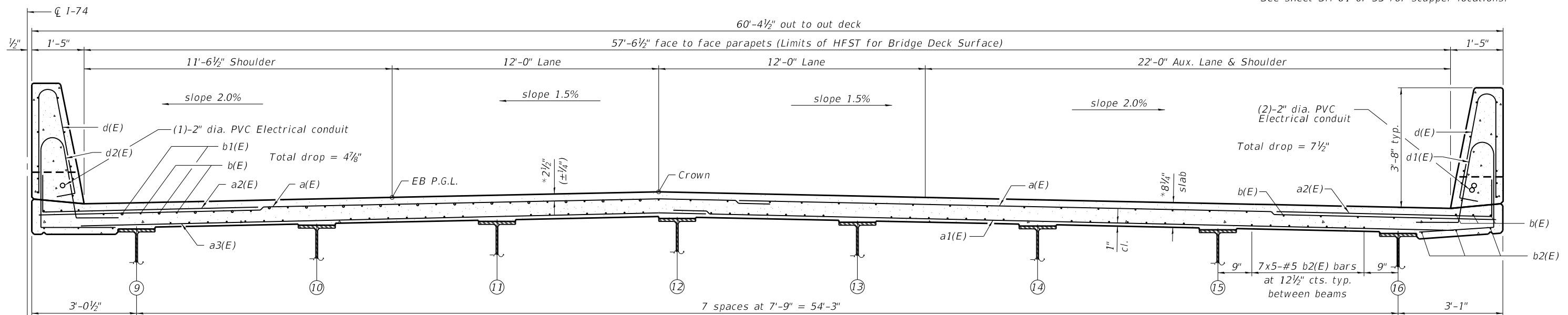


PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

Notes:
 See sheet SM-13 of 35 for superstructure details and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See sheet SM-01 of 35 for scupper locations.



CROSS SECTION

(Looking East)
 (Scuppers not shown for clarity)

* Prior to grinding

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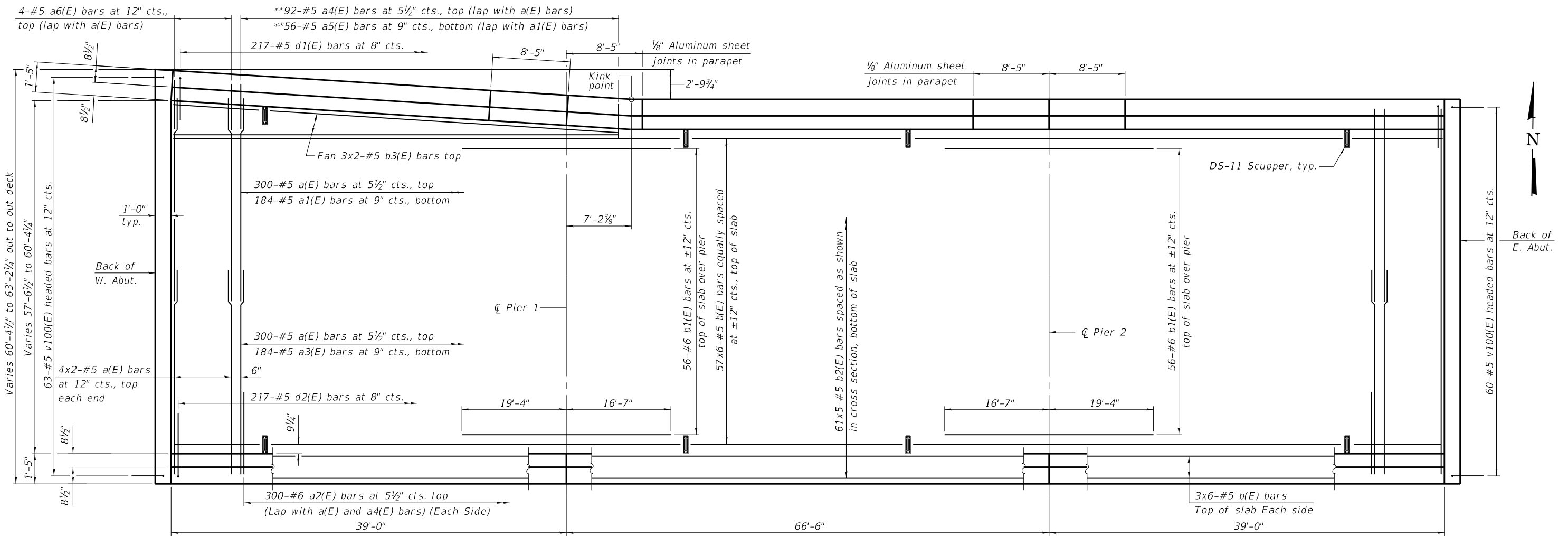
EB SUPERSTRUCTURE
 STRUCTURE NO. 010-0020

SHEET SM-11 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				

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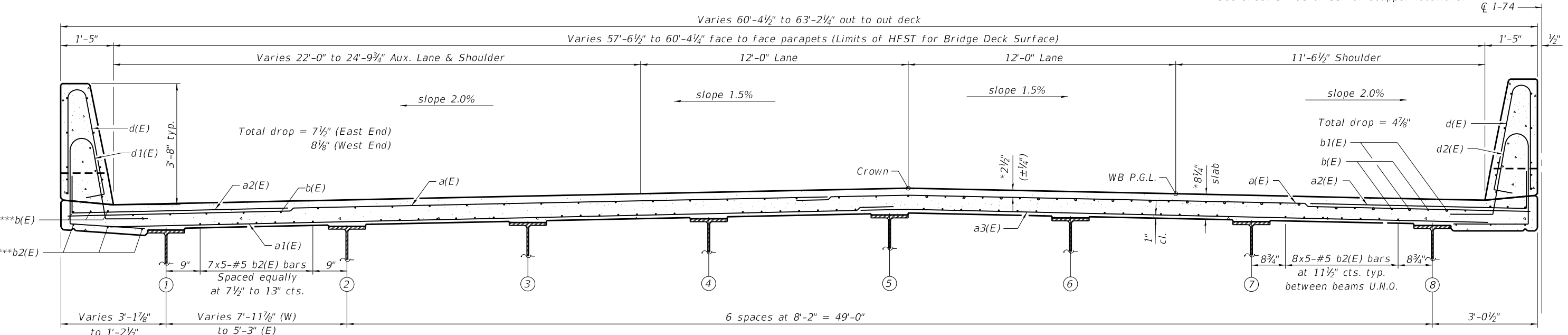
PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

** See Field Cutting Diagram on sheet SM-14 of 35

Notes:
 See sheet SM-14 of 35 for superstructure details and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See sheet SM-01 of 35 for scupper locations.



CROSS SECTION

(Looking East)
 (Scuppers not shown for Clarity)

*** Bend in Field at kink point

* Prior to grinding



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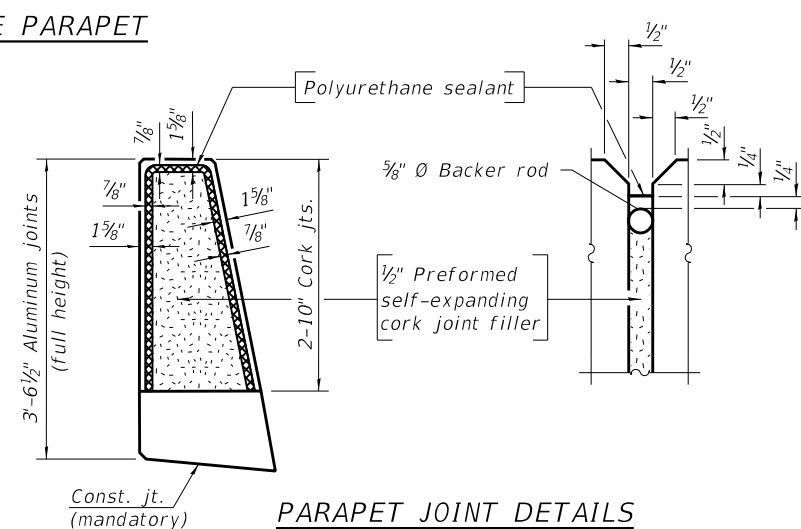
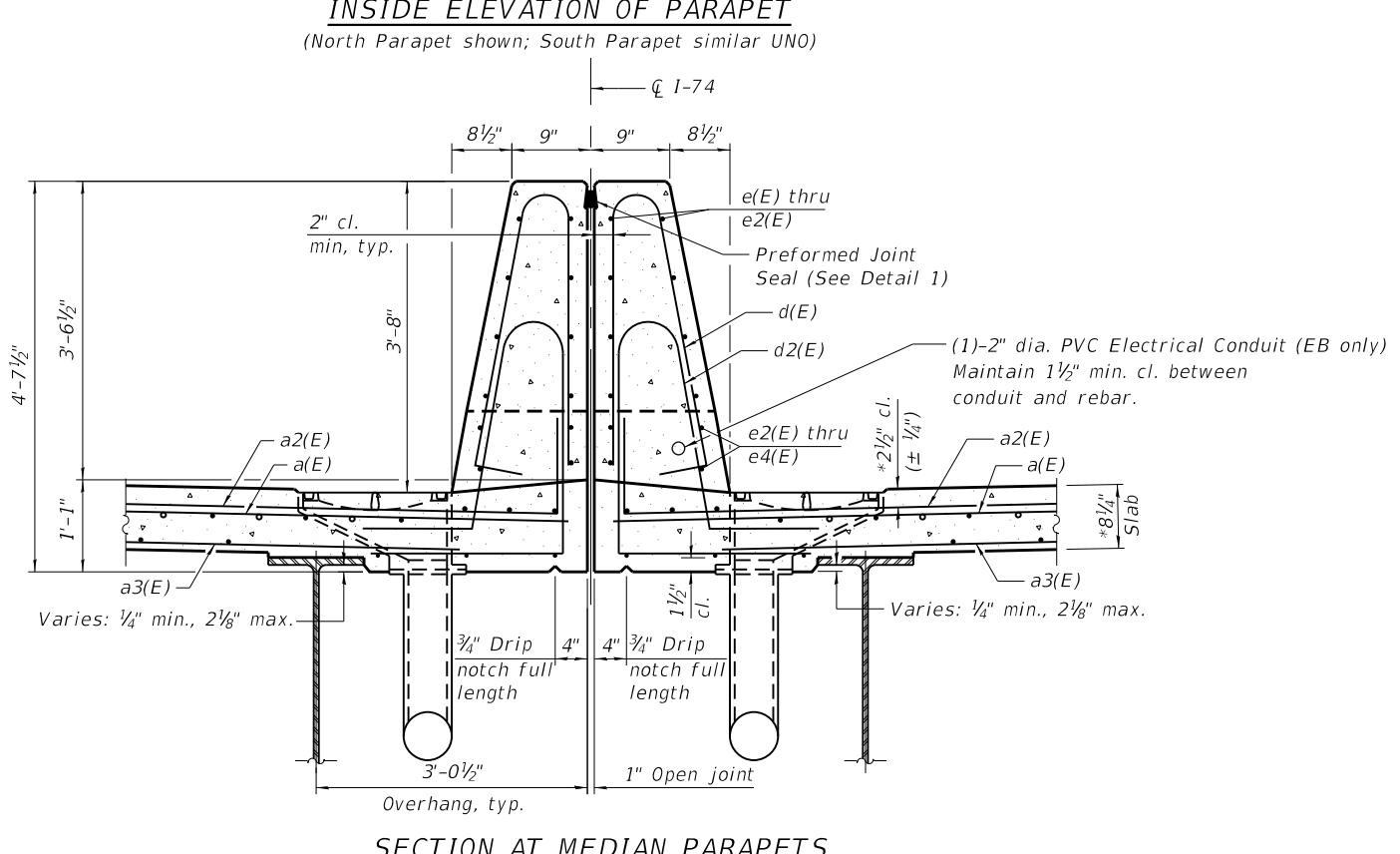
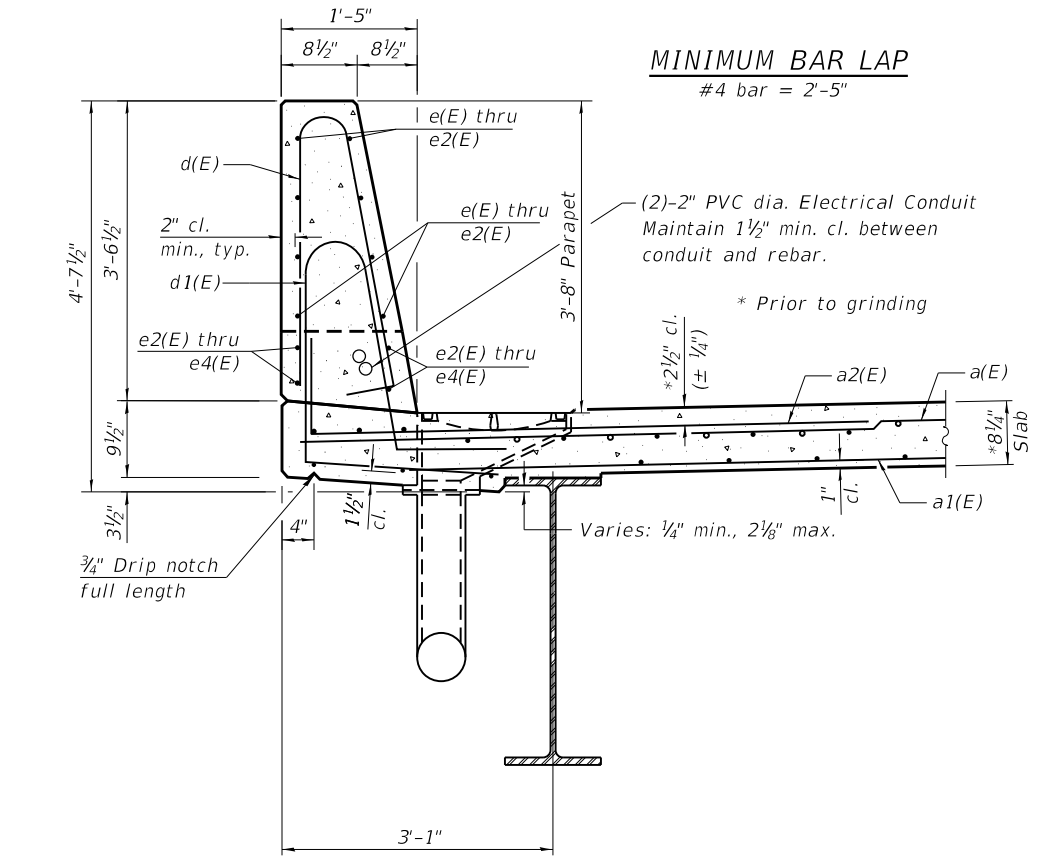
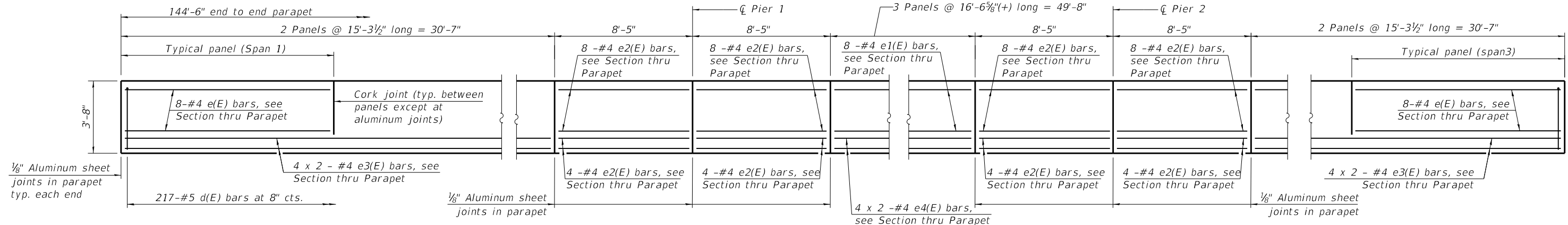
WB SUPERSTRUCTURE
STRUCTURE NO. 010-0020

SHEET SM-12 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				

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**EB SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	616	#5	31'-9"	—
a1(E)	184	#5	35'-9"	—
a2(E)	600	#6	8'-4"	—
a3(E)	184	#5	27'-6"	—
a7(E)	64	#5	1'-6"	—
b(E)	378	#5	27'-0"	—
b1(E)	112	#6	35'-11"	—
b2(E)	275	#5	31'-8"	—
d(E)	434	#5	7'-0"	—
d1(E)	217	#5	8'-6"	—
d2(E)	217	#5	8'-9"	—
e(E)	64	#4	15'-0"	—
e1(E)	48	#4	16'-3"	—
e2(E)	96	#4	8'-1"	—
e3(E)	32	#4	16'-6"	—
e4(E)	16	#4	26'-0"	—
m13(E)	32	#5	4'-0"	—
m14(E)	8	#6	1'-2"	—
m15(E)	32	#6	31'-5"	—
m17(E)	56	#6	7'-5"	—
m18(E)	8	#6	2'-9"	—
s10(E)	122	#5	6'-1"	U
s11(E)	108	#5	8'-2"	U
u10(E)	118	#5	3'-8"	U
v100(E)	120	#5	3'-1"	L
Reinforcement Bars, Epoxy Coated		Lbs.		80,150
Concrete Superstructure		Cu. Yds.		305.8
** Preformed Joint Seal 2 1/2"		Foot		205

Notes:
 The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 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.
 See sheet SM-14 of 35 for Detail 1 and Bar Bend details.

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.
 ** Includes quantity for approach slabs.

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 Consulting Engineers
 Springfield, Illinois

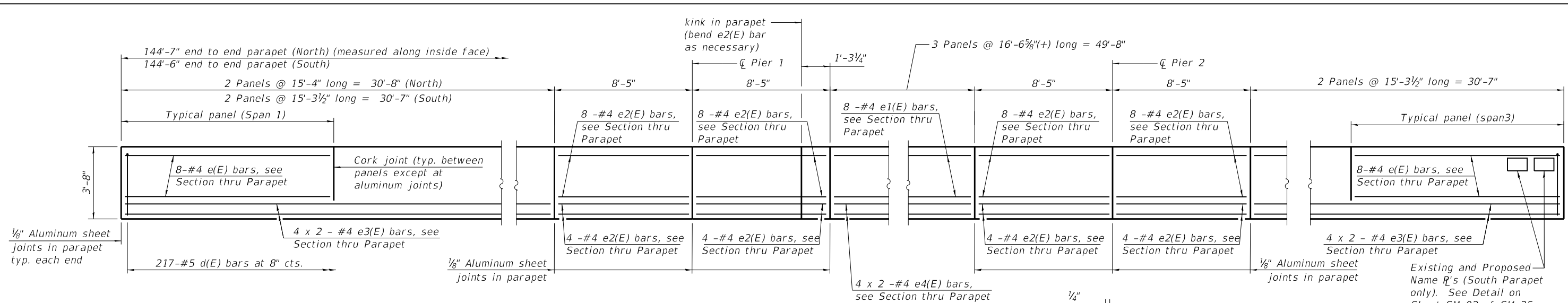
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**EB SUPERSTRUCTURE DETAILS
STRUCTURE NO. 010-0020**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

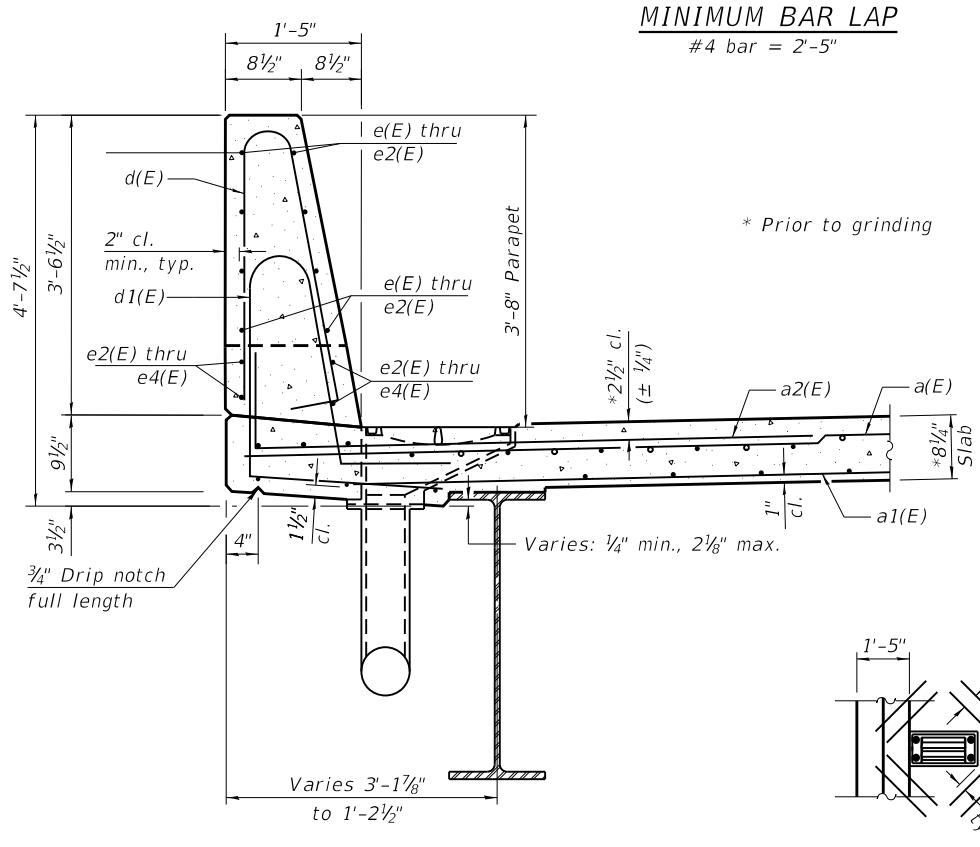
SHEET SM-13 OF SM-35 SHEETS



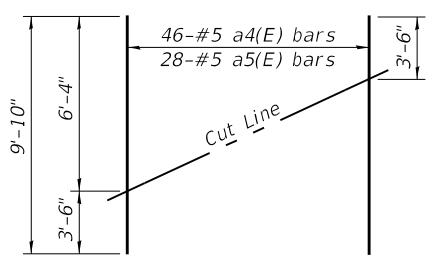
Existing and Proposed Name R's (South Parapet only). See Detail on Sheet SM-02 of SM-35.

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

INSIDE ELEVATION OF PARAPET
(North Parapet shown; South Parapet similar UNO)

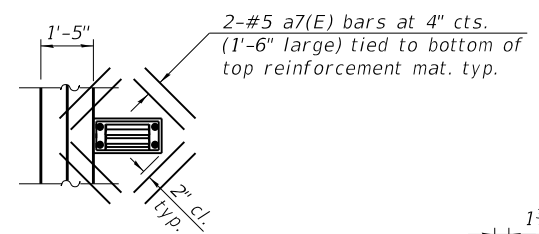


SECTION THRU OUTSIDE PARAPET



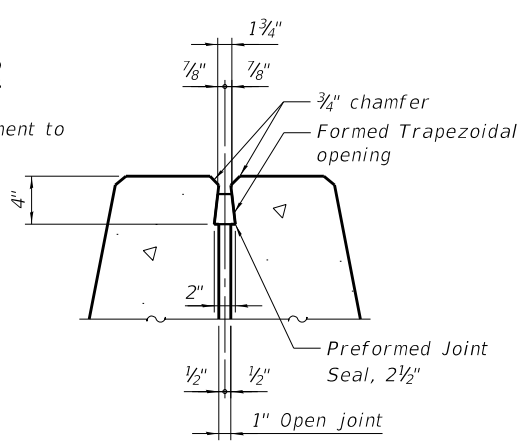
FIELD CUTTING DIAGRAM

Order a4(E) and a5(E) bars full length. Cut as shown and use remainder of bars in opposite end.

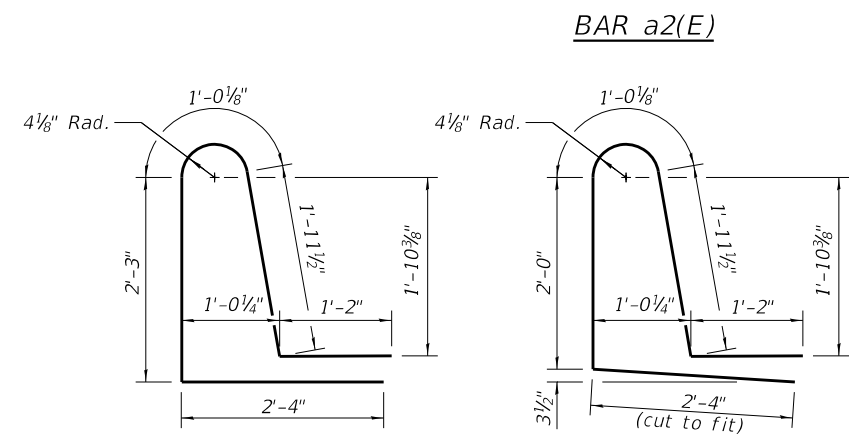


PLAN AT SCUPPER

Notes:
Cut longitudinal reinforcement to clear drainage scuppers.

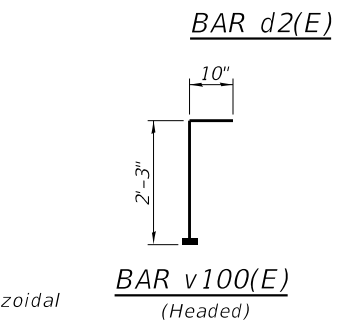


DETAIL 1



BAR a2(E)

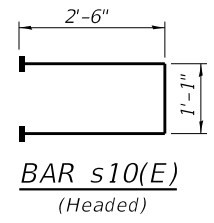
BAR d1(E)



BAR d2(E)

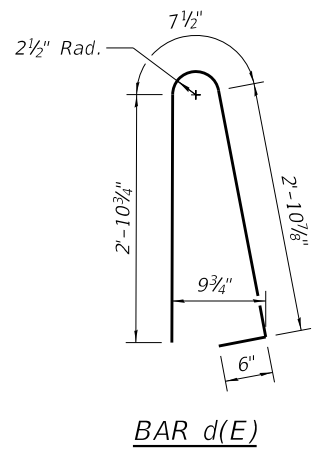
BAR v100(E)
(Headed)

BAR u10(E)



BAR s10(E)
(Headed)

BAR s11(E)



BAR d(E)

WB SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	616	#5	31'-9"	—
a2(E)	184	#5	35'-9"	—
a3(E)	600	#6	8'-4"	—
a4(E)	184	#5	27'-6"	—
a5(E)	46	#5	9'-10"	—
a6(E)	28	#5	9'-10"	—
a7(E)	4	#5	6'-4"	—
a7(E)	64	#5	1'-6"	—
b(E)	378	#5	27'-0"	—
b1(E)	112	#6	35'-11"	—
b2(E)	305	#5	31'-8"	—
b3(E)	6	#5	25'-0"	—
d(E)	434	#5	7'-0"	—
d1(E)	217	#5	8'-6"	—
d2(E)	217	#5	8'-9"	—
e(E)	64	#4	15'-0"	—
e1(E)	48	#4	16'-3"	—
e2(E)	96	#4	8'-1"	—
e3(E)	32	#4	16'-6"	—
e4(E)	16	#4	26'-0"	—
m10(E)	16	#6	32'-10"	—
m11(E)	4	#6	7'-8"	—
m12(E)	48	#6	7'-10"	—
m13(E)	32	#5	4'-0"	—
m14(E)	8	#6	1'-2"	—
m15(E)	16	#6	31'-5"	—
m16(E)	4	#6	4'-11"	—
m18(E)	8	#6	2'-9"	—
s10(E)	119	#5	6'-1"	—
s11(E)	106	#5	8'-2"	—
u10(E)	121	#5	3'-8"	—
v100(E)	123	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Lbs.		82,120
Concrete Superstructure		Cu. Yds.		307.3

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

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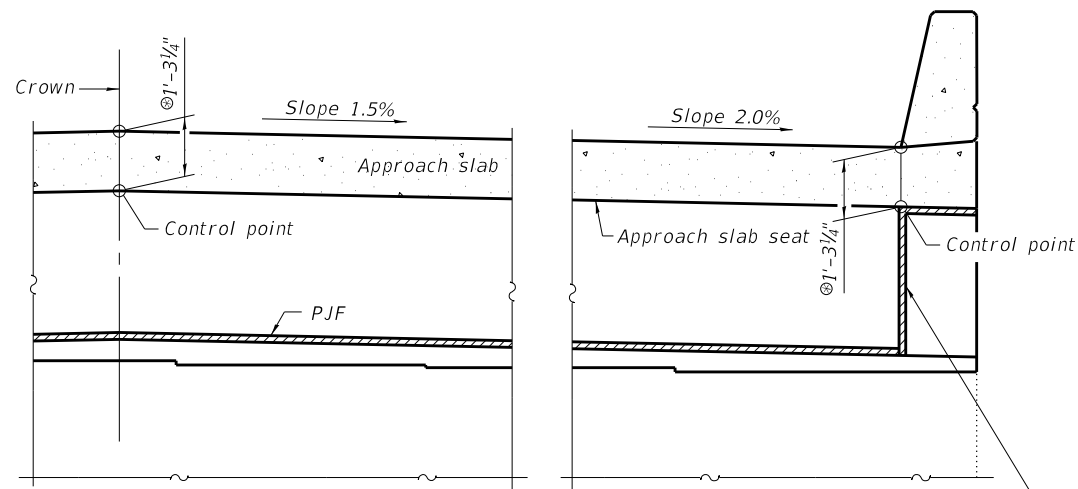
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Consulting Engineers
Springfield, Illinois

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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - DAS	REVISED -
	CHECKED - MTH	REVISED -

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WB SUPERSTRUCTURE DETAILS
STRUCTURE NO. 010-0020
SHEET SM-14 OF SM-35 SHEETS

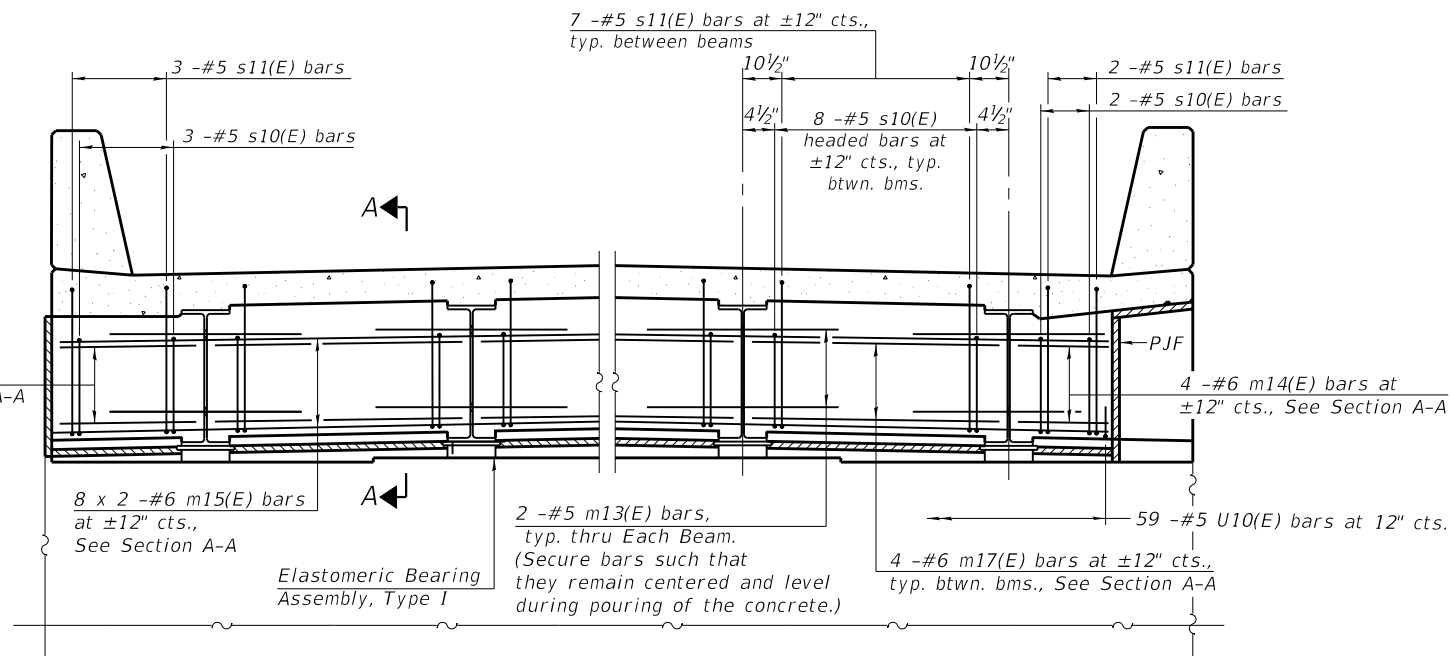
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



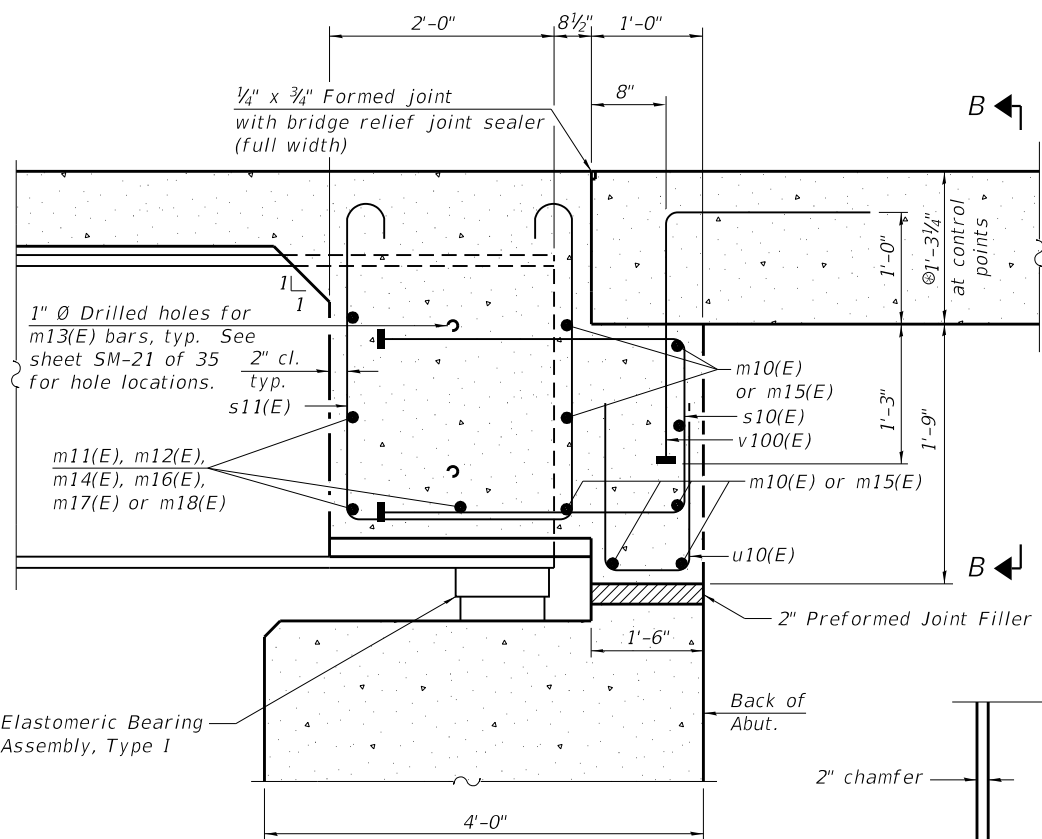
SECTION B-B © Prior to grinding.

2" P.J.F. (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier.

4 -#6 m18(E) bars at ±12" cts., See Section A-A



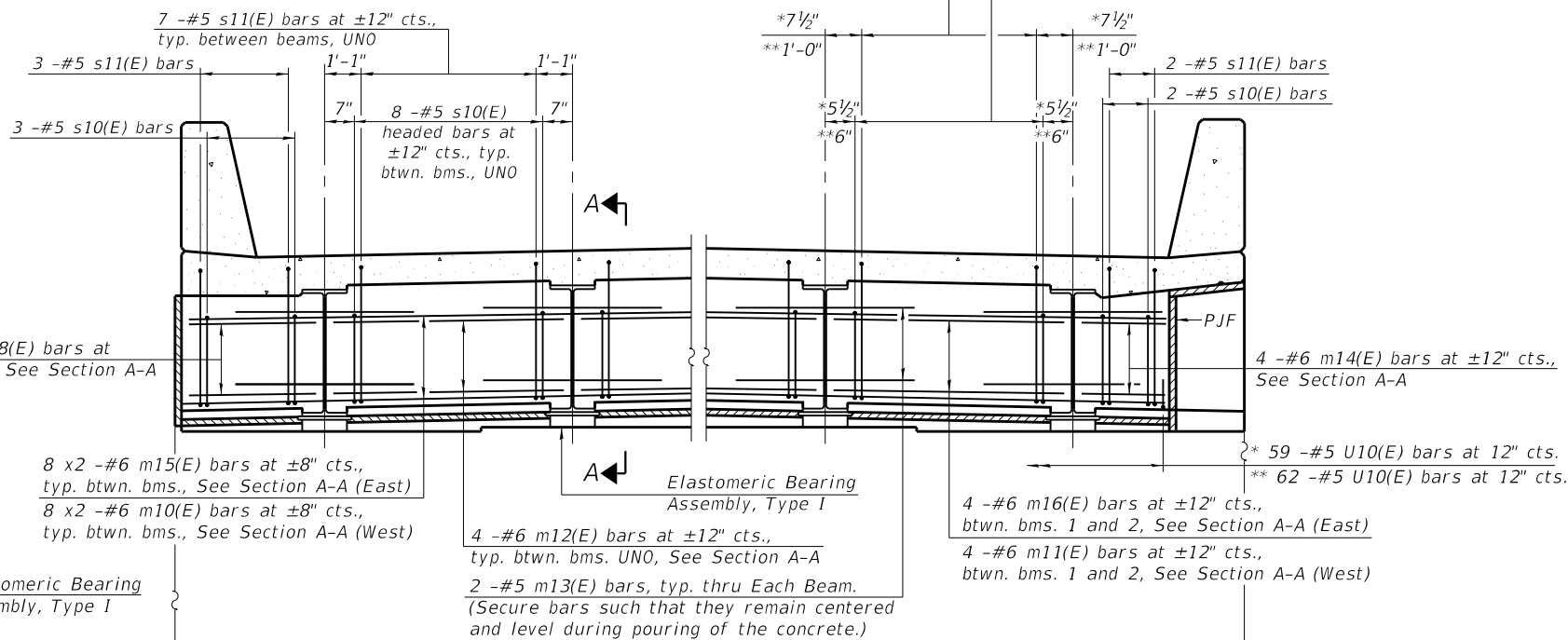
DIAPHRAGM AT EB ABUTMENTS
(Looking East)



SECTION A-A

4 -#6 m18(E) bars at ±12" cts., See Section A-A

8 x 2 -#6 m15(E) bars at ±8" cts., typ. btwn. bms., See Section A-A (East)
8 x 2 -#6 m10(E) bars at ±8" cts., typ. btwn. bms., See Section A-A (West)



DIAPHRAGM AT WB ABUTMENTS
(Looking West)

* East Diaphragm
** West Diaphragm

Notes:
Reinforcement bars in diaphragms are billed with superstructure on sheets SM-13 and SM-14 of 35.
Concrete in diaphragm is included with Concrete Superstructure on sheets SM-13 and SM-14 of 35.
For details of bars s10(E), s11(E) and v100(E) see sheets SM-13 and SM-14 of 35.
The approach slab seat shall have a constant slope determined from the control points shown.
For bearing details see sheet SM-23 of 35.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

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MINIMUM BAR LAP
#6 bar = 4'-0"

PLAN AT ABUTMENT
(Showing bottom flange of beam)



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CONCRETE DIAPHRAGM DETAILS
STRUCTURE NO. 010-0020

SHEET SM-15 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

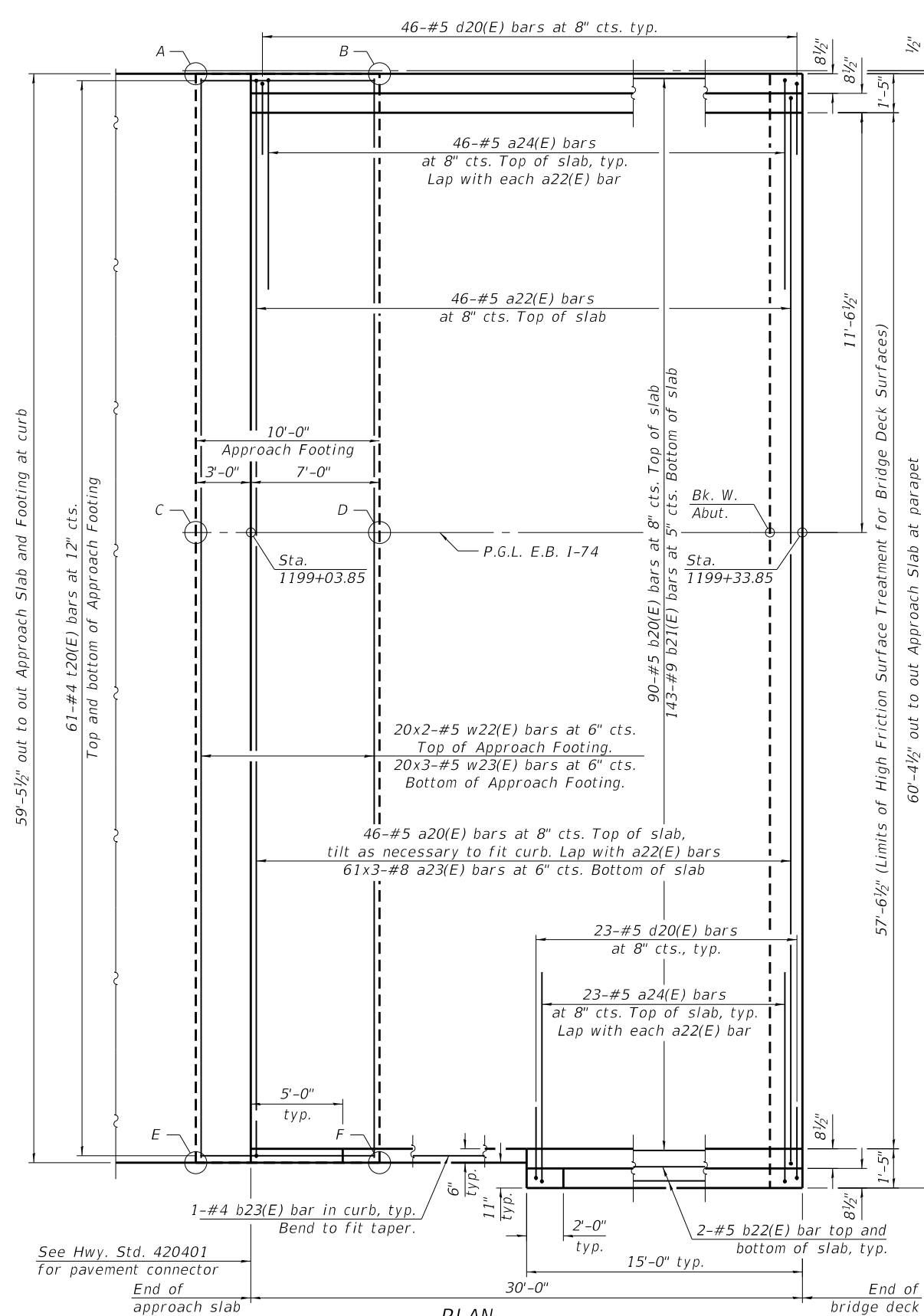
TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
A	753.97	753.14	754.03	753.20
B	754.23	753.39	754.29	753.45
C	754.27	753.44	754.25	753.42
D	753.77	752.94	753.83	753.00
E	753.81	752.98	753.79	752.96

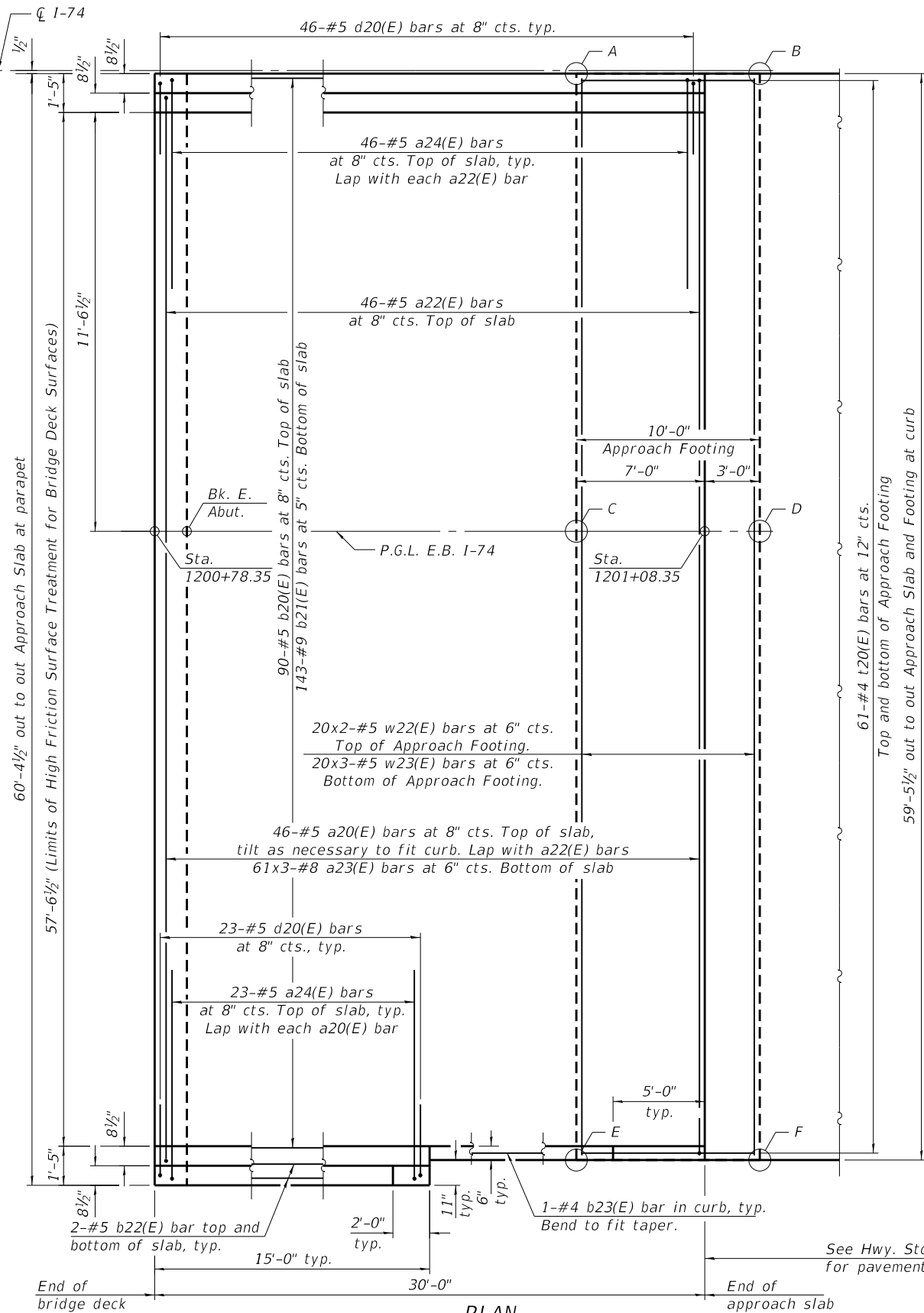


MINIMUM BAR LAP

#5 bar = 3'-6"
#8 bar = 5'-1"



PLAN
(West Approach Slab)



PLAN
(East Approach Slab)

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EB APPROACH SLAB DETAILS
STRUCTURE NO. 010-0020

SHEET SM-16 OF SM-35 SHEETS

USER NAME =	DESIGNED - MC	REVISED -
CHECKED - BB	CHECKED - BB	REVISED -
PLOT SCALE =	DRAWN - RJO	REVISED -
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	115
CONTRACT NO. 70C64				

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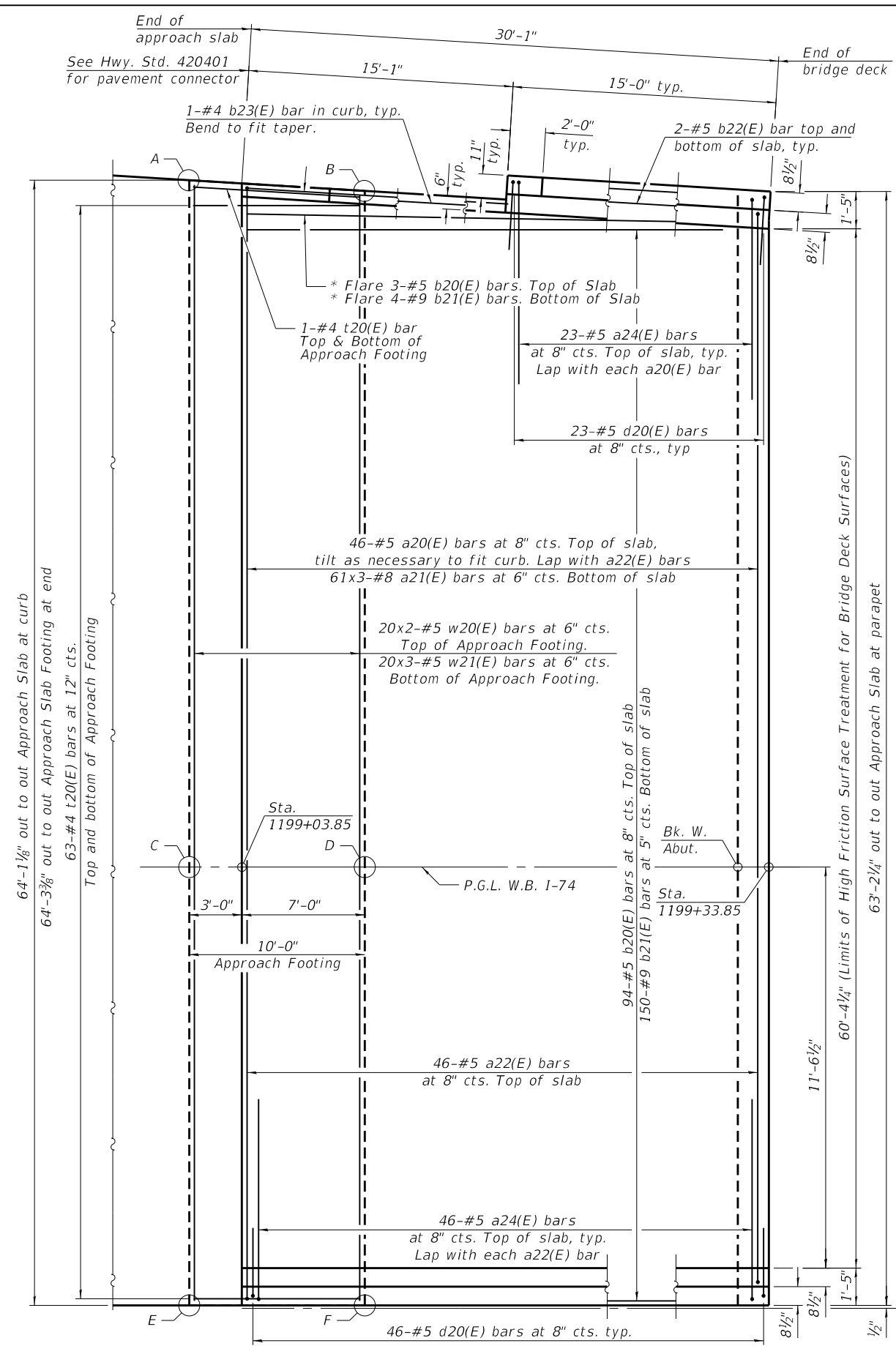
TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
A	753.67	752.84	753.83	753.00
B	753.73	752.89	753.79	752.96
C	754.23	753.39	754.29	753.45
D	754.27	753.44	754.25	753.42
E	753.97	753.14	754.03	753.20
F	754.01	753.18	753.99	753.16

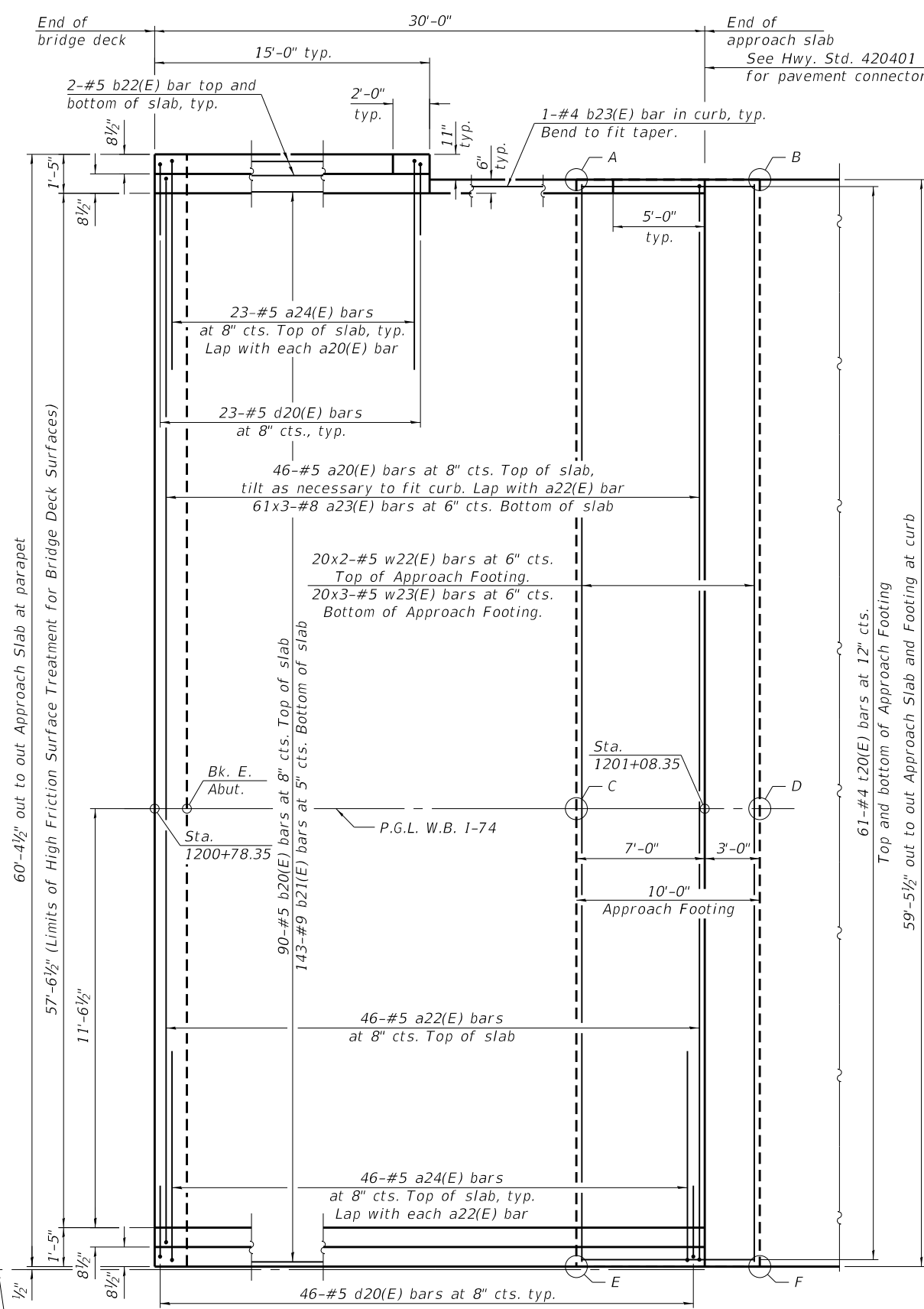


MINIMUM BAR LAP
#5 bar = 3'-6"
#8 bar = 5'-1"

* Order bars full length and cut to fit to relieve congestion.



PLAN
(West Approach Slab)



PLAN
(East Approach Slab)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB APPROACH SLAB DETAILS
STRUCTURE NO. 010-0020

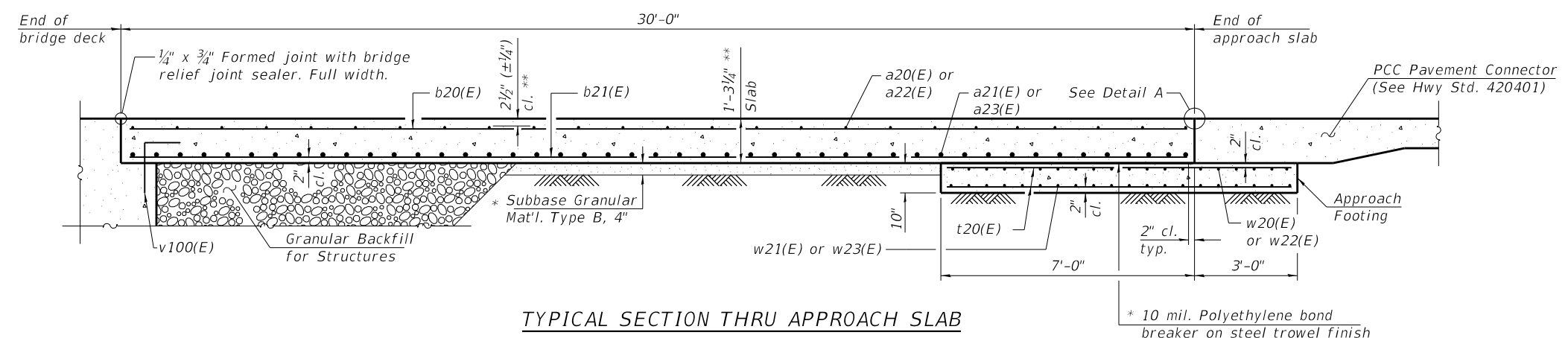
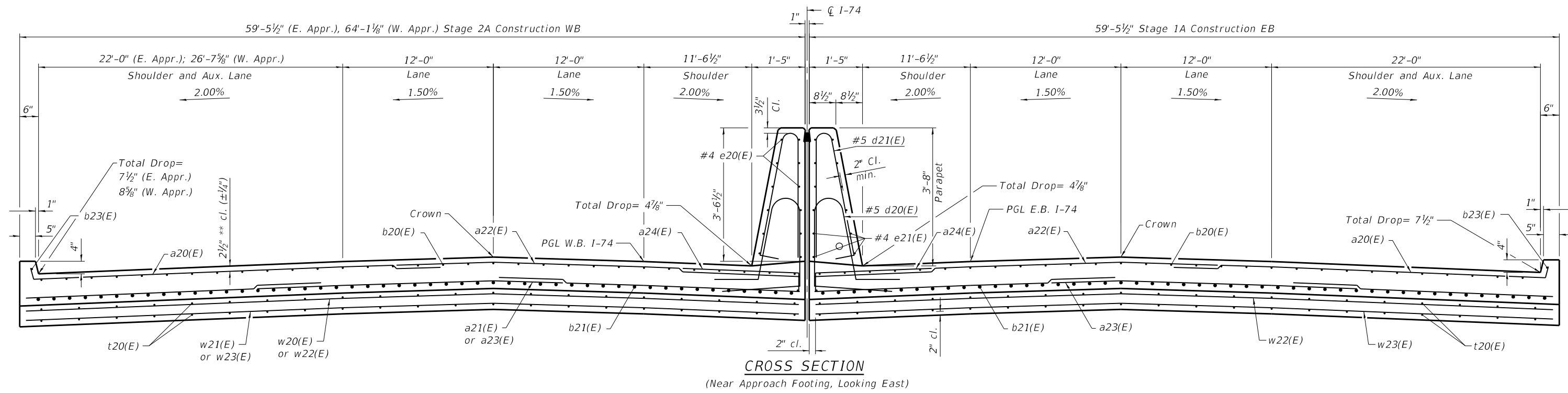
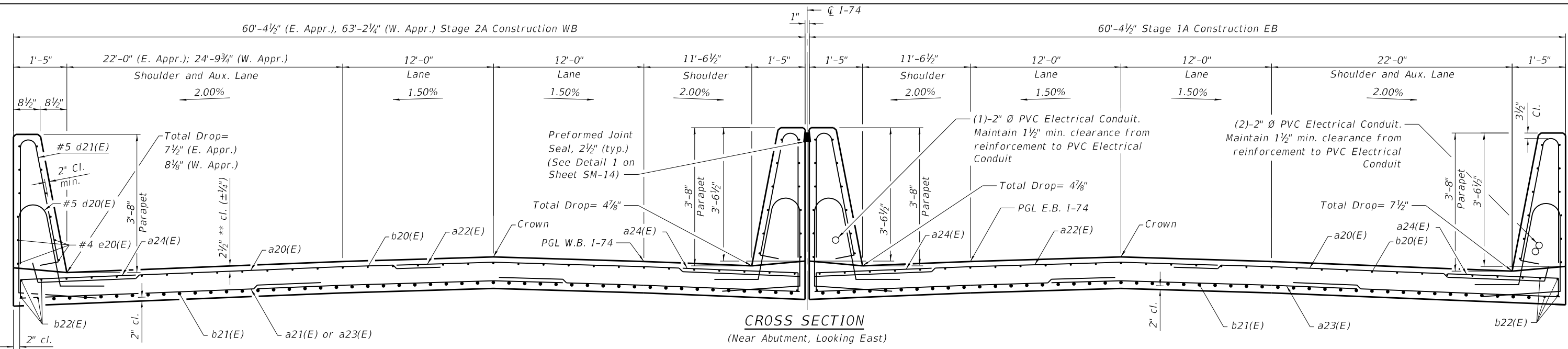
SHEET SM-17 OF SM-35 SHEETS

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PLOT DATE =	CHECKED - BB	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT				

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Notes:
 See Sheet SM-19 of SM-36 for Detail A.
 * Cost included with Concrete Superstructure (Approach Slab).
 ** Prior to Grinding

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 DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS
 STRUCTURE NO. 010-0020

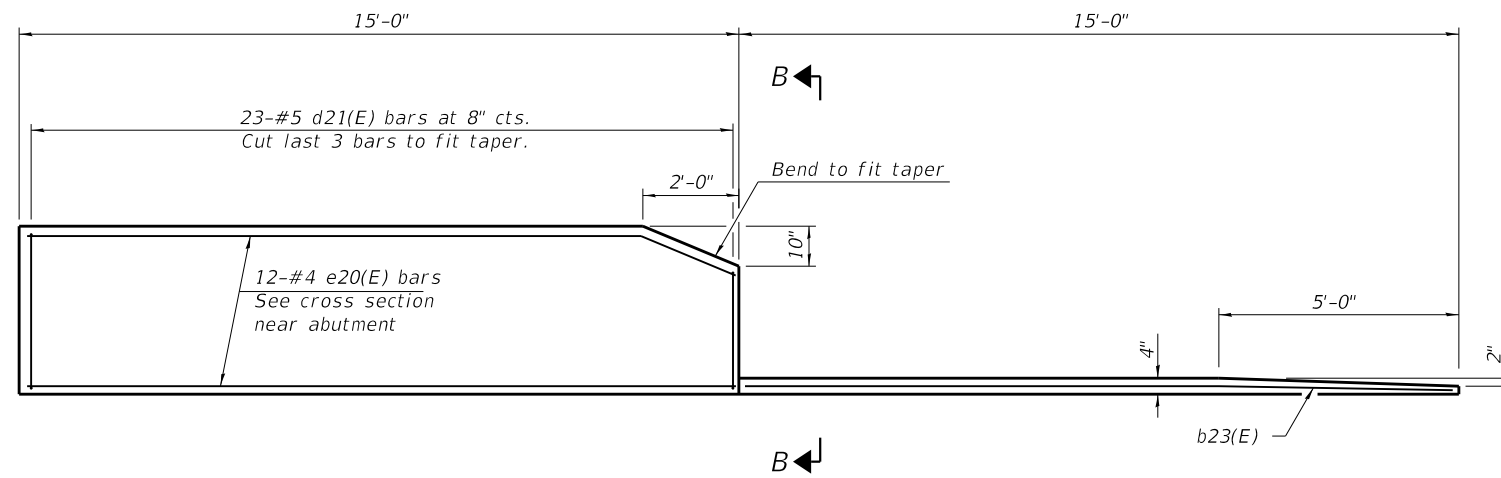
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	117
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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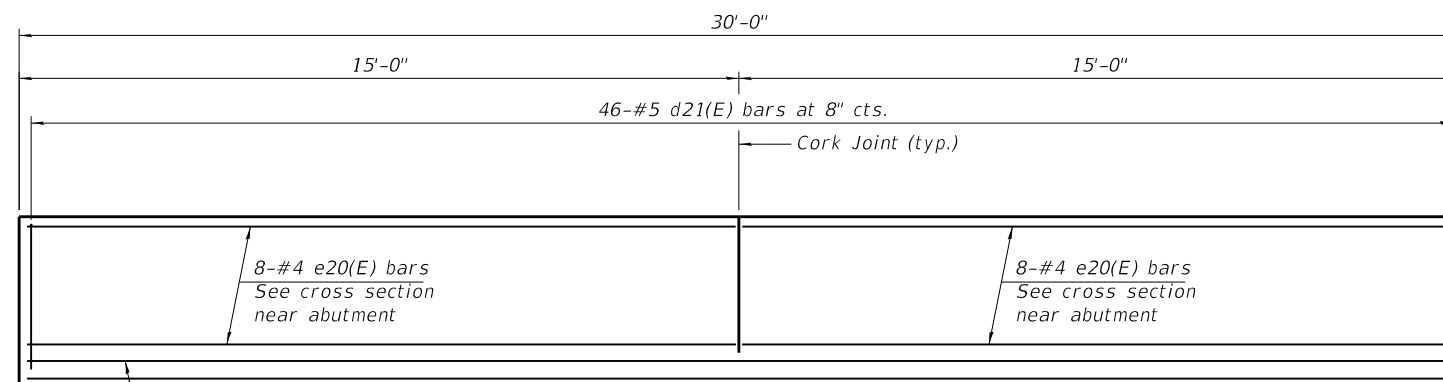
Kaskaskia
 Engineering Group, LLC
 288 E. Main St., Suite 200
 Moline, IL 61704
 309.233.2877
 309.233.2977
 www.kaskaskiaeng.com

USER NAME =	DESIGNED - MC	REVISED -
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DRAWN - RJO	DRAWN - RJO	REVISED -
CHECKED - BB	CHECKED - BB	REVISED -

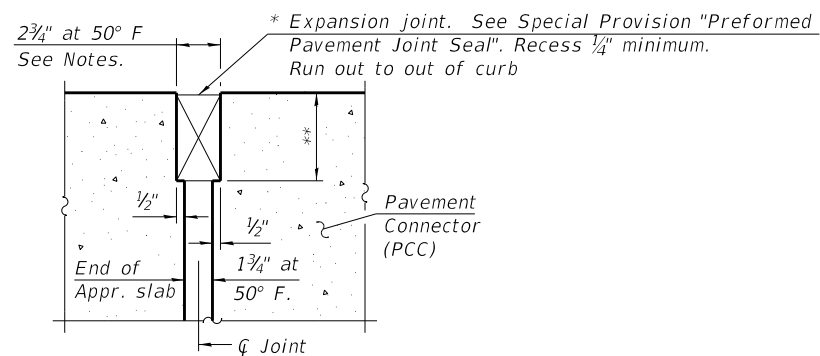
SHEET SM-18 OF SM-35 SHEETS



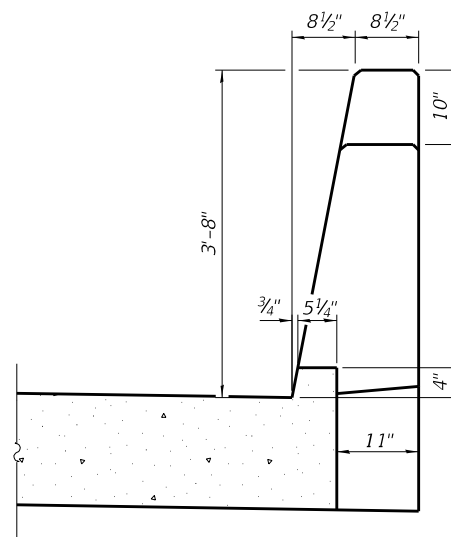
INSIDE ELEVATION OF PARAPET AND CURB
(WB, East Approach North Parapet shown, other parapets similar.)



INSIDE ELEVATION OF MEDIAN PARAPET
(EB, West Approach Median Parapet shown, other median parapets similar.)



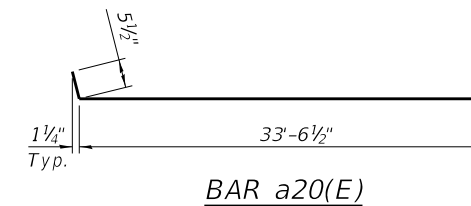
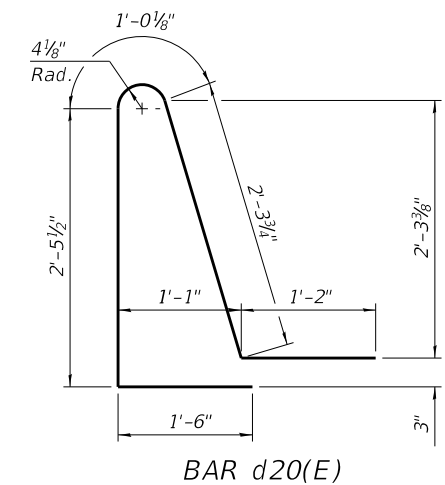
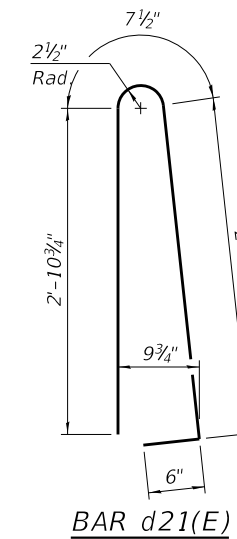
DETAIL A



VIEW B-B

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 (Q_{max}) = 2.0 ksf. Cost of excavation for approach footing included with Concrete Structures. For Granular Backfill for Structures and drainage treatment details, see sheet SM-2 of SM-36. See sheet SM-14 of SM-36 for details of parapet joints and Preformed Joint Seal at median parapets.



**FOUR APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a20(E)	184	#5	34'-0"	U
a21(E)	183	#8	24'-10"	U
a22(E)	184	#5	32'-6"	U
a23(E)	549	#8	23'-5"	U
a24(E)	276	#5	7'-4"	U
b20(E)	367	#5	29'-8"	U
b21(E)	583	#9	29'-8"	U
b22(E)	16	#5	14'-8"	U
b23(E)	4	#4	14'-8"	U
d20(E)	276	#5	8'-6"	U
d21(E)	276	#5	7'-0"	U
e20(E)	112	#4	14'-8"	U
e21(E)	16	#4	29'-8"	U
t20(E)	494	#4	9'-8"	U
w20(E)	40	#5	33'-11"	U
w21(E)	60	#5	23'-10"	U
w22(E)	120	#5	31'-6"	U
w23(E)	180	#5	22'-2"	U
Concrete Superstructure		Cu. Yd.	25.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	342.0	
Concrete Structures		Cu. Yd.	75.3	
Reinforcement Bars, Epoxy Coated		Pound	151,860	

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**APPROACH SLAB DETAILS
STRUCTURE NO. 010-0020**

SHEET SM-19 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	118
CONTRACT NO. 70C64				

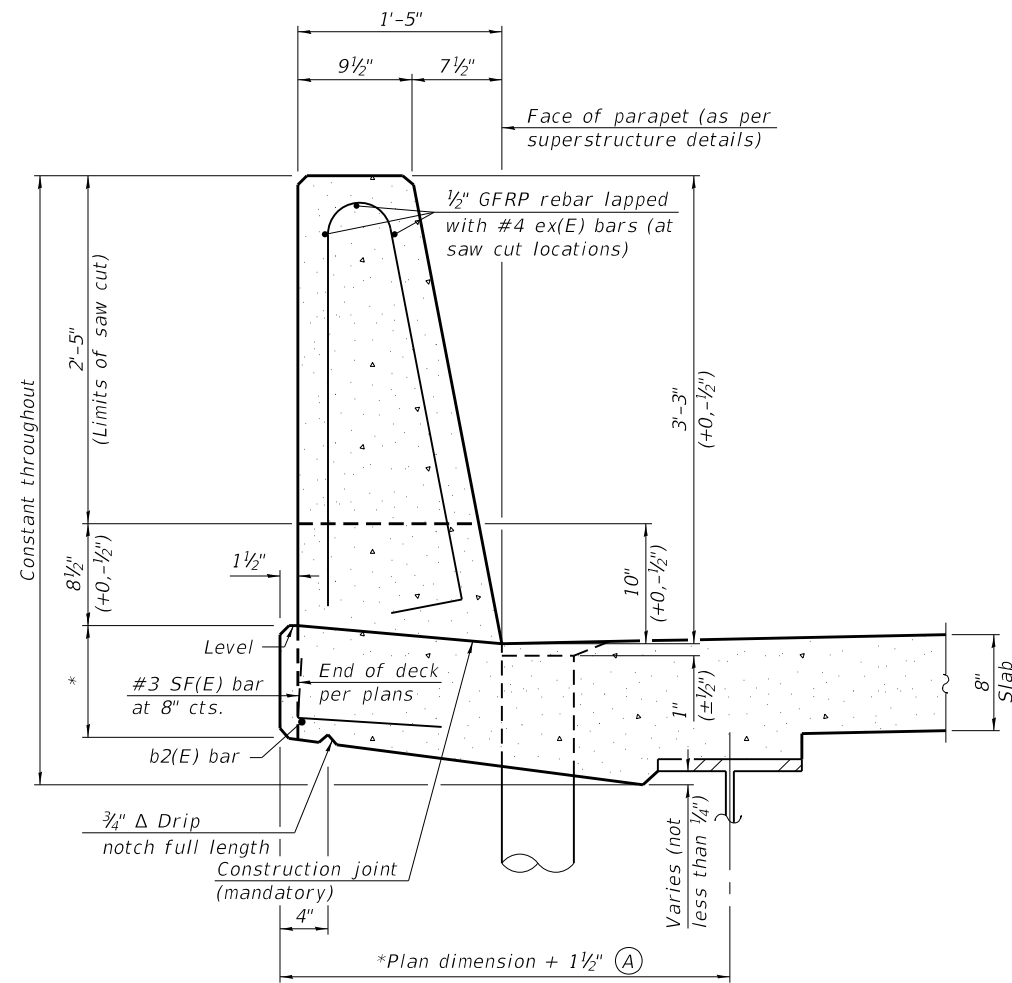
ILLINOIS FED. AID PROJECT

Kaskaskia Engineering Group, LLC
Professional Engineering Group
208 E. Main St., Suite 200
Moline, IL 61401
662.233.2877 phone
662.233.2977 fax
www.kaskaskiaeng.com
11/27/2018
20-086266

USER NAME =	DESIGNED - MC	REVISED -
CHECKED - BB	CHECKED - BB	REVISED -
PLOT SCALE =	DRAWN - RJO	REVISED -
PLOT DATE =	CHECKED - BB	REVISED -

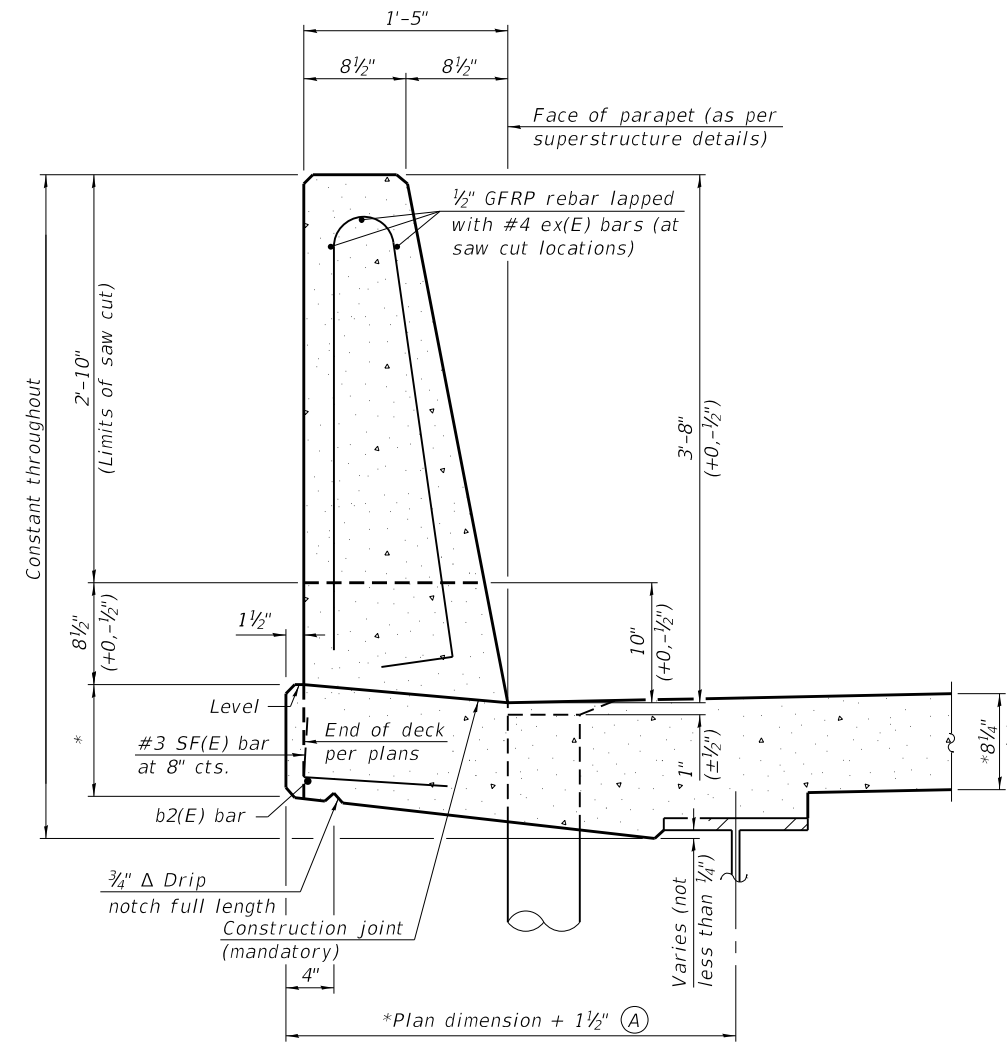
GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.
 Steel superstructure shown. Other superstructure types similar.



**39" CONSTANT-SLOPE
PARAPET SECTION**

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

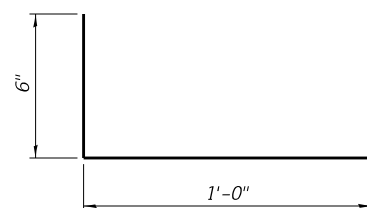


**44" CONSTANT-SLOPE
PARAPET SECTION**

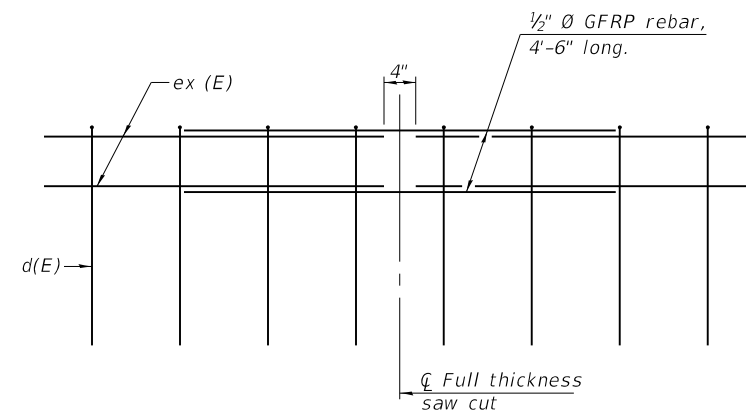
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

*See Superstructure Details.

* Prior to grinding



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

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

SFP 39-44

1-14-2019



USER NAME =	DESIGNED - HZT	REVISED -
	CHECKED - KK	REVISED -
PLOT SCALE =	DRAWN - DAS	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

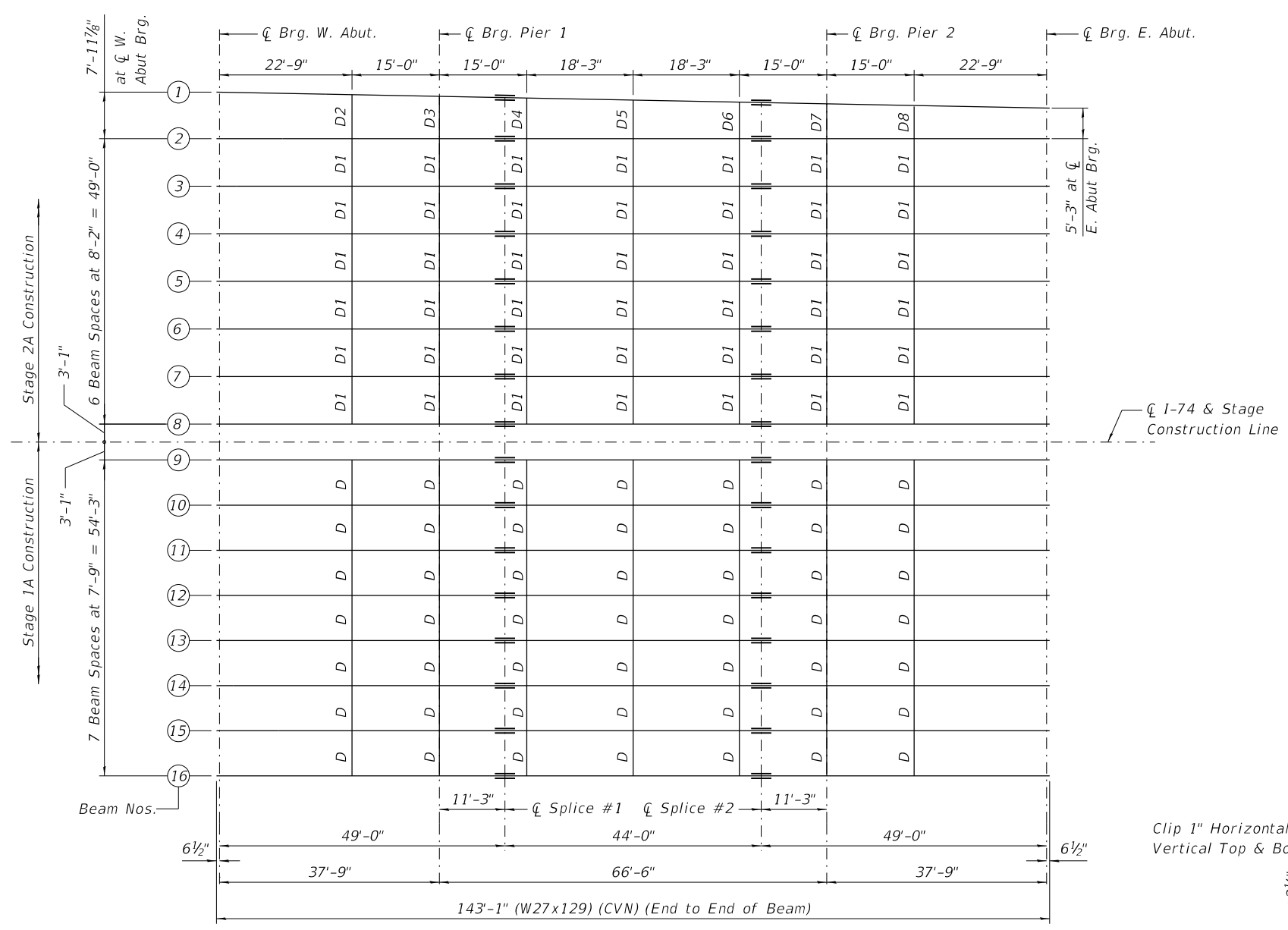
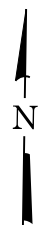
**CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 010-0020**

SHEET SM-20 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	119
CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

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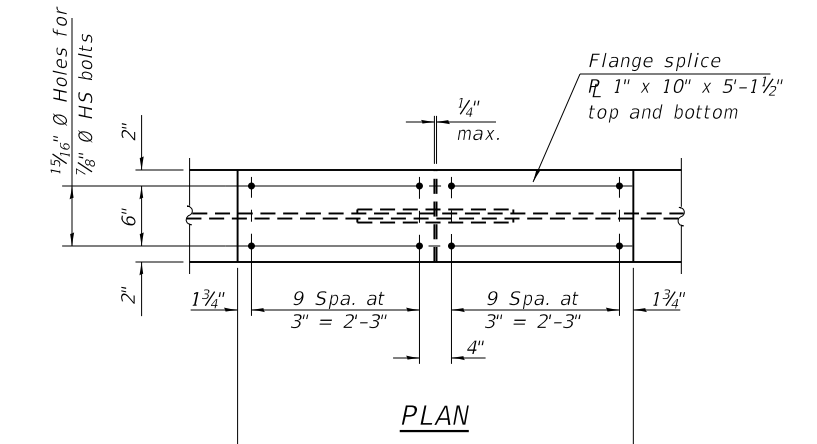


FRAMING PLAN

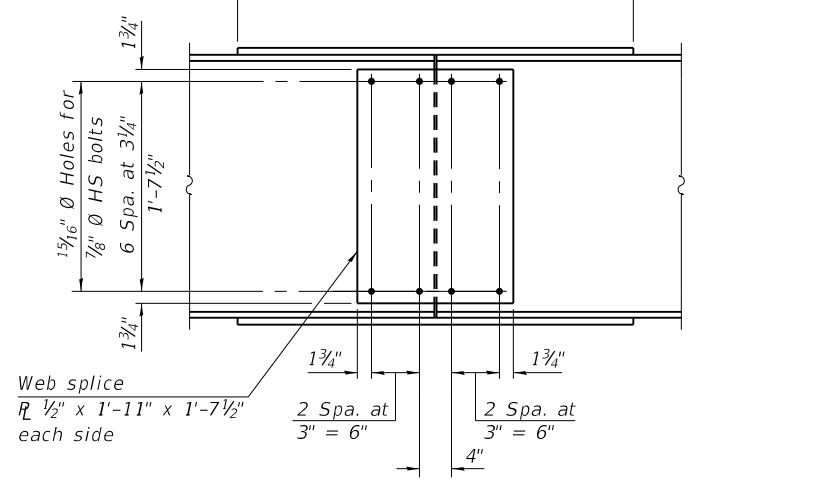
Notes:
 All beams, bearing stiffeners and splice plates shall be AASHTO M270 Grade 50 (CVN).
 All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing diaphragms.
 "CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.

