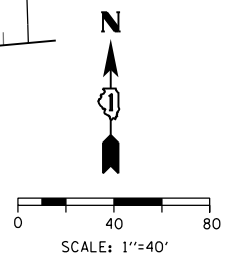
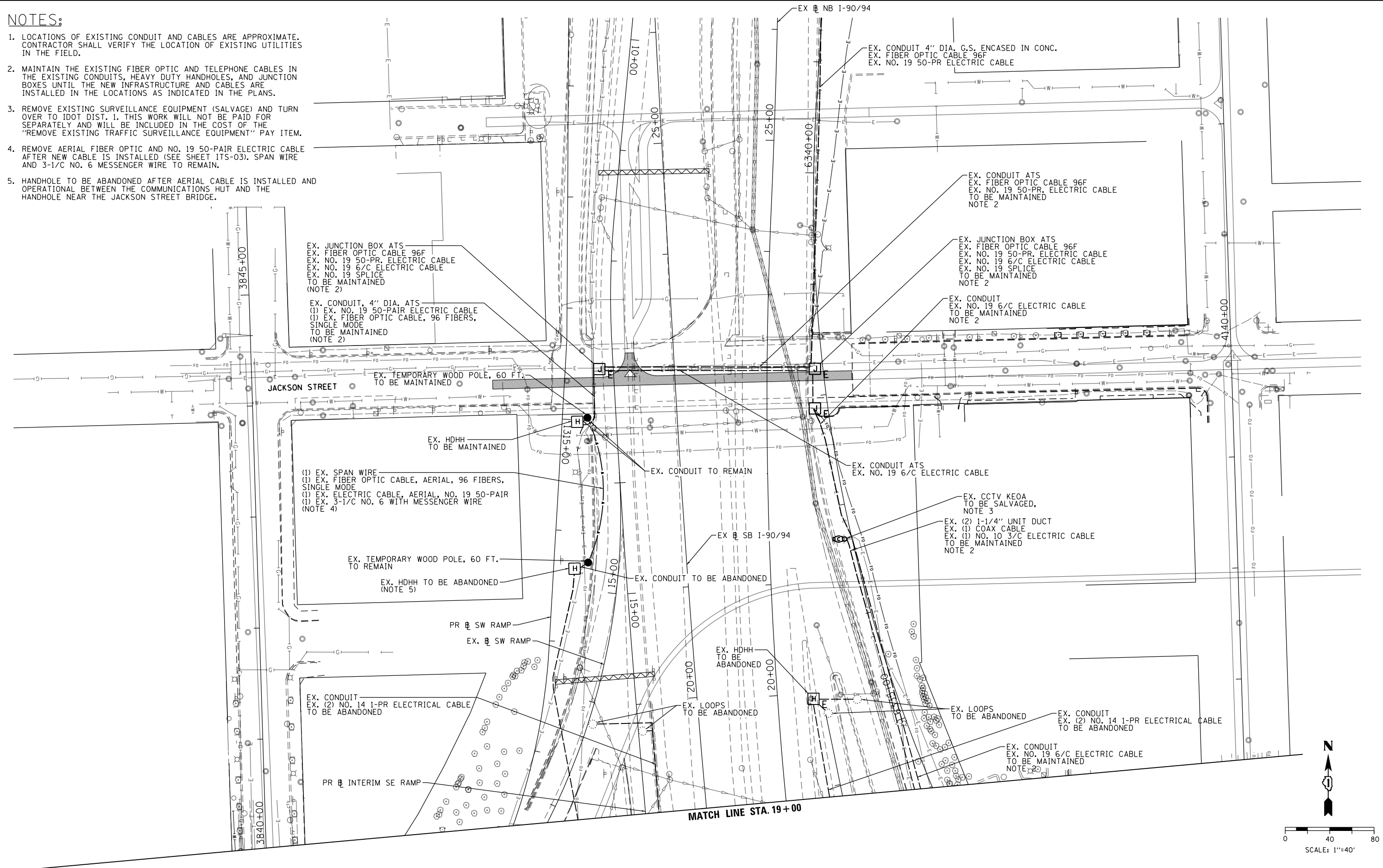


NOTES:

1. LOCATIONS OF EXISTING CONDUIT AND CABLES ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES IN THE FIELD.
2. MAINTAIN THE EXISTING FIBER OPTIC AND TELEPHONE CABLES IN THE EXISTING CONDUITS, HEAVY DUTY HANDHOLES, AND JUNCTION BOXES UNTIL THE NEW INFRASTRUCTURE AND CABLES ARE INSTALLED IN THE LOCATIONS AS INDICATED IN THE PLANS.
3. REMOVE EXISTING SURVEILLANCE EQUIPMENT (SALVAGE) AND TURN OVER TO IDOT DIST. 1. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND WILL BE INCLUDED IN THE COST OF THE "REMOVE EXISTING TRAFFIC SURVEILLANCE EQUIPMENT" PAY ITEM.
4. REMOVE AERIAL FIBER OPTIC AND NO. 19 50-PAIR ELECTRIC CABLE AFTER NEW CABLE IS INSTALLED (SEE SHEET ITS-03). SPAN WIRE AND 3-1/C NO. 6 MESSENGER WIRE TO REMAIN.
5. HANDHOLE TO BE ABANDONED AFTER AERIAL CABLE IS INSTALLED AND OPERATIONAL BETWEEN THE COMMUNICATIONS HUT AND THE HANDHOLE NEAR THE JACKSON STREET BRIDGE.



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D160X99-Sht-ITS-01
 USER NAME = myersc
 PLOT SCALE = 80.0000' / in.
 PLOT DATE = 3/29/2017

DESIGNED - GWS/MJL	REVISED -
DRAWN - CAM	REVISED -
CHECKED - JDC/ME	REVISED -
DATE - 3/31/17	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING/TEMPORARY ITS PLAN
JACKSON STREET**

SCALE: 1"=40' SHEET 1 OF 7 SHEETS STA. 19+00 TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	201
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

ITS-01

NOTES:

1. THE LOCATIONS OF THE ITS EQUIPMENT SHOWN ON THE PLANS ARE APPROXIMATIONS. THE FINAL INSTALLATION LOCATIONS OF THE ITS EQUIPMENT SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING ANY WORK TO IDENTIFY ANY CONFLICTS WITH EXISTING/PROPOSED UTILITIES AND WORK PERFORMED BY OTHER DISCIPLINES.
2. DISCONNECT AND PULL BACK CABLES FROM THE COMMUNICATIONS HUT. EXCESS CABLE IS TO BE SALVAGED AND RETURNED TO IDOT DISTRICT 1 ELECTRICAL MAINTENANCE. THE CONTRACTOR SHALL COORDINATE ALL DISCONNECTION AND SPLICING WORK WITH IDOT/OAK PARK TSC. THIS WORK SHALL ONLY OCCUR OVERNIGHT AFTER THE PM PEAK HOUR AND BEFORE THE AM PEAK HOUR THE NEXT MORNING. ALL SPLICING AND TERMINATION WORK SHALL BE ACCOMPLISHED IN ONE NIGHT. ALL CABLE ASSIGNMENTS SHALL REMAIN THE SAME.
3. INSTALL CCTV CAMERA USING MANUFACTURER'S PENDANT MOUNT ATTACHED TO WOOD POLE. G.S. CONDUIT WILL ENTER CCTV CABINET MOUNTED TO THE POLE. CCTV CAMERA TO BE MOUNTED BELOW AERIAL FIBER OPTIC AND ELECTRIC CABLES.
4. SPLICE NEW FIBER OPTIC CABLE, 96 FIBERS TO EXISTING FIBER OPTIC CABLE IN THE EXISTING HANDHOLE.
5. SPLICE NEW NO. 19 50-PAIR CABLE TO EXISTING CABLES IN THE EXISTING HANDHOLE.
6. WIRELESS VEHICLE DETECTION SYSTEM IN-PAVEMENT DETECTORS TO BE CENTERED IN EACH MAINLINE AND RAMP LANE. REMOVE AND RELOCATE LANE SENSORS FOR RAMP SE AND RAMP SW AS NECESSARY TO ALLOW FOR RAMP LANE REALIGNMENT.
7. TEMPORARY WOOD POLES, CONDUITS, CABLES, CCTV, AND SENSYS NETWORKS SYSTEM TO REMAIN BEYOND THIS CONTRACT AND ARE TO BE TURNED OVER TO IDOT AT THE END OF THE PROJECT.
8. INSTALL 50 FEET OF SLACK OF ALL CABLES ON EACH WOOD POLE.
9. INSTALL CONDUIT AND CABLES ATS ON POLE AND UNDERGROUND TO EX. HANDHOLE.
10. THE WIRELESS VEHICLE DETECTION SYSTEM RADIOS REQUIRE LINE OF SIGHT. THE CONTRACTOR SHALL LOCATE THE SYSTEM SO THAT EXISTING TREES WILL NOT IMPEDE THE WIRELESS SIGNAL BETWEEN THE POLE MOUNTED EQUIPMENT.
11. FIBER OPTIC CABLE ASSIGNMENTS FOR THE CCTV CAMERA ARE TO BE IDENTIFIED BY THE IDOT OAK PARK TSC ELECTRICAL ENGINEER.
12. INTERCEPT THE EXISTING CONDUIT AT THE BASE OF THE WALL. INSTALL NEW NO. 19 6/C CABLE TO THE EXISTING JUNCTION BOX ATTACHED TO STRUCTURE AND SPLICE WITH THE EXISTING NO. 19 6/C CABLE.

- (1) EX. TEMPORARY WOOD POLE, 60 FT., CLASS 4
- (1) CCTV DOME CAMERA, HD
- (1) CCTV EQUIPMENT CABINET, STRUCTURE MOUNTING
- (1) CCTV EQUIPMENT, FIBER OPTIC DISTRIBUTION
- (1) EX. CONDUIT ATS, PVC COATED G.S., 3" DIA.
- (1) 105 FT. FIBER OPTIC CABLE IN CONDUIT, 96 FIBERS, SINGLE MODE
- (1) 105 FT. ELECTRIC CABLE IN CONDUIT, NO. 19 50-PAIR
- NOTES 7, 8, AND 9

- EX. 2" CONDUIT ATS WITH NO. 19 6/C ELECTRIC CABLE
- EX. 4" CONDUIT ATS WITH 96F FIBER OPTIC CABLE AND NO. 19 50-PAIR ELECTRIC CABLE
- EX. JUNCTION BOX ATS

SPLICE EX. AND PR. NO. 19 6/C CABLES IN THIS EX. JB ATS

(1) 100 FT. ELECTRIC CABLE IN EXISTING CONDUIT, NO. 19 50-PAIR
EX. CONDUIT WITH 96F FIBER OPTIC

(1) INTERCEPT EXISTING CONDUIT
NOTE 12

EX. HDHH
(1) FIBER OPTIC SPLICE,
MAINLINE
NOTE 4, 5

(2) EX. CONDUIT ATTACHED TO STRUCTURE, PVC COATED G.S., 2" DIA.
(1) 55 FT. FIBER OPTIC IN CONDUIT, 12 FIBERS, SINGLE MODE
(1) EX. 3-1/C NO. 6 WITH MESSENGER WIRE
NOTE 3

(1) 358 FT. UNDERGROUND CONDUIT, PVC, 2" DIA.
(1) 380 FT. ELECTRIC CABLE IN CONDUIT,
COMMUNICATION, NO. 19 6/C

(1) TEMPORARY WOOD POLE, 40 FT., CLASS 4
WIRELESS VEHICLE DETECTION SYSTEM (REPEATER)
NOTES 7 AND 10

(1) EX. SPAN WIRE
(1) 100 FT. FIBER OPTIC CABLE, AERIAL, 96 FIBERS, SINGLE MODE
(1) 100 FT. FIBER OPTIC CABLE, AERIAL, 12 FIBERS, SINGLE MODE
(1) 100 FT. ELECTRIC CABLE, AERIAL, NO. 19 50-PAIR
(1) EX. 3-1/C NO. 6 WITH MESSENGER WIRE

EX. TEMPORARY WOOD POLE, 60 FT.
NOTES 8 AND 9

(1) 135 FT. SPAN WIRE
(1) 135 FT. FIBER OPTIC CABLE, AERIAL, 96 FIBERS, SINGLE MODE
(1) 135 FT. FIBER OPTIC CABLE, AERIAL, 12 FIBERS, SINGLE MODE
(1) 135 FT. ELECTRIC CABLE, AERIAL INSTALLATION, NO. 19 50-PAIR
(1) 135 FT. 3-1/C NO. 6 WITH MESSENGER WIRE

(1) TEMPORARY WOOD POLE, 60 FT., CLASS 4
(1) WIRELESS VEHICLE DETECTION SYSTEM (ACCESS POINT & CABINET)
(1) 20 FT. CONDUIT ATS, PVC COATED, G.S., 2" DIA.
(1) 20 FT. 3-1/C NO. 6 WITH MESSENGER WIRE
NOTES 8 AND 9

(1) TEMPORARY WOOD POLE, 60 FT., CLASS 4
NOTES 8 AND 9

(1) 90 FT. SPAN WIRE
(1) 90 FT. FIBER OPTIC CABLE, AERIAL, 96 FIBERS, SINGLE MODE
(1) 90 FT. FIBER OPTIC CABLE, AERIAL, 12 FIBERS, SINGLE MODE
(1) 90 FT. ELECTRIC CABLE, AERIAL INSTALLATION, NO. 19 50-PAIR
(1) 90 FT. 3-1/C NO. 6 WITH MESSENGER WIRE

(2) 220 FT. REMOVAL OF
CABLE IN CONDUIT
NOTE 2

(1) 98 FT. SPAN WIRE
(1) 98 FT. FIBER OPTIC CABLE, AERIAL, 96 FIBERS, SINGLE MODE
(1) 98 FT. FIBER OPTIC CABLE, AERIAL, 12 FIBERS, SINGLE MODE
(1) 98 FT. ELECTRIC CABLE, AERIAL INSTALLATION, NO. 19 50-PAIR
(1) 98 FT. 3-1/C NO. 6 WITH MESSENGER WIRE



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D160X99-Sht-11S-03
 USER NAME = myersc
 PLOT SCALE = 80.0000' / in.
 PLOT DATE = 3/29/2017

DESIGNED - GWS/MJL
 DRAWN - CAM
 CHECKED - JDC/ME
 DATE - 3/31/17

REVISED -
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 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

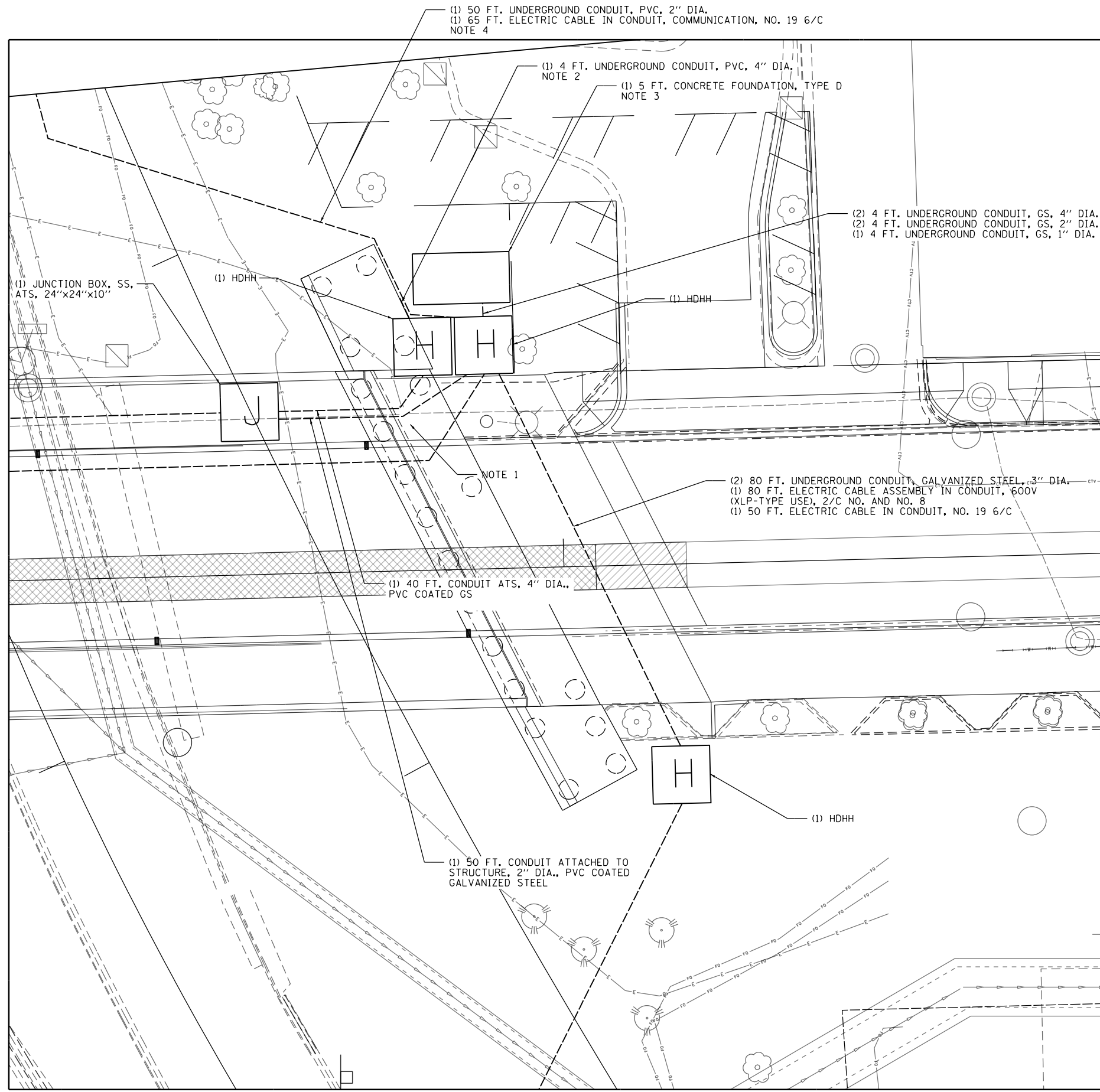
ITS PLAN
 JACKSON STREET
 SCALE: 1"=40'
 SHEET 3 OF 7 SHEETS
 STA. 19+00 TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	203
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

ITS-03

NOTES:

1. A SEPARATE BAY IS PROVIDED IN THE EAST ABUTMENT WALL FOR ITS CONDUITS. SEE THE STRUCTURAL DRAWINGS.
2. STUB OUT THE 4" PVC CONDUIT AND CAP FOR FUTURE USE.
3. THE CONCRETE FOUNDATION SHALL BE SIZED FOR AN ESP4 CABINET HOUSING. ALL CONDUITS TO BE CAPPED FOR FUTURE USE. SEE IDOT STANDARD 878001-10 FOR FOUNDATION DETAILS.
4. CONNECT THE NO. 19 6/C CABLES IN THE HDHH NEXT TO THE CABINET FOUNDATION TO PROVIDE CONTINUITY WITH ITS CABINETS Z5 AND Z4.