TOP OF BEAM ELEVATIONS
 (For Fabrication Only)

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9	Beam 10	Beam 11	Beam 12	Beam 13	Beam 14	Beam 15	Beam 16
☐ Brg. W. Abut.	754.42	754.58	754.74	754.90	755.02	754.98	754.85	754.68	754.68	754.84	754.97	755.04	754.93	754.78	754.63	754.47
☐ Brg. Pier 1	754.45	754.60	754.77	754.93	755.05	755.01	754.87	754.71	754.71	754.86	754.99	755.07	754.95	754.81	754.66	754.50
☐ Splice #1	754.46	754.61	754.78	754.94	755.06	755.02	754.88	754.72	754.72	754.87	755.00	755.08	754.96	754.82	754.67	754.51
☐ Splice #2	754.50	754.63	754.78	754.94	755.07	755.02	754.89	754.72	754.72	754.88	755.01	755.08	754.97	754.83	754.67	754.51
☐ Brg. Pier 2	754.50	754.62	754.78	754.94	755.06	755.01	754.88	754.72	754.72	754.87	755.00	755.08	754.96	754.82	754.66	754.51
☐ Brg. E. Abut.	754.49	754.59	754.76	754.92	755.04	754.99	754.86	754.70	754.70	754.85	754.98	755.06	754.94	754.80	754.64	754.49

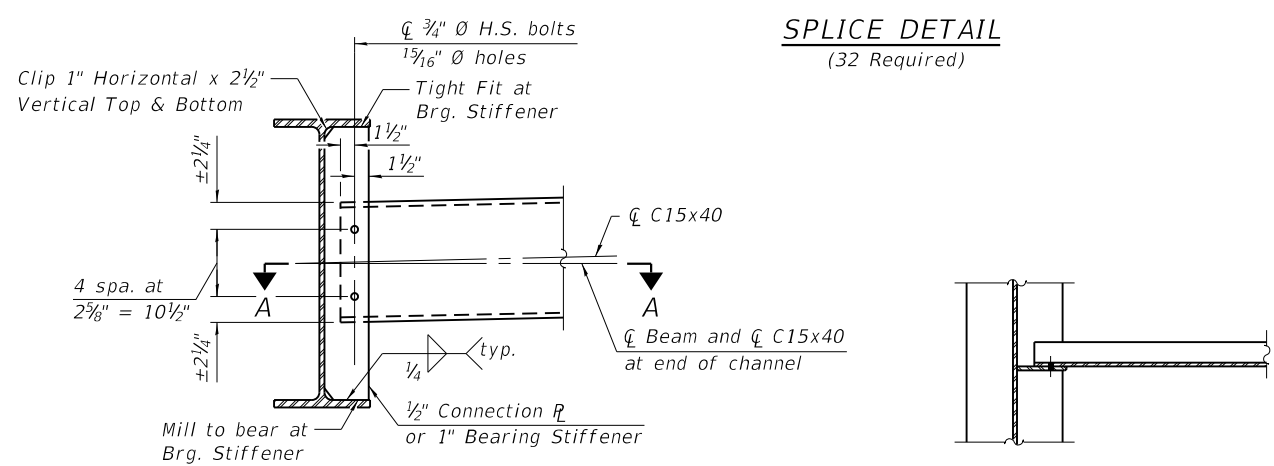


PLAN



ELEVATION

SPLICE DETAIL
 (32 Required)



INTERIOR DIAPHRAGM
 (98 Required)

SECTION A-A

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.
 The alternate, if utilized, shall be provided at no additional cost to the Department.

DIAPHRAGM DIMENSIONS

Label	D	D1	D2	D3	D4	D5	D6	D7	D8
*Length	7'-9"	8'-2"	7'-6 3/8"	7'-3 1/8"	6'-11 3/8"	6'-7 3/8"	6'-3 1/4"	5'-11 3/4"	5'-8 1/4"

* Measured ☐ Beam to ☐ Beam



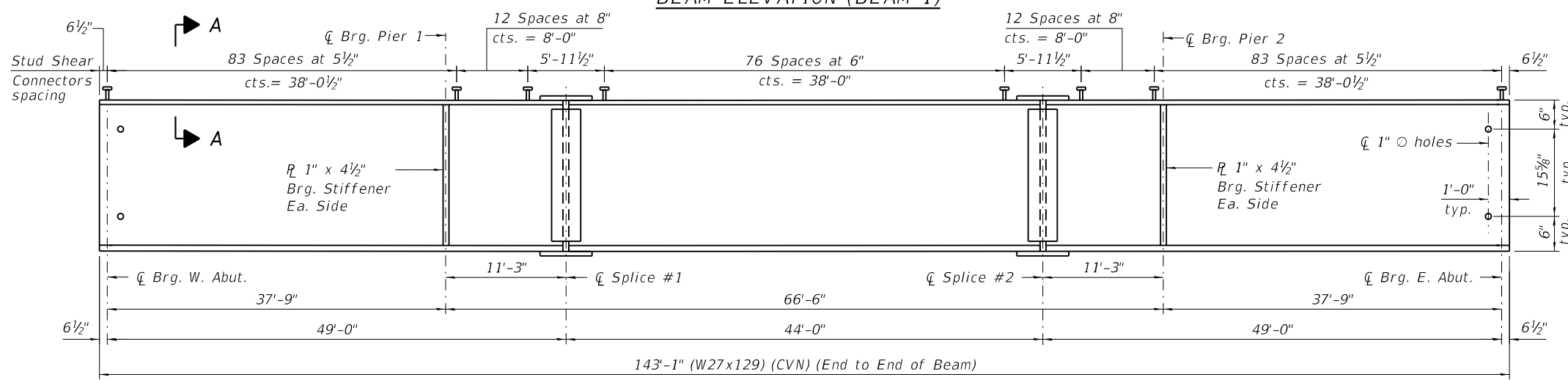
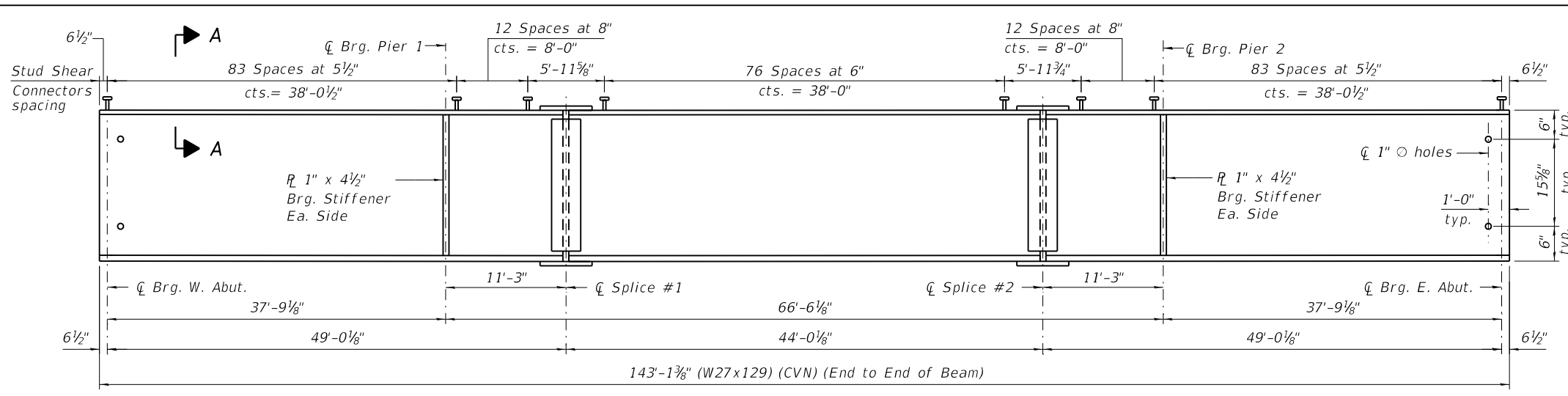
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PLOT DATE =	DRAWN - DAS	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 010-0020
 SHEET SM-21 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	120
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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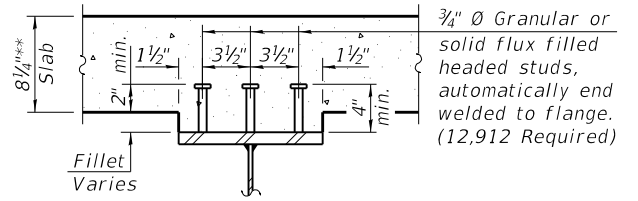
- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
- $I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- $M_L + I_M$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 $M_L + I_M$
- $\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1/ S_{nc}
- f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2/ $S_c(3n)$ or MDC2/ $S_c(cr)$ as applicable.
- f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW/ $S_c(3n)$ or MDW/ $S_c(cr)$ as applicable.
- f_s ($L + I_M$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
 $M_L + I_M / S_c(n)$ or $M_L + I_M / S_c(cr)$ as applicable.
- f_s (Service II): Sum of stresses as computed below (ksi).
 $f_s DC1 + f_s DC2 + f_s DW + 1.3 f_s(L + I_M)$
- 0.95Rh Fyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 ($f_s DC1 + f_s DC2$) + 1.5 $f_s DW + 1.75 f_s(L + I_M)$
- $\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- Vf: Maximum factored shear range in span computed according to Article 6.10.10.
- LLDF: Live Load Distribution Factor
- OCF: Obtuse Correction Factor

		0.4 Sp. 1 0.6 Sp. 3	Piers	0.5 Sp. 2
I_s	(in ⁴)	4760	4760	4760
$I_c(n)$	(in ⁴)	15503	15503	15503
$I_c(3n)$	(in ⁴)	11585	11585	11585
$I_c(cr)$	(in ⁴)	-	-	-
S_s	(in ³)	345	345	345
$S_c(n)$	(in ³)	557	557	557
$S_c(3n)$	(in ³)	505	505	505
$S_c(cr)$	(in ³)	-	-	-
DC1	(k/')	1.005	1.005	1.005
MDC1	(k')	46	315	241
DC2	(k/')	0.143	0.143	0.143
MDC2	(k')	6	45	34
DW	(k/')	0.359	0.359	0.359
MDW	(k')	16	114	85
LLDF		0.761	0.718	0.687
$M_L + I_M$	(k')	437	558	608
M_u (Strength I)	(k)	854	1598	1535
$\phi_f M_n$	(k)	2964	2210	2751
f_s DC1	(ksi)	1.60	10.96	8.38
f_s DC2	(ksi)	0.14	1.07	0.81
f_s DW	(ksi)	0.38	2.71	2.02
f_s ($L + I_M$)	(ksi)	9.42	12.03	13.11
f_s (Service II)	(ksi)	14.37	30.38	28.25
0.95Rh Fyf	(ksi)	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-
$\phi_f F_n$	(ksi)	-	-	-
Vf	(k)	36.0	53.0	33.0

		0.4 Sp. 1 0.6 Sp. 3	Piers	0.5 Sp. 2
I_s	(in ⁴)	4760	4760	4760
$I_c(n)$	(in ⁴)	15330	15330	15330
$I_c(3n)$	(in ⁴)	11394	11394	11394
$I_c(cr)$	(in ⁴)	-	-	-
S_s	(in ³)	345	345	345
$S_c(n)$	(in ³)	554	554	554
$S_c(3n)$	(in ³)	502	502	502
$S_c(cr)$	(in ³)	-	-	-
DC1	(k/')	0.962	0.962	0.962
MDC1	(k')	44	301	230
DC2	(k/')	0.143	0.143	0.143
MDC2	(k')	6	45	34
DW	(k/')	0.359	0.359	0.359
MDW	(k')	16	114	85
LLDF		0.733	0.692	0.662
$M_L + I_M$	(k')	421	537	586
M_u (Strength I)	(k)	823	1543	1483
$\phi_f M_n$	(k)	2954	2198	2752
f_s DC1	(ksi)	1.53	10.47	8.00
f_s DC2	(ksi)	0.14	1.08	0.81
f_s DW	(ksi)	0.38	2.73	2.03
f_s ($L + I_M$)	(ksi)	9.12	11.63	12.69
f_s (Service II)	(ksi)	13.91	29.39	27.34
0.95Rh Fyf	(ksi)	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-
$\phi_f F_n$	(ksi)	-	-	-
Vf	(k)	35.0	52.0	32.0

	Abut.		Pier	
	Interior	Exterior	Interior	Exterior
LLDF	0.826	0.633	0.826	0.633
OCF	-	1.00	-	-
RDC1 (k)	* 47.7	* 42.8	60.7	58.4
RDC2 (k)	1.5	1.5	8.6	8.6
RDW (k)	3.8	3.8	21.7	21.7
R_L (k)	51.9	39.8	90.5	69.4
R_{IM} (k)	14.1	10.8	19.0	14.5
RTotal (k)	119.0	98.7	200.5	172.6

	Abut.		Pier	
	Interior	Exterior	Interior	Exterior
LLDF	0.797	0.611	0.797	0.611
OCF	-	1.00	-	-
RDC1 (k)	* 45.4	* 41.6	58.1	57.1
RDC2 (k)	1.5	1.5	8.6	8.6
RDW (k)	3.8	3.8	21.7	21.7
R_L (k)	50.1	38.4	87.3	66.9
R_{IM} (k)	13.6	10.4	18.3	14.1
RTotal (k)	114.4	95.7	194.0	168.4



** Prior to grinding

* Includes weight of concrete end diaphragm.



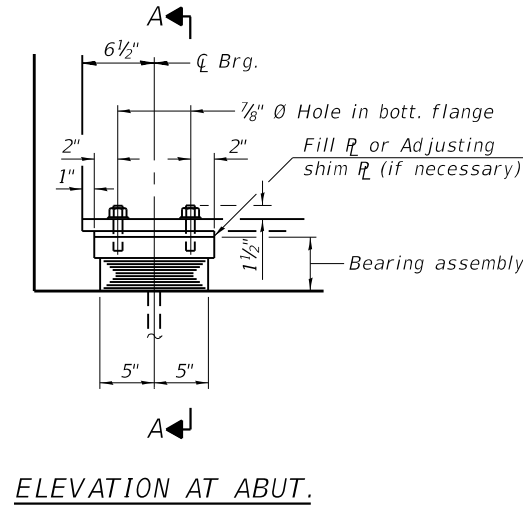
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PLOT SCALE =	CHECKED - KK	REVISED -
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	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

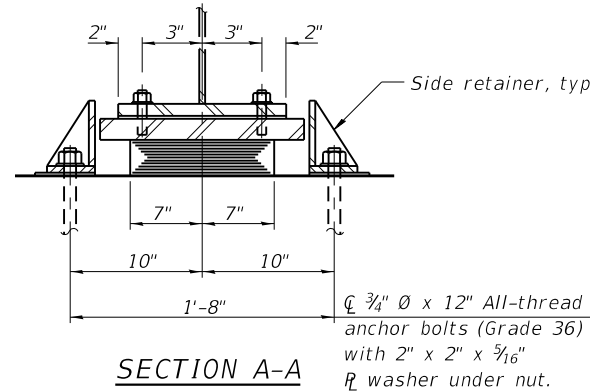
STEEL DETAILS
STRUCTURE NO. 010-0020

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

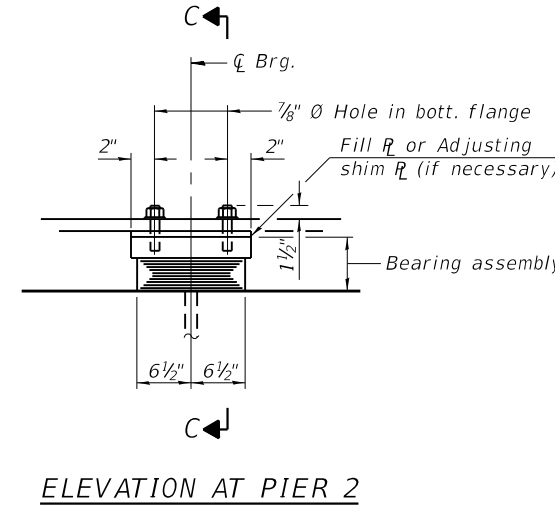
SHEET SM-22 OF SM-35 SHEETS



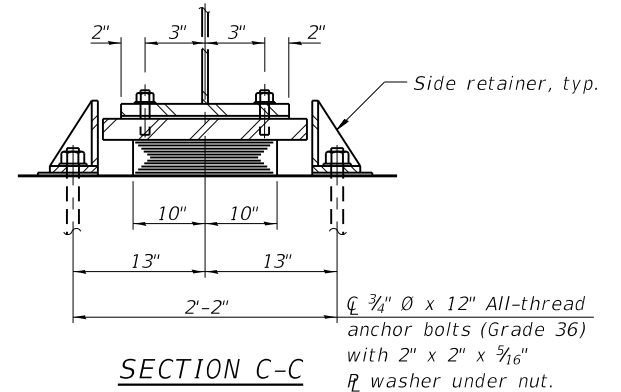
ELEVATION AT ABUT.



SECTION A-A
 3/4" Ø x 12" All-thread anchor bolts (Grade 36) with 2" x 2" x 5/16" R washer under nut.



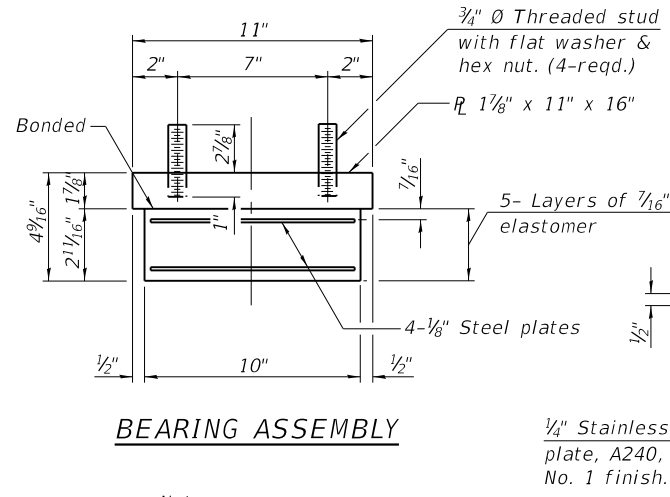
ELEVATION AT PIER 2



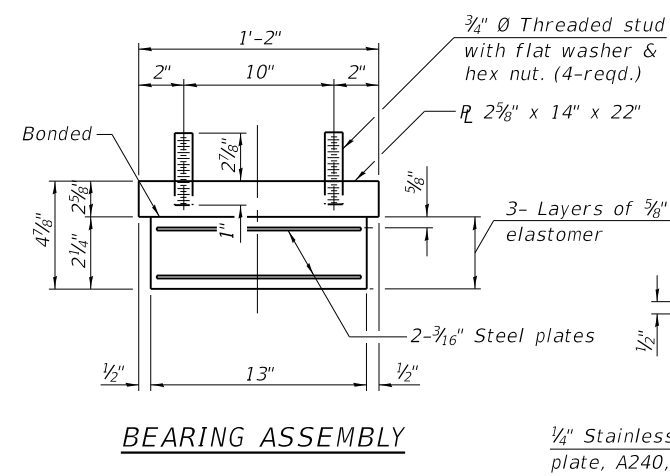
SECTION C-C
 3/4" Ø x 12" All-thread anchor bolts (Grade 36) with 2" x 2" x 5/16" R washer under nut.

TYPE I ELASTOMERIC EXP. BRG. AT ABUTMENTS
 (32 Required)

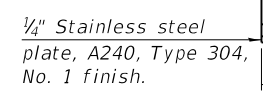
TYPE I ELASTOMERIC EXP. BRG. AT PIER 2
 (16 Required)



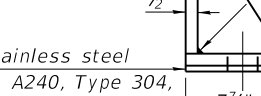
BEARING ASSEMBLY



BEARING ASSEMBLY



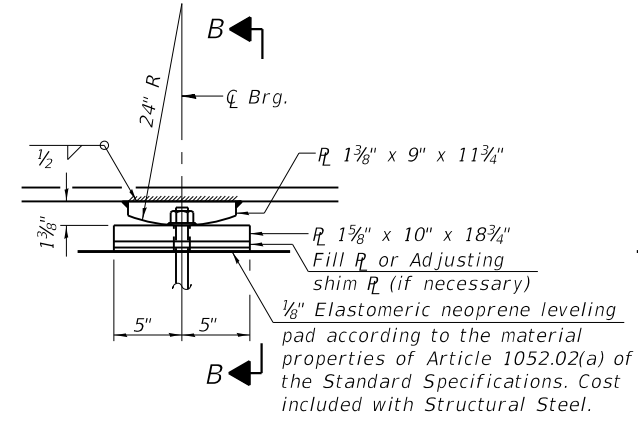
SIDE RETAINER
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



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

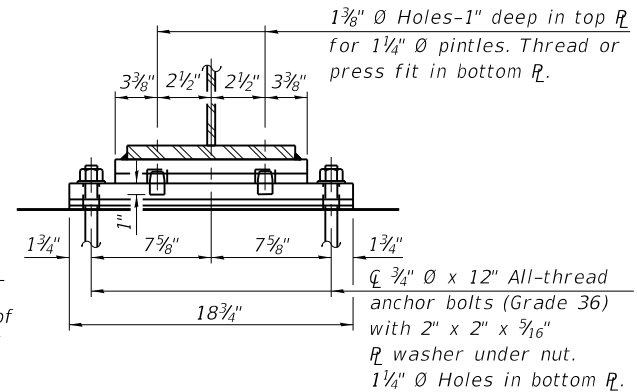
Note: Fill or Shim plates shall not be placed under bearing assembly.

Note: Fill or plates shall not be placed under bearing assembly.

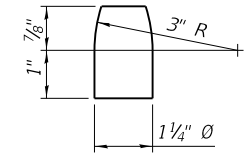


ELEVATION AT PIER 1

FIXED BEARING AT PIER 1
 (16 Required)



SECTION B-B



PINTLE

Beam	Location	Thickness
5	W. Abut.	1/2"
5	Pier 1	1/2"
5	Pier 2	5/8"
5	E. Abut.	5/8"

Notes:
 Side retainers and other steel members required for the elastomeric bearing assembly 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.
 The structural steel plates of the Bearing Assembly, and fixed bearings and pintles shall conform to the requirements of AASHTO M 270 Grade 50.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 All bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
 Structural steel plates and pintles of the fixed bearings shall be included in the cost of Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	48
Anchor Bolts, 3/4"	Each	128

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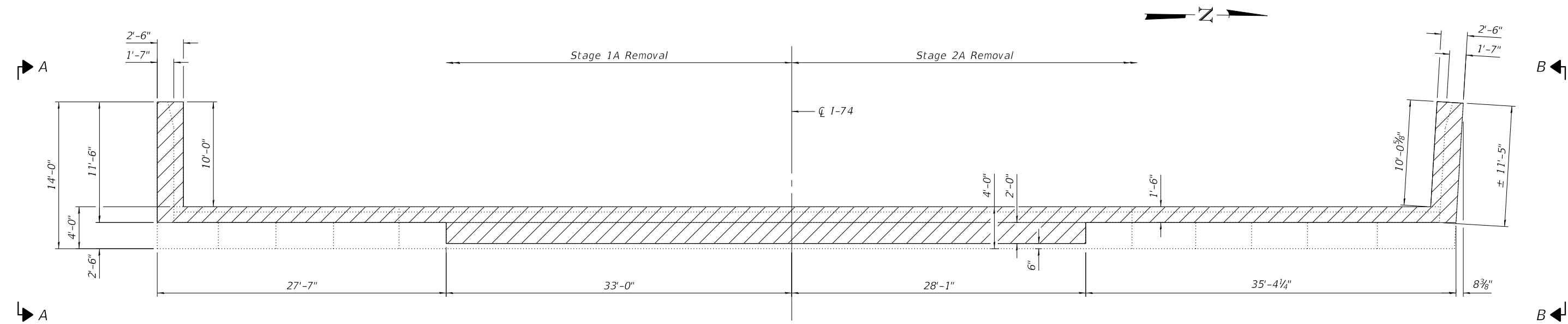


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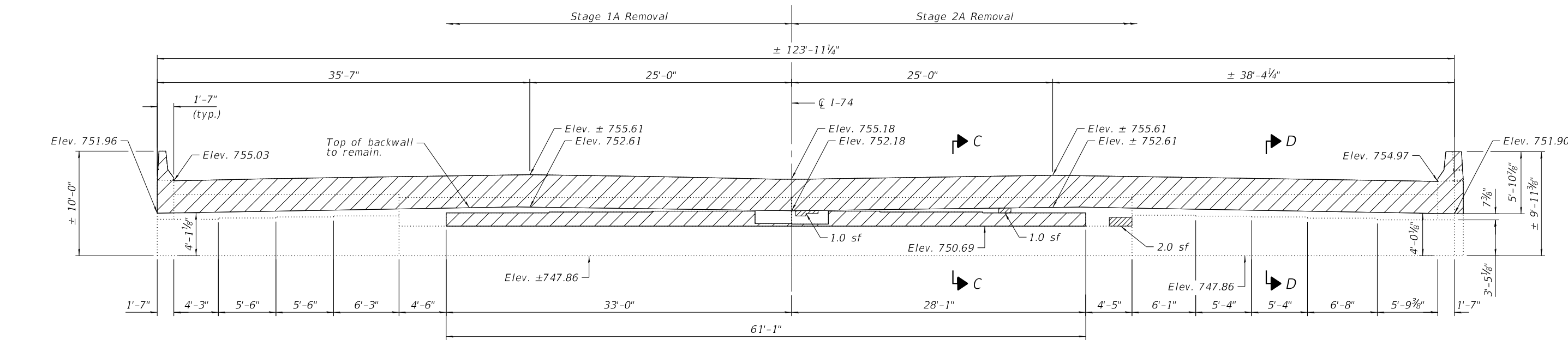
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
 STRUCTURE NO. 010-0020
 SHEET SM-23 OF SM-35 SHEETS

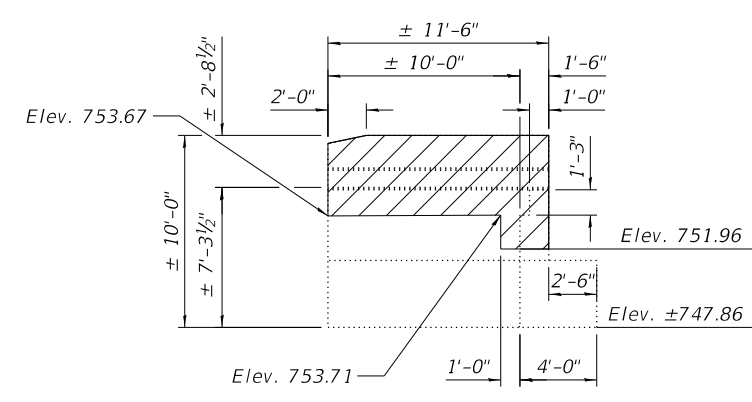
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74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	122
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



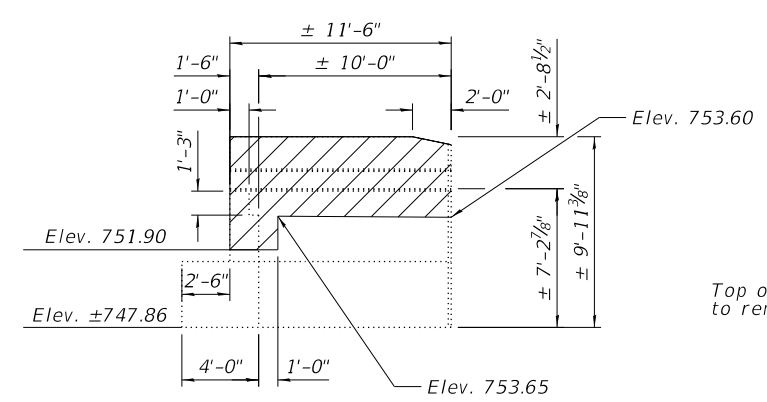
PLAN



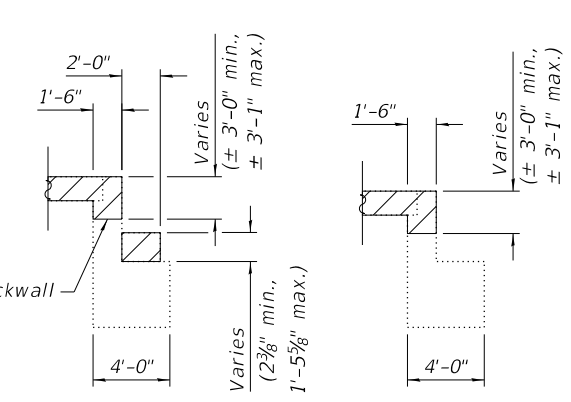
ELEVATION
(Looking West)



VIEW A-A



VIEW B-B



VIEW C-C

VIEW D-D

Notes:
 All saw cuts shall be to such a depth that when concrete is removed, a clean, neat edge will result with no spalling of the remaining concrete.
 Saw cuts cost included with "Concrete Removal."
 For proposed underdrain and drainage components, see Sheet SM-2 of SM-36.
 Areas designated as Unsound Concrete Removal shall be paid for as Concrete Removal.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	28.9

LEGEND

- Indicates Unsound Concrete Removal
- Indicates Limits of Concrete Removal

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 Engineering Group, LLC
 288 E. Main St., Suite 200
 Moline, IL 61704
 618.333.2877
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 www.kaskaskiaeng.com
 Lic. No. 042-000000
 04/20/2013
 24-000006

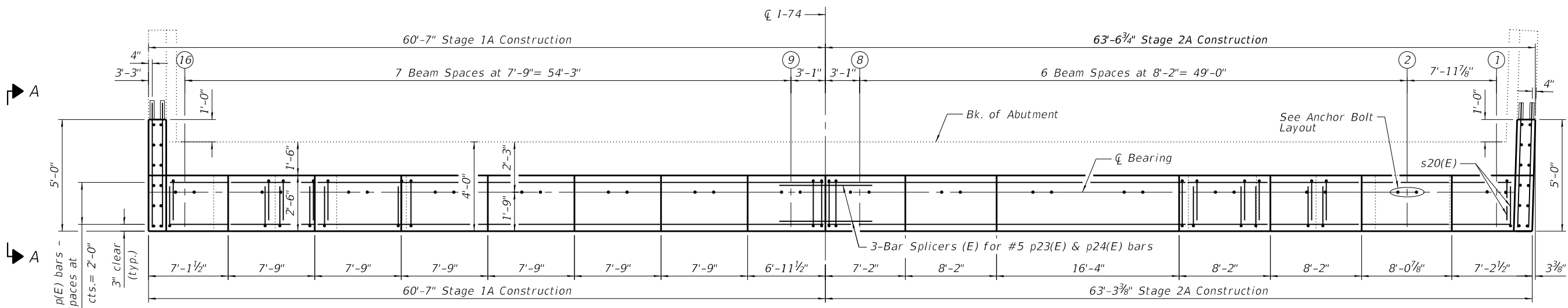
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 010-0020

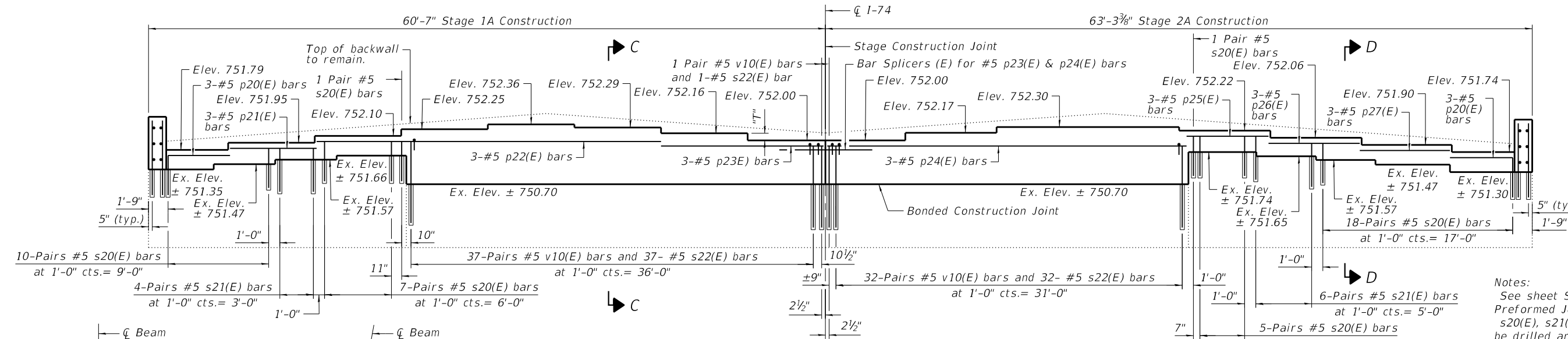
SHEET SM-24 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	123
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



PLAN

Beam No.	Step "T"
1	1 1/8"
2	1 1/8"
3	1 1/8"
4	1"
5	0"
6	1 1/2"
7	2"
8	0"
9	1 1/8"
10	1 1/2"
11	1/8"
12	1 3/8"
13	1 3/4"
14	1 1/2"
15	1 1/8"
16	1 1/8"

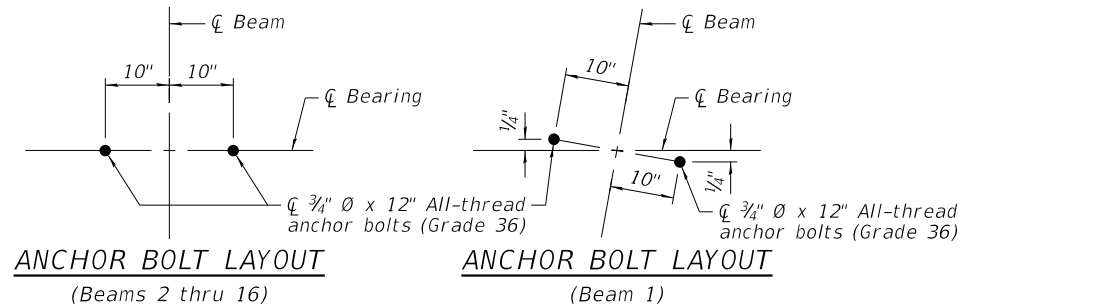


ELEVATION
(Looking West)

Notes:
See sheet SM-15 of SM-36 for 2" Preformed Joint Filler placement.
s20(E), s21(E) and v10(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.

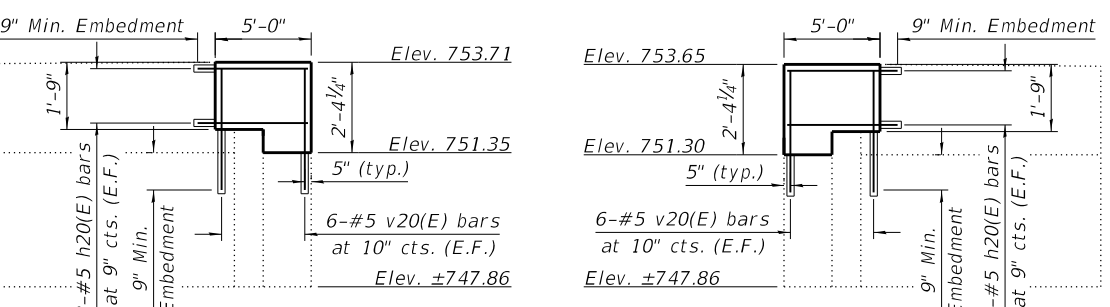
BILL OF MATERIAL

Bar No.	Size	Length	Shape
h20(E)	12	#5	5'-9"
p20(E)	6	#5	5'-7"
p21(E)	3	#5	7'-9"
p22(E)	3	#5	30'-10"
p23(E)	3	#5	14'-7"
p24(E)	3	#5	32'-2"
p25(E)	3	#5	7'-4"
p26(E)	3	#5	8'-2"
p27(E)	3	#5	8'-1"
s20(E)	84	#5	2'-11"
s21(E)	20	#5	2'-10"
s22(E)	71	#5	4'-0"
v10(E)	142	#5	1'-10"
v20(E)	24	#5	3'-2"
Structure Excavation		Cu. Yd.	203
Concrete Structures		Cu. Yd.	13.1
Reinforcement Bars, Epoxy Coated		Pound	1410
Granular Backfill for Structures		Cu. Yd.	170



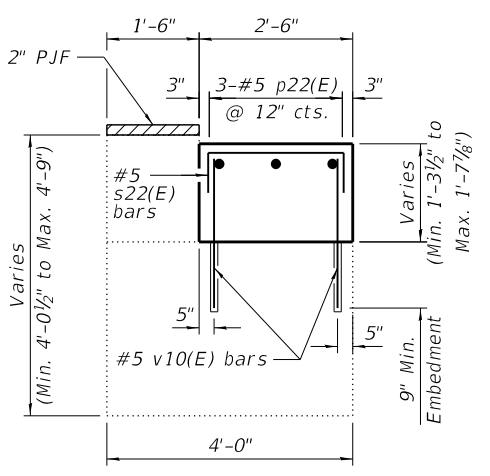
ANCHOR BOLT LAYOUT
(Beams 2 thru 16)

ANCHOR BOLT LAYOUT
(Beam 1)

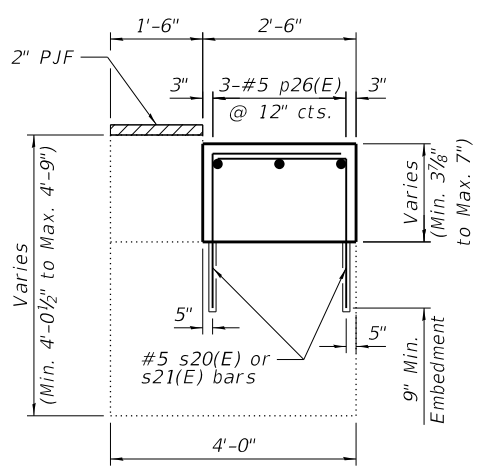


VIEW A-A
(Looking North)

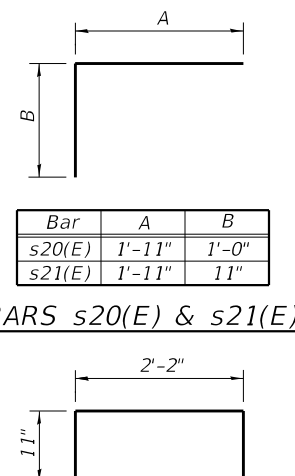
VIEW B-B
(Looking South)



SECTION C-C



SECTION D-D



BARS s20(E) & s21(E)

BAR s22(E)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT REPAIR DETAILS
STRUCTURE NO. 010-0020

SHEET SM-25 OF SM-35 SHEETS

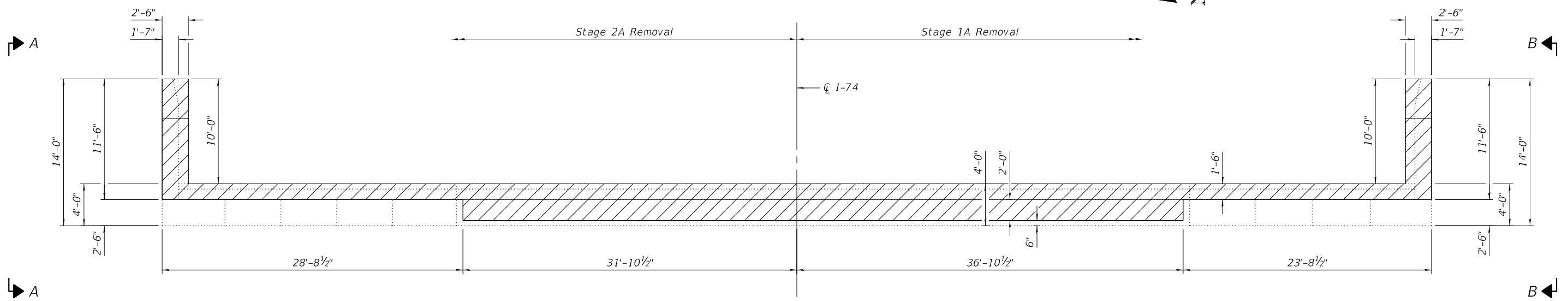
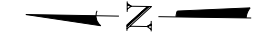
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CONTRACT NO. 70CC64				

ILLINOIS FID. AD. PROJECT

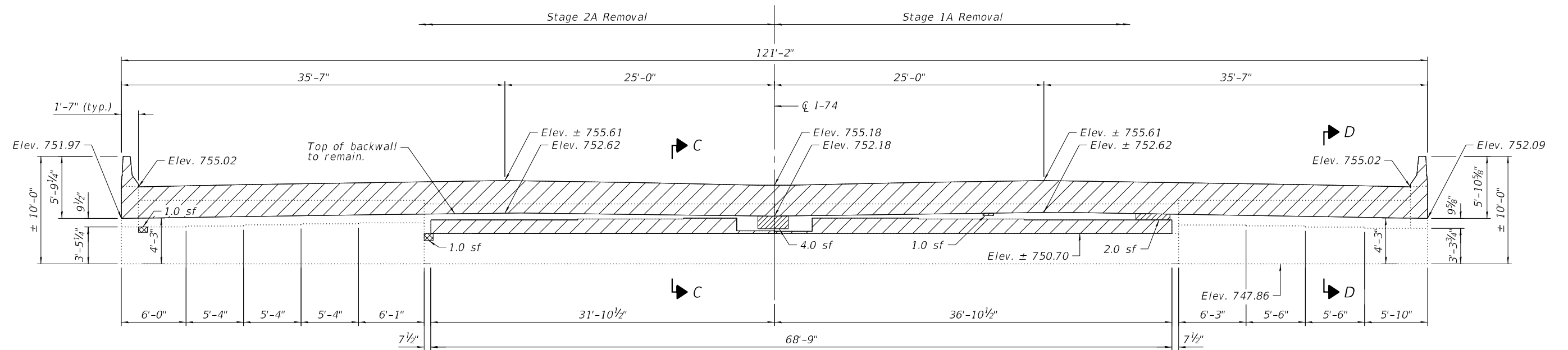
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Kaskaskia
Engineering Group, LLC
Professional Engineering Group

USER NAME =	DESIGNED - MC	REVISED -
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PLAN



ELEVATION
(Looking East)

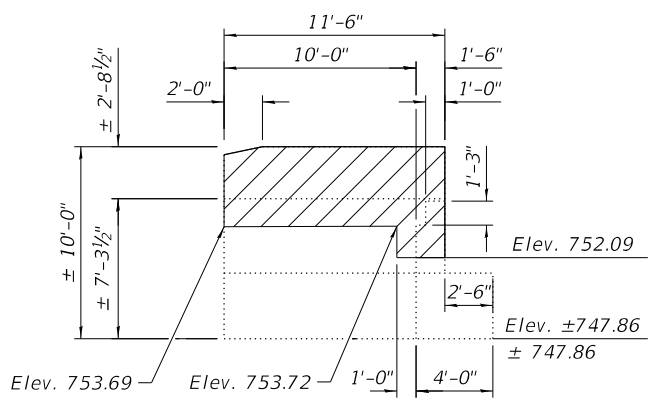
Notes:
 All saw cuts shall be to such a depth that when concrete is removed, a clean, neat edge will result with no spalling of the remaining concrete. Saw cuts cost included with "Concrete Removal."
 For proposed underdrain and drainage components, see Sheet SM-2 of SM-36.
 Areas designated as Unsound Concrete Removal shall be paid for as Concrete Removal.

BILL OF MATERIAL

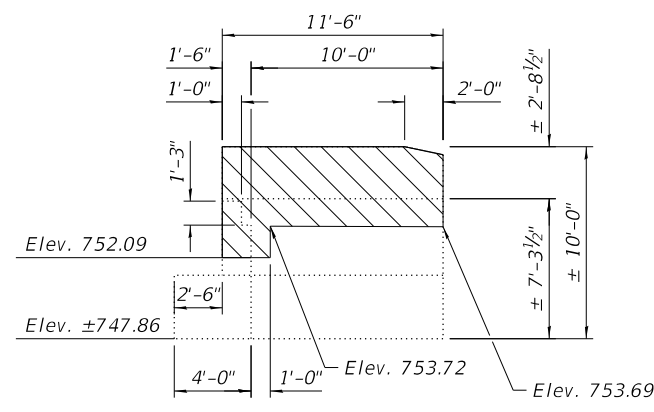
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	2.0
Concrete Removal	Cu. Yd.	28.5

LEGEND

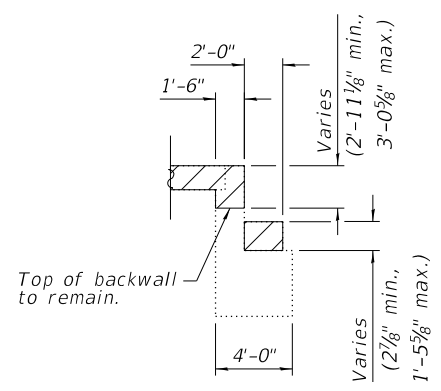
- Indicates Unsound Concrete Removal
- Indicates Structural Repair of Concrete Depth equal to or less than 5"
- Indicates Limits of Concrete Removal



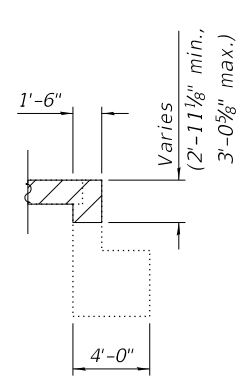
VIEW A-A



VIEW B-B



VIEW C-C



VIEW D-D

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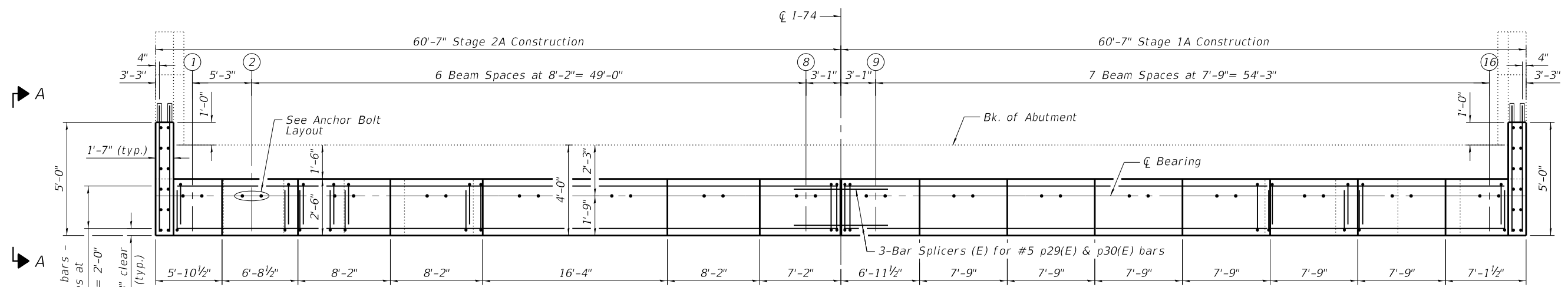
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

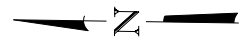
EAST ABUTMENT REMOVAL AND REPAIR DETAILS
STRUCTURE NO. 010-0020

SHEET SM-26 OF SM-35 SHEETS

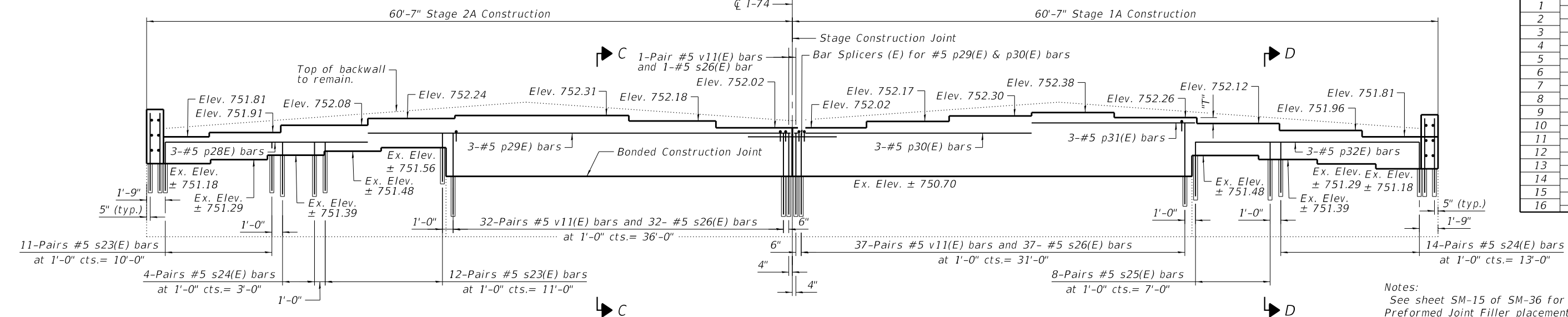
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



PLAN

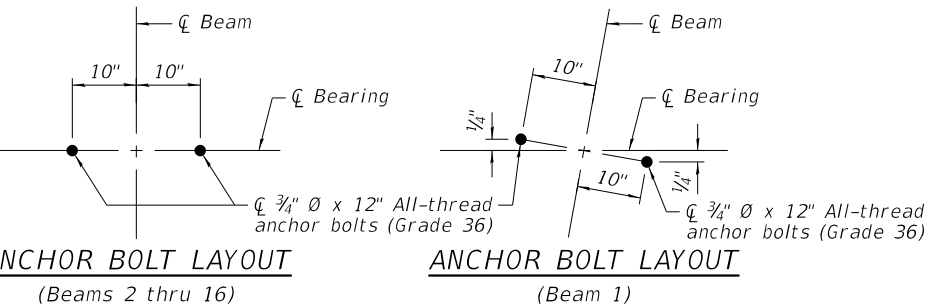


Beam No.	Step "T"
1	1 1/4"
2	2"
3	1 1/8"
4	1/8"
5	0"
6	1 1/2"
7	1 1/8"
8	0"
9	1 3/4"
10	1 1/2"
11	1"
12	1 1/2"
13	1 5/8"
14	1 1/8"
15	1 3/4"
16	1 3/4"



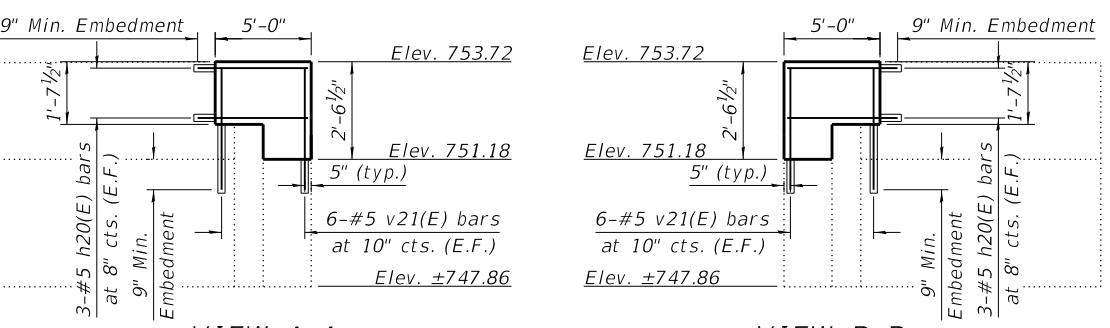
ELEVATION
(Looking East)

Notes:
See sheet SM-15 of SM-36 for 2" Preformed Joint Filler placement.
s23(E), s24(E), s25(E) and v11(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.



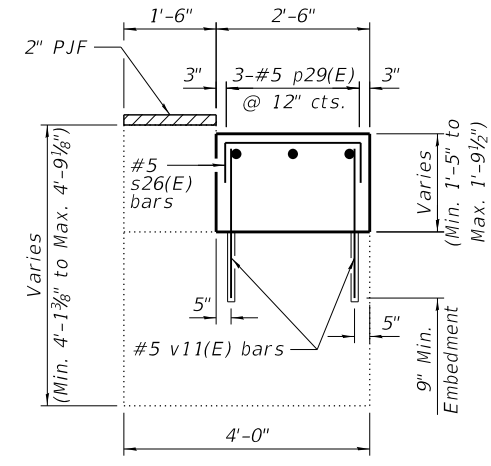
ANCHOR BOLT LAYOUT
(Beams 2 thru 16)

ANCHOR BOLT LAYOUT
(Beam 1)

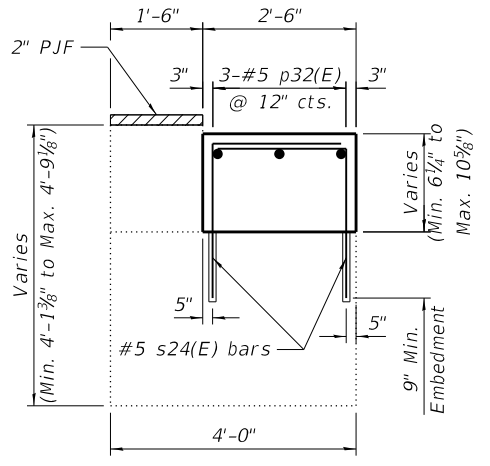


VIEW A-A
(Looking South)

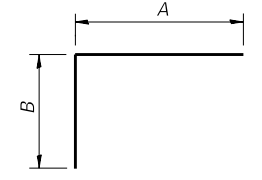
VIEW B-B
(Looking South)



SECTION C-C

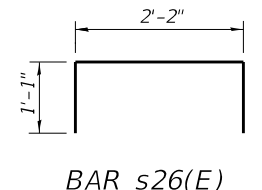


SECTION D-D



Bar	A	B
s23(E)	1'-11"	1'-2"
s24(E)	1'-11"	1'-3"
s25(E)	1'-11"	1'-4"

BARS s23(E),
s24(E) & s25(E)



BAR s26(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	12	#5	5'-9"	—
p28(E)	3	#5	19'-0"	—
p29(E)	3	#5	39'-6"	—
p30(E)	3	#5	22'-5"	—
p31(E)	3	#5	15'-2"	—
p32(E)	3	#5	21'-1"	—
s23(E)	46	#5	3'-1"	┌
s24(E)	36	#5	3'-2"	┌
s25(E)	16	#5	3'-3"	┌
s26(E)	71	#5	4'-4"	┌
v11(E)	142	#5	1'-11"	—
v21(E)	24	#5	3'-4"	—
Structure Excavation		Cu. Yd.	200	
Concrete Structures		Cu. Yd.	14.4	
Reinforcement Bars, Epoxy Coated		Pound	1450	
Granular Backfill for Structures		Cu. Yd.	165	

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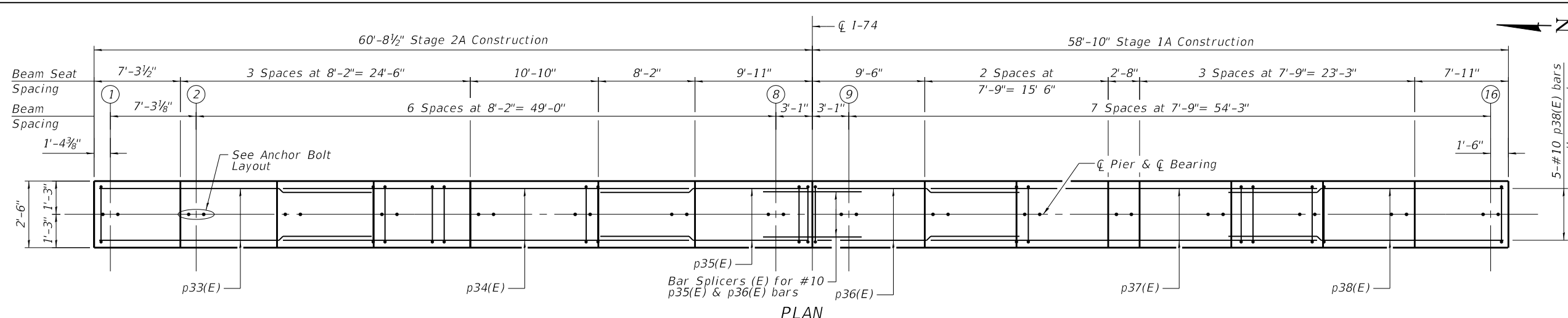
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

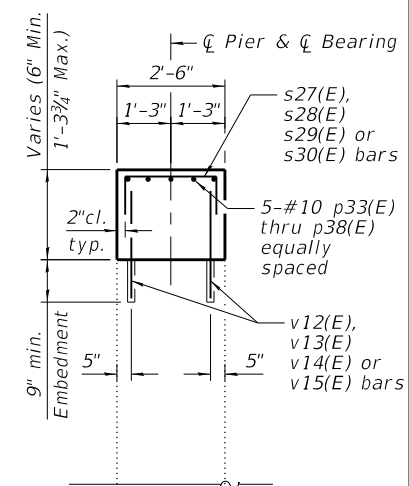
EAST ABUTMENT REPAIR DETAILS
STRUCTURE NO. 010-0020

SHEET SM-27 OF SM-35 SHEETS

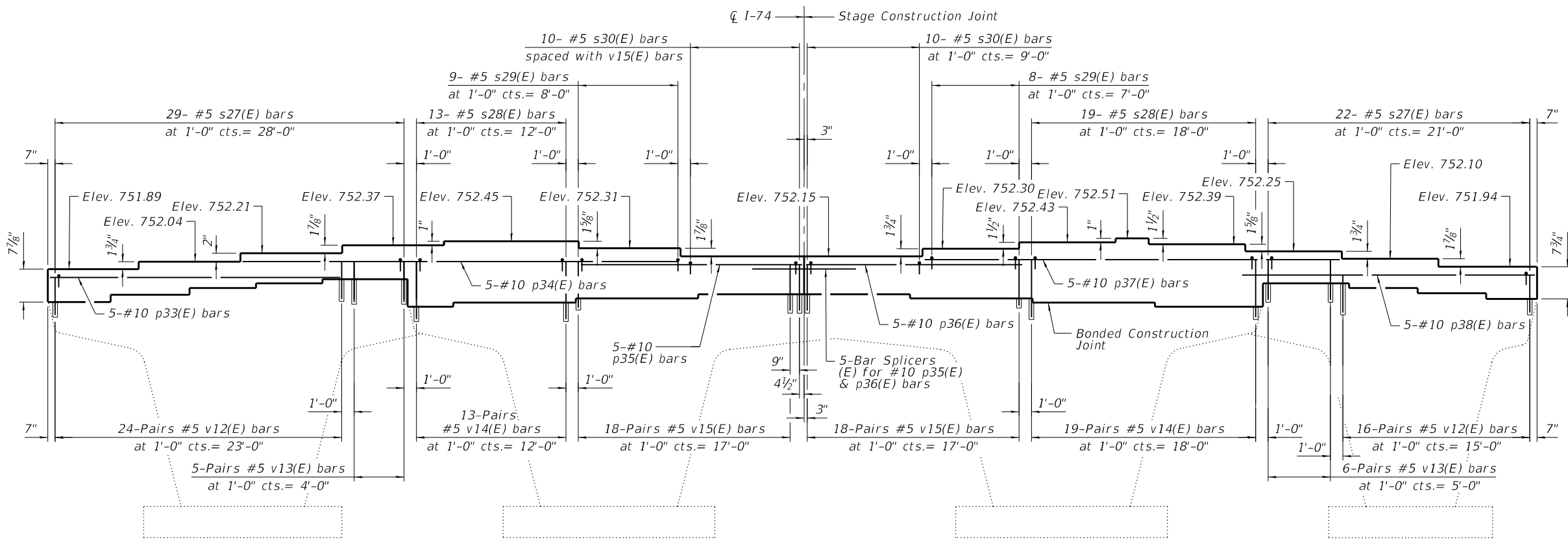
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CONTRACT NO. 70C64				
ILLINOIS / FED. AID PROJECT				



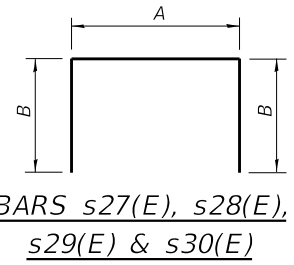
PLAN



TYPICAL SECTION

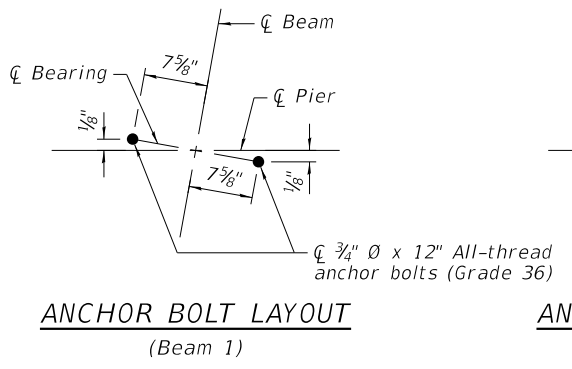


ELEVATION
(Looking East)

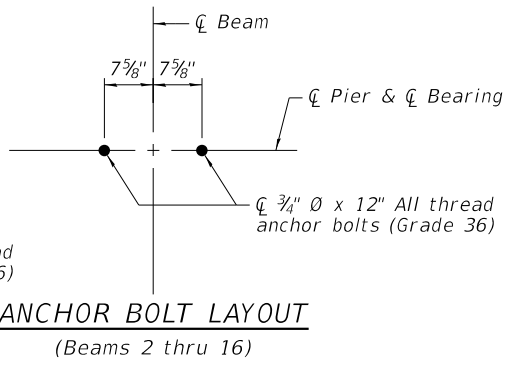


Bar	A	B
s27(E)	2'-2"	4"
s28(E)	2'-2"	10"
s29(E)	2'-2"	8"
s30(E)	2'-2"	5"

BARS s27(E), s28(E), s29(E) & s30(E)



ANCHOR BOLT LAYOUT
(Beam 1)



ANCHOR BOLT LAYOUT
(Beams 2 thru 16)

Notes:
v12(E), v13(E), v14(E), and v15(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
See sheet SM-29 of SM-36 for existing pier cap steps and elevations.
The 9" minimum embedment may be increased to account for the existing beam seat elevation changes.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p33(E)	5	#10	23'-4"	—
p34(E)	5	#10	35'-0"	—
p35(E)	5	#10	17'-11"	—
p36(E)	5	#10	17'-6"	—
p37(E)	5	#10	33'-4"	—
p38(E)	5	#10	23'-6"	—
s27(E)	51	#5	2'-10"	□
s28(E)	32	#5	3'-10"	□
s29(E)	17	#5	3'-6"	□
s30(E)	20	#5	3'-0"	□
v12(E)	80	#5	1'-1"	—
v13(E)	22	#5	1'-2"	—
v14(E)	64	#5	1'-8"	—
v15(E)	74	#5	1'-4"	—
Concrete Structures			Cu. Yd.	9.6
Reinforcement Bars, Epoxy Coated			Pound	3980

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Kaskaskia
Engineering Group, LLC
Professional Engineering Firm
11777 N. Lincoln Ave.
Chicago, IL 60631
312-586-8800



USER NAME =	DESIGNED - MC	REVISED -
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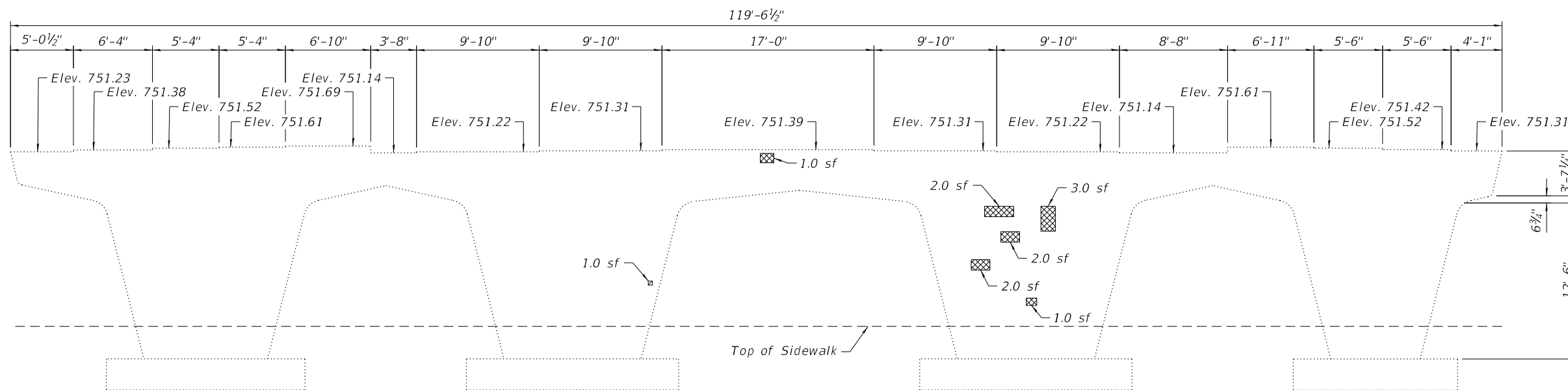
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 010-0020
SHEET SM-28 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	127
CONTRACT NO. 70CC64				
ILLINOIS FED. AID PROJECT				

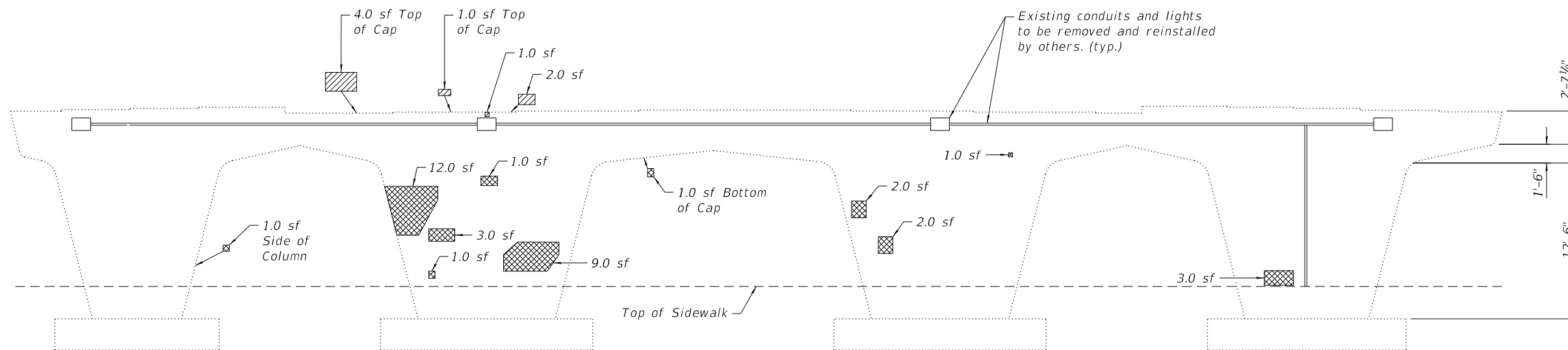
LEGEND

-  Indicates limits of Unsound Concrete Removal
-  Indicates limits of Structural Repair of Concrete (Depth equal to or less than 5")



PIER 1
(Looking East)

Note:
Areas designated as Unsound Concrete Removal shall be paid for as Concrete Removal.
Contractor to coordinate removal and reinstallation of lighting elements with the City of Champaign.
The quantities shown are for estimating purposes only. The areas to be repaired will be determined by the Engineer at the time of construction.



PIER 1
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	48.0
Concrete Removal	Cu. Yd.	0.2

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Kaskaskia
Engineering Group, LLC
Professional Engineering Group
1177 N. Main St., Suite 200
Champaign, IL 61820
618.233.2877 phone
618.233.2977 fax
www.kaskaskiaeng.com
1177 N. Main St.
Champaign, IL 61820
30-086266

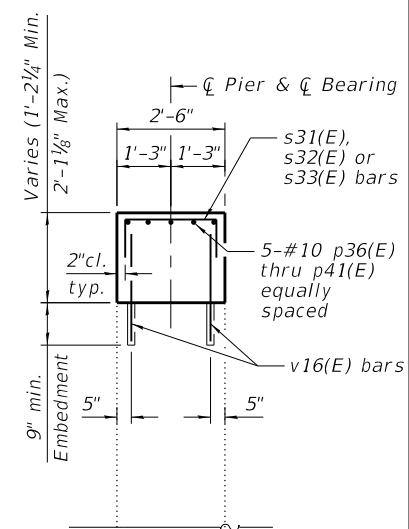
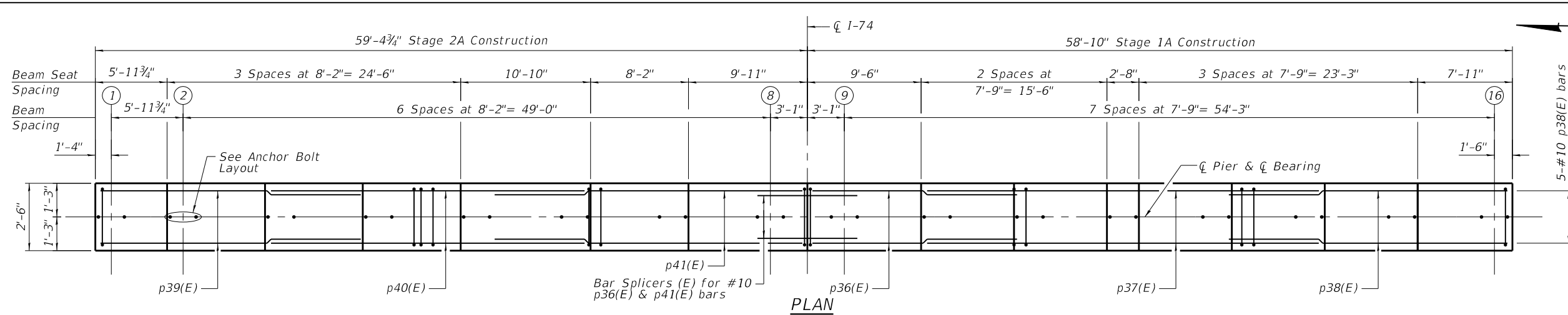
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	CHECKED - BB	REVISED -
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PLOT DATE =	CHECKED - BB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

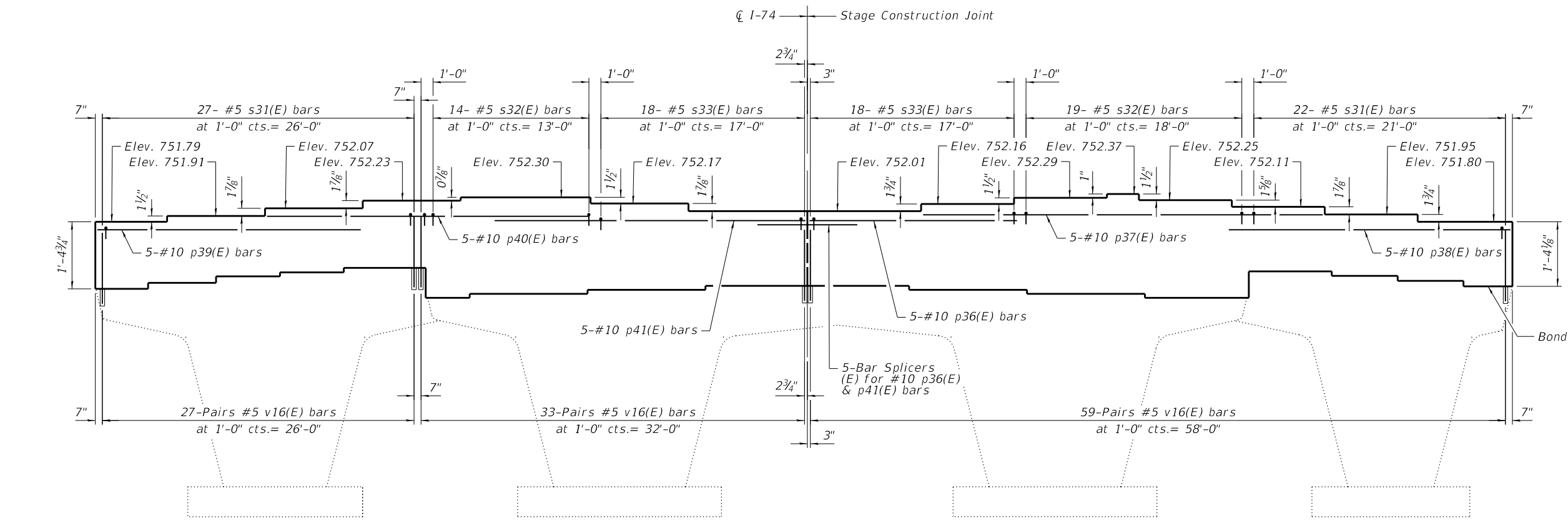
PIER 1 REPAIR DETAILS
STRUCTURE NO. 010-0020

SHEET SM-29 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	128
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



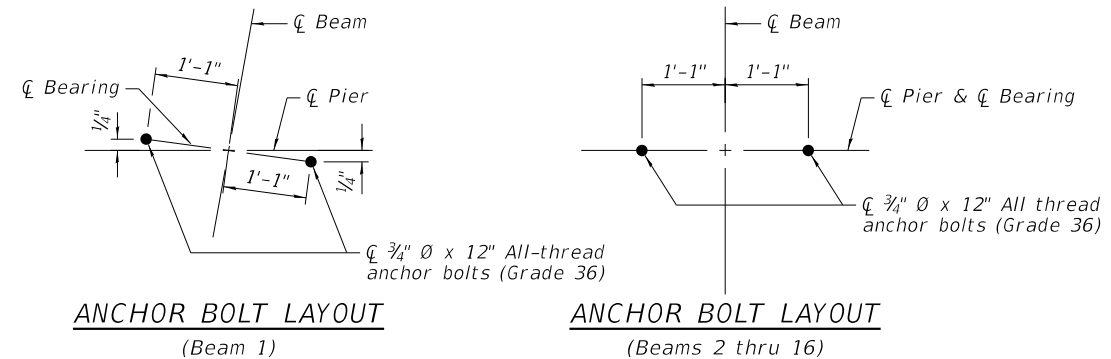
TYPICAL SECTION



ELEVATION (Looking East)

BARS s31(E), s32(E) & s33(E)

Bar	A	B
s31(E)	2'-2"	11"
s32(E)	2'-2"	1'-8"
s33(E)	2'-2"	1'-3"



Notes:
 v16(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
 See sheet SM-31 of SM-36 for existing pier cap steps and elevations.
 The 9" minimum embedment may be increased to account for the existing beam seat elevation changes.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p36(E)	5	#10	17'-6"	—
p37(E)	5	#10	33'-4"	—
p38(E)	5	#10	23'-6"	—
p39(E)	5	#10	22'-0"	—
p40(E)	5	#10	26'-10"	—
p41(E)	5	#10	26'-1"	—
s31(E)	50	#5	4'-0"	□
s32(E)	33	#5	5'-6"	□
s33(E)	36	#5	4'-8"	□
v16(E)	238	#5	1'-9"	—
Concrete Structures		Cu. Yd.	17.8	
Reinforcement Bars, Epoxy Coated		Pound	4220	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
 STRUCTURE NO. 010-0020

SHEET SM-30 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	129
CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

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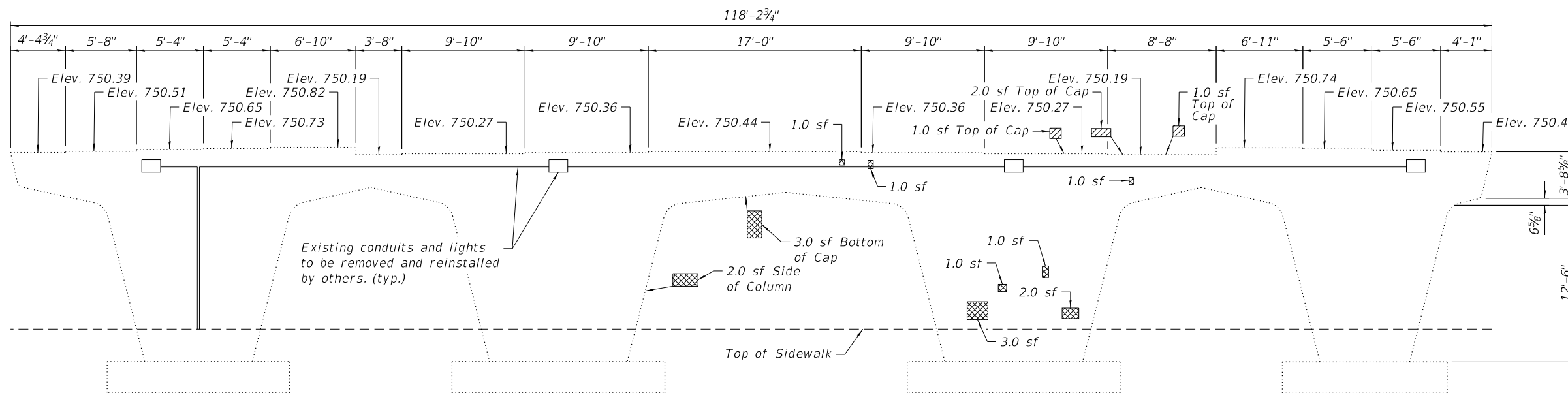
288 E. Main St., Suite 200
 Moline, IL 61704
 617.233.2877 phone
 617.233.2877 fax
 www.kaskaskiaeng.com

USER NAME	DESIGNED	CHECKED	DRAWN	PLOT DATE
=	- MC	- BB	- RJO	=

REVISED	REVISION
-	-
-	-
-	-
-	-

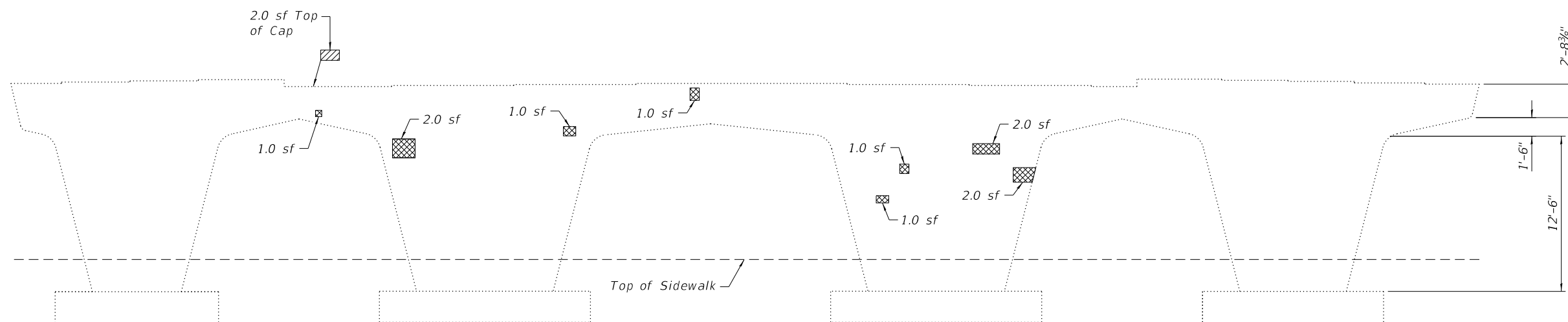
LEGEND

-  Indicates limits of Unsound Concrete Removal.
-  Indicates limits of Structural Repair of Concrete (Depth equal to or less than 5").



PIER 2
(Looking East)

Note:
Areas designated as Unsound Concrete Removal shall be paid for as Concrete Removal.
Contractor to coordinate removal and reinstallation of lighting elements with the City of Champaign.
The quantities shown are for estimating purposes only. The areas to be repaired will be determined by the Engineer at the time of construction.



PIER 2
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	26.0
Concrete Removal	Cu. Yd.	0.1

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Kaskaskia
Engineering Group, LLC
Professional Engineering Group
1177 N. W. Ave.
Champaign, IL 61821
312-298-0566

USER NAME =	DESIGNED - MC	REVISED -
PLOT SCALE =	CHECKED - BB	REVISED -
PLOT DATE =	DRAWN - RJO	REVISED -
	CHECKED - BB	REVISED -

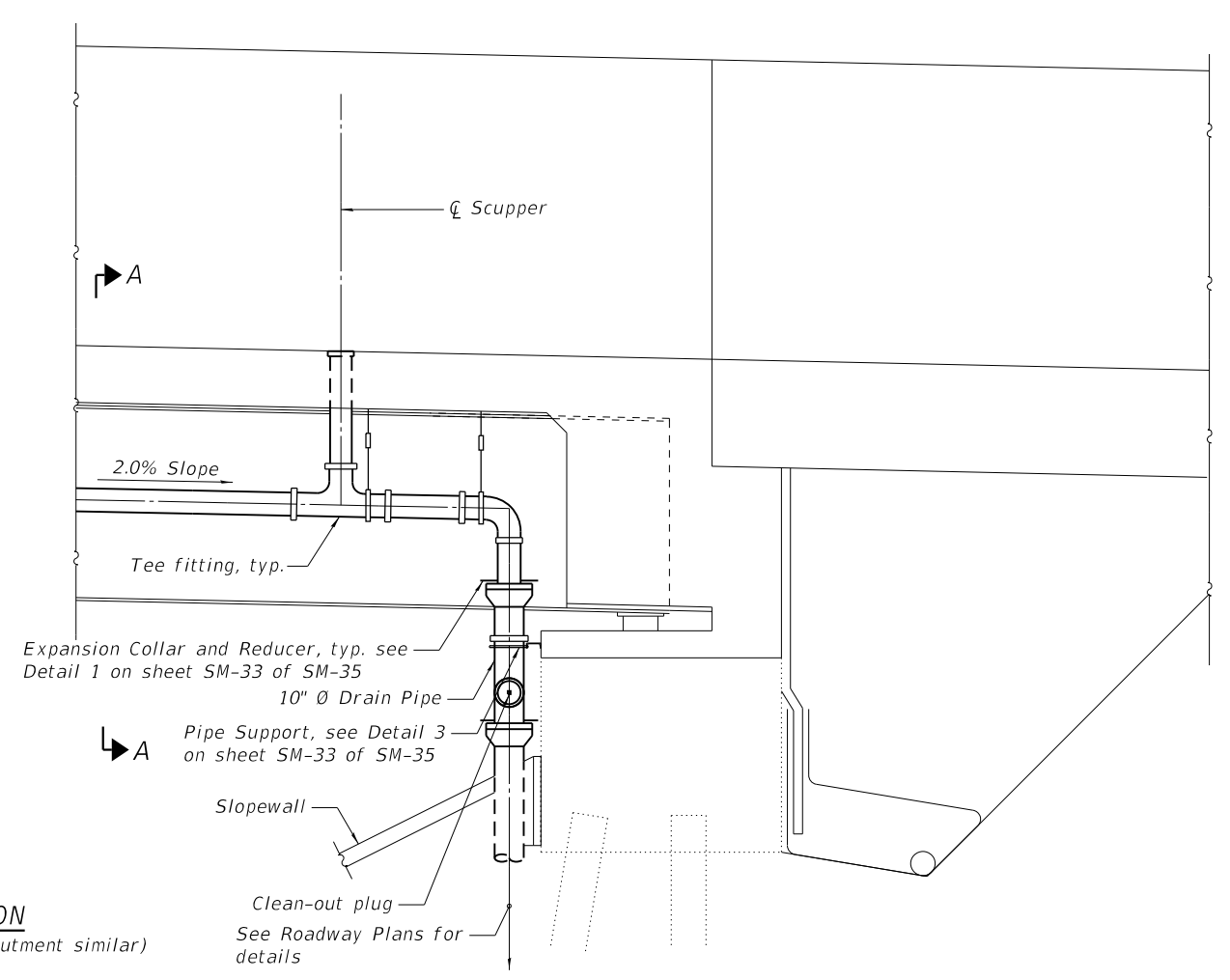
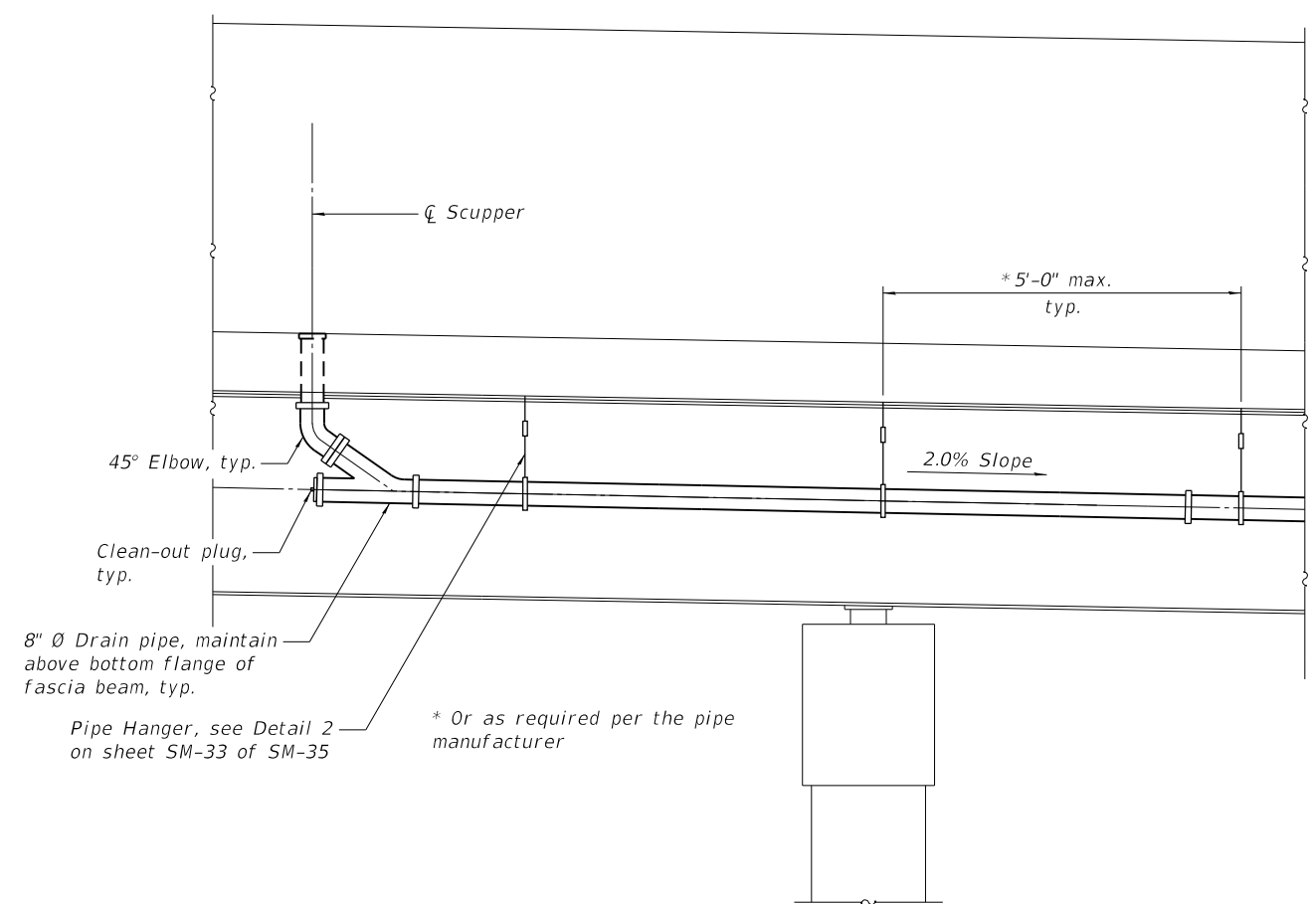
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 REPAIR DETAILS
STRUCTURE NO. 010-0020

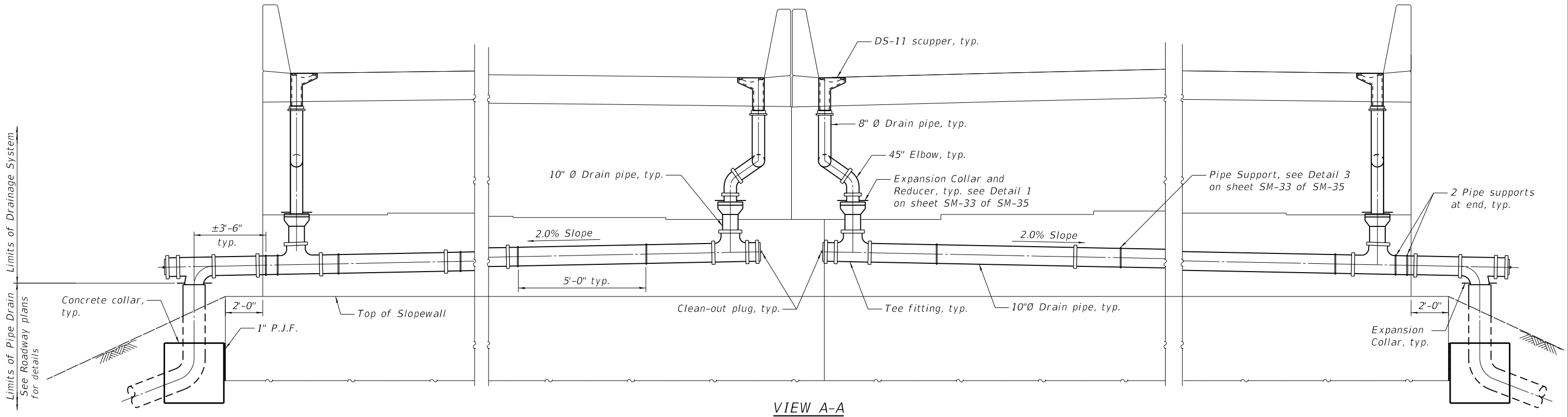
SHEET SM-31 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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ELEVATION
 (E. Abutment shown, W. Abutment similar)



VIEW A-A



USER NAME =	DESIGNED - HZT	REVISED -
	CHECKED - KK	REVISED -
PLOT SCALE =	DRAWN - DAS	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

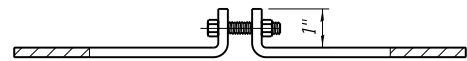
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DRAINAGE SYSTEM
 STRUCTURE NO. 010-0020**

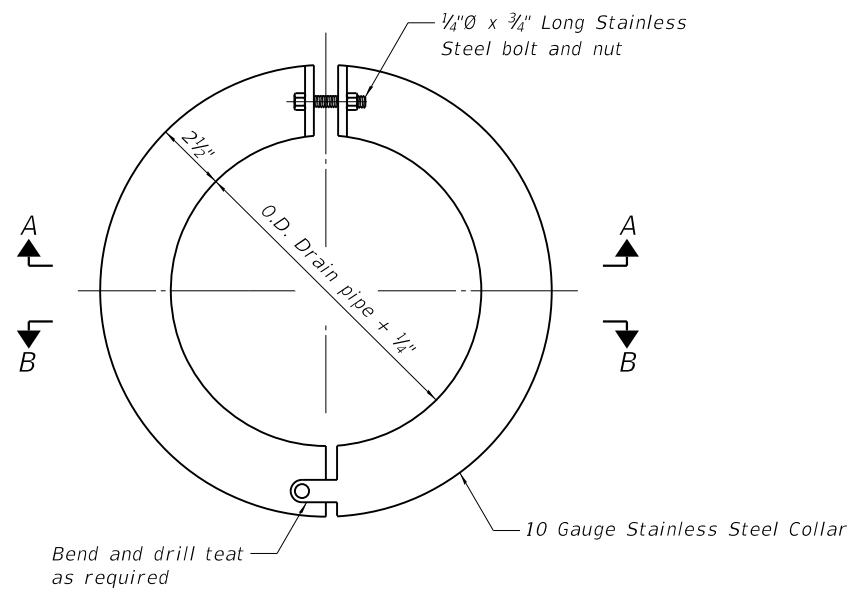
SHEET SM-32 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	131
CONTRACT NO. 70C64				

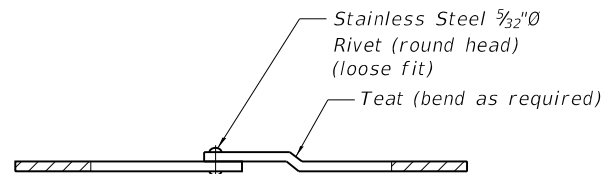
ILLINOIS FED. AID PROJECT



SECTION A-A

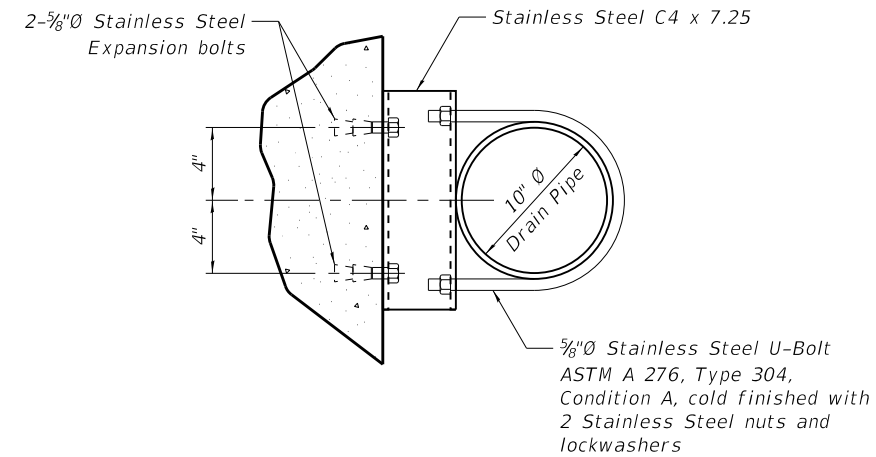


PLAN
(Looking Down)

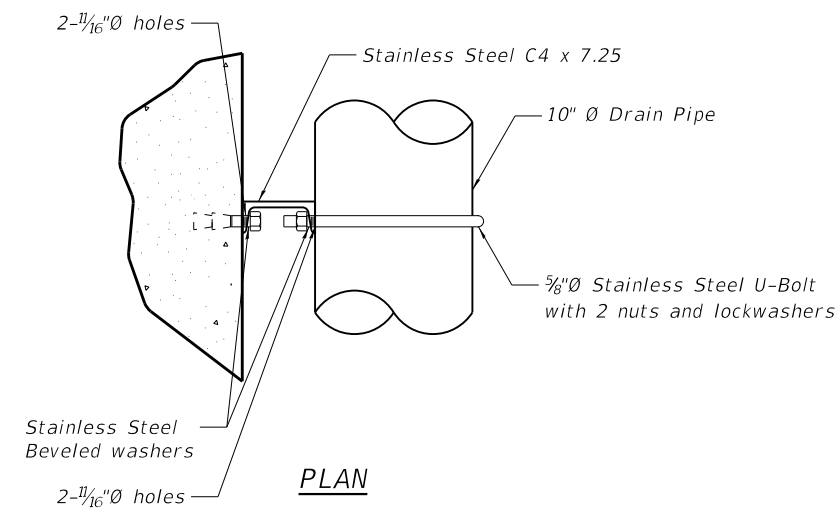


SECTION B-B

DETAIL 1
EXPANSION COLLAR DETAILS



ELEVATION

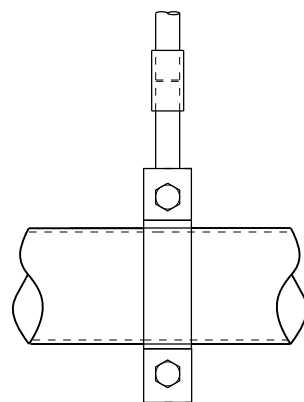


PLAN

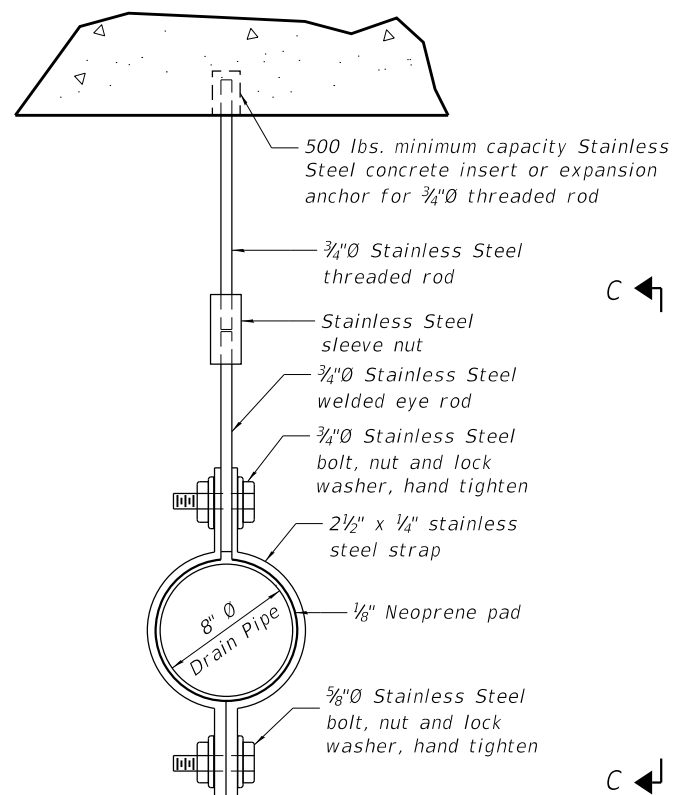
DETAIL 3
PIPE SUPPORT DETAILS

Notes:

1. Bolt pattern and size in drain pipe flange to match scupper flange.
2. For Drainage Scupper location and spacing see sheet SM-01 of SM-35.
3. For Drainage Scupper detail see sheet SM-34 of SM-35.
4. All bolts, nuts and washers shall be stainless steel in accordance with standard specifications Article 1006.29(D).
5. Pipe hangers and supports shall be provided on all horizontal pipes at each tee, elbow, or change in direction and at intermediate points not more than 5'-0" centers.
6. Reducers shall be sized to accommodate a longitudinal movement of 1/2" in each direction.



VIEW C-C



DETAIL 2
COLLECTOR PIPE HANGER DETAILS

C ←

← C

BILL OF MATERIAL

Item	Unit	Total
Drainage System	L. Sum	0.2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 010-0020

SHEET SM-33 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	132
CONTRACT NO. 70C64				

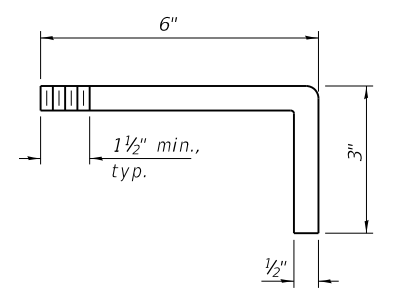
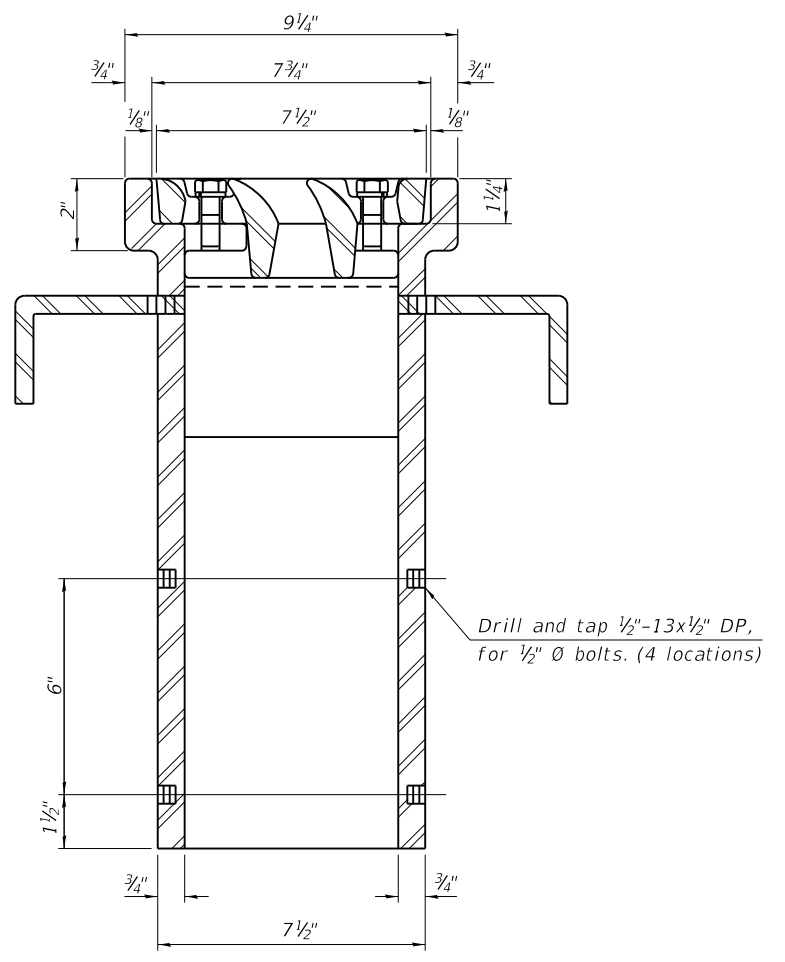
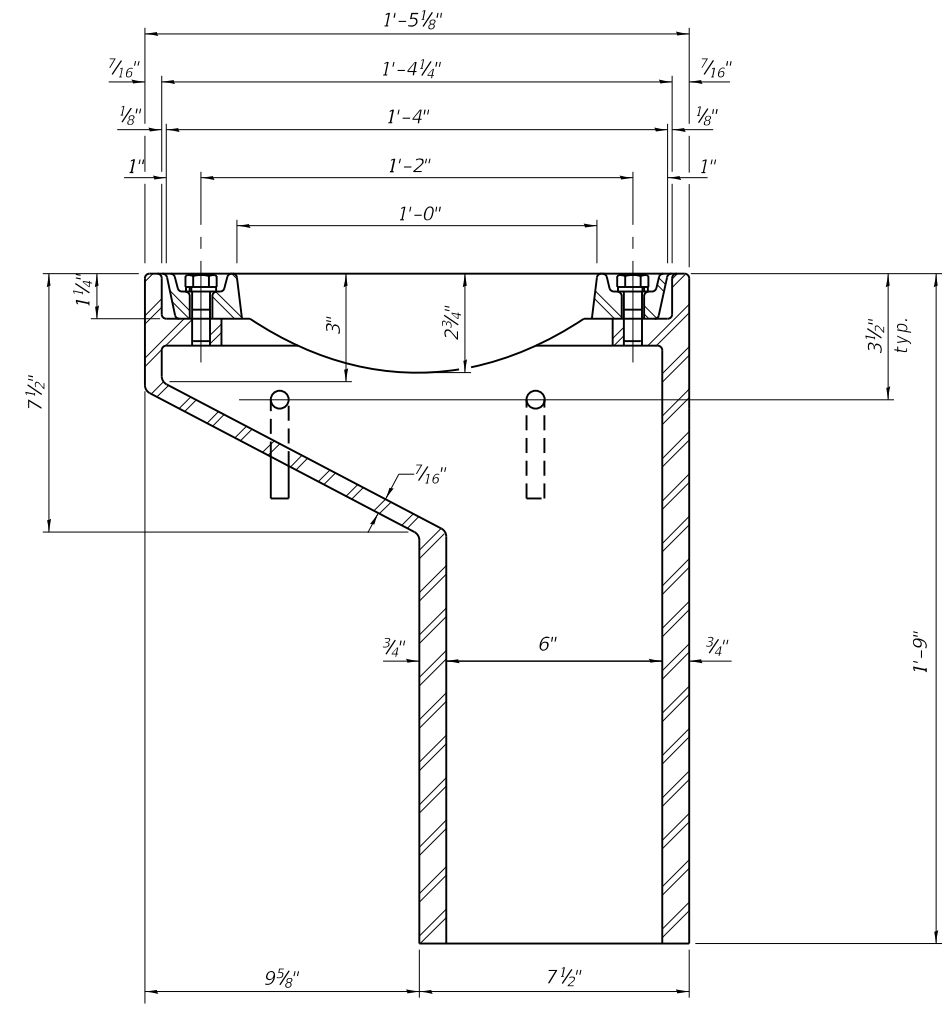
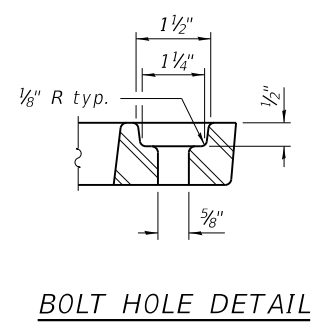
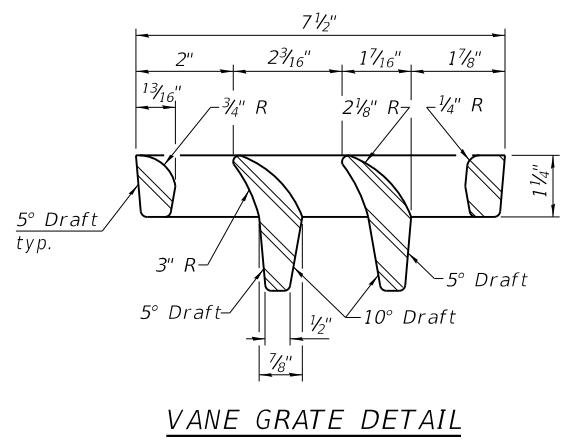
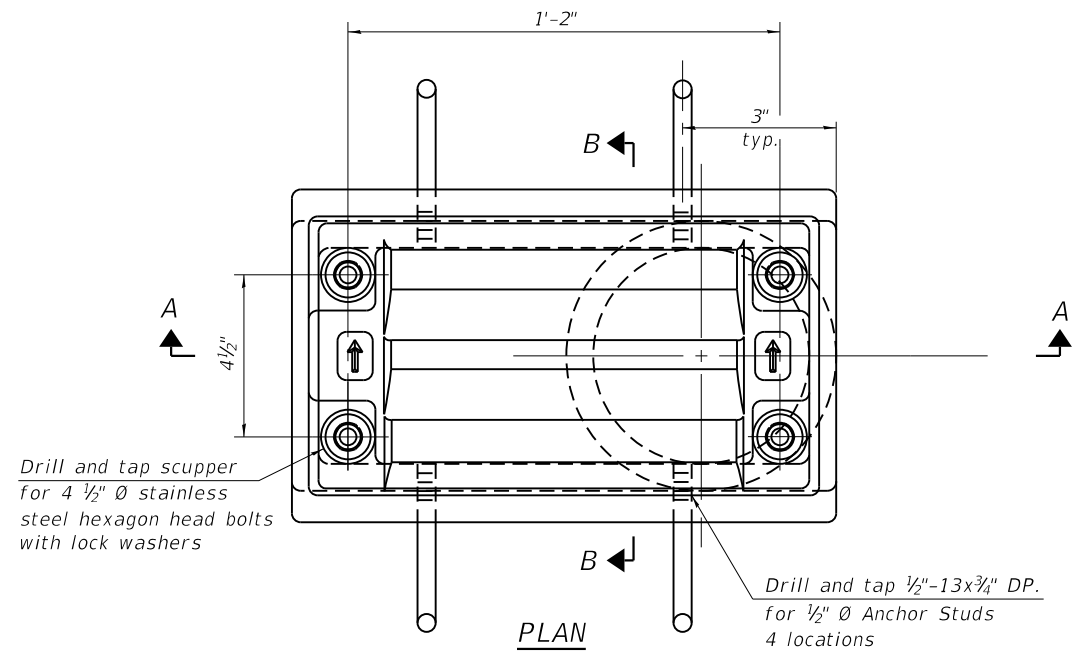
ILLINOIS FED. AID PROJECT

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E LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - HZT	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - DAS	REVISED -
	CHECKED - MTH	REVISED -

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See sheets SM-13 and SM-14 of 35 for scupper location relative to parapet.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	16

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

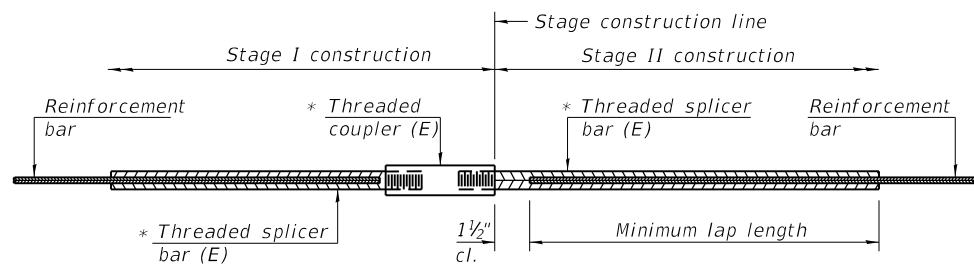
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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - DAS	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER, DS-11
 STRUCTURE NO. 010-0020**

SHEET SM-34 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	133
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

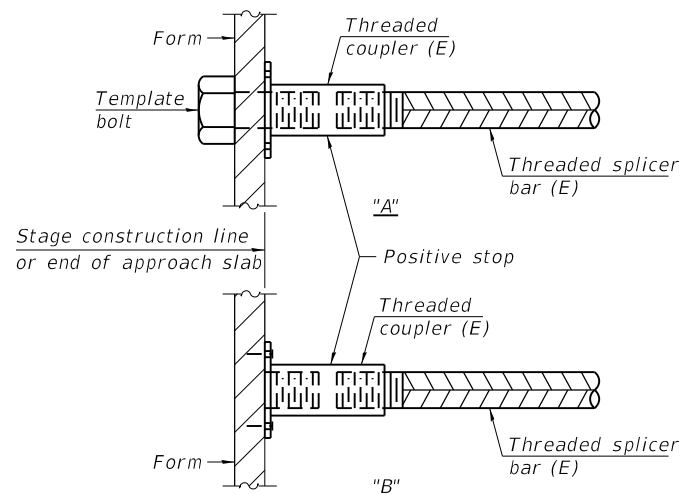


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

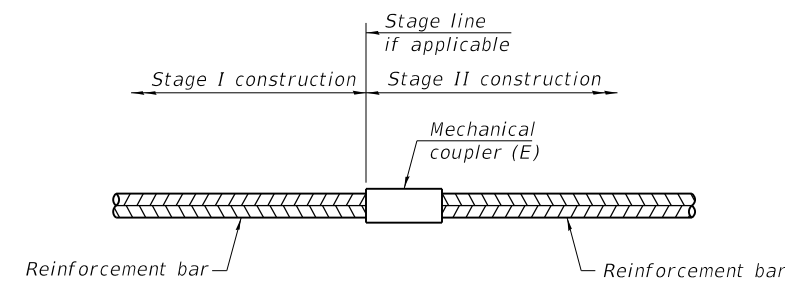
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Pier 1	#10	5	7'-10"
Pier 2	#10	5	7'-10"
W. Abutment	#5	3	3'-7"
E. Abutment	#5	3	3'-7"



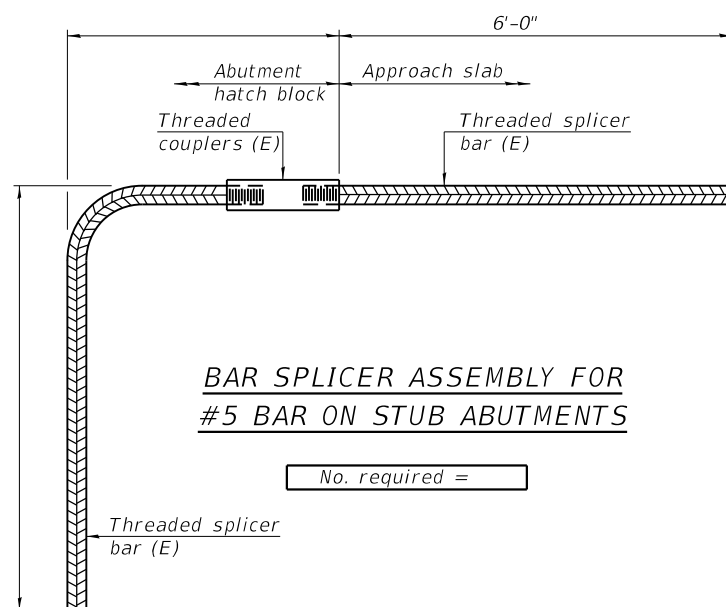
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

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

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BSD-1

2-17-2017



USER NAME =	DESIGNED - MC	REVISED -
CHECKED - KK	CHECKED - KK	REVISED -
PLOT SCALE =	DRAWN - RJO	REVISED -
PLOT DATE =	CHECKED - BB	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 010-0020

SHEET SM-35 OF SM-35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	134
CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

Bench Mark: Brass disk set in concrete along the north side of Anthony Drive. Sta. ±1223+71, 150' Lt., Elev. = 734.35.

Existing Structure: S.N. 010-0021 was originally built in 1956 as F.A. Route 39 Sec. 14-VB-VF and widened in 1992. The structure length is 725'-1" back-to-back of abutments. The out-to-out deck width is 121'-2". The superstructure consists of a reinforced concrete deck supported on four multi-girder spans, a 3 span continuous unit and a simple span unit. The original girders from 1956 are 102½" deep and consist of double angle flanges riveted to a web plate. The widening girders from 1992 are of welded plate construction with a web depth of 96". The deck and girders are non-composite. The superstructure is supported on two stub abutments and three multi-column piers all founded on concrete piles. The superstructure, the backwalls and part of wingwalls and abutments, and Pier 3 above footing will be replaced, while the other substructure elements will be reused.

Stage construction will be utilized to maintain two lanes of traffic in each direction at all times.

Salvage: Existing temporary shoring near Pier 3 is to be removed and delivered to storage.

DESIGN SPECIFICATIONS (New Const.)

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

SEISMIC DATA (Exist. Const.)

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.047g
Site Coefficient (S) = 1.2

LOADING HL 93 (New Const.)

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

DESIGN STRESSES

FIELD UNITS (New Const.)

f'c = 3,500 psi
f'c = 4,000 psi (superstructure)
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Grade 50)

FIELD UNITS (Exist. Struct. 1956)

f'c = 2,500 psi
fy = 40,000 psi (reinforcement)

FIELD UNITS (Exist. Struct. 1992)

f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

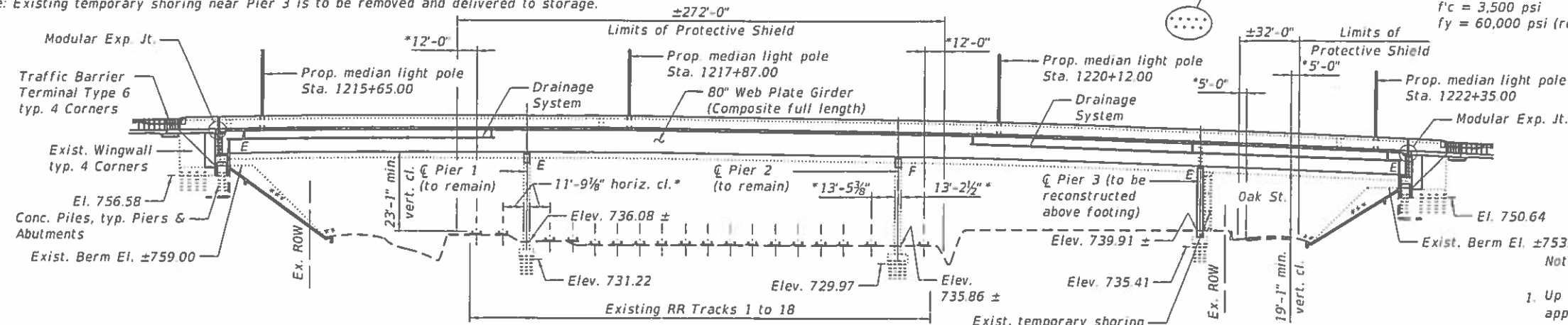


Signed: *[Signature]*
Date: 10/16/2019
Expires: 11/30/2020
Applies to Sheet Nos: SR-01 thru SR-63

APPROVED
For Structural Adequacy Only

[Signature]
Engineer of Bridges & Structures

- Notes:
- Up to ¼" may be ground off the bridge deck and the bridge approach slabs.
 - The existing temporary concrete barrier shall not be removed until the existing temporary shoring near Pier 3 is removed.
 - Remove and salvage exist. temporary shoring near Pier 3 after Stage 2A traffic has been implemented as directed by the Engineer. Cost included with Removal of Existing Superstructures No. 2.



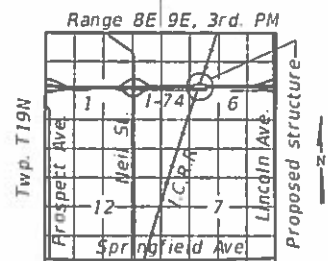
ELEVATION

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

- * Dimensions at Rt. L's to Track or Roadway
- ** 1:4 (V:H) at Rt. L's
- *** 1:2.68 (V:H) at Rt. L's (at W. Abut.)
- 1:3.28 (V:H) at Rt. L's (at E. Abut.)

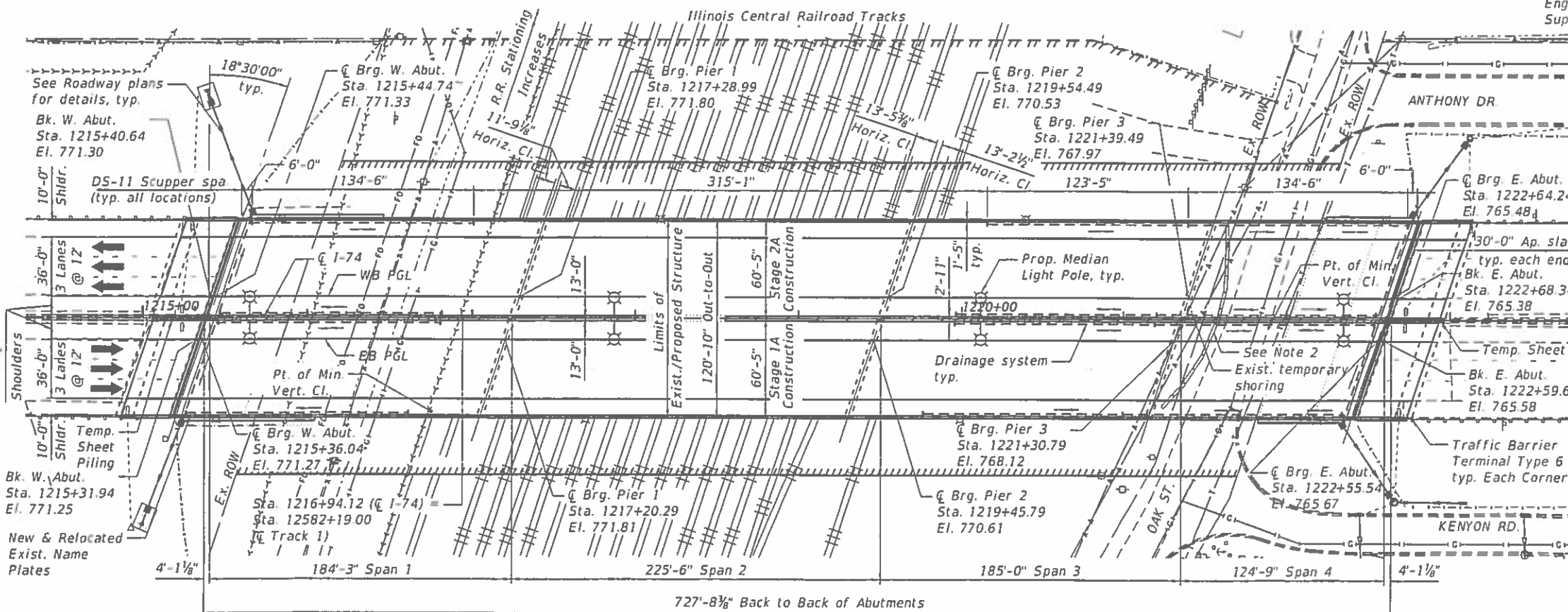
LEGEND

- Ex. Underground Sanitary Sewer
- Ex. Underground Telephone Line
- Ex. Underground Water Main
- Ex. Underground Gas Line
- Ex. Aerial Line
- Ex. Underground Fiber Optic
- Ex. ROW Line
- Ex. Fence
- Prop. Temporary Easement
- Prop. Permanent Easement
- Prop. Pipe Drain



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A.I. RTE. 74 OVER ICRR/OAK ST.
SECTION (14-1)BR, (14HB-2)BR-1
CHAMPAIGN COUNTY
STATION 1219+00.14
STRUCTURE NO. 010-0021



PLAN

USER NAME	DESIGNED - BK	REVISED -
CHECKED - MK	DRAWN - TM	REVISED -
PILOT SCALE	CHECKED - BK	REVISED -
PILOT DATE		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 010-0021

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	135
CONTRACT NO. 70C64				

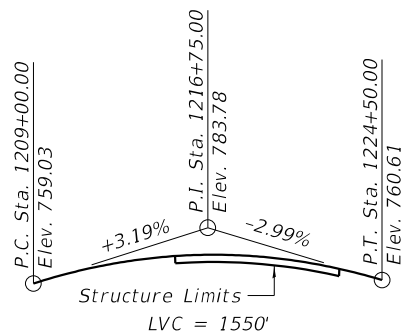
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GENERAL NOTES

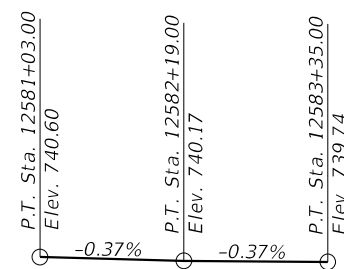
- Fasteners shall be ASTM F3125 Grade A325 Type 1, hot dip galvanized bolts in metallized areas. Bolts 7/8" Ø, holes 15/16" Ø, unless otherwise noted.
- Calculated weight of Structural Steel = 269,210 lbs. (AASHTO M270 Grade 36)
4,285,880 lbs. (AASHTO M270 Grade 50)
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the front face of the abutment backwalls, the abutment bearing seats and the front face of the abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- All new structural steel shall be metallized according to the Special Provision for Metallizing of Structural Steel. The metallizing shall meet a Class A AASHTO slip coefficient (0.30 or greater) for bolted connection faying surfaces.
- High Friction Surface Treatment (HFST) shall be applied to all exposed top surfaces of the bridge deck and approach slabs in accordance with the Special Provision High Friction Surface Treatment on Bridge Deck Surfaces.
- Overlapping HFST joints shall not be located in the wheel zones of final or temporary traffic lanes. For this purpose, wheel zones are defined as a pair of 2-foot wide zones at 6 feet centers, centered in each traffic lane.
- Slipforming of median parapets is not allowed. Slipforming of outside parapets is allowed.
- A new Protective Shield system extending at least 2 ft. from the edges of the bridge decks shall be installed over the ICRR railyard and Oak St. for the length specified on the plans.
- Existing Protective Shield system shall be removed prior to installation of the new Protective Shield. The cost of removal of existing Protective Shield is included with Removal of Existing Superstructures No. 2.
- Apply protective coat to the top and traffic faces of parapets.

INDEX OF SHEETS

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SR-02	Index of Sheets & General Notes
SR-03	Bill of Material & General Details
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SR-08	Top of Deck Elevations 3
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SR-32	Concrete Parapet Slipforming Option
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SR-61	Bridge Drainage System Details
SR-62	Drainage Scupper, DS-11
SR-63	Bar Splicer Assembly and Mechanical Splicer Details



PROFILE GRADE - I-74
Along PGL WB & EB
(The profile grade shows the final elevations after grinding)



PROFILE GRADE - ICRR
Along Track 1 Top of High Rail

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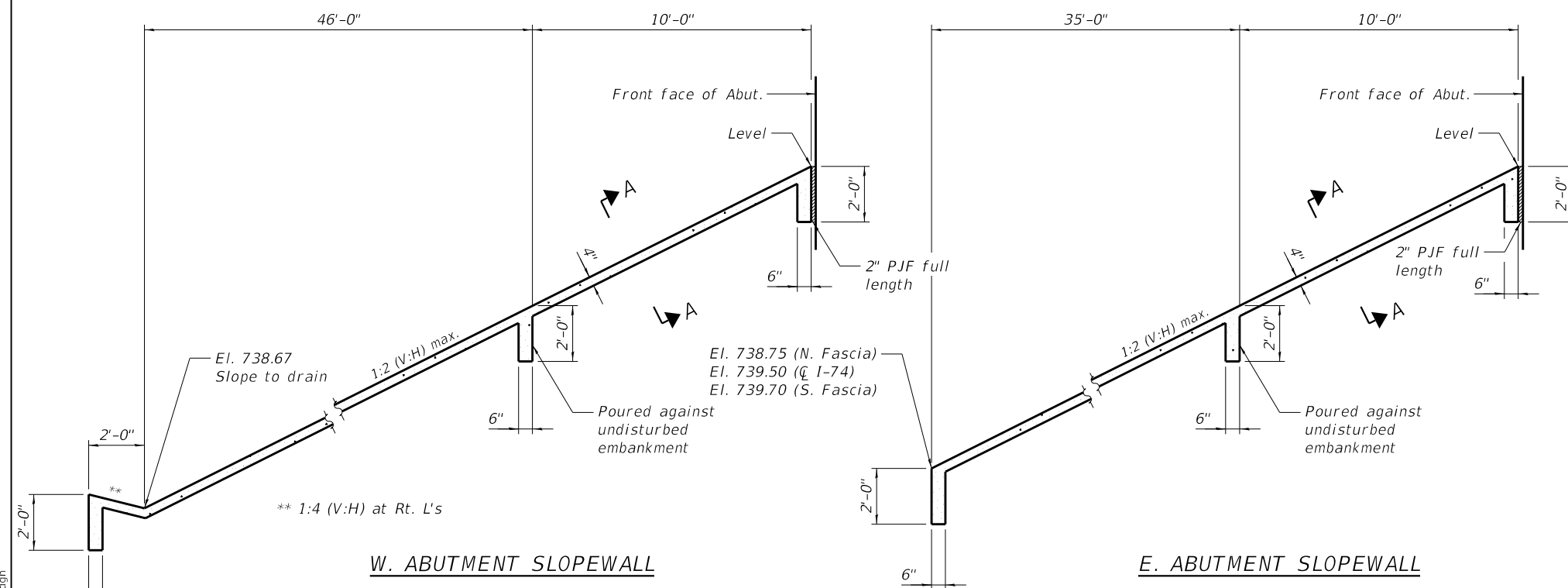
**INDEX OF SHEETS & GENERAL NOTES
STRUCTURE NO. 010-0021**

SHEET SR-02 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	136
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

TOTAL BILL OF MATERIAL

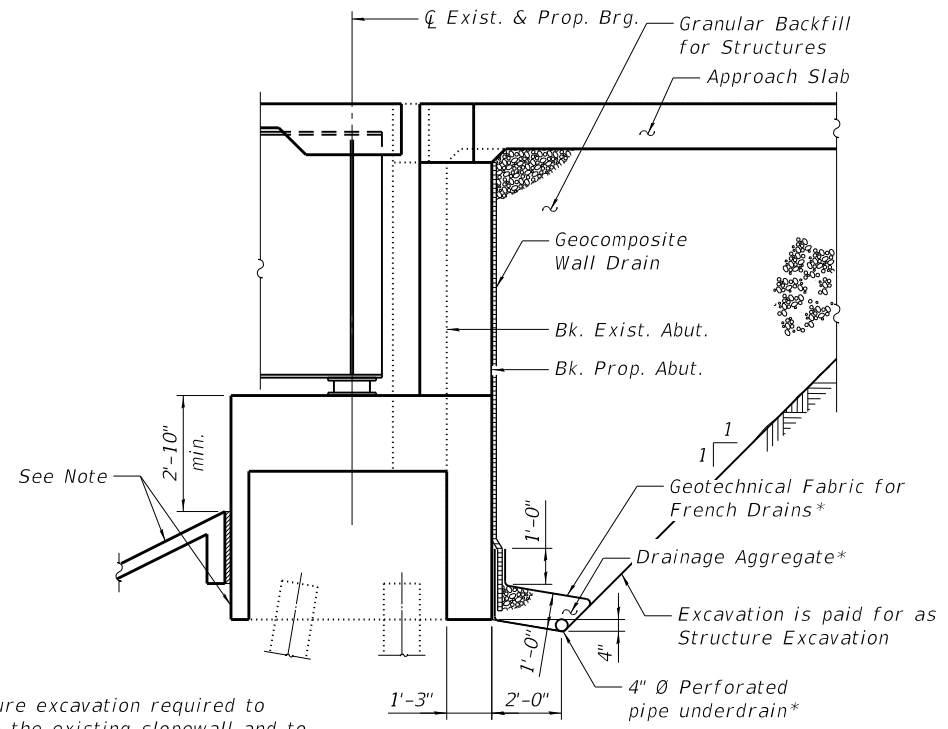
ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures No. 2	Each	1		1
Concrete Removal	Cu Yd		360.6	360.6
Slope Wall Removal	Sq Yd		1,687	1,687
Protective Shield	Sq Yd	4,228		4,228
Structure Excavation	Cu Yd		1,306	1,306
Concrete Structures	Cu Yd	77.8	692.0	769.8
Concrete Superstructure	Cu Yd	2,899.1		2,899.1
Protective Coat	Sq Yd	1,552		1,552
Concrete Superstructure (Approach Slab)	Cu Yd	346.4		346.4
Furnishing and Erecting Structural Steel	L Sum	0.8		0.8
Stud Shear Connectors	Each	35,440		35,440
Reinforcement Bars, Epoxy Coated	Pound	933,720	83,860	1,017,580
Bar Splicers	Each		363	363
Slope Wall 4 Inch	Sq Yd		1,593	1,593
Name Plates	Each	1		1
Preformed Joint Seal 2 1/2"	Foot	787		787
Elastomeric Bearing Assembly, Type II	Each	32		32
Anchor Bolts, 1"	Each	32		32
Anchor Bolts, 1 1/4"	Each	96		96
Anchor Bolts, 1 1/2"	Each	128		128
Temporary Sheet Piling	Sq Ft		933	933
Granular Backfill for Structures	Cu Yd		1,064	1,064
Concrete Sealer	Sq Ft		4,045	4,045
Epoxy Crack Injection	Foot		53	53
Geocomposite Wall Drain	Sq Yd		377	377
High Friction Surface Treatment for Bridge Deck Surfaces	Sq Yd	10,042		10,042
High Load Multi-Rotational Bearings, Guided Expansion, 500K	Each	16		16
High Load Multi-Rotational Bearings, Guided Expansion, 700K	Each	16		16
High Load Multi-Rotational Bearings, Fixed - 600K	Each	16		16
Structural Repair of Concrete (Depth Equal To or Less Than 5 Inches)	Sq Ft		271	271
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		84	84
Drainage Scuppers, DS-11	Each	20		20
Drainage System	L Sum	0.8		0.8
Diamond Grinding (Bridge Section)	Sq Yd	9,344		9,344
Modular Expansion Joint 6"	Foot	243		243
Pipe Underdrains for Structures 4"	Foot		358	358



W. ABUTMENT SLOPEWALL

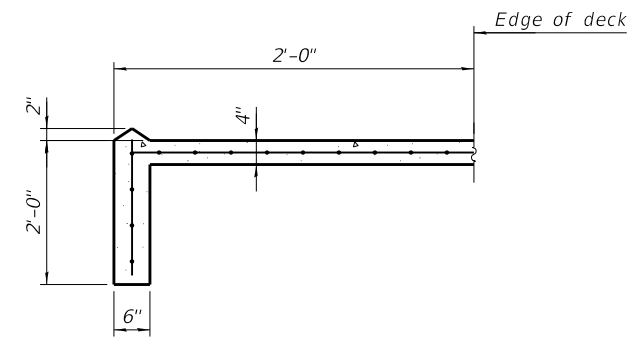
E. ABUTMENT SLOPEWALL

Sloped wall shall be reinforced with welded wire fabric, 6 in x 6 in - W4.0 x 4.0, weighing 58 lbs. per 100 sq. ft. Cost of welded wire fabric included with Sloped wall 4".



SECTION THRU ABUTMENT
(Horizontal dim. at Rt. L's)

All pipe underdrain system components shall extend full width of the abutments between the exist. wingwalls. The pipe shall extend under the existing wingwall footings 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

STATION 1219+00.14
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 74
SEC. (14-1)BR, (14HB-2)BR-1
LOADING HL-93
STRUCTURE NO. 010-0021

NAME PLATE
See Std. 515001

The two existing Name Plates shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

Note:
Structure excavation required to remove the existing sloped wall and to construct the pile cap facing is included in the cost of Slope Wall Removal.

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

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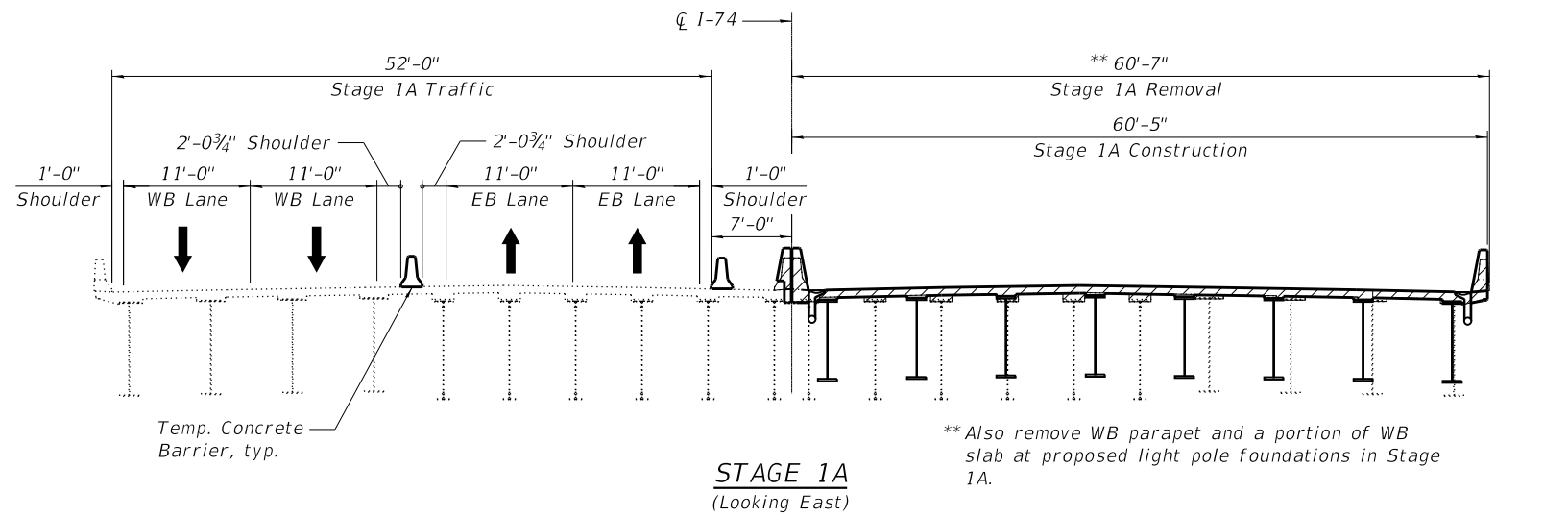
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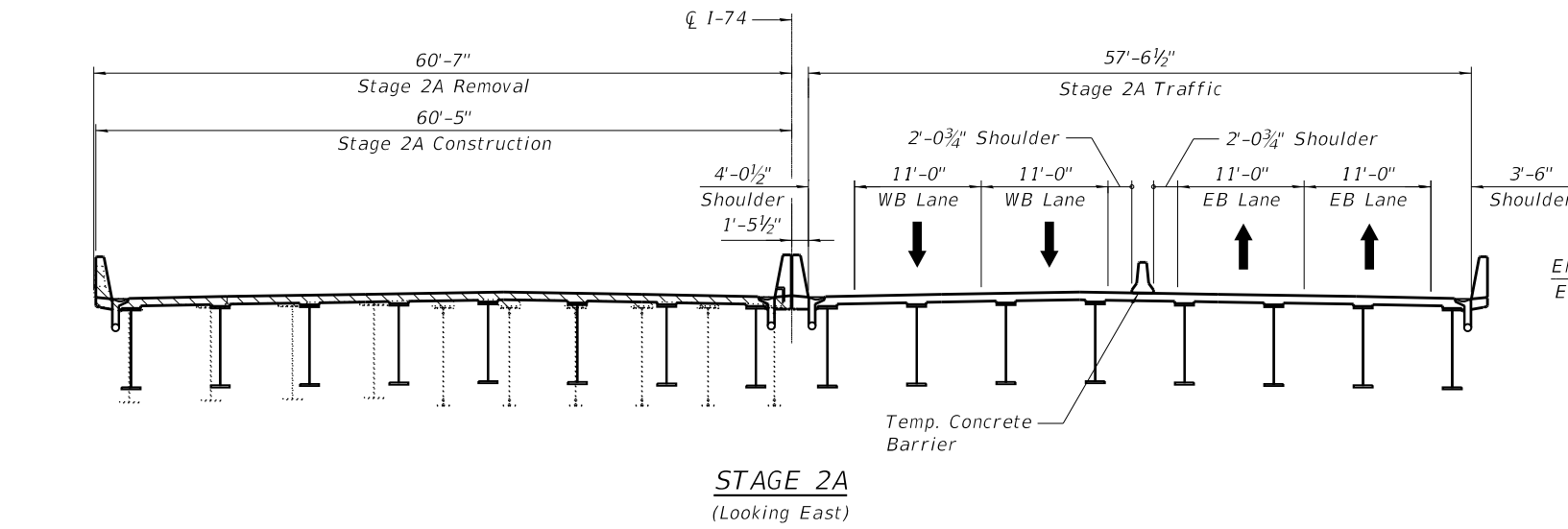
BILL OF MATERIAL & GENERAL DETAILS
STRUCTURE NO. 010-0021

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

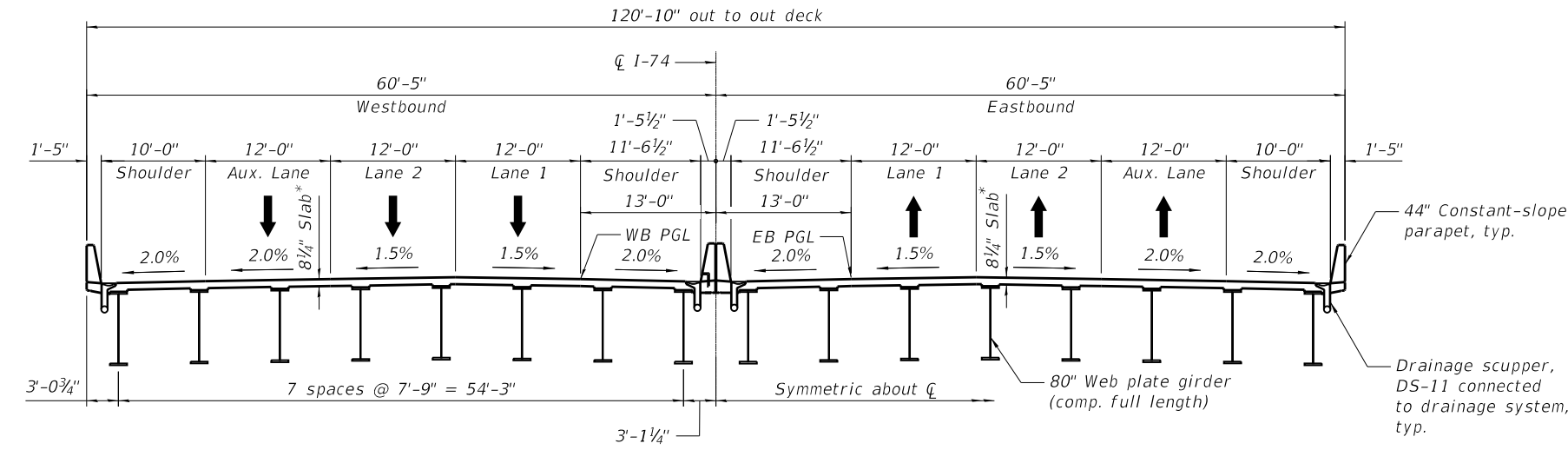
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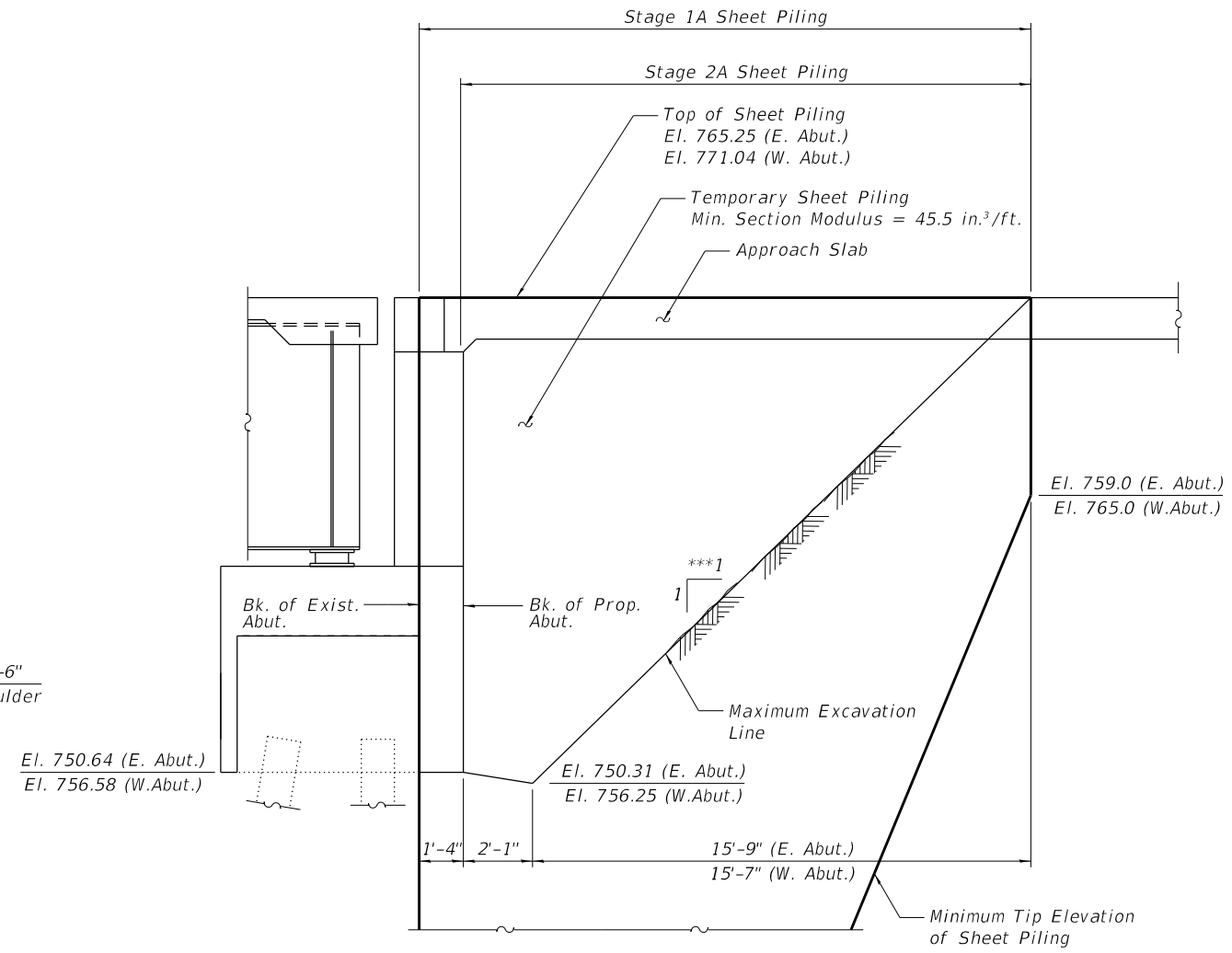
STAGE 1A
(Looking East)



STAGE 2A
(Looking East)



FINAL CONFIGURATION
(Looking East)



TEMPORARY SHEET PILING
(E. Abutment Stage 1A Elevation shown)

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Notes:

1. Hatched areas indicate Removal of Existing Superstructures No. 2.
2. For details of Temporary Concrete Barrier, see Sheet SR-05 of SR-63
3. For quantity of Temporary Concrete Barrier, see Roadway plans.



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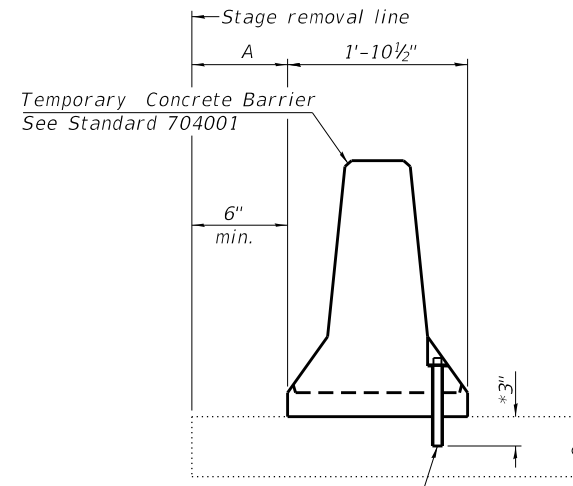
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STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 010-0021

SHEET SR-04 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				

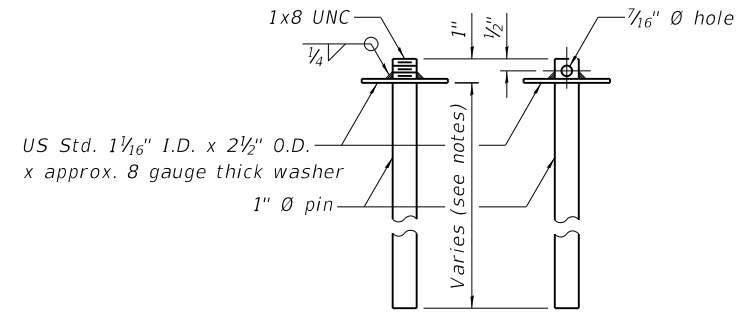
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Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

SECTION THRU EXISTING SLAB



RESTRAINING PIN

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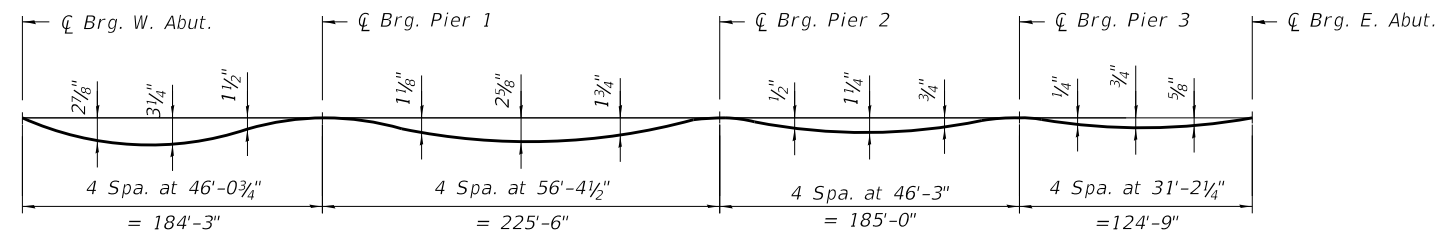
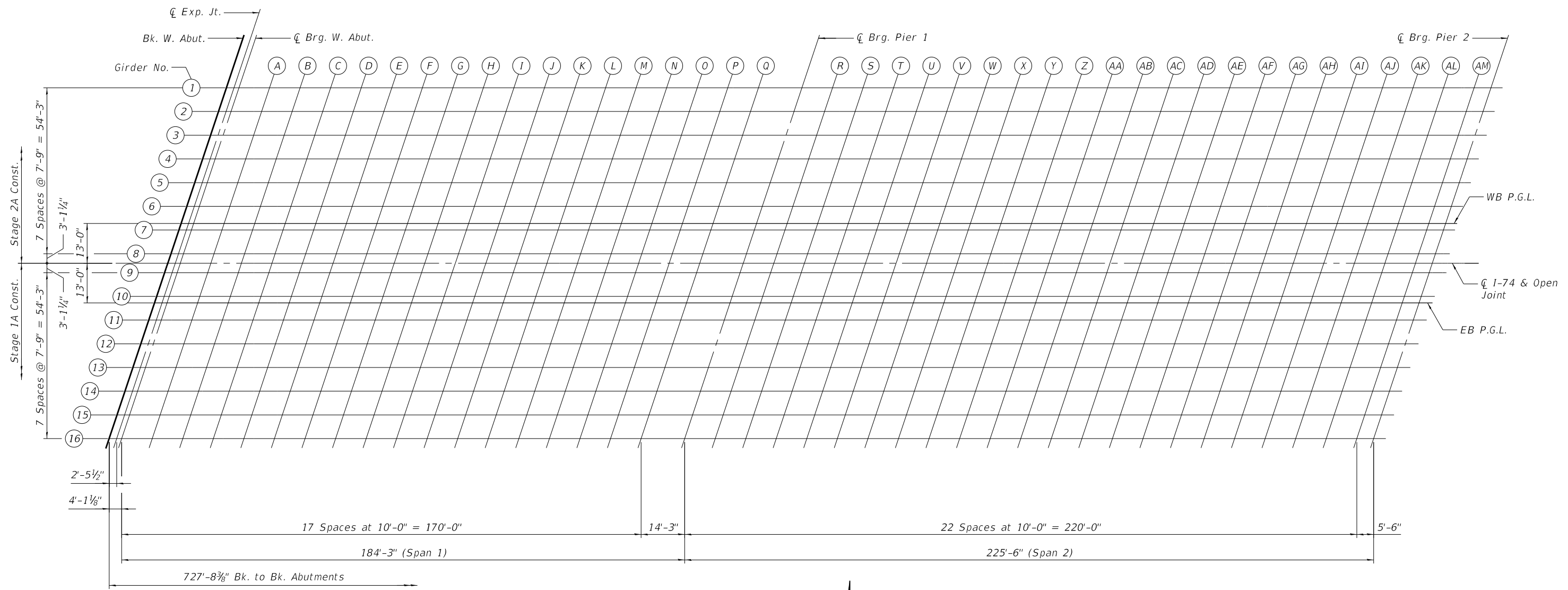
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TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 010-0021

SHEET SR-05 OF SR-63 SHEETS

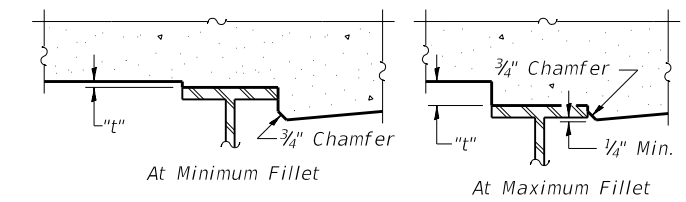
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CONTRACT NO. 70C64				
ILLINOIS			FED. AID PROJECT	

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INTERIOR GIRDER 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 and grinding as shown on Sheets SR-08 thru SR-13.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above and on Sheet SR-07. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on Sheets SR-08 thru SR-13 minus the initial slab thickness prior to grinding, equals the fillet heights "t" above top flange of girders. The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on Sheets SR-08 thru SR-13. For grinding the deck, see Special Provisions.

FILLET HEIGHTS

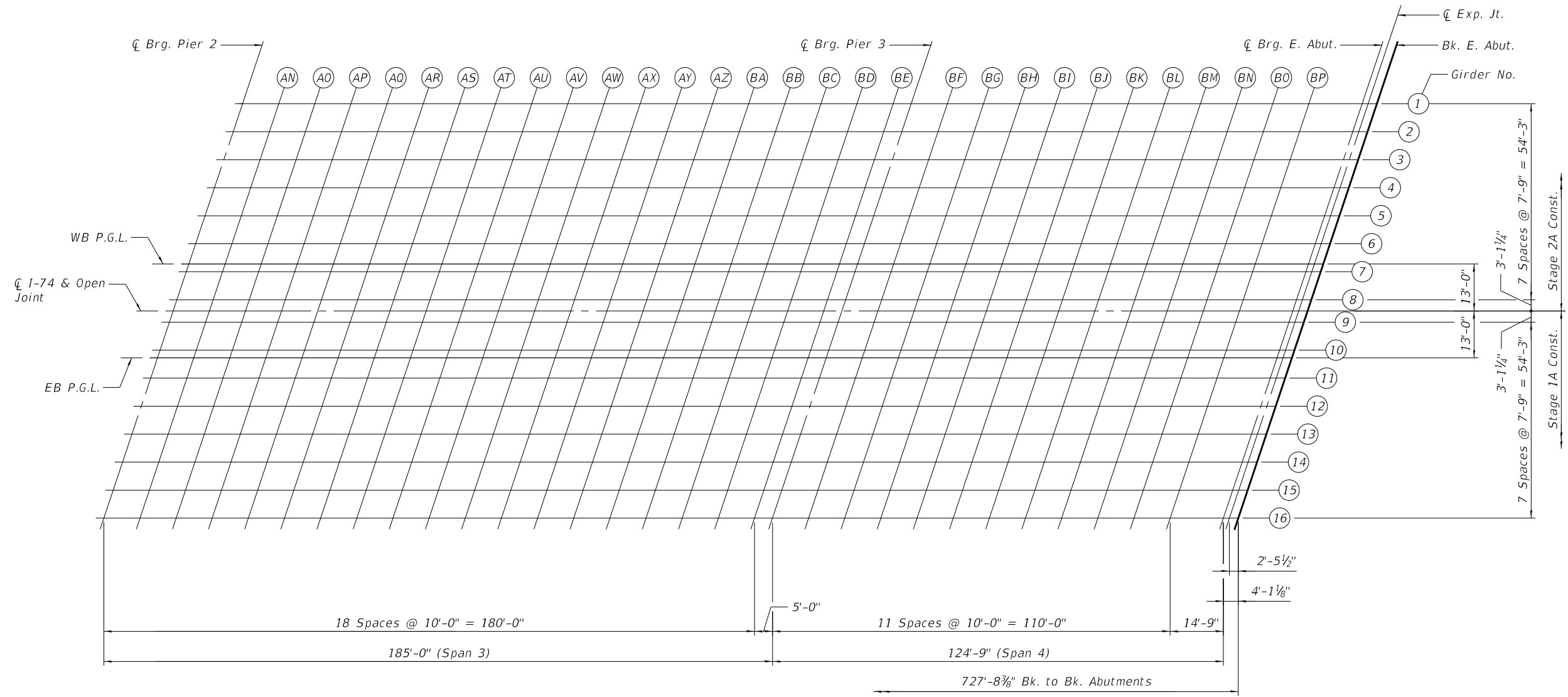
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS 1
 STRUCTURE NO. 010-0021**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	140
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

SHEET SR-06 OF SR-63 SHEETS

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PLAN

N

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TOP OF DECK ELEVATIONS 2
 STRUCTURE NO. 010-0021

SHEET SR-07 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	141
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+55.49	-57.35	770.99	771.01
⊘ Exp. Joint.	1215+57.94	-57.35	771.00	771.02
⊘ Brg. W. Abut.	1215+59.58	-57.35	771.01	771.03
A	1215+69.58	-57.35	771.06	771.14
B	1215+79.58	-57.35	771.11	771.25
C	1215+89.58	-57.35	771.16	771.34
D	1215+99.58	-57.35	771.20	771.43
E	1216+09.58	-57.35	771.24	771.50
F	1216+19.58	-57.35	771.28	771.56
G	1216+29.58	-57.35	771.31	771.60
H	1216+39.58	-57.35	771.33	771.63
I	1216+49.58	-57.35	771.35	771.64
J	1216+59.58	-57.35	771.37	771.64
K	1216+69.58	-57.35	771.39	771.63
L	1216+79.58	-57.35	771.40	771.60
M	1216+89.58	-57.35	771.40	771.57
N	1216+99.58	-57.35	771.41	771.54
O	1217+09.58	-57.35	771.40	771.50
P	1217+19.58	-57.35	771.40	771.46
Q	1217+29.58	-57.35	771.39	771.43
⊘ Brg. Pier 1	1217+43.83	-57.35	771.37	771.39
R	1217+53.83	-57.35	771.35	771.37
S	1217+63.83	-57.35	771.33	771.36
T	1217+73.83	-57.35	771.30	771.35
U	1217+83.83	-57.35	771.27	771.34
V	1217+93.83	-57.35	771.23	771.33
W	1218+03.83	-57.35	771.19	771.32
X	1218+13.83	-57.35	771.15	771.31
Y	1218+23.83	-57.35	771.10	771.29
Z	1218+33.83	-57.35	771.05	771.26
AA	1218+43.83	-57.35	771.00	771.22
AB	1218+53.83	-57.35	770.94	771.17
AC	1218+63.83	-57.35	770.87	771.12
AD	1218+73.83	-57.35	770.81	771.04
AE	1218+83.83	-57.35	770.74	770.96
AF	1218+93.83	-57.35	770.66	770.87
AG	1219+03.83	-57.35	770.58	770.77
AH	1219+13.83	-57.35	770.50	770.65
AI	1219+23.83	-57.35	770.41	770.54
AJ	1219+33.83	-57.35	770.32	770.42
AK	1219+43.83	-57.35	770.23	770.29
AL	1219+53.83	-57.35	770.13	770.17
AM	1219+63.83	-57.35	770.02	770.05
⊘ Brg. Pier 2	1219+69.33	-57.35	769.97	769.99
AN	1219+79.33	-57.35	769.86	769.87
AO	1219+89.33	-57.35	769.74	769.77
AP	1219+99.33	-57.35	769.63	769.66
AQ	1220+09.33	-57.35	769.50	769.55
AR	1220+19.33	-57.35	769.38	769.44
AS	1220+29.33	-57.35	769.25	769.33
AT	1220+39.33	-57.35	769.12	769.21
AU	1220+49.33	-57.35	768.98	769.09
AV	1220+59.33	-57.35	768.84	768.96
AW	1220+69.33	-57.35	768.69	768.81
AX	1220+79.33	-57.35	768.54	768.66
AY	1220+89.33	-57.35	768.39	768.50
AZ	1220+99.33	-57.35	768.23	768.33
BA	1221+09.33	-57.35	768.07	768.15
BB	1221+19.33	-57.35	767.91	767.97
BC	1221+29.33	-57.35	767.74	767.79
BD	1221+39.33	-57.35	767.57	767.60
BE	1221+49.33	-57.35	767.39	767.41
⊘ Brg. Pier 3	1221+54.33	-57.35	767.30	767.32
BF	1221+64.33	-57.35	767.12	767.14
BG	1221+74.33	-57.35	766.93	766.96
BH	1221+84.33	-57.35	766.74	766.78
BI	1221+94.33	-57.35	766.54	766.60
BJ	1222+04.33	-57.35	766.34	766.41
BK	1222+14.33	-57.35	766.14	766.22
BL	1222+24.33	-57.35	765.93	766.02
BM	1222+34.33	-57.35	765.72	765.80
BN	1222+44.33	-57.35	765.51	765.58
BO	1222+54.33	-57.35	765.29	765.35
BP	1222+64.33	-57.35	765.07	765.11
⊘ Brg. E. Abut.	1222+79.08	-57.35	764.73	764.75
⊘ Exp. Joint.	1222+80.72	-57.35	764.69	764.71
Bk. E. Abut.	1222+83.17	-57.35	764.64	764.66

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+52.89	-49.60	771.13	771.15
⊘ Exp. Joint.	1215+55.35	-49.60	771.14	771.16
⊘ Brg. W. Abut.	1215+56.99	-49.60	771.15	771.17
A	1215+66.99	-49.60	771.21	771.29
B	1215+76.99	-49.60	771.26	771.39
C	1215+86.99	-49.60	771.30	771.49
D	1215+96.99	-49.60	771.35	771.58
E	1216+06.99	-49.60	771.39	771.65
F	1216+16.99	-49.60	771.42	771.71
G	1216+26.99	-49.60	771.45	771.76
H	1216+36.99	-49.60	771.48	771.79
I	1216+46.99	-49.60	771.50	771.80
J	1216+56.99	-49.60	771.52	771.80
K	1216+66.99	-49.60	771.54	771.79
L	1216+76.99	-49.60	771.55	771.76
M	1216+86.99	-49.60	771.56	771.73
N	1216+96.99	-49.60	771.56	771.70
O	1217+06.99	-49.60	771.56	771.66
P	1217+16.99	-49.60	771.56	771.62
Q	1217+26.99	-49.60	771.55	771.59
⊘ Brg. Pier 1	1217+41.24	-49.60	771.53	771.55
R	1217+51.24	-49.60	771.51	771.53
S	1217+61.24	-49.60	771.49	771.52
T	1217+71.24	-49.60	771.46	771.51
U	1217+81.24	-49.60	771.43	771.50
V	1217+91.24	-49.60	771.40	771.50
W	1218+01.24	-49.60	771.36	771.49
X	1218+11.24	-49.60	771.32	771.47
Y	1218+21.24	-49.60	771.27	771.46
Z	1218+31.24	-49.60	771.22	771.43
AA	1218+41.24	-49.60	771.17	771.40
AB	1218+51.24	-49.60	771.11	771.35
AC	1218+61.24	-49.60	771.05	771.29
AD	1218+71.24	-49.60	770.98	771.22
AE	1218+81.24	-49.60	770.91	771.14
AF	1218+91.24	-49.60	770.84	771.05
AG	1219+01.24	-49.60	770.76	770.95
AH	1219+11.24	-49.60	770.68	770.84
AI	1219+21.24	-49.60	770.59	770.72
AJ	1219+31.24	-49.60	770.50	770.60
AK	1219+41.24	-49.60	770.41	770.47
AL	1219+51.24	-49.60	770.31	770.35
AM	1219+61.24	-49.60	770.21	770.23
⊘ Brg. Pier 2	1219+66.74	-49.60	770.15	770.17
AN	1219+76.74	-49.60	770.04	770.06
AO	1219+86.74	-49.60	769.93	769.95
AP	1219+96.74	-49.60	769.81	769.85
AQ	1220+06.74	-49.60	769.69	769.74
AR	1220+16.74	-49.60	769.57	769.63
AS	1220+26.74	-49.60	769.44	769.52
AT	1220+36.74	-49.60	769.31	769.41
AU	1220+46.74	-49.60	769.17	769.28
AV	1220+56.74	-49.60	769.03	769.15
AW	1220+66.74	-49.60	768.89	769.01
AX	1220+76.74	-49.60	768.74	768.86
AY	1220+86.74	-49.60	768.59	768.70
AZ	1220+96.74	-49.60	768.43	768.53
BA	1221+06.74	-49.60	768.27	768.35
BB	1221+16.74	-49.60	768.11	768.17
BC	1221+26.74	-49.60	767.94	767.99
BD	1221+36.74	-49.60	767.77	767.80
BE	1221+46.74	-49.60	767.59	767.61
⊘ Brg. Pier 3	1221+51.74	-49.60	767.50	767.52
BF	1221+61.74	-49.60	767.32	767.34
BG	1221+71.74	-49.60	767.13	767.16
BH	1221+81.74	-49.60	766.94	766.99
BI	1221+91.74	-49.60	766.75	766.81
BJ	1222+01.74	-49.60	766.55	766.62
BK	1222+11.74	-49.60	766.35	766.43
BL	1222+21.74	-49.60	766.14	766.23
BM	1222+31.74	-49.60	765.93	766.02
BN	1222+41.74	-49.60	765.72	765.80
BO	1222+51.74	-49.60	765.50	765.57
BP	1222+61.74	-49.60	765.28	765.33
⊘ Brg. E. Abut.	1222+76.49	-49.60	764.94	764.97
⊘ Exp. Joint.	1222+78.12	-49.60	764.91	764.93
Bk. E. Abut.	1222+80.58	-49.60	764.85	764.87

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+50.30	-41.85	771.27	771.29
⊘ Exp. Joint.	1215+52.76	-41.85	771.28	771.30
⊘ Brg. W. Abut.	1215+54.39	-41.85	771.29	771.31
A	1215+64.39	-41.85	771.35	771.43
B	1215+74.39	-41.85	771.40	771.54
C	1215+84.39	-41.85	771.45	771.64
D	1215+94.39	-41.85	771.49	771.72
E	1216+04.39	-41.85	771.53	771.80
F	1216+14.39	-41.85	771.57	771.86
G	1216+24.39	-41.85	771.60	771.90
H	1216+34.39	-41.85	771.63	771.93
I	1216+44.39	-41.85	771.65	771.95
J	1216+54.39	-41.85	771.67	771.95
K	1216+64.39	-41.85	771.69	771.94
L	1216+74.39	-41.85	771.70	771.92
M	1216+84.39	-41.85	771.71	771.89
N	1216+94.39	-41.85	771.72	771.85
O	1217+04.39	-41.85	771.72	771.81
P	1217+14.39	-41.85	771.71	771.78
Q	1217+24.39	-41.85	771.70	771.75
⊘ Brg. Pier 1	1217+38.64	-41.85	771.69	771.71
R	1217+48.64	-41.85	771.67	771.69
S	1217+58.64	-41.85	771.65	771.68
T	1217+68.64	-41.85	771.62	771.67
U	1217+78.64	-41.85	771.59	771.67
V	1217+88.64	-41.85	771.56	771.66
W	1217+98.64	-41.85	771.52	771.65
X	1218+08.64	-41.85	771.48	771.64
Y	1218+18.64	-41.85	771.44	771.63
Z	1218+28.64	-41.85	771.39	771.60
AA	1218+38.64	-41.85	771.34	771.57
AB	1218+48.64	-41.85	771.28	771.52
AC	1218+58.64	-41.85	771.22	771.46
AD	1218+68.64	-41.85	771.15	771.40
AE	1218+78.64	-41.85	771.08	771.32
AF	1218+88.64	-41.85	771.01	771.22
AG	1218+98.64	-41.85	770.93	771.12
AH	1219+08.64	-41.85	770.85	771.01
AI	1219+18.64	-41.85	770.77	770.90
AJ	1219+28.64	-41.85	770.68	770.78
AK	1219+38.64	-41.85	770.59	770.65
AL	1219+48.64	-41.85	770.49	770.53
AM	1219+58.64	-41.85	770.39	770.42
⊘ Brg. Pier 2	1219+64.14	-41.85	770.33	770.35
AN	1219+74.14	-41.85	770.22	770.24
AO	1219+84.14	-41.85	770.11	770.13
AP	1219+94.14	-41.85	770.00	770.03
AQ	1220+04.14	-41.85	769.88	769.93
AR	1220+14.14	-41.85	769.75	769.82
AS	1220+24.14	-41.85	769.63	769.71

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+47.71	-34.10	771.39	771.41
⊘ Exp. Joint.	1215+50.17	-34.10	771.41	771.43
⊘ Brg. W. Abut.	1215+51.80	-34.10	771.42	771.44
A	1215+61.80	-34.10	771.47	771.55
B	1215+71.80	-34.10	771.53	771.66
C	1215+81.80	-34.10	771.58	771.77
D	1215+91.80	-34.10	771.62	771.85
E	1216+01.80	-34.10	771.66	771.93
F	1216+11.80	-34.10	771.70	771.99
G	1216+21.80	-34.10	771.73	772.04
H	1216+31.80	-34.10	771.76	772.07
I	1216+41.80	-34.10	771.79	772.08
J	1216+51.80	-34.10	771.81	772.09
K	1216+61.80	-34.10	771.83	772.07
L	1216+71.80	-34.10	771.84	772.05
M	1216+81.80	-34.10	771.85	772.02
N	1216+91.80	-34.10	771.85	771.99
O	1217+01.80	-34.10	771.86	771.96
P	1217+11.80	-34.10	771.85	771.92
Q	1217+21.80	-34.10	771.85	771.89
⊘ Brg. Pier 1	1217+36.05	-34.10	771.83	771.85
R	1217+46.05	-34.10	771.82	771.84
S	1217+56.05	-34.10	771.80	771.83
T	1217+66.05	-34.10	771.77	771.82
U	1217+76.05	-34.10	771.74	771.82
V	1217+86.05	-34.10	771.71	771.81
W	1217+96.05	-34.10	771.67	771.80
X	1218+06.05	-34.10	771.63	771.79
Y	1218+16.05	-34.10	771.59	771.78
Z	1218+26.05	-34.10	771.54	771.75
AA	1218+36.05	-34.10	771.49	771.72
AB	1218+46.05	-34.10	771.43	771.68
AC	1218+56.05	-34.10	771.37	771.62
AD	1218+66.05	-34.10	771.31	771.55
AE	1218+76.05	-34.10	771.24	771.47
AF	1218+86.05	-34.10	771.17	771.38
AG	1218+96.05	-34.10	771.09	771.28
AH	1219+06.05	-34.10	771.01	771.17
AI	1219+16.05	-34.10	770.93	771.06
AJ	1219+26.05	-34.10	770.84	770.94
AK	1219+36.05	-34.10	770.75	770.82
AL	1219+46.05	-34.10	770.65	770.70
AM	1219+56.05	-34.10	770.55	770.58
⊘ Brg. Pier 2	1219+61.55	-34.10	770.50	770.52
AN	1219+71.55	-34.10	770.39	770.41
AO	1219+81.55	-34.10	770.28	770.30
AP	1219+91.55	-34.10	770.17	770.20
AQ	1220+01.55	-34.10	770.05	770.10
AR	1220+11.55	-34.10	769.93	769.99
AS	1220+21.55	-34.10	769.80	769.88
AT	1220+31.55	-34.10	769.67	769.77
AU	1220+41.55	-34.10	769.54	769.65
AV	1220+51.55	-34.10	769.40	769.52
AW	1220+61.55	-34.10	769.26	769.38
AX	1220+71.55	-34.10	769.11	769.23
AY	1220+81.55	-34.10	768.96	769.07
AZ	1220+91.55	-34.10	768.81	768.91
BA	1221+01.55	-34.10	768.65	768.73
BB	1221+11.55	-34.10	768.49	768.55
BC	1221+21.55	-34.10	768.32	768.37
BD	1221+31.55	-34.10	768.15	768.18
BE	1221+41.55	-34.10	767.98	768.00
⊘ Brg. Pier 3	1221+46.55	-34.10	767.89	767.91
BF	1221+56.55	-34.10	767.71	767.73
BG	1221+66.55	-34.10	767.53	767.56
BH	1221+76.55	-34.10	767.34	767.38
BI	1221+86.55	-34.10	767.15	767.20
BJ	1221+96.55	-34.10	766.95	767.02
BK	1222+06.55	-34.10	766.75	766.83
BL	1222+16.55	-34.10	766.55	766.63
BM	1222+26.55	-34.10	766.34	766.42
BN	1222+36.55	-34.10	766.13	766.20
BO	1222+46.55	-34.10	765.91	765.98
BP	1222+56.55	-34.10	765.69	765.74
⊘ Brg. E. Abut.	1222+71.30	-34.10	765.36	765.38
⊘ Exp. Joint.	1222+72.94	-34.10	765.32	765.34
Bk. E. Abut.	1222+75.40	-34.10	765.27	765.29

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+45.11	-26.35	771.49	771.51
⊘ Exp. Joint.	1215+47.57	-26.35	771.51	771.53
⊘ Brg. W. Abut.	1215+49.21	-26.35	771.52	771.54
A	1215+59.21	-26.35	771.57	771.66
B	1215+69.21	-26.35	771.63	771.77
C	1215+79.21	-26.35	771.68	771.87
D	1215+89.21	-26.35	771.73	771.96
E	1215+99.21	-26.35	771.77	772.04
F	1216+09.21	-26.35	771.81	772.10
G	1216+19.21	-26.35	771.84	772.14
H	1216+29.21	-26.35	771.87	772.18
I	1216+39.21	-26.35	771.90	772.19
J	1216+49.21	-26.35	771.92	772.20
K	1216+59.21	-26.35	771.94	772.19
L	1216+69.21	-26.35	771.95	772.17
M	1216+79.21	-26.35	771.96	772.14
N	1216+89.21	-26.35	771.97	772.10
O	1216+99.21	-26.35	771.97	772.07
P	1217+09.21	-26.35	771.97	772.04
Q	1217+19.21	-26.35	771.97	772.01
⊘ Brg. Pier 1	1217+33.46	-26.35	771.95	771.97
R	1217+43.46	-26.35	771.94	771.96
S	1217+53.46	-26.35	771.92	771.95
T	1217+63.46	-26.35	771.89	771.94
U	1217+73.46	-26.35	771.87	771.94
V	1217+83.46	-26.35	771.84	771.94
W	1217+93.46	-26.35	771.80	771.93
X	1218+03.46	-26.35	771.76	771.92
Y	1218+13.46	-26.35	771.72	771.91
Z	1218+23.46	-26.35	771.67	771.88
AA	1218+33.46	-26.35	771.62	771.85
AB	1218+43.46	-26.35	771.57	771.81
AC	1218+53.46	-26.35	771.51	771.75
AD	1218+63.46	-26.35	771.44	771.69
AE	1218+73.46	-26.35	771.38	771.61
AF	1218+83.46	-26.35	771.31	771.52
AG	1218+93.46	-26.35	771.23	771.42
AH	1219+03.46	-26.35	771.15	771.31
AI	1219+13.46	-26.35	771.07	771.20
AJ	1219+23.46	-26.35	770.98	771.08
AK	1219+33.46	-26.35	770.89	770.96
AL	1219+43.46	-26.35	770.80	770.84
AM	1219+53.46	-26.35	770.70	770.73
⊘ Brg. Pier 2	1219+58.96	-26.35	770.64	770.66
AN	1219+68.96	-26.35	770.54	770.55
AO	1219+78.96	-26.35	770.43	770.45
AP	1219+88.96	-26.35	770.31	770.35
AQ	1219+98.96	-26.35	770.20	770.25
AR	1220+08.96	-26.35	770.08	770.14
AS	1220+18.96	-26.35	769.95	770.03
AT	1220+28.96	-26.35	769.82	769.92
AU	1220+38.96	-26.35	769.69	769.80
AV	1220+48.96	-26.35	769.55	769.67
AW	1220+58.96	-26.35	769.41	769.53
AX	1220+68.96	-26.35	769.27	769.39
AY	1220+78.96	-26.35	769.12	769.23
AZ	1220+88.96	-26.35	768.96	769.06
BA	1220+98.96	-26.35	768.81	768.89
BB	1221+08.96	-26.35	768.65	768.71
BC	1221+18.96	-26.35	768.48	768.53
BD	1221+28.96	-26.35	768.31	768.35
BE	1221+38.96	-26.35	768.14	768.16
⊘ Brg. Pier 3	1221+43.96	-26.35	768.05	768.07
BF	1221+53.96	-26.35	767.87	767.90
BG	1221+63.96	-26.35	767.69	767.72
BH	1221+73.96	-26.35	767.50	767.55
BI	1221+83.96	-26.35	767.31	767.37
BJ	1221+93.96	-26.35	767.12	767.19
BK	1222+03.96	-26.35	766.92	767.00
BL	1222+13.96	-26.35	766.72	766.80
BM	1222+23.96	-26.35	766.51	766.59
BN	1222+33.96	-26.35	766.30	766.37
BO	1222+43.96	-26.35	766.08	766.15
BP	1222+53.96	-26.35	765.86	765.91
⊘ Brg. E. Abut.	1222+68.71	-26.35	765.53	765.56
⊘ Exp. Joint.	1222+70.34	-26.35	765.50	765.52
Bk. E. Abut.	1222+72.80	-26.35	765.44	765.46

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+42.52	-18.60	771.40	771.42
⊘ Exp. Joint.	1215+44.98	-18.60	771.41	771.44
⊘ Brg. W. Abut.	1215+46.62	-18.60	771.42	771.45
A	1215+56.62	-18.60	771.48	771.57
B	1215+66.62	-18.60	771.54	771.68
C	1215+76.62	-18.60	771.59	771.78
D	1215+86.62	-18.60	771.64	771.87
E	1215+96.62	-18.60	771.68	771.95
F	1216+06.62	-18.60	771.72	772.01
G	1216+16.62	-18.60	771.76	772.06
H	1216+26.62	-18.60	771.79	772.09
I	1216+36.62	-18.60	771.82	772.11
J	1216+46.62	-18.60	771.84	772.12
K	1216+56.62	-18.60	771.86	772.11
L	1216+66.62	-18.60	771.87	772.09
M	1216+76.62	-18.60	771.89	772.06
N	1216+86.62	-18.60	771.89	772.03
O	1216+96.62	-18.60	771.90	772.00
P	1217+06.62	-18.60	771.90	771.96
Q	1217+16.62	-18.60	771.89	771.93
⊘ Brg. Pier 1	1217+30.87	-18.60	771.88	771.90
R	1217+40.87	-18.60	771.86	771.89
S	1217+50.87	-18.60	771.85	771.88
T	1217+60.87	-18.60	771.82	771.87
U	1217+70.87	-18.60	771.80	771.87
V	1217+80.87	-18.60	771.77	771.87
W	1217+90.87	-18.60	771.73	771.86
X	1218+00.87	-18.60	771.70	771.85
Y	1218+10.87	-18.60	771.65	771.84
Z	1218+20.87	-18.60	771.61	771.82
AA	1218+30.87	-18.60	771.56	771.79
AB	1218+40.87	-18.60	771.50	771.75
AC	1218+50.87	-18.60	771.45	771.69
AD	1218+60.87	-18.60	771.38	771.63
AE	1218+70.87	-18.60	771.32	771.55
AF	1218+80.87	-18.60	771.25	771.46
AG	1218+90.87	-18.60	771.17	771.36
AH	1219+00.87	-18.60	771.10	771.26
AI	1219+10.87	-18.60	771.01	771.14
AJ	1219+20.87	-18.60	770.93	771.03
AK	1219+30.87	-18.60	770.84	770.91
AL	1219+40.87	-18.60	770.75	770.79
AM	1219+50.87	-18.60	770.65	770.68
⊘ Brg. Pier 2	1219+56.37	-18.60	770.59	770.61
AN	1219+66.37	-18.60	770.49	770.51
AO	1219+76.37	-18.60	770.38	770.40
AP	1219+86.37	-18.60	770.27	770.30
AQ	1219+96.37	-18.60	770.15	770.20
AR	1220+06.37	-18.60	770.03	770.10
AS	1220+16.37	-18.60	769.91	769.99

WB P.G.L.