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D160X99-sht-ITS-05
 USER NAME = myersc
 PLOT SCALE = 40.0000' / in.
 PLOT DATE = 12/14/2016

DESIGNED - GWS	REVISED -
DRAWN - CAM	REVISED -
CHECKED - JDG	REVISED -
DATE - 12/14/16	REVISED -

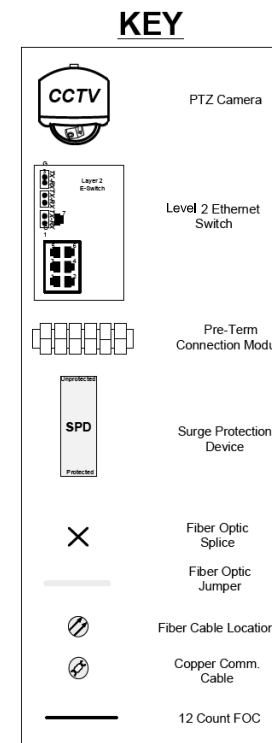
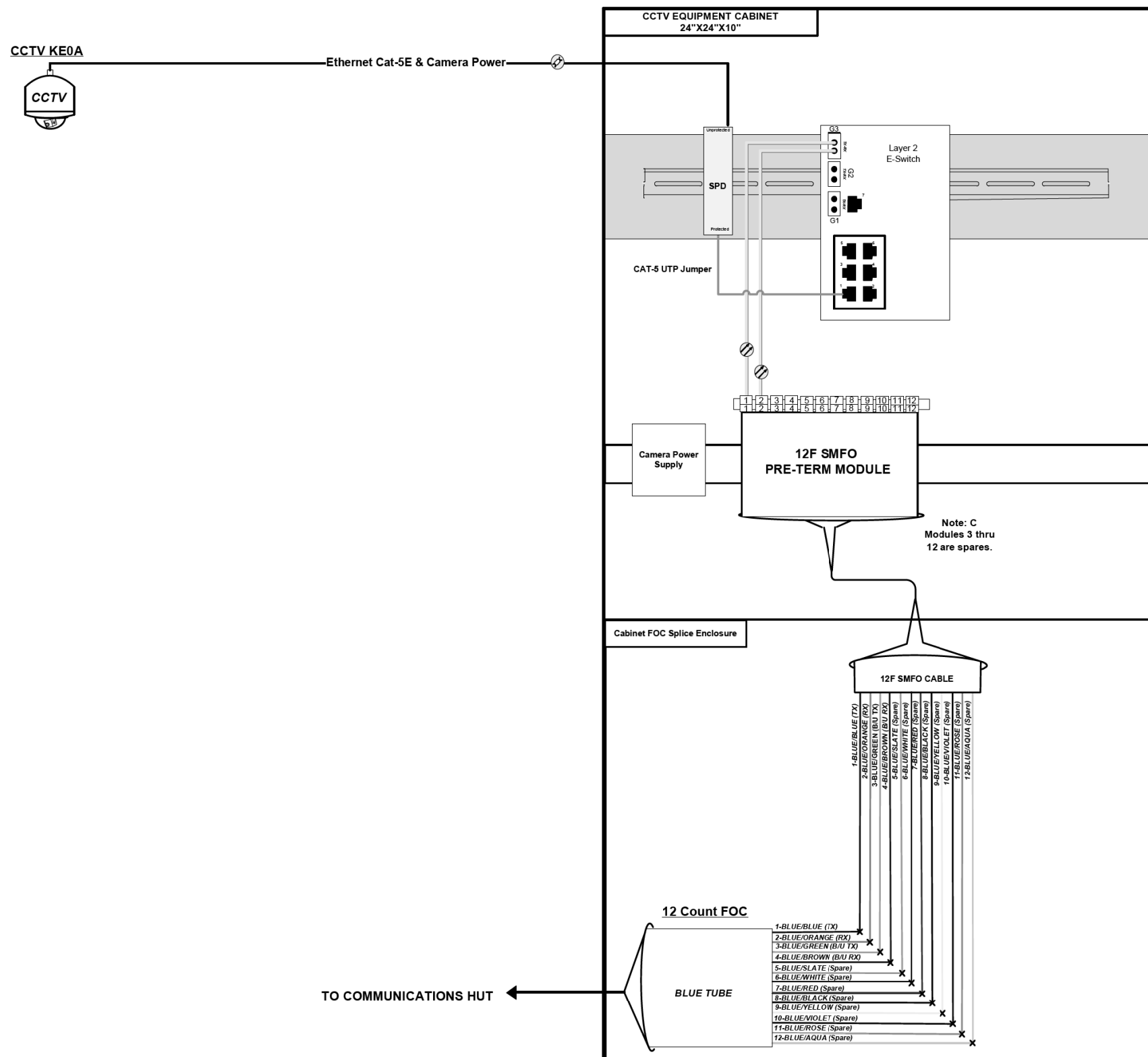
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DETAIL A

SCALE: N.T.S. SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	205
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

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**COMMUNICATIONS DETAIL
CCTV KE0A**

ITS-06



D160X99-sht-ITS-06	DESIGNED - GWS	REVISED -
USER NAME = myersc	DRAWN - CAM	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - JDG	REVISED -
PLOT DATE = 12/8/2016	DATE - 12/14/16	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

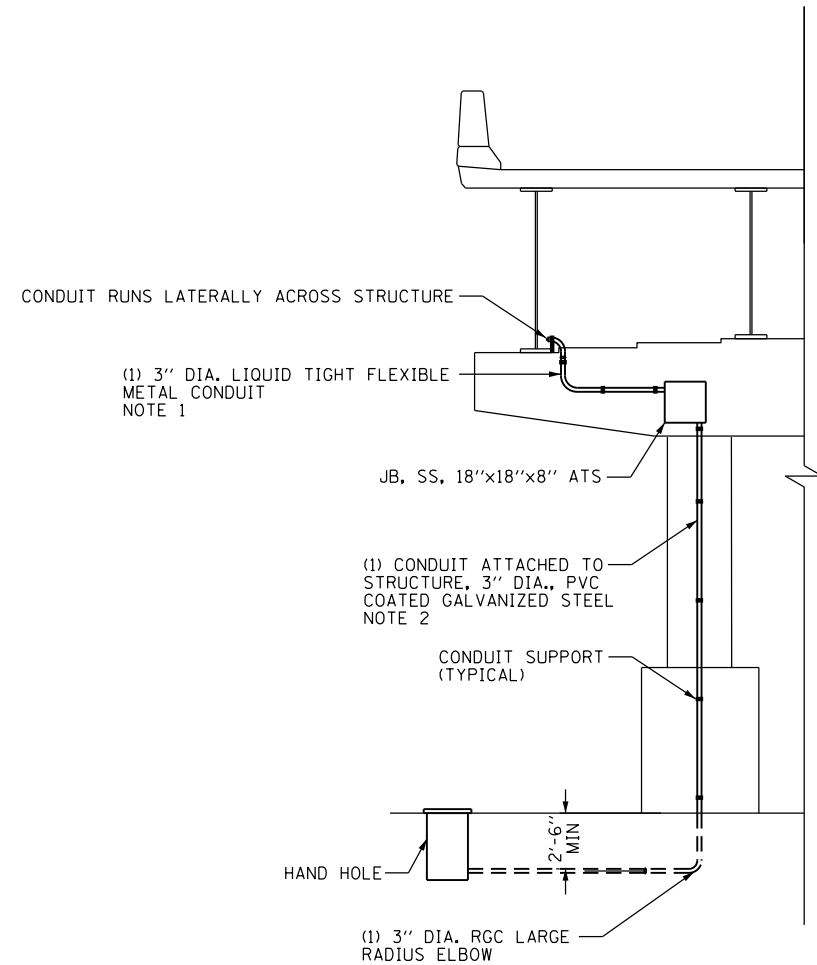
COMMUNICATIONS DETAIL

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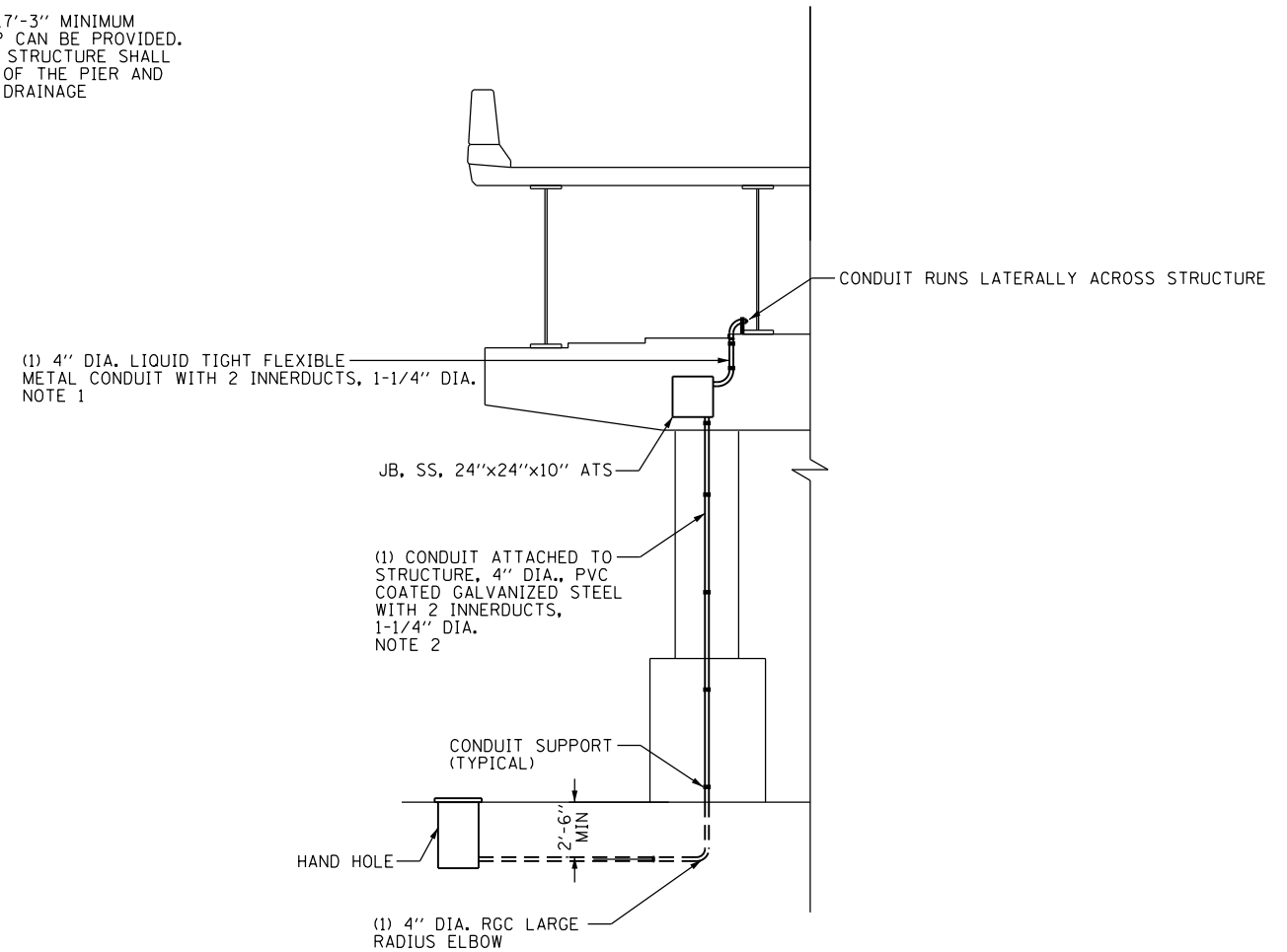
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	206
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

NOTES:

1. THE FLEXIBLE CONDUIT WILL BE MEASURED AND PAID FOR UNDER THE CONDUIT ATTACHED TO STRUCTURE PAY ITEMS.
2. AT ALL LOCATIONS WHERE 17'-3" MINIMUM CLEARANCE UNDER PIER CAP CAN BE PROVIDED, CONDUIT ATTACHED TO THE STRUCTURE SHALL BE PLACED IN THE REVEAL OF THE PIER AND SHALL NOT CONFLICT WITH DRAINAGE INFRASTRUCTURE.



CONDUIT ATTACHED TO PIER INSTALLATION DETAIL
(LOOP CABLES)



CONDUIT ATTACHED TO PIER INSTALLATION DETAIL
(FIBER OPTIC AND TELEPHONE CABLES)

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D160X99-sht-ITS-07
 USER NAME = myersc
 PLOT SCALE = 40.0000' / in.
 PLOT DATE = 12/8/2016

DESIGNED - GWS
 DRAWN - CAM
 CHECKED - JDG
 DATE - 12/14/16

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

ITS DETAILS - CONDUIT ATTACHED TO STRUCTURE

SCALE: N.T.S. SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	207
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

ITS-07

GENERAL NOTES:

- Fasteners shall be ASTM A325 Type 1, hot dip galvanized bolts. Bolts 7/8 in. φ, holes 15/16 in. φ, unless otherwise noted (See special provision for Hot Dip Galvanizing for Structural Steel).
- Calculated weight of Structural Steel = 1,398,370 pounds (AASHTO M270 Grade 50).
Calculated weight of Structural Steel = 81,790 pounds (AASHTO M270 Grade 36).
- All structural steel shall be hot dip galvanized. Cost included in Furnishing and Erecting Structural Steel. See special provision for Hot Dip Galvanizing For Structural Steel.
- Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
- Girders have bearing stiffeners and connection plates as required by design. Additional stiffeners may be added at the Contractor's expense as necessary to prevent distortion of the girders during galvanizing. The Contractor shall coordinate with the fabricator and the galvanizer to determine if additional stiffeners are necessary, and where these should be placed. Any proposed changes shall be submitted to the Engineer for approval prior to making any changes.
- Temporary stiffener angles shall be bolted to each side of the splice ends of each girder segment to prevent distortion during galvanizing. Temporary stiffener angles shall bolt or fit tight against the top and bottom flanges and shall include spacer tubes to minimize damage to galvanizing during removal. Cost included with "Furnishing and Erecting Structural Steel".
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Plan dimension 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 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.
- Concrete Sealer shall be applied to the designated areas of the Piers, Abutments, and Wingwalls.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- For Conduit Attached to Structure quantities and details, see Electrical Plans.
- The contractor shall exercise extreme caution during construction to make certain that construction activities, live load surcharge and other loads applied to the structures will not have detrimental effects on the adjacent building foundations and the existing siphon and main drain. Any damage during construction shall be repaired by the contractor at his expense and no charge to the department. Driving piles and temporary sheet piling is not allowed.
- Abandoned 8' diameter CTA Water Tunnel shall be filled prior to the start of drilled shaft construction in a previous contract. The Contractor shall verify with the Engineer that the tunnel has been filled prior to the start of drilled shaft construction. A number of the drilled shaft foundations will be placed through this tunnel. Drilling operations must account for the presence of debris, brick material, CLSM and bedding material in addition to soil and other expected materials to be encountered.
- Slipforming of parapets is not allowed.
- For drilled shaft locations where permanent casing is required as shown on the plans, the casing will be paid for under the Permanent Casing pay item. If contractor elects to use permanent casing for ease of construction in locations where permanent casing is not required on the plans, the casing will not be paid for separately and is included in the Drilled Shaft in Soil pay item.
- Limited groundwater elevation data is available in the boring logs. In addition, groundwater may also be present in deeper granular layers. The groundwater may rise in the shafts to an elevation above the top of granular layers. The Contractor shall consider this information when choosing construction methods. The Contractor will not be compensated for issues related to the groundwater elevation.

STATION 8150+37.65
BUILT 20-- BY
STATE OF ILLINOIS
F.A.U. RT. 1423 SEC. 2014-017B
LOADING HL-93
STR. NO. 016-1707

NAME PLATE
See Std. 515001

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- S-02 General Data 1
- S-03 General Data 2
- S-04 Foundation Layout
- S-05 Temporary Soil Retention Details 1
- S-06 Temporary Soil Retention Details 2
- S-07 Existing Structure Removal Details
- S-08 Top of Slab Elevations 1
- S-09 Top of Slab Elevations 2
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- S-60 Boring Logs 7
- S-61 Boring Logs 8

CURVE DATA

(@ Ramp SW)
P-CIR-SW-3
P.I. Sta. = 1322+16.98
Δ = 83°35'08" (RT)
D = 10°03'07"
R = 570.00'
T = 509.51'
L = 831.54'
E = 194.53'
e = 5.40%
T.R. = NA
S.E. Run = 101'
P.C. Sta. = 1317+07.47
P.T. Sta. = 1325+39.01

CURVE DATA

(@ SB Taylor Exit)
P-TAY-SX-1
P.I. Sta. = 6404+16.60
Δ = 43°59'21" (RT)
D = 30°58'14"
R = 185.00'
T = 74.72'
L = 142.03'
E = 14.52'
e = 6.00%
T.R. = NA
S.E. Run = 91'
P.C. Sta. = 6403+41.87
P.T. Sta. = 6404+83.91

CURVE DATA

(@ Ramp SE)
P-CIR-SE-1
P.I. Sta. = 1401+94.82
Δ = 45°11'30" (RT)
D = 30°58'14"
R = 185.00'
T = 76.99'
L = 145.92'
E = 15.38'
e = 6.00%
T.R. = NA
S.E. Run = 91'
P.C. Sta. = 1401+17.83
P.T. Sta. = 1402+63.75

CURVE DATA

(@ I-90/94 NB)
P-KDR-NB-4
P.I. Sta. = 6143+87.92
Δ = 12°26'15" (RT)
D = 2°22'10"
R = 2,418.00'
T = 263.48'
L = 524.89'
E = 14.31'
e = 5.00%
T.R. = 80'
S.E. Run = 268'
P.C. Sta. = 6141+24.44
P.T. Sta. = 6146+49.33

CURVE DATA

(@ NB C-D Road)
P-NCD-NX-5
P.I. Sta. = 6336+57.47
Δ = 35°13'41" (RT)
D = 4°12'24"
R = 1,362.00'
T = 432.42'
L = 837.42'
E = 67.00'
e = 4.20%
T.R. = 41'
S.E. Run = 87'
P.C. Sta. = 6332+25.05
P.T. Sta. = 6340+62.48

CURVE DATA

(@ Ramp WN)
P-CIR-WN-2
P.I. Sta. = 1105+88.67
Δ = 69°00'44" (RT)
D = 12°43'57"
R = 450.00'
T = 309.35'
L = 542.02'
E = 96.07'
e = 5.20%
T.R. = NA
S.E. Run = 46'
P.C. Sta. = 1102+79.32
P.T. Sta. = 1108+21.34

CURVE DATA

(@ Ramp EN)
P-CIR-WN-3
P.I. Sta. = 1108+60.30
Δ = 1°51'47" (RT)
D = 2°23'29"
R = 2,396.00'
T = 38.96'
L = 77.91'
E = 0.32'
e = 5.00%
T.R. = NA
S.E. Run = NA
P.C. Sta. = 1108+21.34
P.T. Sta. = 1108+99.25

CURVE DATA

(@ Ramp EN)
P-CIR-EN-3
P.I. Sta. = 1621+50.17
Δ = 28°56'55" (RT)
D = 4°48'53"
R = 1,190.00'
T = 307.19'
L = 601.25'
E = 39.01'
e = 4.40%
T.R. = NA
S.E. Run = 50'
P.C. Sta. = 1618+42.98
P.T. Sta. = 1624+44.23

CURVE DATA

(@ EN Slip Ramp)
P-ENS-NX-2
P.I. Sta. = 6504+42.53
Δ = 11°16'16" (RT)
D = 4°13'09"
R = 1,358.00'
T = 134.00'
L = 267.14'
E = 6.60'
e = 4.20%
T.R. = NA
S.E. Run = 61'
P.C. Sta. = 6503+08.53
P.T. Sta. = 6505+75.67

For information only. Part of future contract.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total Quantity
Porous Granular Backfill	Cu. Yd.		280	280
Removal Of Existing Structures	Each			1
Protective Shield	Sq. Yd.	3,539		3,539
Structure Excavation	Cu. Yd.		3,163	3,163
Concrete Structures	Cu. Yd.		1,357.0	1,357.0
Rubbed Finish	Sq. Ft.		3,639	3,639
Concrete Superstructure	Cu. Yd.	1,285.7		1,285.7
Bridge Deck Grooving	Sq. Yd.	2,124		2,124
Form Liner Textured Surface	Sq. Ft.		1,633	1,633
Protective Coat	Sq. Yd.	4,009		4,009
Concrete Superstructure (Approach Slab)	Cu. Yd.	164.5		164.5
Furnishing And Erecting Structural Steel	L. Sum		1	1
Stud Shear Connectors	Each	13,092		13,092
Reinforcement Bars	Pound		429,660	429,660
Reinforcement Bars, Epoxy Coated	Pound	299,840	193,210	493,050
Bar Splicers	Each		135	135
Name Plates	Each		1	1
Permanent Casing	Foot		1,563	1,563
Drilled Shaft In Soil	Cu. Yd.		1,832.2	1,832.2
Drilled Shaft In Rock	Cu. Yd.		43.9	43.9
Preformed Joint Strip Seal	Foot	137		137
Elastomeric Bearing Assembly, Type II	Each	36		36
Anchor Bolts, 5/8"	Each	24		24
Anchor Bolts, 3/4"	Each	48		48
Anchor Bolts, 1"	Each	24		24
Anchor Bolts, 1 1/4"	Each	24		24
Temporary Soil Retention System	Sq. Ft.		8,636	8,636
Concrete Sealer	Sq. Ft.		11,411	11,411
Geocomposite Wall Drain	Sq. Yd.		502	502
Decorative Railing (Parapet Mounted)	Foot	956		956
Crosshole Sonic Logging	Each		5	5
Granular Backfill For Structures	Cu. Yd.		444	444
Drainage Scuppers, DS-11	Each	12		12
Drainage System	L. Sum		1	1
Pipe Underdrains For Structures 4"	Foot		205	205

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA 1
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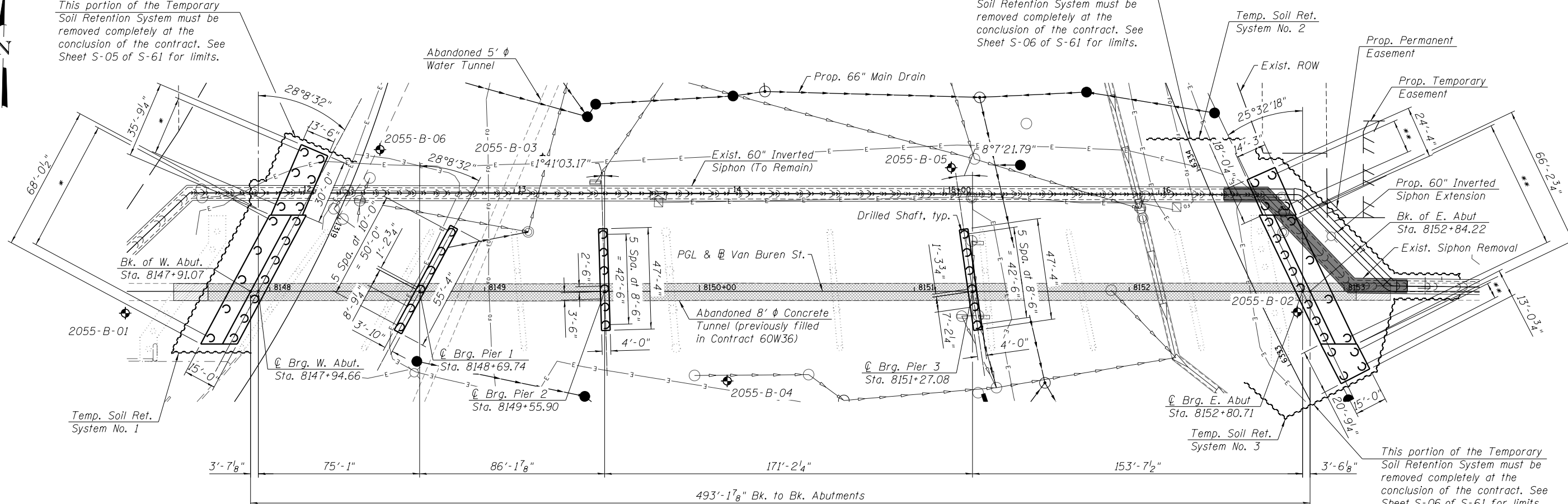
SHEET NO. S-02 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 209
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



This portion of the Temporary Soil Retention System must be removed completely at the conclusion of the contract. See Sheet S-05 of S-61 for limits.

This portion of the Temporary Soil Retention System must be removed completely at the conclusion of the contract. See Sheet S-06 of S-61 for limits.



FOUNDATION LAYOUT

- * Shaft spacing varies. See Sheet S-36 of S-61.
- ** Shaft spacing varies. See Sheet S-40 of S-61.

LEGEND

- Combined Sewer →→→→→
- Storm Sewer —▶—▶—▶
- Light Pole ○
- Soil Boring ⊕
- Siphon Removal ■

Notes:
 Driving piles and temporary sheet piling is not allowed.
 See the Utility Plan on sheet S-03 of S-61 for existing utilities.
 The maximum allowable excavation slope is 1:2 (V:H).
 For Temporary Soil Retention System details see sheets S-05 and S-06 of S-61.