GIRDER 7

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+40.65	-13.00	771.30	771.32
Exp. Joint.	1215+43.10	-13.00	771.32	771.34
Brg. W. Abut.	1215+44.74	-13.00	771.33	771.35
A	1215+54.74	-13.00	771.39	771.47
B	1215+64.74	-13.00	771.45	771.58
C	1215+74.74	-13.00	771.50	771.69
D	1215+84.74	-13.00	771.55	771.78
E	1215+94.74	-13.00	771.59	771.86
F	1216+04.74	-13.00	771.63	771.92
G	1216+14.74	-13.00	771.67	771.97
H	1216+24.74	-13.00	771.70	772.00
I	1216+34.74	-13.00	771.73	772.02
J	1216+44.74	-13.00	771.75	772.03
K	1216+54.74	-13.00	771.77	772.02
L	1216+64.74	-13.00	771.79	772.00
M	1216+74.74	-13.00	771.80	771.97
N	1216+84.74	-13.00	771.81	771.94
O	1216+94.74	-13.00	771.81	771.91
P	1217+04.74	-13.00	771.81	771.88
Q	1217+14.74	-13.00	771.81	771.85
Brg. Pier 1	1217+28.99	-13.00	771.80	771.82
R	1217+38.99	-13.00	771.78	771.81
S	1217+48.99	-13.00	771.77	771.80
T	1217+58.99	-13.00	771.74	771.79
U	1217+68.99	-13.00	771.72	771.79
V	1217+78.99	-13.00	771.69	771.79
W	1217+88.99	-13.00	771.66	771.79
X	1217+98.99	-13.00	771.62	771.78
Y	1218+08.99	-13.00	771.58	771.77
Z	1218+18.99	-13.00	771.53	771.74
AA	1218+28.99	-13.00	771.48	771.71
AB	1218+38.99	-13.00	771.43	771.67
AC	1218+48.99	-13.00	771.37	771.62
AD	1218+58.99	-13.00	771.31	771.56
AE	1218+68.99	-13.00	771.25	771.48
AF	1218+78.99	-13.00	771.18	771.39
AG	1218+88.99	-13.00	771.10	771.29
AH	1218+98.99	-13.00	771.03	771.19
AI	1219+08.99	-13.00	770.95	771.07
AJ	1219+18.99	-13.00	770.86	770.96
AK	1219+28.99	-13.00	770.77	770.84
AL	1219+38.99	-13.00	770.68	770.72
AM	1219+48.99	-13.00	770.58	770.61
Brg. Pier 2	1219+54.49	-13.00	770.53	770.55
AN	1219+64.49	-13.00	770.42	770.44
AO	1219+74.49	-13.00	770.32	770.34
AP	1219+84.49	-13.00	770.20	770.24
AQ	1219+94.49	-13.00	770.09	770.14
AR	1220+04.49	-13.00	769.97	770.04
AS	1220+14.49	-13.00	769.85	769.93
AT	1220+24.49	-13.00	769.72	769.82
AU	1220+34.49	-13.00	769.59	769.70
AV	1220+44.49	-13.00	769.45	769.57
AW	1220+54.49	-13.00	769.31	769.44
AX	1220+64.49	-13.00	769.17	769.29
AY	1220+74.49	-13.00	769.02	769.14
AZ	1220+84.49	-13.00	768.87	768.97
BA	1220+94.49	-13.00	768.72	768.80
BB	1221+04.49	-13.00	768.56	768.62
BC	1221+14.49	-13.00	768.40	768.44
BD	1221+24.49	-13.00	768.23	768.26
BE	1221+34.49	-13.00	768.06	768.08
Brg. Pier 3	1221+39.49	-13.00	767.97	767.99
BF	1221+49.49	-13.00	767.79	767.82
BG	1221+59.49	-13.00	767.61	767.64
BH	1221+69.49	-13.00	767.43	767.47
BI	1221+79.49	-13.00	767.24	767.30
BJ	1221+89.49	-13.00	767.04	767.12
BK	1221+99.49	-13.00	766.85	766.93
BL	1222+09.49	-13.00	766.65	766.73
BM	1222+19.49	-13.00	766.44	766.53
BN	1222+29.49	-13.00	766.23	766.31
BO	1222+39.49	-13.00	766.02	766.08
BP	1222+49.49	-13.00	765.80	765.85
Brg. E. Abut.	1222+64.24	-13.00	765.48	765.50
Exp. Joint.	1222+65.88	-13.00	765.44	765.46
Bk. E. Abut.	1222+68.33	-13.00	765.38	765.40

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+39.93	-10.85	771.26	771.28
Exp. Joint.	1215+42.39	-10.85	771.27	771.29
Brg. W. Abut.	1215+44.02	-10.85	771.28	771.30
A	1215+54.02	-10.85	771.34	771.42
B	1215+64.02	-10.85	771.40	771.54
C	1215+74.02	-10.85	771.45	771.64
D	1215+84.02	-10.85	771.50	771.73
E	1215+94.02	-10.85	771.54	771.81
F	1216+04.02	-10.85	771.58	771.88
G	1216+14.02	-10.85	771.62	771.92
H	1216+24.02	-10.85	771.65	771.96
I	1216+34.02	-10.85	771.68	771.98
J	1216+44.02	-10.85	771.71	771.98
K	1216+54.02	-10.85	771.73	771.97
L	1216+64.02	-10.85	771.74	771.96
M	1216+74.02	-10.85	771.76	771.93
N	1216+84.02	-10.85	771.76	771.90
O	1216+94.02	-10.85	771.77	771.87
P	1217+04.02	-10.85	771.77	771.84
Q	1217+14.02	-10.85	771.77	771.81
Brg. Pier 1	1217+28.27	-10.85	771.75	771.78
R	1217+38.27	-10.85	771.74	771.76
S	1217+48.27	-10.85	771.72	771.76
T	1217+58.27	-10.85	771.70	771.75
U	1217+68.27	-10.85	771.68	771.75
V	1217+78.27	-10.85	771.65	771.75
W	1217+88.27	-10.85	771.62	771.75
X	1217+98.27	-10.85	771.58	771.74
Y	1218+08.27	-10.85	771.54	771.73
Z	1218+18.27	-10.85	771.49	771.71
AA	1218+28.27	-10.85	771.44	771.67
AB	1218+38.27	-10.85	771.39	771.63
AC	1218+48.27	-10.85	771.33	771.58
AD	1218+58.27	-10.85	771.27	771.52
AE	1218+68.27	-10.85	771.21	771.44
AF	1218+78.27	-10.85	771.14	771.35
AG	1218+88.27	-10.85	771.07	771.26
AH	1218+98.27	-10.85	770.99	771.15
AI	1219+08.27	-10.85	770.91	771.04
AJ	1219+18.27	-10.85	770.82	770.92
AK	1219+28.27	-10.85	770.74	770.80
AL	1219+38.27	-10.85	770.64	770.69
AM	1219+48.27	-10.85	770.55	770.57
Brg. Pier 2	1219+53.77	-10.85	770.49	770.51
AN	1219+63.77	-10.85	770.39	770.41
AO	1219+73.77	-10.85	770.28	770.30
AP	1219+83.77	-10.85	770.17	770.21
AQ	1219+93.77	-10.85	770.06	770.10
AR	1220+03.77	-10.85	769.94	770.00
AS	1220+13.77	-10.85	769.81	769.90
AT	1220+23.77	-10.85	769.69	769.79
AU	1220+33.77	-10.85	769.56	769.67
AV	1220+43.77	-10.85	769.42	769.54
AW	1220+53.77	-10.85	769.28	769.40
AX	1220+63.77	-10.85	769.14	769.26
AY	1220+73.77	-10.85	768.99	769.10
AZ	1220+83.77	-10.85	768.84	768.94
BA	1220+93.77	-10.85	768.69	768.77
BB	1221+03.77	-10.85	768.53	768.59
BC	1221+13.77	-10.85	768.36	768.41
BD	1221+23.77	-10.85	768.20	768.23
BE	1221+33.77	-10.85	768.03	768.05
Brg. Pier 3	1221+38.77	-10.85	767.94	767.96
BF	1221+48.77	-10.85	767.76	767.79
BG	1221+58.77	-10.85	767.58	767.61
BH	1221+68.77	-10.85	767.40	767.44
BI	1221+78.77	-10.85	767.21	767.27
BJ	1221+88.77	-10.85	767.02	767.09
BK	1221+98.77	-10.85	766.82	766.90
BL	1222+08.77	-10.85	766.62	766.70
BM	1222+18.77	-10.85	766.41	766.50
BN	1222+28.77	-10.85	766.20	766.28
BO	1222+38.77	-10.85	765.99	766.06
BP	1222+48.77	-10.85	765.78	765.82
Brg. E. Abut.	1222+63.52	-10.85	765.45	765.47
Exp. Joint.	1222+65.16	-10.85	765.41	765.43
Bk. E. Abut.	1222+67.62	-10.85	765.36	765.38

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	1215+37.34	-3.10	771.08	771.10
Exp. Joint.	1215+39.79	-3.10	771.10	771.12
Brg. W. Abut.	1215+41.43	-3.10	771.11	771.13
A	1215+51.43	-3.10	771.17	771.25
B	1215+61.43	-3.10	771.23	771.36
C	1215+71.43	-3.10	771.28	771.47
D	1215+81.43	-3.10	771.33	771.56
E	1215+91.43	-3.10	771.38	771.64
F	1216+01.43	-3.10	771.42	771.70
G	1216+11.43	-3.10	771.46	771.75
H	1216+21.43	-3.10	771.49	771.79
I	1216+31.43	-3.10	771.52	771.81
J	1216+41.43	-3.10	771.55	771.81
K	1216+51.43	-3.10	771.57	771.81
L	1216+61.43	-3.10	771.58	771.79
M	1216+71.43	-3.10	771.60	771.77
N	1216+81.43	-3.10	771.61	771.74
O	1216+91.43	-3.10	771.61	771.71
P	1217+01.43	-3.10	771.62	771.68
Q	1217+11.43	-3.10	771.61	771.65
Brg. Pier 1	1217+25.68	-3.10	771.60	771.62
R	1217+35.68	-3.10	771.59	771.61
S	1217+45.68	-3.10	771.57	771.61
T	1217+55.68	-3.10	771.55	771.60
U	1217+65.68	-3.10	771.53	771.60
V	1217+75.68	-3.10	771.50	771.60
W	1217+85.68	-3.10	771.47	771.60
X	1217+95.68	-3.10	771.43	771.59
Y	1218+05.68	-3.10	771.39	771.58
Z	1218+15.68	-3.10	771.35	771.56
AA	1218+25.68	-3.10	771.30	771.53
AB	1218+35.68	-3.10	771.25	771.49
AC	1218+45.68	-3.10	771.20	771.44
AD	1218+55.68	-3.10	771.14	771.37
AE	1218+65.68	-3.10	771.07	771.30
AF	1218+75.68	-3.10	771.00	771.21
AG	1218+85.68	-3.10	770.93	771.12
AH	1218+95.68	-3.10	770.86	771.01
AI	1219+05.68	-3.10	770.78	770.90
AJ	1219+15.68	-3.10	770.69	770.79
AK	1219+25.68	-3.10	770.60	770.67
AL	1219+35.68	-3.10	770.51	770.56
AM	1219+45.68	-3.10	770.42	770.44
Brg. Pier 2	1219+51.18	-3.10	770.36	770.38
AN	1219+61.18	-3.10	770.26	770.28
AO	1219+71.18	-3.10	770.15	770.18
AP	1219+81.18	-3.10	770.04	770.08
AQ	1219+91.18	-3.10	769.93	769.98
AR	1220+01.18	-3.10	769.81	769.88
AS	1220+11.18	-3.10	769.69	769.77
AT	1220+21.18	-3.10	769.56	769.66
AU	1220+31.18	-3.10	769.43	769.54
AV				

GIRDER 9

GIRDER 10

EB P.G.L.

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include locations from Bk. W. Abut. to Bk. E. Abut.

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include locations from Bk. W. Abut. to Bk. E. Abut.

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include locations from Bk. W. Abut. to Bk. E. Abut.

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Table with 4 columns: USER NAME, DESIGNED, CHECKED, DRAWN, PLOT DATE. Values include BK, KK, MTR.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS 6 STRUCTURE NO. 010-0021

SHEET SR-11 OF SR-63 SHEETS

Table with 5 columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO. Values include 74, (14-1)BR, (14HB-2)BR-1, CHAMPAIGN, 201, 145.

ILLINOIS FED. AID PROJECT

GIRDER 11

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint., Brg. W. Abut., and various pier and abutment sections.

GIRDER 12

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint., Brg. W. Abut., and various pier and abutment sections.

GIRDER 13

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint., Brg. W. Abut., and various pier and abutment sections.

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exp U.S. Services Inc.
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

Metadata table with columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, BK, KK, MTR, BK.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS 7
STRUCTURE NO. 010-0021
SHEET SR-12 OF SR-63 SHEETS

Table with columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., 74, (14-1)BR, (14HB-2)BR-1, CHAMPAIGN, 201, 146, CONTRACT NO. 70C64, ILLINOIS, FED. AID PROJECT.

GIRDER 14

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint, Brg. W. Abut., and various pier sections (Pier 1, Pier 2, Pier 3).

GIRDER 15

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint, Brg. W. Abut., and various pier sections (Pier 1, Pier 2, Pier 3).

GIRDER 16

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding. Rows include Bk. W. Abut., Exp. Joint, Brg. W. Abut., and various pier sections (Pier 1, Pier 2, Pier 3).

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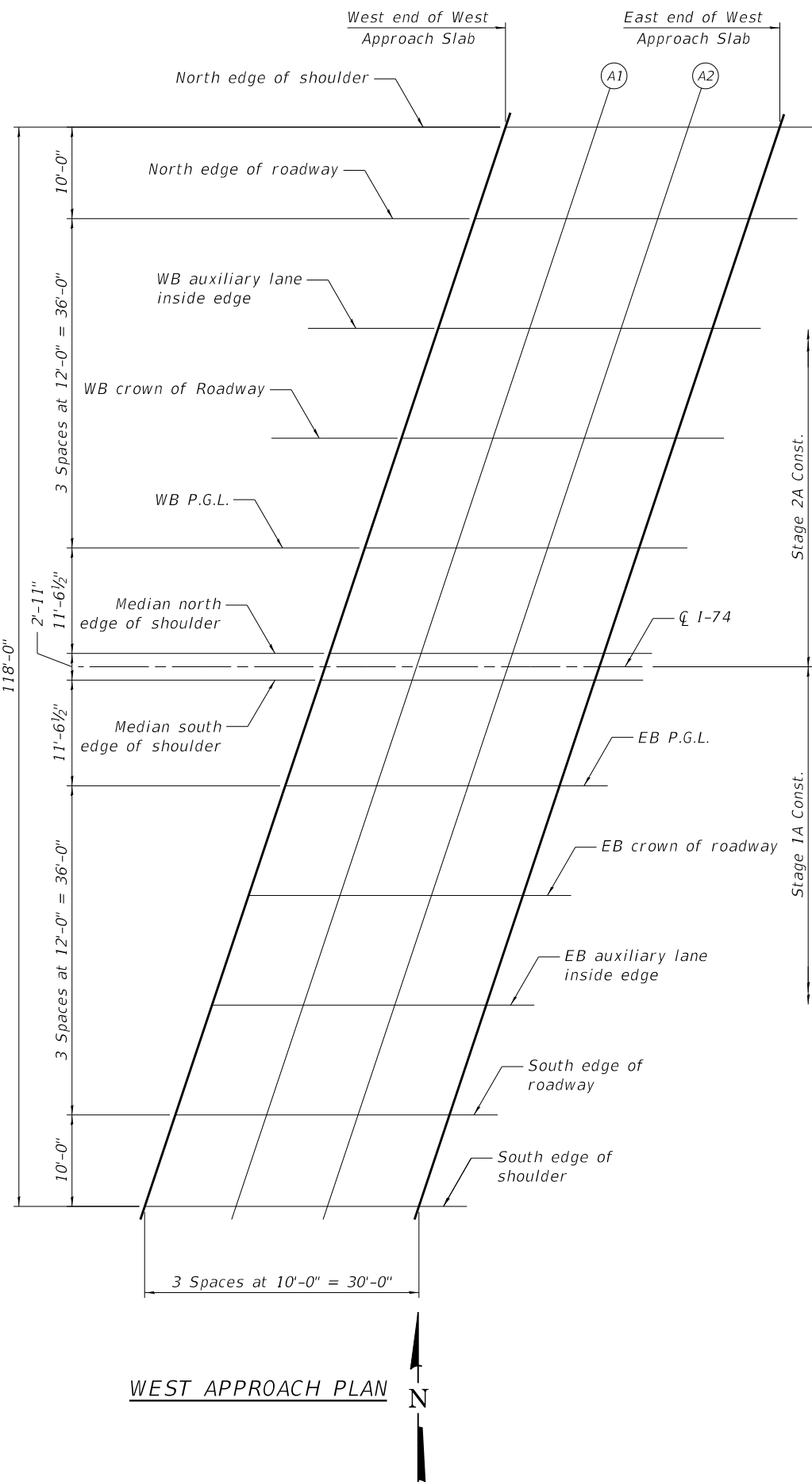
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS 8
STRUCTURE NO. 010-0021

Revision table with columns: USER NAME, DESIGNED, CHECKED, DRAWN, PLOT DATE and corresponding initials/versions.

Project information table with columns: F.A.I. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and CONTRACT NO.

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WEST APPROACH PLAN

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+26.56	-59.00	770.77	770.79
A1	1215+36.56	-59.00	770.84	770.86
A2	1215+46.56	-59.00	770.90	770.92
E. End of W. Appr. Slab	1215+56.56	-59.00	770.96	770.98

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+23.22	-49.00	770.95	770.97
A1	1215+33.22	-49.00	771.01	771.04
A2	1215+43.22	-49.00	771.08	771.10
E. End of W. Appr. Slab	1215+53.22	-49.00	771.14	771.16

WB AUXILIARY LANE INSIDE EDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+19.20	-37.00	771.16	771.18
A1	1215+29.20	-37.00	771.23	771.25
A2	1215+39.20	-37.00	771.29	771.31
E. End of W. Appr. Slab	1215+49.20	-37.00	771.36	771.38

WB CROWN OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+15.19	-25.00	771.31	771.33
A1	1215+25.19	-25.00	771.38	771.40
A2	1215+35.19	-25.00	771.45	771.47
E. End of W. Appr. Slab	1215+45.19	-25.00	771.51	771.53

WB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+11.17	-13.00	771.10	771.12
A1	1215+21.17	-13.00	771.17	771.19
A2	1215+31.17	-13.00	771.24	771.26
E. End of W. Appr. Slab	1215+41.17	-13.00	771.31	771.33

MEDIAN NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+07.31	-1.46	770.84	770.86
A1	1215+17.31	-1.46	770.91	770.93
A2	1215+27.31	-1.46	770.98	771.00
E. End of W. Appr. Slab	1215+37.31	-1.46	771.05	771.07

MEDIAN SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+06.34	1.46	770.83	770.85
A1	1215+16.34	1.46	770.91	770.93
A2	1215+26.34	1.46	770.98	771.00
E. End of W. Appr. Slab	1215+36.34	1.46	771.04	771.07

EB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1215+02.47	13.00	771.03	771.05
A1	1215+12.47	13.00	771.11	771.13
A2	1215+22.47	13.00	771.18	771.20
E. End of W. Appr. Slab	1215+32.47	13.00	771.25	771.27

EB CROWN OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1214+98.46	25.00	771.18	771.20
A1	1215+08.46	25.00	771.26	771.28
A2	1215+18.46	25.00	771.33	771.35
E. End of W. Appr. Slab	1215+28.46	25.00	771.40	771.42

EB AUXILIARY LANE INSIDE EDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1214+94.44	37.00	770.97	770.99
A1	1215+04.44	37.00	771.05	771.07
A2	1215+14.44	37.00	771.12	771.14
E. End of W. Appr. Slab	1215+24.44	37.00	771.19	771.22

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1214+90.43	49.00	770.69	770.71
A1	1215+00.43	49.00	770.77	770.80
A2	1215+10.43	49.00	770.85	770.87
E. End of W. Appr. Slab	1215+20.43	49.00	770.93	770.95

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr. Slab	1214+87.08	59.00	770.46	770.48
A1	1214+97.08	59.00	770.55	770.57
A2	1215+07.08	59.00	770.63	770.65
E. End of W. Appr. Slab	1215+17.08	59.00	770.70	770.72

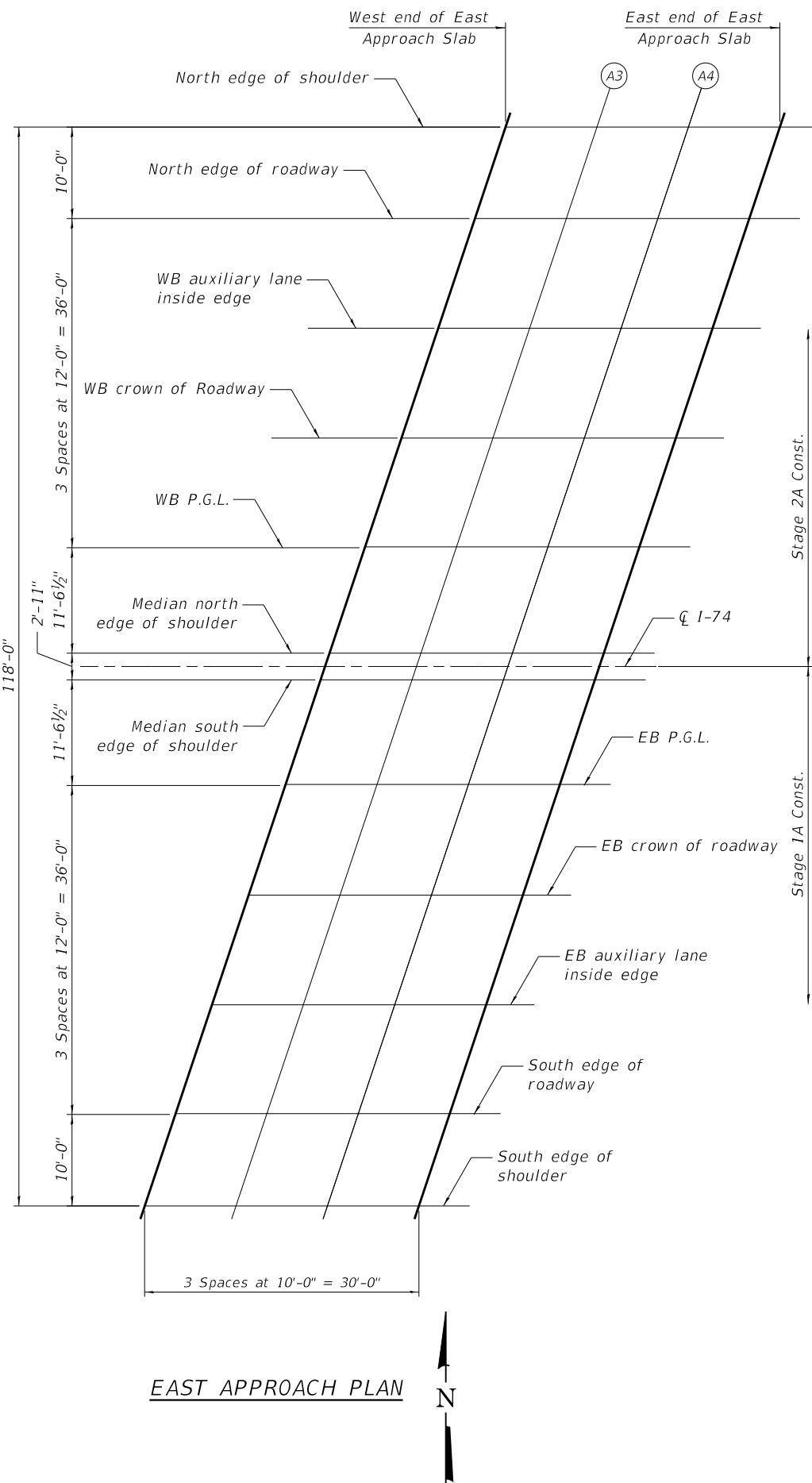
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS 1
 STRUCTURE NO. 010-0021

SHEET SR-14 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	148
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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EAST APPROACH PLAN

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+83.21	-59.00	764.60	764.62
A3	1222+93.21	-59.00	764.37	764.39
A4	1223+03.21	-59.00	764.13	764.15
E. End of E. Appr. Slab	1223+13.21	-59.00	763.89	763.91

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+79.86	-49.00	764.88	764.90
A3	1222+89.86	-49.00	764.65	764.67
A4	1222+99.86	-49.00	764.41	764.43
E. End of E. Appr. Slab	1223+09.86	-49.00	764.17	764.19

WB AUXILIARY LANE INSIDE EDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+75.85	-37.00	765.21	765.23
A3	1222+85.85	-37.00	764.98	765.00
A4	1222+95.85	-37.00	764.74	764.77
E. End of E. Appr. Slab	1223+05.85	-37.00	764.51	764.53

WB CROWN OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+71.83	-25.00	765.48	765.50
A3	1222+81.83	-25.00	765.25	765.27
A4	1222+91.83	-25.00	765.02	765.04
E. End of E. Appr. Slab	1223+01.83	-25.00	764.78	764.80

WB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+67.82	-13.00	765.39	765.42
A3	1222+77.82	-13.00	765.17	765.19
A4	1222+87.82	-13.00	764.93	764.95
E. End of E. Appr. Slab	1222+97.82	-13.00	764.70	764.72

MEDIAN NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+63.96	-1.46	765.25	765.27
A3	1222+73.96	-1.46	765.02	765.05
A4	1222+83.96	-1.46	764.79	764.81
E. End of E. Appr. Slab	1222+93.96	-1.46	764.56	764.58

MEDIAN SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+62.98	1.46	765.27	765.29
A3	1222+72.98	1.46	765.05	765.07
A4	1222+82.98	1.46	764.82	764.84
E. End of E. Appr. Slab	1222+92.98	1.46	764.58	764.60

EB P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+59.12	13.00	765.59	765.61
A3	1222+69.12	13.00	765.37	765.39
A4	1222+79.12	13.00	765.14	765.16
E. End of E. Appr. Slab	1222+89.12	13.00	764.90	764.92

EB CROWN OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+55.10	25.00	765.86	765.88
A3	1222+65.10	25.00	765.64	765.66
A4	1222+75.10	25.00	765.41	765.43
E. End of E. Appr. Slab	1222+85.10	25.00	765.18	765.20

EB AUXILIARY LANE INSIDE EDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+51.09	37.00	765.77	765.79
A3	1222+61.09	37.00	765.55	765.57
A4	1222+71.09	37.00	765.32	765.34
E. End of E. Appr. Slab	1222+81.09	37.00	765.09	765.11

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+47.07	49.00	765.62	765.64
A3	1222+57.07	49.00	765.40	765.42
A4	1222+67.07	49.00	765.17	765.19
E. End of E. Appr. Slab	1222+77.07	49.00	764.94	764.96

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr. Slab	1222+43.73	59.00	765.49	765.51
A3	1222+53.73	59.00	765.27	765.29
A4	1222+63.73	59.00	765.05	765.07
E. End of E. Appr. Slab	1222+73.73	59.00	764.82	764.84

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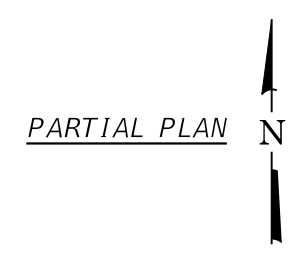
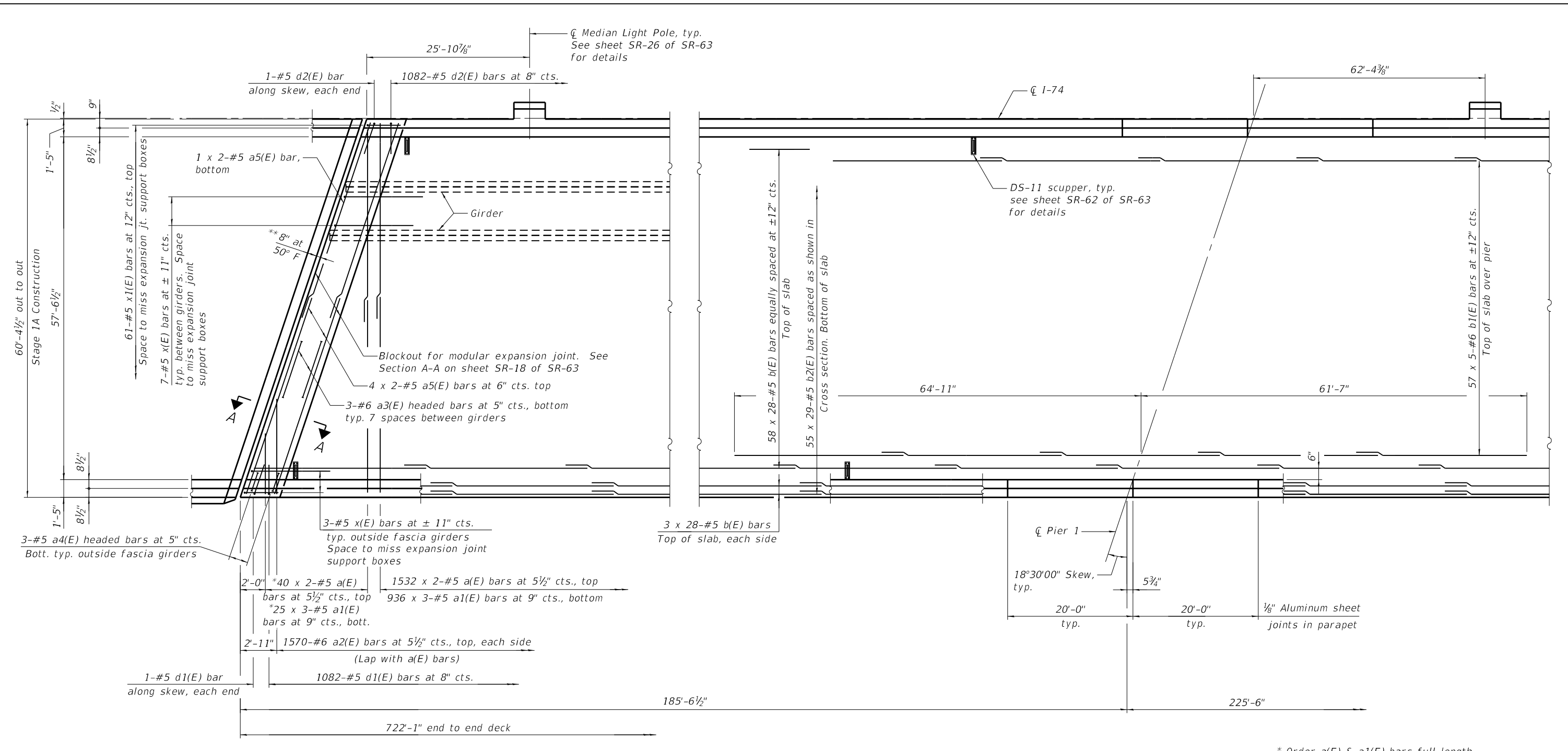
**TOP OF APPROACH SLAB ELEVATIONS 2
 STRUCTURE NO. 010-0021**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	149
CONTRACT NO. 70C64				

SHEET SR-15 OF SR-63 SHEETS

ILLINOIS FED. AID PROJECT

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* Order a(E) & a1(E) bars full length. Cut in field to fit skew and use remainder of bars in opposite end of deck.

** Dimension showing concrete opening. Actual joint dimensions may vary depending on manufacturer's design.

Notes:
 See sheet SR-23 for superstructure details and sheet SR-27 of SR-63 for Bill of Materials. See sheet SR-18 of SR-63 for Section A-A. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line. 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. The x(E) bars shall be placed parallel to the beams. Spacing for these bars at right angles to the beams.

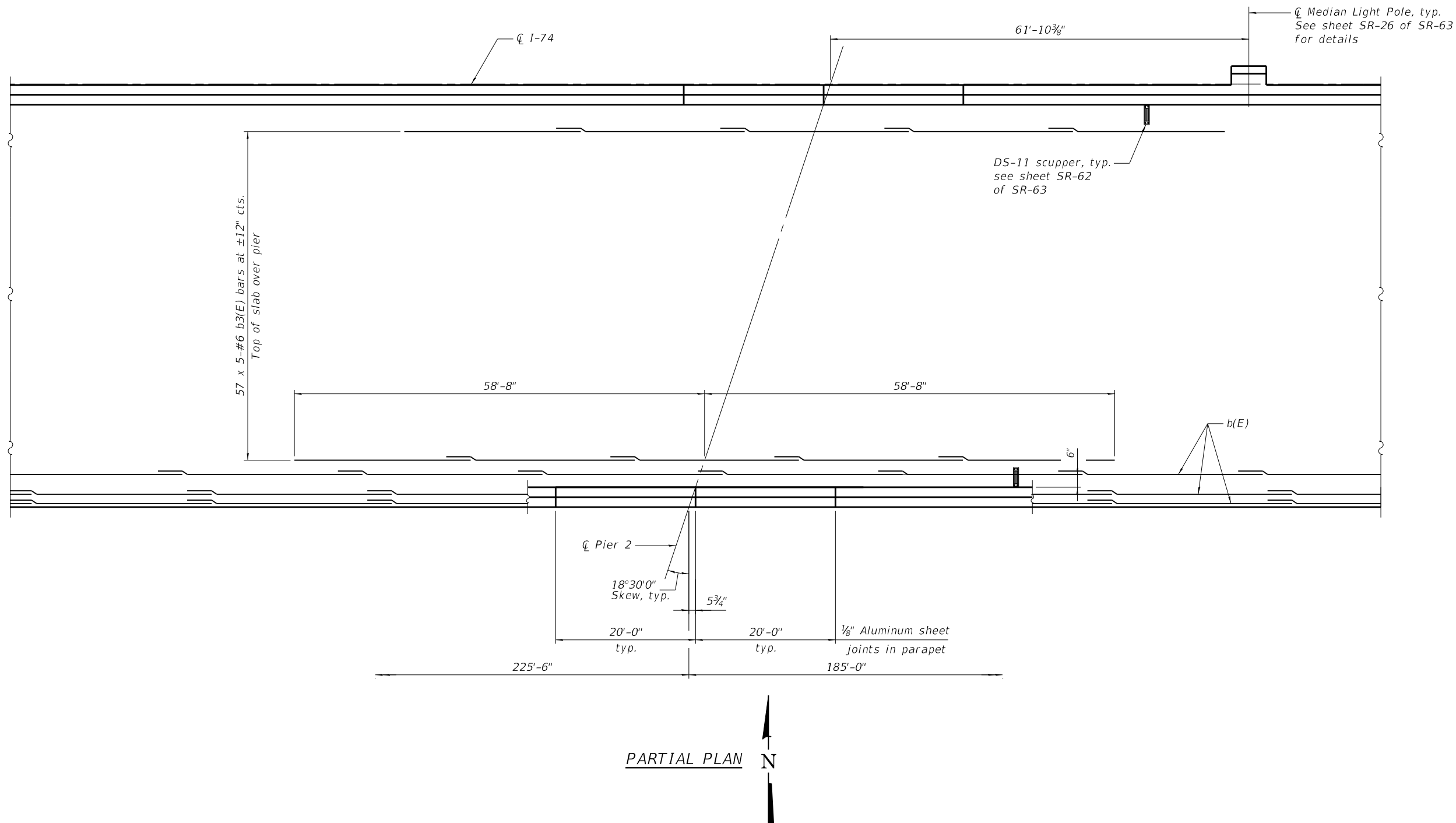
MINIMUM BAR LAP
 #5 bar = 3'-6"
 #6 bar = 3'-7"

**STATE OF ILLINOIS
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**EB DECK PLAN 1
 STRUCTURE NO. 010-0021**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	150
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

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PLOT DATE =	CHECKED - BK	REVISED -

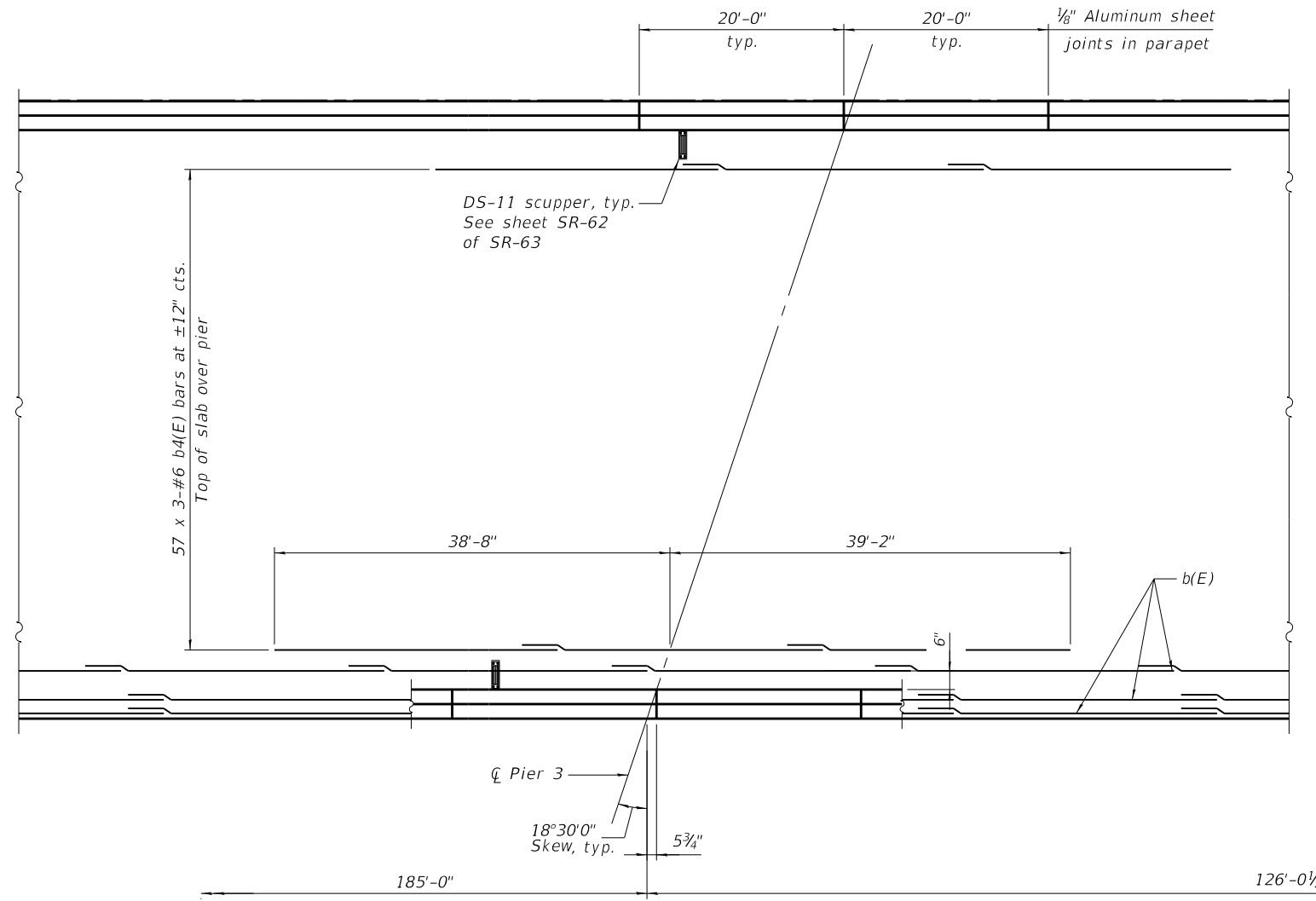
STATE OF ILLINOIS
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EB DECK PLAN 2
 STRUCTURE NO. 010-0021

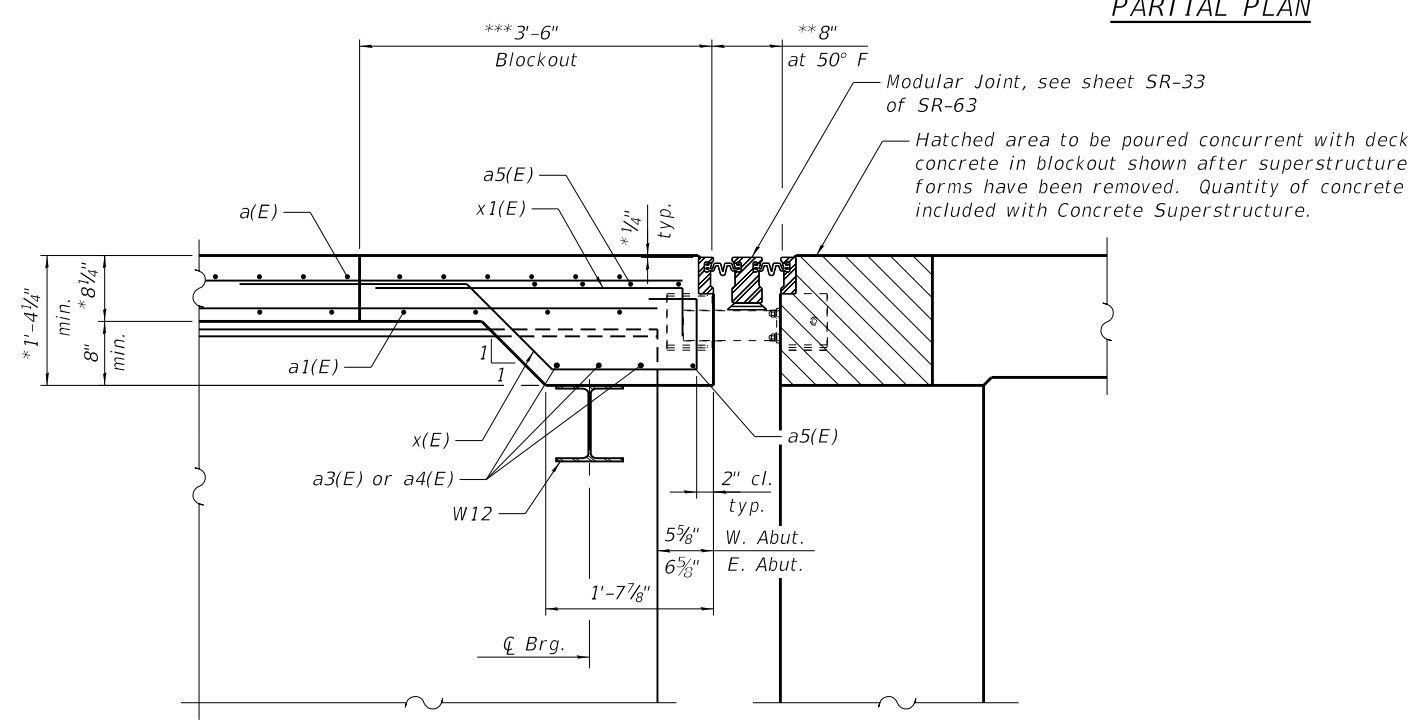
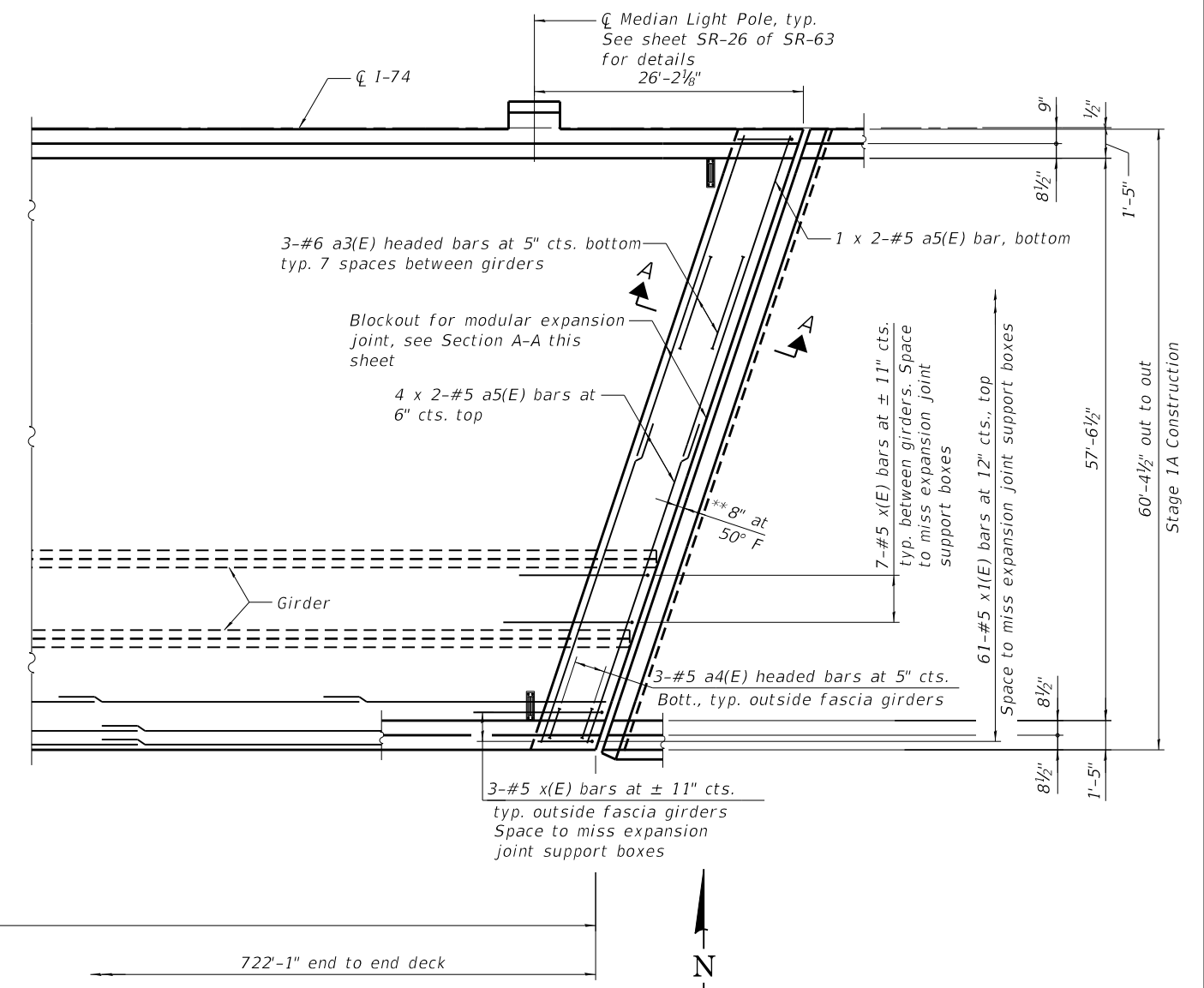
SHEET SR-17 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

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PARTIAL PLAN



SECTION A-A

* Prior to grinding.
 ** Dimension showing concrete opening. Actual joint dimensions may vary depending on manufacturer's design.
 *** Bars a(E), a1(E), a5(E), b(E), b2(E), x(E) and x1(E) in blockout may be adjusted or cut in field if necessary to miss joint support boxes as approved by the Engineer. See Special Provisions.

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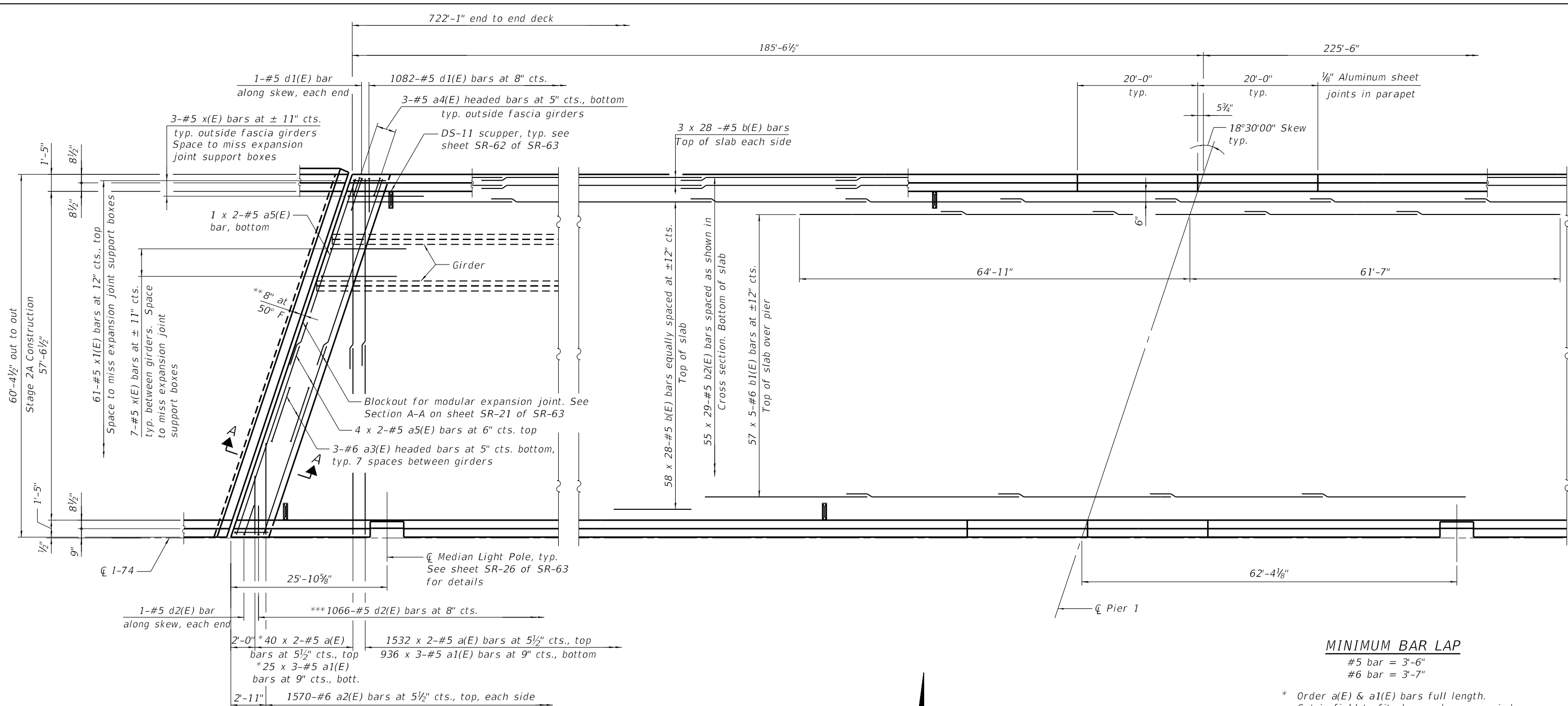
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**EB DECK PLAN 3
 STRUCTURE NO. 010-0021**

SHEET SR-18 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	152
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

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MINIMUM BAR LAP

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

* Order a(E) & a1(E) bars full length. Cut in field to fit skew and use remainder of bars in opposite end of deck.

** Dimension showing concrete opening. Actual joint dimensions may vary depending on manufacturer's design.

*** Omit at light pole foundations.

Notes:
 See sheet SR-23 for superstructure details and sheet SR-27 of SR-63 for Bill of Materials. See sheet SR-21 of SR-63 for Section A-A. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line. 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. The x(E) bars shall be placed parallel to the beams. Spacing for these bars at right angles to the beams.

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PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BK	REVISED -

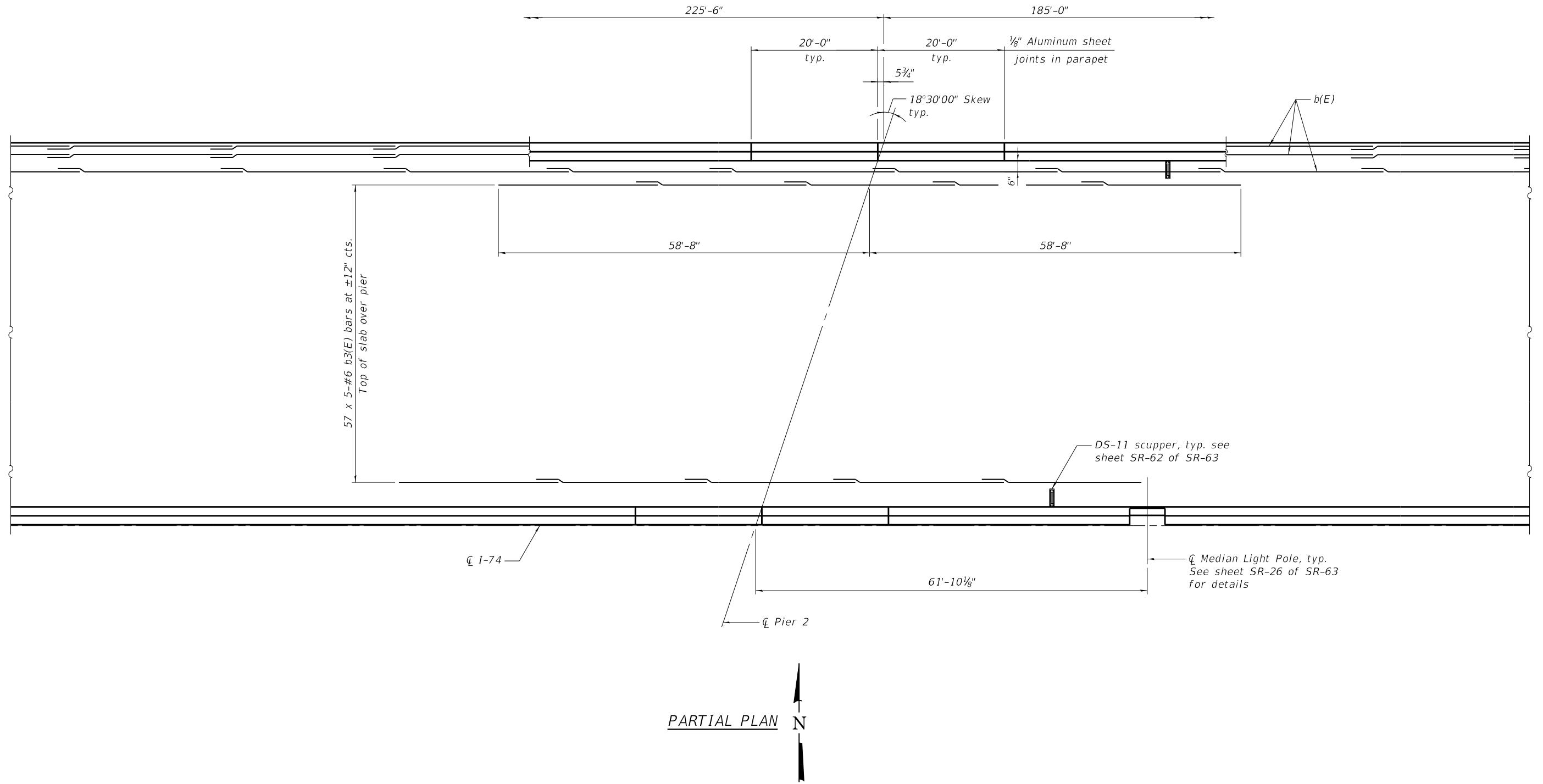
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB DECK PLAN 1
 STRUCTURE NO. 010-0021**

SHEET SR-19 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	153
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

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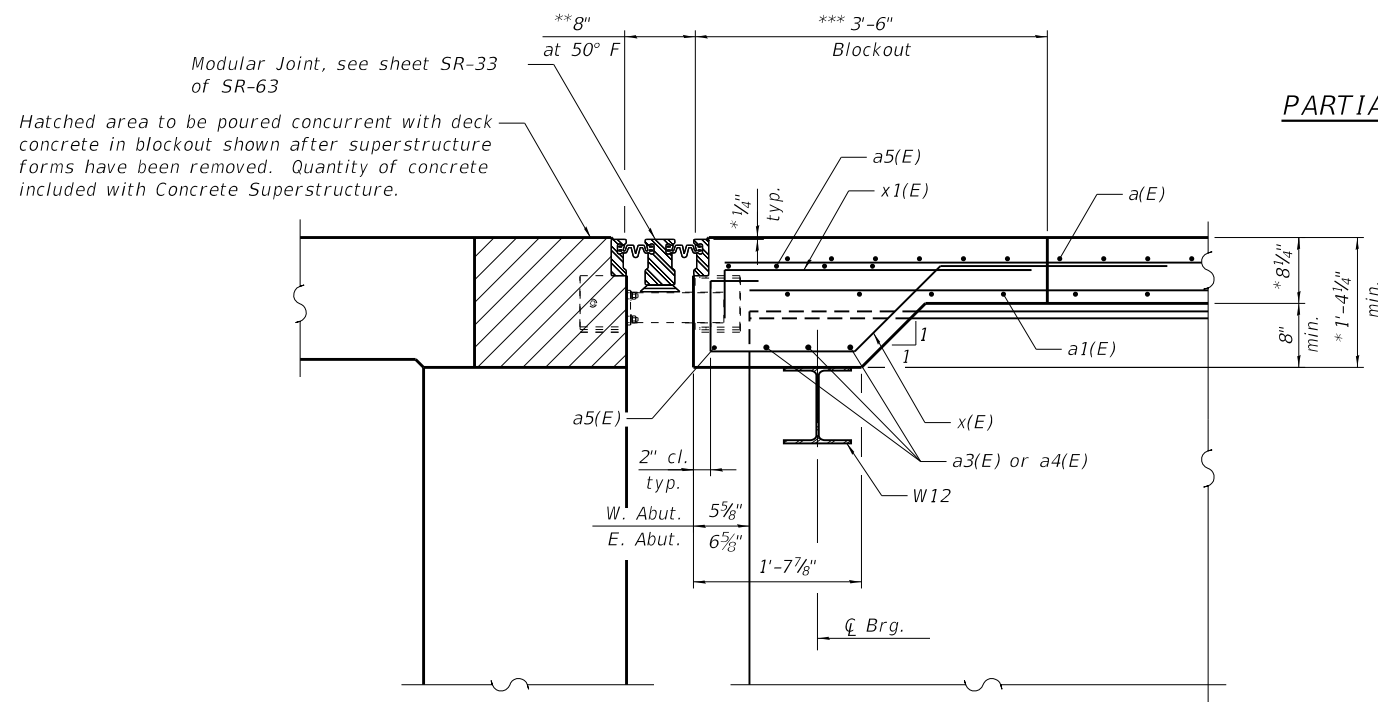
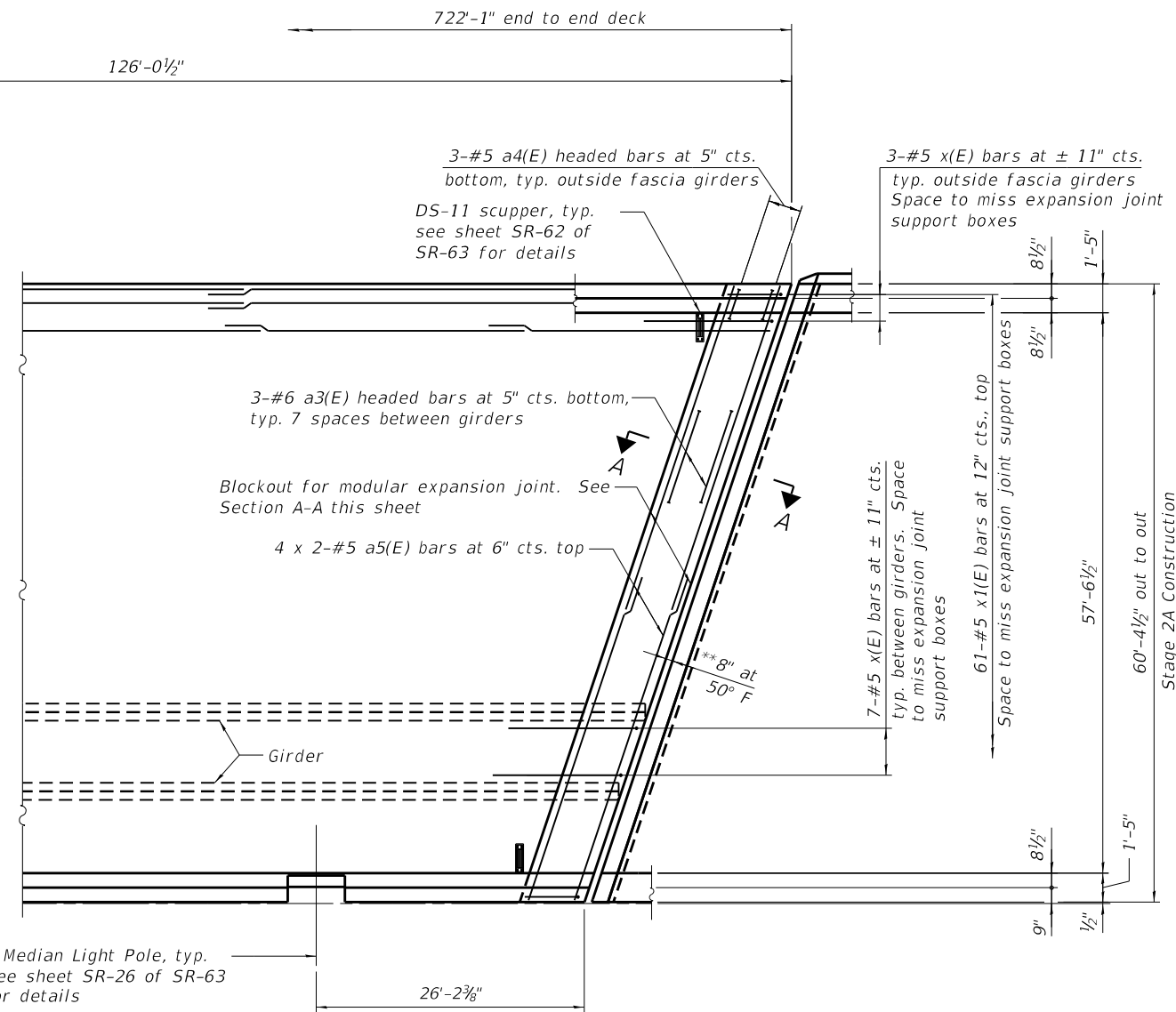
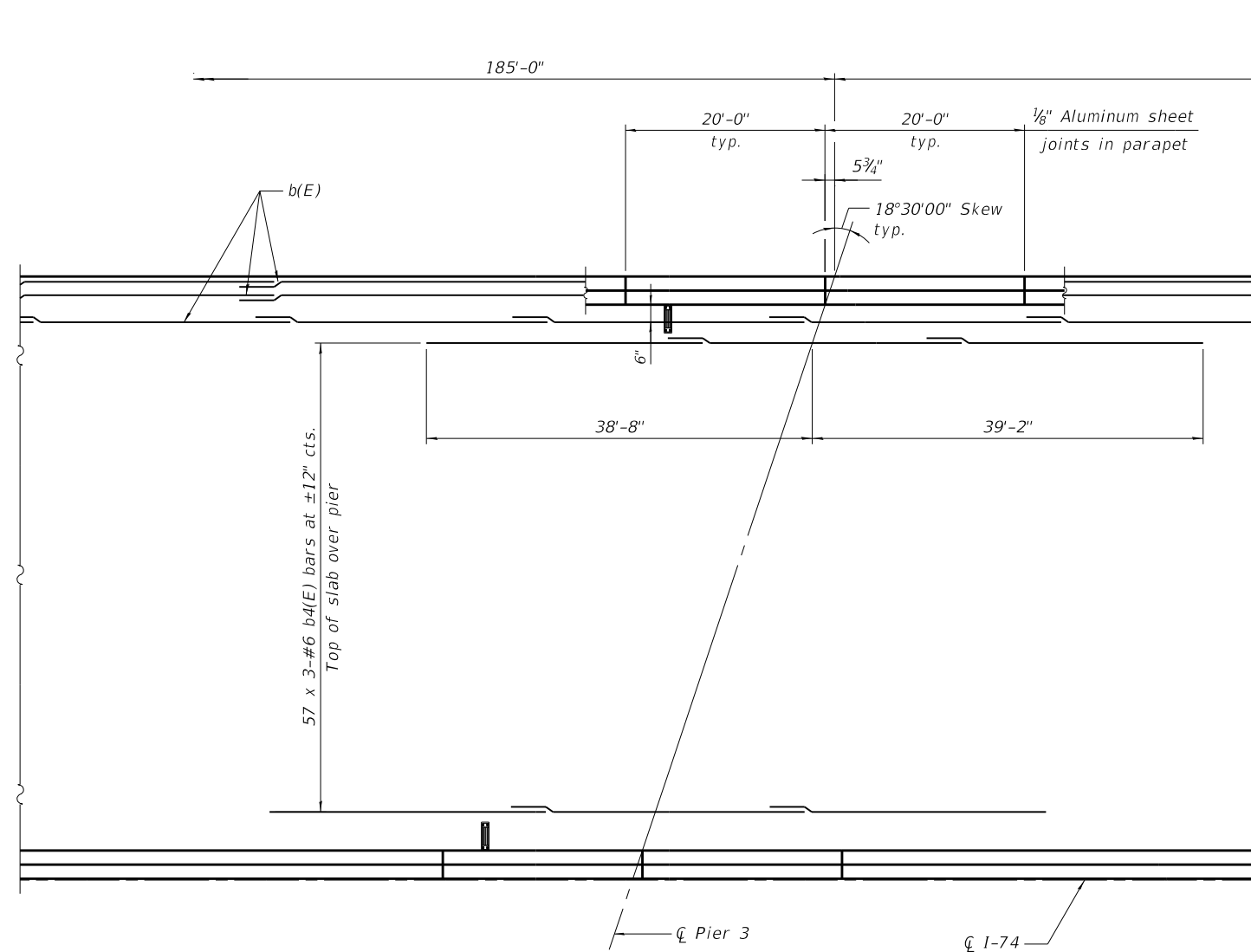
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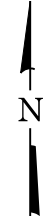
**WB DECK PLAN 2
 STRUCTURE NO. 010-0021**

SHEET SR-20 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	154
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	



PARTIAL PLAN



- * Prior to grinding.
- ** Dimension showing concrete opening. Actual joint dimensions may vary depending on manufacturer's design.
- *** Bars a(E), a1(E), a5(E), b(E), b2(E), x(E) and x1(E) in blockout may be adjusted or cut in field if necessary to miss joint support boxes as approved by the Engineer. See Special Provisions.

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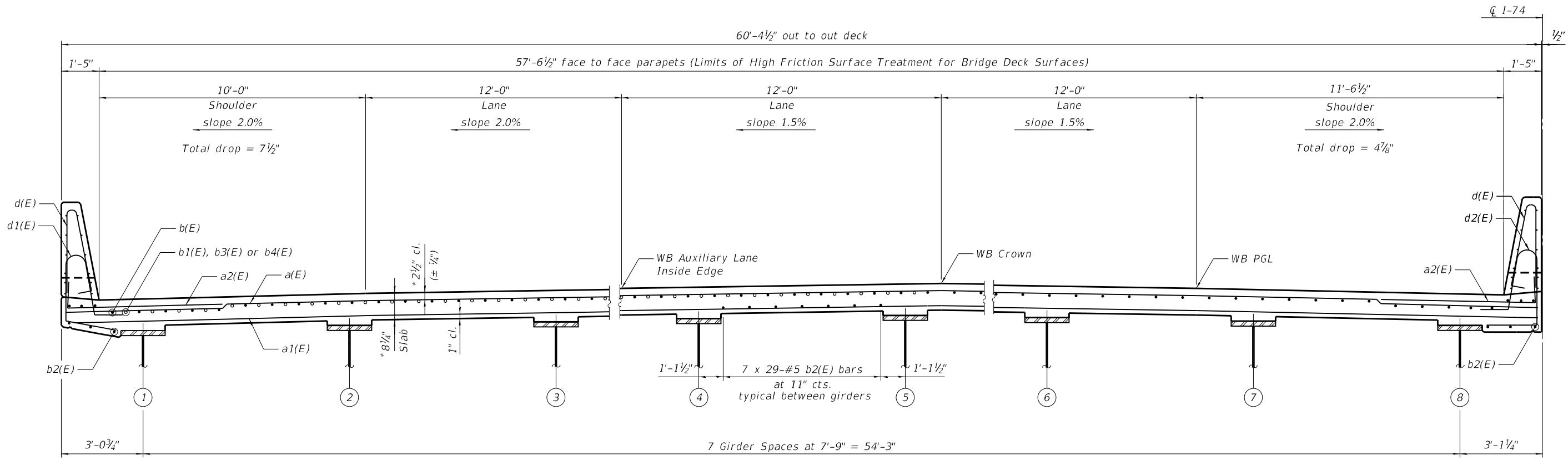
**STATE OF ILLINOIS
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**WB DECK PLAN 3
STRUCTURE NO. 010-0021**

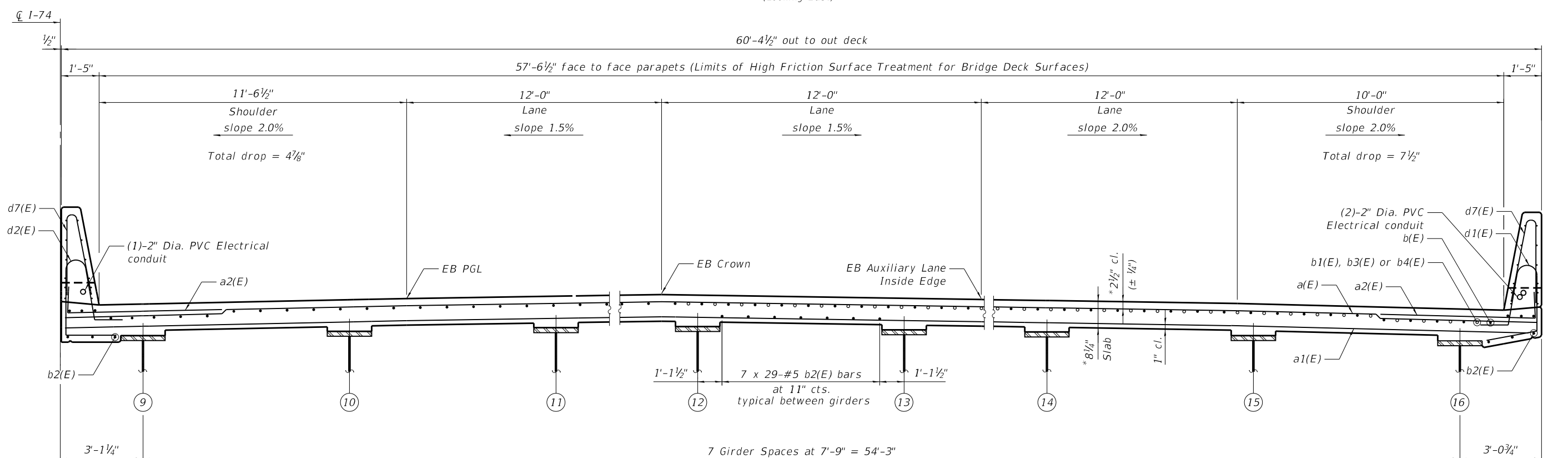
SHEET SR-21 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	155
CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT



WB CROSS SECTION
(Looking East)



EB CROSS SECTION
(Looking East)

*Prior to grinding. Up to 1/4" will be ground off the bridge slab.
Drainage scuppers not shown for clarity.

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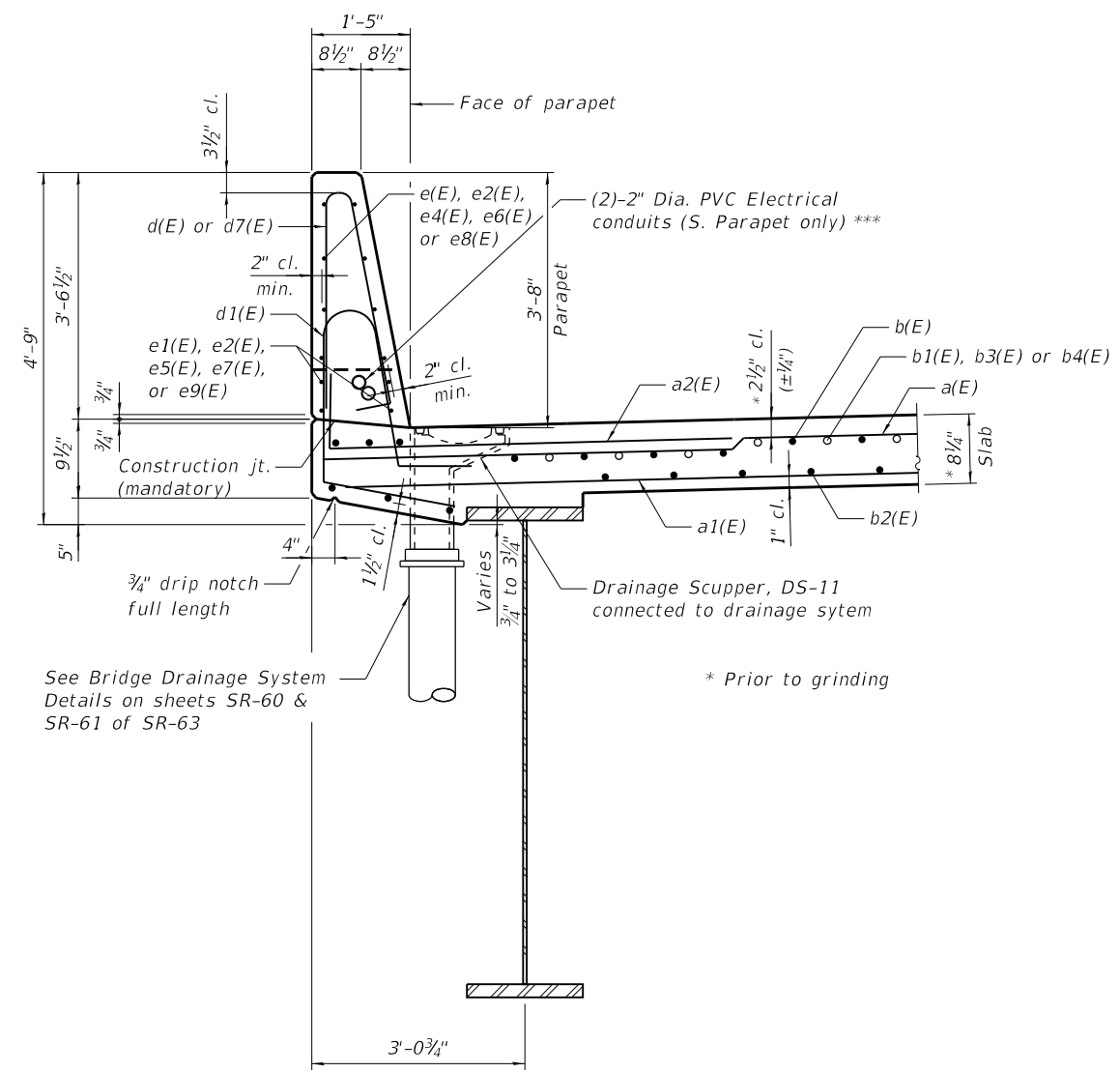
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DECK CROSS SECTIONS
STRUCTURE NO. 010-0021

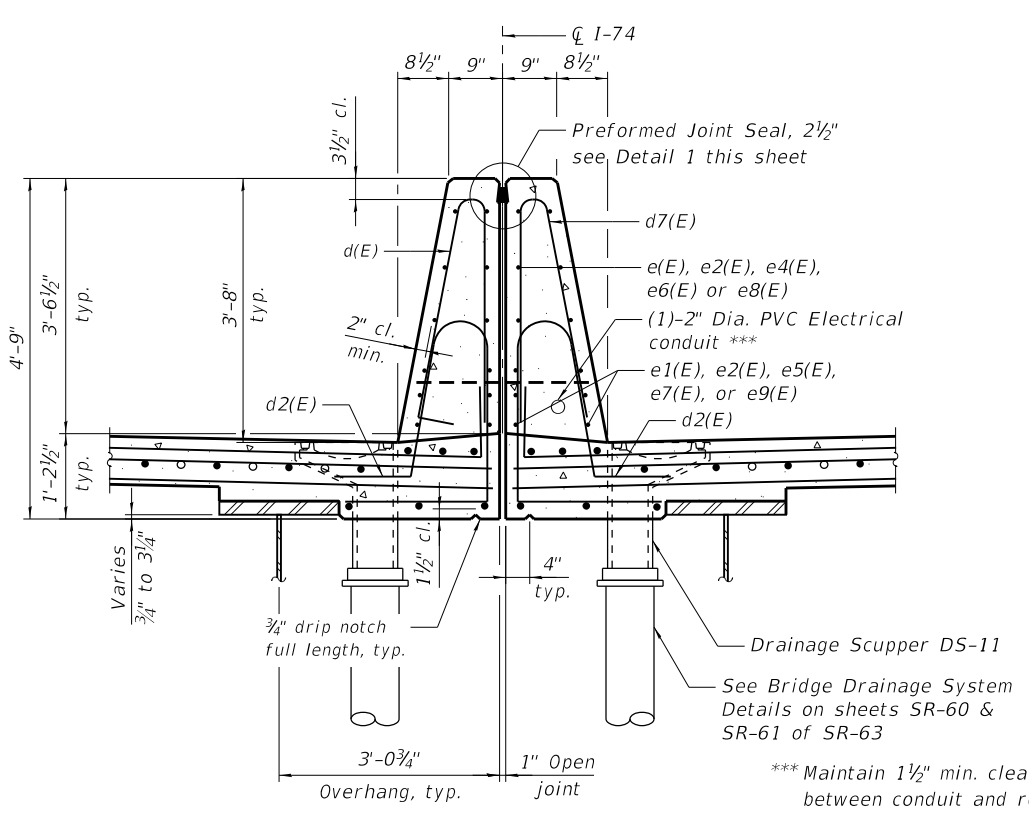
SHEET SR-22 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

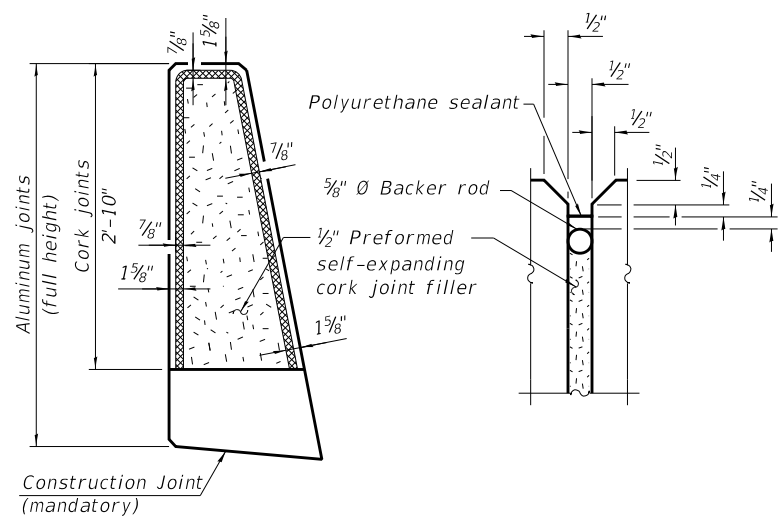
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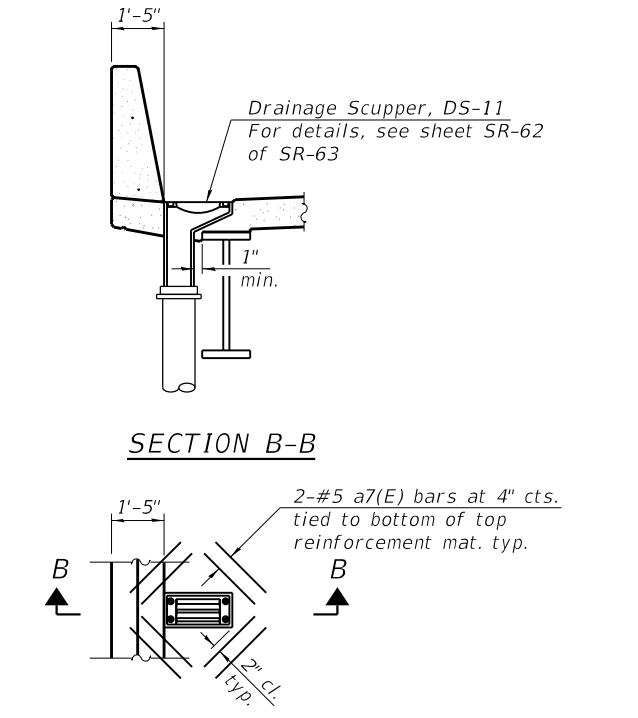
SECTION THRU OUTSIDE PARAPET



**SECTION THRU MEDIAN PARAPETS
 (Looking East)**

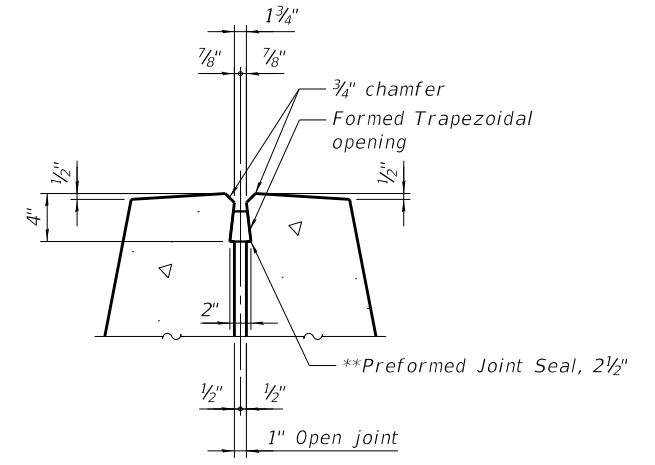


PARAPET JOINT DETAILS



**PLAN AT DRAINAGE SCUPPER
 (20 thus)**

Note:
 Cut longitudinal reinforcement to clear drainage scuppers.



DETAIL 1

Notes:
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Specs. and the color shall be gray.

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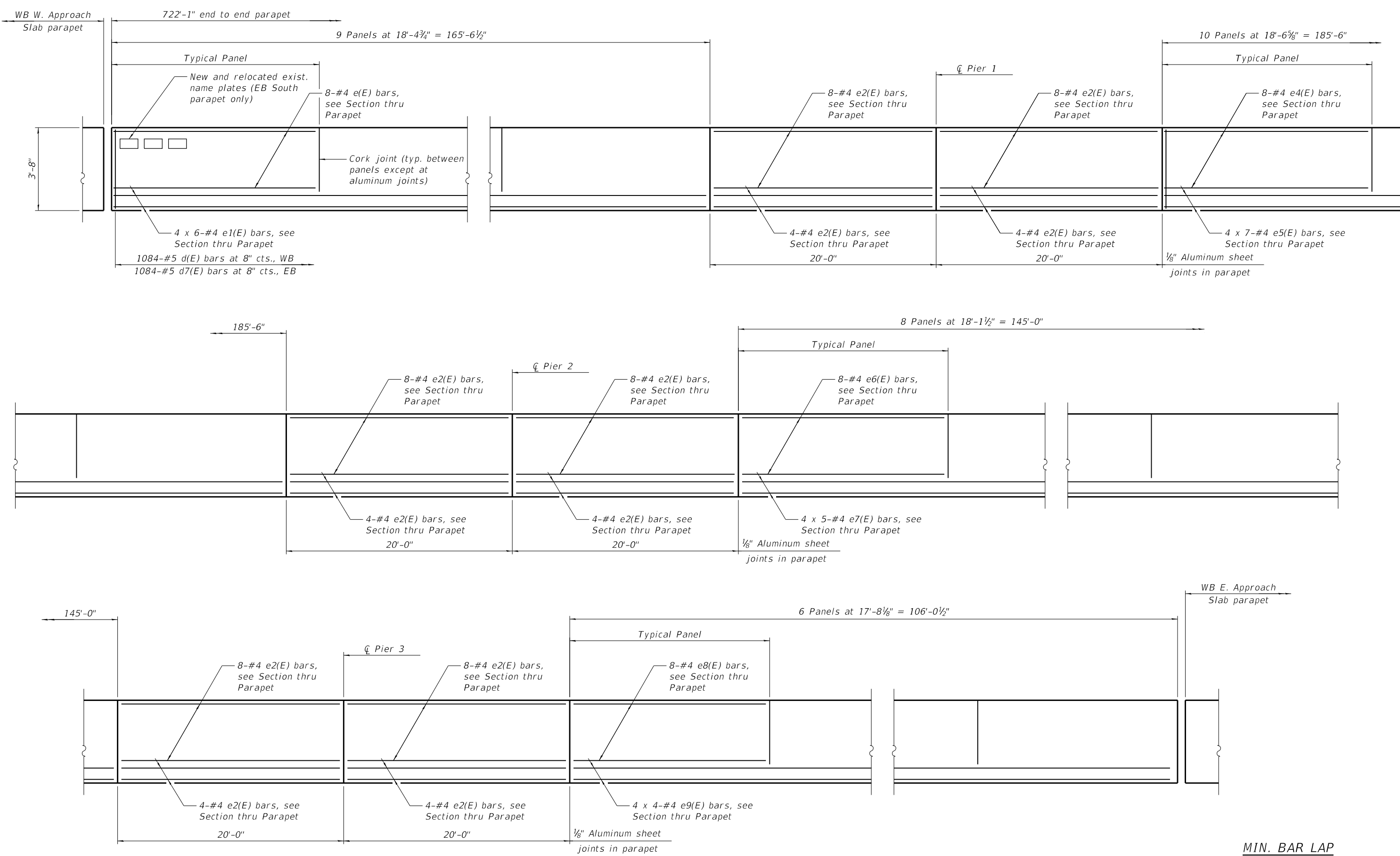
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**DECK DETAILS
 STRUCTURE NO. 010-0021**

SHEET SR-23 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	157
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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MIN. BAR LAP
 #4 = 2'-5"

INSIDE ELEVATION OF OUTSIDE PARAPET
 (WB North parapet shown, EB South parapet mirrored 180°)

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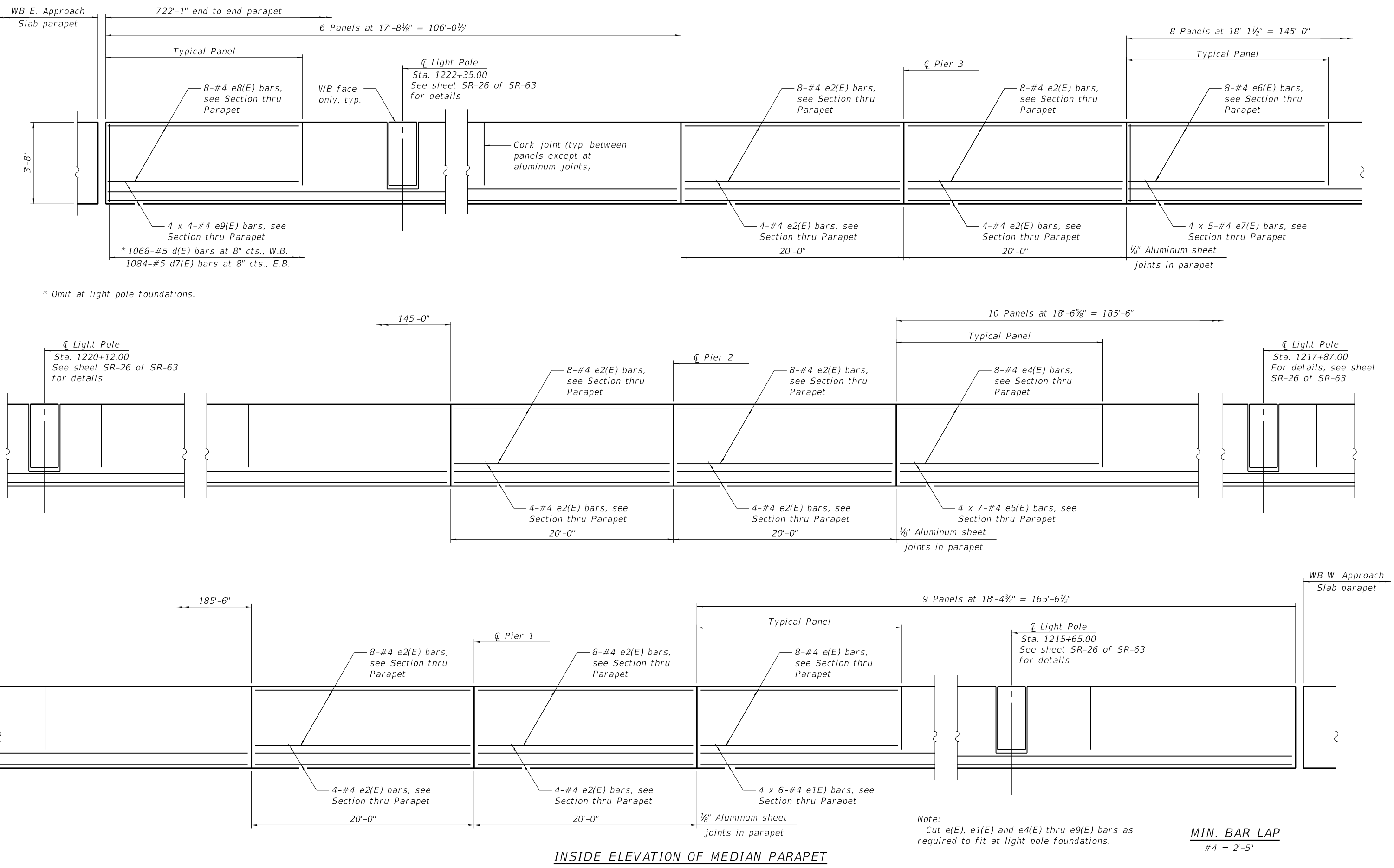
PARAPET ELEVATIONS 1
STRUCTURE NO. 010-0021

SHEET SR-24 OF SR-63 SHEETS

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	158
CONTRACT NO. 70C64				
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INSIDE ELEVATION OF MEDIAN PARAPET
 (WB Median parapet shown, EB Median parapet mirrored 180°)

Note:
 Cut e(E), e1(E) and e4(E) thru e9(E) bars as required to fit at light pole foundations.

MIN. BAR LAP
 #4 = 2'-5"

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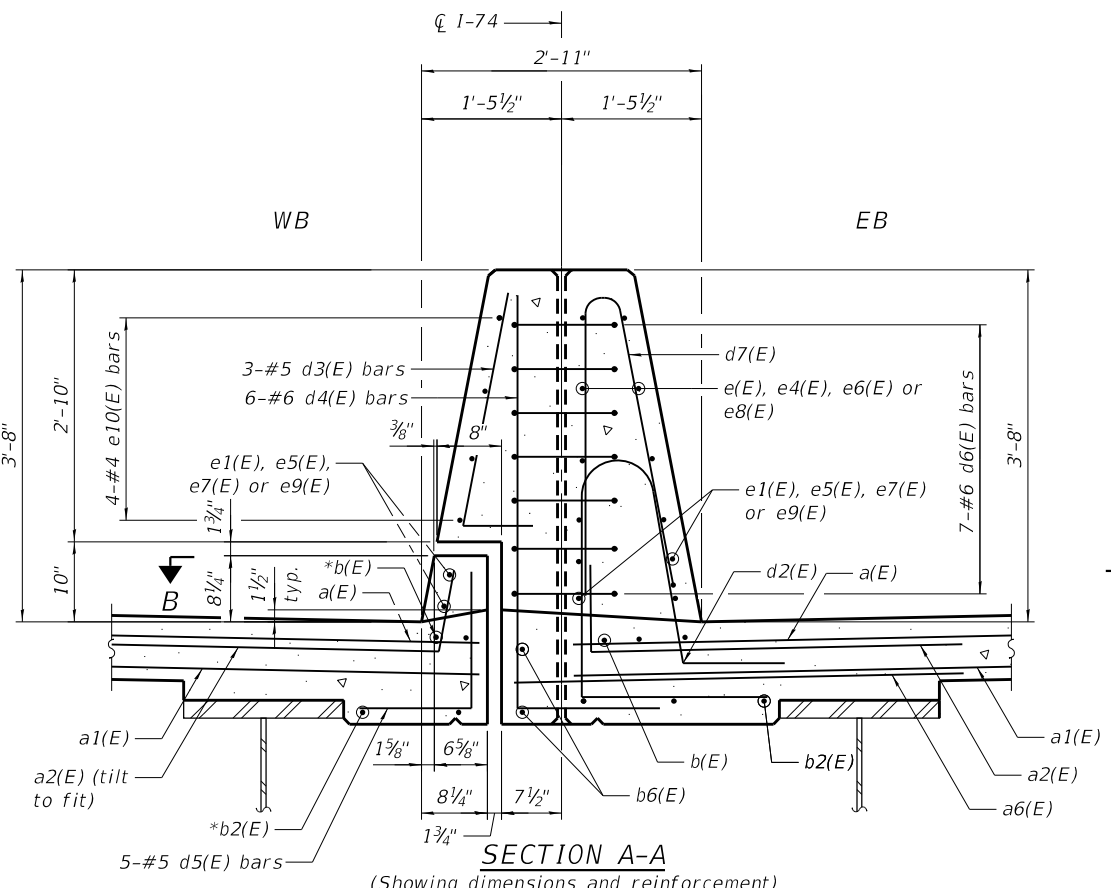
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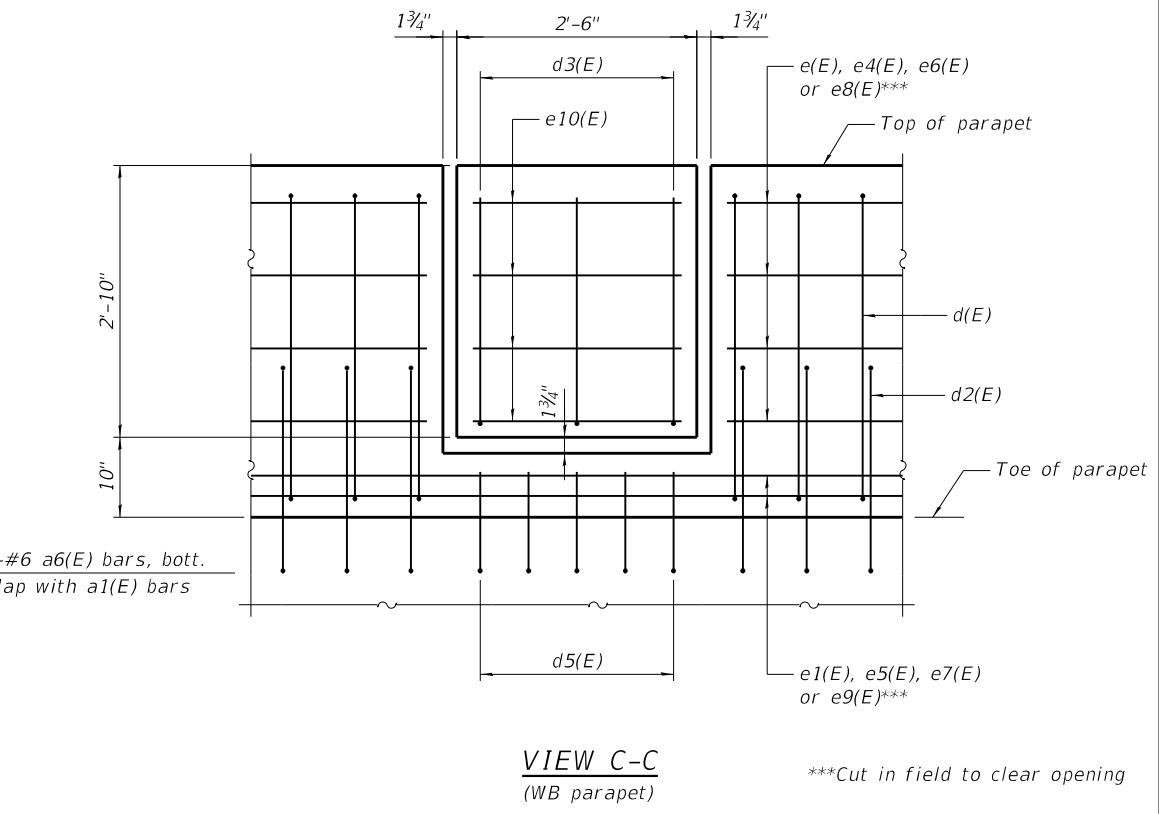
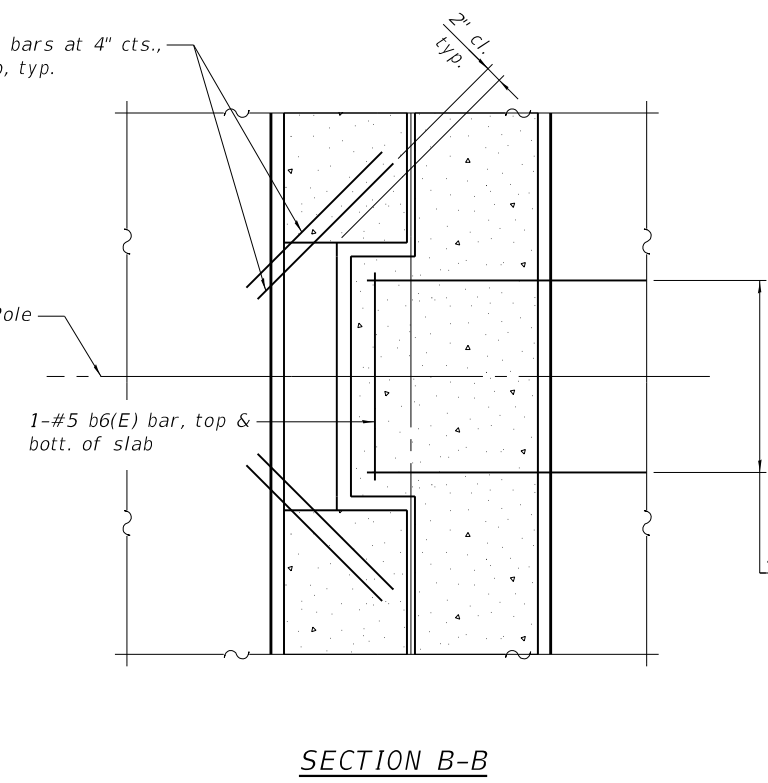
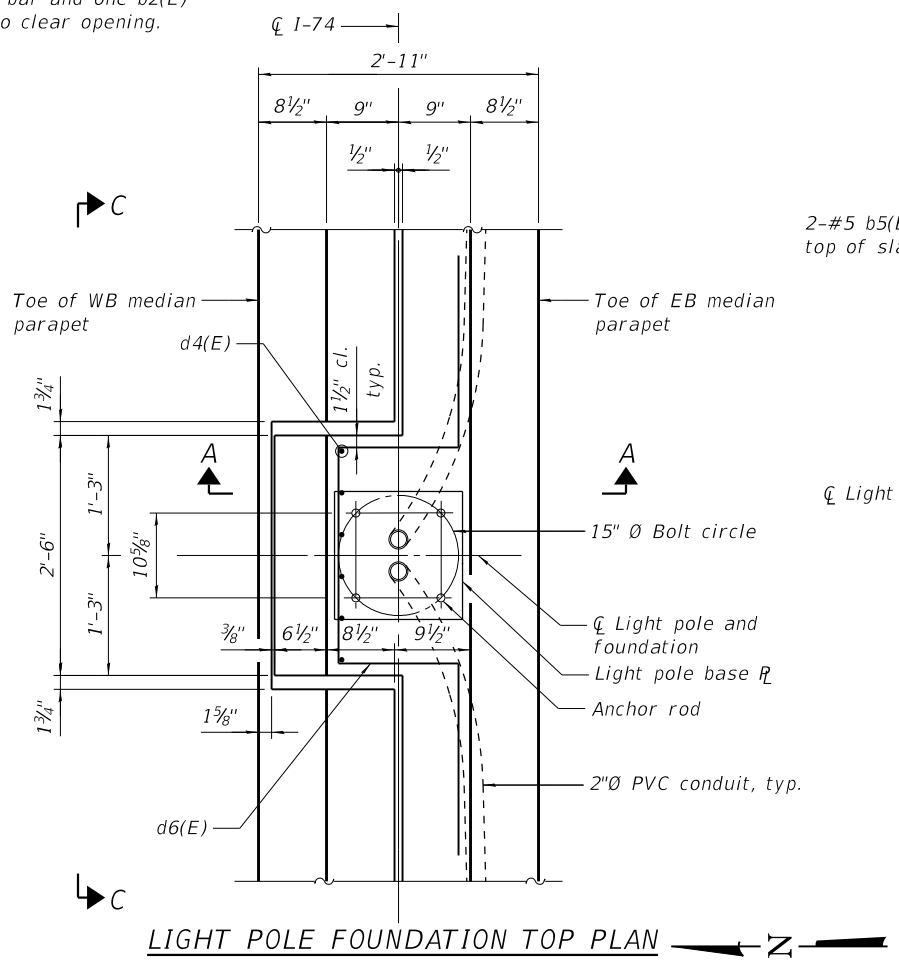
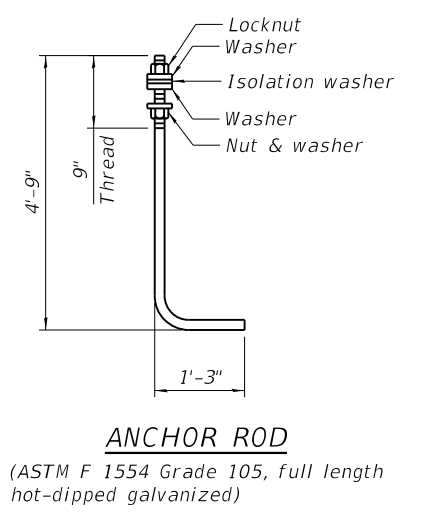
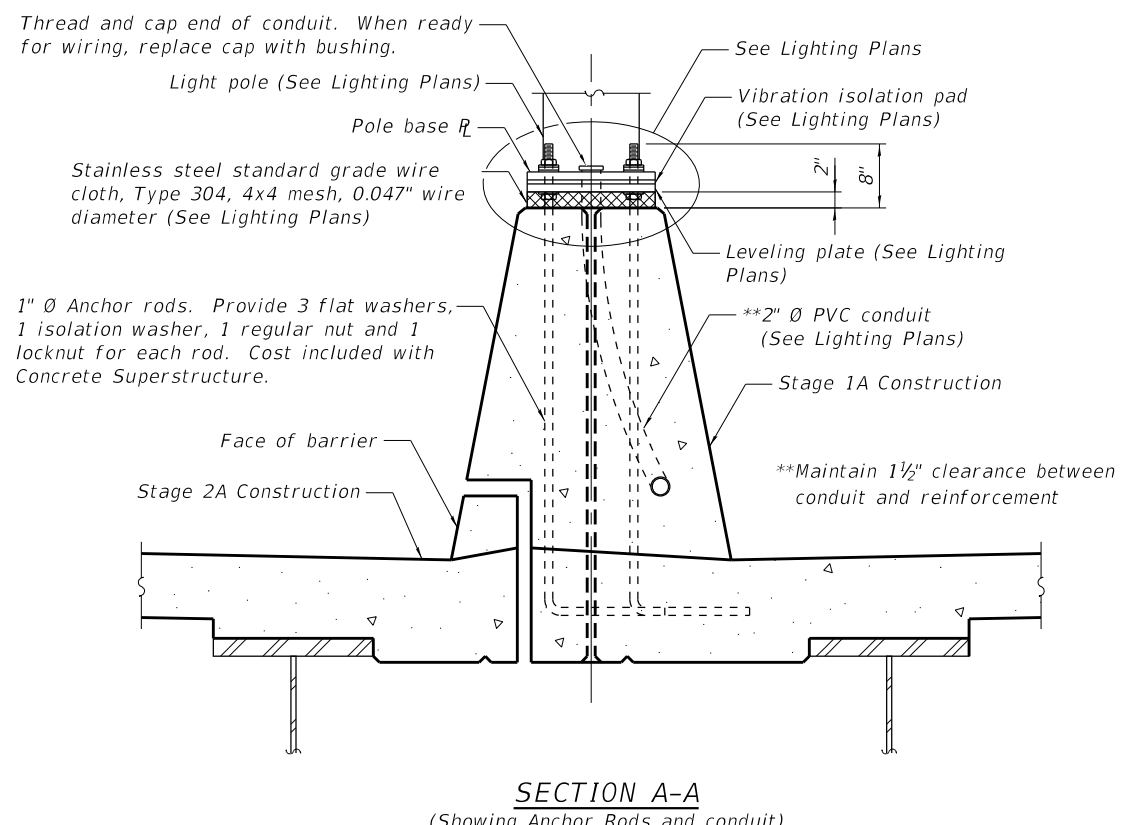
PARAPET ELEVATIONS 2
STRUCTURE NO. 010-0021

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	159
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	

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*Cut one b(E) bar and one b2(E) bar in field to clear opening.



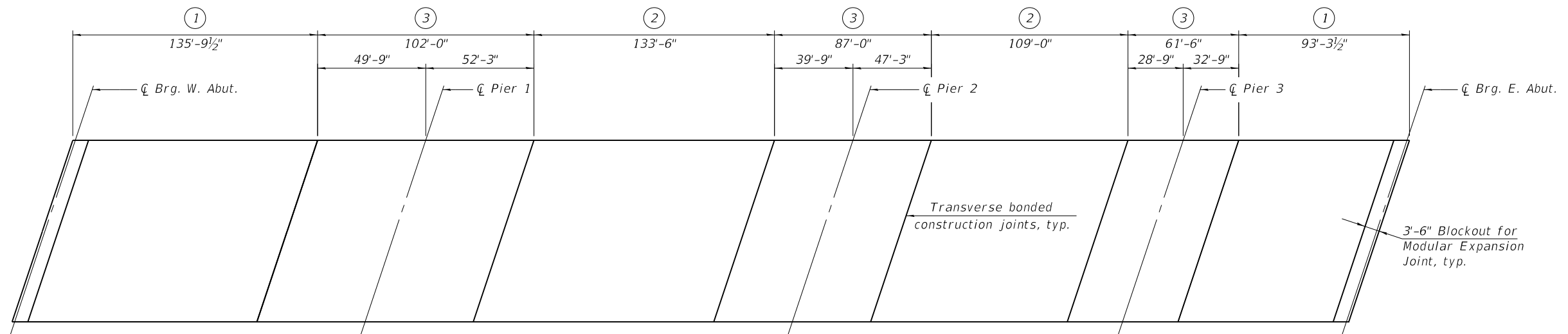
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PARAPET DETAILS
 STRUCTURE NO. 010-0021

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1) JBR, (14HB-2) JBR-1	CHAMPAIGN	201	160
CONTRACT NO. 70C64				

SHEET SR-26 OF SR-63 SHEETS

ILLINOIS FED. AID PROJECT



DECK POURING SEQUENCE

**EB SUPERSTRUCTURE
BILL OF MATERIAL**

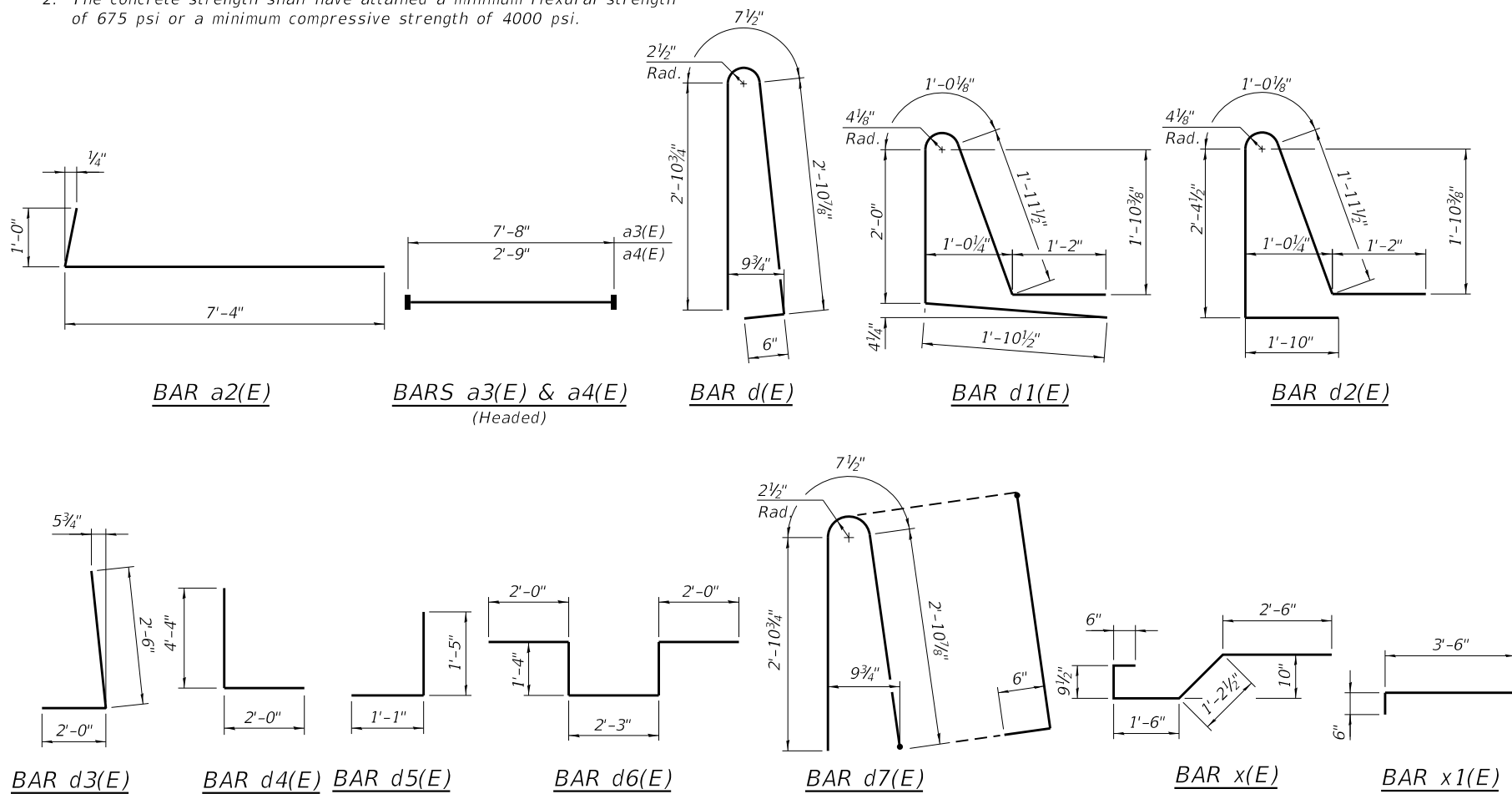
**WB SUPERSTRUCTURE
BILL OF MATERIAL**

Notes:
 The bridge deck shall be poured in numeric order per the pouring sequence shown. If the Contractor wishes to alter the deck pour sequence from the sequence shown, the Contractor shall submit a proposed deck pour sequence to the Engineer for review and acceptance.
 When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4000 psi.

Bar	No.	Size	Length	Shape
a(E)	3144	#5	31'-10"	—
a1(E)	2883	#5	22'-3"	—
a2(E)	3140	#6	8'-4"	└
a3(E)	42	#6	7'-8"	└
a4(E)	12	#5	2'-9"	└
a5(E)	20	#5	33'-5"	—
a6(E)	16	#6	7'-1"	—
a7(E)	80	#5	1'-6"	—
b(E)	1792	#5	29'-2"	—
b1(E)	285	#6	28'-2"	—
b2(E)	1595	#5	28'-4"	—
b3(E)	285	#6	26'-4"	—
b4(E)	171	#6	28'-4"	—
b6(E)	8	#5	2'-3"	—
d(E)	2152	#5	6'-11"	└
d1(E)	1084	#5	8'-0"	└
d2(E)	1084	#5	8'-4"	└
d3(E)	12	#5	4'-6"	└
d4(E)	24	#6	6'-4"	└
d6(E)	28	#6	8'-11"	└
d7(E)	2168	#5	6'-11"	└
e(E)	144	#4	18'-0"	—
e1(E)	48	#4	29'-7"	—
e2(E)	144	#4	19'-8"	—
e4(E)	160	#4	18'-2"	—
e5(E)	56	#4	28'-7"	—
e6(E)	128	#4	17'-9"	—
e7(E)	40	#4	30'-11"	—
e8(E)	96	#4	17'-4"	—
e9(E)	32	#4	28'-3"	—
e10(E)	16	#4	2'-3"	—
x(E)	110	#5	6'-6"	└
x1(E)	122	#5	4'-0"	└
Item		Unit	Total	
Concrete Superstructure		Cu Yd	1,430.1	
Reinforcement Bars, Epoxy Coated		Pound	391,030	
Description		Unit	Quantity	
Item		Unit	Total	
Concrete Superstructure		Cu Yd	1,433.4	
Reinforcement Bars, Epoxy Coated		Pound	392,070	
Preformed Joint Seal, 2 1/2"		Foot	787	

Bar	No.	Size	Length	Shape
a(E)	3144	#5	31'-10"	—
a1(E)	2883	#5	22'-3"	—
a2(E)	3140	#6	8'-4"	└
a3(E)	42	#6	7'-8"	└
a4(E)	12	#5	2'-9"	└
a5(E)	20	#5	33'-5"	—
a7(E)	80	#5	1'-6"	—
b(E)	1792	#5	29'-2"	—
b1(E)	285	#6	28'-2"	—
b2(E)	1595	#5	28'-4"	—
b3(E)	285	#6	26'-4"	—
b4(E)	171	#6	28'-4"	—
b5(E)	16	#5	2'-0"	—
d(E)	2152	#5	6'-11"	└
d1(E)	1084	#5	8'-0"	└
d2(E)	1068	#5	8'-4"	└
d5(E)	20	#5	2'-6"	└
e(E)	144	#4	18'-0"	—
e1(E)	48	#4	29'-7"	—
e2(E)	144	#4	19'-8"	—
e4(E)	160	#4	18'-2"	—
e5(E)	56	#4	28'-7"	—
e6(E)	128	#4	17'-9"	—
e7(E)	40	#4	30'-11"	—
e8(E)	96	#4	17'-4"	—
e9(E)	32	#4	28'-3"	—
x(E)	110	#5	6'-6"	└
x1(E)	122	#5	4'-0"	└
Item		Unit	Total	
Concrete Superstructure		Cu Yd	1,430.1	
Reinforcement Bars, Epoxy Coated		Pound	391,030	

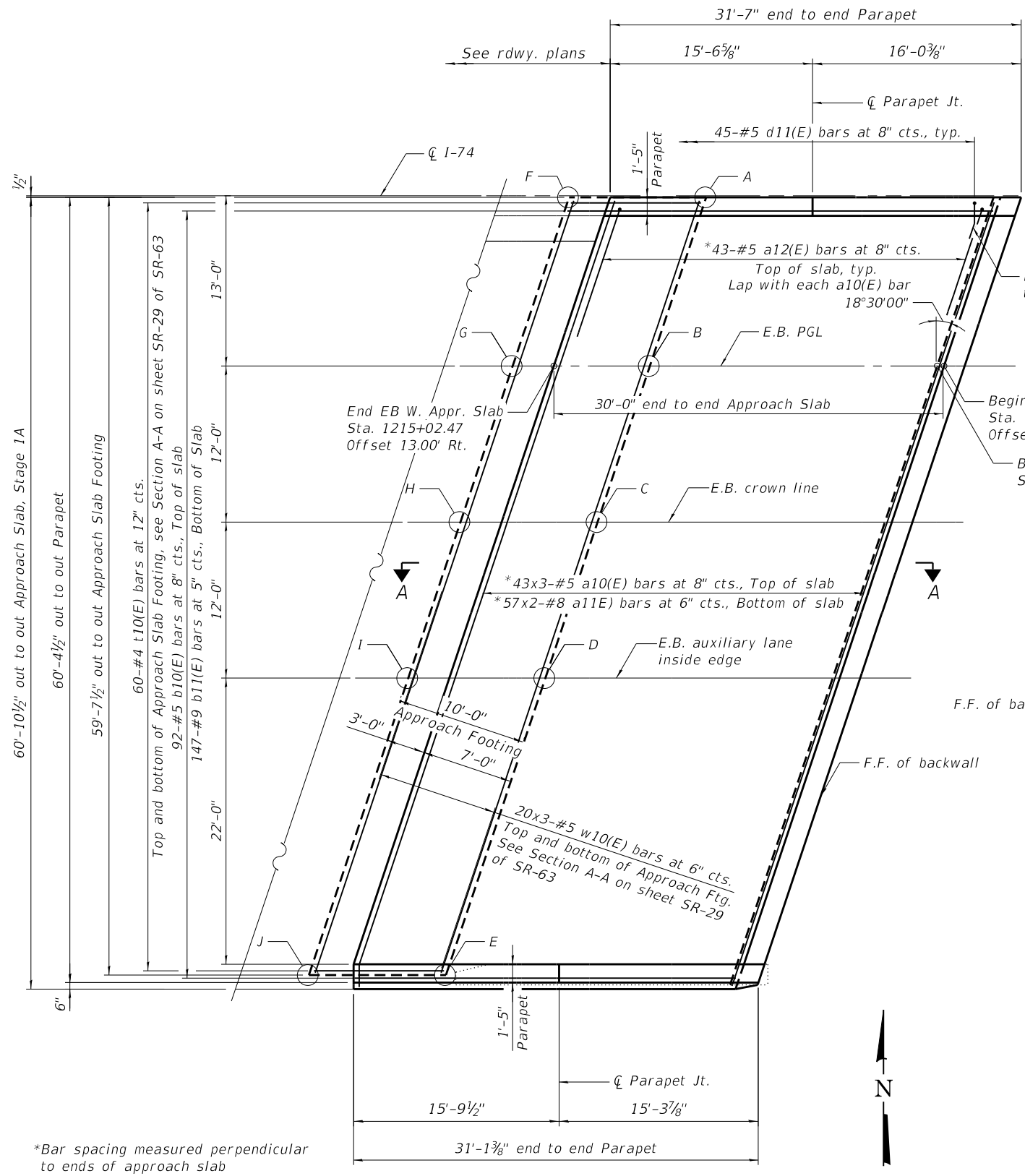


* Includes quantity for end to end of bridge approach slabs along median parapets.

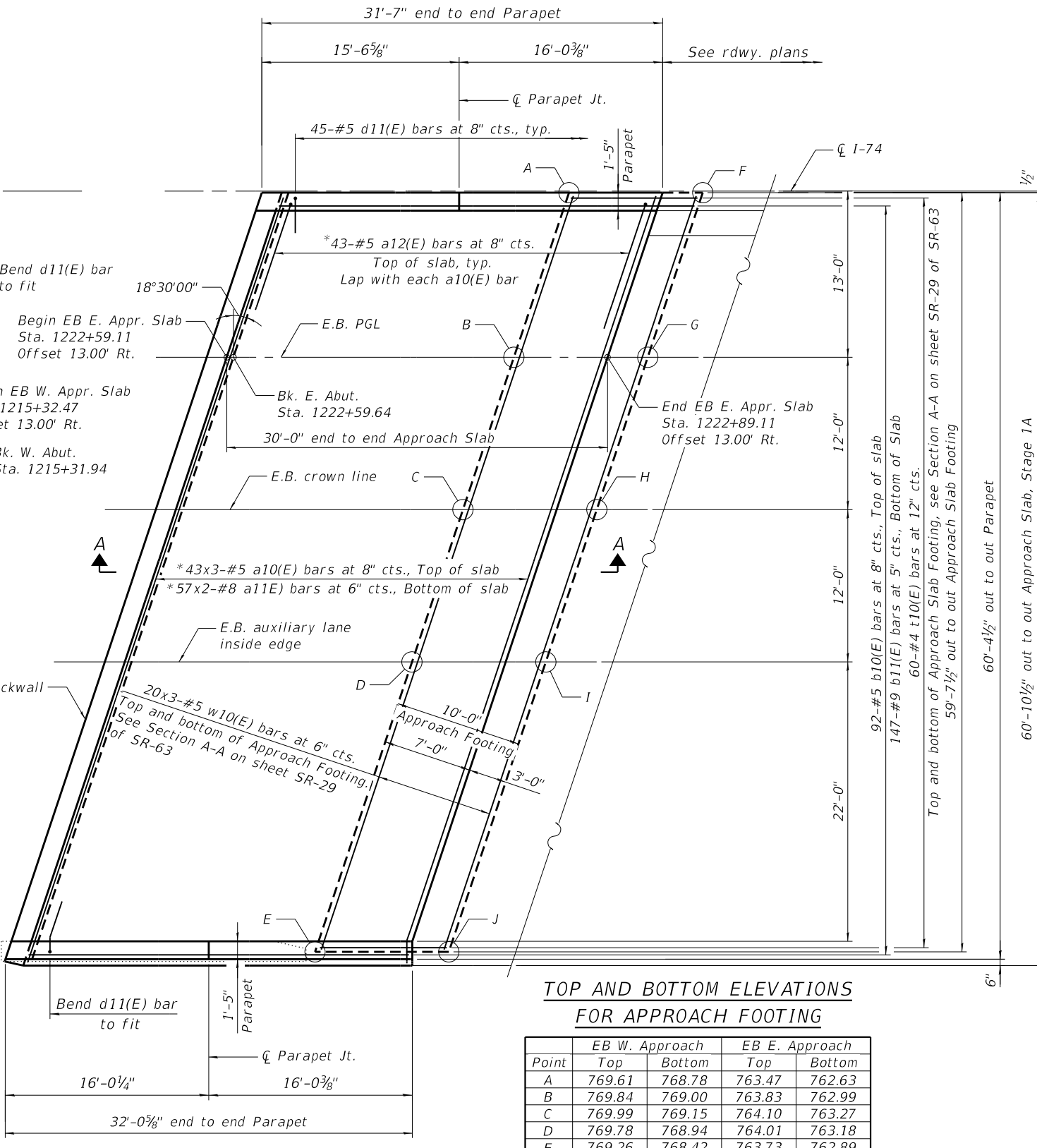
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exp U.S. Services Inc. CHICAGO BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	USER NAME =	DESIGNED - BK	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE BAR LIST STRUCTURE NO. 010-0021	F.A.I. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	CHECKED - KK	REVISIONS -			74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	161
	PLOT DATE =	DRAWN - JV	REVISIONS -	SHEET SR-27 OF SR-63 SHEETS		CONTRACT NO. 70C64		ILLINOIS		FED. AID PROJECT
		CHECKED - BK	REVISIONS -							

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EB WEST APPROACH SLAB PLAN



EB EAST APPROACH SLAB PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point	EB W. Approach		EB E. Approach	
	Top	Bottom	Top	Bottom
A	769.61	768.78	763.47	762.63
B	769.84	769.00	763.83	762.99
C	769.99	769.15	764.10	763.27
D	769.78	768.94	764.01	763.18
E	769.26	768.42	763.73	762.89
F	769.53	768.70	763.22	762.38
G	769.76	768.92	763.58	762.75
H	769.90	769.07	763.85	763.02
I	769.69	768.86	763.77	762.93
J	769.17	768.33	763.49	762.65

*Bar spacing measured perpendicular to ends of approach slab

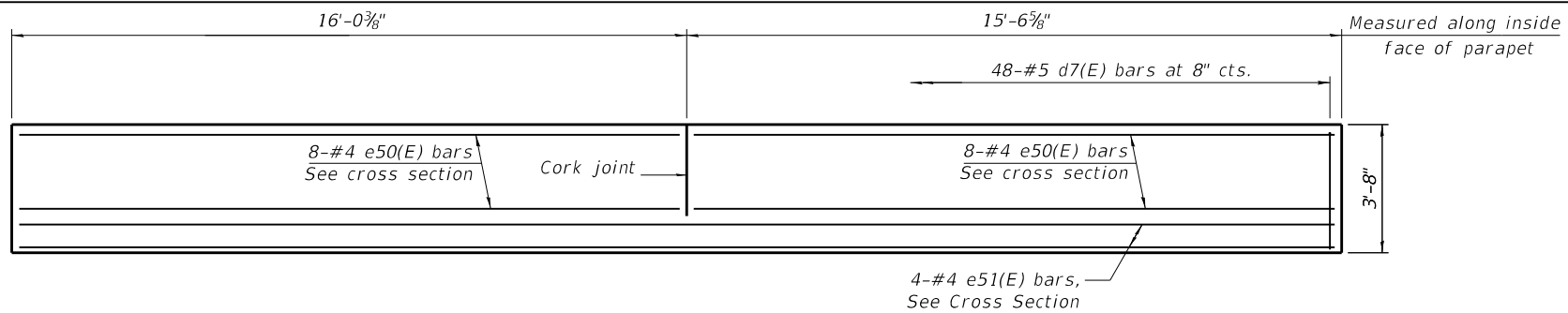


**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

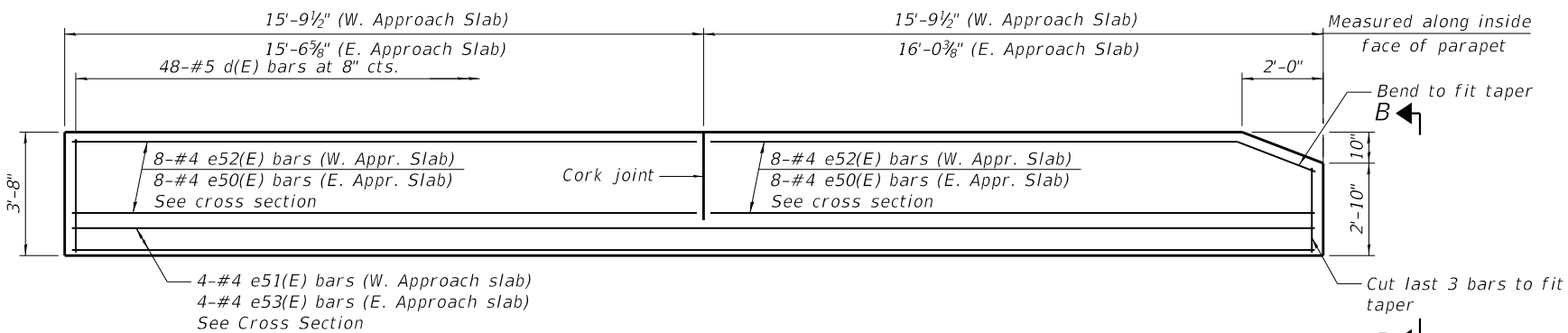
**EB APPROACH SLAB DETAILS 1
 STRUCTURE NO. 010-0021**

SHEET SR-28 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	162
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



INSIDE ELEVATION OF MEDIAN PARAPETS

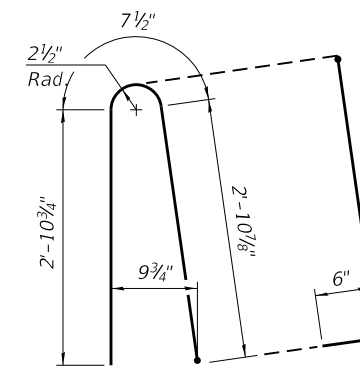


INSIDE ELEVATION OF OUTSIDE PARAPET

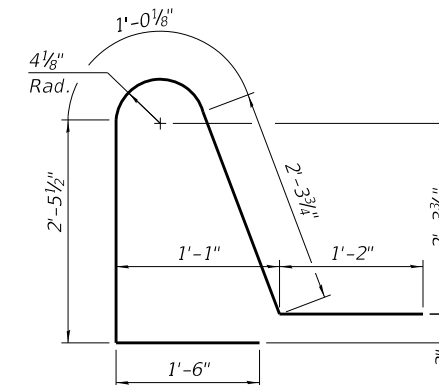
(EB W. Approach slab shown, EB E. Approach mirrored 180°)

Notes:

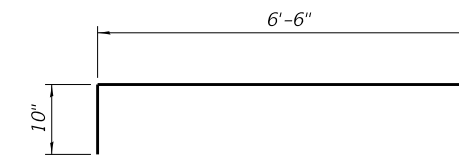
Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet SR-03 of SR-63
 See Highway Standard 631031 for Type 6 traffic barrier terminal connections at the end of each outside parapet.
 For details of parapet joints and Preformed Joint Seal between median parapets see sheet SR-23 of SR-63
 Trim e50(E) thru e53(E) bars in field to fit.



BAR d7(E)



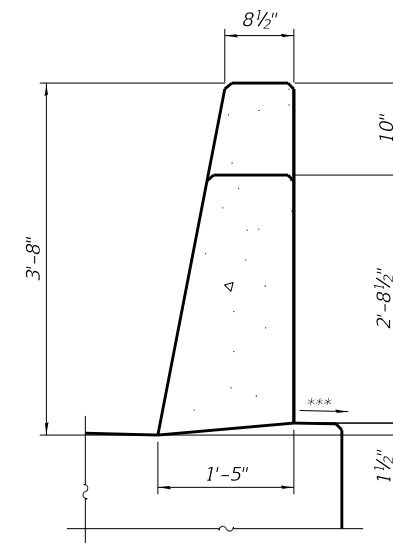
BAR d11(E)



BAR a12(E)

TWO APPROACHES
BILL OF MATERIAL

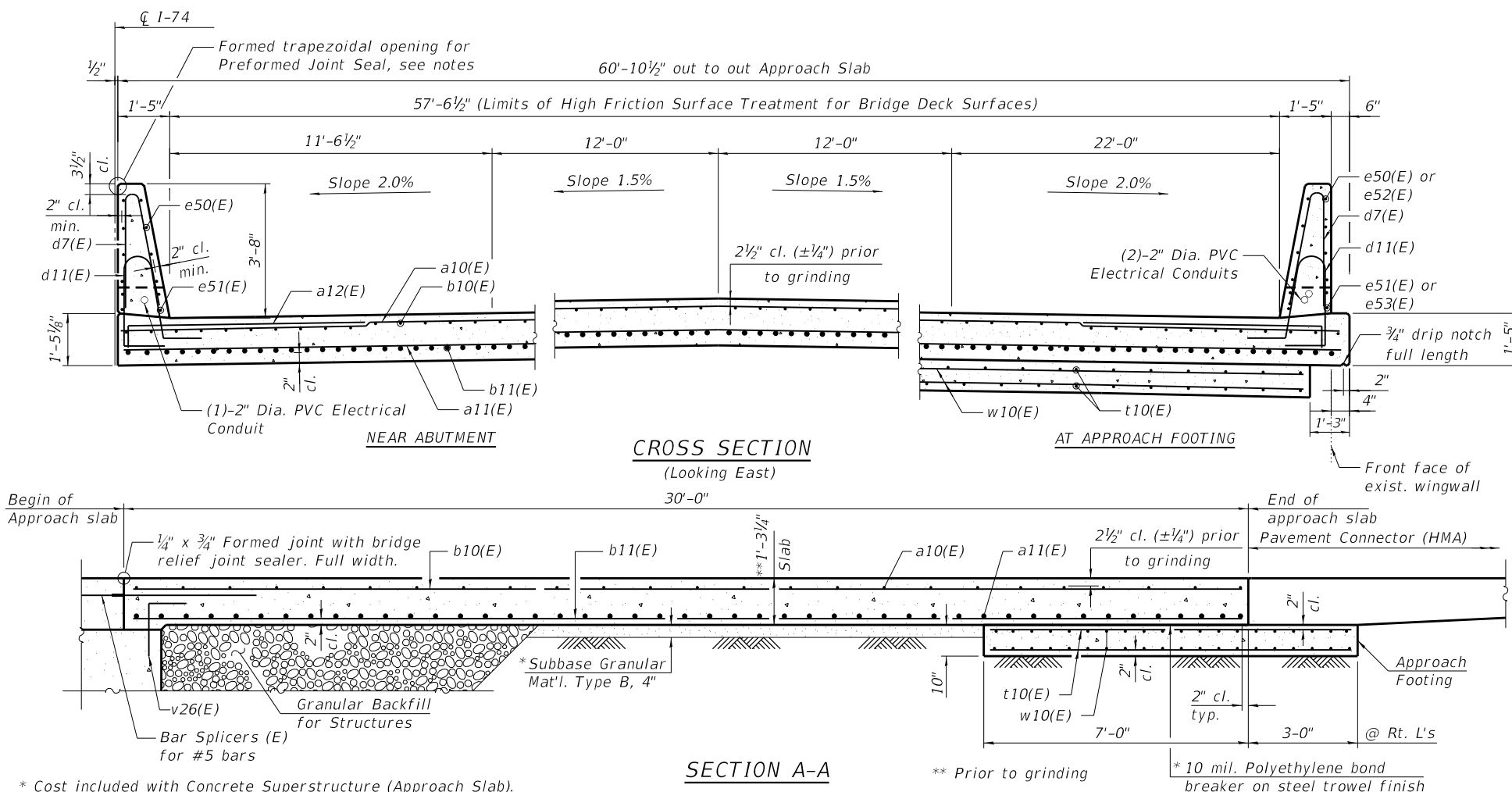
Bar	No.	Size	Length	Shape
a10(E)	258	#5	23'-7"	—
a11(E)	228	#8	34'-4"	—
a12(E)	172	#5	7'-4"	—
b10(E)	184	#5	29'-8"	—
b11(E)	294	#9	29'-8"	—
d7(E)	192	#5	6'-11"	∩
d11(E)	180	#5	8'-6"	∩
e50(E)	48	#4	15'-8"	—
e51(E)	12	#4	31'-3"	—
e52(E)	16	#4	15'-5"	—
e53(E)	4	#4	31'-8"	—
t10(E)	240	#4	10'-2"	—
w10(E)	240	#5	23'-1"	—
Description		Unit	Quantity	
Item		Unit	Total	
Concrete Structures		Cu Yd	38.9	
Concrete Superstructure		Cu Yd	17.8	
Concrete Superstructure (Approach Slab)		Cu Yd	173.2	
Reinforcement Bars, Epoxy Coated		Pound	75,310	



VIEW B-B

MIN. BAR LAP

#5 = 3'-4"
 #8 = 4'-9"



SECTION A-A

* Cost included with Concrete Superstructure (Approach Slab).

** Prior to grinding

* 10 mil. Polyethylene bond breaker on steel trowel finish

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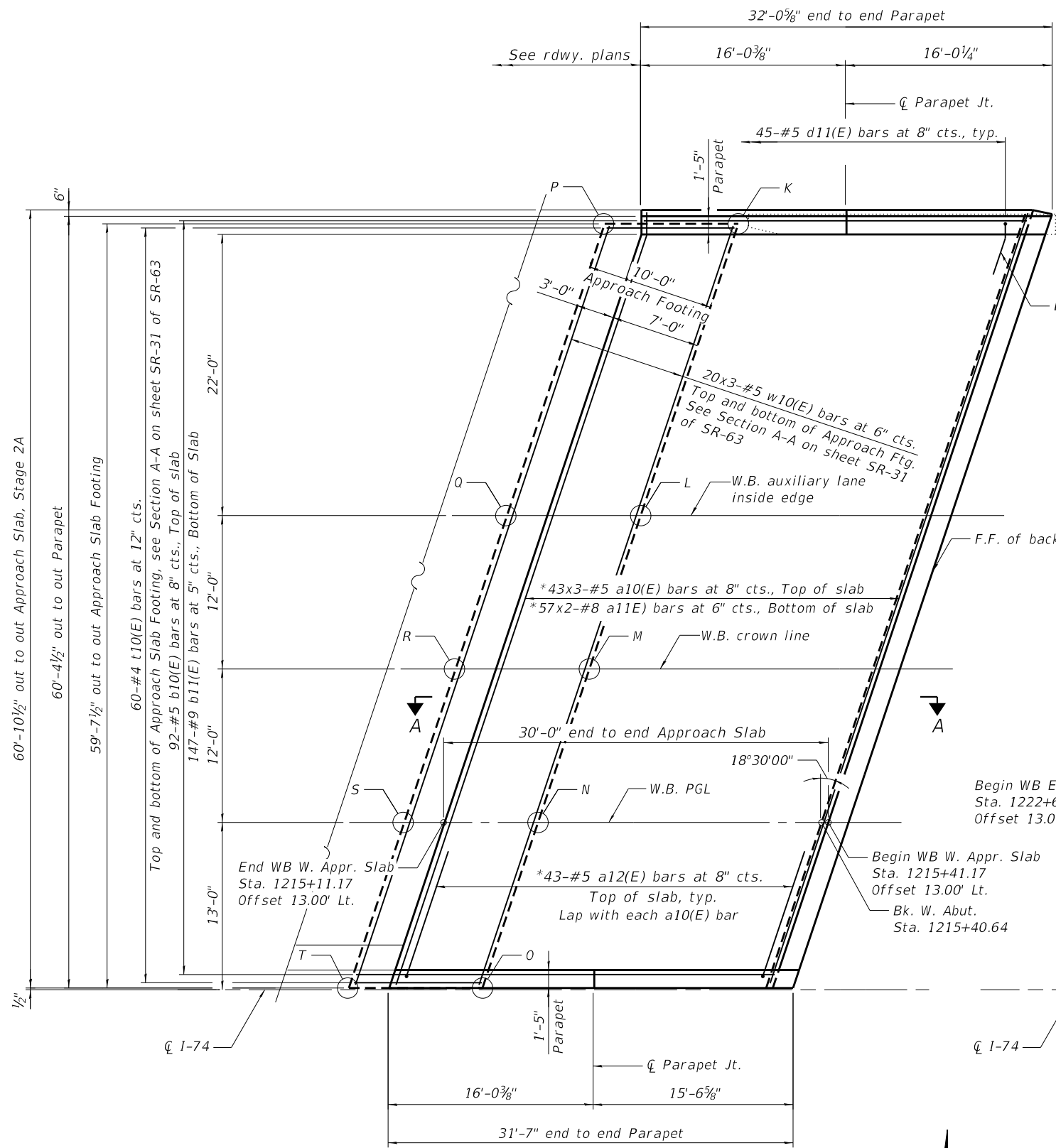
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB APPROACH SLAB DETAILS 2
STRUCTURE NO. 010-0021

SHEET SR-29 OF SR-63 SHEETS

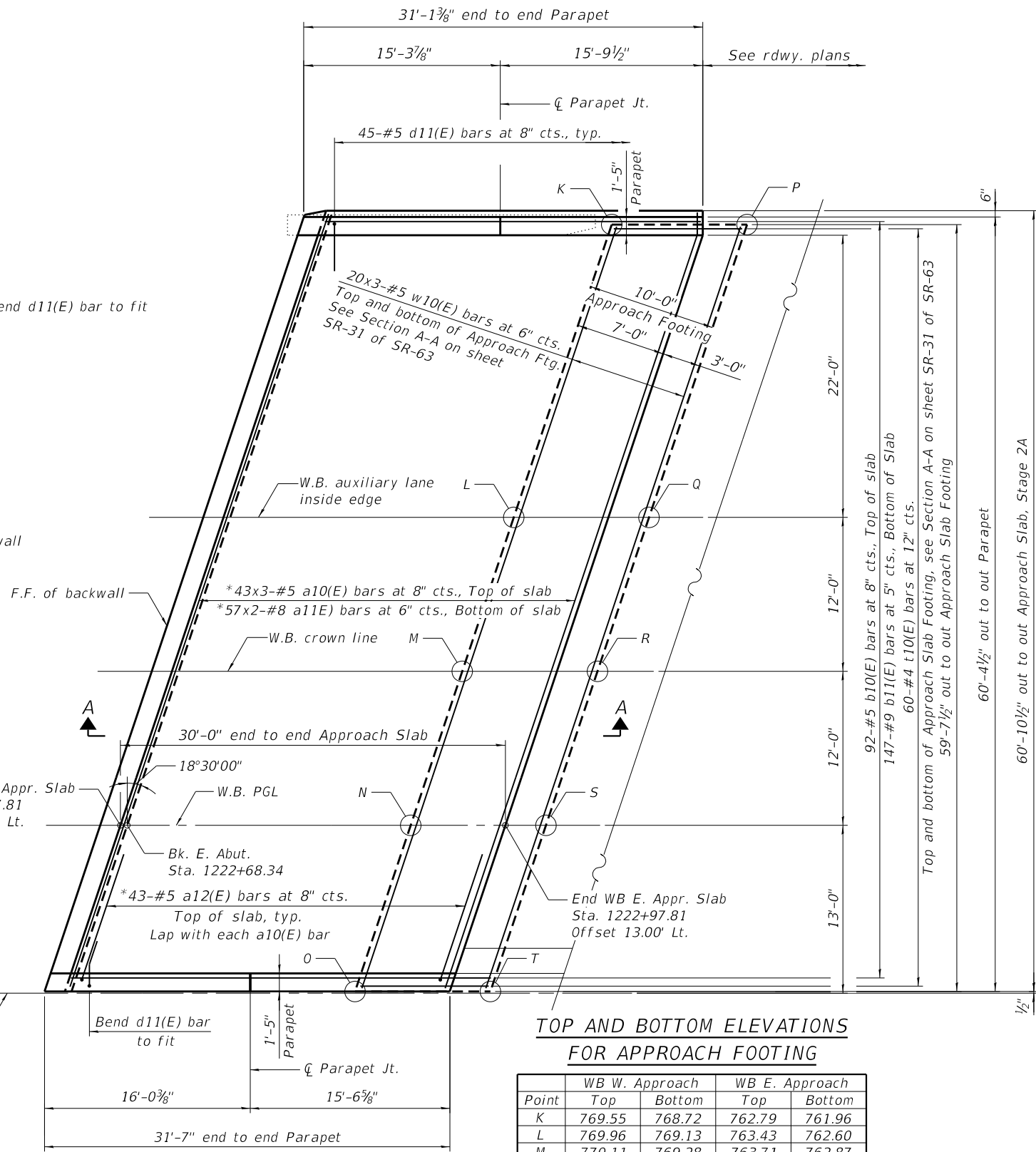
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74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	163
			CONTRACT NO. 70C64	
		ILLINOIS	FED. AID PROJECT	

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WB WEST APPROACH SLAB PLAN

*Bar spacing measured perpendicular to ends of approach slab



WB EAST APPROACH SLAB PLAN

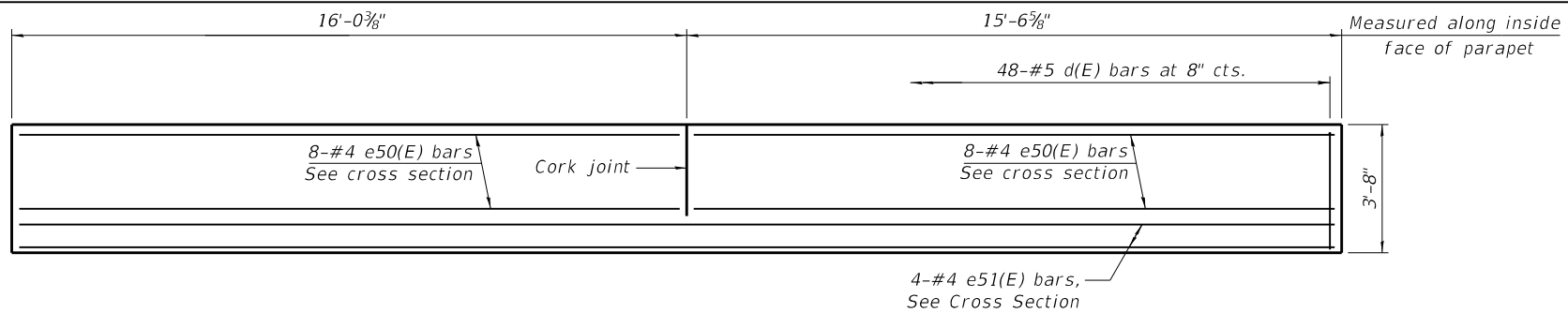
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point	WB W. Approach		WB E. Approach	
	Top	Bottom	Top	Bottom
K	769.55	768.72	762.79	761.96
L	769.96	769.13	763.43	762.60
M	770.11	769.28	763.71	762.87
N	769.90	769.07	763.62	762.79
O	769.61	768.78	763.47	762.63
P	769.48	768.65	762.54	761.70
Q	769.88	769.05	763.18	762.35
R	770.03	769.20	763.46	762.62
S	769.82	768.99	763.37	762.54
T	769.53	768.70	763.22	762.38

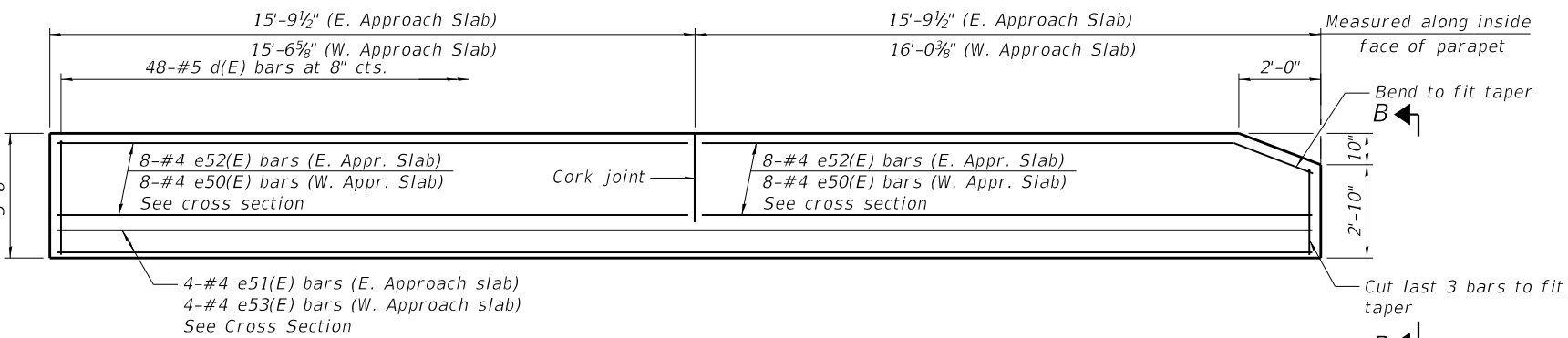
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB APPROACH SLAB DETAILS 1
 STRUCTURE NO. 010-0021**

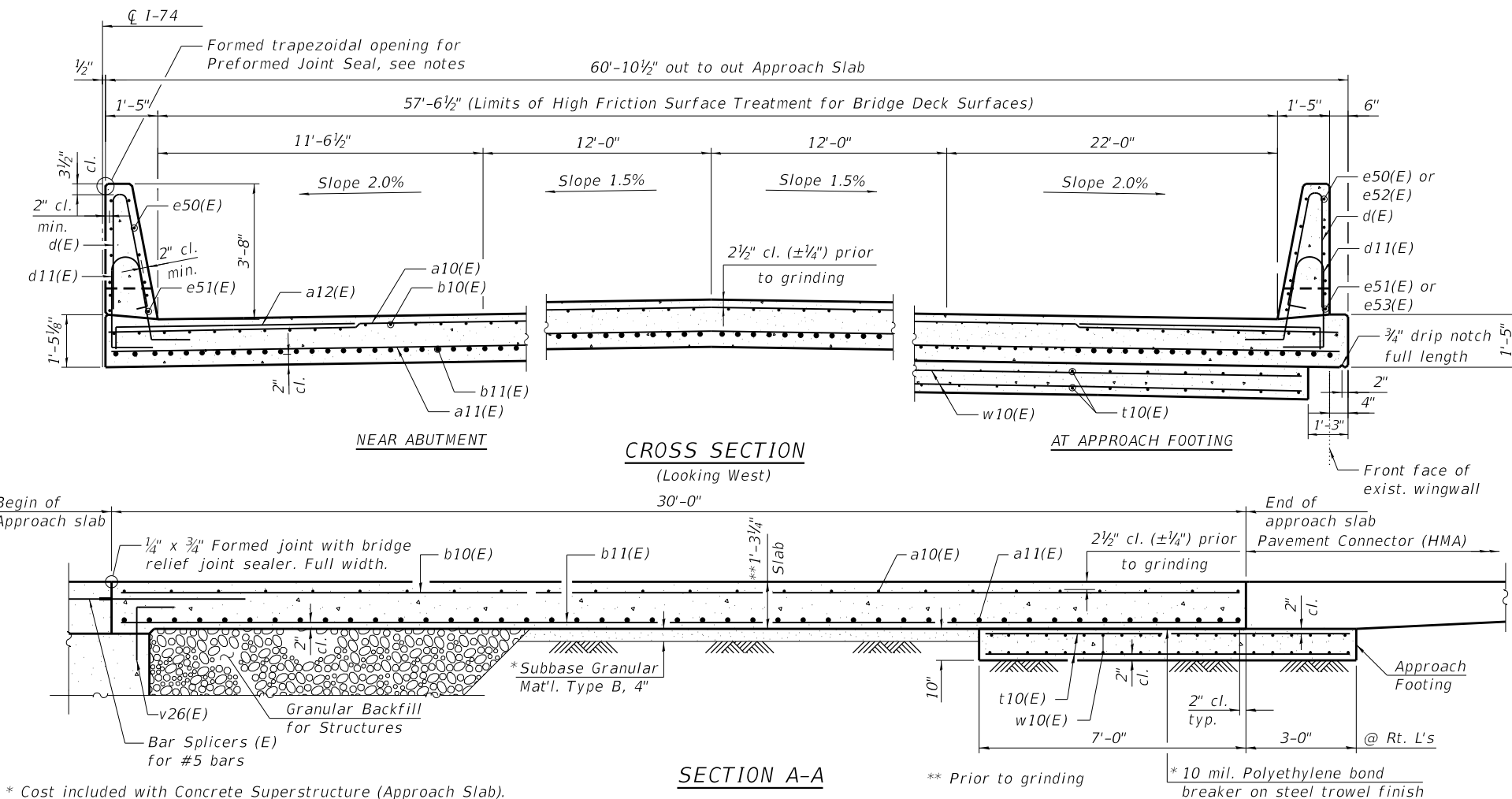
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74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	164
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		



INSIDE ELEVATION OF MEDIAN PARAPETS



INSIDE ELEVATION OF OUTSIDE PARAPET
(WB E. Approach slab shown, WB W. Approach mirrored 180°)

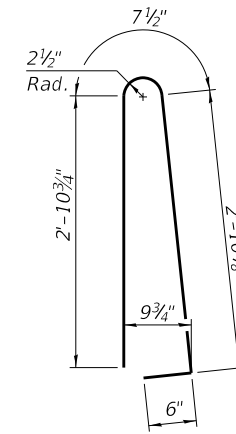


* Cost included with Concrete Superstructure (Approach Slab).

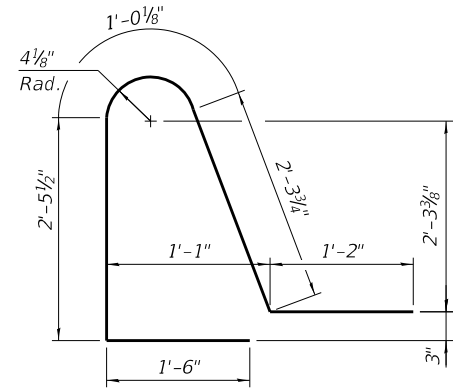
** Prior to grinding
* 10 mil. Polyethylene bond breaker on steel trowel finish

Notes:

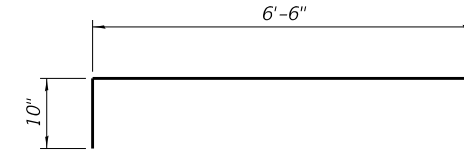
Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet SR-03 of SR-63
 See Highway Standard 631031 for Type 6 traffic barrier terminal connections at the end of each outside parapet.
 For details of parapet joints and Preformed Joint Seal between median parapets see sheet SR-23 of SR-63
 Trim e50(E) thru e53(E) bars in field to fit.



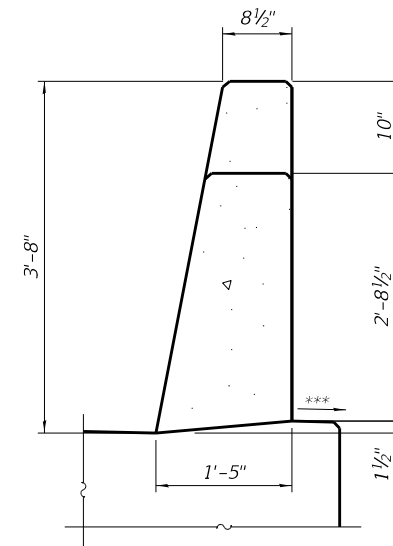
BAR d(E)



BAR d11(E)



BAR a12(E)



VIEW B-B

MIN. BAR LAP

#5 = 3'-4"
#8 = 4'-9"

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	258	#5	23'-7"	—
a11(E)	228	#8	34'-4"	—
a12(E)	172	#5	7'-4"	—
b10(E)	184	#5	29'-8"	—
b11(E)	294	#9	29'-8"	—
d(E)	192	#5	6'-11"	U
d11(E)	180	#5	8'-6"	U
e50(E)	48	#4	15'-8"	—
e51(E)	12	#4	31'-3"	—
e52(E)	16	#4	15'-5"	—
e53(E)	4	#4	31'-8"	—
t10(E)	240	#4	10'-2"	—
w10(E)	240	#5	23'-1"	—
Item		Unit	Total	
Concrete Structures		Cu Yd	38.9	
Concrete Superstructure		Cu Yd	17.8	
Concrete Superstructure (Approach Slab)		Cu Yd	173.2	
Reinforcement Bars, Epoxy Coated		Pound	75,310	

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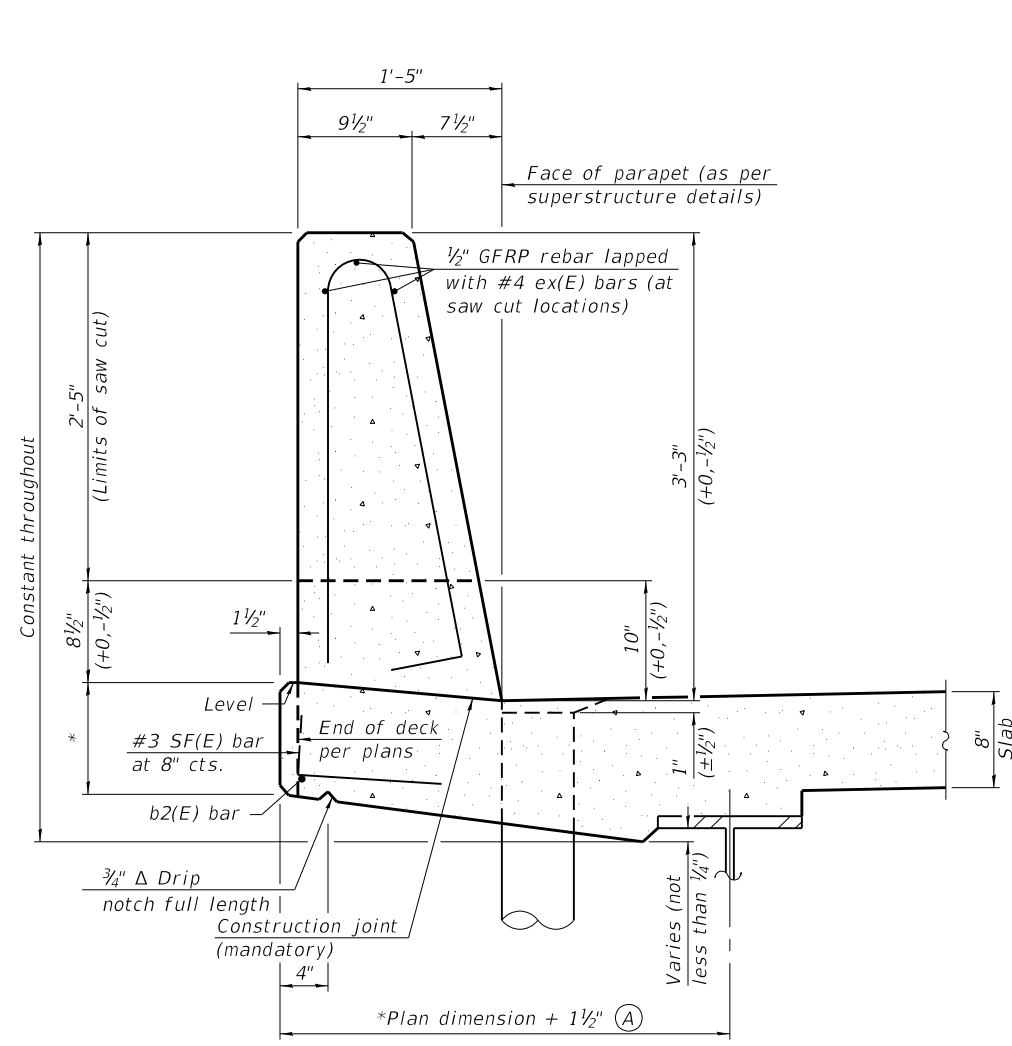
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	PLOT SCALE =	CHECKED - KK	REVISIONS -
	PLOT DATE =	DRAWN - MTR	REVISIONS -
		CHECKED - BK	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB APPROACH SLAB DETAILS 2
STRUCTURE NO. 010-0021
SHEET SR-31 OF SR-63 SHEETS

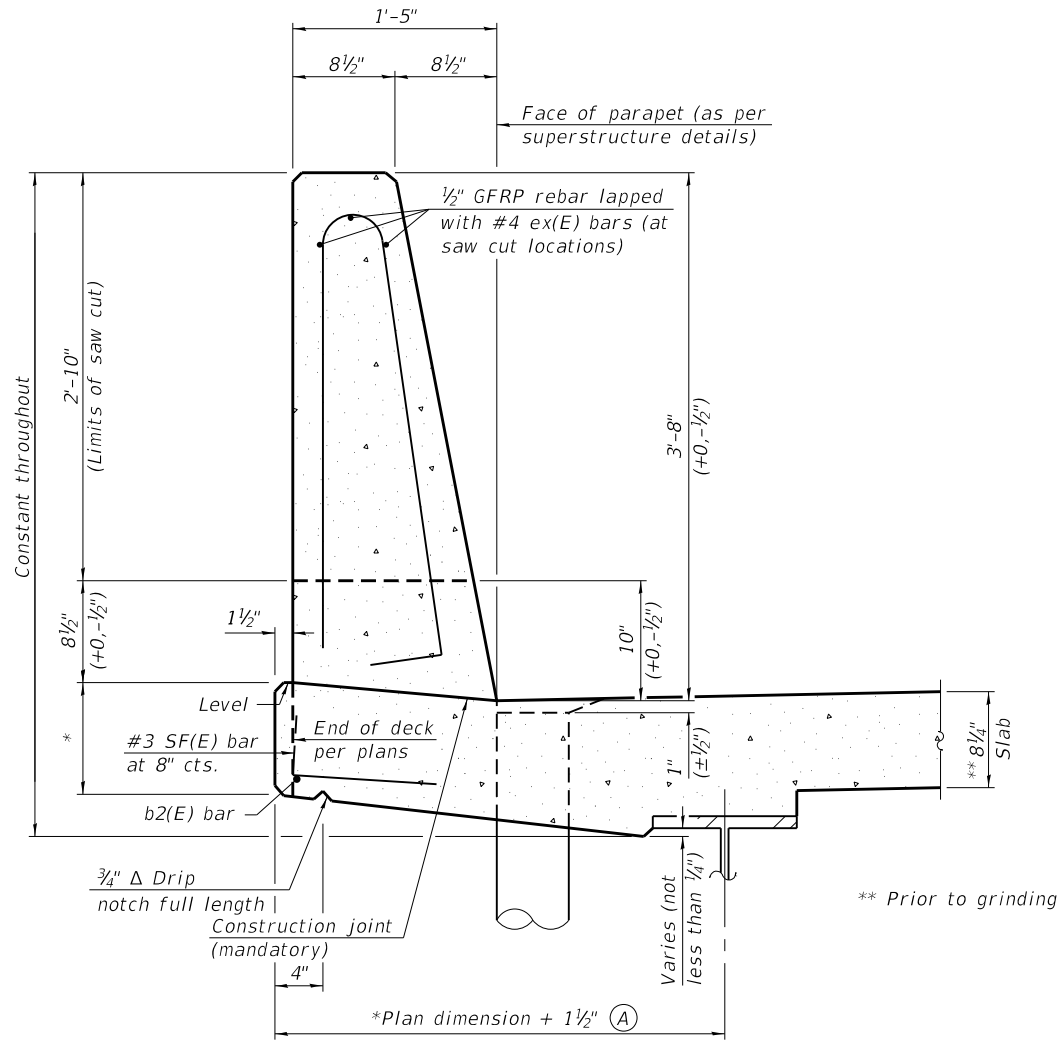
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CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

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**39" CONSTANT-SLOPE
 PARAPET SECTION**

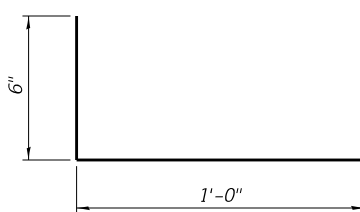
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)



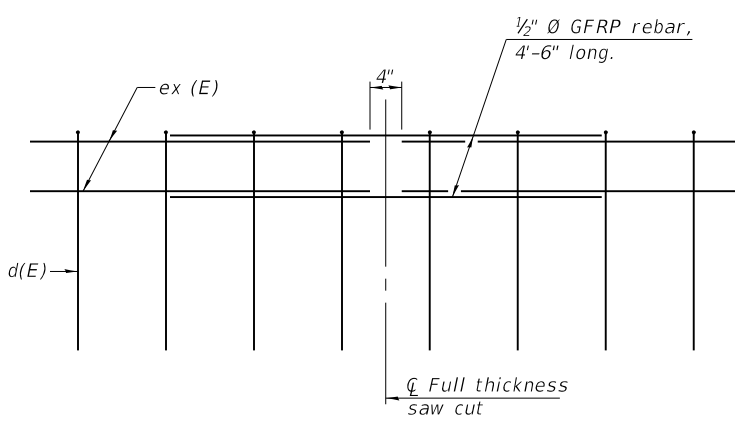
**44" CONSTANT-SLOPE
 PARAPET SECTION**

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

*See Superstructure Details.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

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

GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.
 Steel superstructure shown. Other superstructure types similar.

SFP 39-44

1-14-2019

USER NAME =	DESIGNED - BK	REVISED -
CHECKED - KK	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

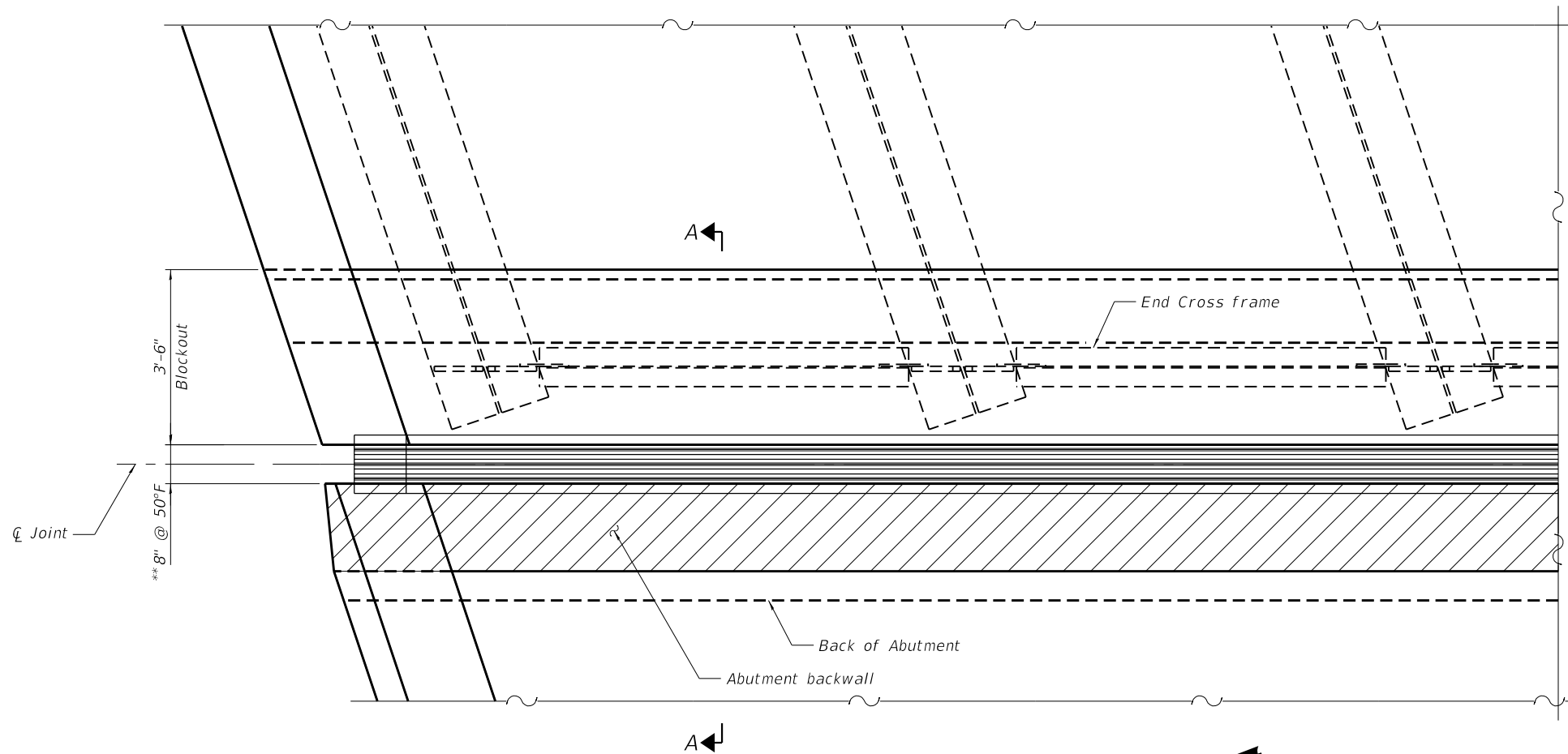
**CONCRETE PARAPET SLIPFORMING OPTION
 STRUCTURE NO. 010-0021**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	166
CONTRACT NO. 70C64				

SHEET SR-32 OF SR-63 SHEETS

ILLINOIS FED. AID PROJECT

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PARTIAL PLAN
 (North end of W. Abut. shown, E. Abut. similar)

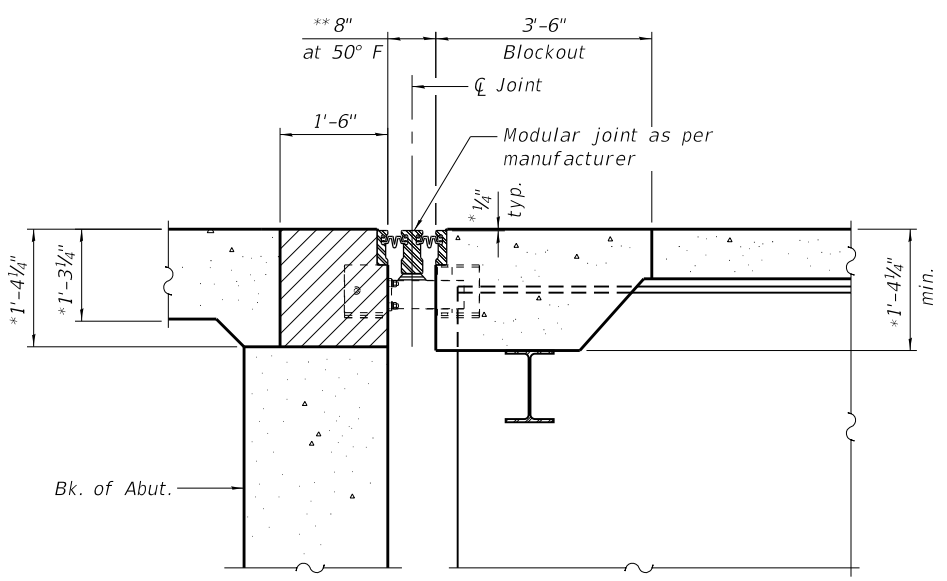
* Prior to grinding
 ** Actual dimension may vary depending on manufacturer's design

Notes:
 Expansion support boxes shall be rigidly fixed to surrounding bridge elements prior to pouring blockout concrete to prevent shifting of the joint during pour.
 Modular expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 All steel surfaces of the expansion joint assemblies, except areas in direct contact with the seals and stainless steel surfaces, shall be metallized (or galvanized) according to the Special Provision for Metallizing of Structural Steel.
 The modular expansion joints shall provide the following service thermal movements measured from 50°F:

	W. Abut.	E. Abut.
Perpendicular to C Joint	±2 1/4"	±1 5/8"
Along C Joint	±3/4"	±3/8"

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint 6"	Foot	243



SECTION A-A

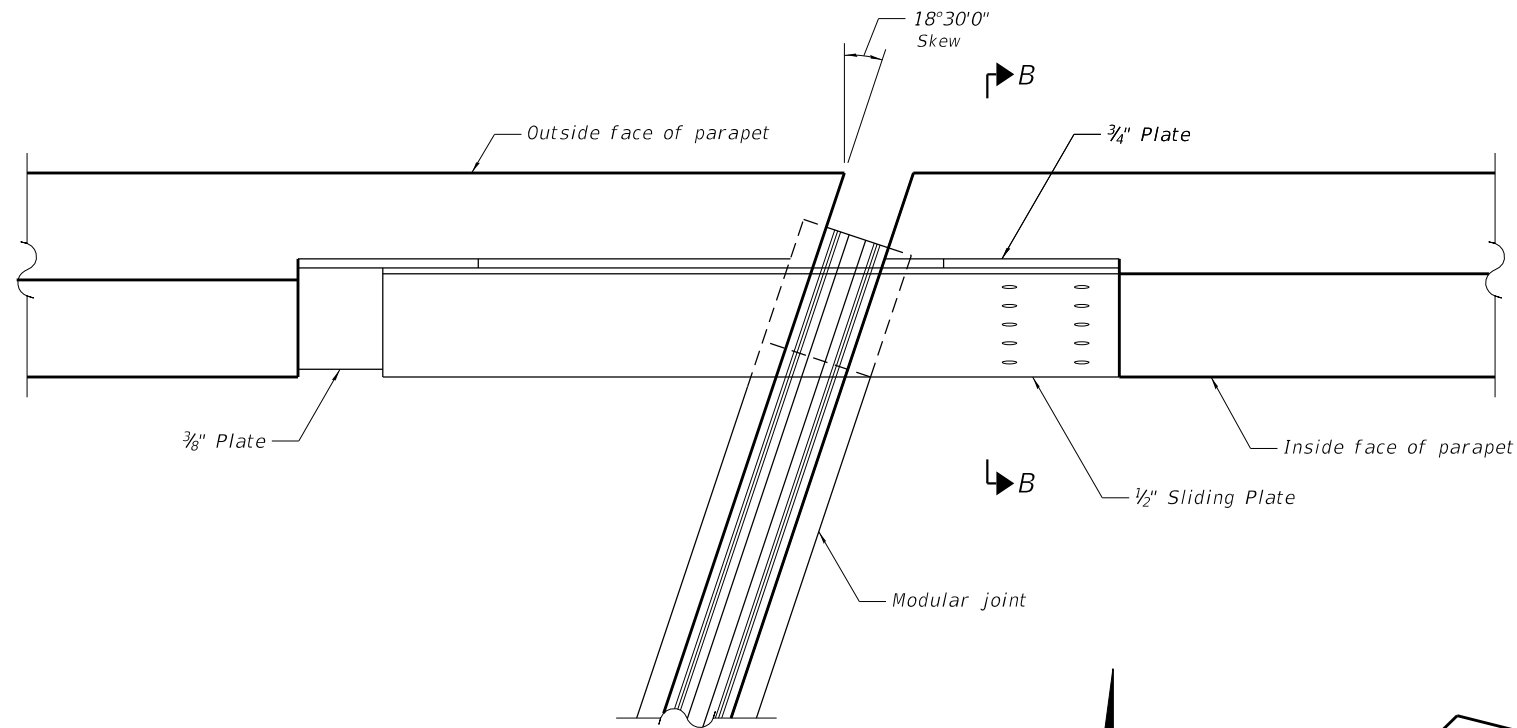
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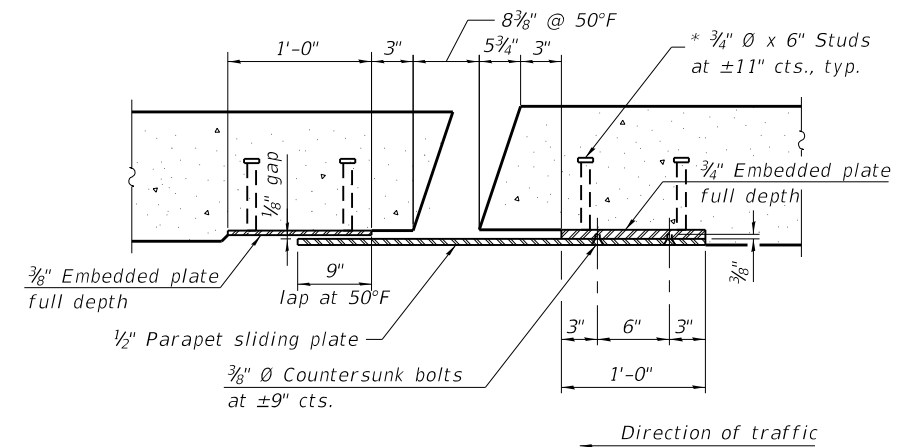
**MODULAR EXPANSION JOINT DETAILS 1
 STRUCTURE NO. 010-0021**

SHEET SR-33 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	167
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

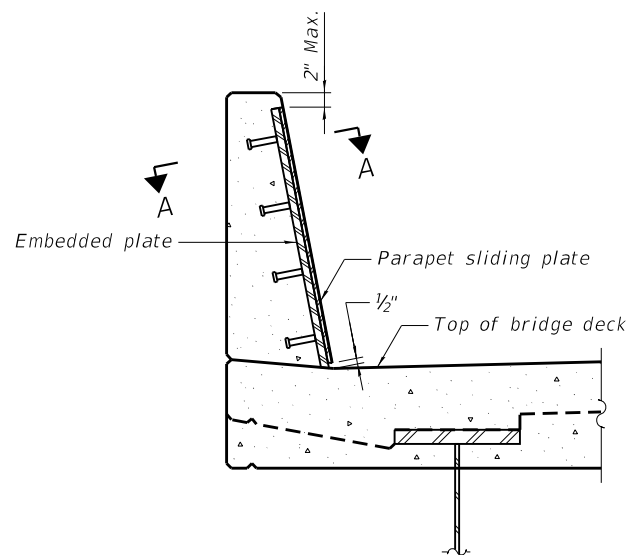


PLAN
(WB north parapet at W. Abutment shown, other locations similar)

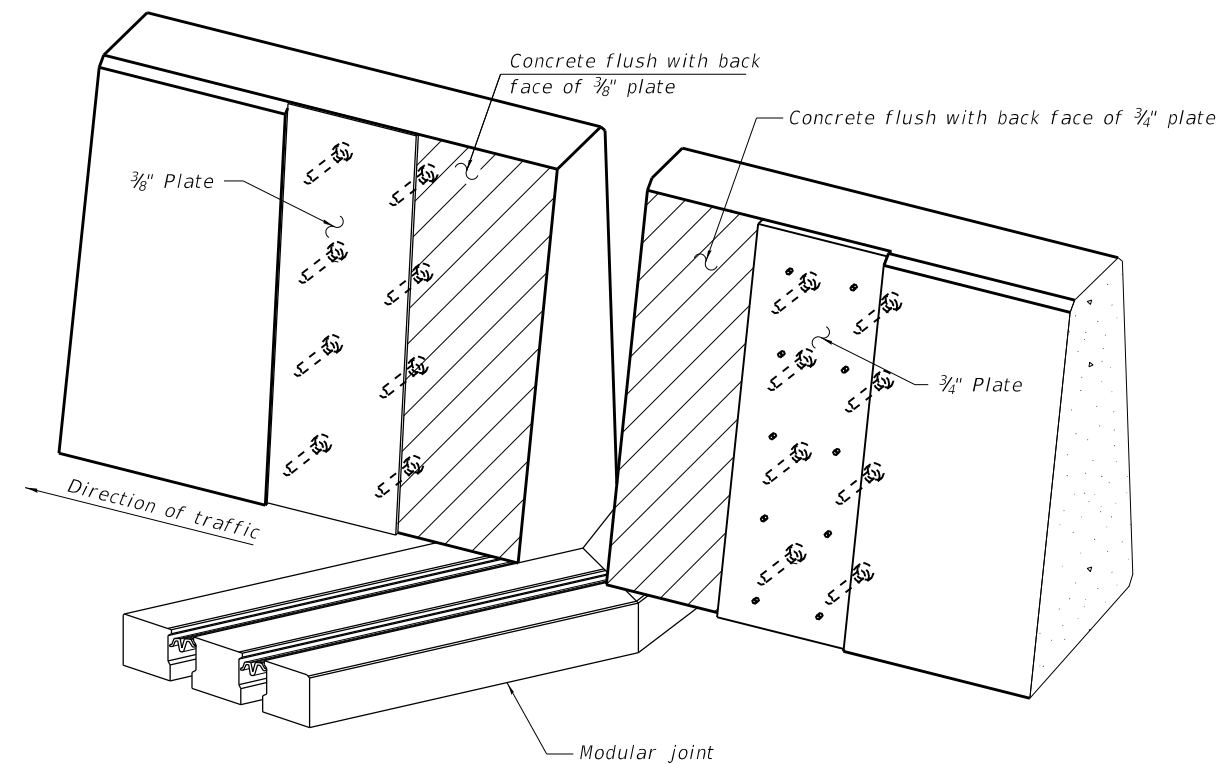


SECTION A-A

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



SECTION B-B



TRIMETRIC VIEW
(Showing embedded plates only)

Notes:

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
All material (plates, bolts, and studs), equipment, and labor required to install the sliding plate assemblies in the parapets is included in the cost of Modular Expansion Joint 6".