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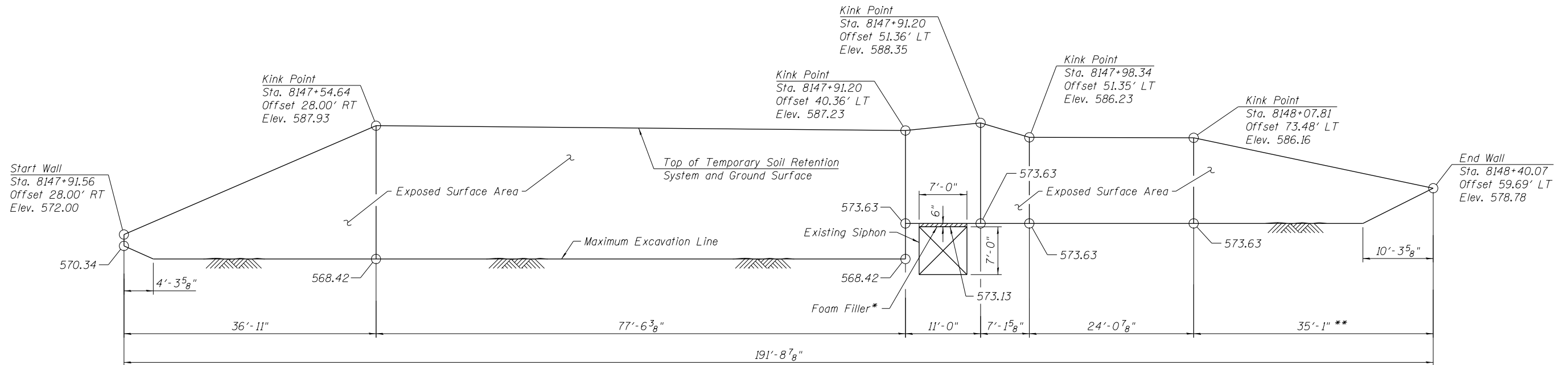
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FOUNDATION LAYOUT
 STRUCTURE NO. 016-1707**

SHEET NO. S-04 OF S-61 SHEETS

F.A.I. R.E. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 211
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



TEMPORARY SOIL RETENTION SYSTEM NO. 1
 (At West Abutment, Measured along F.F. of Wall)

* Foam filler, according to Article 1051.09 of the Standard Specifications. Cost included with Temporary Soil Retention System.

** This portion of the Temporary Soil Retention System must be removed completely at the conclusion of the contract.

Notes:

Impact driving of piles and sheet piles is not allowed. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a soil retention system design including plan details and calculations for review and acceptance by the Engineer. See Special Provision for Temporary Soil Retention System. The maximum allowable excavation slope is 1:2 (V:H). For additional Temporary Soil Retention System details, see Sheet S-06 of S-61. The existing siphon location shall be verified in the field and approved by the Engineer prior to temporary soil retention construction. Any damage to the existing siphon during construction shall be repaired at the Contractors expense.

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	2,747

3:01:20 PM 0161707-60X99-5005-Substruct_TempExc1.dgn



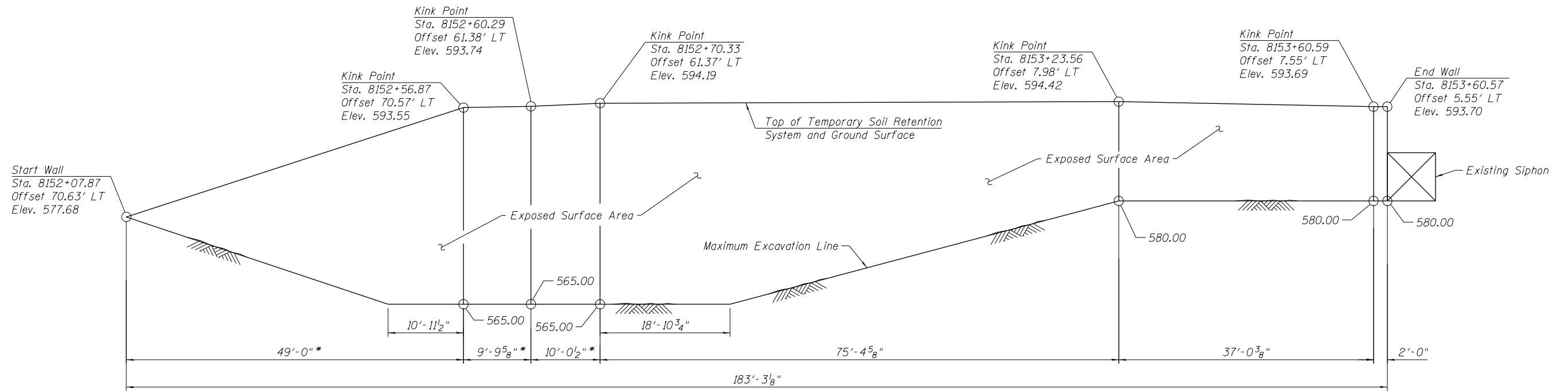
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SOIL RETENTION DETAILS 1
STRUCTURE NO. 016-1707**

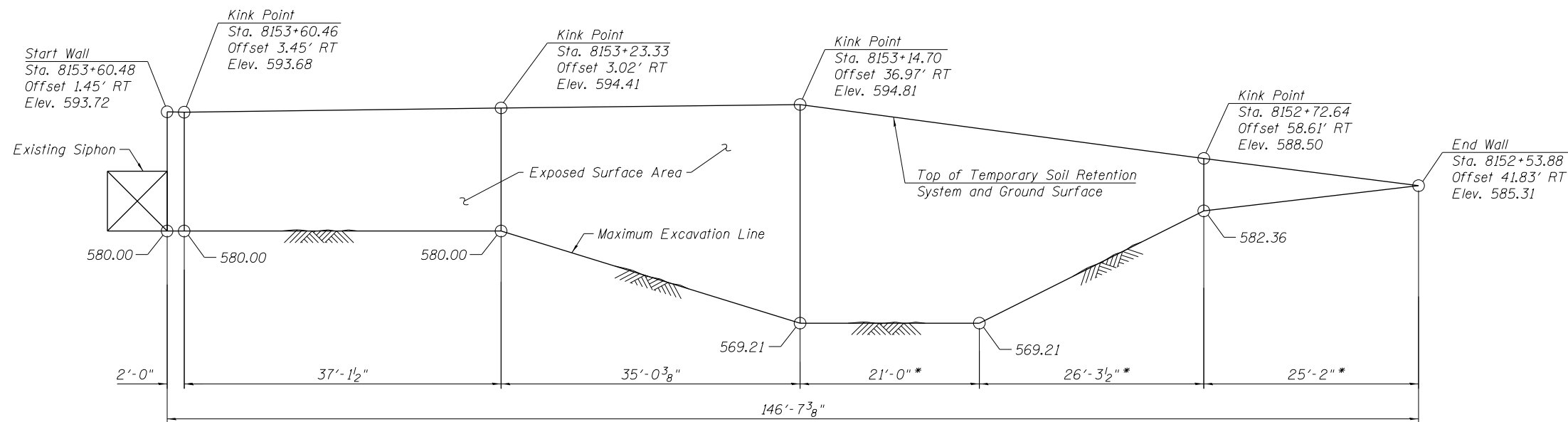
SHEET NO. S-05 OF S-61 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	212
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



TEMPORARY SOIL RETENTION SYSTEM NO. 2
(At East Abutment, Measured along F.F. of Wall)

* This portion of the Temporary Soil Retention System must be removed completely at the conclusion of the contract.



TEMPORARY SOIL RETENTION SYSTEM NO. 3
(At East Abutment, Measured along F.F. of Wall)

Notes:
Impact driving of piles and sheet piles is not allowed.
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a soil retention system design including plan details and calculations for review and acceptance by the Engineer. See Special Provision for Temporary Soil Retention System.
The maximum allowable excavation slope is 1:2 (V:H).
The existing siphon location shall be verified in the field and approved by the Engineer prior to temporary soil retention construction.
Any damage to the existing siphon during construction shall be repaired at the Contractors expense.

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	5,889

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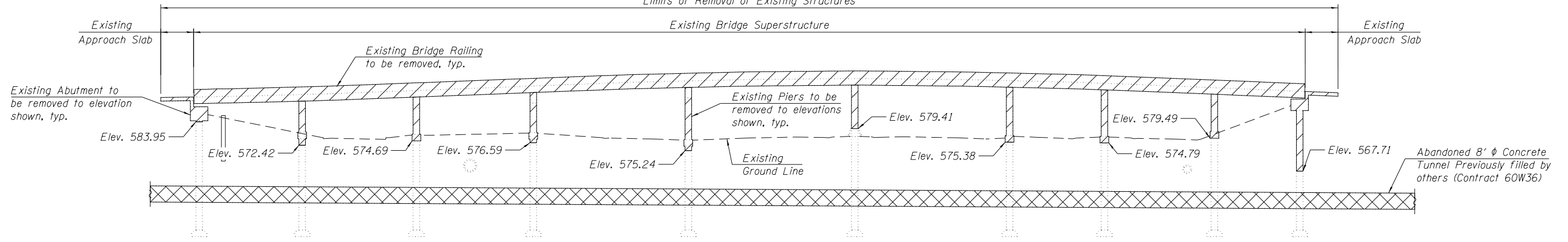
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SOIL RETENTION DETAILS 2
STRUCTURE NO. 016-1707**

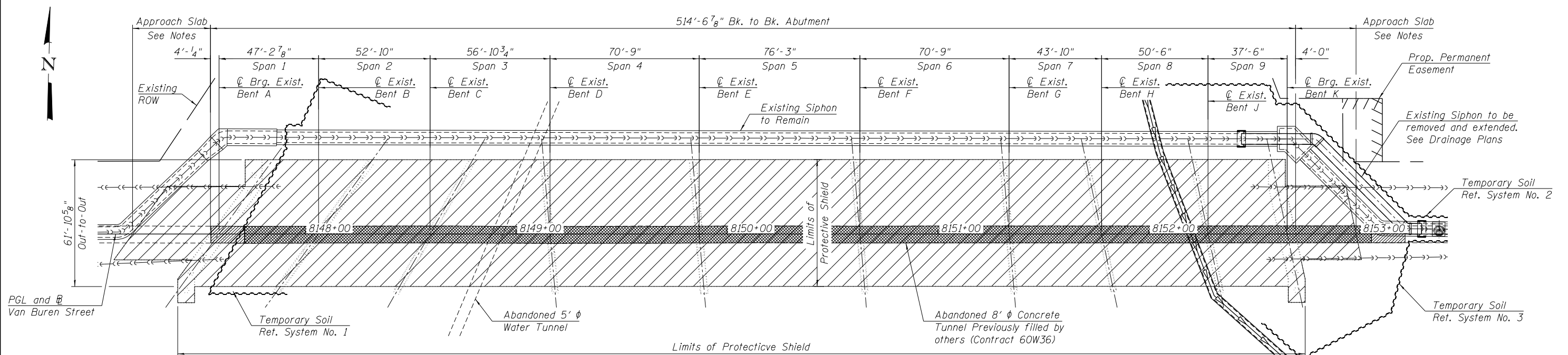
SHEET NO. S-06 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 213
CONTRACT NO. 60X99				ILLINOIS FED. AID PROJECT

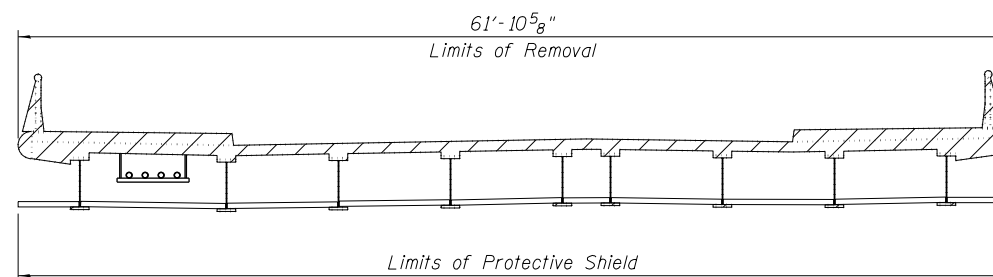
Limits of Removal of Existing Structures



ELEVATION



PLAN



CROSS SECTION OF EXISTING SUPERSTRUCTURE

LEGEND:

- Removal of Existing Structures
- Bulkhead and area filled with CLSM previously filled by others (Contract 60W36)

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures	Each	1
Protective Shield	Sq Yd	3,539

Notes:

For temporary soil retention system details, see Sheets S-05 and S-06 of S-61.
Existing utilities between girders will be relocated to provide uninterrupted service during construction (by others). Utilities to be incorporated into new structure (by others).
The Contractor is responsible to protect the roadway below from falling objects and debris during removal of the existing structure.
For existing approach slabs removal quantities, see Roadway plans.
Removal of existing structures shall be in accordance with Section 501 of the Standard Specifications. This item shall include complete removal of the concrete bridge rails, concrete deck and superstructure. This item also includes partial removal of the abutment and piers down to a minimum elevation as noted in plans.

3:01:23 PM 0161707-60X99-5007-Removal_Detail.dgn



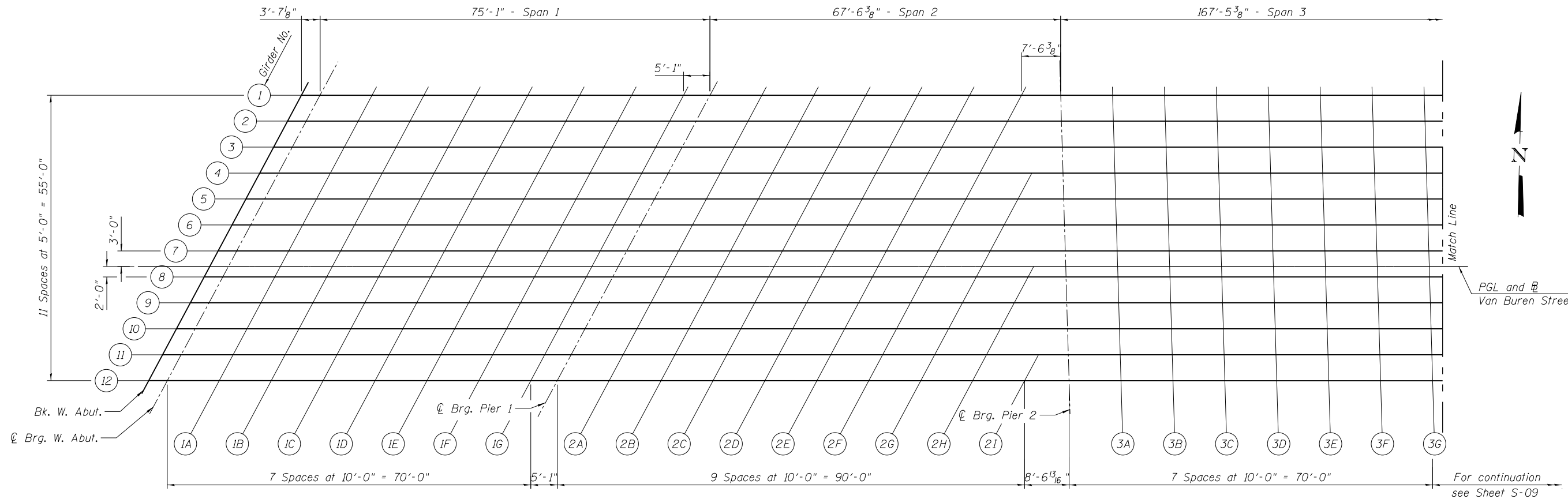
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

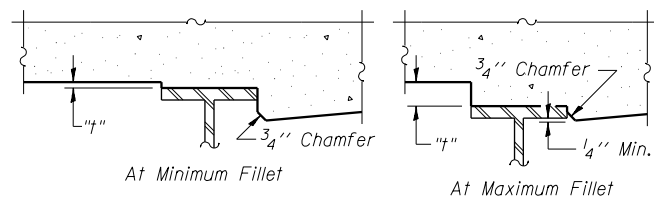
EXISTING STRUCTURE REMOVAL DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-07 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 214
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

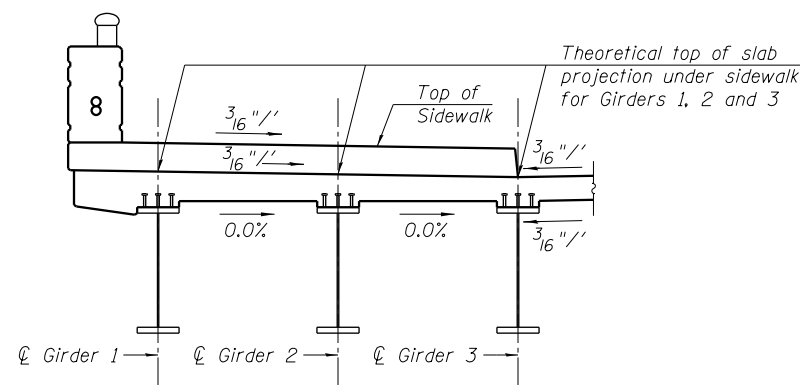


PLAN
(Spans 1, 2 and 3)

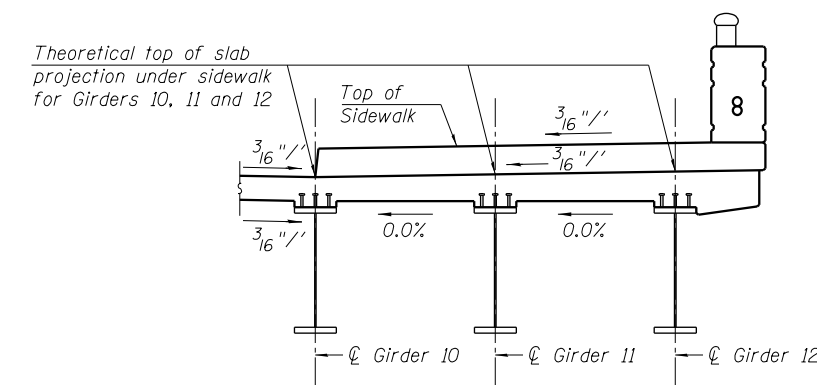


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets S-08 thru S-09. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets S-10 thru S-14 of S-61, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



LOCATION OF ELEVATIONS UNDER NORTH SIDEWALK



LOCATION OF ELEVATIONS UNDER SOUTH SIDEWALK

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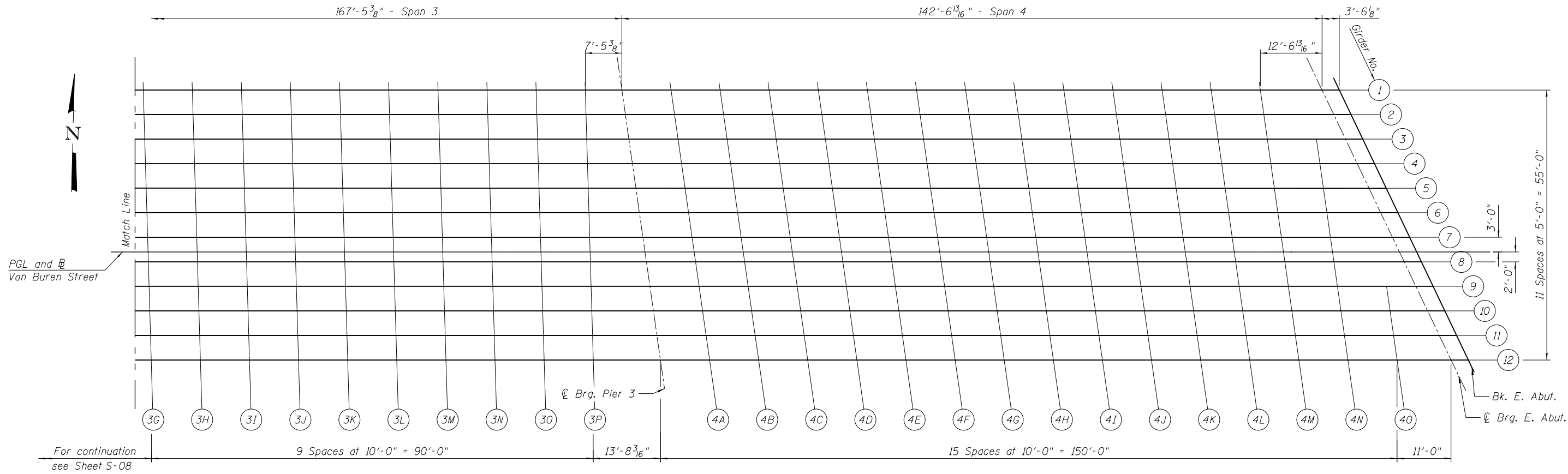
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

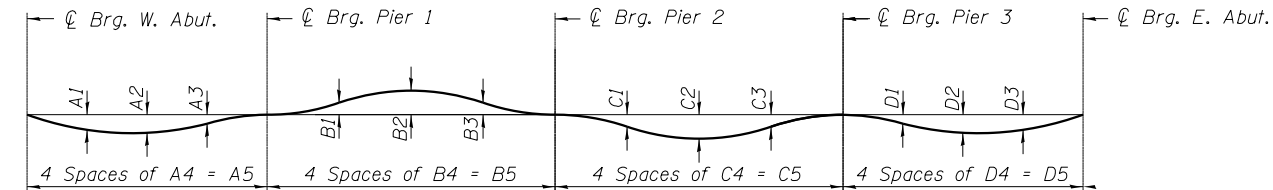
**TOP OF SLAB ELEVATIONS 1
STRUCTURE NO. 016-1707**

SHEET NO. S-08 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 215
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



PLAN
(Spans 3 and 4)



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

Note:
The deflections below are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-10 thru S-14 of S-61.