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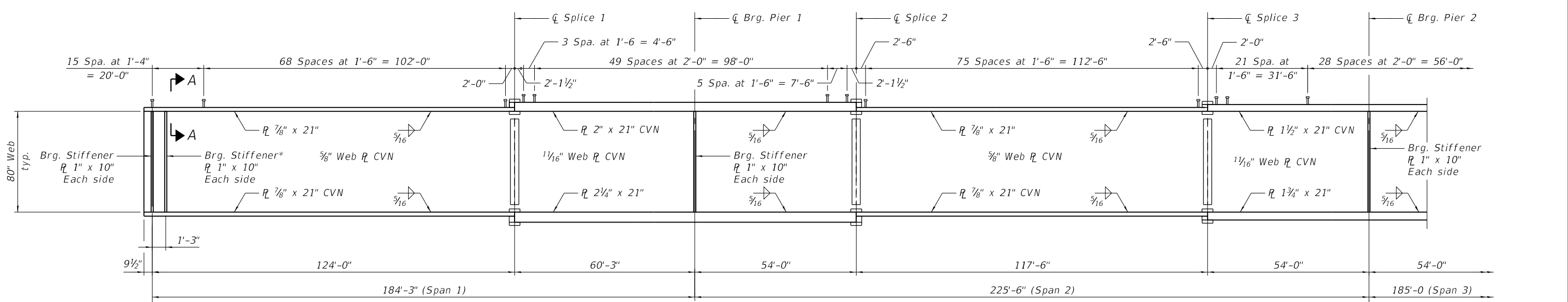
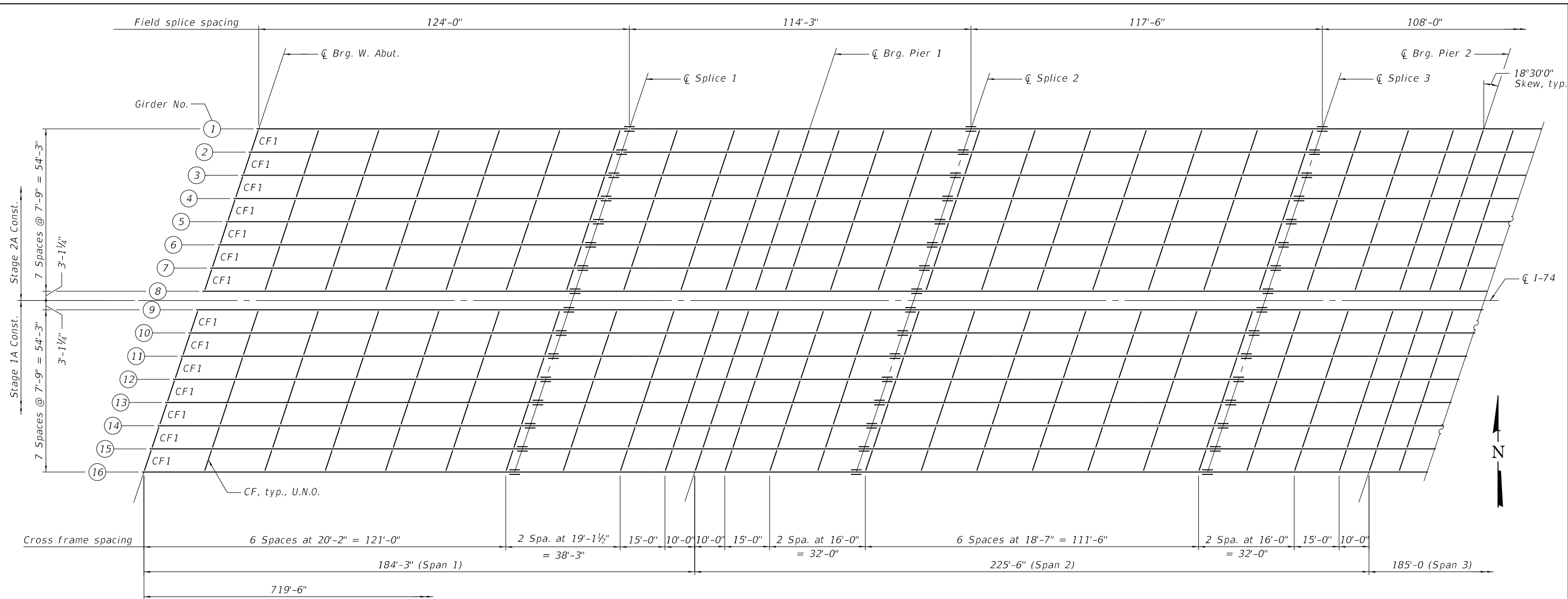
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MODULAR EXPANSION JOINT DETAILS 2
STRUCTURE NO. 010-0021

SHEET SR-34 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	168
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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*For future girder jacking

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

Notes:
 All girder plates, including bearing stiffeners shall be AASHTO M270, Grade 50.
 See Section A-A on sheet SR-36 of SR-63

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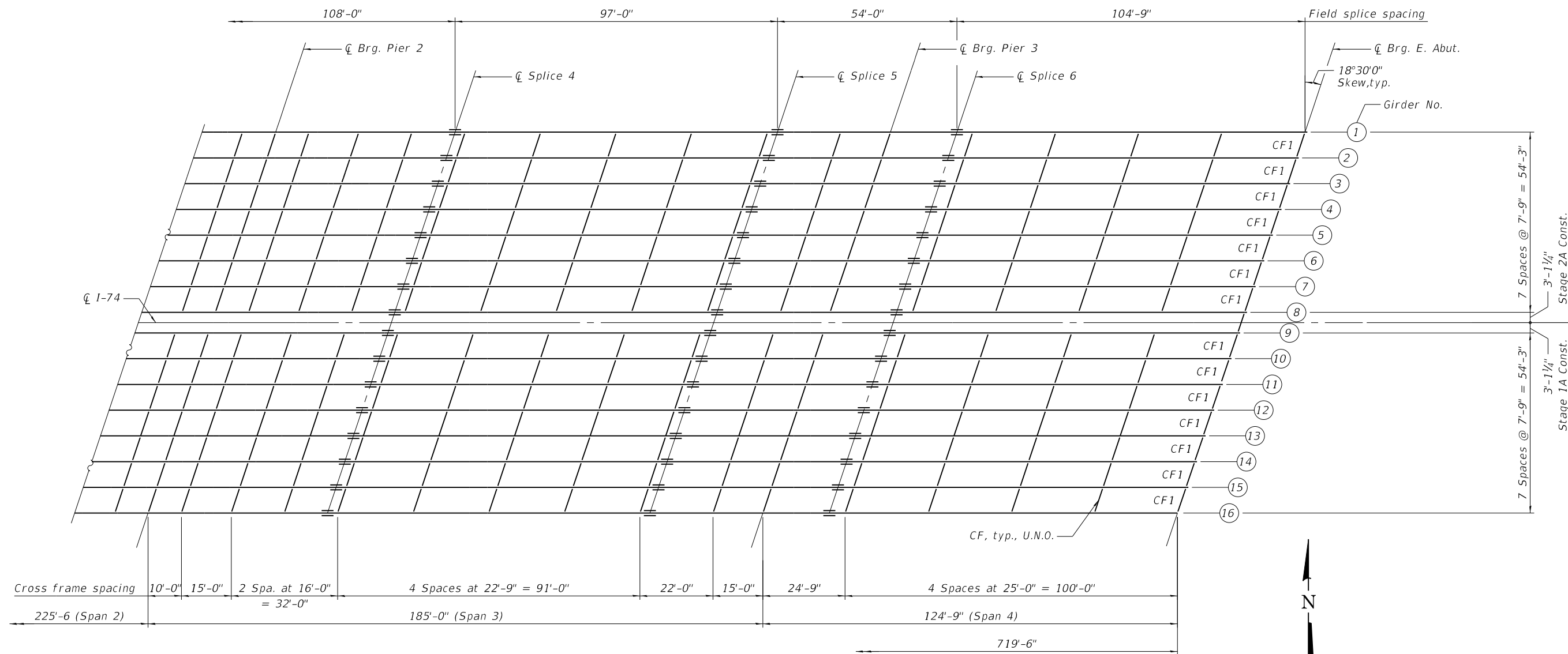
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PLOT SCALE =	CHECKED - KK	REVISED -
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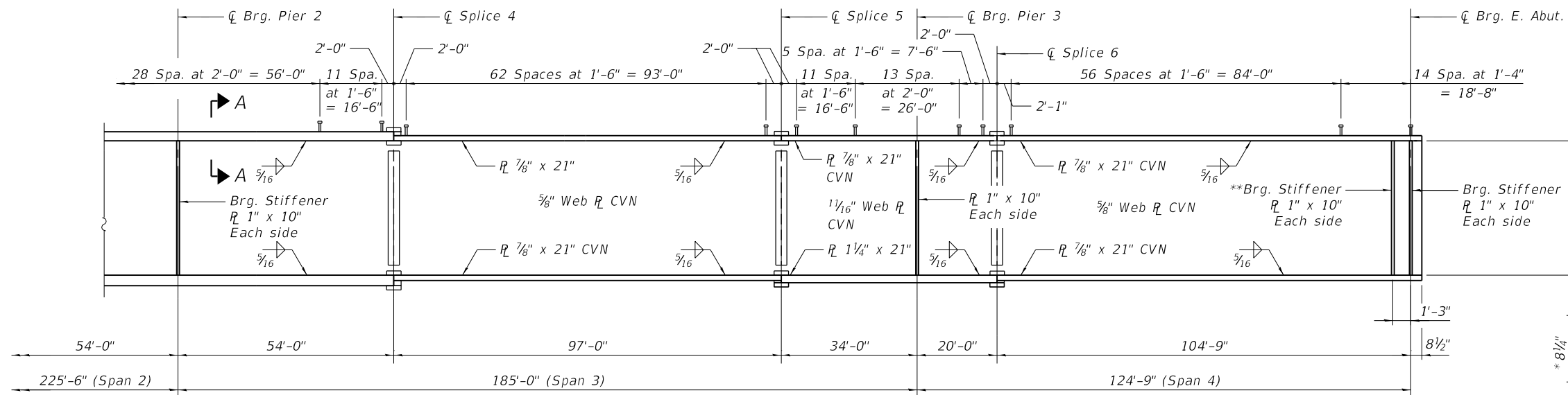
**FRAMING PLAN AND GIRDER ELEVATION 1
 STRUCTURE NO. 010-0021**

SHEET SR-35 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1) BR. (14HB-2) BR-1	CHAMPAIGN	201	169
CONTRACT NO. 70C64			ILLINOIS FED. AID PROJECT	



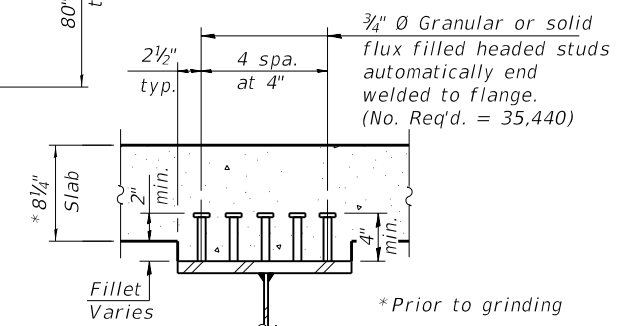
PARTIAL FRAMING PLAN



PARTIAL GIRDER ELEVATION

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

**For future girder jacking



SECTION A-A

MODEL: Default
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 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME =	DESIGNED - BK	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - MTR	REVISED -
	CHECKED - BK	REVISED -

**STATE OF ILLINOIS
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**FRAMING PLAN AND GIRDER ELEVATION 2
 STRUCTURE NO. 010-0021**

SHEET SR-36 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	170
CONTRACT NO. 70C64			ILLINOIS FED. AID PROJECT	

INTERIOR GIRDER MOMENT TABLE								
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4	
<i>I_s</i>	(in ⁴)	86762	179542	86762	142669	86762	101658	86762
<i>I_c(n)</i>	(in ⁴)	185043	319652	185043	272162	185043	222772	185043
<i>I_c(3n)</i>	(in ⁴)	137912	244041	137912	204469	137912	162532	137912
<i>I_c(cr)</i>	(in ⁴)	-	197046	-	159831	-	119180	-
<i>S_s</i>	(in ³)	2122	4409	2122	3569	2122	2675	2122
<i>S_c(n)</i>	(in ³)	2822	5261	2822	4407	2822	3549	2822
<i>S_c(3n)</i>	(in ³)	2566	4886	2566	4058	2566	3220	2566
<i>S_c(cr)</i>	(in ³)	-	4557	-	3727	-	2864	-
<i>DC1</i>	(k')	1.171	1.366	1.171	1.295	1.171	1.215	1.171
<i>MDC1</i>	(k)	2383	6376	2138	4747	1389	2646	1131
<i>DC2</i>	(k')	0.143	0.143	0.143	0.143	0.143	0.143	0.143
<i>MDC2</i>	(k)	293	723	267	560	168	327	136
<i>DW</i>	(k')	0.360	0.360	0.360	0.360	0.360	0.360	0.360
<i>MDW</i>	(k)	739	1820	673	1411	423	823	343
<i>LLDF</i>		0.571	0.588	0.542	0.578	0.570	0.610	0.632
<i>M_l + i_M</i>	(k)	3050	4037	2772	3532	2408	2657	2124
<i>f_l (Strength I)</i>	(ksi)	0	0	0	0	0	0	0
<i>M_u + 1/2 f_l S_{xc}</i>	(k)	9791	18669	8867	14931	6795	9601	5815
<i>ØfMn</i>	(k)	13819	19637	13967	16062	14433	10354	14592
<i>f_s DC1</i>	(ksi)	13.47	17.35	12.09	15.96	7.85	11.87	6.39
<i>f_s DC2</i>	(ksi)	1.37	1.90	1.25	1.80	0.79	1.37	0.64
<i>f_s DW</i>	(ksi)	3.46	4.79	3.15	4.54	1.98	3.45	1.60
<i>f_s (L+IM)</i>	(ksi)	12.97	10.63	11.79	11.37	10.24	11.13	9.03
<i>f_l (Service II)</i>	(ksi)	0	0	0	0	0	0	0
<i>f_s + f_l/2 (Service II)</i>	(ksi)	35.16	37.87	31.81	37.10	23.93	31.16	20.38
<i>0.95RhFyf</i>	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50
<i>f_s + f_l/3 (Total)(Strength I)</i>	(ksi)	-	-	-	-	-	-	-
<i>ØFFn</i>	(ksi)	-	-	-	-	-	-	-
<i>Vf</i>	(k)	65.5	65.3	53.2	72.0	47.5	72.8	66.0

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

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

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

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

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

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

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

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

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

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

LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.

M_l + i_M: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u: Factored Strength I design moment (kip-ft.).
1.25 (MDC1+ MDC2) + 1.5 MDW + 1.75 M_l + i_M

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

ØfMn: 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/ S_{nc}

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

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

f_s (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 + i_M / S_c(n) or M_l + i_M / S_c(cr) as applicable.

f_s + f_l/2 (Service II): Sum of stresses as computed below (ksi).
f_sDC1 + f_sDC2 + f_sDW + 1.3 f_s(L+IM) + f_l/2

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

f_s + f_l/3 (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (f_sDC1 + f_sDC2) + 1.5 f_sDW + 1.75 f_s(L+IM) + f_l/3

ØFFn: 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 applied to non-continuous exterior beam ends and computed according to Article 4.6.2.2.3c-1.

RDC1: Un-factored reaction due to non-composite dead load (kip).

RDC2: Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).

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

R_l: Un-factored live load reaction (kip).

R_{IM}: Un-factored dynamic load allowance (impact) (kip).

GIRDER REACTION TABLE										
	West Abutment		Pier 1		Pier 2		Pier 3		East Abutment	
	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior
<i>LLDF</i>	0.797	0.609	0.797	0.609	0.797	0.609	0.797	0.609	0.797	0.609
<i>OCF</i>	-	1.057	-	-	-	-	-	-	-	1.051
<i>RDC1 (k)</i>	78.3	82.5	302.6	318.4	257.1	270.9	193.8	204.6	54.8	57.6
<i>RDC2 (k)</i>	9.3	9.2	33.9	34.0	29.9	29.9	23.5	23.5	6.3	6.3
<i>RDW (k)</i>	23.3	23.3	85.5	85.5	75.3	75.2	59.2	59.2	15.9	15.9
<i>R_l (k)</i>	95.7	77.3	212.2	162.2	204.4	156.3	181.9	139.1	84.1	67.6
<i>R_{IM} (k)</i>	17.7	14.3	32.1	24.5	31.7	24.2	30.6	23.4	17.2	13.8
<i>RTotal (k)</i>	224.2	206.6	666.2	624.6	598.3	556.5	489.0	449.8	178.2	161.2

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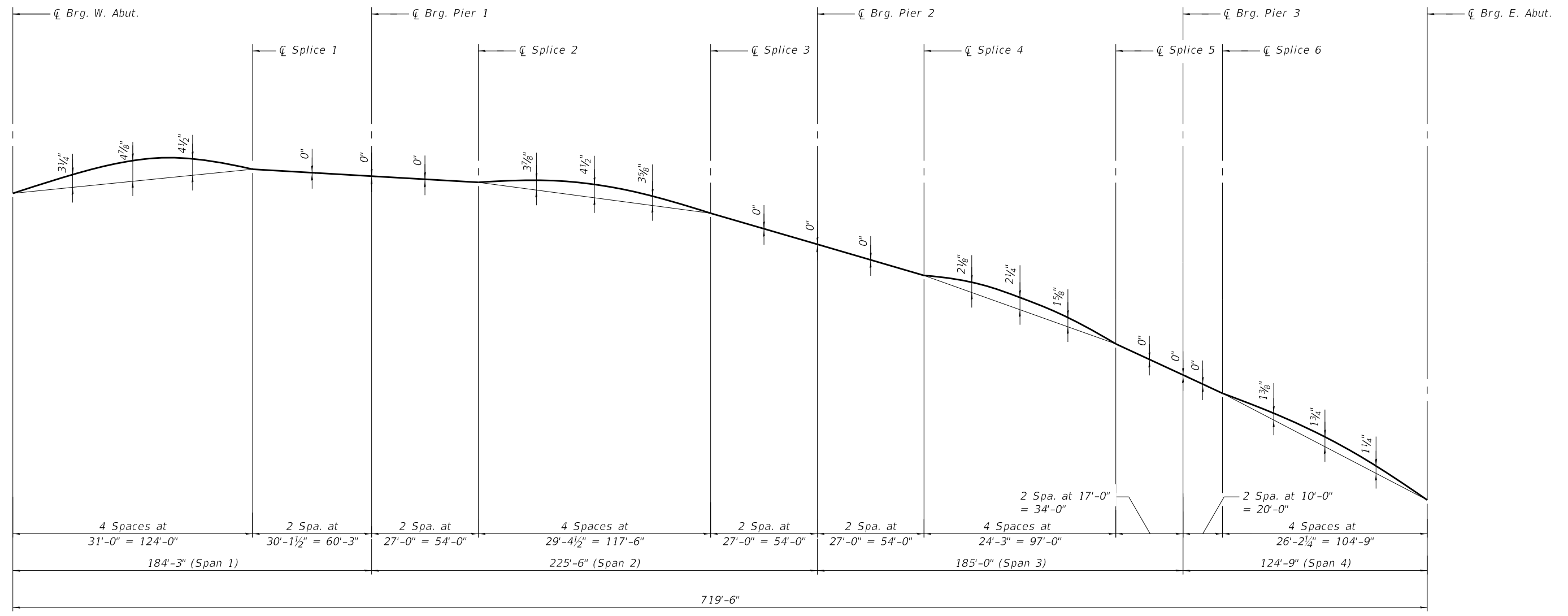
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MOMENT AND REACTION TABLES
STRUCTURE NO. 010-0021**

SHEET SR-37 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	171
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

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CAMBER DIAGRAM

*TOP OF WEB ELEVATIONS

Location	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11	Girder 12	Girder 13	Girder 14	Girder 15	Girder 16
C Brg. West Abut.	770.19	770.33	770.47	770.59	770.69	770.60	770.46	770.29	770.27	770.41	770.52	770.58	770.45	770.29	770.11	769.94
C Splice 1	770.60	770.75	770.90	771.04	771.16	771.08	770.95	770.79	770.78	770.94	771.06	771.13	771.01	770.86	770.70	770.54
C Brg. Pier 1	770.45	770.61	770.77	770.91	771.03	770.96	770.84	770.69	770.69	770.85	770.97	771.05	770.94	770.80	770.64	770.49
C Splice 2	770.32	770.49	770.65	770.80	770.93	770.86	770.74	770.60	770.60	770.76	770.90	770.98	770.87	770.74	770.59	770.44
C Splice 3	769.72	769.90	770.08	770.24	770.38	770.32	770.22	770.08	770.10	770.27	770.42	770.52	770.42	770.30	770.16	770.02
C Brg. Pier 2	769.09	769.27	769.46	769.62	769.77	769.72	769.62	769.49	769.51	769.69	769.84	769.94	769.85	769.73	769.60	769.47
C Splice 4	768.46	768.64	768.83	769.00	769.15	769.11	769.01	768.89	768.92	769.10	769.26	769.37	769.28	769.17	769.05	768.92
C Splice 5	767.08	767.28	767.48	767.66	767.82	767.79	767.70	767.59	767.62	767.82	767.99	768.10	768.03	767.93	767.81	767.70
C Brg. Pier 3	766.45	766.65	766.85	767.04	767.20	767.17	767.09	766.98	767.02	767.22	767.39	767.51	767.44	767.34	767.23	767.11
C Splice 6	766.08	766.28	766.48	766.67	766.84	766.81	766.73	766.62	766.66	767.04	767.16	767.09	767.09	766.99	766.88	766.77
C Brg. East Abut.	763.91	764.12	764.34	764.54	764.71	764.69	764.63	764.53	764.58	764.79	764.97	765.10	765.05	764.96	764.86	764.76

*For fabrication only.

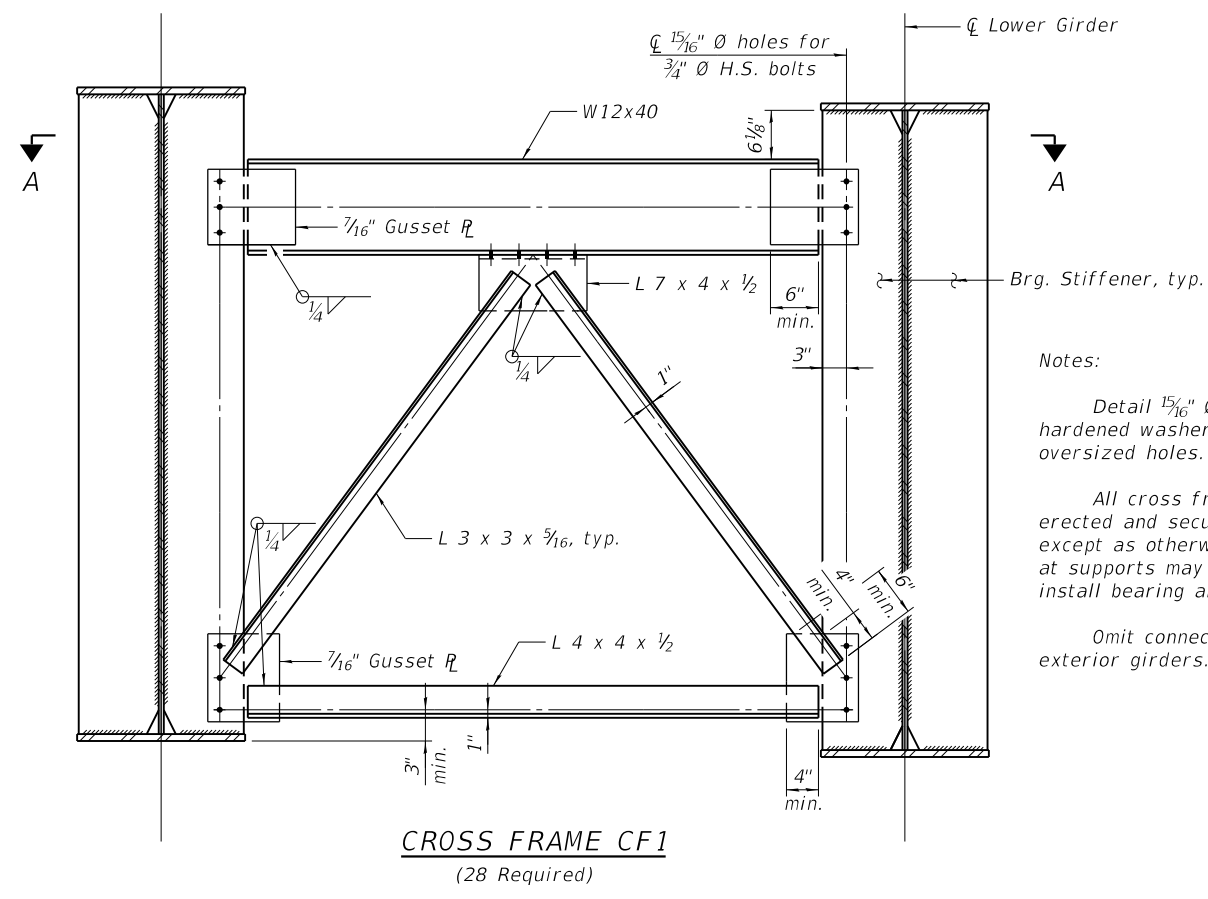
STATE OF ILLINOIS
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CAMBER DIAGRAM
 STRUCTURE NO. 010-0021

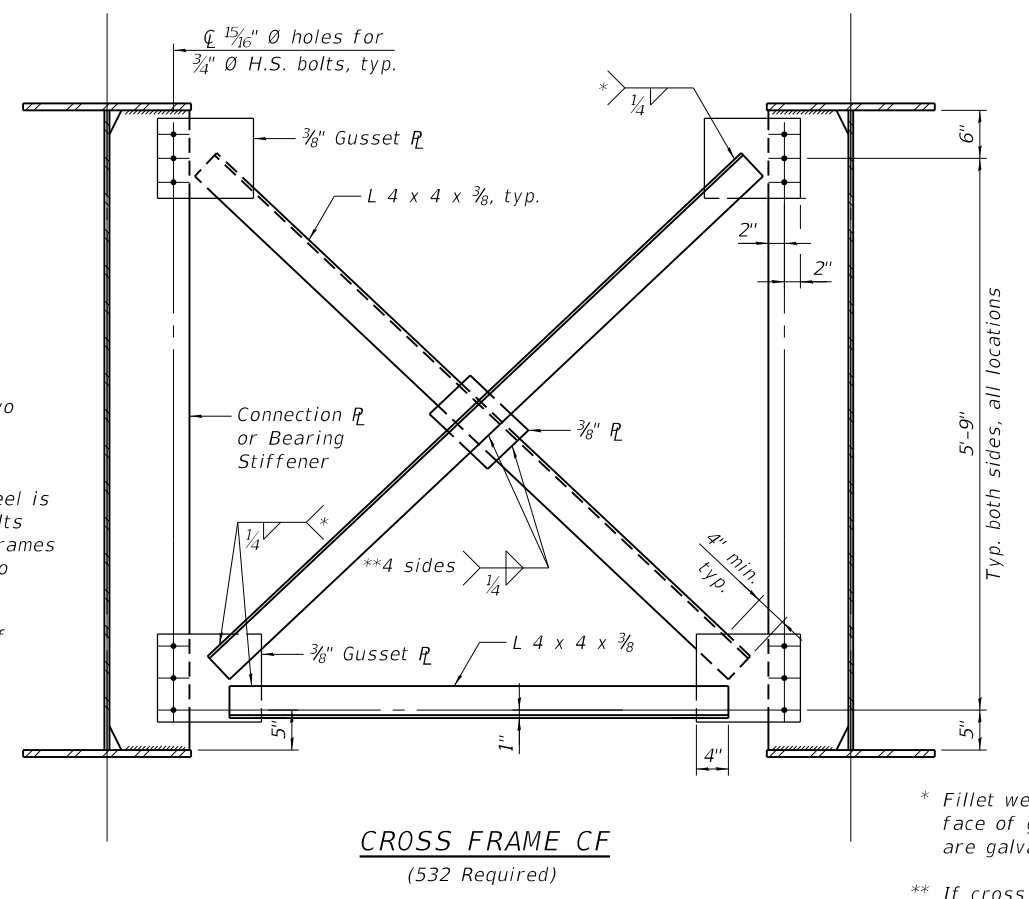
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	172
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

SHEET SR-38 OF SR-63 SHEETS

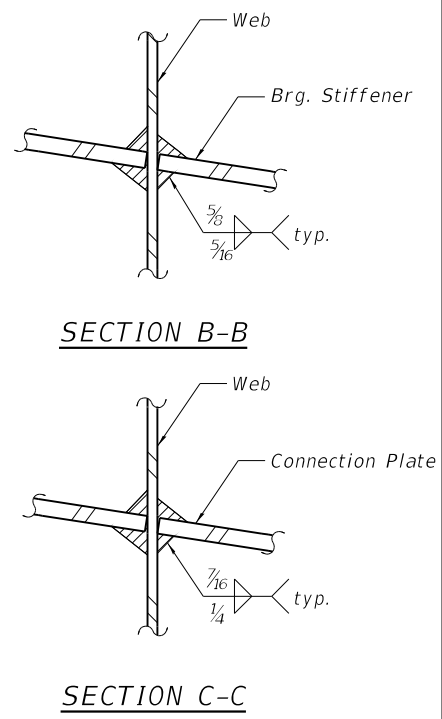
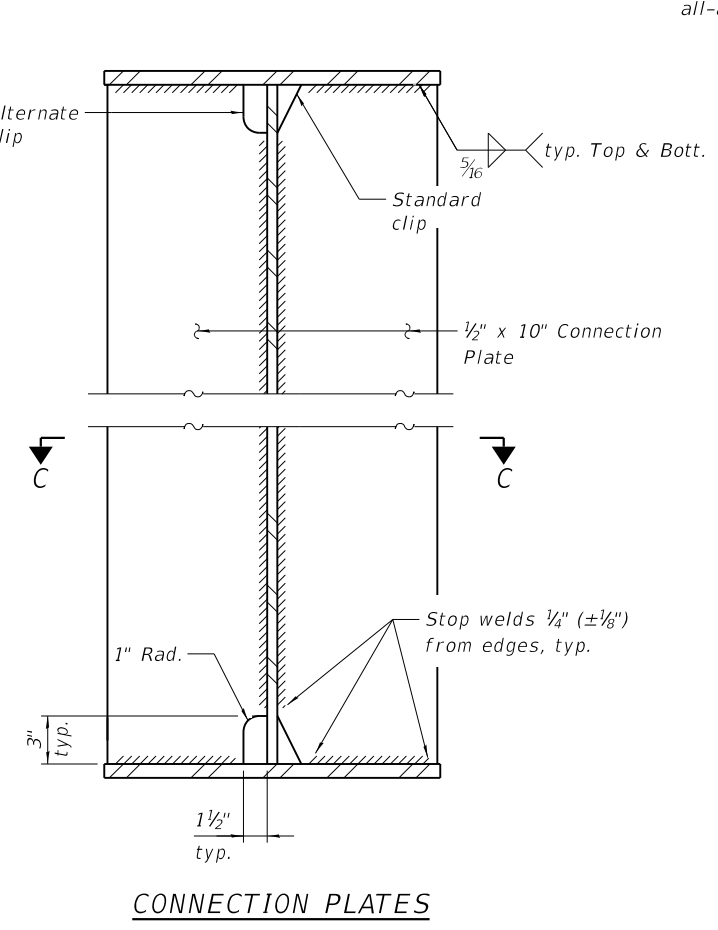
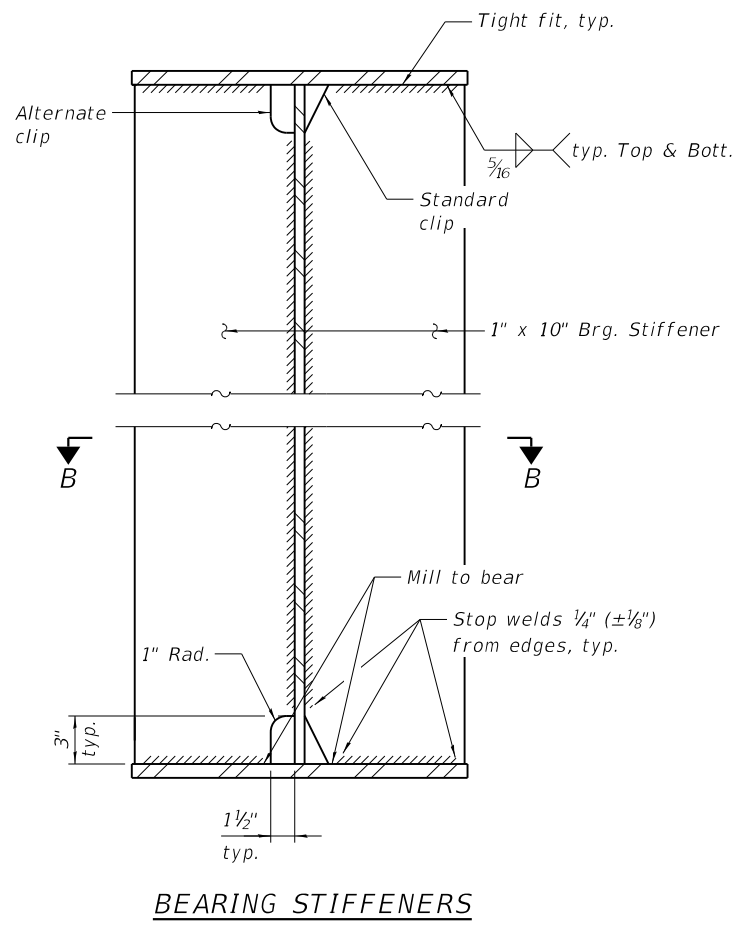
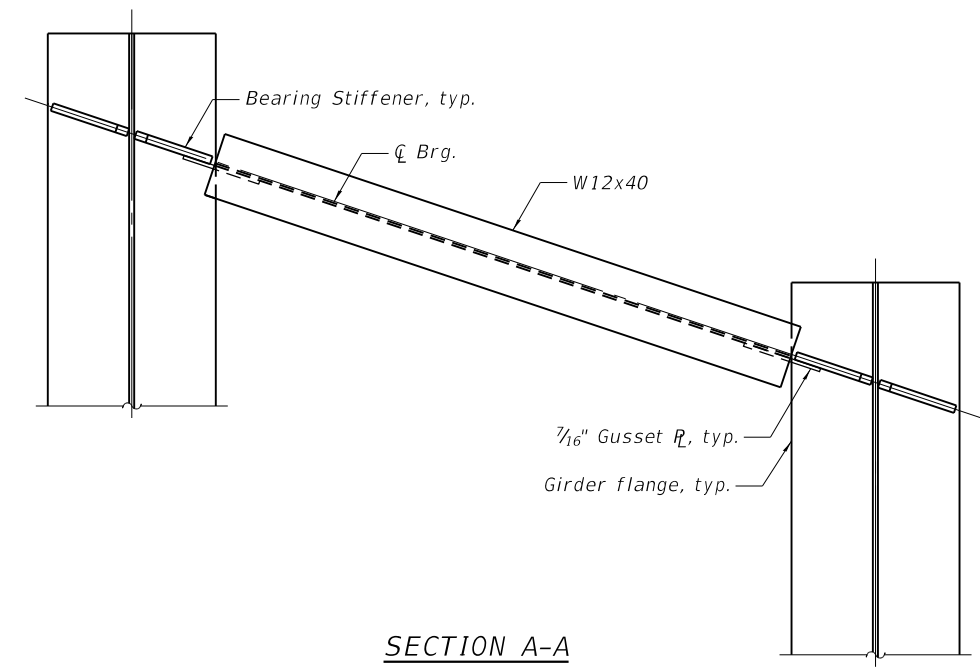
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Notes:
 Detail $\frac{15}{16}$ " \emptyset holes for all $\frac{3}{4}$ " \emptyset bolts. Two hardened washers required for each set of oversized holes.
 All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
 Omit connection plates on exterior side of exterior girders.



* Fillet weld angles along 3 sides on one face of gusset plate; if cross frames are galvanized, weld all-around.
 ** If cross frames are galvanized, weld all-around.



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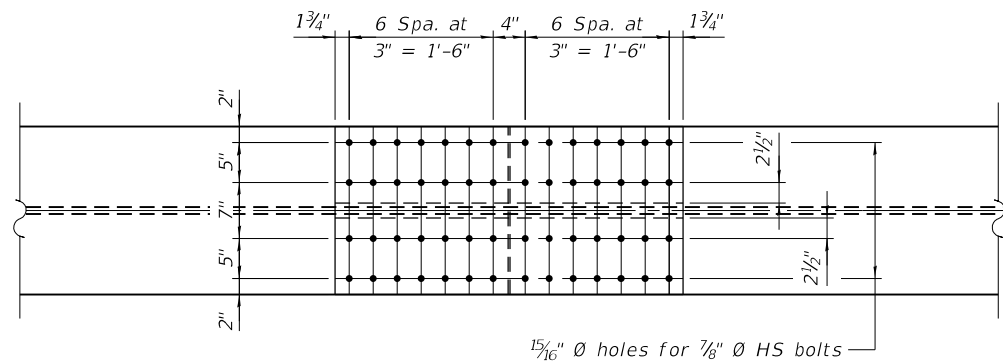
STEEL DETAILS 1
 STRUCTURE NO. 010-0021

SHEET SR-39 OF SR-63 SHEETS

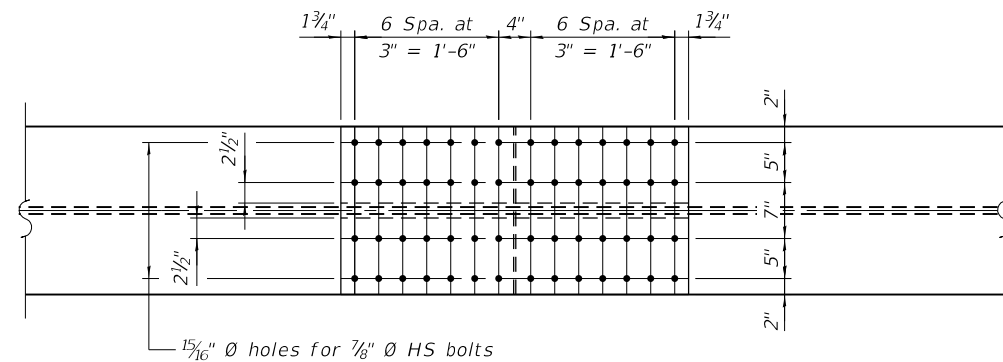
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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - MTR	REVISED -
	CHECKED - BK	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	173
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

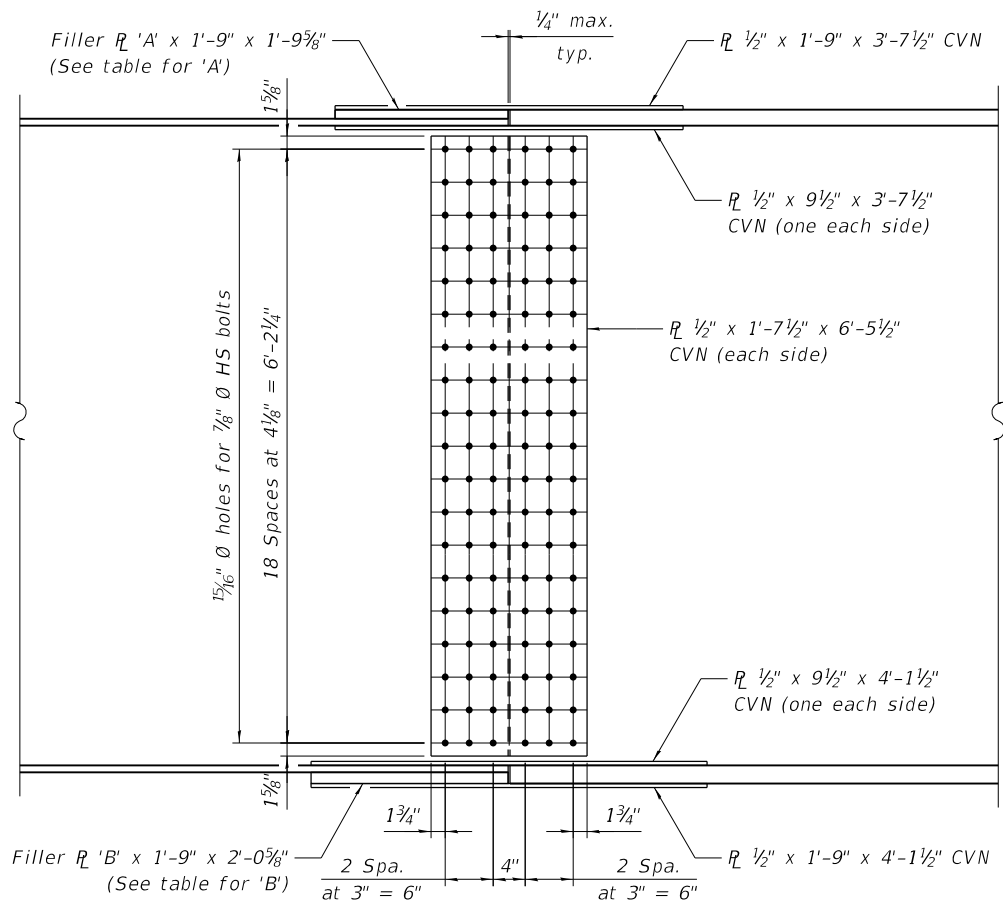
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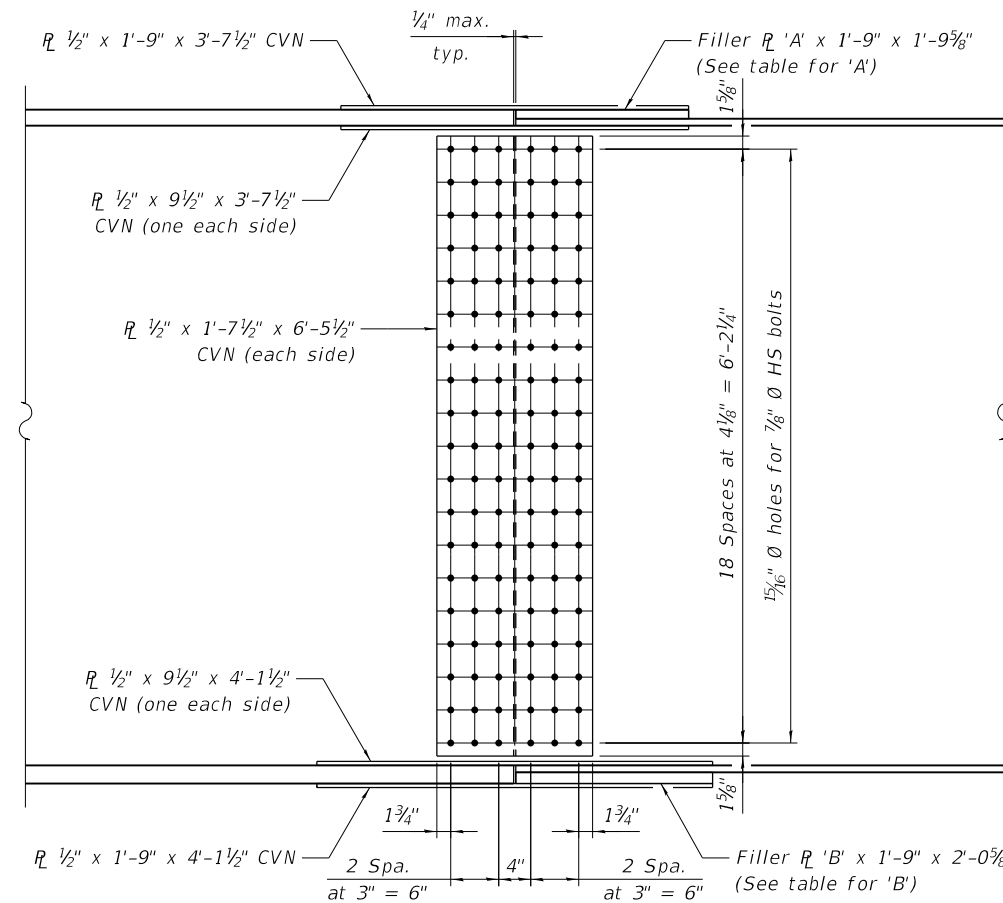
SPLICES 1, 3, & 5 TOP VIEW



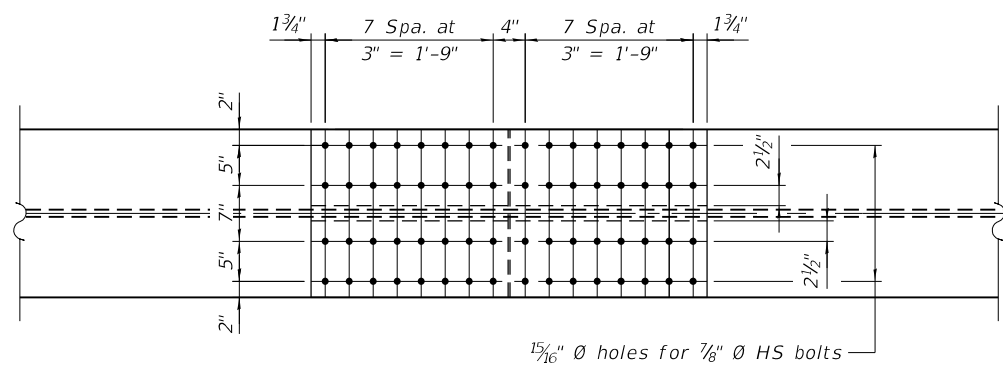
SPLICES 2, 4, & 6 TOP VIEW



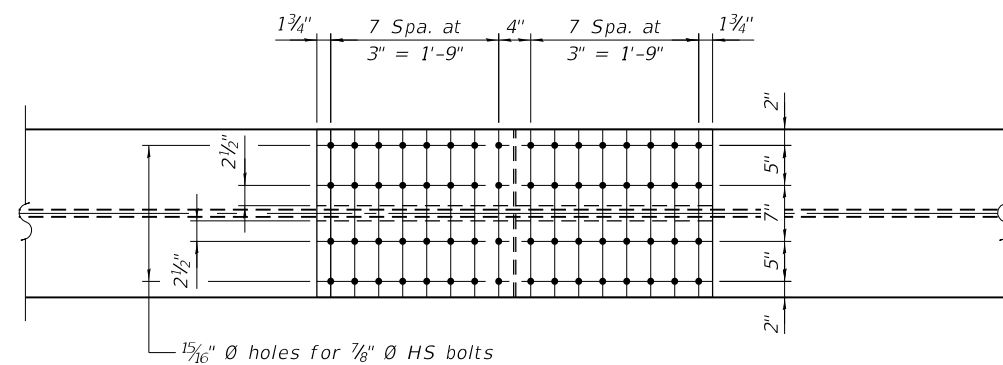
SPLICES 1, 3, & 5 ELEVATION



SPLICES 2, 4, & 6 ELEVATION



SPLICES 1, 3 & 5 BOTTOM VIEW



SPLICES 2, 4, & 6 BOTTOM VIEW

Notes:

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

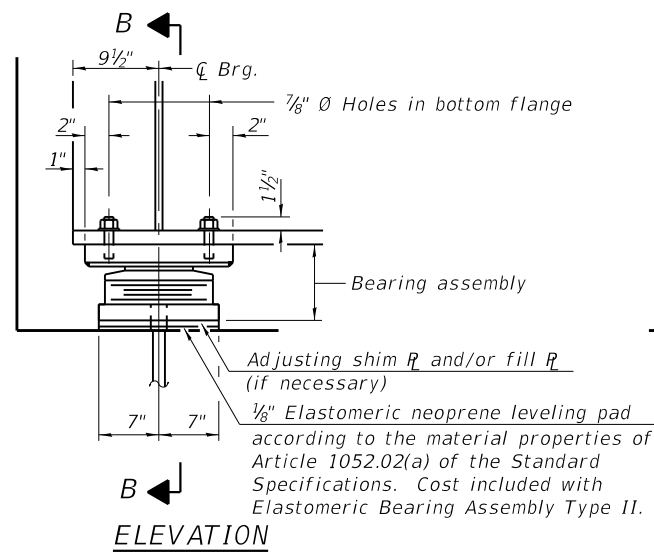
All splice plates shall be AASHTO M270, Grade 50.

FILLER PLATE THICKNESS

Splice	'A'	'B'
1	1 1/8"	1 3/8"
2	1 1/8"	1 3/8"
3	3/8"	7/8"
4	5/8"	7/8"
5	0"	3/8"
6	0"	3/8"

USER NAME =	DESIGNED - BK	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - MTR	REVISED -
	CHECKED - BK	REVISED -

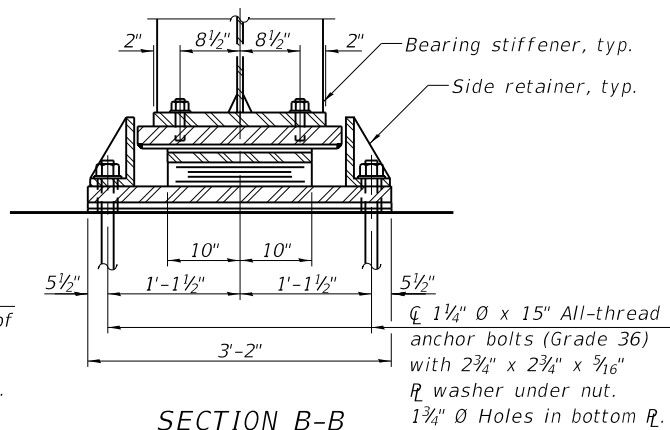
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	174
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



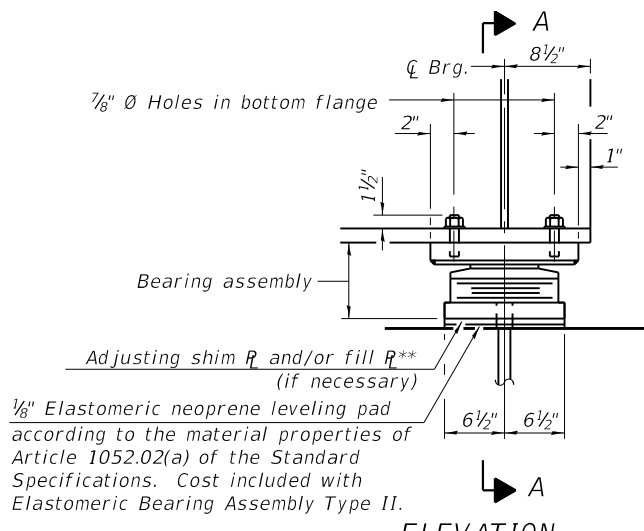
ELEVATION

TYPE II ELASTOMERIC EXP. BRG. AT W. ABUT.

(16 required)



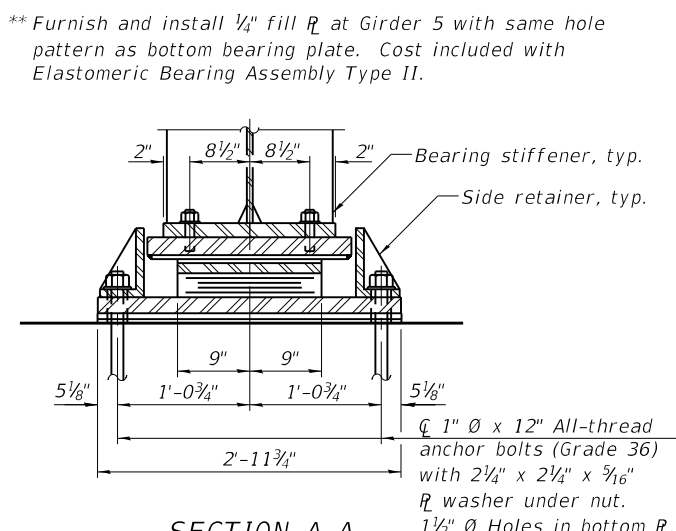
SECTION B-B



ELEVATION

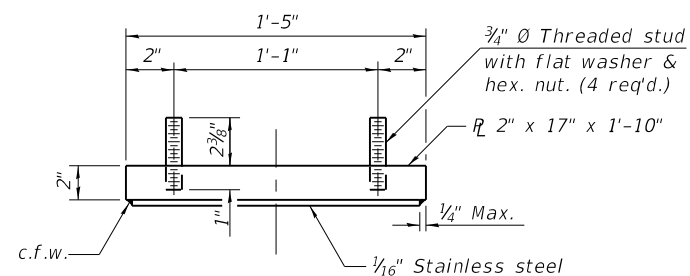
TYPE II ELASTOMERIC EXP. BRG. AT E. ABUT.

(16 required)

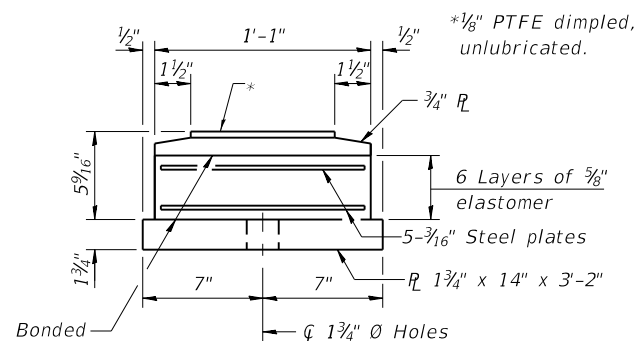


SECTION A-A

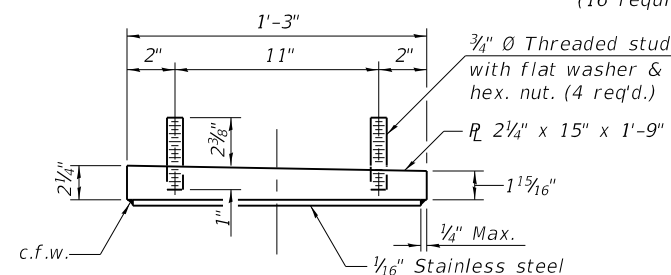
**Furnish and install 1/4" fill R at Girder 5 with same hole pattern as bottom bearing plate. Cost included with Elastomeric Bearing Assembly Type II.



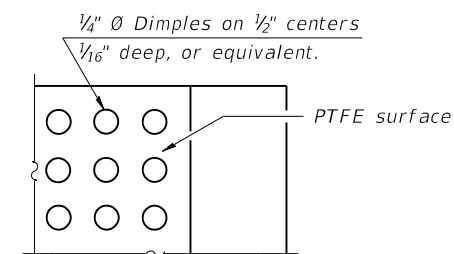
TOP BEARING ASSEMBLY AT W. ABUT.



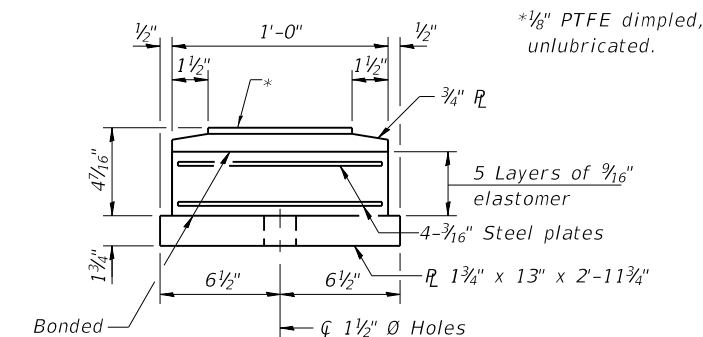
BOTTOM BEARING ASSEMBLY AT W. ABUT.



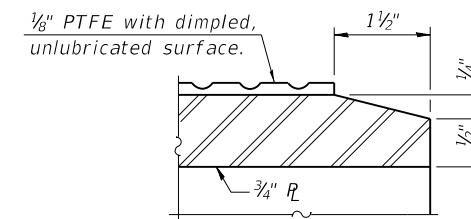
TOP BEARING ASSEMBLY AT E. ABUT.



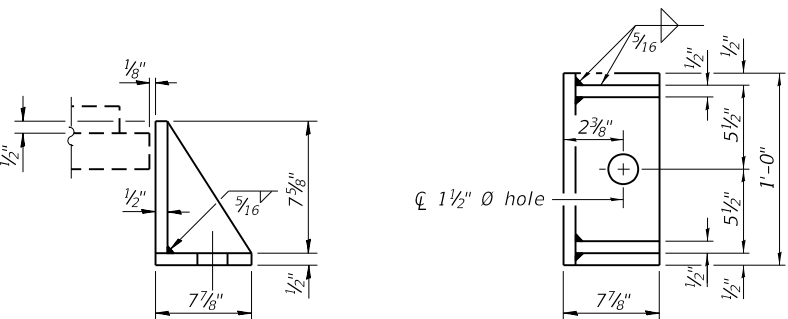
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY AT E. ABUT.

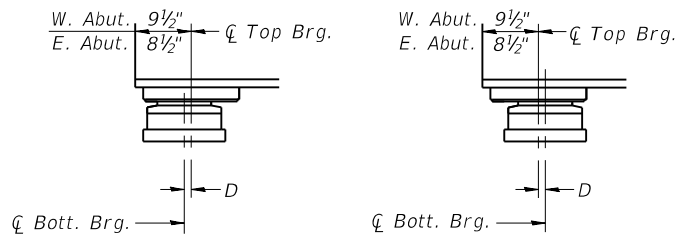


SECTION THRU PTFE



SIDE RETAINER AT W. ABUT.

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



BELOW 50°F.

ABOVE 50°F.

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

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Notes:

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

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

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

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 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with Elastomeric Bearing Assembly Type II.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

All bearing plates, threaded studs, side retainers, anchor bolts, nuts, and washers shall be galvanized according to AASHTO M111 or M232 as applicable.

c.f.w. indicates continuous fillet weld

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ELASTOMERIC BEARING DETAILS
STRUCTURE NO. 010-0021**

SHEET SR-41 OF SR-63 SHEETS

BILL OF MATERIAL

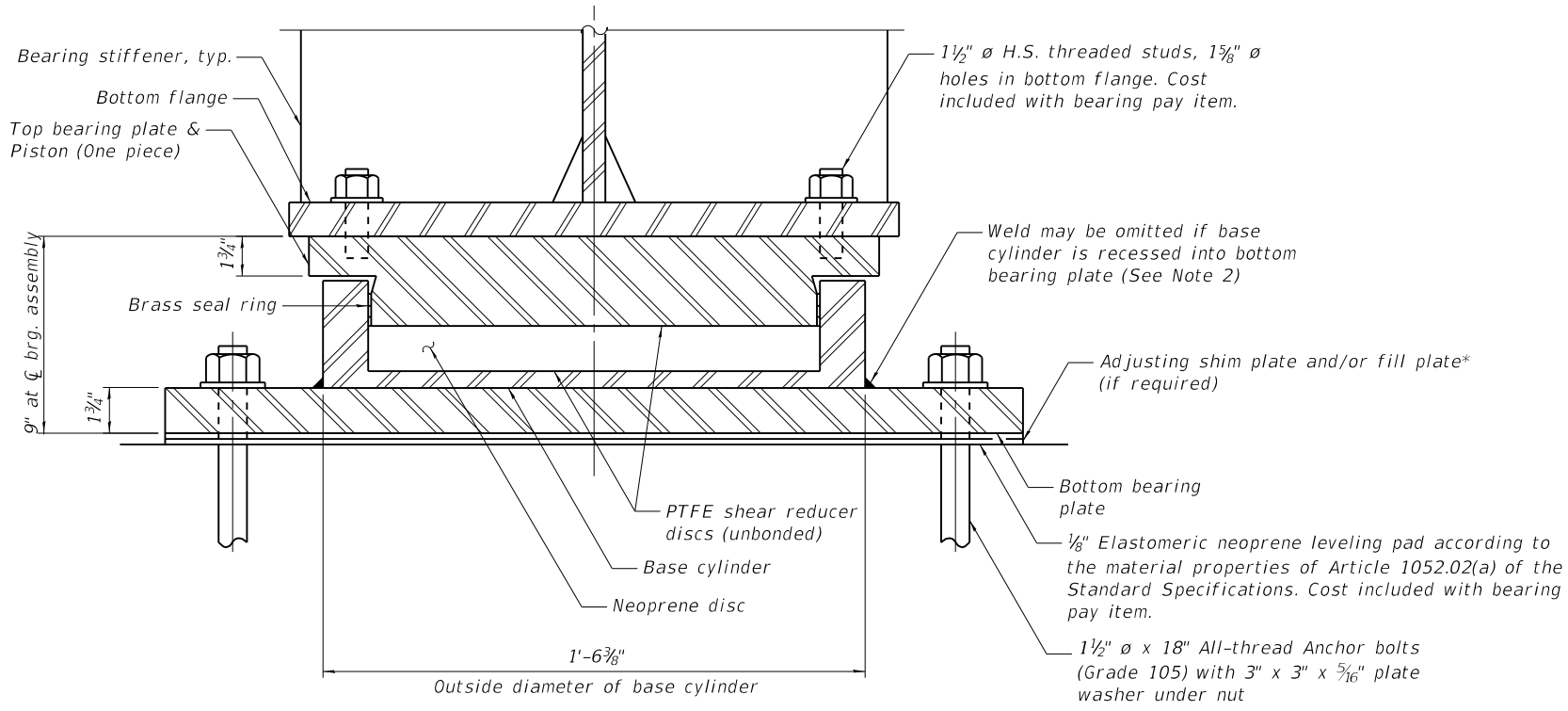
Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	32
Anchor Bolts, 1"	Each	32
Anchor Bolts, 1 1/4"	Each	32

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	175
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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exp U.S. Services Inc.
Chicago
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME	DESIGNED	REVISION
=	- BK	-
	- KK	-
PLOT SCALE	DRAWN	REVISION
=	- MTR	-
PLOT DATE	CHECKED	REVISION
=	- BK	-



FIXED HLMR BEARING SCHEMATIC AT PIER 2

* Furnish and install 5/8" fill R at Girder 5 with same hole pattern as bottom bearing plate. Cost included with bearing pay item.

DESIGN CRITERIA

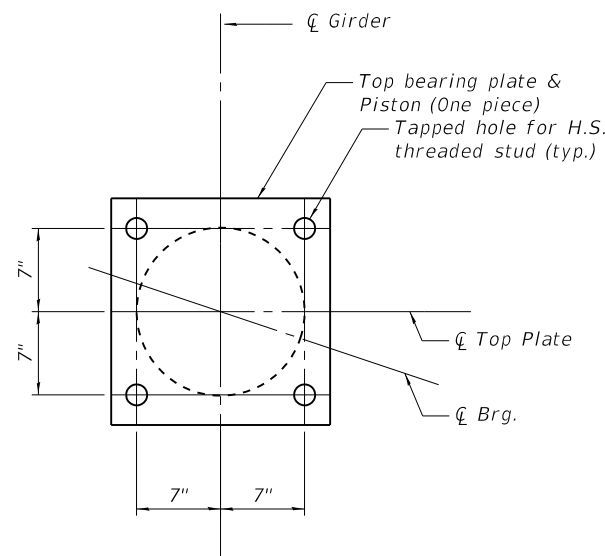
Vertical Service Dead Load (V _{DL})	363 kips
Vertical Service Live Load w/out Impact (V _{LL})	205 kips
Lateral Design Load (H _w)	260 kips
Max. Fact. Ultimate (Strength) Design Rotation (θ _w)	0.024 rad
Service Thermal Translation from 50°F (Δ _T)	0"

BILL OF MATERIAL

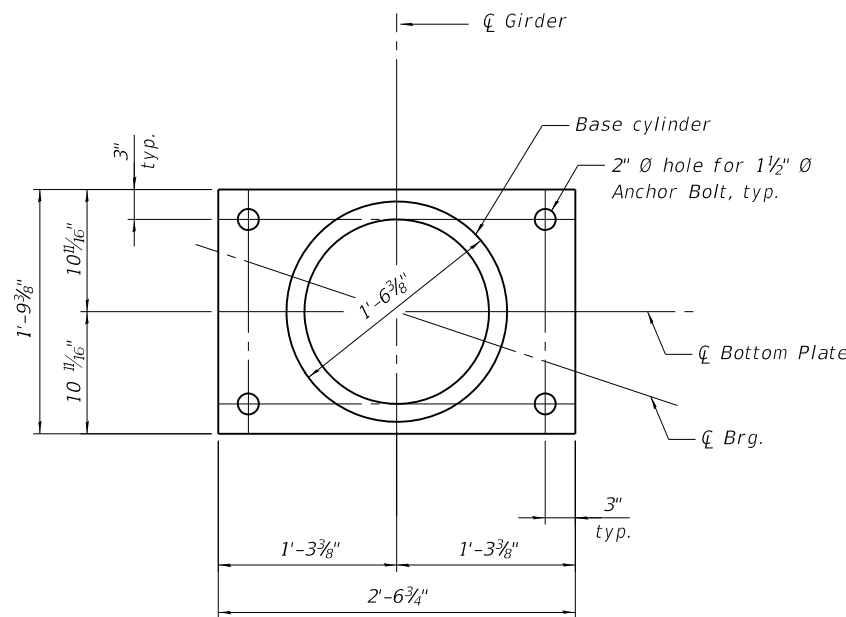
Item	Unit	Total
High Load Multi-Rotational Bearings, Fixed-600K	Each	16
Anchor Bolts, 1 1/2"	Each	64

NOTES:

- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with bearing pay item.
- If base cylinder is recessed into the bottom bearing plate, the designed thickness of the bottom plate shall take into account the depth of the recess.
- Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- All bearing plates, H.S. studs, anchor bolts, nuts, and washers shall be galvanized according to AASHTO M111 or M232 as applicable.
- The θ_w values listed in the Design Criteria include the effects of profile grade, factored dead and live load rotations, a tolerance rotation of 0.005 rad. and an uncertainty allowance of 0.005 rad.



TOP BEARING PLATE - PISTON PLAN



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN

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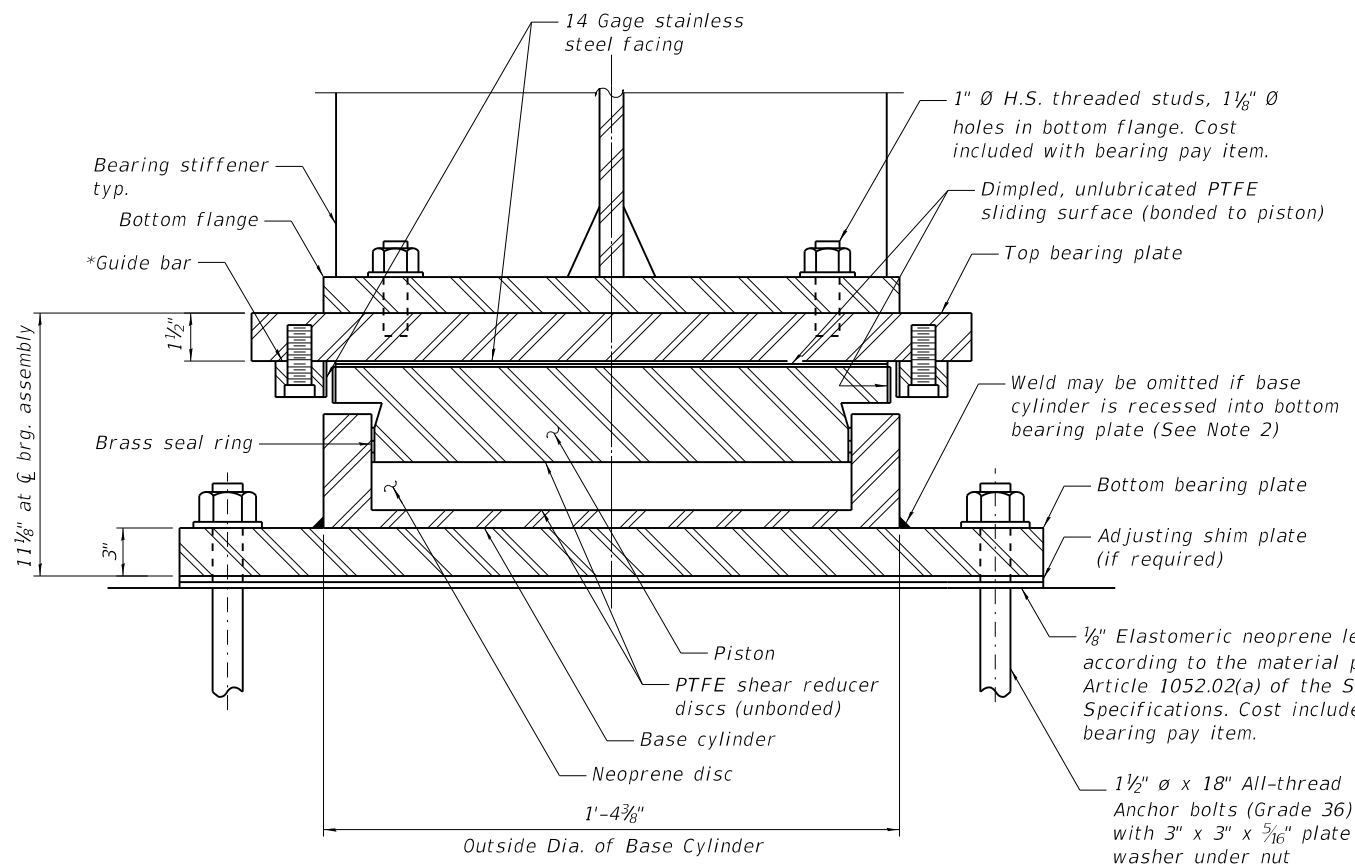
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

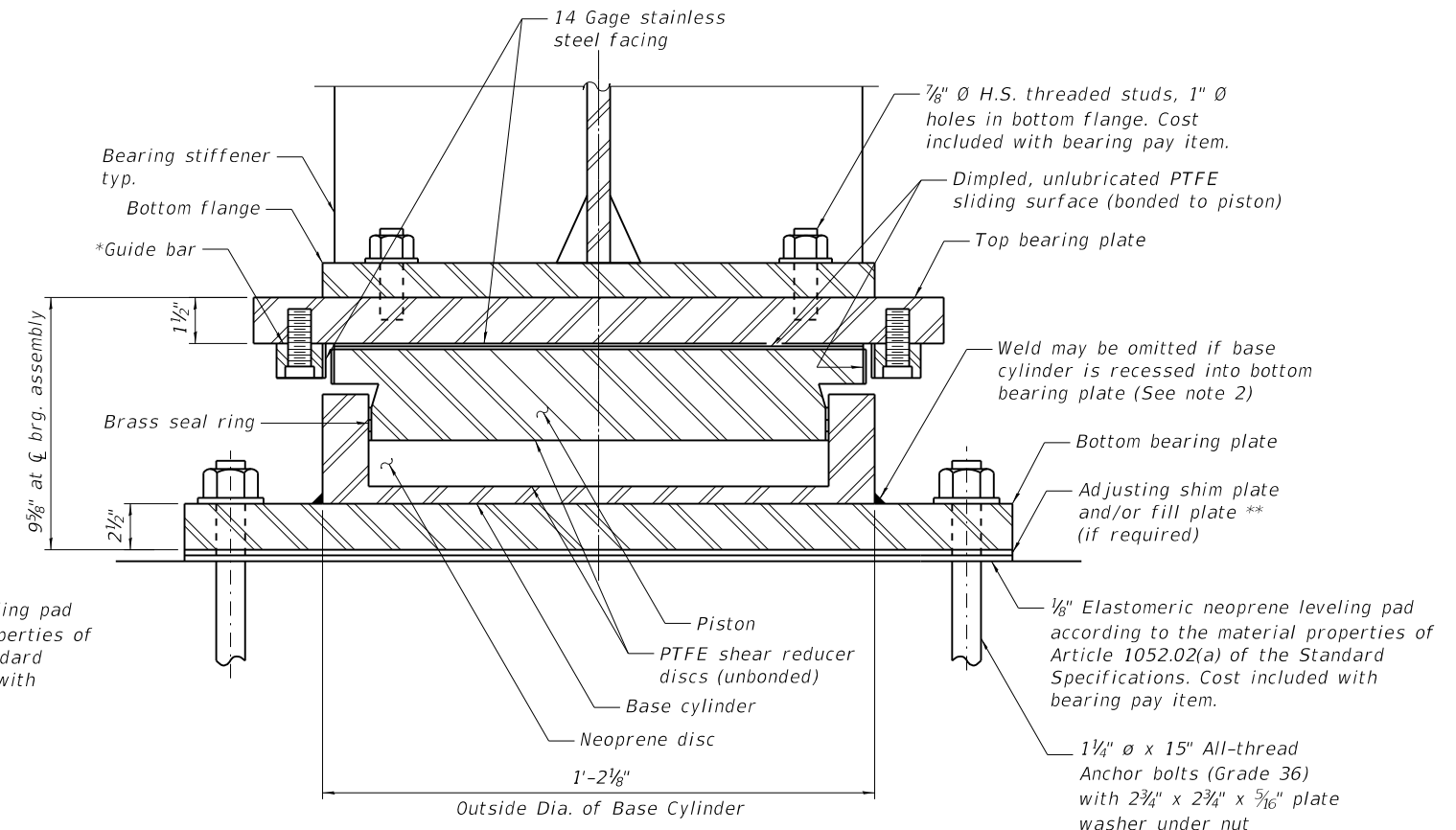
**FIXED HLMR BEARING DETAILS
 STRUCTURE NO. 010-0021**

SHEET SR-42 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	176
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



GUIDED EXPANSION HLMR BEARING SCHEMATIC AT PIER 1
(16-700K capacity bearings required)



GUIDED EXPANSION HLMR BEARING SCHEMATIC AT PIER 3
(16-500K capacity bearings required)

* As an alternate to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.

** Furnish and install 3/8" fill plate at Girder 5 with same hole pattern as bottom bearing plate. Cost included with bearing pay item.

DESIGN CRITERIA

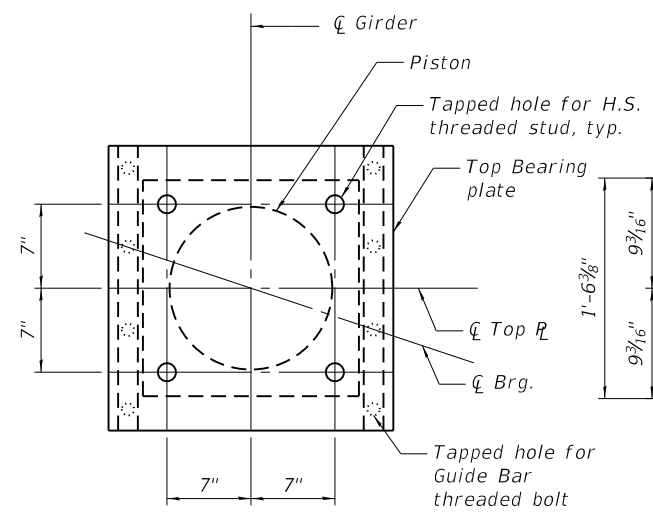
	Pier 1	Pier 3
Vertical Service Dead Load (V _{DL})	428 kips	281 kips
Vertical Service Live Load w/out Impact (V _{LL})	213 kips	182 kips
Lateral Design Load (H _u)	128 kips	93 kips
Max. Fact. Ultimate (Strength) Design Rotation (θ _u)	0.016 rad	0.030 rad
Service Thermal Translation from 50°F (Δ _T)	±1 1/4"	±1 1/8"

NOTES:

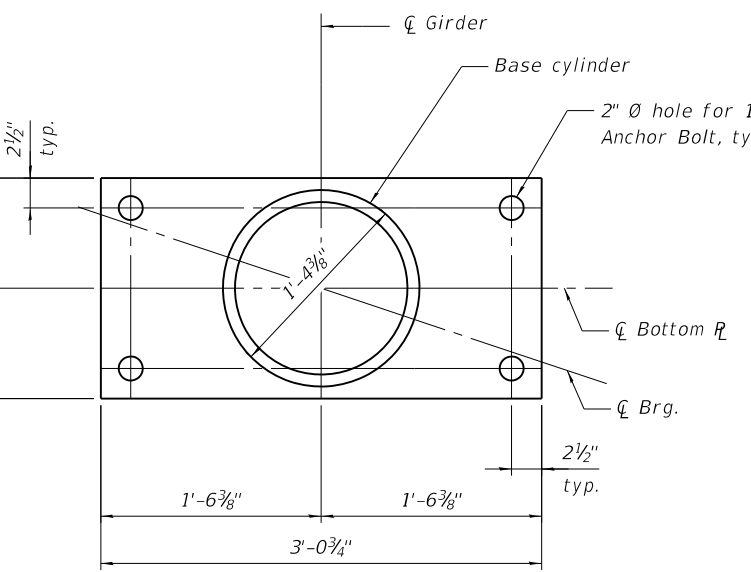
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included with bearing pay item.
- If base cylinder is recessed into the bottom bearing plate, the designed thickness of the bottom plate shall take into account the depth of the recess.
- Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- All bearing plates, H.S. studs, anchor bolts, nuts, and washers shall be galvanized according to AASHTO M111 or M232 as applicable.
- The θ_u values listed in the Design Criteria include the effects of profile grade, factored dead and live load rotations, a tolerance rotation of 0.005 rad. and an uncertainty allowance of 0.005 rad.

BILL OF MATERIAL

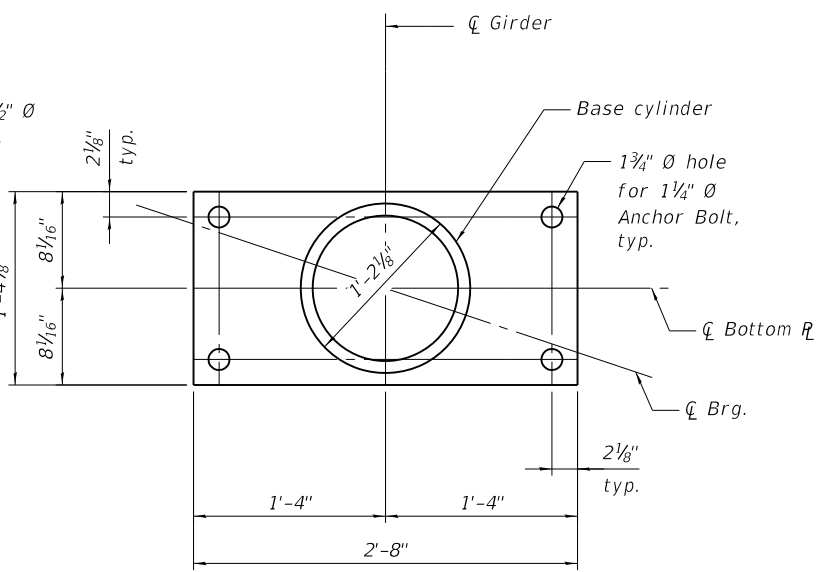
Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 500K	Each	16
High Load Multi-Rotational Bearings, Guided Expansion, 700K	Each	16
Anchor Bolts, 1 1/4"	Each	64
Anchor Bolts, 1 1/2"	Each	64



TOP BEARING PLATE AND PISTON PLAN AT PIERS 1 & 3



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN AT PIER 1



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN AT PIER 3

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GUIDED EXPANSION HLMR BEARING DETAILS
STRUCTURE NO. 010-0021

SHEET SR-43 OF SR-63 SHEETS

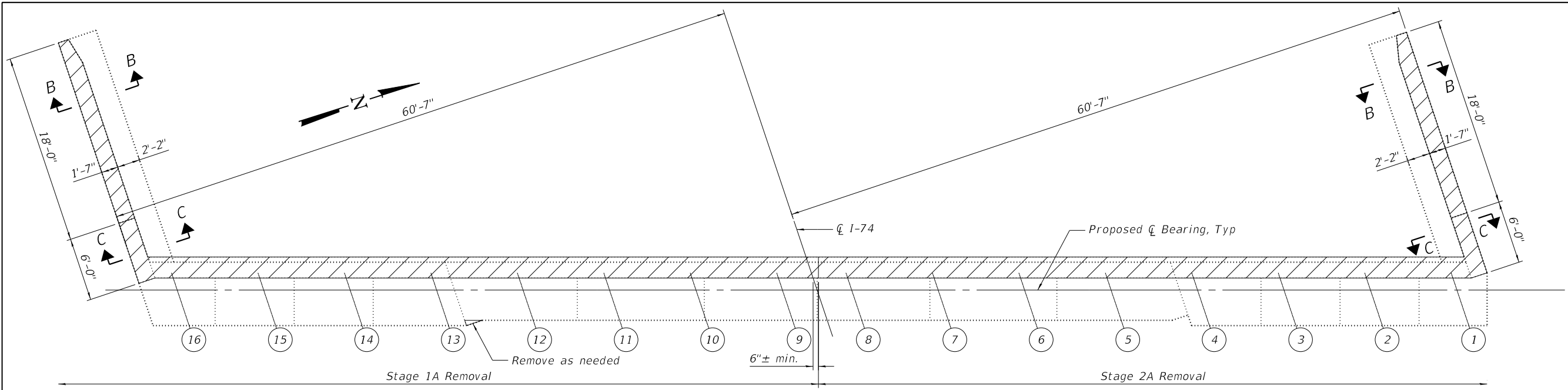
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	177

CONTRACT NO. 70C64
ILLINOIS FED. AID PROJECT

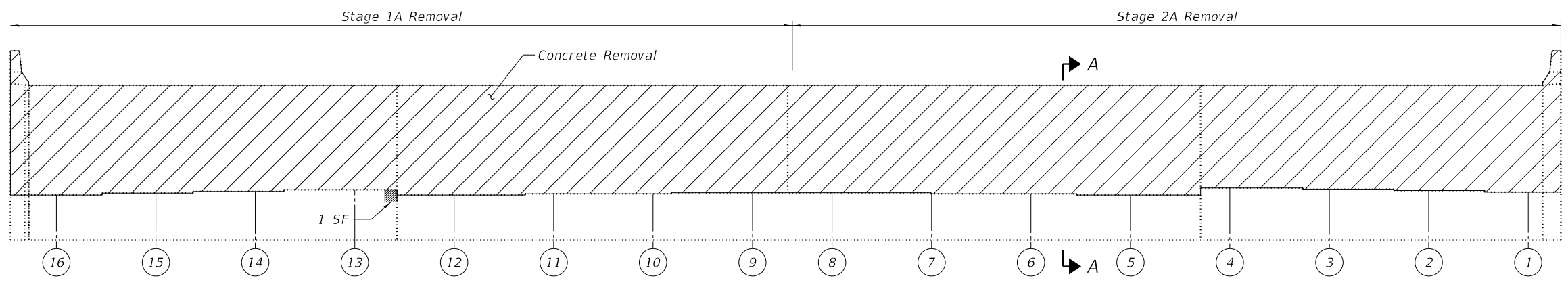
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exp U.S. Services Inc.
Chicago
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

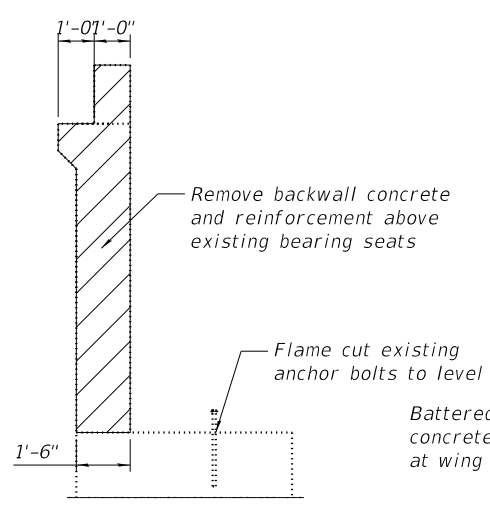
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PLOT SCALE	DRAWN	CHECKED	REVISIONS	
=	- MTR	- BK		
PLOT DATE	REVISIONS			
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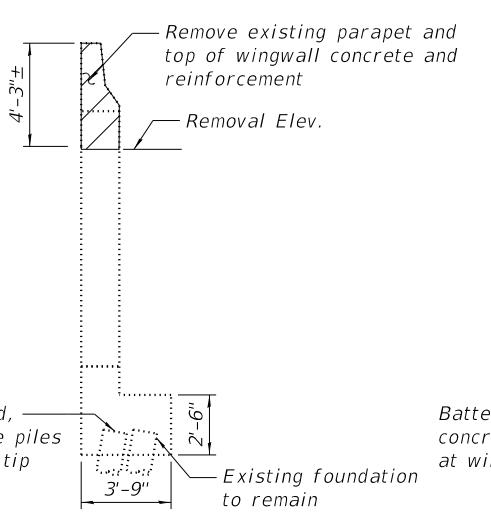
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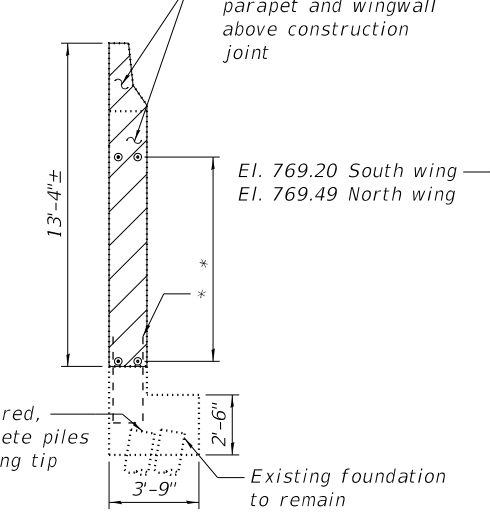
ELEVATION
Looking West



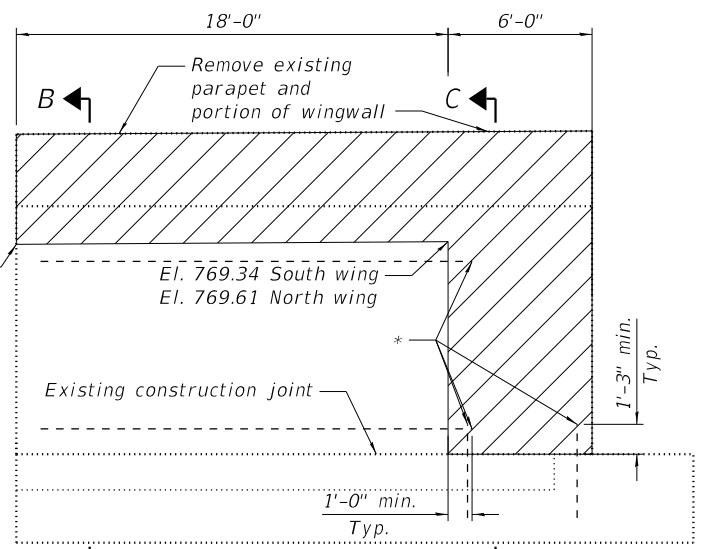
SECTION A-A



SECTION B-B



SECTION C-C



WINGWALL ELEVATION
Looking North at Front Face of South Wing
(North wing similar)

Notes:
Cost of removal of unsound concrete shall be paid for as Concrete Removal.

LEGEND

	Concrete Removal
	Unsound concrete removal
	Proposed \bar{C} girder

* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	84.1

MODEL: Default - 64
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USER NAME =	DESIGNED - YMC	REVISED -
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PLOT DATE =	DRAWN - EG	REVISED -
	CHECKED - YMC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

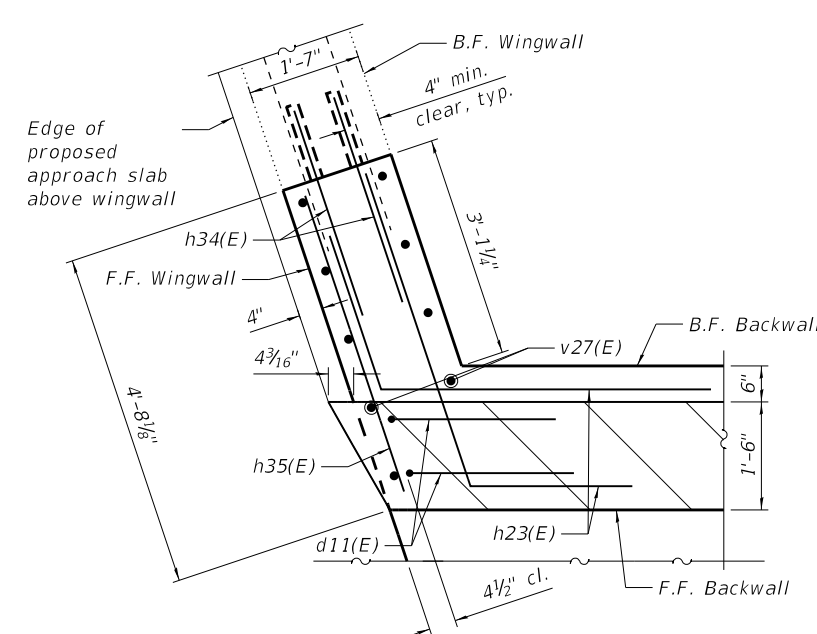
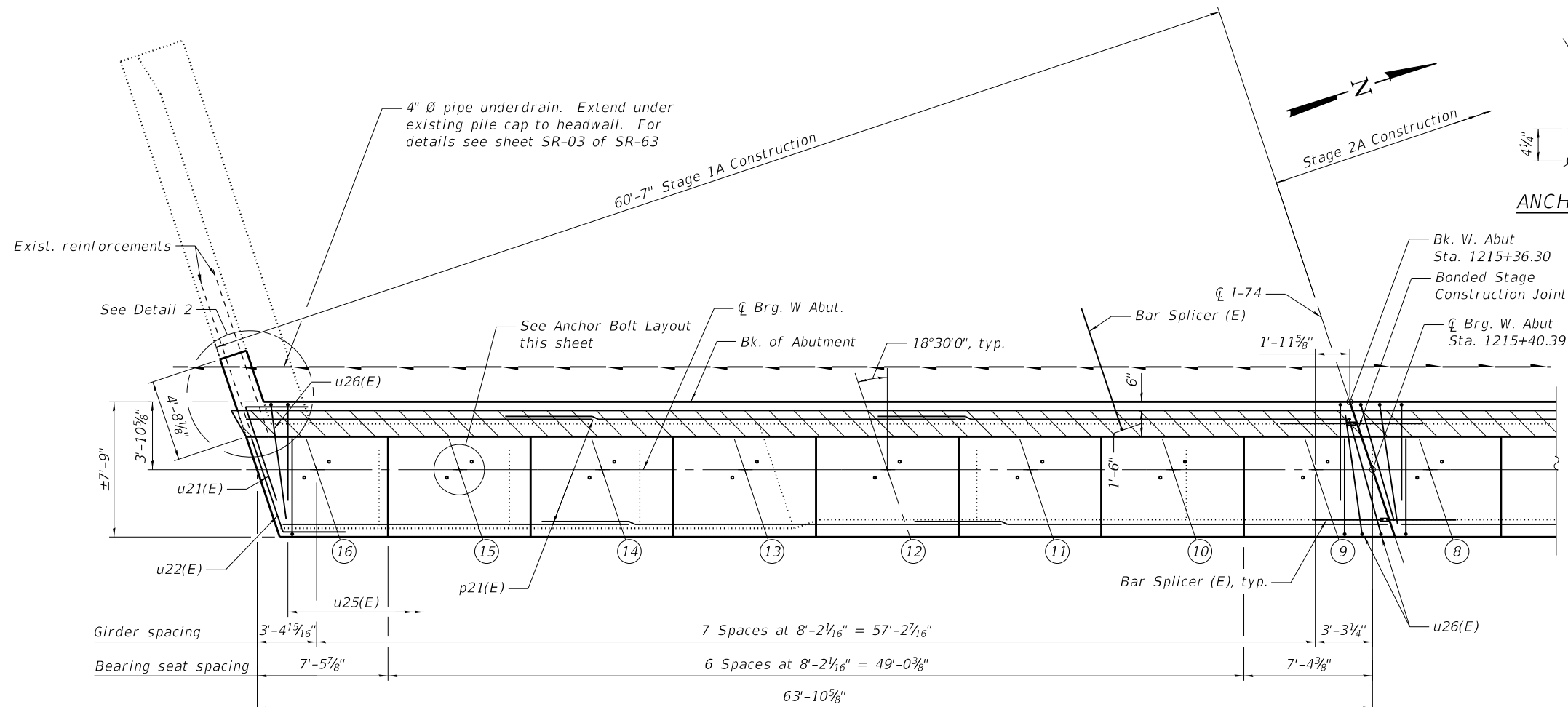
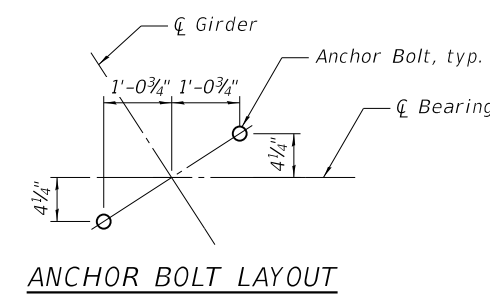
**WEST ABUTMENT - REMOVAL
STRUCTURE NO. 010-0021**

SHEET SR-44 OF SR-63 SHEETS

F.A.I. RTE. 74	SECTION (14-1)BR, (14HB-2)BR-1	COUNTY CHAMPAIGN	TOTAL SHEETS 201	SHEET NO. 178
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

BEARING SEAT ELEVATIONS

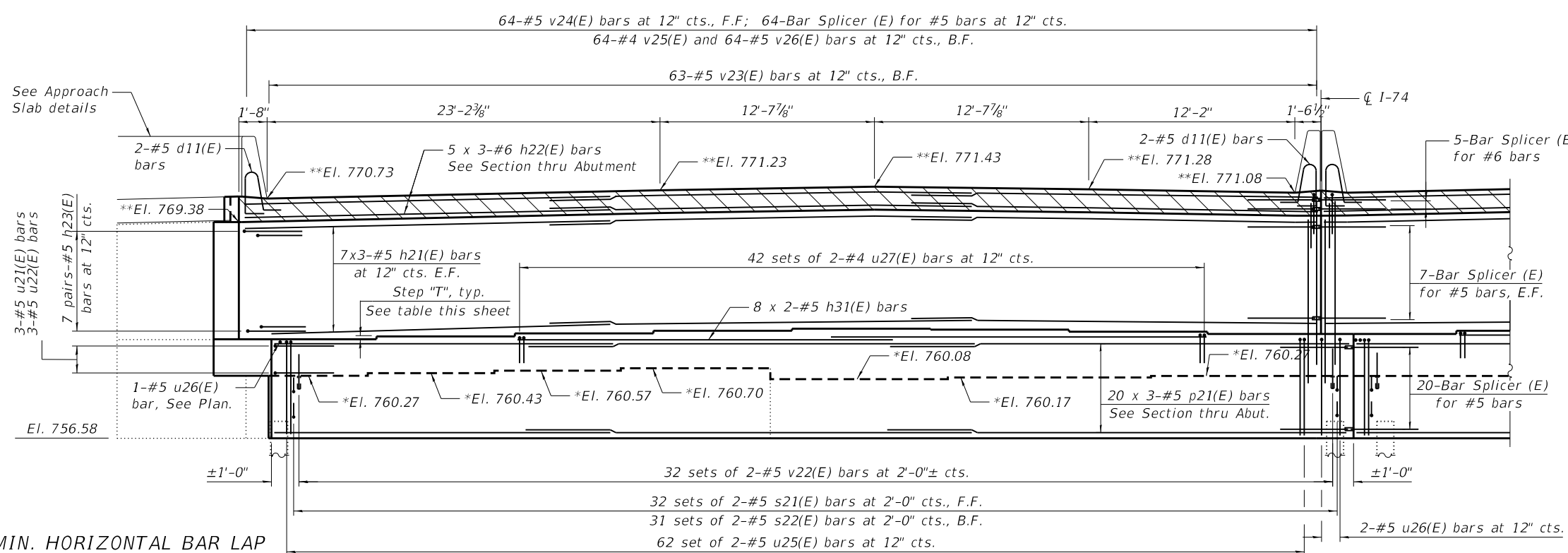
Girder No.	Brg. Seat Elevation	Step "T"
9	762.74	1 5/8"
10	762.88	1 3/8"
11	762.99	3/4"
12	763.05	1 1/2"
13	762.92	1 7/8"
14	762.76	2 1/8"
15	762.58	2"
16	762.41	



TOP PLAN - STAGE 1A CONSTRUCTION

DETAIL 2

Showing Wingwall Reinforcement



ELEVATION - STAGE 1A CONSTRUCTION
(Looking West)

NOTES:

- B.F. indicates Back Face
- F.F. indicates Front Face
- E.F. indicates Each Face
- Bars indicated 7 x 3-#5 etc. indicates 7 lines of bars with 3 lengths per line.
- For Bill of Materials and Bar Bending Diagrams, see Sheet SR-47 of SR-63
- * Existing bearing seat elevation, for information only
- ** Elevations given at front face of abutment backwall

LEGEND

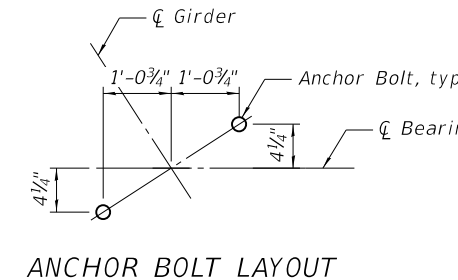
Hatched area to be poured with concrete in blockout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.

MODEL: Default
FILE NAME: p:\v\exp-pw\bentley.com\exp-pw-01\Documents\Projects\CH\00246550-A01800 CADD Design\802 Phase II\802.10 Structural\CRR-Oak St\Sheet\0100021-70C64-050A-abut.dgn
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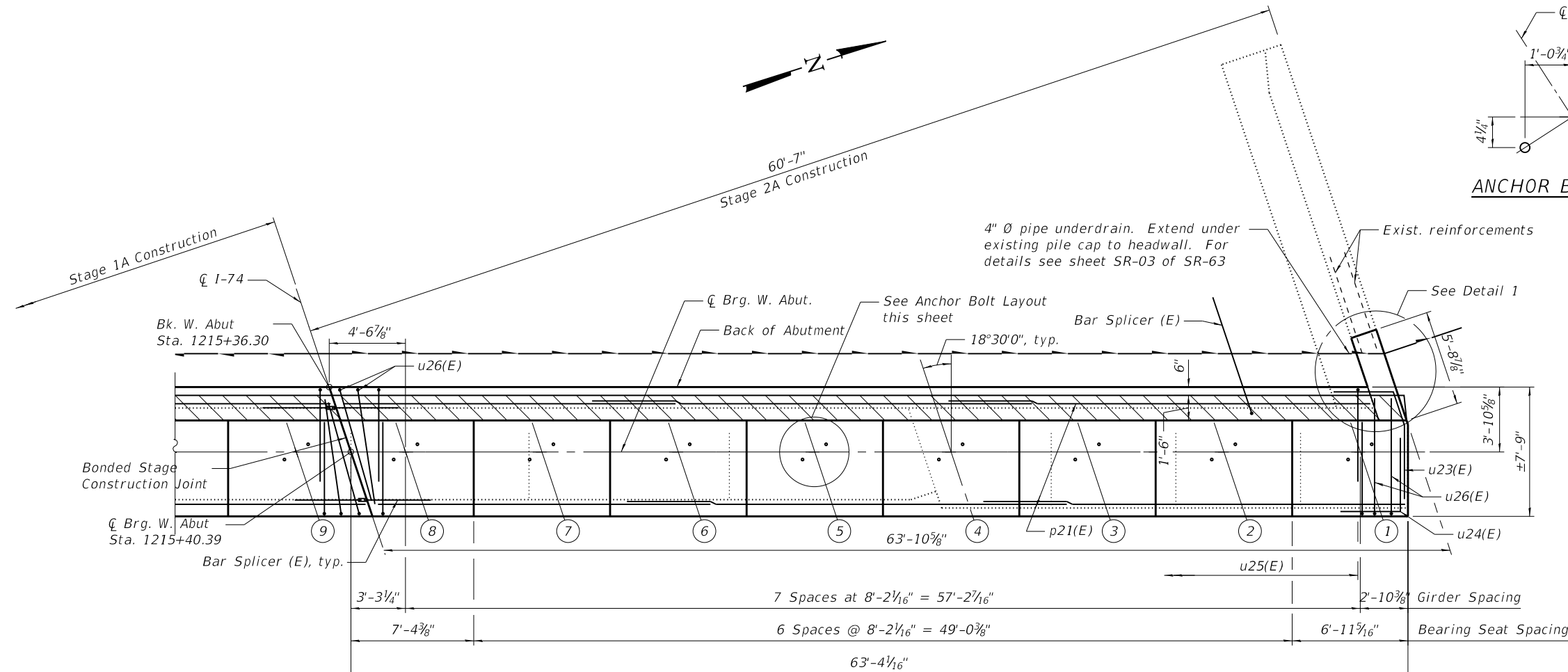
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	SHEET SR-45 OF SR-63 SHEETS						ILLINOIS FED. AID PROJECT	

BEARING SEAT ELEVATIONS

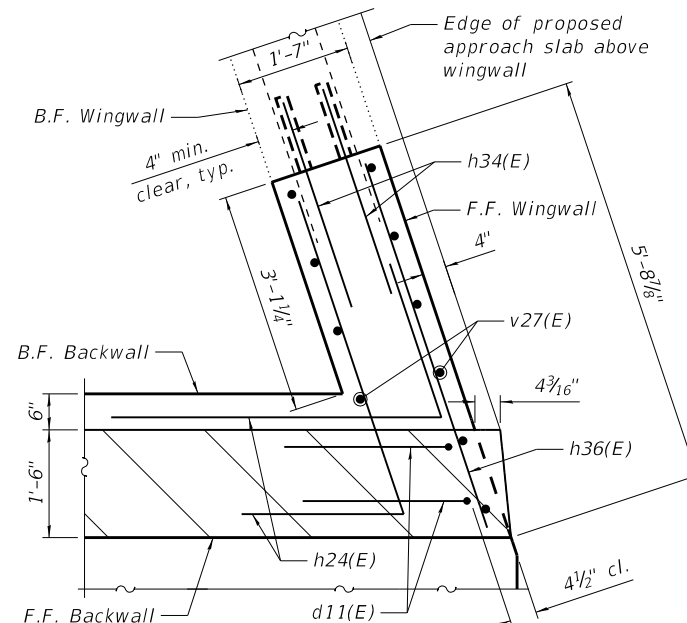
Girder No.	Brg. Seat Elevation	Step "T"
1	762.66	1 5/8"
2	762.80	1 5/8"
3	762.94	1 1/2"
4	763.06	1 1/4"
5	763.16	1 1/8"
6	763.07	1 5/8"
7	762.93	2"
8	762.76	



ANCHOR BOLT LAYOUT



TOP PLAN - STAGE 2A CONSTRUCTION

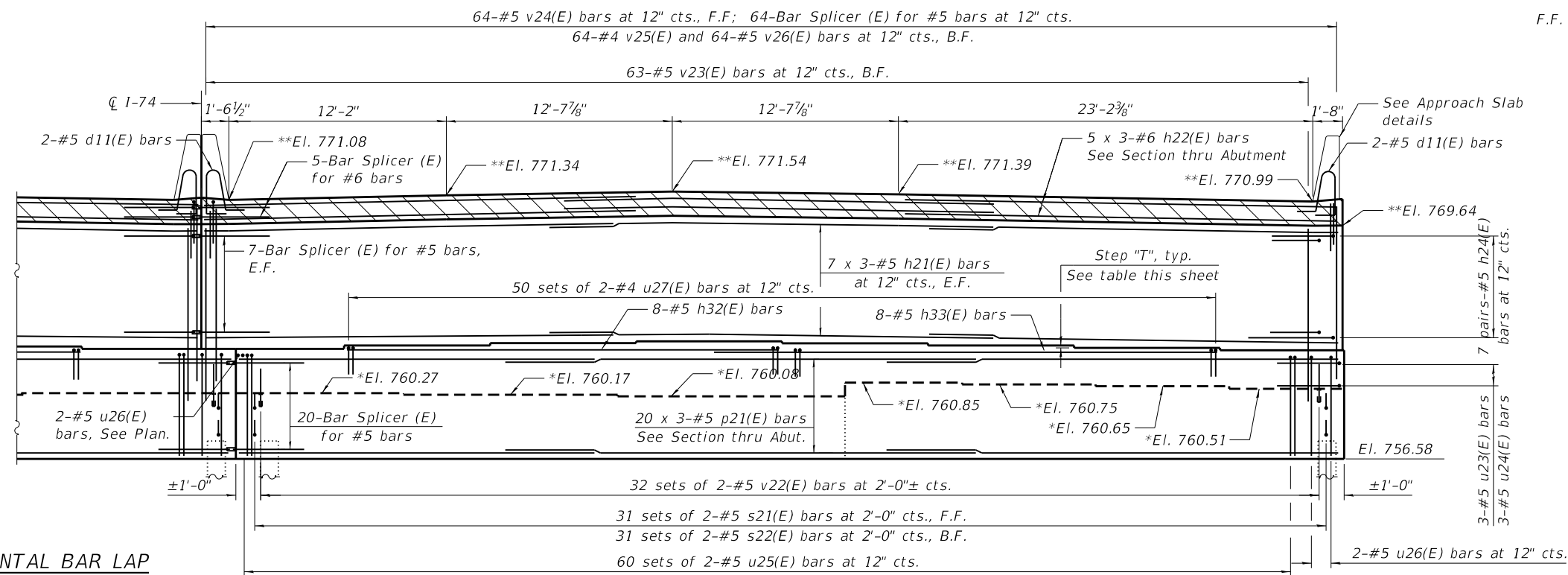


DETAIL 1

Showing Wingwall Reinforcement

NOTES:

- B.F. indicates Back Face
- F.F. indicates Front Face
- E.F. indicates Each Face
- Bars indicated 7 x 3-#5 etc. indicates 7 lines of bars with 3 lengths per line.
- For Bill of Materials and Bar Bending Diagrams, see Sheet SR-47 of SR-63
- * Existing bearing seat elevation, for information only.
- ** Elevations given at front face of abutment backwall.



ELEVATION - STAGE 2A CONSTRUCTION

(Looking West)

MIN. HORIZONTAL BAR LAP

- #5 = 3'-7"
- #6 = 4'-4"

LEGEND

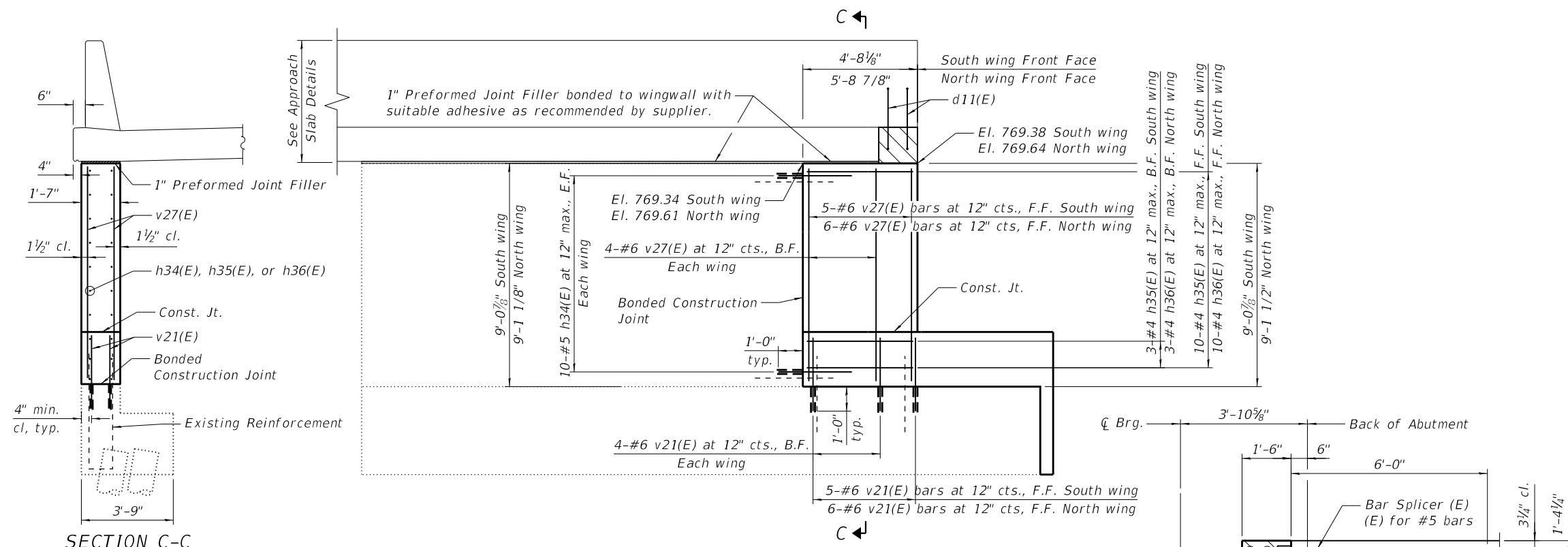
Hatched area to be poured with concrete in breakout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.

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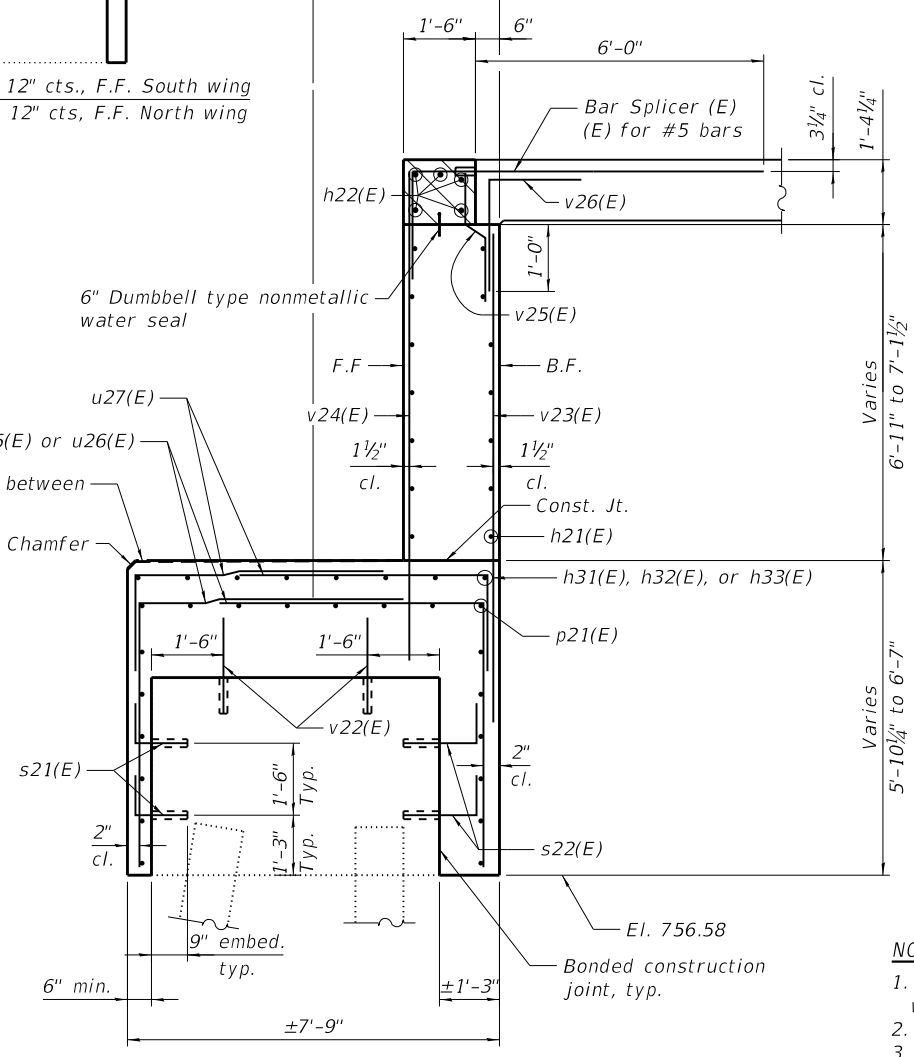
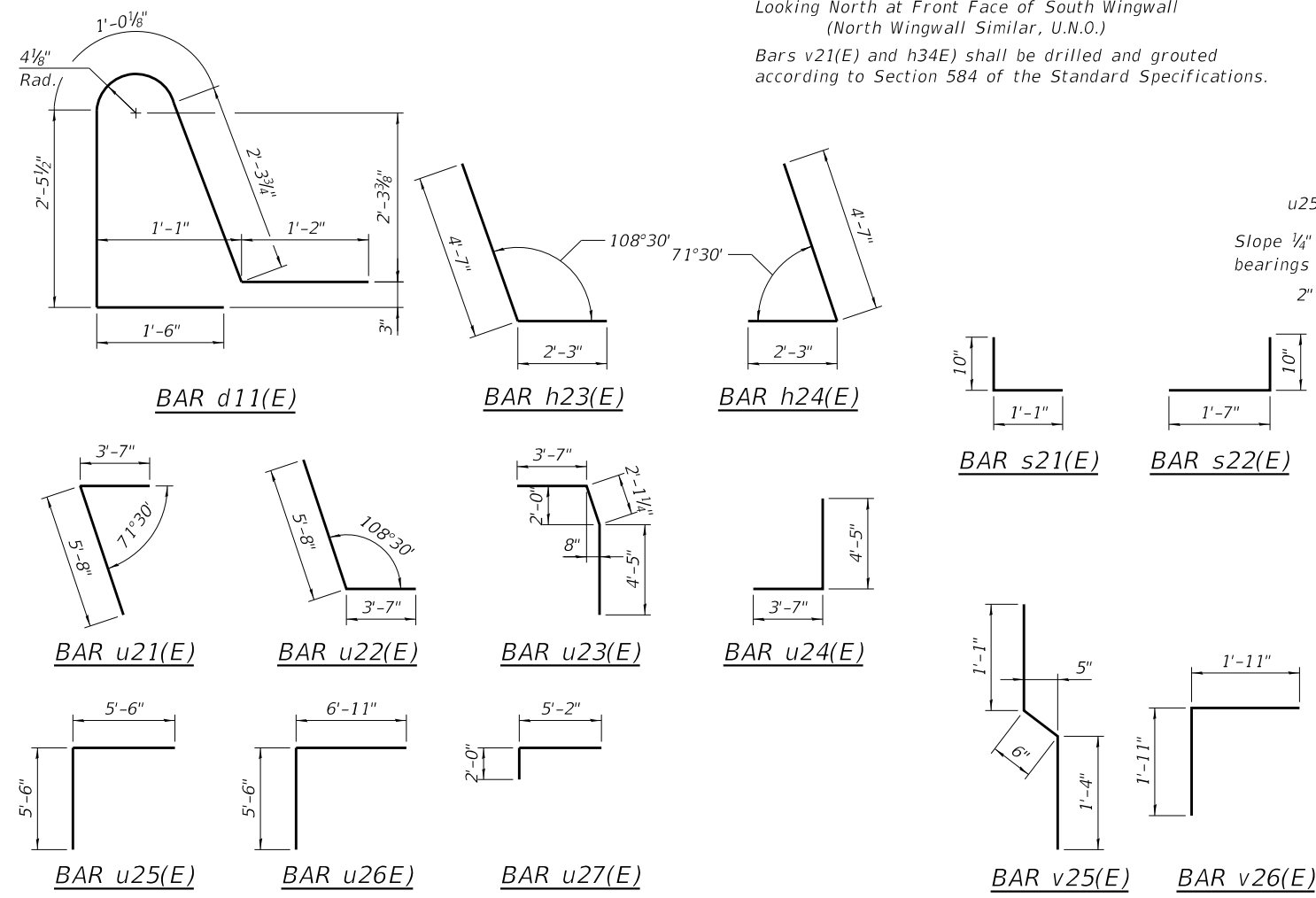
exp U.S. Services Inc. CHICAGO, IL BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	USER NAME = PLOT SCALE = PLOT DATE =	DESIGNED - YMC CHECKED - KK DRAWN - EG CHECKED - YMC	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT PLAN AND ELEVATION 2 STRUCTURE NO. 010-0021	F.A.I. RTE. = 74 SECTION = (14-1)BR, (14HB-2)BR-1 COUNTY = CHAMPAIGN TOTAL SHEETS = 201 SHEET NO. = 180 CONTRACT NO. 70C64
						SHEET SR-46 OF SR-63 SHEETS

BILL OF MATERIAL

Bar	No.	Size	Length	Shape		
d11(E)	8	#5	8'-6"			
h21(E)	84	#5	23'-8"	—		
h22(E)	30	#6	24'-2"	—		
h23(E)	14	#5	6'-10"			
h24(E)	14	#5	6'-10"			
h31(E)	16	#5	22'-2"	—		
h32(E)	8	#5	24'-2"	—		
h33(E)	8	#5	28'-2"	—		
h34(E)	40	#5	3'-0"	—		
h35(E)	13	#4	4'-4"	—		
h36(E)	13	#4	5'-4"	—		
p21(E)	120	#5	23'-8"	—		
s21(E)	126	#5	1'-11"			
s22(E)	124	#5	2'-5"			
u21(E)	3	#5	9'-3"			
u22(E)	3	#5	9'-3"			
u23(E)	3	#5	10'-2"			
u24(E)	3	#5	8'-0"			
u25(E)	244	#5	11'-0"			
u26(E)	7	#5	12'-5"			
u27(E)	184	#4	7'-2"			
v21(E)	19	#6	3'-0"	—		
v22(E)	128	#5	1'-10"	—		
v23(E)	126	#5	9'-8"	—		
v24(E)	128	#5	9'-8"	—		
v25(E)	128	#5	2'-11"			
v26(E)	128	#5	3'-10"			
v27(E)	19	#6	8'-10"	—		
				Item	Unit	Total
Structure Excavation				Cu Yd	622	
Concrete Structures				Cu Yd	188.1	
Reinforcement Bars, Epoxy Coated				Pound	15,910	
Granular Backfill for Structures				Cu Yd	534	
Concrete Sealer				Sq Ft	2,041	
Geocomposite Wall Drain				Sq Yd	187	
Pipe Underdrains for Structures 4"				Foot	177	



WINGWALL ELEVATION
 Looking North at Front Face of South Wingwall
 (North Wingwall Similar, U.N.O.)
 Bars v21(E) and h34(E) shall be drilled and grouted according to Section 584 of the Standard Specifications.

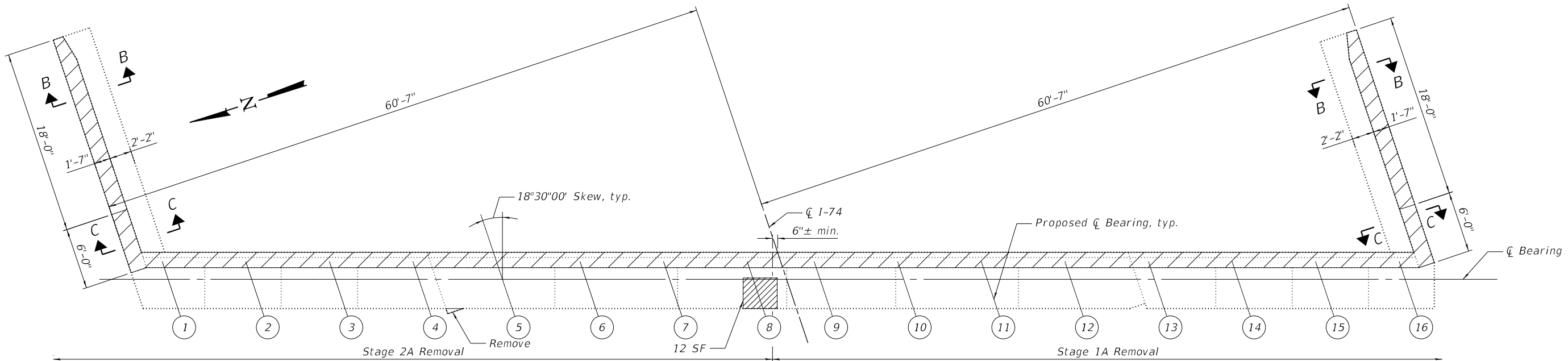


CROSS SECTION THRU ABUTMENT
 Bars v22(E), s21(E) and s22(E) shall be drilled and grouted according to Section 584 of the Standard Specifications.

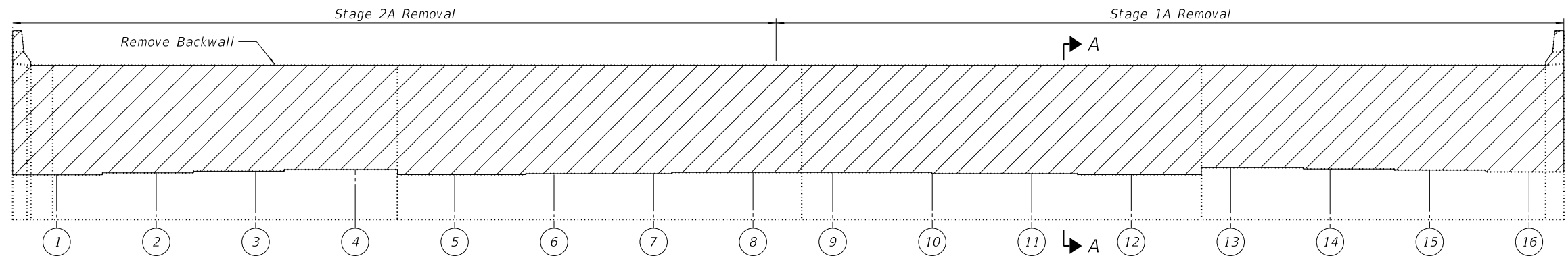
- NOTES:**
1. Bars indicated 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.
 2. For details of Bar Splicer (E), see sheet SR-63.
 3. Hatched area to be poured with concrete in blackout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.
 4. Concrete sealer to be applied to all exposed surfaces of backwalls, bearing seats and the front face of pile caps.

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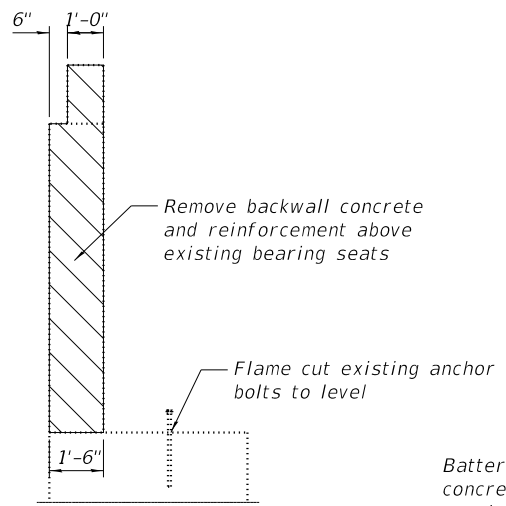
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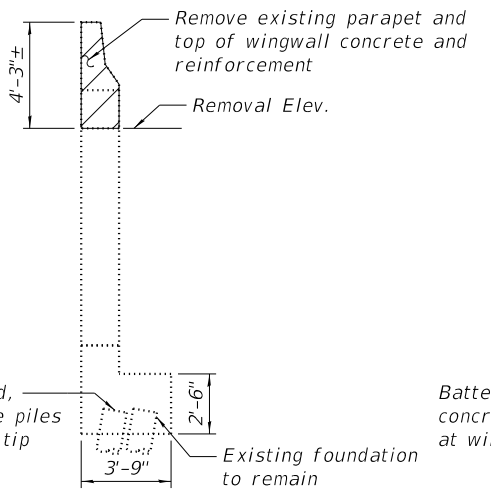
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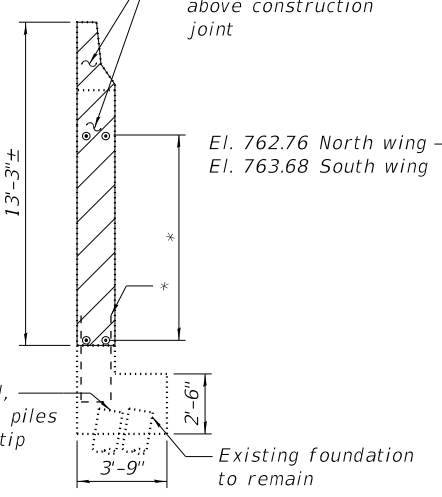
ELEVATION
Looking East



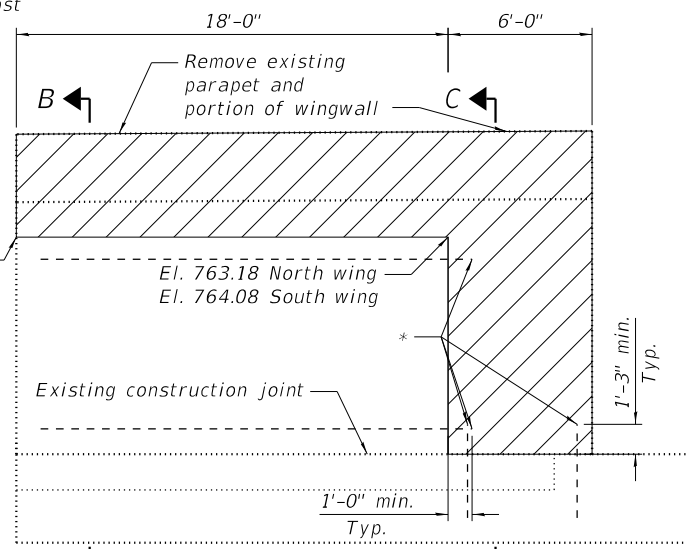
SECTION A-A



SECTION B-B



SECTION C-C



WINGWALL ELEVATION
Looking South at Front Face of North Wing
(South wing similar)

Notes:
 1. Cost of removal of unsound concrete shall be paid for as Concrete Removal.

LEGEND

	Concrete Removal
	Unsound concrete removal
	Proposed \bar{C} girder

* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	81.6

USER NAME =	DESIGNED - YMC	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - EG	REVISED -
	CHECKED - YMC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT - REMOVAL
STRUCTURE NO. 010-0021**

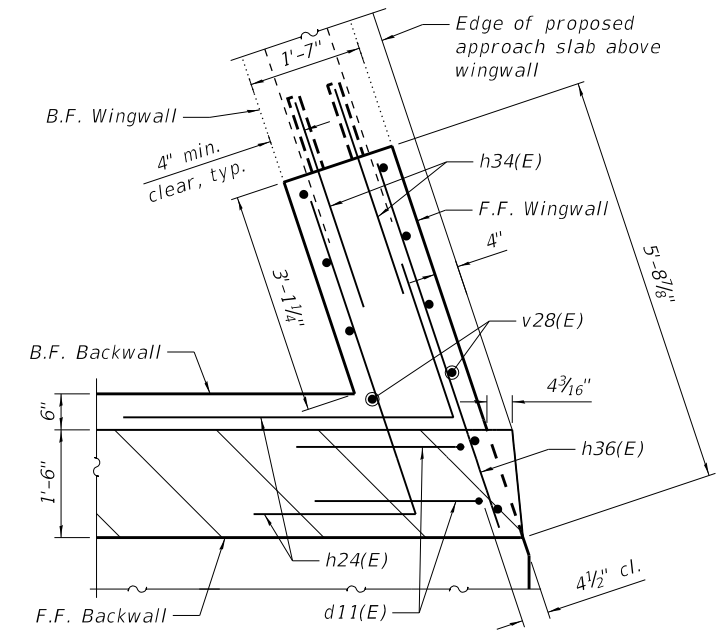
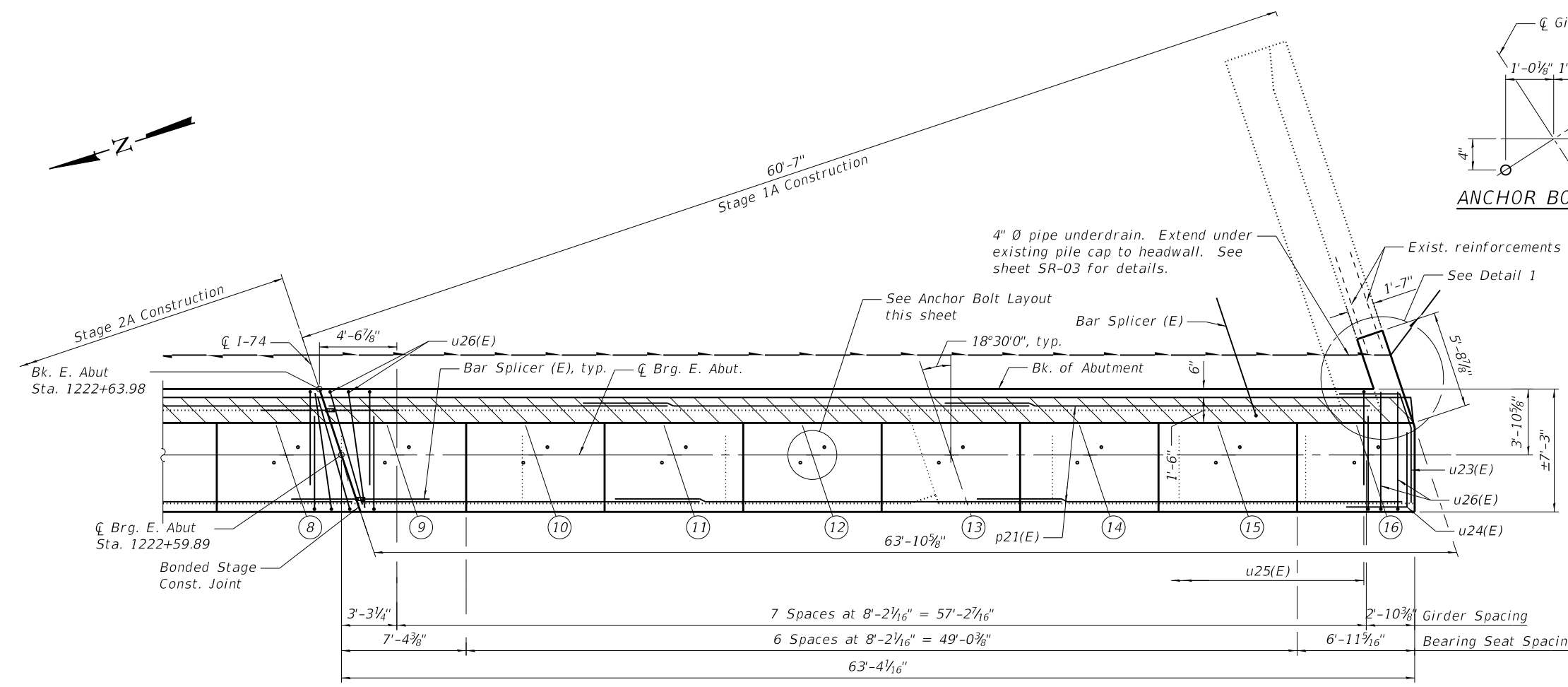
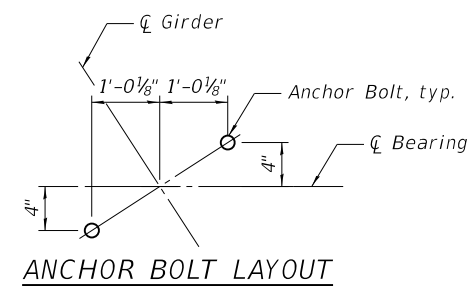
SHEET SR-48 OF SR-63 SHEETS

F.A.I. RTE. 74	SECTION (14-1)BR, (14HB-2)BR-1	COUNTY CHAMPAIGN	TOTAL SHEETS 201	SHEET NO. 182
CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
9	757.13	2 1/2"
10	757.34	2 1/4"
11	757.53	1 1/2"
12	757.66	3/4"
13	757.60	1"
14	757.52	1 1/4"
15	757.42	1 1/4"
16	757.32	



DETAIL 1
Showing Wingwall Reinforcement

NOTES:

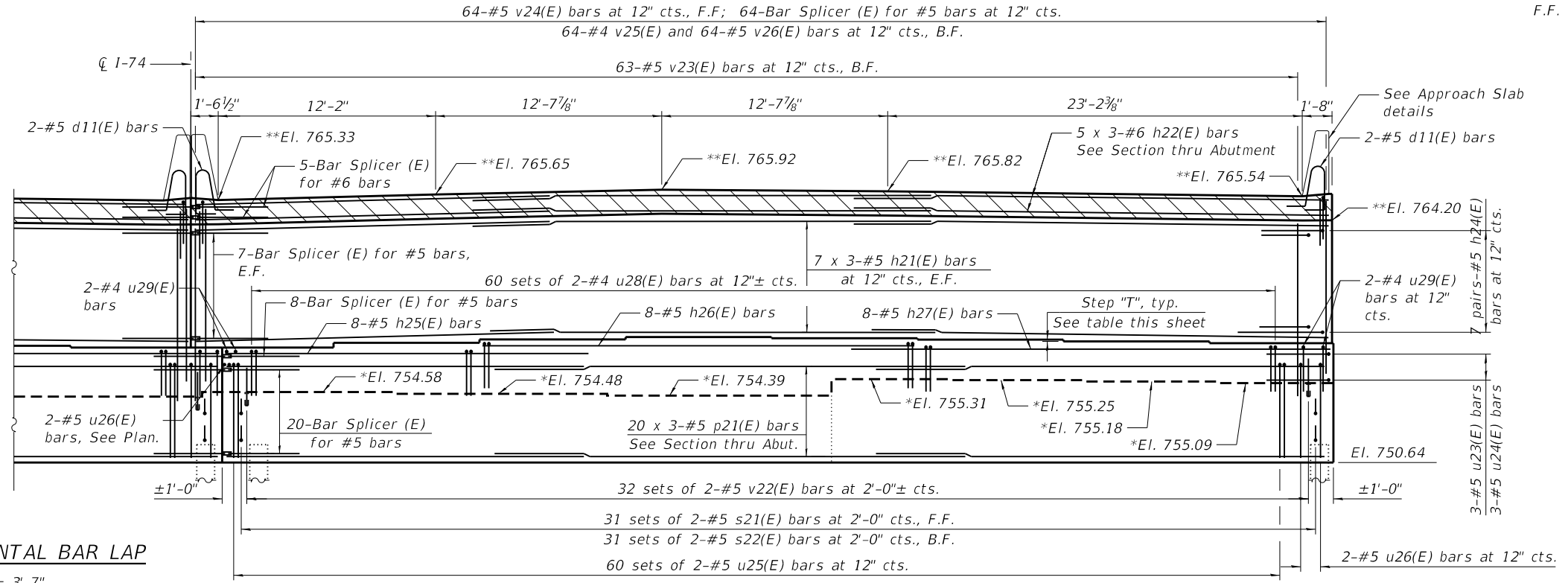
- B.F. indicates Back Face
- F.F. indicates Front Face
- E.F. indicates Each Face
- Bars indicated 7 x 3-#5 etc. indicates 7 lines of bars with 3 lengths per line.
- For Bill of Materials and Bar Bending Diagrams, see Sheet SR-51 of SR-63
- * Existing bearing seat elevation, for information only
- ** Elevations given at front face of abutment backwall

LEGEND

Hatched area to be poured with concrete in breakout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.

MIN. HORIZONTAL BAR LAP
#5 = 3'-7"
#6 = 4'-4"

ELEVATION - STAGE 1A CONSTRUCTION
(Looking East)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT PLAN AND ELEVATION 1
STRUCTURE NO. 010-0021

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	183
CONTRACT NO. 70C64				

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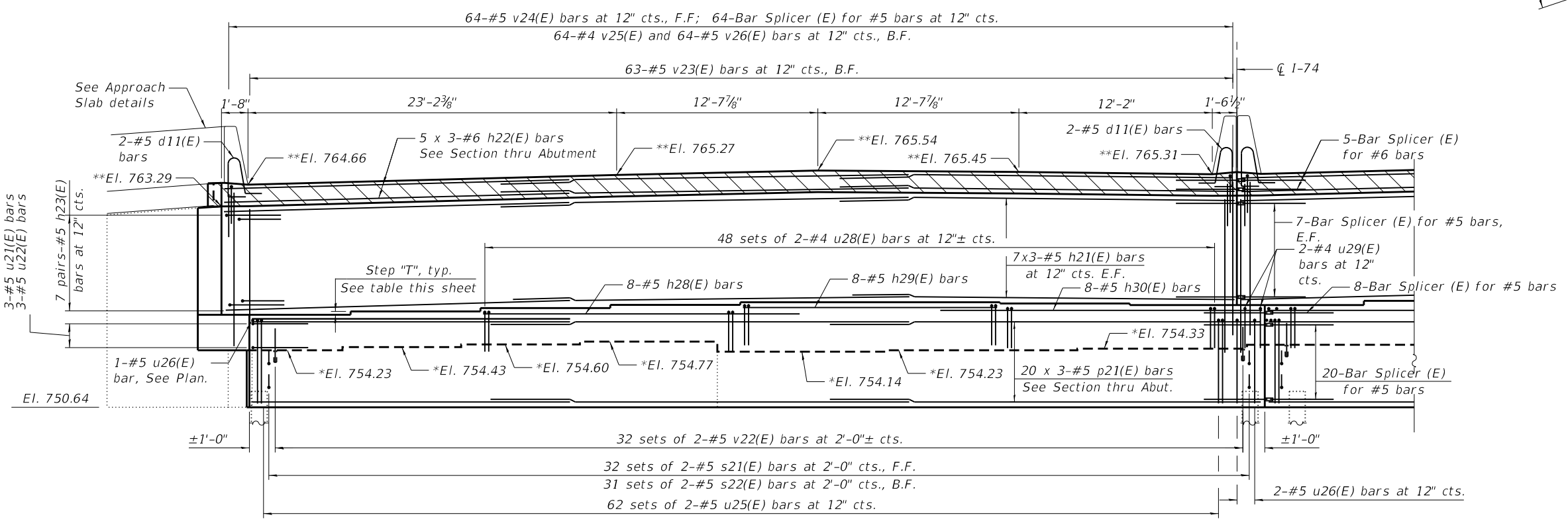
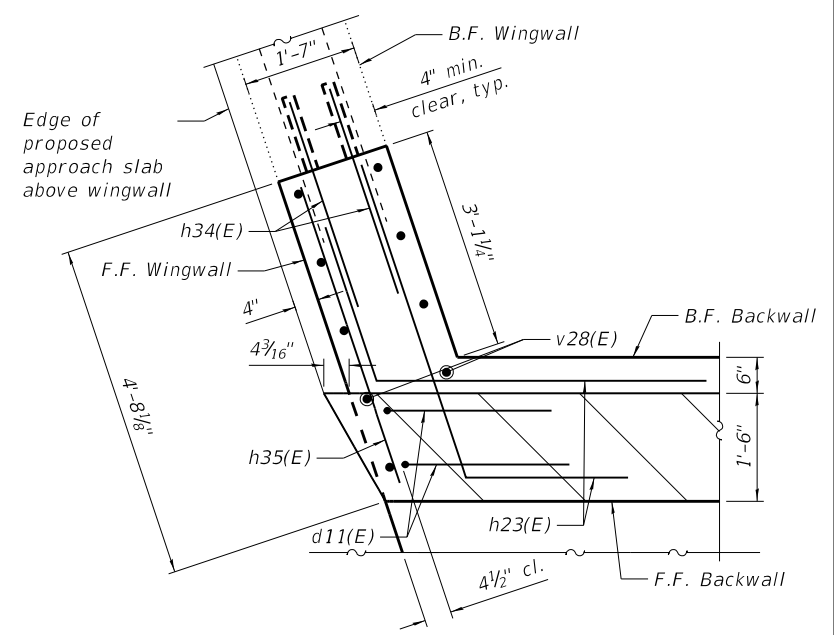
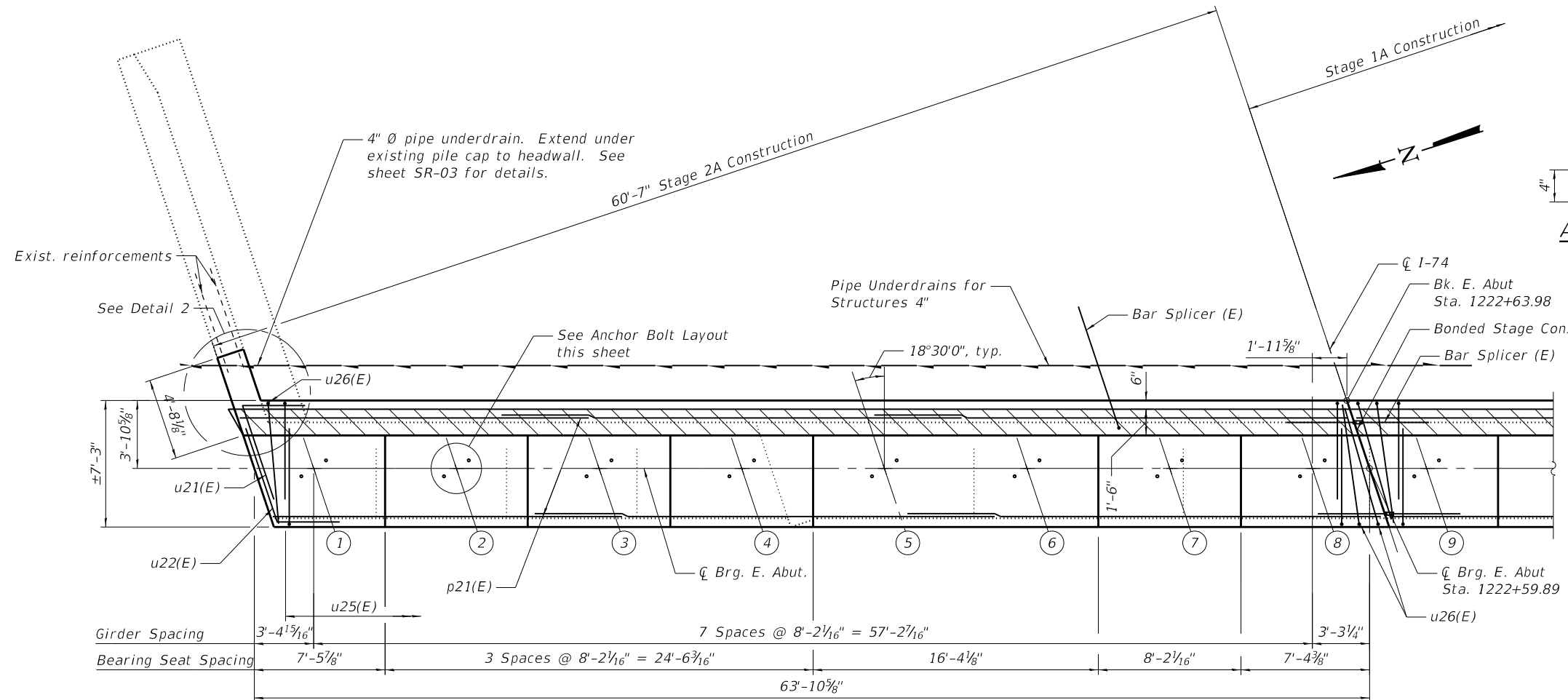
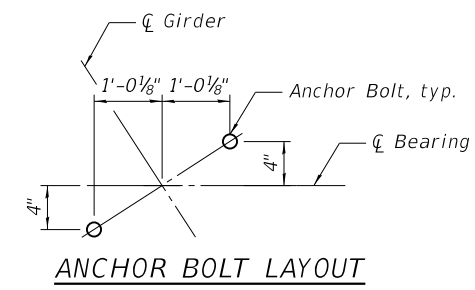
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=	- YMC	- KK	- EG	- BK
PLOT SCALE =	REVISIONS	REVISIONS	REVISIONS	REVISIONS
PLOT DATE =				

SHEET SR-49 OF SR-63 SHEETS

ILLINOIS FED. AID PROJECT

BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
1	756.46	2 5/8"
2	756.68	2 1/2"
3	756.89	2 3/8"
4	757.09	1 7/8"
5	757.25	0"
6	757.25	7/8"
7	757.18	1 1/4"
8	757.08	



NOTES:

B.F. indicates Back Face
F.F. indicates Front Face
E.F. indicates Each Face

Bars indicated 7 x 3-#5 etc. indicates 7 lines of bars with 3 lengths per line.

For Bill of Materials and Bar Bending Diagrams, see Sheet SR-51 of SR-63

* Existing bearing seat elevation, for information only

** Elevations given at front face of abutment backwall

LEGEND

Hatched area to be poured with concrete in breakout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.

MIN. HORIZONTAL BAR LAP

#5 = 3'-7"
#6 = 4'-4"

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exp U.S. Services Inc.
CHICAGO
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME =	DESIGNED - YMC	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

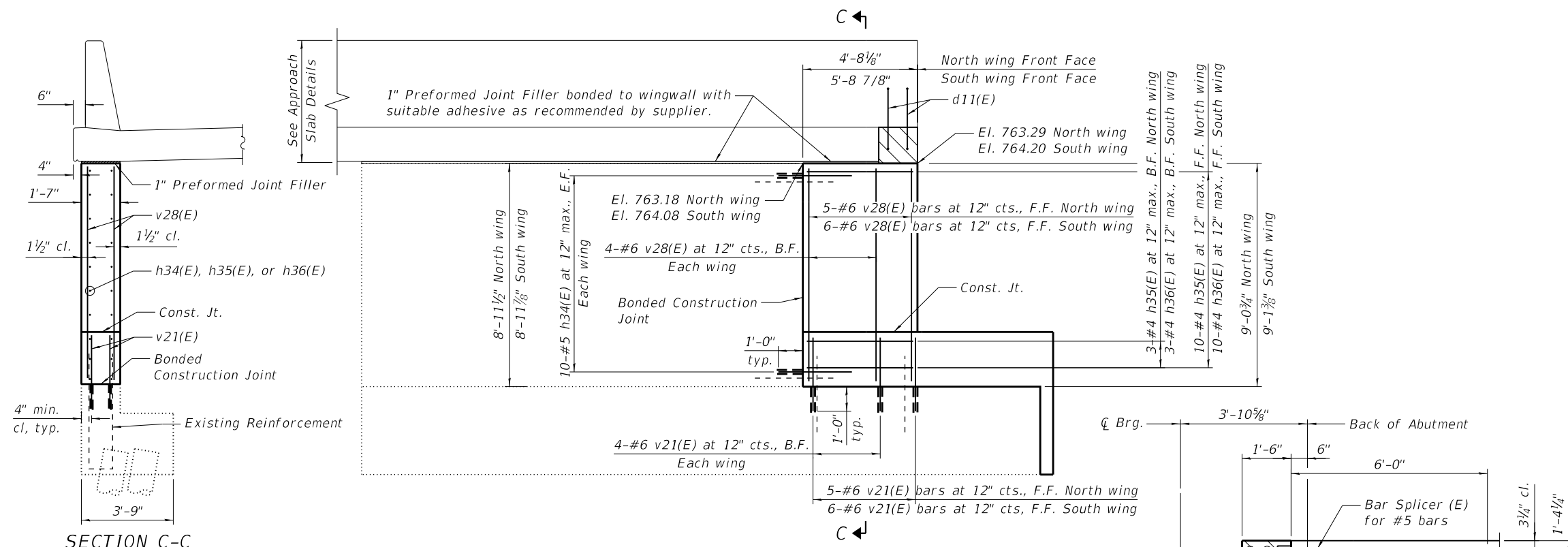
EAST ABUTMENT PLAN AND ELEVATION 2
STRUCTURE NO. 010-0021

SHEET SR-50 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	184
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

BILL OF MATERIAL

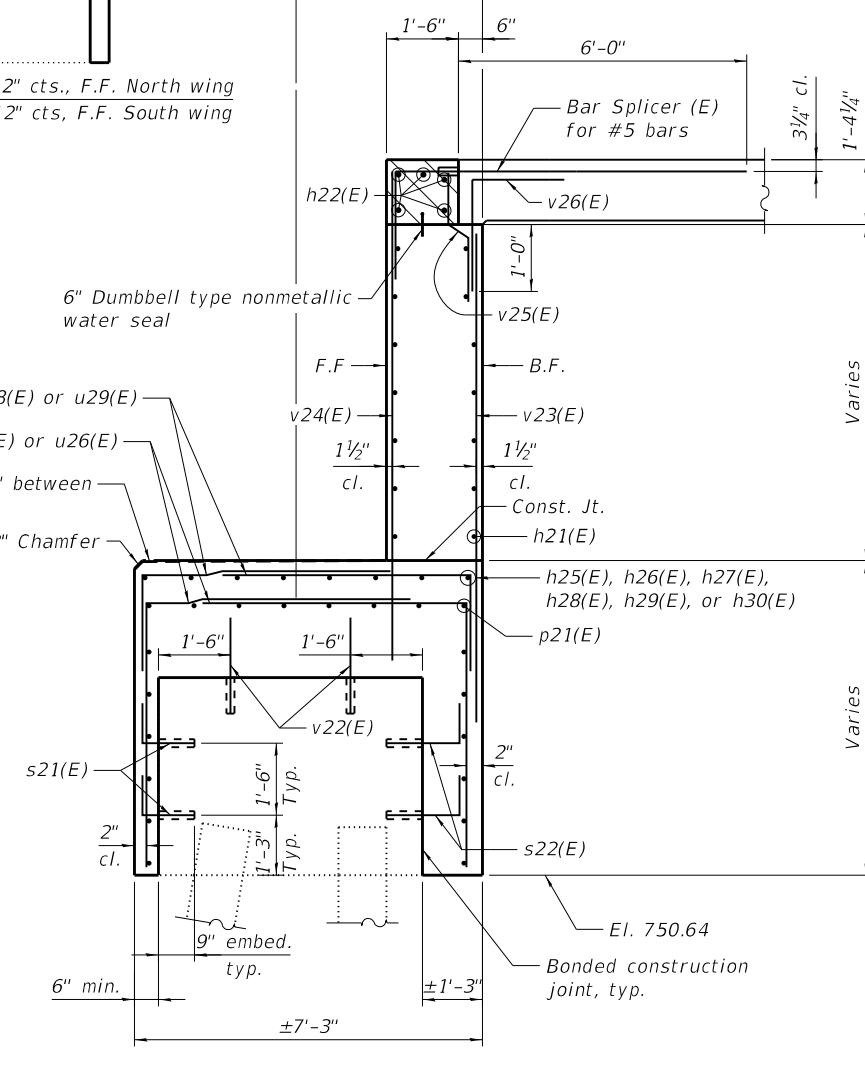
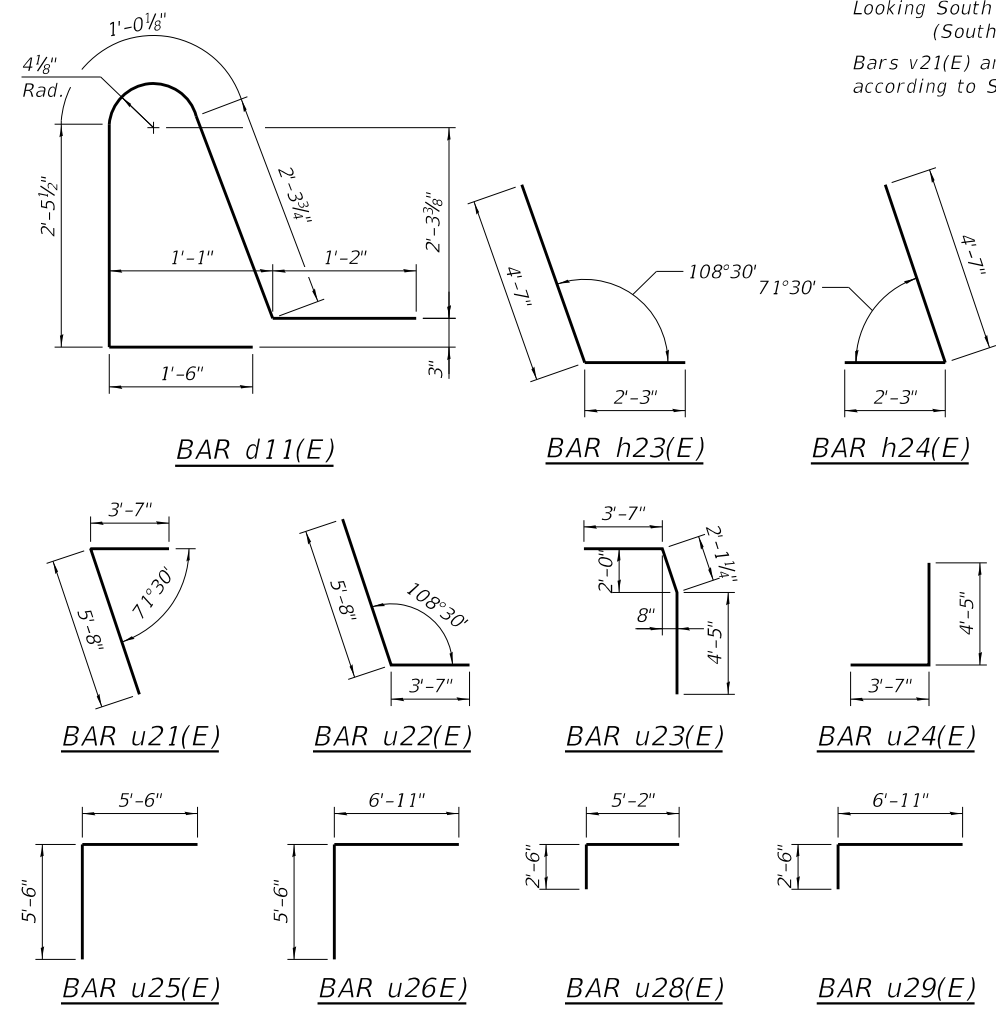
Bar	No.	Size	Length	Shape
d11(E)	8	#5	8'-6"	└─┘
h21(E)	84	#5	23'-8"	—
h22(E)	30	#6	24'-2"	—
h23(E)	14	#5	6'-10"	└─┘
h24(E)	14	#5	6'-10"	└─┘
h25(E)	8	#5	20'-4"	—
h26(E)	8	#5	24'-2"	—
h27(E)	8	#5	26'-10"	—
h28(E)	8	#5	19'-11"	—
h29(E)	8	#5	16'-0"	—
h30(E)	8	#5	20'-3"	—
h34(E)	40	#5	3'-0"	—
h35(E)	13	#4	4'-4"	—
h36(E)	13	#4	5'-4"	—
p21(E)	120	#5	23'-8"	—
s21(E)	126	#5	1'-11"	└─┘
s22(E)	124	#5	2'-5"	└─┘
u21(E)	3	#5	9'-3"	└─┘
u22(E)	3	#5	9'-3"	└─┘
u23(E)	3	#5	10'-2"	└─┘
u24(E)	3	#5	8'-0"	└─┘
u25(E)	244	#5	11'-0"	└─┘
u26(E)	7	#5	12'-5"	└─┘
u28(E)	216	#4	7'-8"	└─┘
u29(E)	6	#4	9'-5"	└─┘
v21(E)	19	#6	3'-0"	—
v22(E)	128	#5	1'-10"	—
v23(E)	126	#5	9'-8"	—
v24(E)	128	#5	9'-8"	—
v25(E)	128	#5	2'-11"	└─┘
v26(E)	128	#5	3'-10"	└─┘
v28(E)	19	#6	8'-8"	—
Item	Unit	Total		
Structure Excavation	Cu Yd	618		
Concrete Structures	Cu Yd	191.9		
Reinforcement Bars, Epoxy Coated	Pound	16,430		
Granular Backfill for Structures	Cu Yd	530		
Concrete Sealer	Sq Ft	2,004		
Geocomposite Wall Drain	Sq Yd	190		
Pipe Underdrains for Structures 4"	Foot	181		



SECTION C-C

WINGWALL ELEVATION

Looking South at Front Face of North Wingwall
(South Wingwall Similar, U.N.O.)
Bars v21(E) and h34(E) shall be drilled and grouted according to Section 584 of the Standard Specifications.



CROSS SECTION THRU ABUTMENT

Bars v22(E), s21(E) and s22(E) shall be drilled and grouted according to Section 584 of the Standard Specifications.

- NOTES:**
1. Bars indicated 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.
 2. For details of Bar Splicer (E), see sheet SR-63.
 3. Hatched area to be poured with concrete in blackout for modular expansion joint in deck. Quantity of concrete to be included with Concrete Superstructure.
 4. Concrete sealer to be applied to all exposed surfaces of backwalls, bearing seats and the front face of pile caps.

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 exp U.S. Services Inc.
 CHICAGO
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

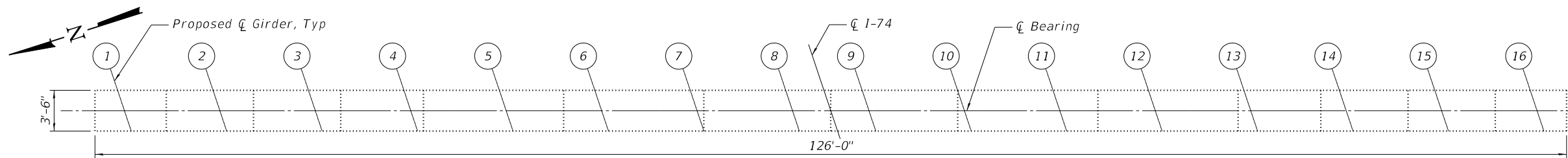
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

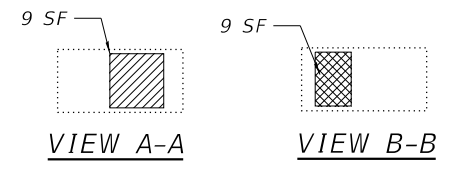
**EAST ABUTMENT SECTIONS AND DETAILS
STRUCTURE NO. 010-0021**

SHEET SR-51 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	



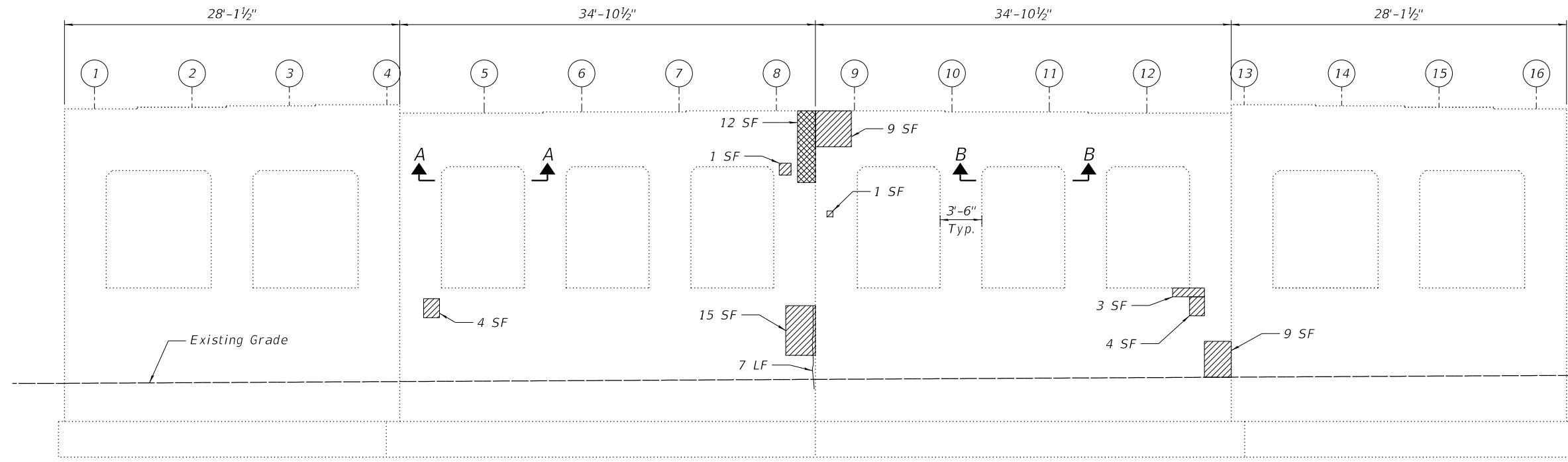
PIER 1 PLAN VIEW



EXIST. BEARING SEAT ELEVATIONS

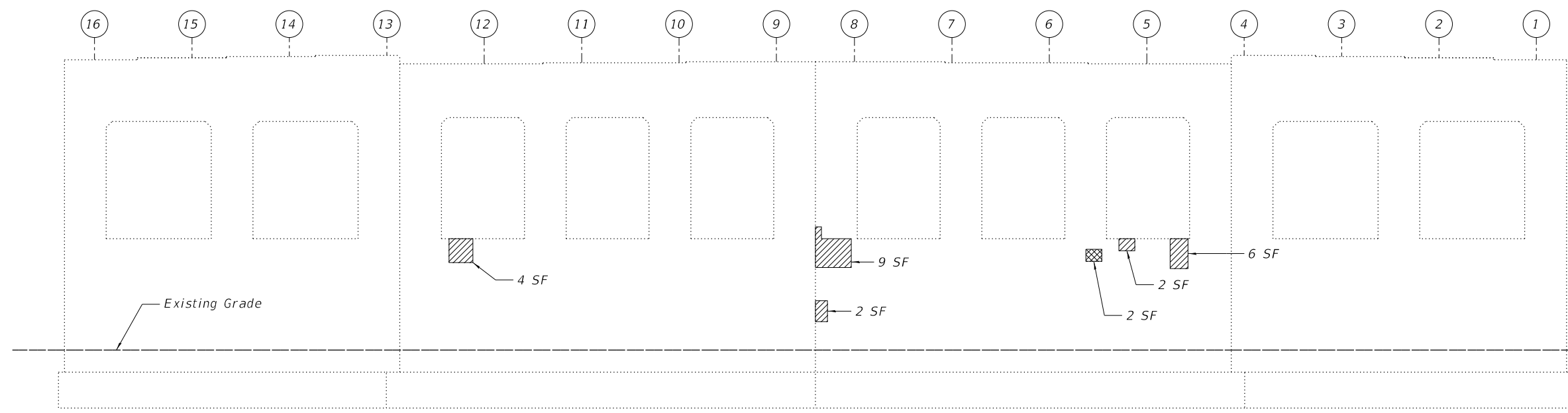
Prop. Girder No.	Exist. Brg. Seat Elev.
1	760.41
2	760.57
3	760.69
4	760.80
5	759.80
6	759.89
7	759.89
8	759.99
9	759.99
10	759.89
11	759.89
12	759.80
13	760.83
14	760.72
15	760.60
16	760.45

The contractor shall verify the exist. elevations in the field.



PIER 1 ELEVATION

Looking East



PIER 1 ELEVATION

Looking West

NOTES:

The quantities shown are for estimating purposes only. The cracks and concrete areas to be repaired will be determined by the engineer at the time of construction.

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	7
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	78
Structural Repair of Concrete (Depth Equal to or Greater than 5 Inches)	Sq. Ft.	23

LEGEND

- Structural repair of concrete (Depth equal to or less than 5 inches)
- Structural repair of concrete (Depth greater than 5 inches)
- Epoxy crack injection (Cracks greater than or equal to 1/16")
- Proposed Girder No.
- SF Square Feet
- LF Linear Feet

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exp U.S. Services Inc.
Chicago, IL
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

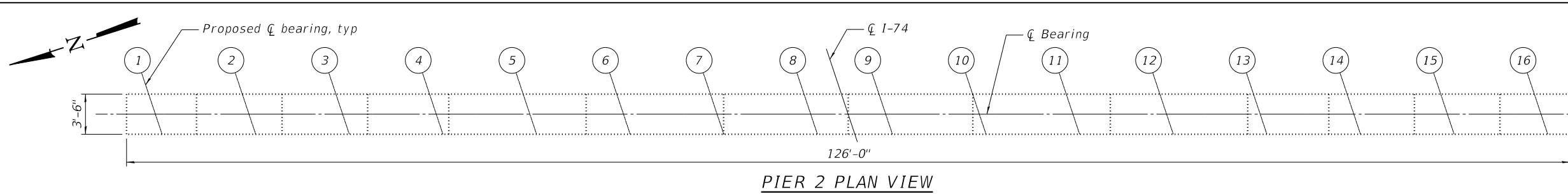
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

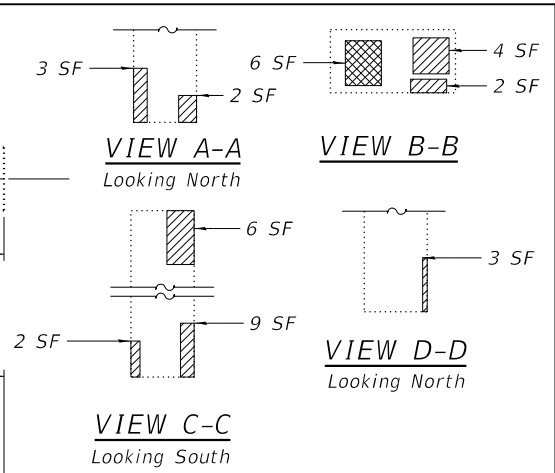
PIER 1 - REPAIRS
STRUCTURE NO. 010-0021

SHEET SR-52 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				



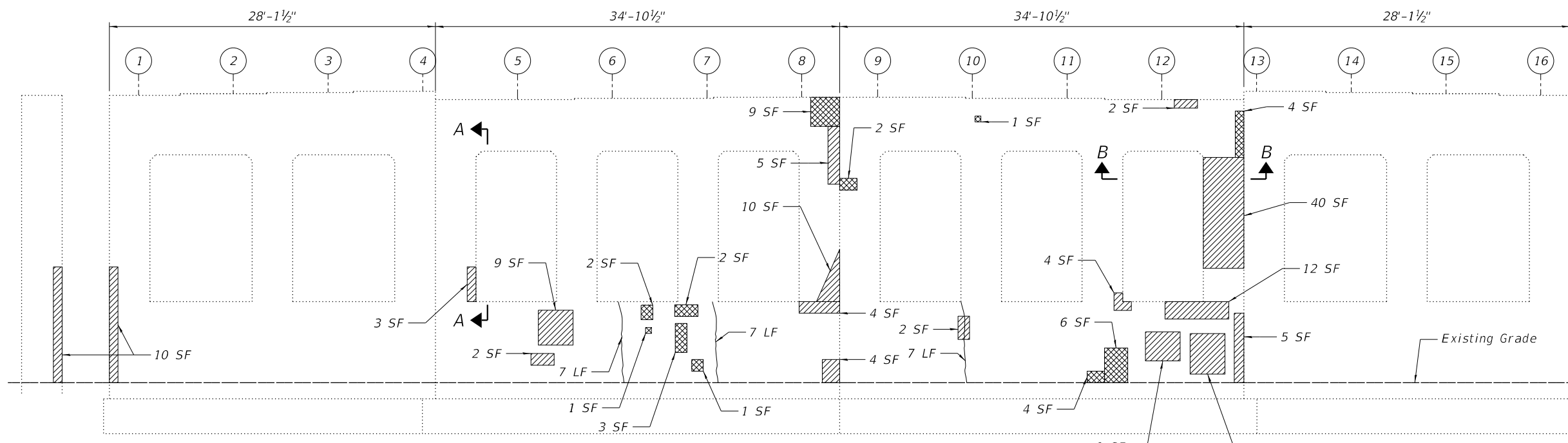
PIER 2 PLAN VIEW



EXIST. BEARING SEAT ELEVATIONS

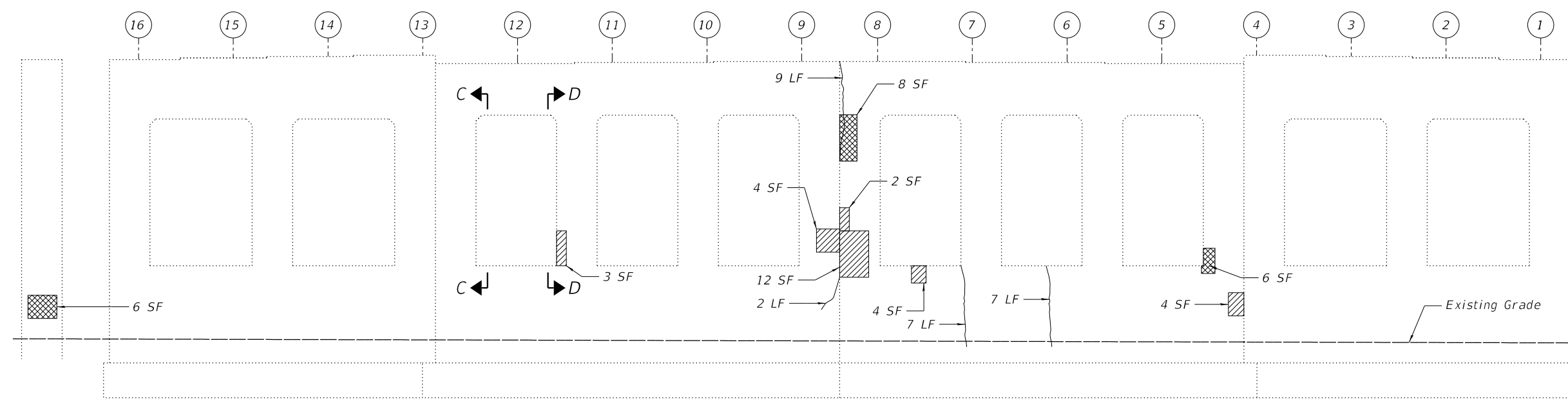
Prop. Girder No.	Exist. Brg. Seat Elev.
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2	759.32
3	759.46
4	759.60
5	758.47
6	758.56
7	758.56
8	758.66
9	758.79
10	758.69
11	758.69
12	758.60
13	759.84
14	759.75
15	759.66
16	759.53

The contractor shall verify the exist. elevations in the field.



PIER 2 ELEVATION

Looking East



PIER 2 ELEVATION

Looking West

NOTES:

The quantities shown are for estimating purposes only. The cracks and concrete areas to be repaired will be determined by the engineer at the time of construction.