Girder	DEAD LOAD DEFLECTIONS																			
	Span 1					Span 2					Span 3					Span 4				
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5
1	5/8"	3/4"	1/2"	18'-9 1/4"	75'-1"	3/8"	1/2"	1/2"	16'-10 5/8"	67'-6 7/16"	2 3/4"	3 3/4"	1 3/4"	41'-10 5/16"	167'-5 3/8"	1"	2 1/2"	2 3/8"	35'-7 1/16"	142'-6 13/16"
2	1/2"	3/4"	1/2"	18'-9 1/4"	75'-1"	3/8"	1/2"	1/2"	17'-7 1/16"	70'-4 1/4"	2 5/8"	3 5/8"	1 5/8"	42'-0 1/16"	168'-0 3/16"	1"	2 5/8"	2 3/8"	36'-0 3/4"	144'-2 15/16"
3	1/2"	3/4"	1/2"	18'-9 1/4"	75'-1"	1/4"	1/2"	1/2"	18'-3 9/16"	73'-2 1/8"	2 5/8"	3 1/2"	1 5/8"	42'-1 3/4"	168'-7"	1 1/8"	2 5/8"	2 3/8"	36'-5 3/4"	145'-11"
4	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/4"	1/2"	3/8"	19'-0"	76'-0"	2 1/2"	3 1/2"	1 5/8"	42'-3 7/16"	169'-1 3/4"	1 1/8"	2 3/4"	2 1/2"	36'-10 3/4"	147'-7 1/8"
5	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/4"	1/2"	3/8"	19'-8 7/16"	78'-9 7/8"	2 1/2"	3 3/8"	1 1/2"	42'-5 1/8"	169'-8 9/16"	1 1/4"	3"	2 5/8"	37'-3 13/16"	149'-3 1/4"
6	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/4"	3/8"	3/8"	20'-4 5/16"	81'-7 1/16"	2 1/2"	3 3/8"	1 1/2"	42'-6 13/16"	170'-3 3/8"	1 3/8"	3 1/8"	2 3/4"	37'-8 13/16"	150'-11 5/16"
7	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/4"	3/8"	3/8"	21'-1 3/8"	84'-5 9/16"	2 1/2"	3 3/8"	1 1/2"	42'-8 9/16"	170'-10 3/16"	1 1/2"	3 1/4"	2 7/8"	38'-1 7/8"	152'-7 7/16"
8	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/4"	3/8"	3/8"	21'-9 7/8"	87'-3 7/16"	2 1/2"	3 3/8"	1 1/2"	42'-10 1/4"	171'-5"	1 1/2"	3 1/2"	3"	38'-6 7/8"	154'-3 9/16"
9	1/2"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/8"	3/8"	3/8"	22'-6 5/16"	90'-1 1/4"	2 1/2"	3 3/8"	1 3/8"	42'-11 15/16"	171'-11 3/4"	1 5/8"	3 3/4"	3 1/4"	38'-11 15/16"	155'-11 5/8"
10	3/8"	5/8"	3/8"	18'-9 1/4"	75'-1"	1/8"	1/4"	3/8"	23'-2 13/16"	92'-11 1/8"	2 1/2"	3 3/8"	1 3/8"	43'-1 5/8"	172'-6 9/16"	1 3/4"	3 7/8"	3 3/8"	39'-4 15/16"	157'-7 3/4"
11	3/8"	1/2"	3/8"	18'-9 1/4"	75'-1"	1/8"	1/4"	3/8"	23'-11 1/4"	95'-9"	2 1/2"	3 1/2"	1 3/8"	43'-3 5/16"	173'-1 3/8"	1 7/8"	4 1/4"	3 5/8"	39'-9 15/16"	159'-3 7/8"
12	3/8"	1/2"	3/8"	18'-9 1/4"	75'-1"	0"	1/8"	1/4"	24'-7 1/16"	98'-6 7/8"	2 5/8"	3 5/8"	1 1/2"	43'-5 1/16"	173'-8 3/16"	2 1/8"	4 5/8"	4"	40'-3"	160'-11 5/16"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS 2
STRUCTURE NO. 016-1707

SHEET NO. S-09 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 216
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8148+08.71	-33.00	596.43	596.43
CL. W. Abut.	8148+12.31	-33.00	596.61	596.61
1A	8148+22.31	-33.00	597.11	597.14
1B	8148+32.31	-33.00	597.61	597.66
1C	8148+42.31	-33.00	598.11	598.18
1D	8148+52.31	-33.00	598.61	598.68
1E	8148+62.31	-33.00	599.11	599.17
1F	8148+72.31	-33.00	599.61	599.65
1G	8148+82.31	-33.00	600.11	600.13
CL. Brg. Pier 1	8148+87.39	-33.00	600.37	600.37
2A	8148+97.39	-33.00	600.87	600.85
2B	8149+07.39	-33.00	601.36	601.32
2C	8149+17.39	-33.00	601.80	601.76
2D	8149+27.39	-33.00	602.21	602.17
2E	8149+37.39	-33.00	602.58	602.54
2F	8149+47.39	-33.00	602.91	602.89
CL. Brg. Pier 2	8149+54.93	-33.00	603.13	603.13
3A	8149+64.93	-33.00	603.38	603.43
3B	8149+74.93	-33.00	603.60	603.70
3C	8149+84.93	-33.00	603.77	603.93
3D	8149+94.93	-33.00	603.90	604.12
3E	8150+04.93	-33.00	603.99	604.26
3F	8150+14.93	-33.00	604.04	604.34
3G	8150+24.93	-33.00	604.05	604.37
3H	8150+34.93	-33.00	604.02	604.33
3I	8150+44.93	-33.00	603.95	604.24
3J	8150+54.93	-33.00	603.83	604.10
3K	8150+64.93	-33.00	603.68	603.90
3L	8150+74.93	-33.00	603.48	603.66
3M	8150+84.93	-33.00	603.25	603.37
3N	8150+94.93	-33.00	602.97	603.05
3O	8151+04.93	-33.00	602.65	602.69
3P	8151+14.93	-33.00	602.29	602.31
CL. Brg. Pier 3	8151+22.37	-33.00	602.00	602.00
4A	8151+32.37	-33.00	601.60	601.61
4B	8151+42.37	-33.00	601.20	601.23
4C	8151+52.37	-33.00	600.80	600.87
4D	8151+62.37	-33.00	600.40	600.51
4E	8151+72.37	-33.00	600.00	600.15
4F	8151+82.37	-33.00	599.60	599.78
4G	8151+92.37	-33.00	599.20	599.41
4H	8152+02.37	-33.00	598.80	599.03
4I	8152+12.37	-33.00	598.40	598.63
4J	8152+22.37	-33.00	598.00	598.22
4K	8152+32.37	-33.00	597.60	597.79
4L	8152+42.37	-33.00	597.20	597.34
4M	8152+52.37	-33.00	596.80	596.89
CL. E. Abut.	8152+64.94	-33.00	596.30	596.30
Bk. E. Abut.	8152+68.45	-33.00	596.16	596.16

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8148+06.04	-28.00	596.22	596.22
CL. W. Abut.	8148+09.63	-28.00	596.40	596.40
1A	8148+19.63	-28.00	596.90	596.93
1B	8148+29.63	-28.00	597.40	597.45
1C	8148+39.63	-28.00	597.90	597.96
1D	8148+49.63	-28.00	598.40	598.46
1E	8148+59.63	-28.00	598.90	598.95
1F	8148+69.63	-28.00	599.40	599.43
1G	8148+79.63	-28.00	599.90	599.91
CL. Brg. Pier 1	8148+84.72	-28.00	600.15	600.15
2A	8148+94.72	-28.00	600.65	600.64
2B	8149+04.72	-28.00	601.15	601.12
2C	8149+14.72	-28.00	601.61	601.57
2D	8149+24.72	-28.00	602.03	601.99
2E	8149+34.72	-28.00	602.41	602.37
2F	8149+44.72	-28.00	602.75	602.72
CL. Brg. Pier 2	8149+55.07	-28.00	603.05	603.05
3A	8149+65.07	-28.00	603.31	603.36
3B	8149+75.07	-28.00	603.52	603.62
3C	8149+85.07	-28.00	603.69	603.85
3D	8149+95.07	-28.00	603.82	604.03
3E	8150+05.07	-28.00	603.91	604.17
3F	8150+15.07	-28.00	603.96	604.25
3G	8150+25.07	-28.00	603.97	604.28
3H	8150+35.07	-28.00	603.94	604.24
3I	8150+45.07	-28.00	603.87	604.15
3J	8150+55.07	-28.00	603.75	604.01
3K	8150+65.07	-28.00	603.60	603.81
3L	8150+75.07	-28.00	603.40	603.57
3M	8150+85.07	-28.00	603.17	603.29
3N	8150+95.07	-28.00	602.89	602.97
3O	8151+05.07	-28.00	602.57	602.61
3P	8151+15.07	-28.00	602.21	602.23
CL. Brg. Pier 3	8151+23.09	-28.00	601.90	601.90
4A	8151+33.09	-28.00	601.50	601.51
4B	8151+43.09	-28.00	601.10	601.13
4C	8151+53.09	-28.00	600.70	600.76
4D	8151+63.09	-28.00	600.30	600.40
4E	8151+73.09	-28.00	599.90	600.04
4F	8151+83.09	-28.00	599.50	599.68
4G	8151+93.09	-28.00	599.10	599.31
4H	8152+03.09	-28.00	598.70	598.92
4I	8152+13.09	-28.00	598.30	598.53
4J	8152+23.09	-28.00	597.90	598.11
4K	8152+33.09	-28.00	597.50	597.68
4L	8152+43.09	-28.00	597.10	597.24
4M	8152+53.09	-28.00	596.70	596.79
CL. E. Abut.	8152+67.33	-28.00	596.13	596.13
Bk. E. Abut.	8152+70.84	-28.00	595.99	595.99

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8148+03.37	-23.00	596.01	596.01
CL. W. Abut.	8148+06.96	-23.00	596.19	596.19
1A	8148+16.96	-23.00	596.69	596.71
1B	8148+26.96	-23.00	597.19	597.23
1C	8148+36.96	-23.00	597.69	597.75
1D	8148+46.96	-23.00	598.19	598.25
1E	8148+56.96	-23.00	598.69	598.74
1F	8148+66.96	-23.00	599.19	599.22
1G	8148+76.96	-23.00	599.69	599.70
CL. Brg. Pier 1	8148+82.04	-23.00	599.94	599.94
2A	8148+92.04	-23.00	600.44	600.43
2B	8149+02.04	-23.00	600.94	600.91
2C	8149+12.04	-23.00	601.41	601.38
2D	8149+22.04	-23.00	601.84	601.80
2E	8149+32.04	-23.00	602.23	602.19
2F	8149+42.04	-23.00	602.58	602.55
CL. Brg. Pier 2	8149+55.22	-23.00	602.98	602.98
3A	8149+65.22	-23.00	603.23	603.28
3B	8149+75.22	-23.00	603.44	603.54
3C	8149+85.22	-23.00	603.62	603.77
3D	8149+95.22	-23.00	603.75	603.95
3E	8150+05.22	-23.00	603.84	604.09
3F	8150+15.22	-23.00	603.89	604.17
3G	8150+25.22	-23.00	603.89	604.19
3H	8150+35.22	-23.00	603.86	604.16
3I	8150+45.22	-23.00	603.79	604.07
3J	8150+55.22	-23.00	603.67	603.92
3K	8150+65.22	-23.00	603.52	603.73
3L	8150+75.22	-23.00	603.32	603.49
3M	8150+85.22	-23.00	603.08	603.20
3N	8150+95.22	-23.00	602.81	602.88
3O	8151+05.22	-23.00	602.49	602.52
3P	8151+15.22	-23.00	602.13	602.14
CL. Brg. Pier 3	8151+23.80	-23.00	601.79	601.79
4A	8151+33.80	-23.00	601.39	601.40
4B	8151+43.80	-23.00	600.99	601.02
4C	8151+53.80	-23.00	600.59	600.66
4D	8151+63.80	-23.00	600.19	600.30
4E	8151+73.80	-23.00	599.79	599.94
4F	8151+83.80	-23.00	599.39	599.57
4G	8151+93.80	-23.00	598.99	599.20
4H	8152+03.80	-23.00	598.59	598.82
4I	8152+13.80	-23.00	598.19	598.43
4J	8152+23.80	-23.00	597.79	598.02
4K	8152+33.80	-23.00	597.39	597.59
4L	8152+43.80	-23.00	596.99	597.15
4M	8152+53.80	-23.00	596.59	596.69
4N	8152+63.80	-23.00	596.19	596.23
CL. E. Abut.	8152+69.72	-23.00	595.95	595.95
Bk. E. Abut.	8152+73.23	-23.00	595.81	595.81

3:01:29 PM 01/17/17-60X99-5010-TopSlab_Deck3.dgn



USER NAME =	mkwilson	DESIGNED -	WJC	REVISED
		CHECKED -	KAH	REVISED
PLOT SCALE =	0:2.0000 ' / in.	DRAWN -	WJC	REVISED
PLOT DATE =	12/15/2016	CHECKED -	JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 3
STRUCTURE NO. 016-1707**

SHEET NO. S-10 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	217
			CONTRACT NO. 60X99	
ILLINOIS FED. AID PROJECT				

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8148+00.69	-18.00	595.96	595.96
CL. W. Abut.	8148+04.29	-18.00	596.13	596.13
1A	8148+14.29	-18.00	596.63	596.66
1B	8148+24.29	-18.00	597.13	597.18
1C	8148+34.29	-18.00	597.63	597.69
1D	8148+44.29	-18.00	598.13	598.19
1E	8148+54.29	-18.00	598.63	598.68
1F	8148+64.29	-18.00	599.13	599.16
1G	8148+74.29	-18.00	599.63	599.64
CL. Brg. Pier 1	8148+79.37	-18.00	599.89	599.89
2A	8148+89.37	-18.00	600.39	600.37
2B	8148+99.37	-18.00	600.89	600.86
2C	8149+09.37	-18.00	601.37	601.34
2D	8149+19.37	-18.00	601.81	601.77
2E	8149+29.37	-18.00	602.21	602.17
2F	8149+39.37	-18.00	602.57	602.54
2G	8149+49.37	-18.00	602.89	602.87
CL. Brg. Pier 2	8149+55.37	-18.00	603.06	603.06
3A	8149+65.37	-18.00	603.31	603.36
3B	8149+75.37	-18.00	603.53	603.62
3C	8149+85.37	-18.00	603.70	603.85
3D	8149+95.37	-18.00	603.83	604.03
3E	8150+05.37	-18.00	603.92	604.16
3F	8150+15.37	-18.00	603.97	604.24
3G	8150+25.37	-18.00	603.97	604.27
3H	8150+35.37	-18.00	603.94	604.23
3I	8150+45.37	-18.00	603.87	604.14
3J	8150+55.37	-18.00	603.75	603.99
3K	8150+65.37	-18.00	603.59	603.80
3L	8150+75.37	-18.00	603.40	603.56
3M	8150+85.37	-18.00	603.16	603.27
3N	8150+95.37	-18.00	602.88	602.95
3O	8151+05.37	-18.00	602.56	602.60
3P	8151+15.37	-18.00	602.20	602.21
CL. Brg. Pier 3	8151+24.52	-18.00	601.84	601.84
4A	8151+34.52	-18.00	601.44	601.45
4B	8151+44.52	-18.00	601.04	601.08
4C	8151+54.52	-18.00	600.64	600.71
4D	8151+64.52	-18.00	600.24	600.35
4E	8151+74.52	-18.00	599.84	599.99
4F	8151+84.52	-18.00	599.44	599.63
4G	8151+94.52	-18.00	599.04	599.26
4H	8152+04.52	-18.00	598.64	598.88
4I	8152+14.52	-18.00	598.24	598.49
4J	8152+24.52	-18.00	597.84	598.08
4K	8152+34.52	-18.00	597.44	597.65
4L	8152+44.52	-18.00	597.04	597.21
4M	8152+54.52	-18.00	596.64	596.75
4N	8152+64.52	-18.00	596.24	596.29
CL. E. Abut.	8152+72.11	-18.00	595.93	595.93
Bk. E. Abut.	8152+75.62	-18.00	595.79	595.79

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+98.02	-13.00	595.91	595.91
CL. W. Abut.	8148+01.61	-13.00	596.08	596.08
1A	8148+11.61	-13.00	596.58	596.60
1B	8148+21.61	-13.00	597.08	597.12
1C	8148+31.61	-13.00	597.58	597.63
1D	8148+41.61	-13.00	598.08	598.13
1E	8148+51.61	-13.00	598.58	598.62
1F	8148+61.61	-13.00	599.08	599.11
1G	8148+71.61	-13.00	599.58	599.59
CL. Brg. Pier 1	8148+76.69	-13.00	599.83	599.83
2A	8148+86.69	-13.00	600.33	600.32
2B	8148+96.69	-13.00	600.83	600.81
2C	8149+06.69	-13.00	601.32	601.29
2D	8149+16.69	-13.00	601.77	601.74
2E	8149+26.69	-13.00	602.19	602.15
2F	8149+36.69	-13.00	602.56	602.52
2G	8149+46.69	-13.00	602.89	602.86
CL. Brg. Pier 2	8149+55.51	-13.00	603.14	603.14
3A	8149+65.51	-13.00	603.40	603.44
3B	8149+75.51	-13.00	603.61	603.70
3C	8149+85.51	-13.00	603.78	603.93
3D	8149+95.51	-13.00	603.91	604.10
3E	8150+05.51	-13.00	604.00	604.24
3F	8150+15.51	-13.00	604.04	604.32
3G	8150+25.51	-13.00	604.05	604.34
3H	8150+35.51	-13.00	604.02	604.30
3I	8150+45.51	-13.00	603.94	604.21
3J	8150+55.51	-13.00	603.83	604.07
3K	8150+65.51	-13.00	603.67	603.87
3L	8150+75.51	-13.00	603.47	603.63
3M	8150+85.51	-13.00	603.23	603.35
3N	8150+95.51	-13.00	602.95	603.03
3O	8151+05.51	-13.00	602.63	602.67
3P	8151+15.51	-13.00	602.27	602.29
CL. Brg. Pier 3	8151+25.23	-13.00	601.89	601.89
4A	8151+35.23	-13.00	601.49	601.50
4B	8151+45.23	-13.00	601.09	601.13
4C	8151+55.23	-13.00	600.69	600.76
4D	8151+65.23	-13.00	600.29	600.41
4E	8151+75.23	-13.00	599.89	600.05
4F	8151+85.23	-13.00	599.49	599.69
4G	8151+95.23	-13.00	599.09	599.32
4H	8152+05.23	-13.00	598.69	598.94
4I	8152+15.23	-13.00	598.29	598.55
4J	8152+25.23	-13.00	597.89	598.14
4K	8152+35.23	-13.00	597.49	597.71
4L	8152+45.23	-13.00	597.09	597.28
4M	8152+55.23	-13.00	596.69	596.82
4N	8152+65.23	-13.00	596.29	596.35
CL. E. Abut.	8152+74.50	-13.00	595.92	595.92
Bk. E. Abut.	8152+78.01	-13.00	595.78	595.78

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+95.34	-8.00	595.86	595.86
CL. W. Abut.	8147+98.94	-8.00	596.03	596.03
1A	8148+08.94	-8.00	596.52	596.55
1B	8148+18.94	-8.00	597.02	597.06
1C	8148+28.94	-8.00	597.52	597.57
1D	8148+38.94	-8.00	598.02	598.07
1E	8148+48.94	-8.00	598.52	598.57
1F	8148+58.94	-8.00	599.02	599.05
1G	8148+68.94	-8.00	599.52	599.53
CL. Brg. Pier 1	8148+74.02	-8.00	599.78	599.78
2A	8148+84.02	-8.00	600.28	600.26
2B	8148+94.02	-8.00	600.78	600.76
2C	8149+04.02	-8.00	601.27	601.24
2D	8149+14.02	-8.00	601.74	601.70
2E	8149+24.02	-8.00	602.16	602.12
2F	8149+34.02	-8.00	602.54	602.50
2G	8149+44.02	-8.00	602.88	602.85
CL. Brg. Pier 2	8149+55.66	-8.00	603.22	603.22
3A	8149+65.66	-8.00	603.48	603.52
3B	8149+75.66	-8.00	603.69	603.78
3C	8149+85.66	-8.00	603.86	604.00
3D	8149+95.66	-8.00	603.99	604.18
3E	8150+05.66	-8.00	604.07	604.32
3F	8150+15.66	-8.00	604.12	604.39
3G	8150+25.66	-8.00	604.13	604.42
3H	8150+35.66	-8.00	604.09	604.38
3I	8150+45.66	-8.00	604.02	604.29
3J	8150+55.66	-8.00	603.90	604.14
3K	8150+65.66	-8.00	603.74	603.95
3L	8150+75.66	-8.00	603.55	603.71
3M	8150+85.66	-8.00	603.31	603.42
3N	8150+95.66	-8.00	603.03	603.10
3O	8151+05.66	-8.00	602.71	602.74
3P	8151+15.66	-8.00	602.35	602.36
CL. Brg. Pier 3	8151+25.94	-8.00	601.94	601.94
4A	8151+35.94	-8.00	601.54	601.55
4B	8151+45.94	-8.00	601.14	601.18
4C	8151+55.94	-8.00	600.74	600.82
4D	8151+65.94	-8.00	600.34	600.46
4E	8151+75.94	-8.00	599.94	600.11
4F	8151+85.94	-8.00	599.54	599.75
4G	8151+95.94	-8.00	599.14	599.38
4H	8152+05.94	-8.00	598.74	599.00
4I	8152+15.94	-8.00	598.34	598.62
4J	8152+25.94	-8.00	597.94	598.20
4K	8152+35.94	-8.00	597.54	597.78
4L	8152+45.94	-8.00	597.14	597.34
4M	8152+55.94	-8.00	596.74	596.88
4N	8152+65.94	-8.00	596.34	596.42
CL. E. Abut.	8152+76.89	-8.00	595.90	595.90
Bk. E. Abut.	8152+80.40	-8.00	595.76	595.76

3:01:31 PM 01/16/17-60x99-5011-TopSlab_Deck4.dgn



USER NAME =	mkwilson	DESIGNED -	WJC	REVISED
		CHECKED -	KAH	REVISED
PLOT SCALE =	0:2.0000 '"/ In.	DRAWN -	WJC	REVISED
PLOT DATE	12/15/2016	CHECKED -	JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 4
STRUCTURE NO. 016-1707**