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	46
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.	193
Structural Repair of Concrete (Depth Equal to or Greater than 5 Inches)	Sq. Ft.	61

LEGEND

- Structural repair of concrete (Depth equal to or less than 5 inches)
- Structural repair of concrete (Depth greater than 5 inches)
- Epoxy crack injection (Cracks greater than or equal to 1/16")
- Proposed Girder No.
- SF Square Feet
- LF Linear Feet

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exp U.S. Services Inc.
 CHICAGO, ILL. BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

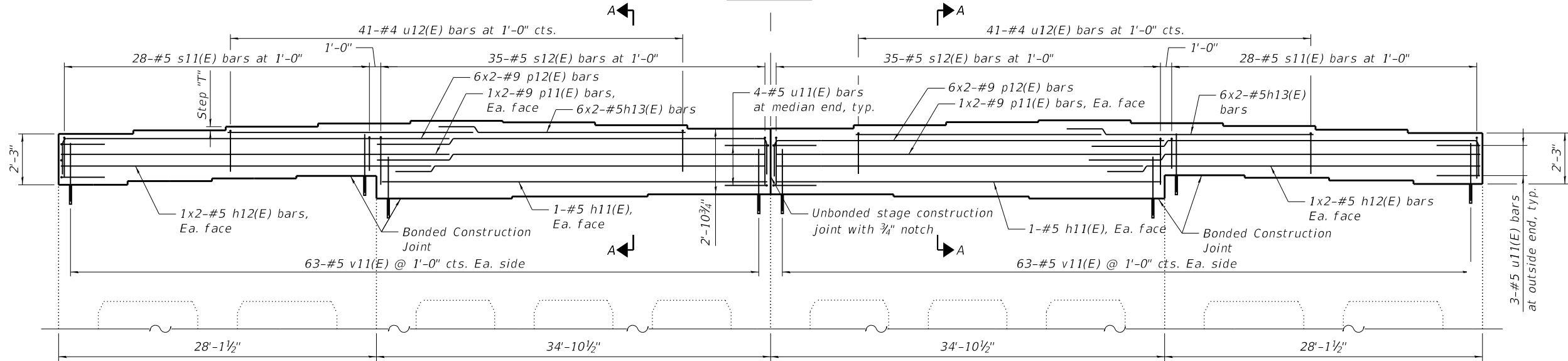
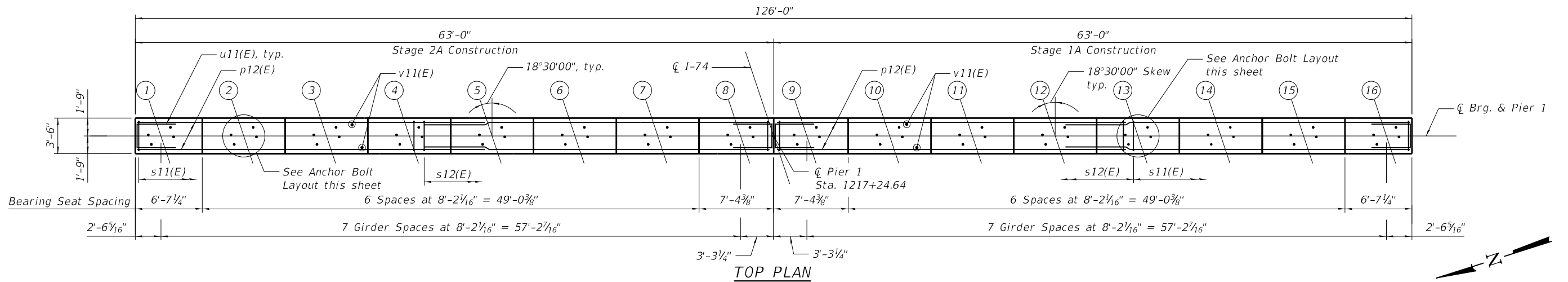
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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - EG	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

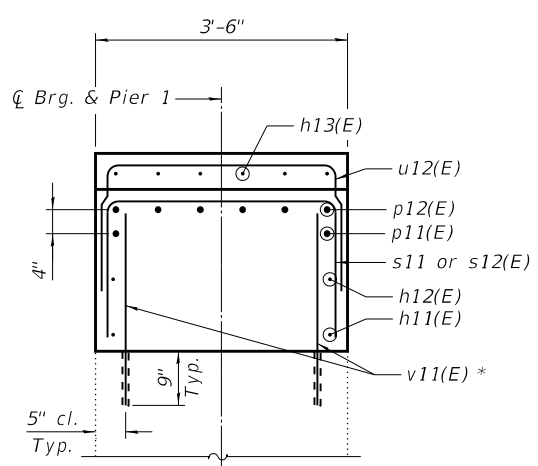
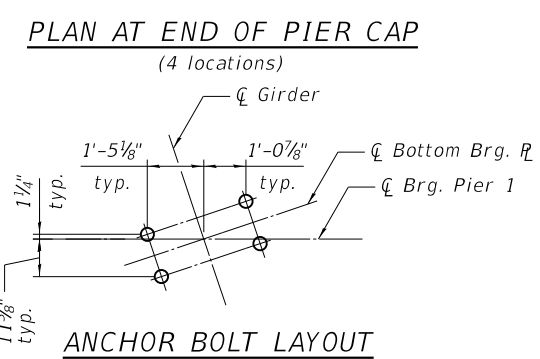
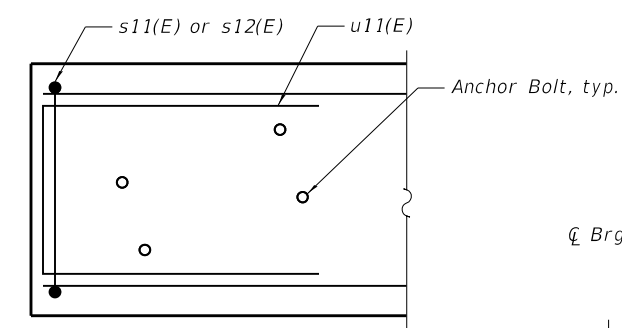
PIER 2 - REPAIRS
STRUCTURE NO. 010-0021

SHEET SR-53 OF SR-63 SHEETS

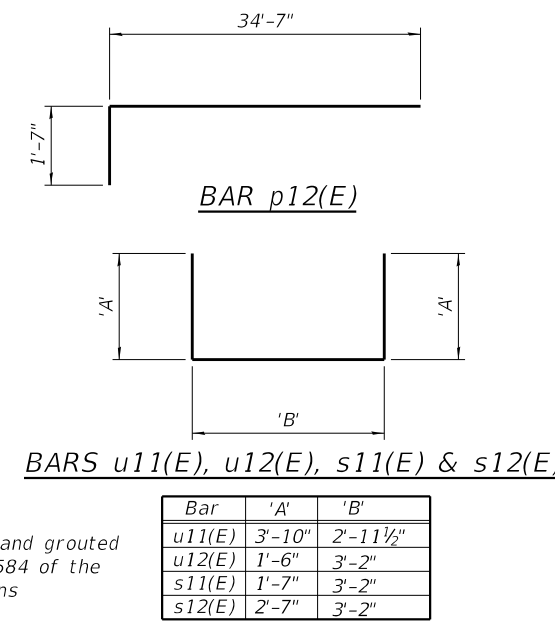
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	187
CONTRACT NO. 70C64			ILLINOIS FED. AID PROJECT	



MIN. BAR LAP
 #5 = 3'-7"
 #9 = 6'-5"



*Bars shall be drilled and grouted according to Section 584 of the Standard Specifications



BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
1	762.66	1 7/8"
2	762.82	1 7/8"
3	762.98	1 5/8"
4	763.12	1 1/2"
5	763.24	7/8"
6	763.17	1 1/2"
7	763.05	1 7/8"
8	762.89	1/8"
9	762.90	1 3/4"
10	763.05	1 1/2"
11	763.18	1"
12	763.26	1 1/2"
13	763.14	1 1/2"
14	763.01	1 7/8"
15	762.85	1 3/4"
16	762.70	1 3/4"

BILL OF MATERIAL - PIER 1

Bar	No.	Size	Length	Shape
h11(E)	4	#5	34'-7"	—
h12(E)	8	#5	33'-2"	—
h13(E)	24	#5	22'-1"	—
p11(E)	8	#9	34'-7"	—
p12(E)	24	#9	36'-2"	—
u11(E)	14	#5	10'-8"	U
u12(E)	82	#4	6'-6"	U
s11(E)	56	#5	6'-6"	U
s12(E)	70	#5	8'-6"	U
v11(E)	252	#5	2'-8"	—
Item		Unit	Total	
Concrete Structures		Cu Yd	45.6	
Reinforcement Bars, Epoxy Coated		Pound	7,080	

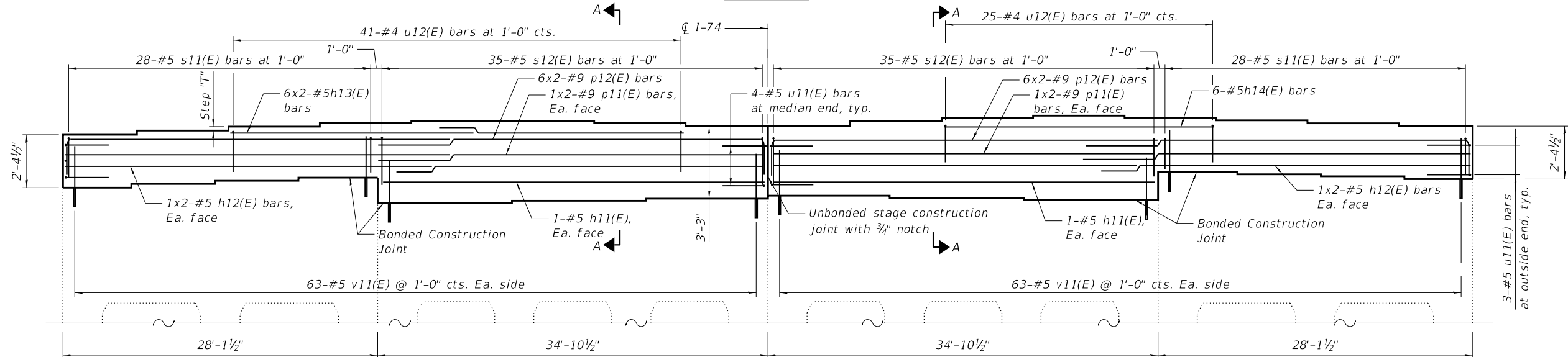
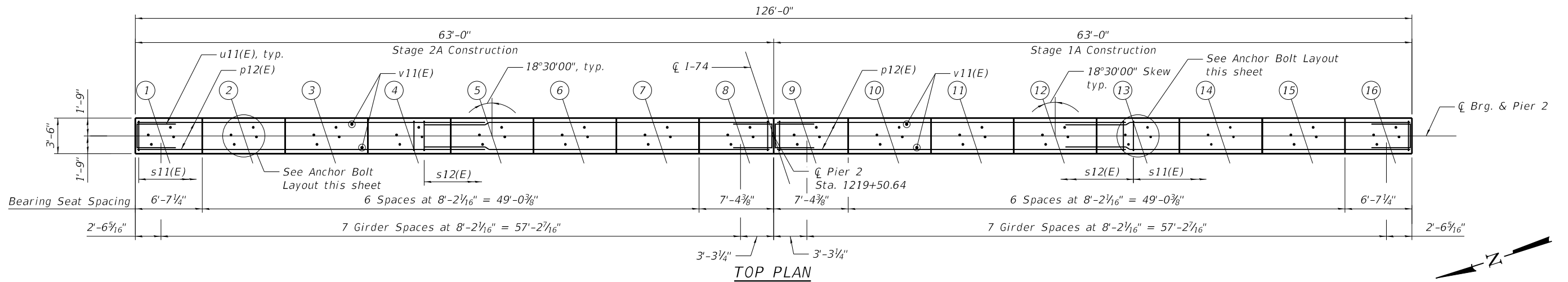
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exp U.S. Services Inc. CHICAGO BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	USER NAME =	DESIGNED - YMC	REVISED -
	CHECKED - KK	REVISOR -	
	PLOT SCALE =	DRAWN - EG	REVISED -
	PLOT DATE =	CHECKED - YMC	REVISED -

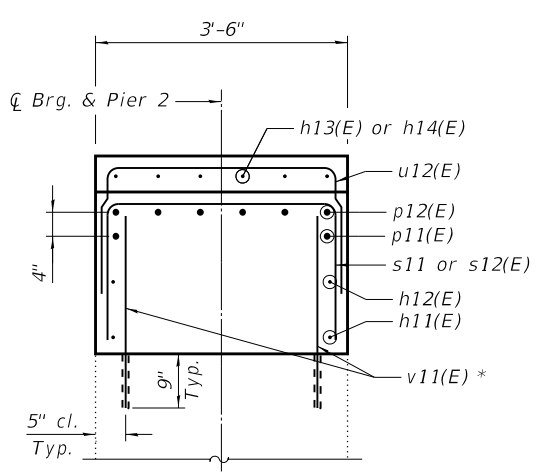
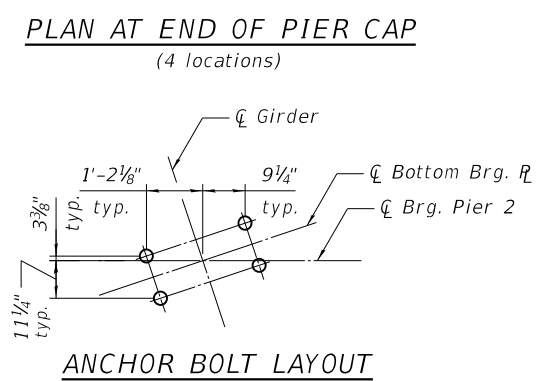
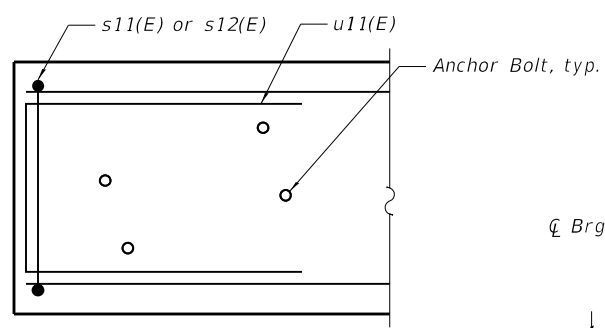
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 BEARING SEAT MODIFICATION
STRUCTURE NO. 010-0021
 SHEET SR-54 OF SR-63 SHEETS

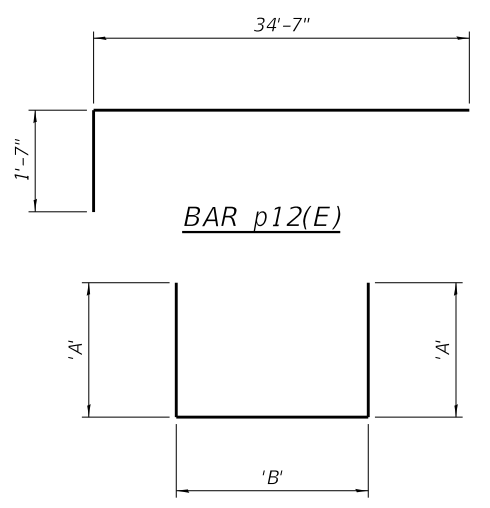
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1) BR, (14HB-2) BR-1	CHAMPAIGN	201	188
CONTRACT NO. 70C64			ILLINOIS FED. AID PROJECT	



MIN. BAR LAP
 #5 = 3'-7"
 #9 = 6'-5"



*Bars shall be drilled and grouted according to Section 584 of the Standard Specifications



Bar	'A'	'B'
u11(E)	3'-10"	2'-11 1/2"
u12(E)	1'-8"	3'-2"
s11(E)	1'-8"	3'-2"
s12(E)	2'-8"	3'-2"

BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
1	761.52	
2	761.70	2 1/8"
3	761.88	2 1/8"
4	762.05	2"
5	762.14	1 1/8"
6	762.14	0"
7	762.04	1 1/4"
8	761.91	1 1/2"
9	761.94	3/8"
10	762.12	2 1/8"
11	762.27	1 3/4"
12	762.37	1 1/4"
13	762.28	1 1/8"
14	762.16	1 1/2"
15	762.03	1 1/2"
16	761.90	1 1/2"

BILL OF MATERIAL - PIER 2

Bar	No.	Size	Length	Shape
h11(E)	4	#5	34'-7"	—
h12(E)	8	#5	33'-2"	—
h13(E)	12	#5	22'-1"	—
h14(E)	6	#5	24'-2"	—
p11(E)	8	#9	34'-7"	—
p12(E)	24	#9	36'-2"	—
u11(E)	14	#5	10'-8"	┌
u12(E)	66	#4	6'-6"	┌
s11(E)	56	#5	6'-6"	┌
s12(E)	70	#5	8'-6"	┌
v11(E)	252	#5	2'-8"	—
Item		Unit	Total	
Concrete Structures		Cu Yd	49.0	
Reinforcement Bars, Epoxy Coated		Pound	6,890	

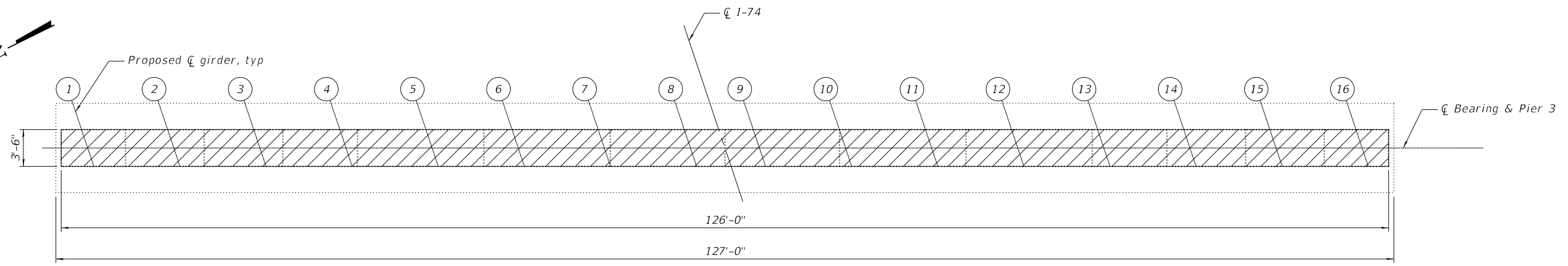
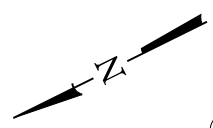
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exp U.S. Services Inc. CHICAGO, IL BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY	USER NAME =	DESIGNED - YMC	REVISED -
	PLOT SCALE =	CHECKED - KK	REVISED -
	PLOT DATE =	DRAWN - EG	REVISED -
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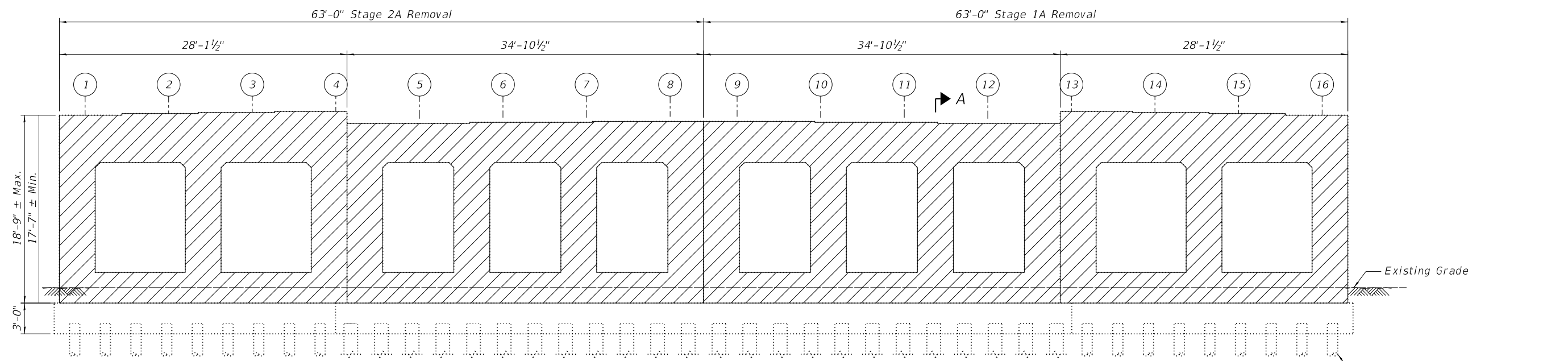
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 BEARING SEAT MODIFICATION
STRUCTURE NO. 010-0021
 SHEET SR-55 OF SR-63 SHEETS

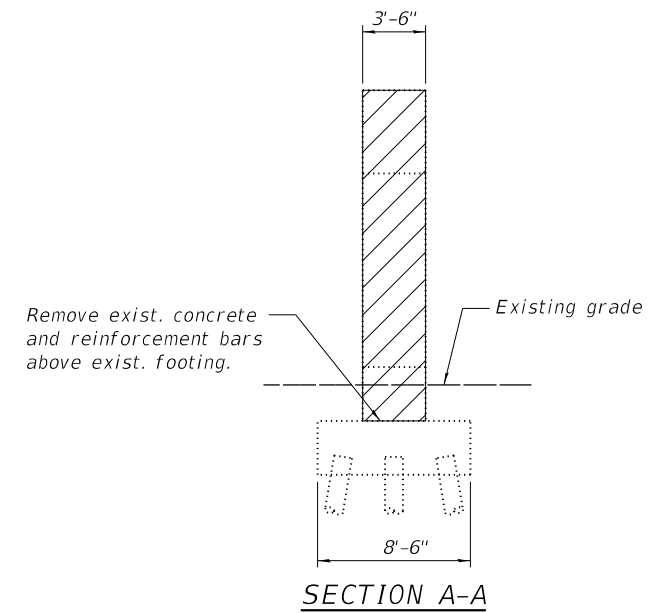
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	189
CONTRACT NO. 70C64			ILLINOIS FED. AID PROJECT	



PIER 3 PLAN



PIER 3 ELEVATION
(Looking East)



SECTION A-A

- LEGEND**
- Concrete Removal
 - Proposed Girder No.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	194.9

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exp U.S. Services Inc.
 CHICAGO, IL
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

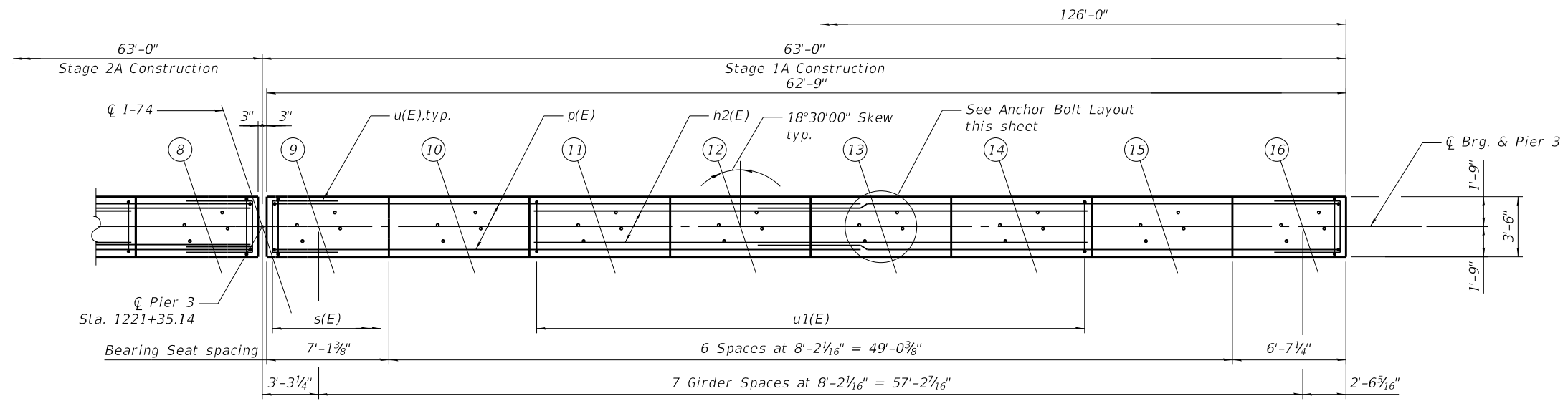
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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - EG	REVISED -
	CHECKED - YMC	REVISED -

STATE OF ILLINOIS
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PIER 3 - REMOVAL
STRUCTURE NO. 010-0021

SHEET SR-56 OF SR-63 SHEETS

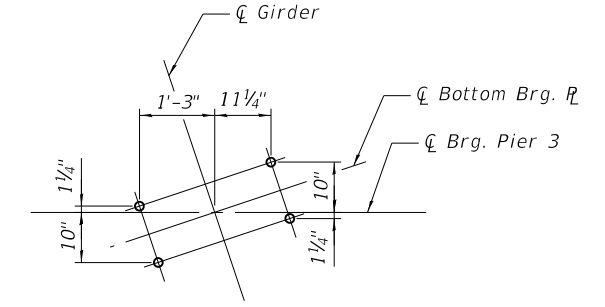
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	190
CONTRACT NO. 70C64				
		ILLINOIS	FED. AID PROJECT	



TOP PLAN - STAGE 1A

BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
9	759.43	2 3/8"
10	759.63	2 1/8"
11	759.81	1 1/2"
12	759.93	1"
13	759.85	1 1/8"
14	759.76	1 1/2"
15	759.64	1 3/8"
16	759.53	



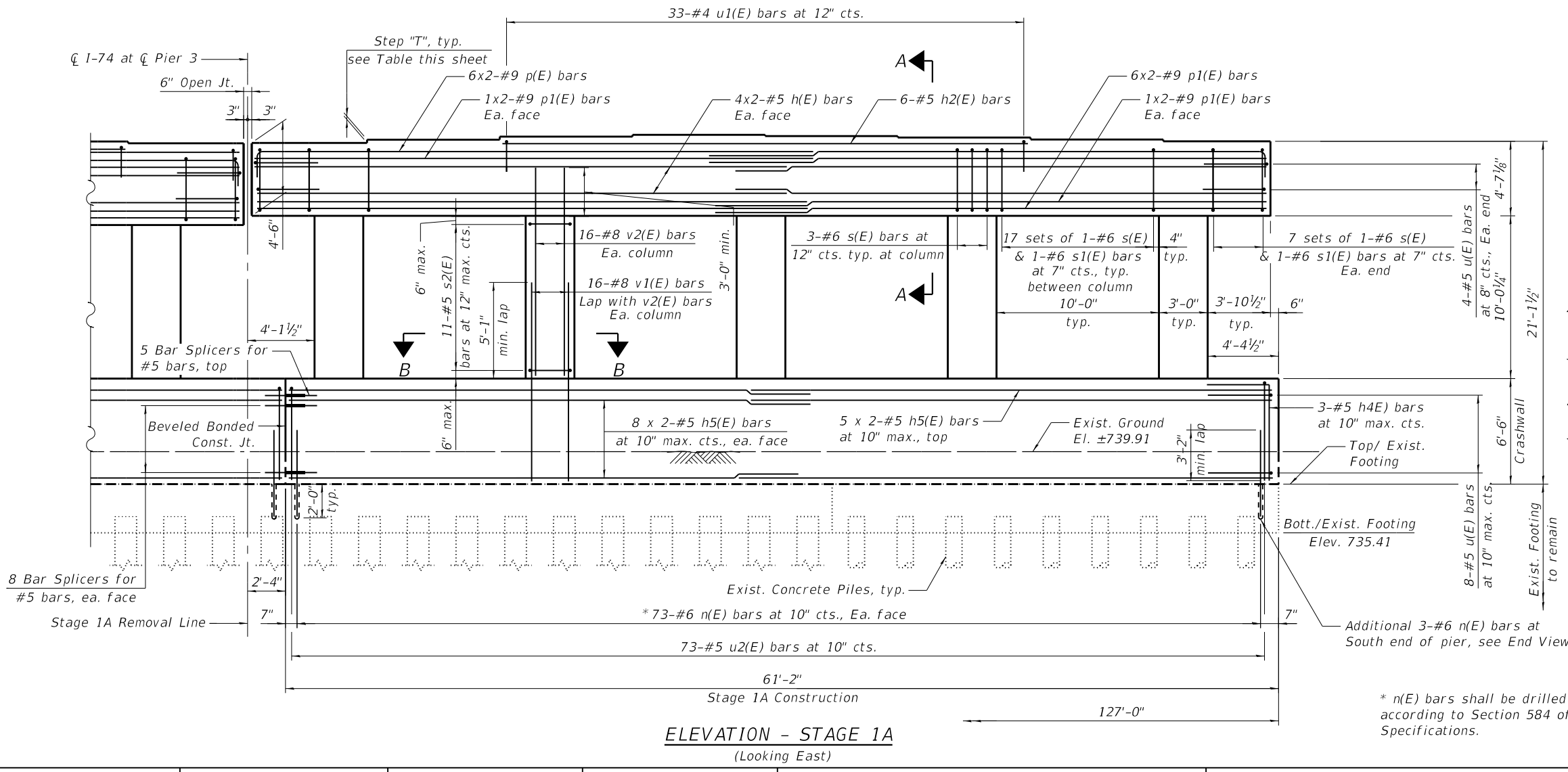
ANCHOR BOLT LAYOUT

MIN. HORIZONTAL BAR LAP

#5 = 3'-7"
#9 = 6'-5"

Notes:

1. Pour steps monolithically with cap.
2. For Section A-A, Section B-B, End View, Bill of Material, and Bar Bending Diagrams, see sheet SR-59 of SR-63
3. Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.
4. Space reinforcement in pier cap to miss anchor bolts.
5. For Bearing details, see sheet SR-43 of SR-63



ELEVATION - STAGE 1A
(Looking East)

* n(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.

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11/15/2019 11:50:12 AM

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CHICAGO
BUILDINGS-EARTH & ENVIRONMENT-ENERGY
INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME =	DESIGNED - YMC	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

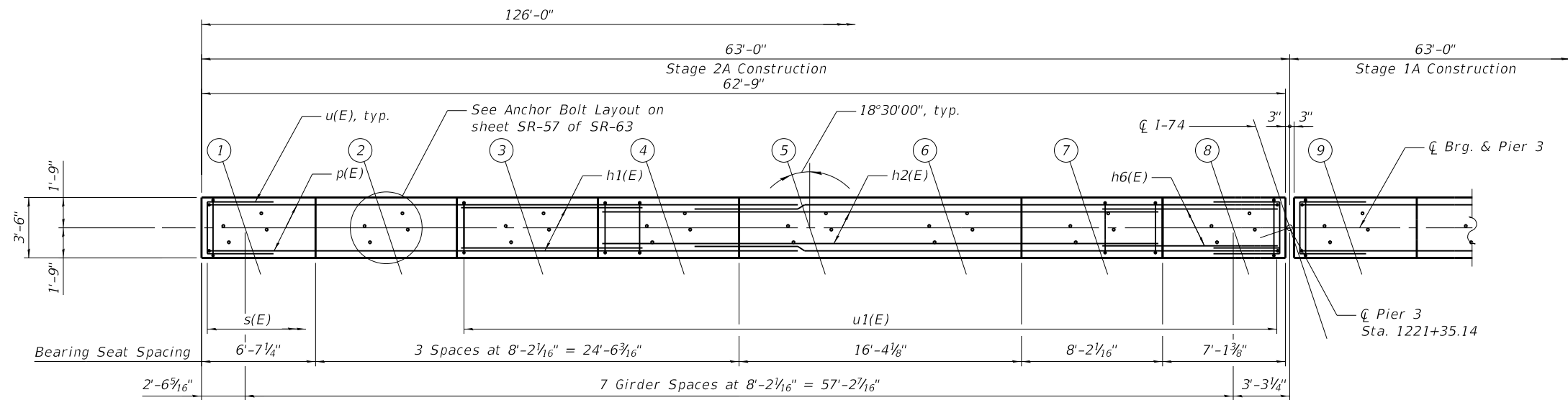
PIER 3 PLAN AND ELEVATION 1
STRUCTURE NO. 010-0021

SHEET SR-57 OF SR-63 SHEETS

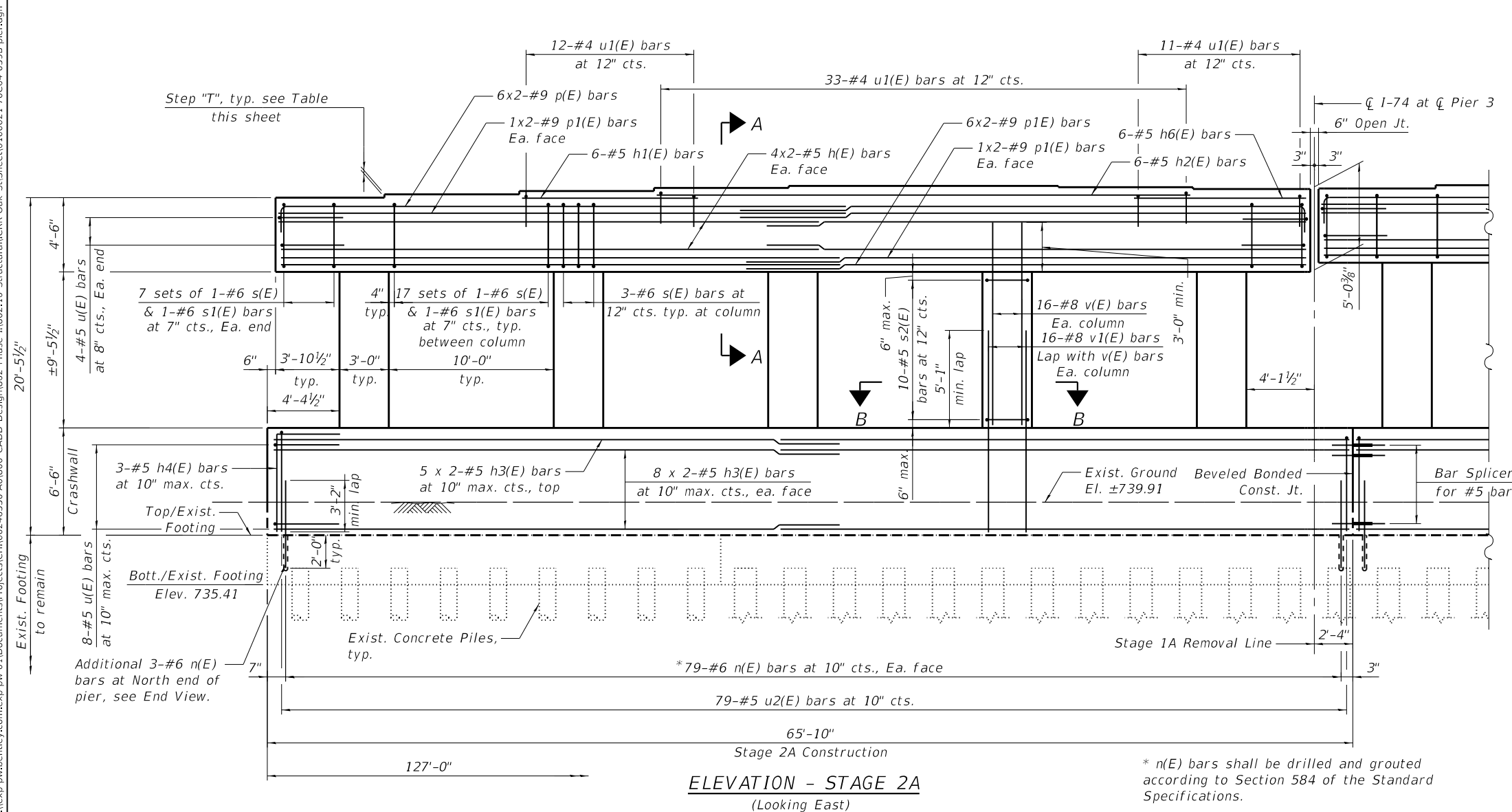
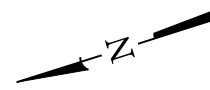
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	191
CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

BEARING SEAT ELEVATIONS

Girder No.	Brg. Seat Elevation	Step "T"
1	758.87	2 3/8"
2	759.07	2 3/8"
3	759.27	2 1/4"
4	759.46	1 1/2"
5	759.59	0"
6	759.59	1"
7	759.51	1 3/8"
8	759.40	



TOP PLAN - STAGE 2A



ELEVATION - STAGE 2A
(Looking East)

* n(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.

MIN. HORIZONTAL BAR LAP

#5 = 3'-7"
#9 = 6'-5"

MODEL: Default
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<p>exp U.S. Services Inc. CHICAGO BUILDINGS-EARTH & ENVIRONMENT-ENERGY INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY</p>	USER NAME =	DESIGNED - YMC	REVISED -
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	PLOT DATE =	DRAWN - MTR	REVISED -
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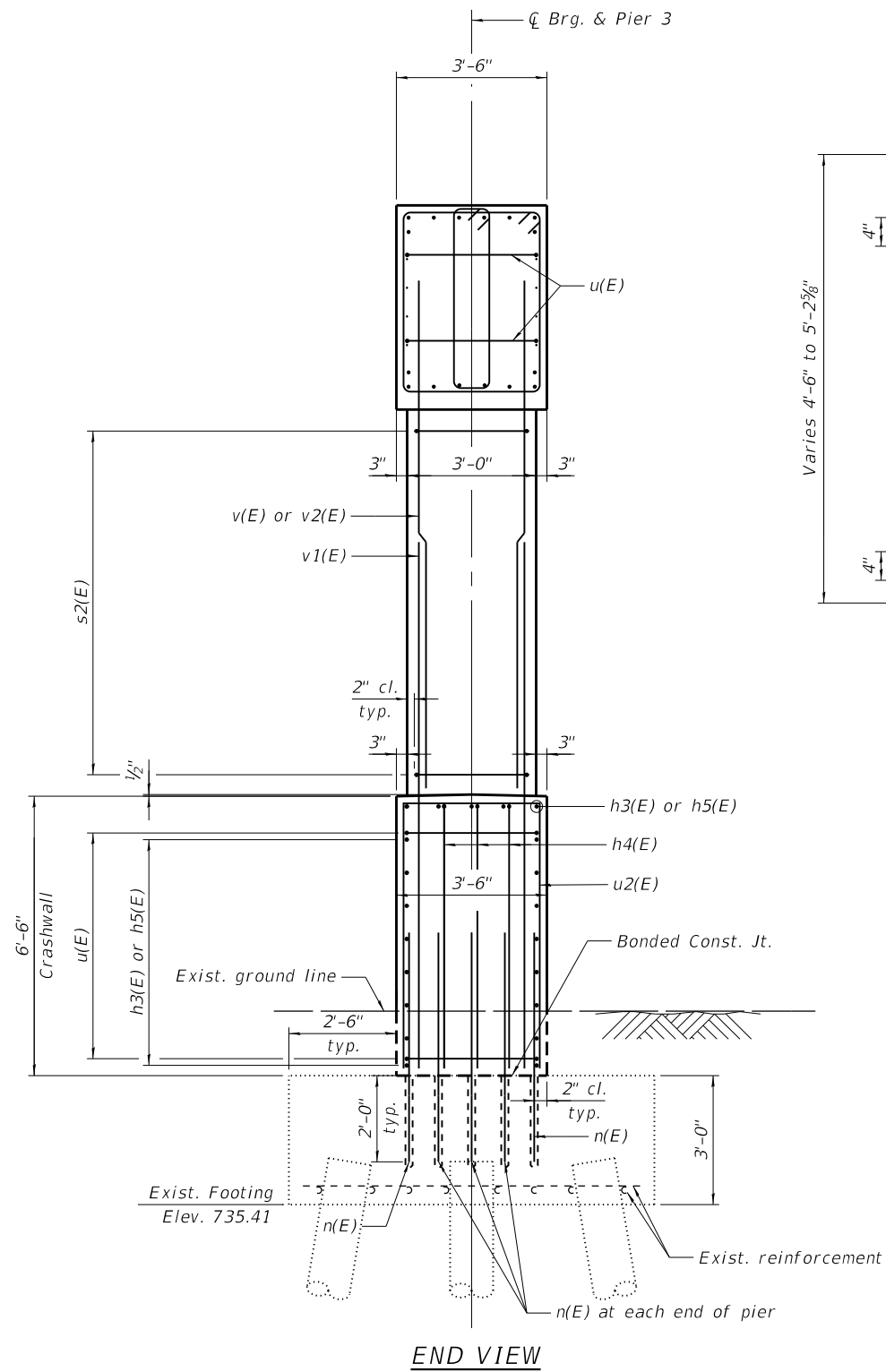
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 PLAN AND ELEVATION 2
STRUCTURE NO. 010-0021

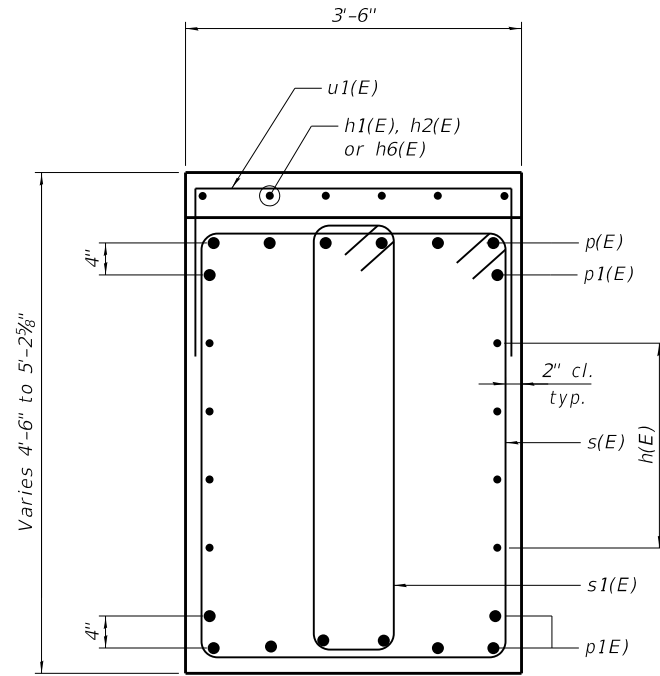
SHEET SR-58 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	192
CONTRACT NO. 70C64				
ILLINOIS		FED. AID PROJECT		

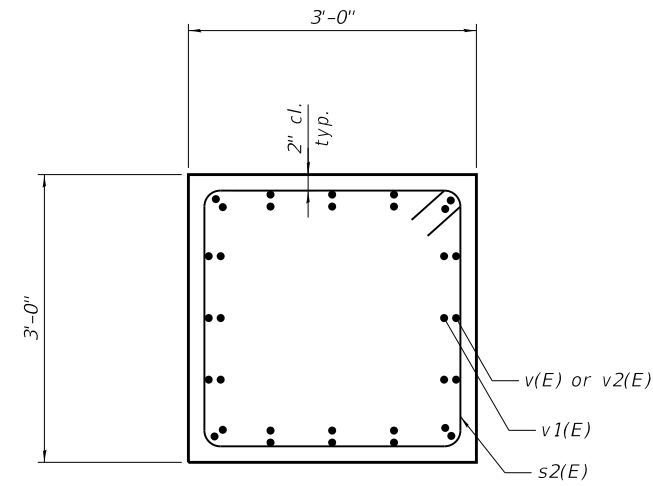
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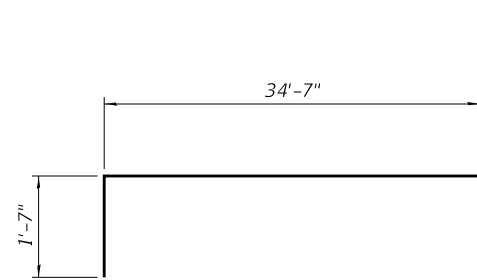
Note:
 n(E) bars shall be drilled and grouted according to Section 584 of the Standard Specifications.



SECTION A-A



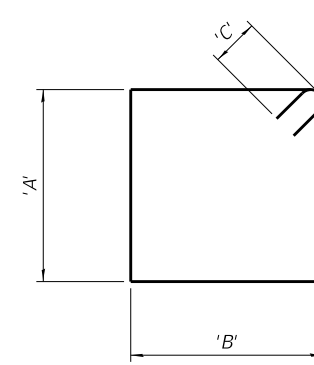
SECTION B-B



BAR p(E)

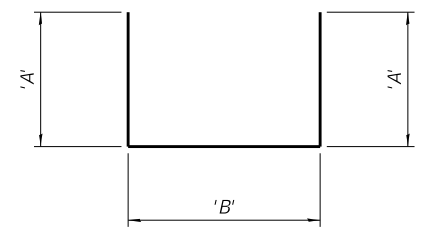


BAR h4(E)



BARS s(E), s1(E) & s2(E)

Bar	'A'	'B'	'C'
s(E)	4'-2"	3'-2"	8"
s1(E)	4'-2"	1'-1"	8"
s2(E)	2'-8"	2'-8"	5 1/2"



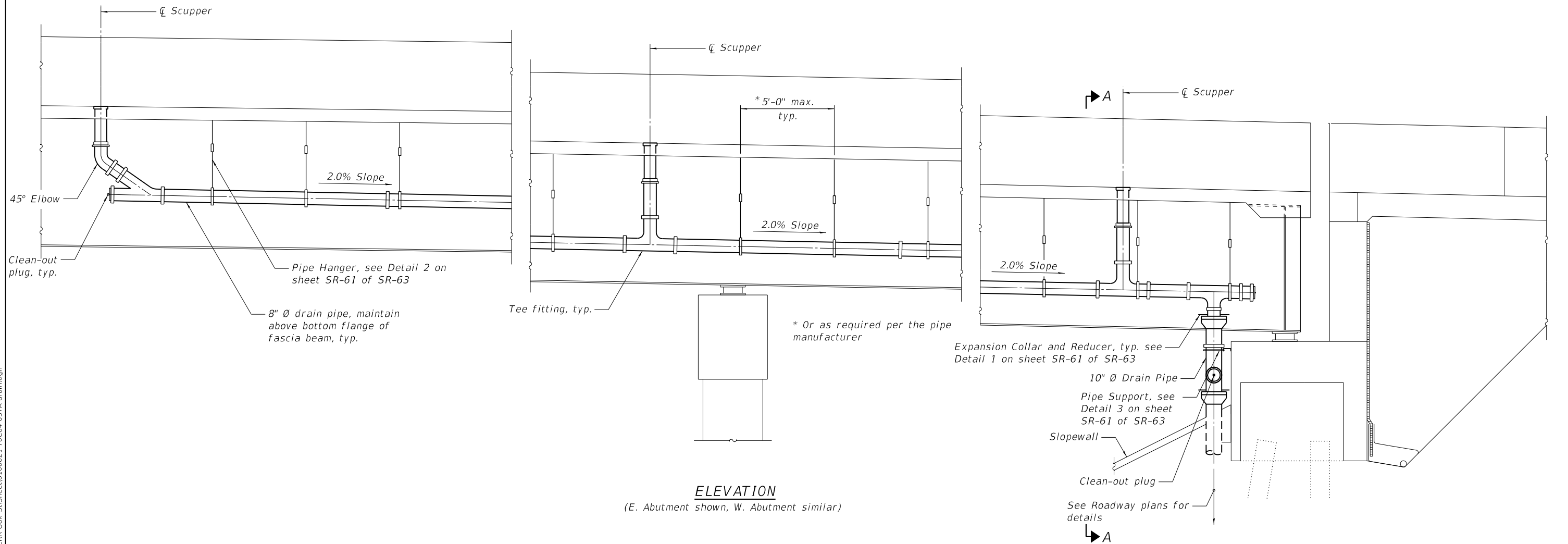
BARS u(E), u1(E) & u2(E)

Bar	'A'	'B'
u(E)	3'-10"	2'-11 1/2"
u1(E)	1'-10"	3'-2"
u2(E)	6'-2"	3'-2"

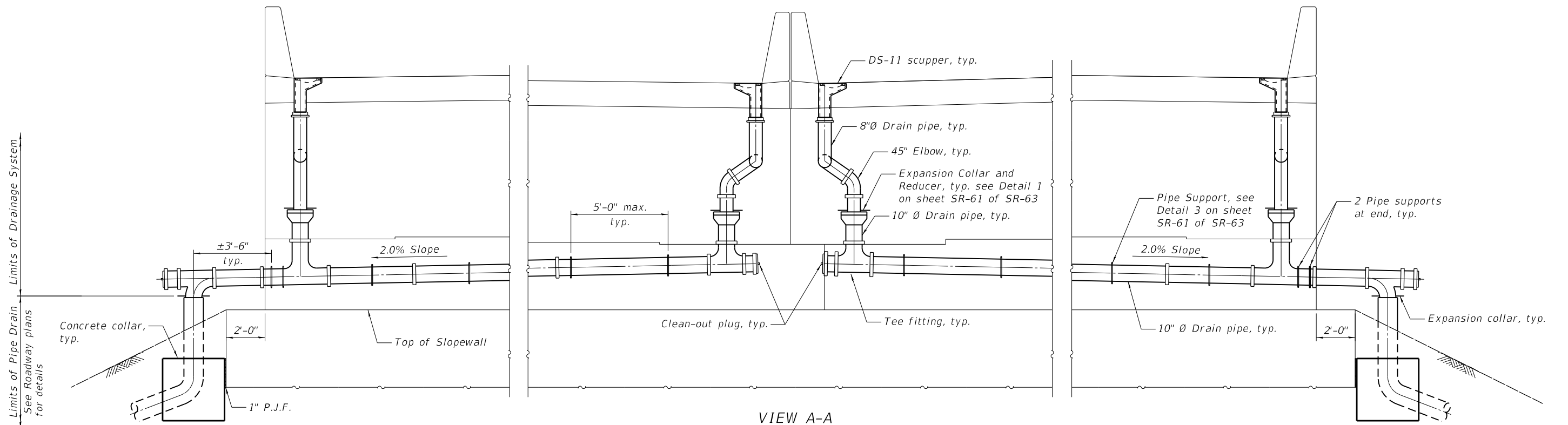
BILL OF MATERIAL - PIER 3

Bar	No.	Size	Length	Shape
h(E)	32	#5	33'-0"	—
h1(E)	6	#5	11'-8"	—
h2(E)	12	#5	32'-5"	—
h3(E)	42	#5	34'-8"	—
h4(E)	6	#5	10'-0"	—
h5(E)	42	#5	32'-4"	—
h6(E)	6	#5	10'-7"	—
n(E)	310	#6	5'-6"	—
p(E)	24	#9	36'-2"	┌
p1(E)	40	#9	34'-5"	—
s(E)	194	#6	16'-0"	□
s1(E)	164	#6	11'-8"	□
s2(E)	105	#5	11'-7"	□
u(E)	32	#5	10'-8"	┌
u1(E)	89	#4	6'-10"	┌
u2(E)	152	#5	15'-6"	┌
v(E)	80	#8	13'-0"	—
v1(E)	160	#8	11'-9"	—
v2(E)	80	#8	13'-6"	—
Item	Unit	Total		
Structure Excavation	Cu Yd	66		
Concrete Structures	Cu Yd	217.4		
Reinforcement Bars, Epoxy Coated	Pound	37,550		

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ELEVATION
 (E. Abutment shown, W. Abutment similar)



VIEW A-A

exp U.S. Services Inc.
 Chicago, IL
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

USER NAME =	DESIGNED - BK	REVISED -
	CHECKED - KK	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BK	REVISED -

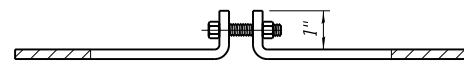
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DRAINAGE SYSTEM
STRUCTURE NO. 010-0021

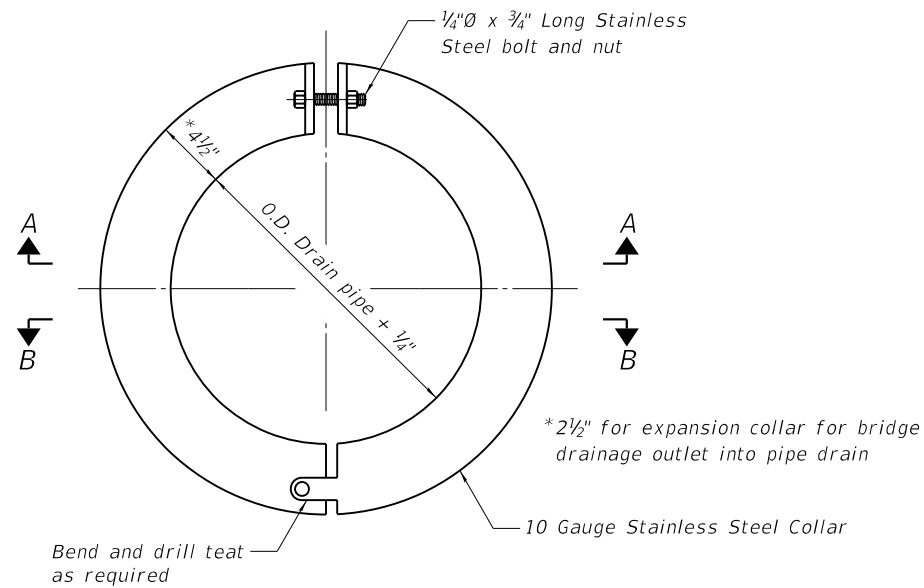
SHEET SR-60 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(14-1)BR, (14HB-2)BR-1	CHAMPAIGN	201	194
CONTRACT NO. 70C64				

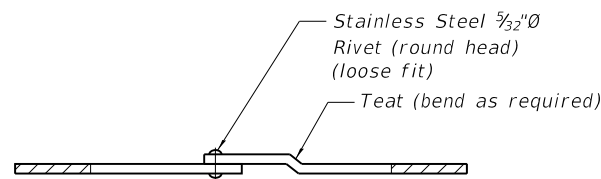
ILLINOIS FED. AID PROJECT



SECTION A-A

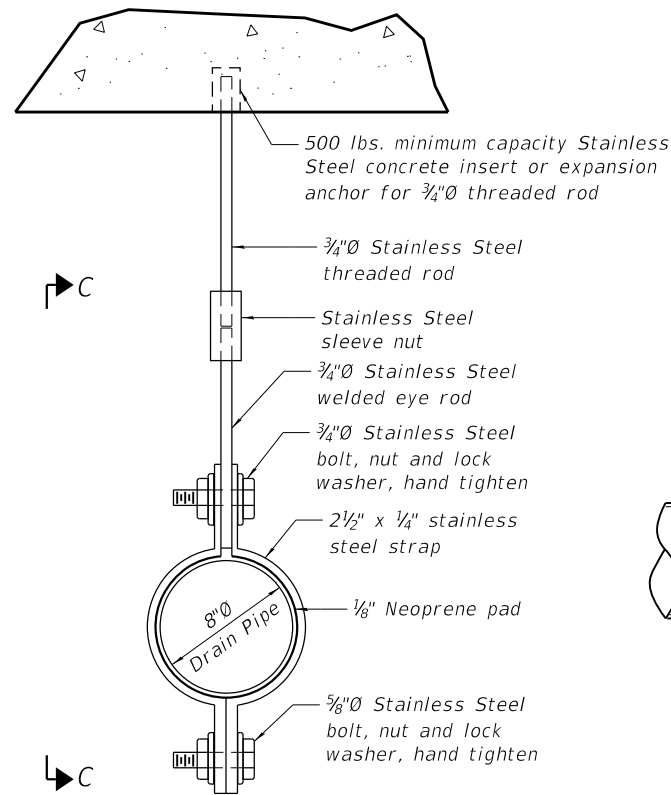


PLAN
(Looking Down)

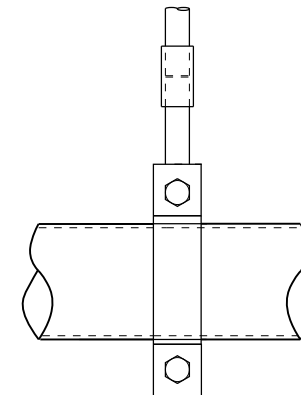


SECTION B-B

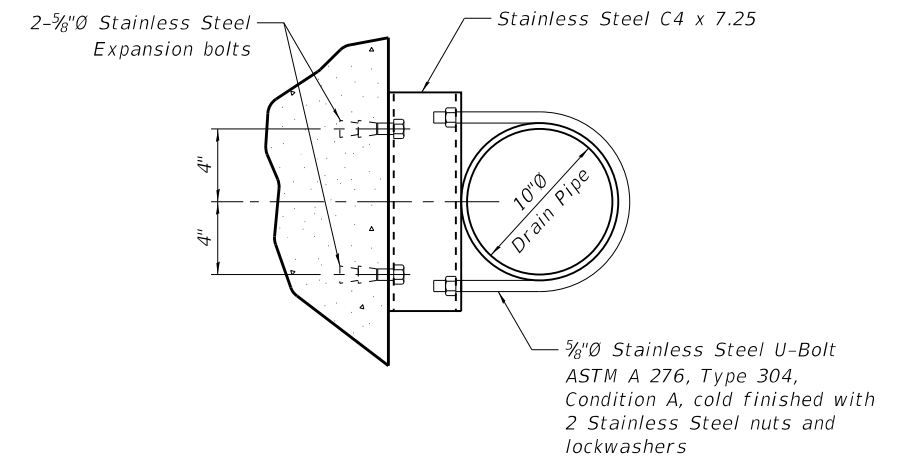
DETAIL 1
EXPANSION COLLAR DETAILS



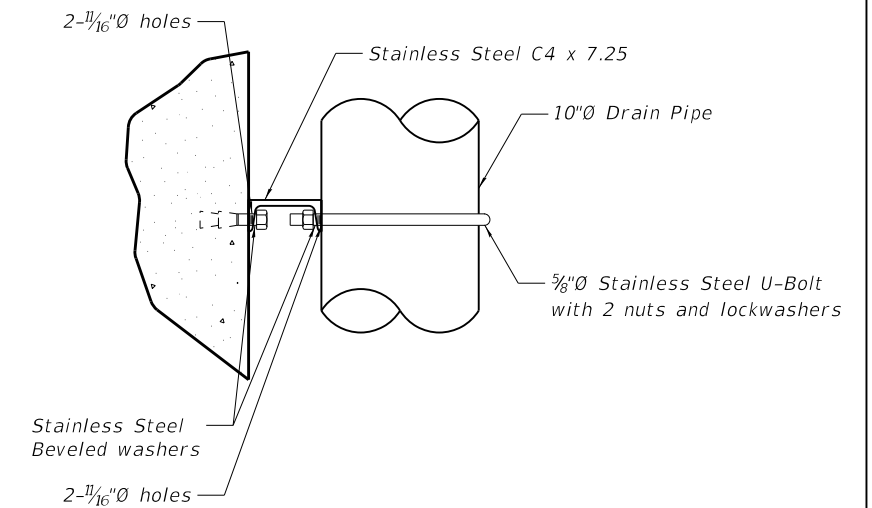
DETAIL 2
COLLECTOR PIPE HANGER DETAILS



VIEW C-C



ELEVATION



PLAN

DETAIL 3
PIPE SUPPORT DETAILS

Notes:

1. Bolt pattern and size in drain pipe flange to match scupper flange.
2. For Drainage Scupper location and spacing see sheet SR-01 of SR-63
3. For Drainage Scupper detail see sheet SR-62 of SR-63
4. All bolts, nuts and washers shall be stainless steel in accordance to standard specifications Article 1006.29(D).
5. Pipe hangers and supports shall be provided on all horizontal pipes at each tee, elbow, or change in direction and at intermediate points not more than 5'-0" centers.
6. Reducers shall be sized to accommodate a longitudinal movement of 2 1/4" in each direction.

BILL OF MATERIAL

Item	Unit	Total
Drainage System	L. Sum	0.8

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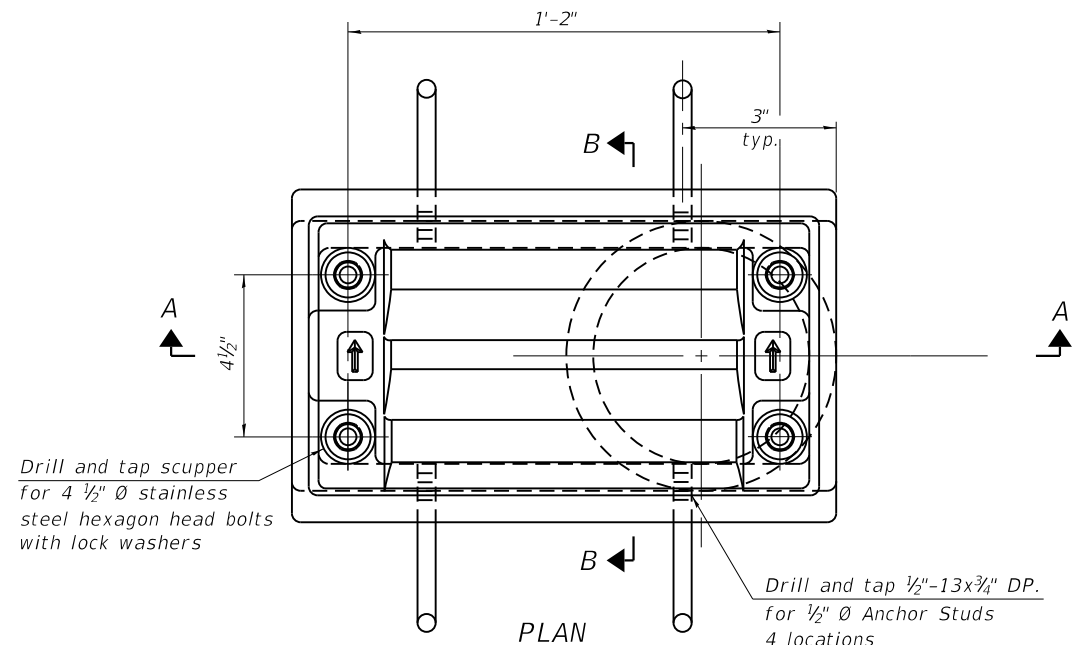
BRIDGE DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 010-0021

SHEET SR-61 OF SR-63 SHEETS

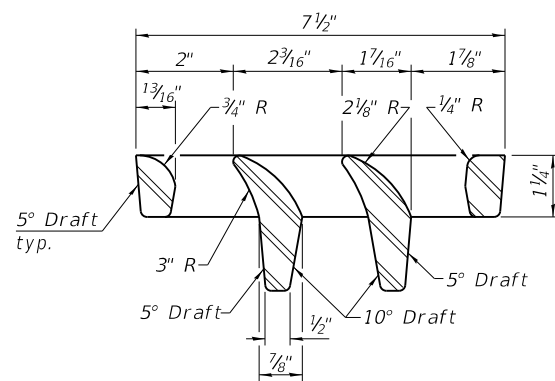
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CONTRACT NO. 70C64				

ILLINOIS FED. AID PROJECT

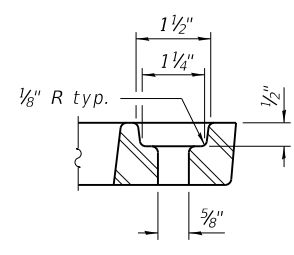
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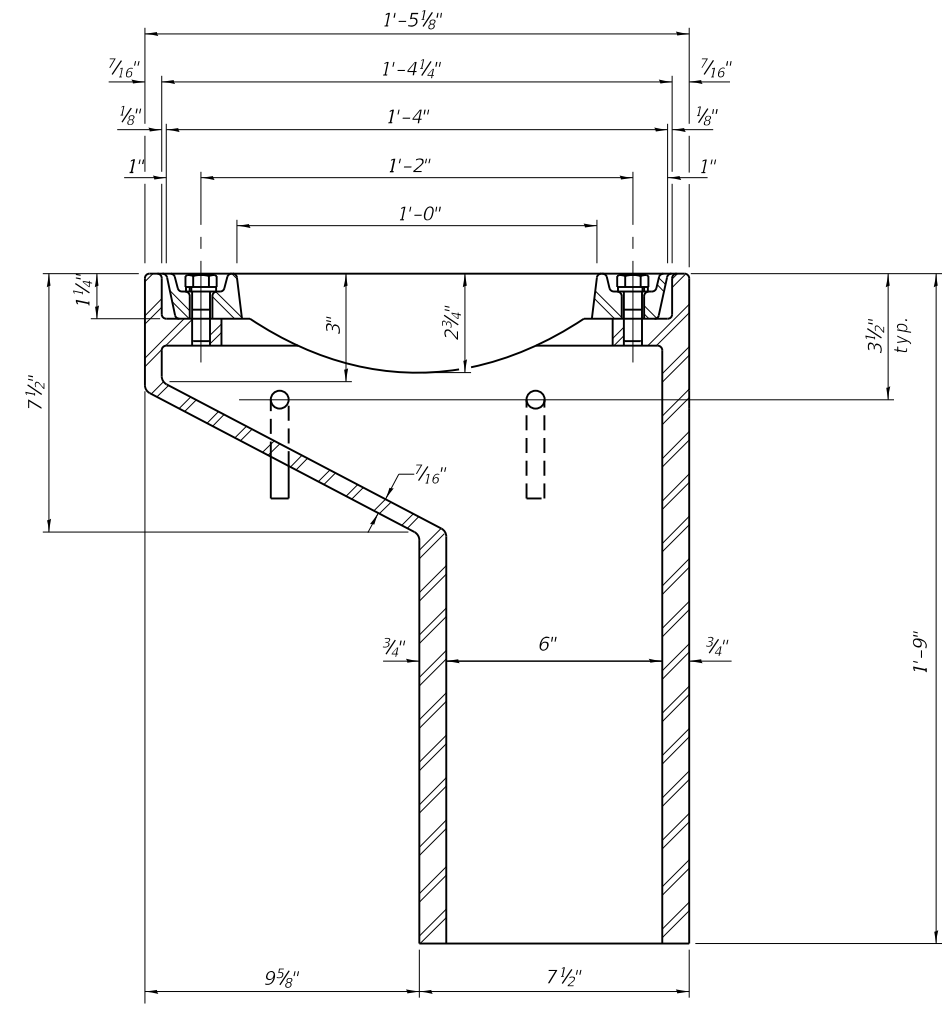
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VANE GRATE DETAIL

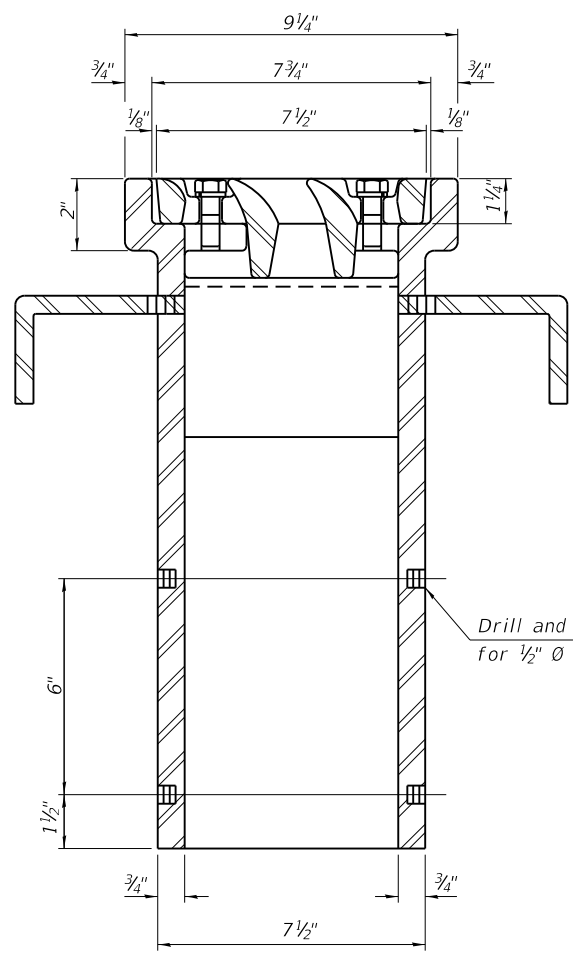


BOLT HOLE DETAIL



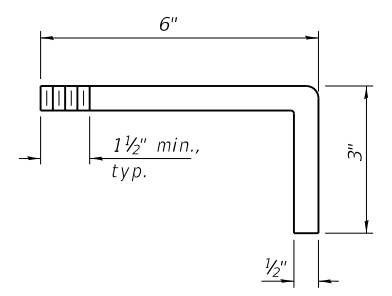
SECTION A-A

For scupper location relative to parapet, see sheet SR-23 of SR-63



SECTION B-B

Drill and tap 1/2"-13x1/2" DP, for 1/2" Ø bolts. (4 locations)



ANCHOR STUD DETAIL

Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	20

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DS-11

2-17-2017

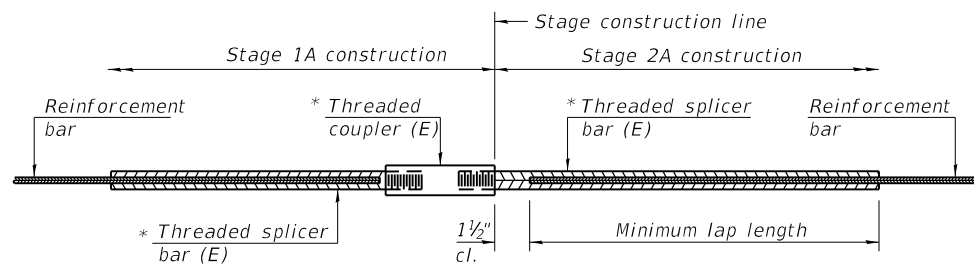
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 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER DS-11
 STRUCTURE NO. 010-0021**

SHEET SR-62 OF SR-63 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

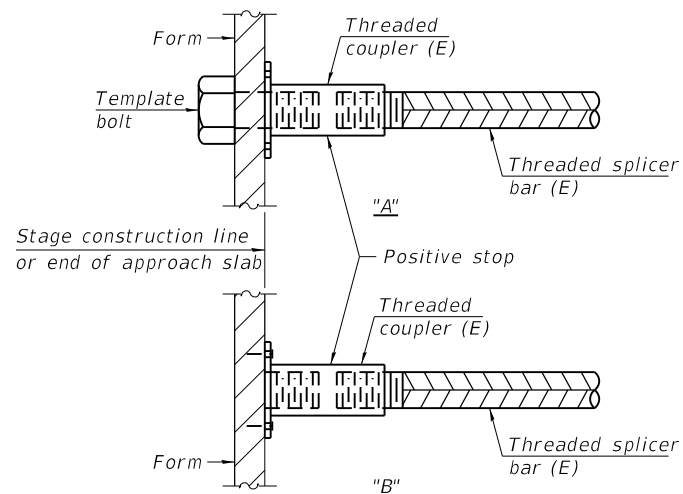


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

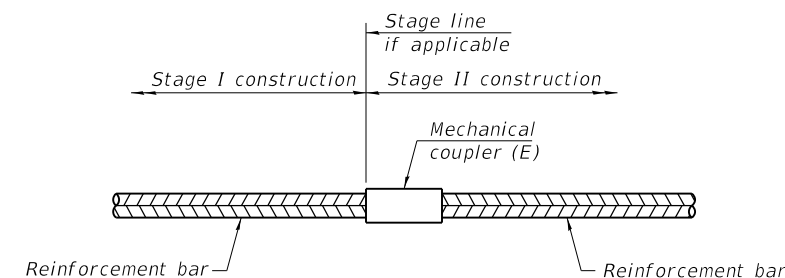
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
West Abutment	#5	34	3'-7"
West Abutment	#6	5	4'-4"
East Abutment	#5	42	3'-7"
East Abutment	#6	5	4'-4"
Pier 3	#5	21	3'-7"



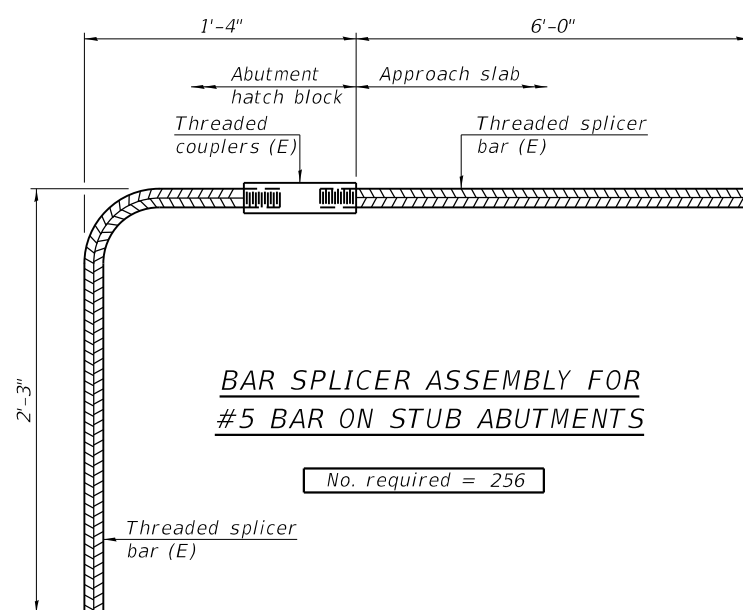
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 256

NOTES

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

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BSD-1

2-17-2017



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STATE OF ILLINOIS
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BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 010-0021

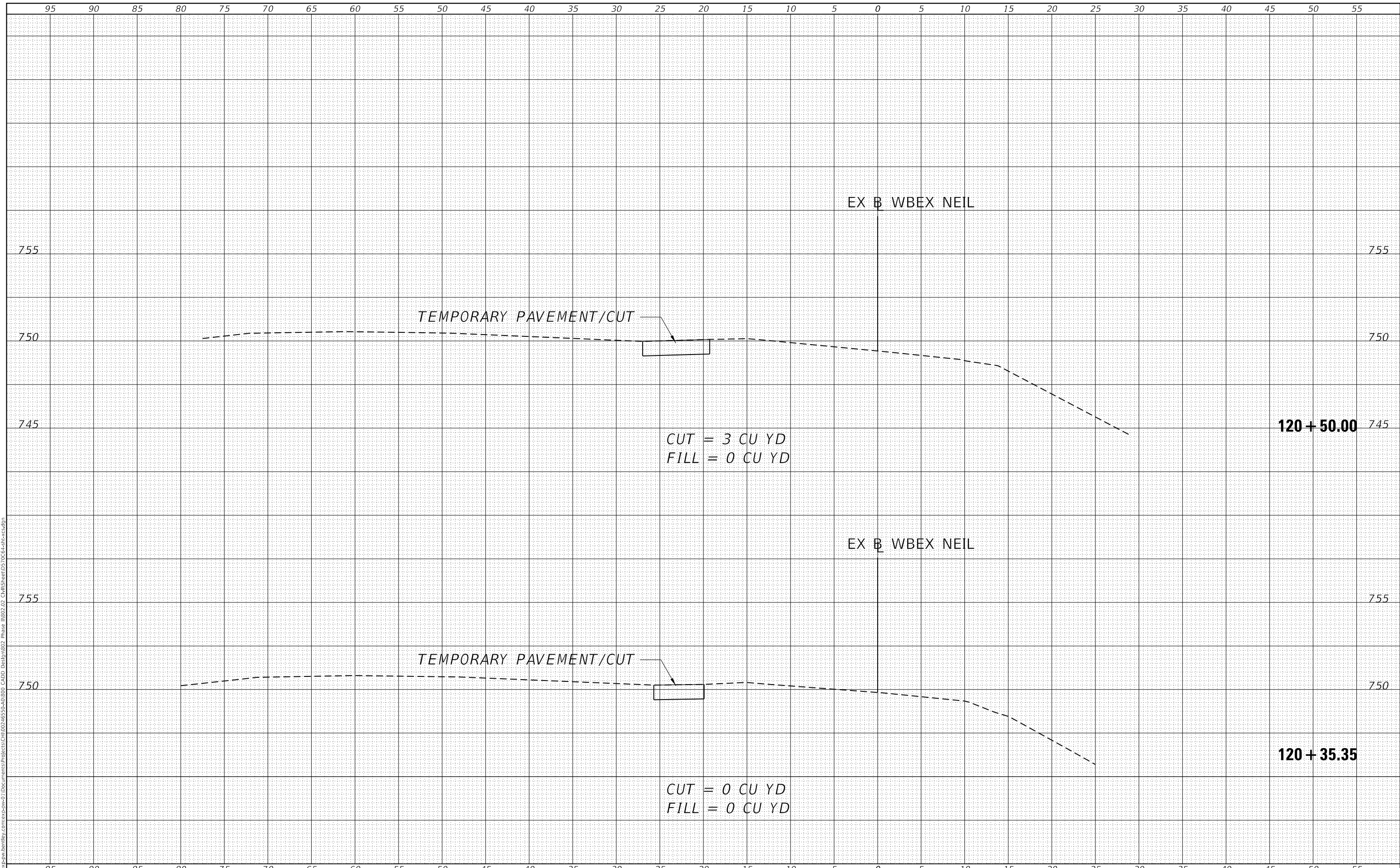
SHEET SR-63 OF SR-63 SHEETS

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CONTRACT NO. 70C64				
ILLINOIS FED. AID PROJECT				

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SURVEYED AREAS	
PLOTTED TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

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BY	
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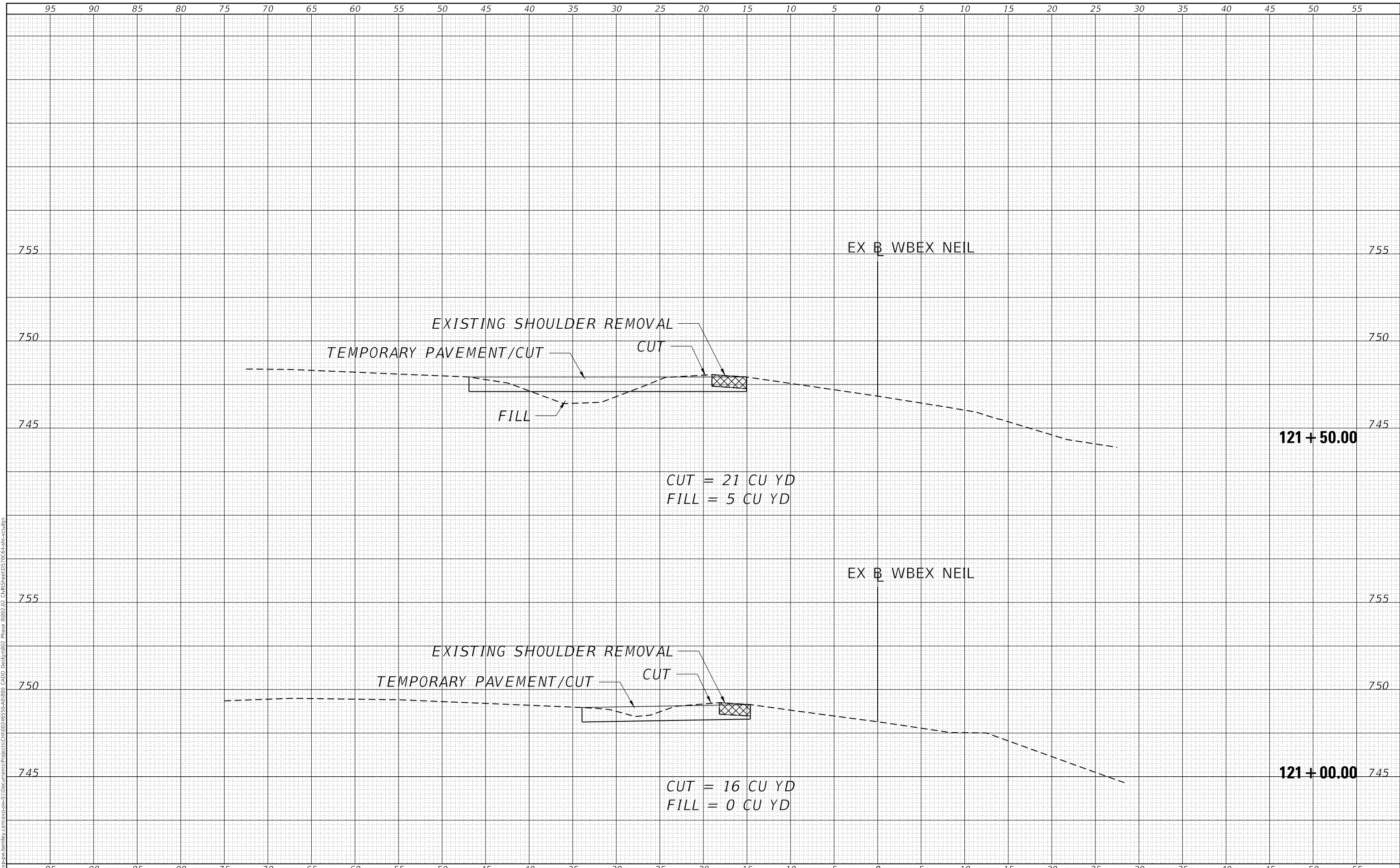


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	DATE - 10/16/2019	REVISED -									ILLINOIS FED. AID PROJECT

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY NO.	
NOTE BOOK NO.	
AREAS CHECKED	

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CUT = 21 CU YD
 FILL = 5 CU YD

CUT = 16 CU YD
 FILL = 0 CU YD

exp U.S. Services Inc.
 CHICAGO, IL
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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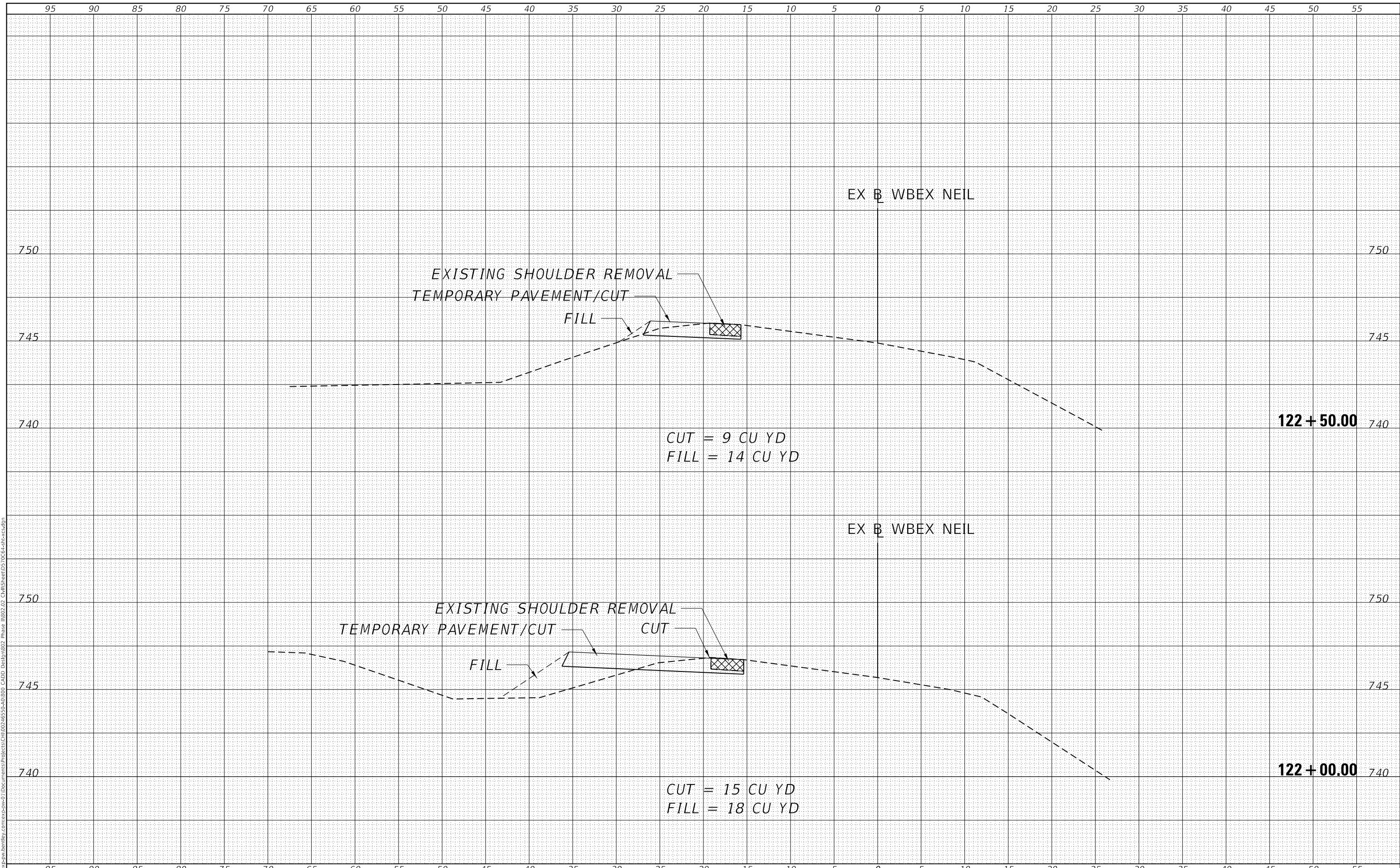
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		ILLINOIS	FED. AID PROJECT	

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exp U.S. Services Inc.
 Chicago, IL
 BUILDINGS-EARTH & ENVIRONMENT-ENERGY
 INDUSTRIAL-INFRASTRUCTURE-SUSTAINABILITY

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

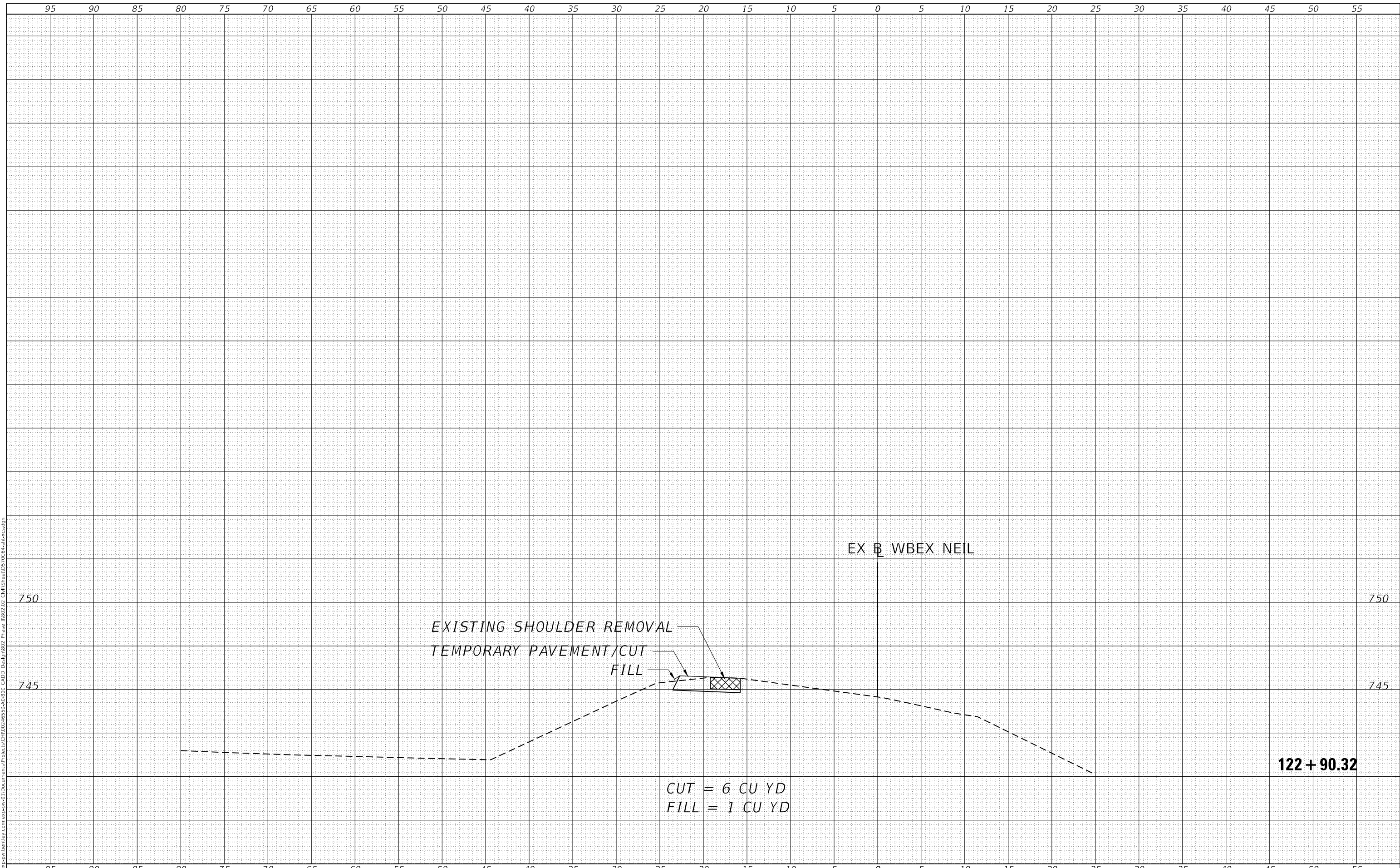
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				CONTRACT NO. 70C64
		ILLINOIS	FED. AID PROJECT	

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NOTE BOOK	PLOTTED	BY
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ORIGINAL SURVEY NO.	SURVEYED	DATE
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CHECKED -	DDH	REVISED -	
DATE -	10/16/2019	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
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