SHEET NO. S-11 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	218
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+92.67	-3.00	595.81	595.81
CL. W. Abut.	8147+96.26	-3.00	595.98	595.98
1A	8148+06.26	-3.00	596.47	596.49
1B	8148+16.26	-3.00	596.97	597.01
1C	8148+26.26	-3.00	597.47	597.52
1D	8148+36.26	-3.00	597.97	598.02
1E	8148+46.26	-3.00	598.47	598.51
1F	8148+56.26	-3.00	598.97	598.99
1G	8148+66.26	-3.00	599.47	599.48
CL. Brg. Pier 1	8148+71.35	-3.00	599.72	599.72
2A	8148+81.35	-3.00	600.22	600.21
2B	8148+91.35	-3.00	600.72	600.70
2C	8149+01.35	-3.00	601.22	601.20
2D	8149+11.35	-3.00	601.69	601.66
2E	8149+21.35	-3.00	602.13	602.09
2F	8149+31.35	-3.00	602.52	602.48
2G	8149+41.35	-3.00	602.87	602.84
CL. Brg. Pier 2	8149+55.81	-3.00	603.31	603.31
3A	8149+65.81	-3.00	603.56	603.60
3B	8149+75.81	-3.00	603.77	603.86
3C	8149+85.81	-3.00	603.94	604.08
3D	8149+95.81	-3.00	604.07	604.26
3E	8150+05.81	-3.00	604.15	604.40
3F	8150+15.81	-3.00	604.20	604.47
3G	8150+25.81	-3.00	604.21	604.50
3H	8150+35.81	-3.00	604.17	604.46
3I	8150+45.81	-3.00	604.10	604.37
3J	8150+55.81	-3.00	603.98	604.22
3K	8150+65.81	-3.00	603.82	604.02
3L	8150+75.81	-3.00	603.62	603.78
3M	8150+85.81	-3.00	603.38	603.50
3N	8150+95.81	-3.00	603.10	603.17
3O	8151+05.81	-3.00	602.78	602.82
3P	8151+15.81	-3.00	602.42	602.43
CL. Brg. Pier 3	8151+26.66	-3.00	601.99	601.99
4A	8151+36.66	-3.00	601.59	601.61
4B	8151+46.66	-3.00	601.19	601.23
4C	8151+56.66	-3.00	600.79	600.87
4D	8151+66.66	-3.00	600.39	600.52
4E	8151+76.66	-3.00	599.99	600.16
4F	8151+86.66	-3.00	599.59	599.81
4G	8151+96.66	-3.00	599.19	599.44
4H	8152+06.66	-3.00	598.79	599.07
4I	8152+16.66	-3.00	598.39	598.68
4J	8152+26.66	-3.00	597.99	598.27
4K	8152+36.66	-3.00	597.59	597.85
4L	8152+46.66	-3.00	597.19	597.41
4M	8152+56.66	-3.00	596.79	596.95
4N	8152+66.66	-3.00	596.39	596.48
CL. E. Abut.	8152+79.28	-3.00	595.88	595.88
Bk. E. Abut.	8152+82.79	-3.00	595.74	595.74

PGL & B ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+91.07	0.00	595.79	595.79
CL. W. Abut.	8147+94.66	0.00	595.95	595.95
1A	8148+04.66	0.00	596.43	596.46
1B	8148+14.66	0.00	596.93	596.97
1C	8148+24.66	0.00	597.43	597.48
1D	8148+34.66	0.00	597.93	597.98
1E	8148+44.66	0.00	598.43	598.47
1F	8148+54.66	0.00	598.93	598.96
1G	8148+64.66	0.00	599.43	599.44
CL. Brg. Pier 1	8148+69.74	0.00	599.69	599.69
2A	8148+79.74	0.00	600.19	600.18
2B	8148+89.74	0.00	600.69	600.67
2C	8148+99.74	0.00	601.19	601.16
2D	8149+09.74	0.00	601.67	601.64
2E	8149+19.74	0.00	602.11	602.07
2F	8149+29.74	0.00	602.51	602.47
2G	8149+39.74	0.00	602.86	602.83
2H	8149+49.74	0.00	603.18	603.17
CL. Brg. Pier 2	8149+55.90	0.00	603.36	603.36
3A	8149+65.90	0.00	603.61	603.65
3B	8149+75.90	0.00	603.82	603.91
3C	8149+85.90	0.00	603.99	604.13
3D	8149+95.90	0.00	604.11	604.31
3E	8150+05.90	0.00	604.20	604.44
3F	8150+15.90	0.00	604.25	604.52
3G	8150+25.90	0.00	604.25	604.54
3H	8150+35.90	0.00	604.22	604.50
3I	8150+45.90	0.00	604.14	604.41
3J	8150+55.90	0.00	604.02	604.27
3K	8150+65.90	0.00	603.87	604.07
3L	8150+75.90	0.00	603.67	603.83
3M	8150+85.90	0.00	603.43	603.54
3N	8150+95.90	0.00	603.15	603.22
3O	8151+05.90	0.00	602.82	602.86
3P	8151+15.90	0.00	602.46	602.48
CL. Brg. Pier 3	8151+27.09	0.00	602.02	602.02
4A	8151+37.09	0.00	601.62	601.64
4B	8151+47.09	0.00	601.22	601.26
4C	8151+57.09	0.00	600.82	600.90
4D	8151+67.09	0.00	600.42	600.55
4E	8151+77.09	0.00	600.02	600.20
4F	8151+87.09	0.00	599.62	599.85
4G	8151+97.09	0.00	599.22	599.48
4H	8152+07.09	0.00	598.82	599.11
4I	8152+17.09	0.00	598.42	598.72
4J	8152+27.09	0.00	598.02	598.31
4K	8152+37.09	0.00	597.62	597.89
4L	8152+47.09	0.00	597.22	597.45
4M	8152+57.09	0.00	596.82	596.99
4N	8152+67.09	0.00	596.42	596.52
CL. E. Abut.	8152+80.71	0.00	595.87	595.87
Bk. E. Abut.	8152+84.22	0.00	595.73	595.73

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+89.99	2.00	595.71	595.71
CL. W. Abut.	8147+93.59	2.00	595.87	595.87
1A	8148+03.59	2.00	596.35	596.37
1B	8148+13.59	2.00	596.85	596.89
1C	8148+23.59	2.00	597.35	597.40
1D	8148+33.59	2.00	597.85	597.90
1E	8148+43.59	2.00	598.35	598.39
1F	8148+53.59	2.00	598.85	598.87
1G	8148+63.59	2.00	599.35	599.36
CL. Brg. Pier 1	8148+68.67	2.00	599.60	599.60
2A	8148+78.67	2.00	600.10	600.09
2B	8148+88.67	2.00	600.60	600.58
2C	8148+98.67	2.00	601.10	601.08
2D	8149+08.67	2.00	601.59	601.56
2E	8149+18.67	2.00	602.03	602.00
2F	8149+28.67	2.00	602.43	602.40
2G	8149+38.67	2.00	602.80	602.76
2H	8149+48.67	2.00	603.12	603.10
CL. Brg. Pier 2	8149+55.96	2.00	603.33	603.33
3A	8149+65.96	2.00	603.58	603.62
3B	8149+75.96	2.00	603.79	603.88
3C	8149+85.96	2.00	603.96	604.10
3D	8149+95.96	2.00	604.08	604.28
3E	8150+05.96	2.00	604.17	604.41
3F	8150+15.96	2.00	604.22	604.49
3G	8150+25.96	2.00	604.22	604.51
3H	8150+35.96	2.00	604.19	604.47
3I	8150+45.96	2.00	604.11	604.38
3J	8150+55.96	2.00	603.99	604.23
3K	8150+65.96	2.00	603.83	604.04
3L	8150+75.96	2.00	603.63	603.80
3M	8150+85.96	2.00	603.39	603.51
3N	8150+95.96	2.00	603.11	603.18
3O	8151+05.96	2.00	602.79	602.83
3P	8151+15.96	2.00	602.43	602.44
CL. Brg. Pier 3	8151+27.37	2.00	601.97	601.97
4A	8151+37.37	2.00	601.57	601.59
4B	8151+47.37	2.00	601.17	601.22
4C	8151+57.37	2.00	600.77	600.86
4D	8151+67.37	2.00	600.37	600.51
4E	8151+77.37	2.00	599.97	600.16
4F	8151+87.37	2.00	599.57	599.81
4G	8151+97.37	2.00	599.17	599.44
4H	8152+07.37	2.00	598.77	599.07
4I	8152+17.37	2.00	598.37	598.68
4J	8152+27.37	2.00	597.97	598.27
4K	8152+37.37	2.00	597.57	597.85
4L	8152+47.37	2.00	597.17	597.41
4M	8152+57.37	2.00	596.77	596.95
4N	8152+67.37	2.00	596.37	596.49
CL. E. Abut.	8152+81.66	2.00	595.80	595.80
Bk. E. Abut.	8152+85.18	2.00	595.67	595.67

3:01:33 PM 01/16/17-60X99-5012-TopSlab_Deck5.dgn



USER NAME =	mkwilson	DESIGNED -	WJC	REVISED
		CHECKED -	KAH	REVISED
PLOT SCALE =	0:2.0000 '"/>			
PLOT DATE =	12/15/2016	DRAWN -	WJC	REVISED
		CHECKED -	JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 5
STRUCTURE NO. 016-1707**

SHEET NO. S-12 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	219
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+87.32	7.00	595.51	595.51
CL. W. Abut.	8147+90.91	7.00	595.67	595.67
1A	8148+00.91	7.00	596.14	596.16
1B	8148+10.91	7.00	596.64	596.68
1C	8148+20.91	7.00	597.14	597.18
1D	8148+30.91	7.00	597.64	597.68
1E	8148+40.91	7.00	598.14	598.18
1F	8148+50.91	7.00	598.64	598.66
1G	8148+60.91	7.00	599.14	599.14
CL. Brg. Pier 1	8148+66.00	7.00	599.39	599.39
2A	8148+76.00	7.00	599.89	599.88
2B	8148+86.00	7.00	600.39	600.38
2C	8148+96.00	7.00	600.89	600.87
2D	8149+06.00	7.00	601.38	601.36
2E	8149+16.00	7.00	601.84	601.81
2F	8149+26.00	7.00	602.25	602.22
2G	8149+36.00	7.00	602.63	602.59
2H	8149+46.00	7.00	602.96	602.94
CL. Brg. Pier 2	8149+56.10	7.00	603.25	603.25
3A	8149+66.10	7.00	603.50	603.55
3B	8149+76.10	7.00	603.71	603.80
3C	8149+86.10	7.00	603.88	604.03
3D	8149+96.10	7.00	604.01	604.20
3E	8150+06.10	7.00	604.09	604.33
3F	8150+16.10	7.00	604.14	604.41
3G	8150+26.10	7.00	604.14	604.44
3H	8150+36.10	7.00	604.11	604.39
3I	8150+46.10	7.00	604.03	604.30
3J	8150+56.10	7.00	603.91	604.15
3K	8150+66.10	7.00	603.75	603.96
3L	8150+76.10	7.00	603.55	603.71
3M	8150+86.10	7.00	603.31	603.43
3N	8150+96.10	7.00	603.03	603.10
3O	8151+06.10	7.00	602.71	602.74
3P	8151+16.10	7.00	602.34	602.36
CL. Brg. Pier 3	8151+28.08	7.00	601.87	601.87
4A	8151+38.08	7.00	601.47	601.49
4B	8151+48.08	7.00	601.07	601.12
4C	8151+58.08	7.00	600.67	600.76
4D	8151+68.08	7.00	600.27	600.41
4E	8151+78.08	7.00	599.87	600.06
4F	8151+88.08	7.00	599.47	599.71
4G	8151+98.08	7.00	599.07	599.35
4H	8152+08.08	7.00	598.67	598.98
4I	8152+18.08	7.00	598.27	598.59
4J	8152+28.08	7.00	597.87	598.18
4K	8152+38.08	7.00	597.47	597.77
4L	8152+48.08	7.00	597.07	597.32
4M	8152+58.08	7.00	596.67	596.87
4N	8152+68.08	7.00	596.27	596.40
4O	8152+78.08	7.00	595.87	595.92
CL. E. Abut.	8152+84.05	7.00	595.63	595.63
Bk. E. Abut.	8152+87.56	7.00	595.50	595.50

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+84.64	12.00	595.32	595.32
CL. W. Abut.	8147+88.24	12.00	595.48	595.48
1A	8147+98.24	12.00	595.93	595.95
1B	8148+08.24	12.00	596.42	596.46
1C	8148+18.24	12.00	596.92	596.97
1D	8148+28.24	12.00	597.42	597.47
1E	8148+38.24	12.00	597.92	597.96
1F	8148+48.24	12.00	598.42	598.45
1G	8148+58.24	12.00	598.92	598.93
CL. Brg. Pier 1	8148+63.32	12.00	599.18	599.18
2A	8148+73.32	12.00	599.68	599.67
2B	8148+83.32	12.00	600.18	600.17
2C	8148+93.32	12.00	600.68	600.66
2D	8149+03.32	12.00	601.18	601.16
2E	8149+13.32	12.00	601.64	601.62
2F	8149+23.32	12.00	602.07	602.04
2G	8149+33.32	12.00	602.45	602.42
2H	8149+43.32	12.00	602.80	602.77
CL. Brg. Pier 2	8149+56.25	12.00	603.18	603.18
3A	8149+66.25	12.00	603.43	603.47
3B	8149+76.25	12.00	603.64	603.73
3C	8149+86.25	12.00	603.80	603.95
3D	8149+96.25	12.00	603.93	604.13
3E	8150+06.25	12.00	604.02	604.26
3F	8150+16.25	12.00	604.06	604.33
3G	8150+26.25	12.00	604.07	604.36
3H	8150+36.25	12.00	604.03	604.32
3I	8150+46.25	12.00	603.95	604.22
3J	8150+56.25	12.00	603.83	604.08
3K	8150+66.25	12.00	603.67	603.88
3L	8150+76.25	12.00	603.47	603.63
3M	8150+86.25	12.00	603.23	603.35
3N	8150+96.25	12.00	602.95	603.02
3O	8151+06.25	12.00	602.62	602.66
3P	8151+16.25	12.00	602.26	602.27
CL. Brg. Pier 3	8151+28.80	12.00	601.76	601.76
4A	8151+38.80	12.00	601.36	601.38
4B	8151+48.80	12.00	600.96	601.02
4C	8151+58.80	12.00	600.56	600.66
4D	8151+68.80	12.00	600.16	600.31
4E	8151+78.80	12.00	599.76	599.97
4F	8151+88.80	12.00	599.36	599.62
4G	8151+98.80	12.00	598.96	599.26
4H	8152+08.80	12.00	598.56	598.89
4I	8152+18.80	12.00	598.16	598.50
4J	8152+28.80	12.00	597.76	598.10
4K	8152+38.80	12.00	597.36	597.68
4L	8152+48.80	12.00	596.96	597.24
4M	8152+58.80	12.00	596.56	596.78
4N	8152+68.80	12.00	596.16	596.31
4O	8152+78.80	12.00	595.76	595.83
CL. E. Abut.	8152+86.44	12.00	595.46	595.46
Bk. E. Abut.	8152+89.95	12.00	595.33	595.33

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USER NAME =	mkwilson	DESIGNED -	WJC	REVISED
		CHECKED -	KAH	REVISED
PLOT SCALE =	0:2.0000 " = 1" / in.	DRAWN -	WJC	REVISED
PLOT DATE =	12/15/2016	CHECKED -	JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 6
STRUCTURE NO. 016-1707**

SHEET NO. S-13 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	220
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+81.97	17.00	595.29	595.29
CL. W. Abut.	8147+85.56	17.00	595.44	595.44
1A	8147+95.56	17.00	595.89	595.91
1B	8148+05.56	17.00	596.37	596.41
1C	8148+15.56	17.00	596.87	596.91
1D	8148+25.56	17.00	597.37	597.41
1E	8148+35.56	17.00	597.87	597.90
1F	8148+45.56	17.00	598.37	598.39
1G	8148+55.56	17.00	598.87	598.88
CL. Brg. Pier 1	8148+60.65	17.00	599.12	599.12
2A	8148+70.65	17.00	599.62	599.62
2B	8148+80.65	17.00	600.12	600.12
2C	8148+90.65	17.00	600.62	600.61
2D	8149+00.65	17.00	601.12	601.11
2E	8149+10.65	17.00	601.60	601.58
2F	8149+20.65	17.00	602.04	602.01
2G	8149+30.65	17.00	602.43	602.40
2H	8149+40.65	17.00	602.79	602.76
2I	8149+50.65	17.00	603.10	603.09
CL. Brg. Pier 2	8149+56.40	17.00	603.26	603.26
3A	8149+66.40	17.00	603.51	603.55
3B	8149+76.40	17.00	603.72	603.81
3C	8149+86.40	17.00	603.88	604.03
3D	8149+96.40	17.00	604.01	604.21
3E	8150+06.40	17.00	604.10	604.34
3F	8150+16.40	17.00	604.14	604.41
3G	8150+26.40	17.00	604.14	604.44
3H	8150+36.40	17.00	604.11	604.40
3I	8150+46.40	17.00	604.03	604.31
3J	8150+56.40	17.00	603.91	604.16
3K	8150+66.40	17.00	603.75	603.96
3L	8150+76.40	17.00	603.55	603.71
3M	8150+86.40	17.00	603.30	603.42
3N	8150+96.40	17.00	603.02	603.09
3O	8151+06.40	17.00	602.70	602.73
3P	8151+16.40	17.00	602.33	602.35
CL. Brg. Pier 3	8151+29.51	17.00	601.81	601.81
4A	8151+39.51	17.00	601.41	601.44
4B	8151+49.51	17.00	601.01	601.07
4C	8151+59.51	17.00	600.61	600.72
4D	8151+69.51	17.00	600.21	600.37
4E	8151+79.51	17.00	599.81	600.03
4F	8151+89.51	17.00	599.41	599.69
4G	8151+99.51	17.00	599.01	599.33
4H	8152+09.51	17.00	598.61	598.96
4I	8152+19.51	17.00	598.21	598.58
4J	8152+29.51	17.00	597.81	598.18
4K	8152+39.51	17.00	597.41	597.76
4L	8152+49.51	17.00	597.01	597.31
4M	8152+59.51	17.00	596.61	596.86
4N	8152+69.51	17.00	596.21	596.38
4O	8152+79.51	17.00	595.81	595.90
CL. E. Abut.	8152+88.83	17.00	595.45	595.45
Bk. E. Abut.	8152+92.34	17.00	595.32	595.32

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	8147+79.30	22.00	595.25	595.25
CL. W. Abut.	8147+82.89	22.00	595.40	595.40
1A	8147+92.89	22.00	595.84	595.86
1B	8148+02.89	22.00	596.31	596.35
1C	8148+12.89	22.00	596.81	596.86
1D	8148+22.89	22.00	597.31	597.36
1E	8148+32.89	22.00	597.81	597.85
1F	8148+42.89	22.00	598.31	598.33
1G	8148+52.89	22.00	598.81	598.82
CL. Brg. Pier 1	8148+57.97	22.00	599.07	599.07
2A	8148+67.97	22.00	599.57	599.56
2B	8148+77.97	22.00	600.07	600.06
2C	8148+87.97	22.00	600.57	600.56
2D	8148+97.97	22.00	601.07	601.06
2E	8149+07.97	22.00	601.55	601.54
2F	8149+17.97	22.00	602.00	601.98
2G	8149+27.97	22.00	602.41	602.38
2H	8149+37.97	22.00	602.77	602.75
2I	8149+47.97	22.00	603.10	603.08
CL. Brg. Pier 2	8149+56.54	22.00	603.34	603.34
3A	8149+66.54	22.00	603.59	603.64
3B	8149+76.54	22.00	603.80	603.89
3C	8149+86.54	22.00	603.96	604.11
3D	8149+96.54	22.00	604.09	604.29
3E	8150+06.54	22.00	604.17	604.42
3F	8150+16.54	22.00	604.22	604.50
3G	8150+26.54	22.00	604.22	604.53
3H	8150+36.54	22.00	604.18	604.48
3I	8150+46.54	22.00	604.10	604.39
3J	8150+56.54	22.00	603.98	604.24
3K	8150+66.54	22.00	603.82	604.04
3L	8150+76.54	22.00	603.62	603.79
3M	8150+86.54	22.00	603.38	603.50
3N	8150+96.54	22.00	603.09	603.17
3O	8151+06.54	22.00	602.77	602.81
3P	8151+16.54	22.00	602.40	602.42
CL. Brg. Pier 3	8151+30.22	22.00	601.86	601.86
4A	8151+40.22	22.00	601.46	601.49
4B	8151+50.22	22.00	601.06	601.12
4C	8151+60.22	22.00	600.66	600.77
4D	8151+70.22	22.00	600.26	600.43
4E	8151+80.22	22.00	599.86	600.10
4F	8151+90.22	22.00	599.46	599.76
4G	8152+00.22	22.00	599.06	599.40
4H	8152+10.22	22.00	598.66	599.04
4I	8152+20.22	22.00	598.26	598.66
4J	8152+30.22	22.00	597.86	598.26
4K	8152+40.22	22.00	597.46	597.84
4L	8152+50.22	22.00	597.06	597.40
4M	8152+60.22	22.00	596.66	596.94
4N	8152+70.22	22.00	596.26	596.46
4O	8152+80.22	22.00	595.86	595.97
CL. E. Abut.	8152+91.22	22.00	595.44	595.44
Bk. E. Abut.	8152+94.73	22.00	595.32	595.32

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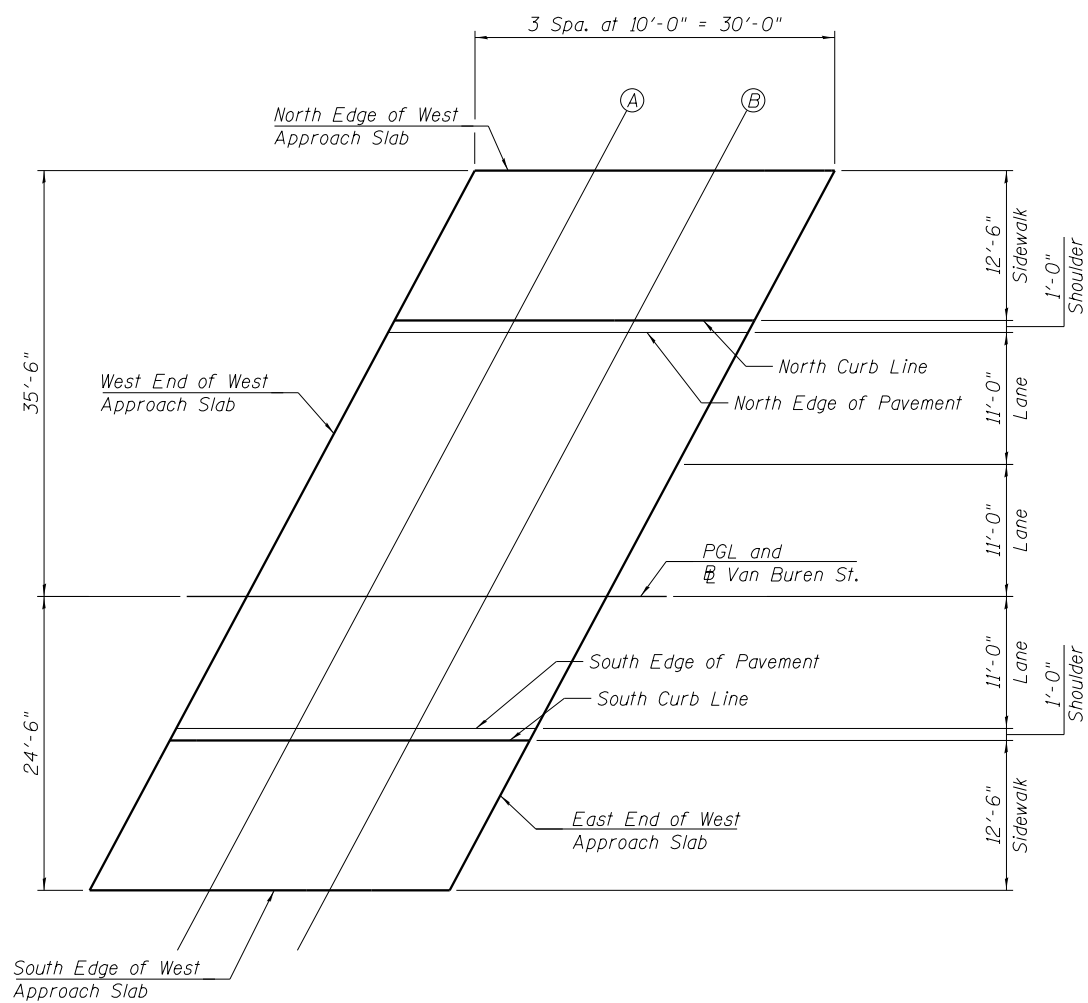
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	CHECKED - KAH	REVISED
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PLOT DATE = 12/15/2016	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

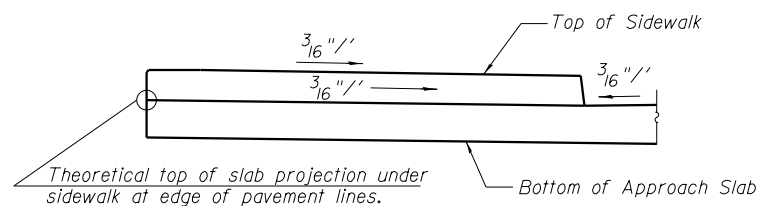
**TOP OF SLAB ELEVATIONS 7
STRUCTURE NO. 016-1707**

SHEET NO. S-14 OF S-61 SHEETS

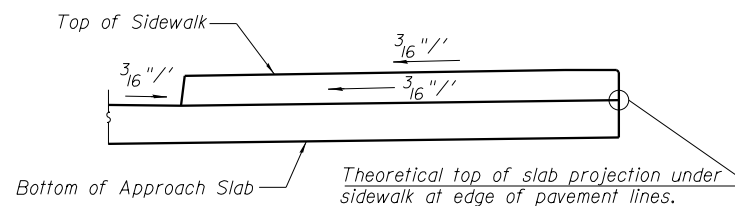
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	221
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



PLAN



LOCATION OF ELEVATION UNDER NORTH SIDEWALK



LOCATION OF ELEVATION UNDER SOUTH SIDEWALK

NORTH EDGE OF WEST APPROACH SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+80.62	-35.50	595.17
A	8147+90.62	-35.50	595.60
B	8148+00.62	-35.50	596.07
E. End West Appr. Slab	8148+10.62	-35.50	596.57

PGL & B ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+61.63	0.00	594.62
A	8147+71.63	0.00	594.98
B	8147+81.63	0.00	595.38
E. End West Appr. Slab	8147+91.63	0.00	595.81

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+73.94	-23.00	594.71
A	8147+83.94	-23.00	595.12
B	8147+93.94	-23.00	595.56
E. End West Appr. Slab	8148+03.94	-23.00	596.04

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+55.75	11.00	594.25
A	8147+65.75	11.00	594.59
B	8147+75.75	11.00	594.97
E. End West Appr. Slab	8147+85.75	11.00	595.38

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+73.40	-22.00	594.71
A	8147+83.40	-22.00	595.11
B	8147+93.40	-22.00	595.55
E. End West Appr. Slab	8148+03.40	-22.00	596.03

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+55.21	12.00	594.22
A	8147+65.21	12.00	594.56
B	8147+75.21	12.00	594.93
E. End West Appr. Slab	8147+85.21	12.00	595.34

SOUTH EDGE OF WEST APPROACH SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End West Appr. Slab	8147+48.53	24.50	594.21
A	8147+58.53	24.50	594.52
B	8147+68.53	24.50	594.88
E. End West Appr. Slab	8147+78.53	24.50	595.26

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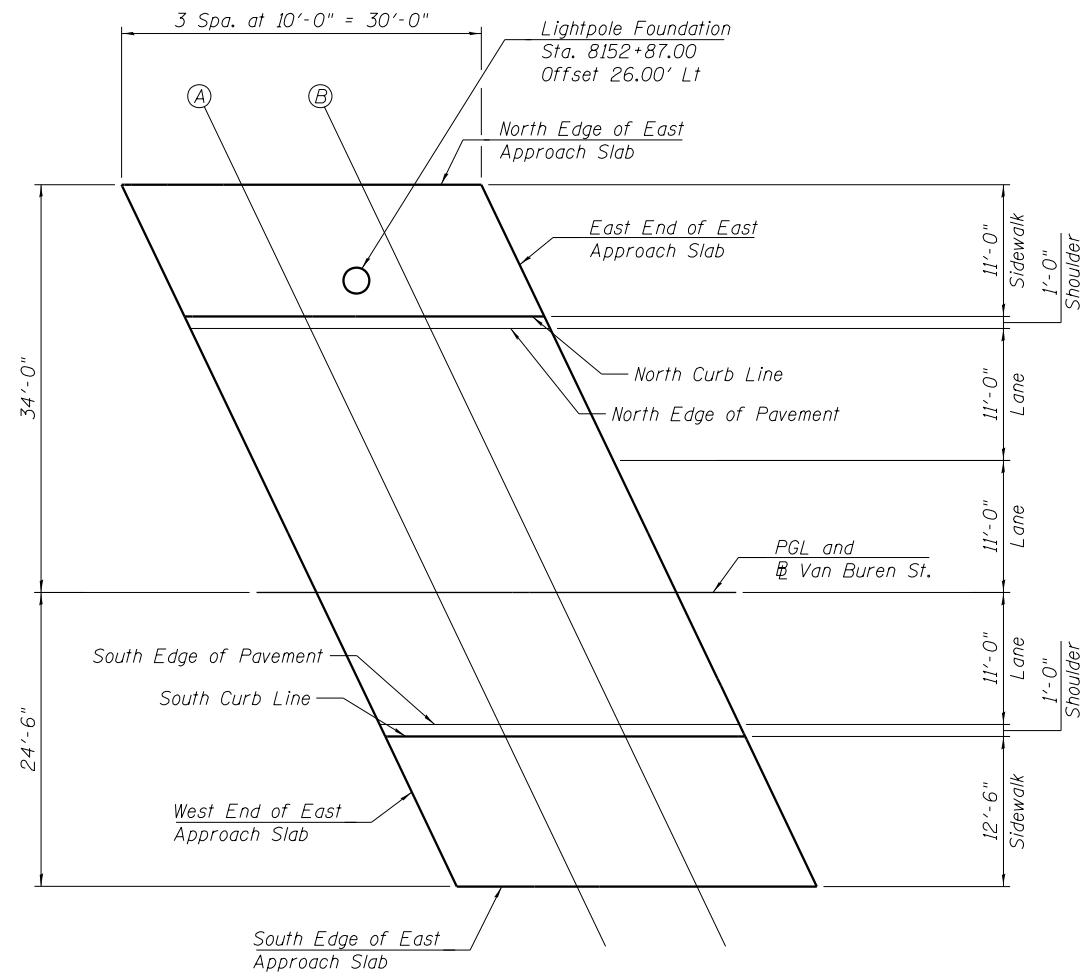
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

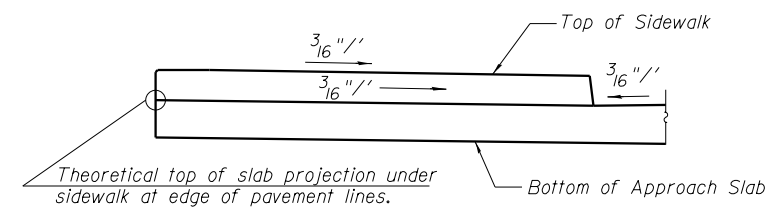
TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-1707

SHEET NO. S-15 OF S-61 SHEETS

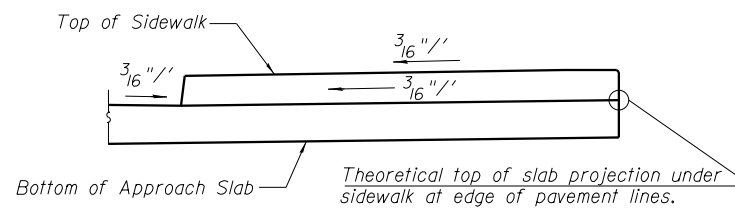
F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 222
CONTRACT NO. 60X99				ILLINOIS FED. AID PROJECT



PLAN



LOCATION OF ELEVATION UNDER NORTH SIDEWALK



LOCATION OF ELEVATION UNDER SOUTH SIDEWALK

NORTH EDGE OF EAST APPROACH SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+67.42	-34.00	596.22
A	8152+77.42	-34.00	595.82
B	8152+87.42	-34.00	595.42
E. End East Appr. Slab	8152+97.42	-34.00	595.07

PGL & B ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+83.67	0.00	595.76
A	8152+93.67	0.00	595.38
B	8153+03.67	0.00	595.04
E. End East Appr. Slab	8153+13.67	0.00	594.74

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+72.68	-23.00	595.83
A	8152+82.68	-23.00	595.44
B	8152+92.68	-23.00	595.06
E. End East Appr. Slab	8153+02.68	-23.00	594.72

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+88.92	11.00	595.38
A	8152+98.92	11.00	595.03
B	8153+08.92	11.00	594.71
E. End East Appr. Slab	8153+18.92	11.00	594.42

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+73.16	-22.00	595.83
A	8152+83.16	-22.00	595.43
B	8152+93.16	-22.00	595.06
E. End East Appr. Slab	8153+03.16	-22.00	594.72

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+89.40	12.00	595.35
A	8152+99.40	12.00	595.00
B	8153+09.40	12.00	594.68
E. End East Appr. Slab	8153+19.40	12.00	594.39

SOUTH EDGE OF EAST APPROACH SLAB

Location	Station	Offset	Theoretical Grade Elevations
W. End East Appr. Slab	8152+95.37	24.50	595.33
A	8153+05.37	24.50	595.00
B	8153+15.37	24.50	594.70
E. End East Appr. Slab	8153+25.37	24.50	594.43

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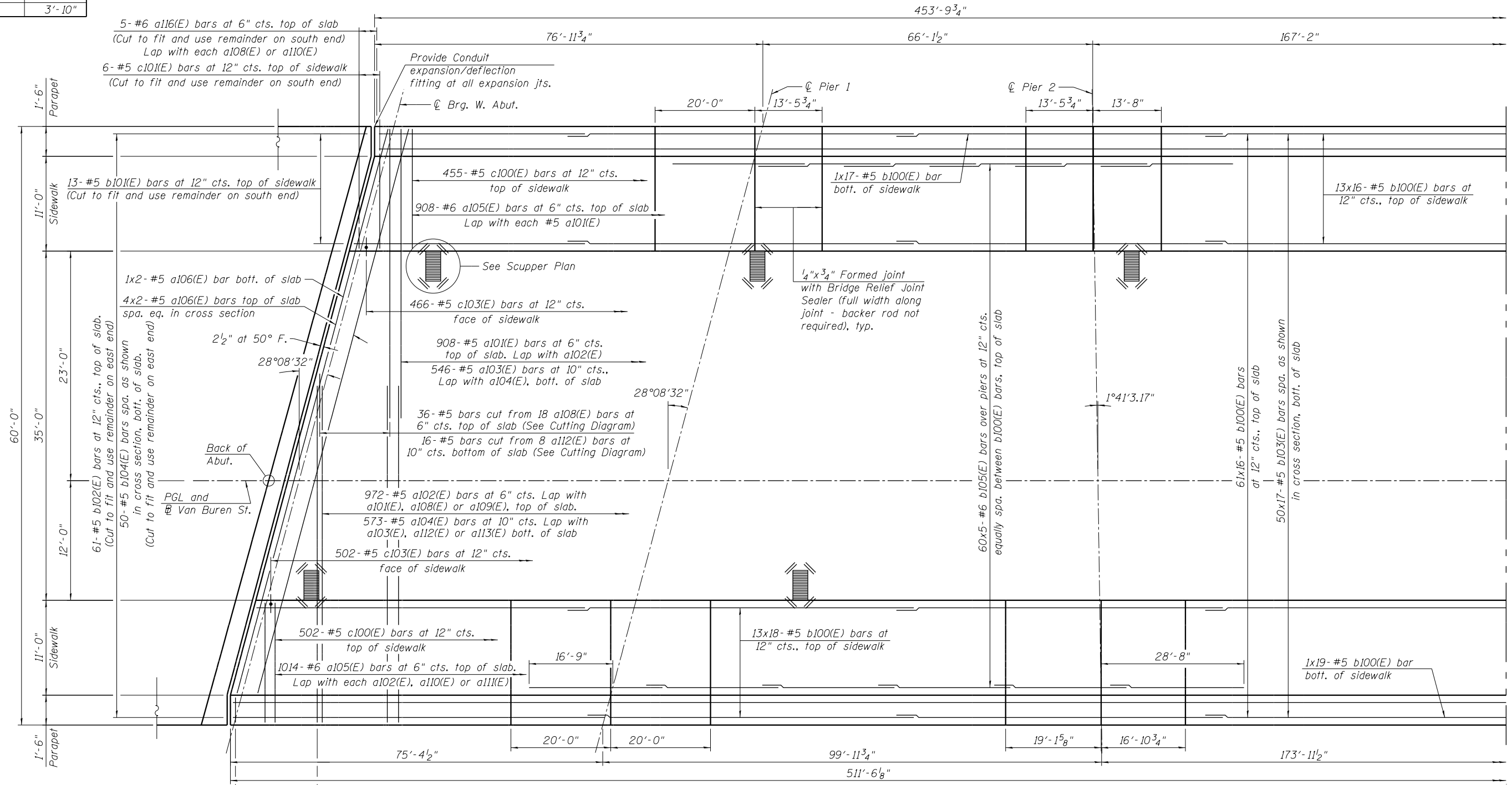
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-1707**

SHEET NO. S-16 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 223
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

Minimum Bar Laps	
Bar	Lap
#5	3'-3"
#6	3'-10"



Notes:
 Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy details on Sheet S-28 of S-61.
 See Sheet S-22 of S-61 for Bill of Material.
 See Sheet S-20 and S-21 of S-61 for parapet reinforcement.
 For Scupper locations see Sheet S-03 of S-61.
 For Scupper Plan see Sheet S-19 of S-61.

DECK PLAN

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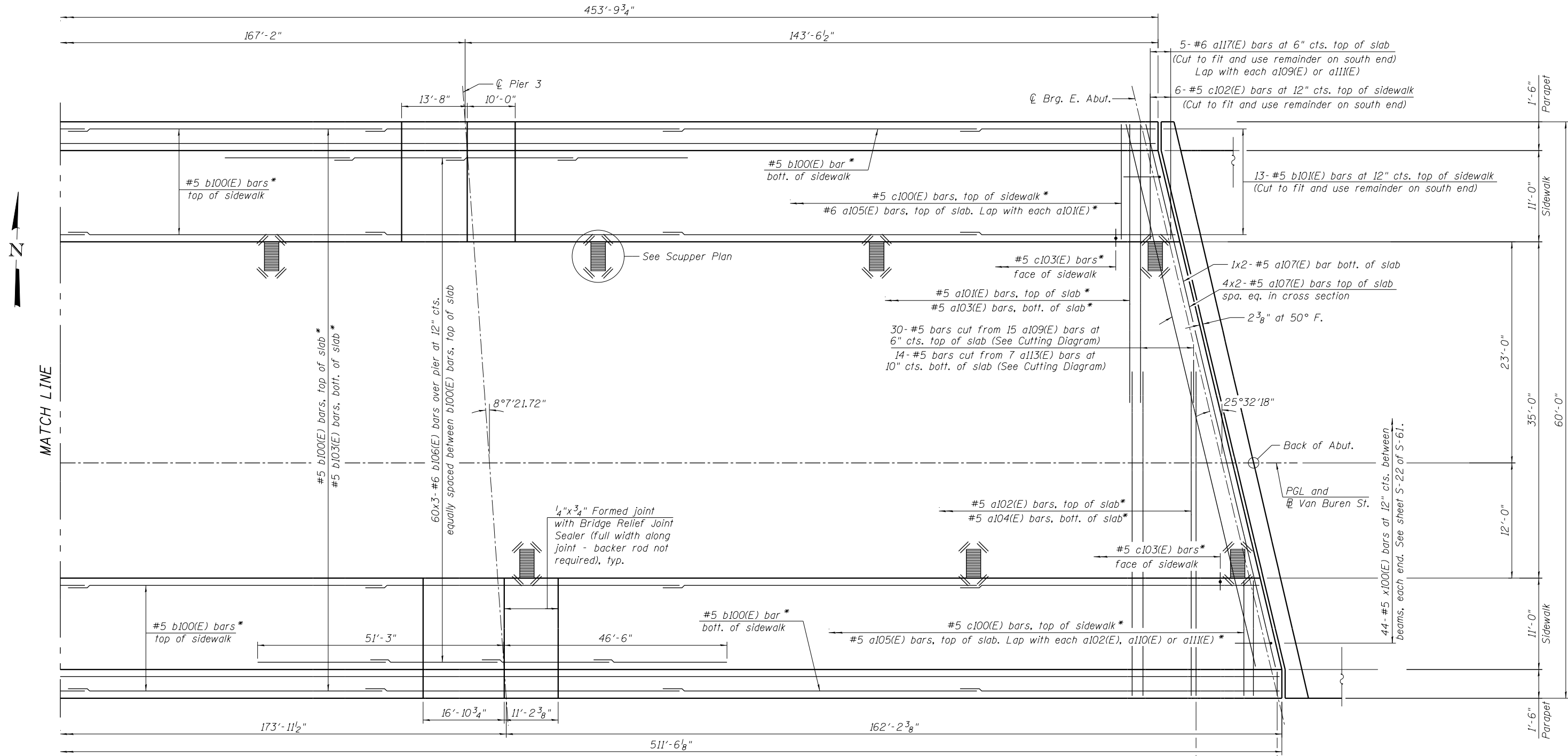
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DECK PLAN AND CROSS SECTION 1
 STRUCTURE NO. 016-1707**

SHEET NO. S-17 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 224
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

Minimum Bar Laps	
Bar	Lap
#5	3'-3"
#6	3'-10"



Notes:
 Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy details on Sheet S-28 of S-61.
 See Sheet S-22 of S-61 for Bill of Material.
 See Sheet S-20 and S-21 of S-61 for parapet reinforcement.
 For Scupper locations see Sheet S-03 of S-61.
 For Scupper Plan see Sheet S-19 of S-61.

* See Sheet S-17 of S-61 for number and spacing of bars.

DECK PLAN

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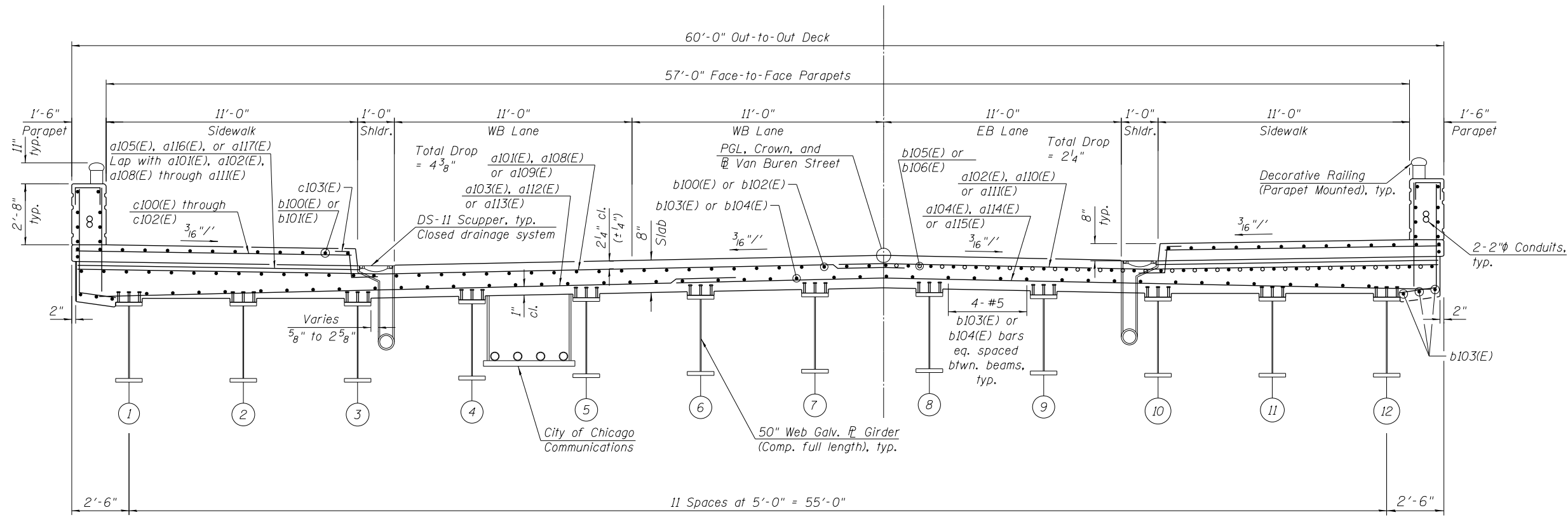
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

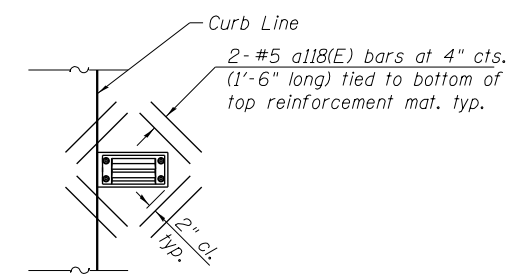
**DECK PLAN AND CROSS SECTION 2
 STRUCTURE NO. 016-1707**

SHEET NO. S-18 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 225
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



NEAR MIDSPAN CROSS SECTION (Looking East) NEAR PIER



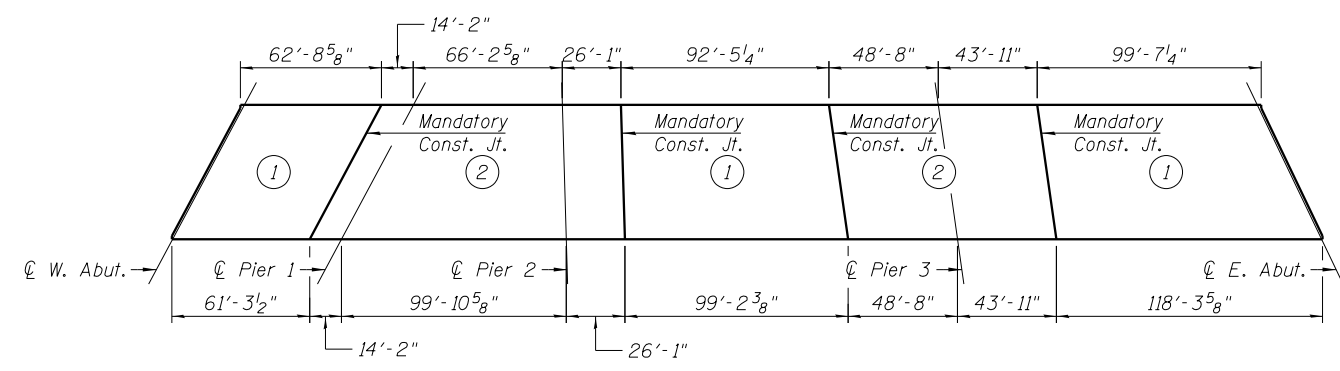
SCUPPER PLAN Note: Cut longitudinal reinforcement to clear drainage scuppers.

DECK POURING SEQUENCE

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 650 psi or a minimum compressive strength of 4000 psi.

Concrete pours shall follow the numerical order shown in the pouring sequence. Deviation from this pour sequence requires approval from the Engineer.



POURING SEQUENCE



Notes:
See Sheet S-22 of S-61 for Bill of Material.
See Sheet S-20 and S-21 of S-61 for parapet reinforcement.
For Scupper locations see Sheet S-03 of S-61.
Details for the proposed conduit support system are shown on the Lighting Plans. The concrete inserts will be provided by the contractor. The installation location of the concrete inserts will be determined in the field by the contractor. There is no separate payment for the placement of the inserts. Cost of the work involved in providing and installing the inserts included with Concrete Superstructure.

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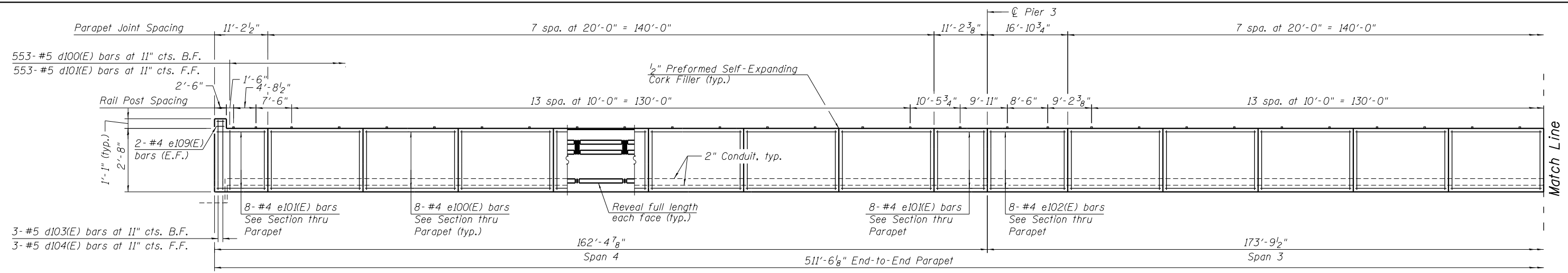
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN AND CROSS SECTION 3
STRUCTURE NO. 016-1707

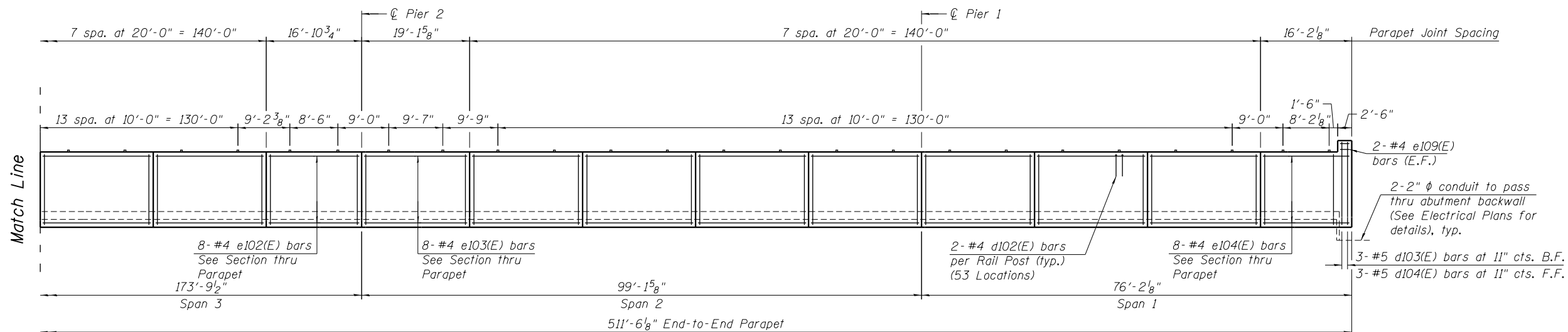
SHEET NO. S-19 OF S-61 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	226
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



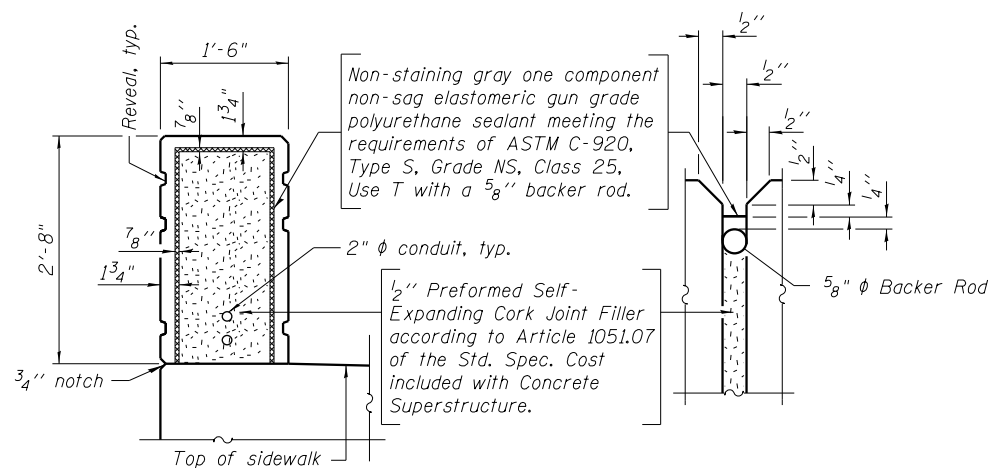
INSIDE ELEVATION OF SOUTH PARAPET

(Looking South)



INSIDE ELEVATION OF SOUTH PARAPET

(Looking South)



PARAPET JOINT DETAILS

Notes:
 For notes, bar diagrams, Section Through Parapet and Bill of Material, see Sheet S-22 of S-61.
 All edges shall be chamfered 3/4".
 For architectural details on the parapets and Decorative Railing (Parapet Mounted) details, see Sheet S-25 of S-61.
 The cost of reveal is included in cost of Concrete Superstructure.

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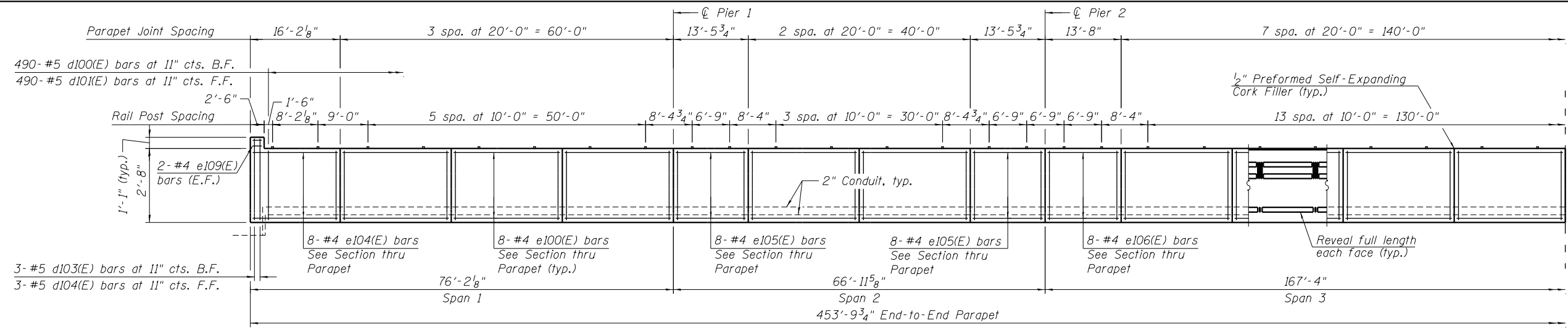
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

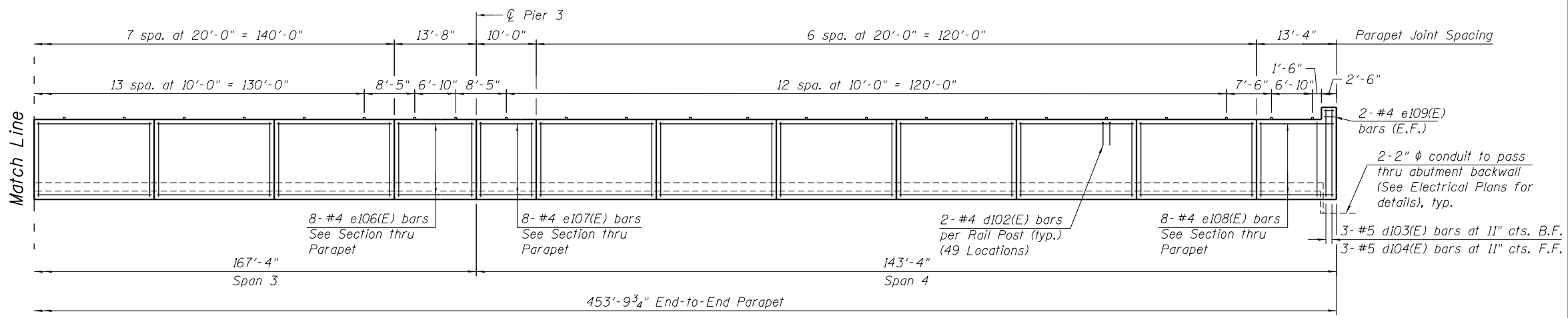
**SOUTH PARAPET ELEVATION AND DETAILS
 STRUCTURE NO. 016-1707**

SHEET NO. S-20 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	227
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



INSIDE ELEVATION OF NORTH PARAPET
(Looking North)



INSIDE ELEVATION OF NORTH PARAPET
(Looking North)

Notes:
For notes, see Sheet S-20 of S-61.

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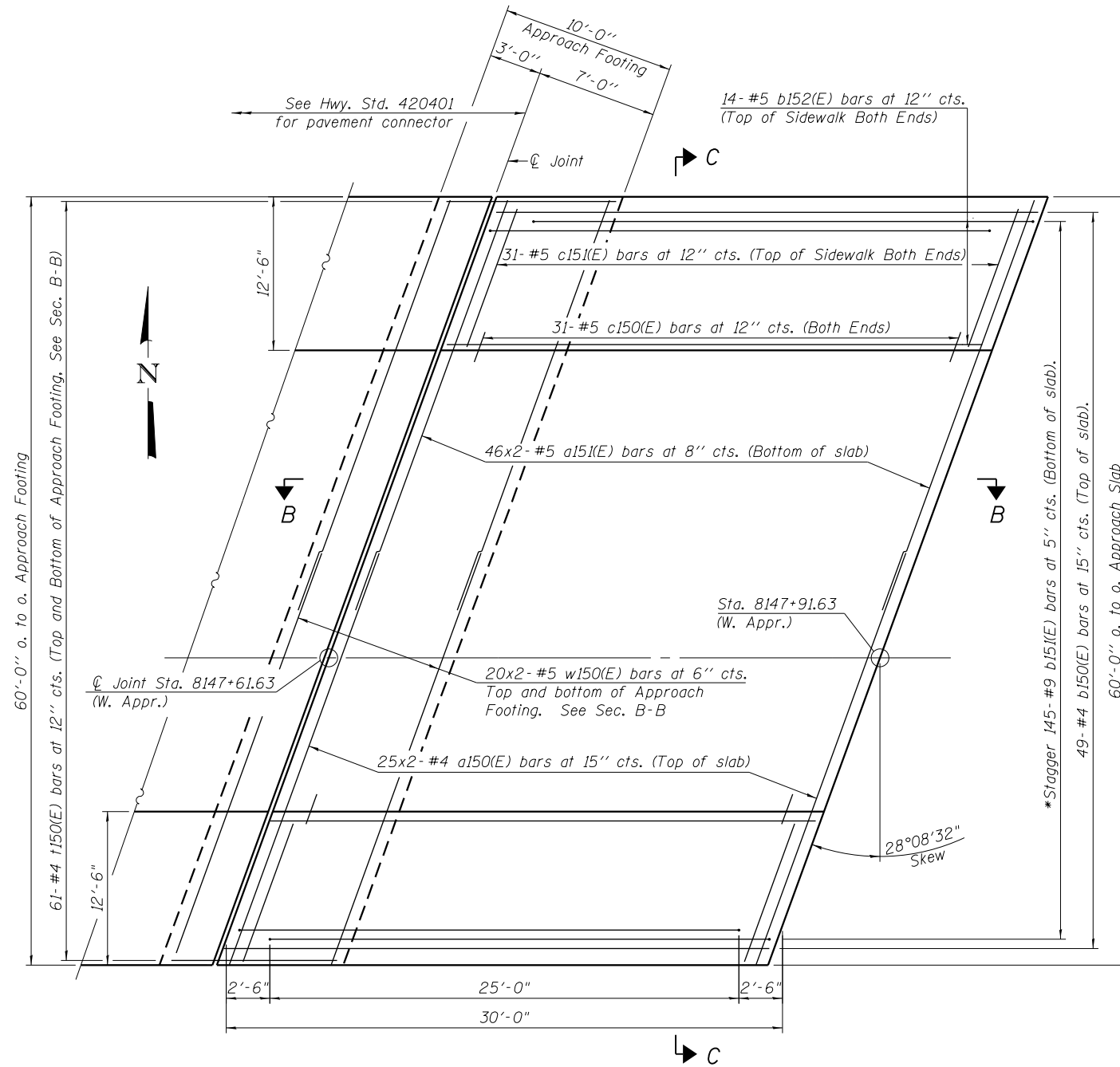
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH PARAPET ELEVATION AND DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-21 OF S-61 SHEETS

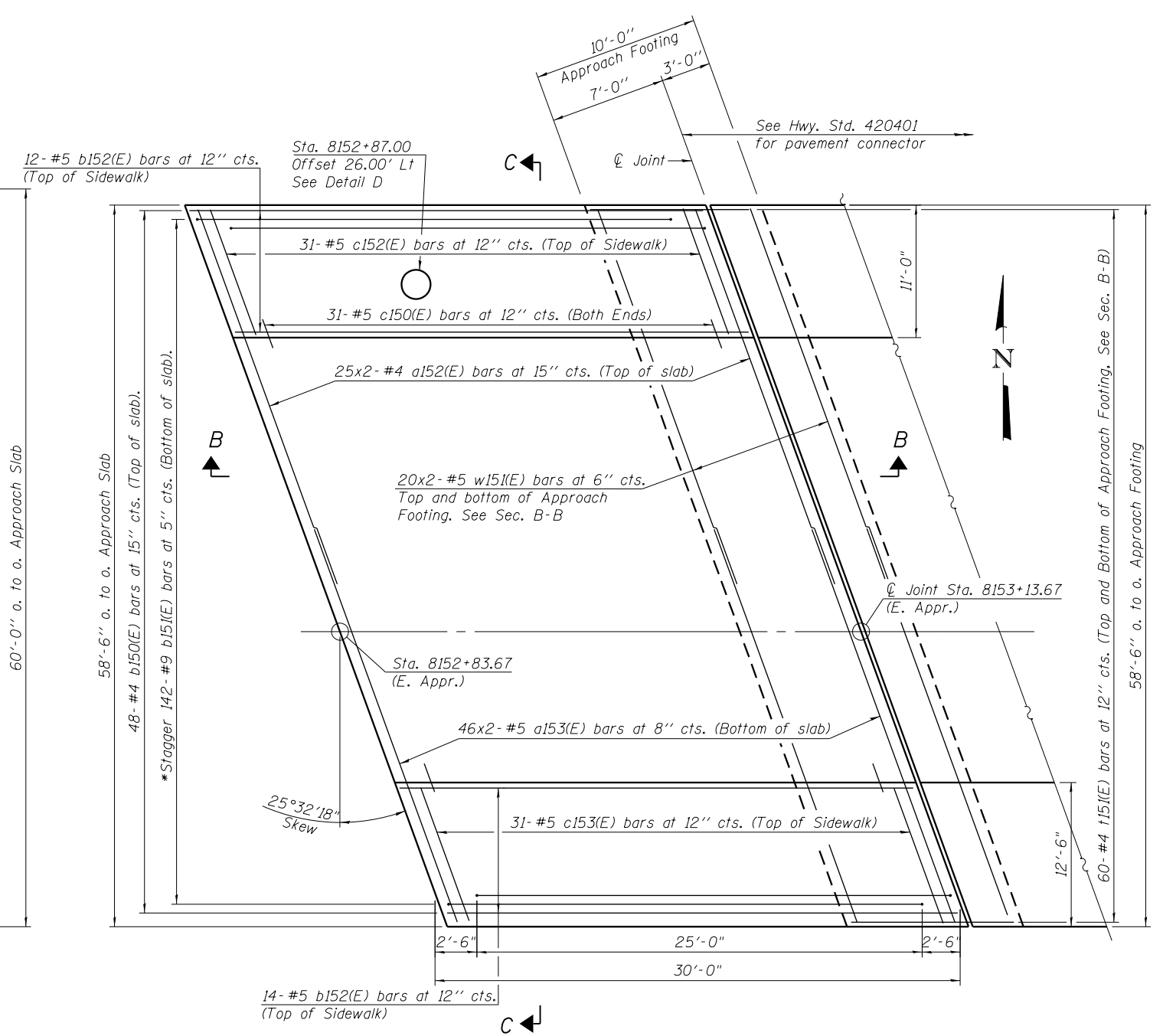
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	228
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

Notes:
 See sheet S-24 of S-61 for Sections B-B, C-C and Detail D.
 a150(E) through a153(E) and c150(E) through c152(E) bar spacings measured along $\text{\textcircled{C}}$ Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be $1\frac{1}{2}$ " for installation purposes.
 Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



WEST APPROACH - PLAN

* Tilt #9 b151(E) bars as required to maintain clearance.



EAST APPROACH - PLAN

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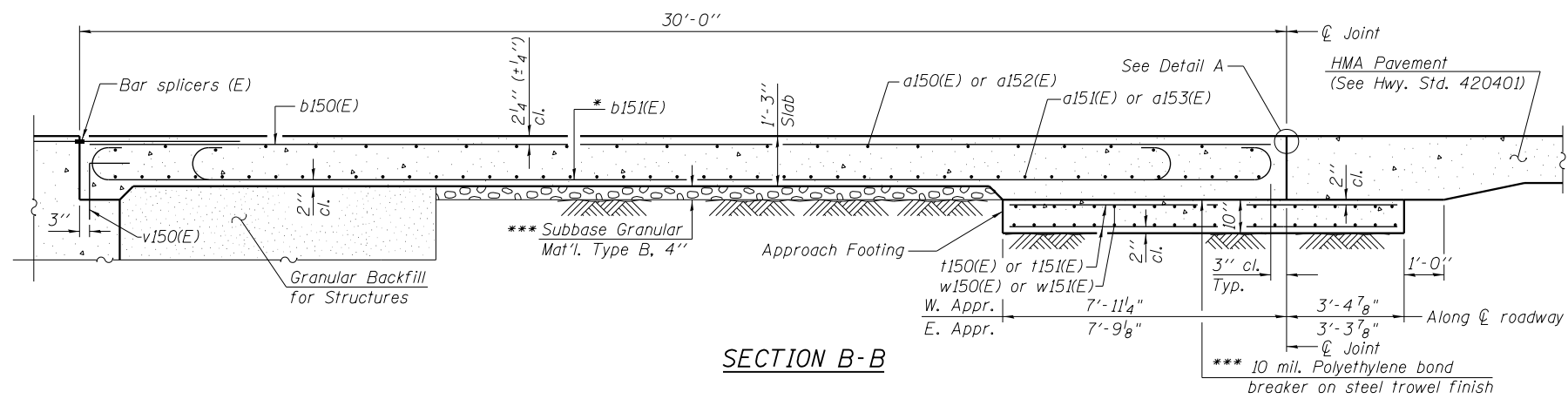
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS 1
 STRUCTURE NO. 016-1707**

SHEET NO. S-23 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	230
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

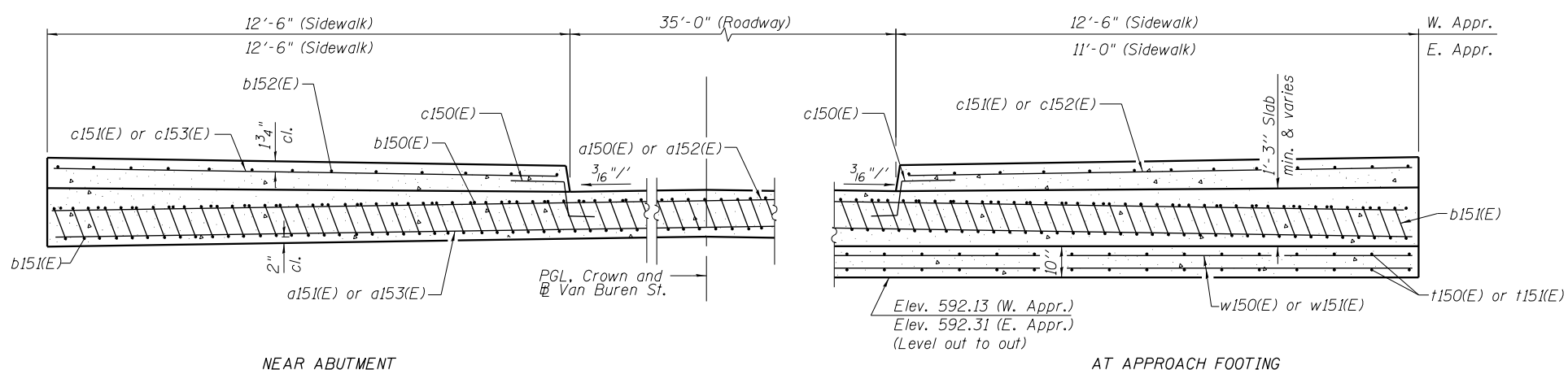


Notes:
 Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
 Sidewalk concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v150(E) bar details and for Granular Backfill for Structures, see Sheets S-37 and S-41 of S-61.
 For drainage treatment details, see Sheets S-39 and S-43 of S-61.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 For bar splicer details, see Sheet S-53 of S-61.
 Cost of excavation for approach footing included with Concrete Structures.
 For lightpole foundation details, see Lighting Plans.

**WEST APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a150(E)	50	#4	35'-2"	—	
a151(E)	92	#5	35'-6"	—	
b150(E)	49	#4	29'-8"	—	
b151(E)	145	#9	29'-9"	—	
b152(E)	28	#5	29'-8"	—	
c150(E)	62	#5	2'-4"	—	
c151(E)	62	#5	13'-10"	—	
t150(E)	122	#4	10'-11"	—	
w150(E)	40	#5	35'-6"	—	
Concrete Superstructure				Cu. Yd.	19.6
Concrete Superstructure (Approach Slab)				Cu. Yd.	83.3
Concrete Structures				Cu. Yd.	21.1
Reinforcement Bars, Epoxy Coated				Pound	24,510
Bridge Deck Grooving				Sq. Yd.	124
Protective Coat				Sq. Yd.	217

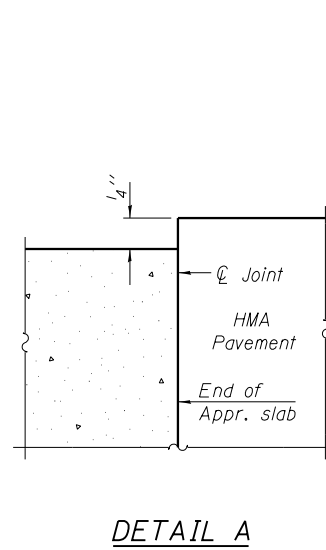
Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"



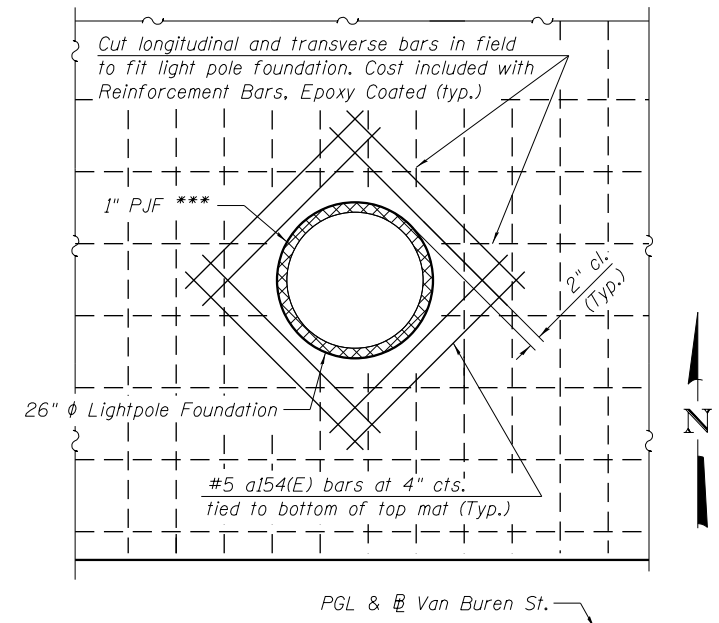
* Tilt #9 b151(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure (Approach Slab).

SECTION C-C

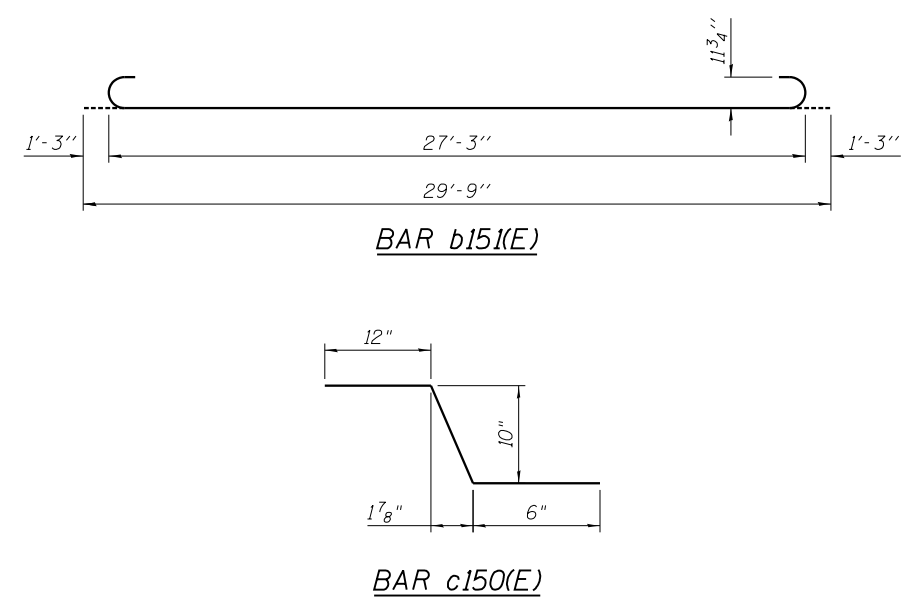
(See Plan for dimensions not shown)



DETAIL A



DETAIL D



**EAST APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a152(E)	50	#4	33'-7"	—	
a153(E)	92	#5	33'-11"	—	
a154(E)	8	#5	3'-8"	—	
b150(E)	48	#4	29'-8"	—	
b151(E)	142	#9	29'-9"	—	
b152(E)	26	#5	29'-8"	—	
c150(E)	62	#5	2'-4"	—	
c152(E)	31	#5	11'-10"	—	
c153(E)	31	#5	13'-6"	—	
t151(E)	120	#4	10'-8"	—	
w151(E)	40	#5	33'-11"	—	
Concrete Superstructure				Cu. Yd.	18.3
Concrete Superstructure (Approach Slab)				Cu. Yd.	81.2
Concrete Structures				Cu. Yd.	20.1
Reinforcement Bars, Epoxy Coated				Pound	23,770
Bridge Deck Grooving				Sq. Yd.	123
Protective Coat				Sq. Yd.	211

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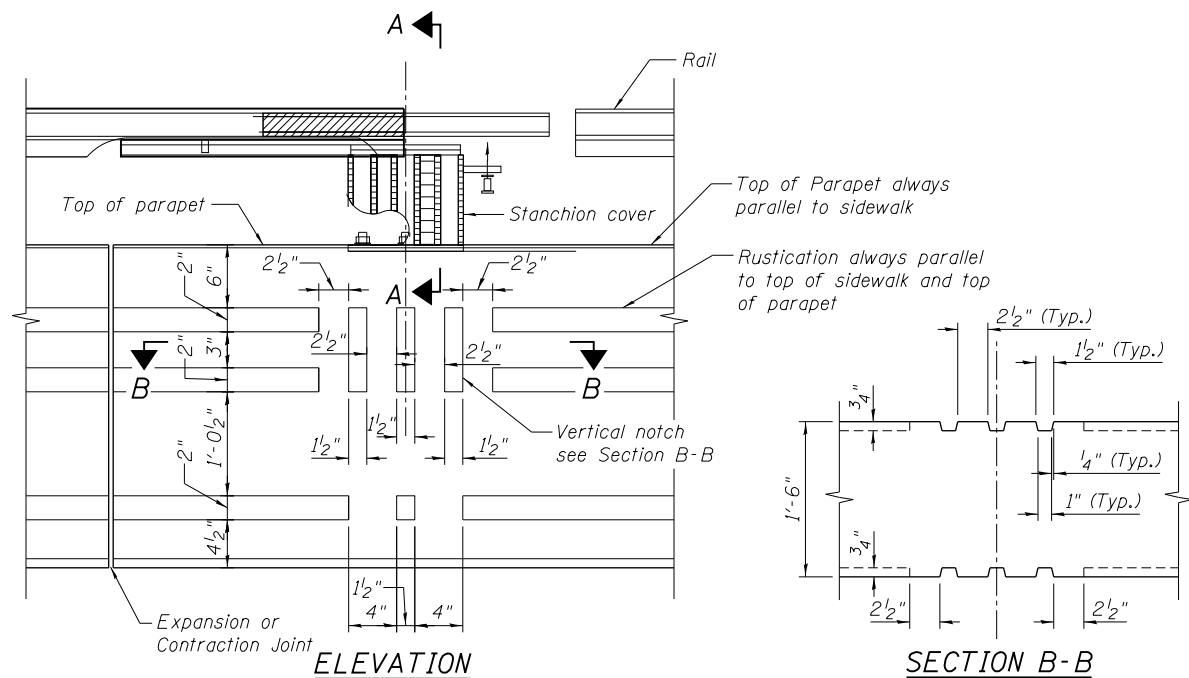
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS 2
 STRUCTURE NO. 016-1707**

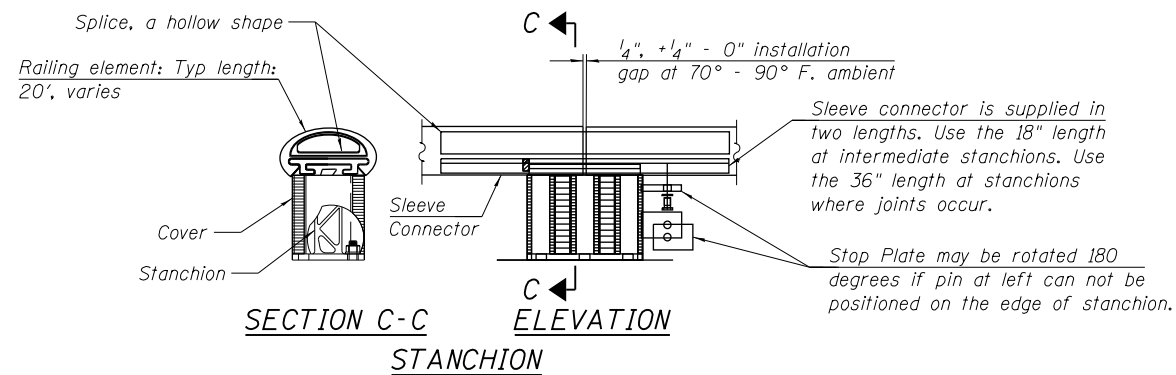
SHEET NO. S-24 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 231
CONTRACT NO. 60X99				ILLINOIS FED. AID PROJECT



ELEVATION

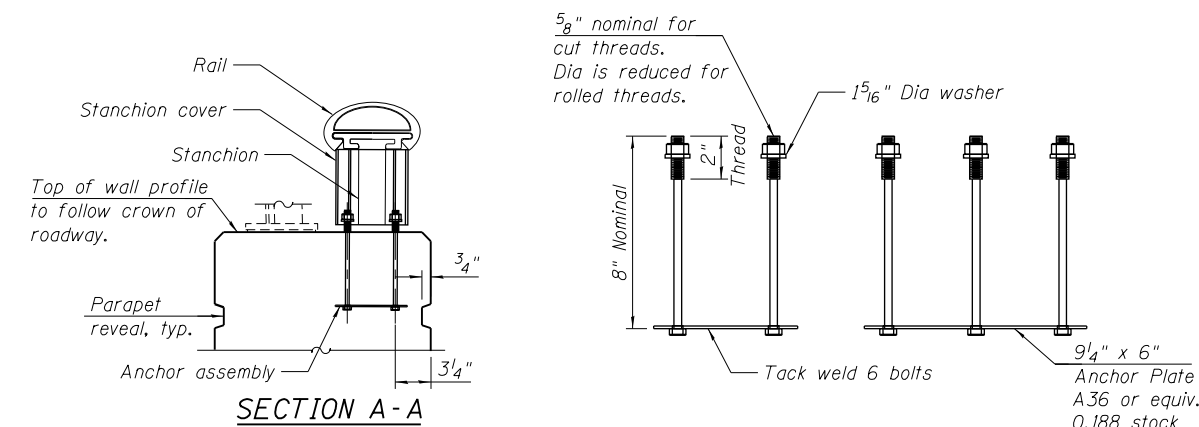
SECTION B-B



SECTION C-C

ELEVATION

TYPICAL CHICAGO PARAPET DETAIL



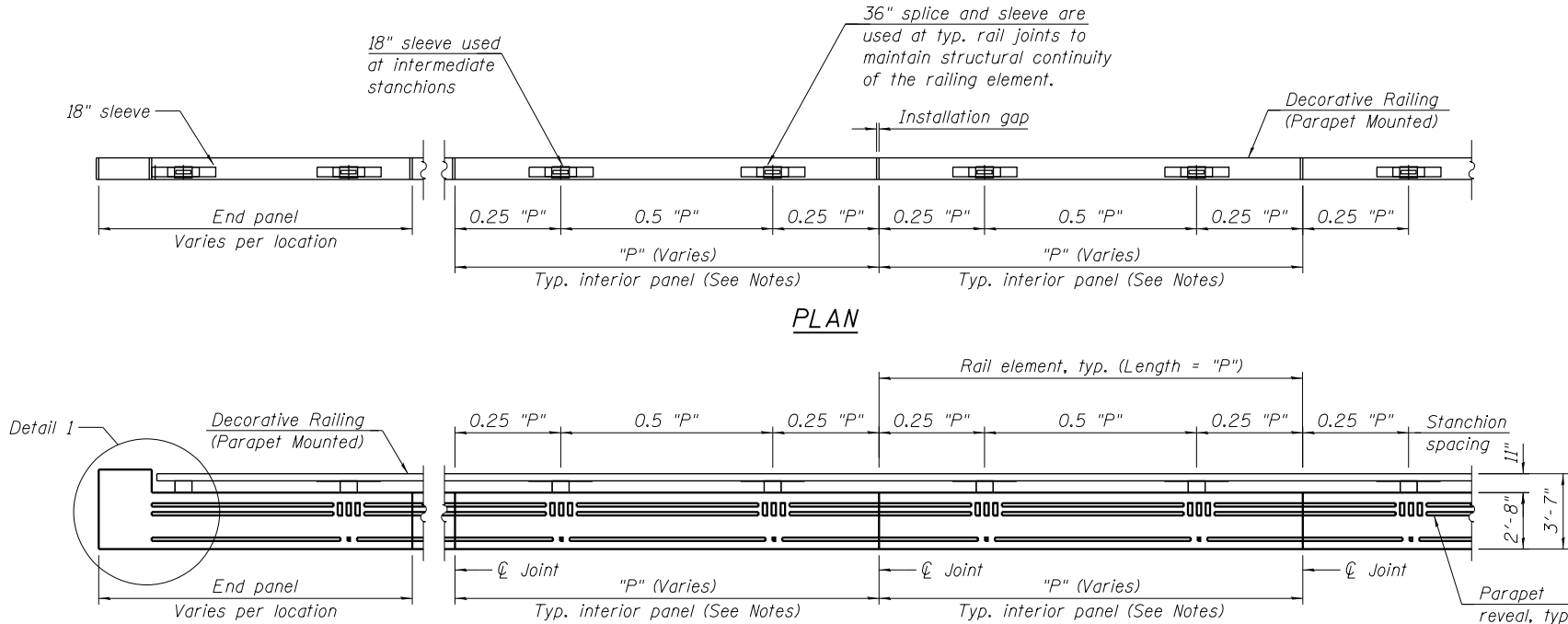
SECTION A-A

ANCHOR ASSEMBLY

- NOTES:**
- All fasteners to meet, or exceed, ASTM A307 Grade C strength requirements.
 - Galvanize per Article 509.05 of the Standard Specifications after fabrication.
 - The size and position of parapet reinforcing must be consistent with capture of the anchor assembly. See Sheets S-20 and S-21 of S-61 for rebar details.

BILL OF MATERIAL

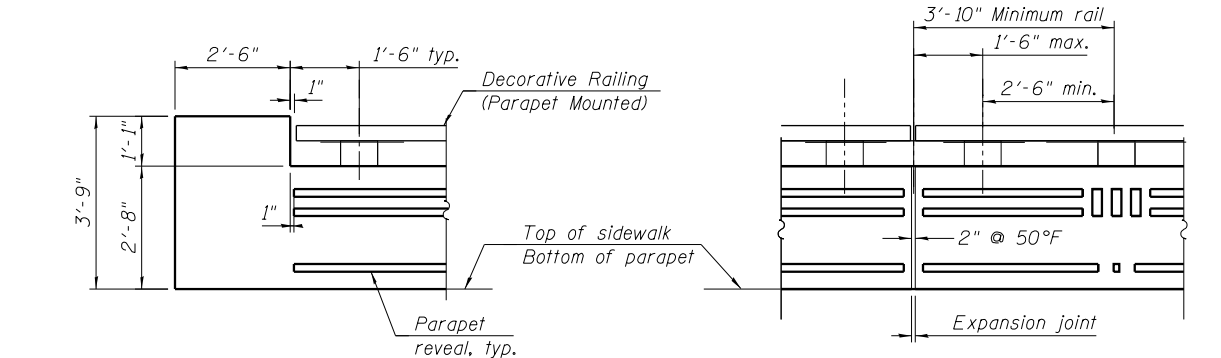
Item	Unit	Total
Decorative Railing (Parapet Mounted)	Foot	956



PLAN

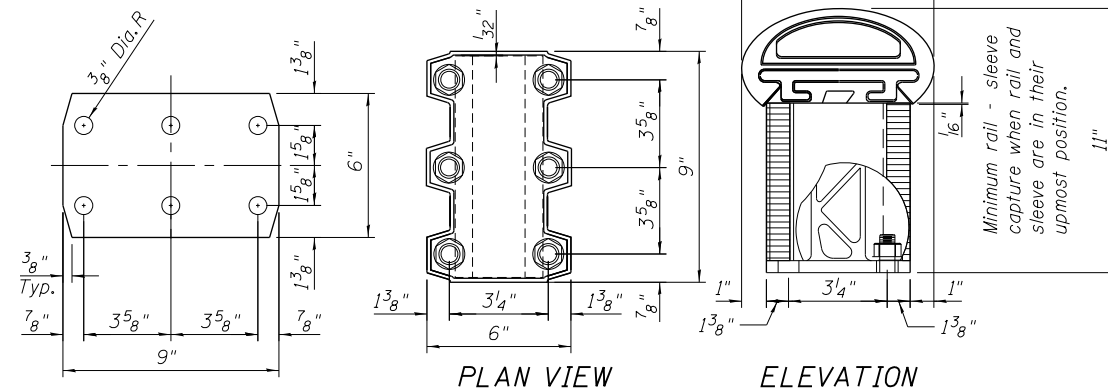
ELEVATION

RAIL DETAIL - STANCHION LOCATION AND SPACING



RAIL DETAIL 1 - AT END OF PARAPET

RAIL DETAIL 2 - AT EXPANSION JOINT



PLAN VIEW

ELEVATION

ELASTOMERIC PAD

- NOTES:**
- Elastomeric pad for stanchion made from 1/16" thick stock.
 - One required per stanchion.

STANCHION COVER

- NOTES:**
- Cover is shown superimposed over stanchion with anchors in place.
 - The stanchion cover is a non-structural element, serving an aesthetic function. It rests on the flange of the stanchion, without fasteners and is captured in place by the rail and stanchion.

- Notes:**
- When walls without rail are adjacent to Chicago wall with rail, their traffic face, or the terminus of their traffic face, must be in the same plane as Chicago wall with rail.
 - Rustication may vary at terminal ends and is subject to site conditions and site approval. In all other situations, the middle 2.5" x 1.5" rustication is aligned with the center of the stanchion.
 - Wall details above show that portion of the wall above the gutter break, the substructure is not shown. Note that substructure(s) depth variations could significantly alter the required top of wall profile.
 - Field cutting of rail elements is acceptable. The cut edge will no longer be anodized. Saw cut only, flame cut not allowed.
 - End caps shall be used at all rail terminals.
 - Railing system to be produced using extruded aluminum that can be clear anodized.
 - Alloy selection is based upon the above color requirement and the engineering sufficiency analysis which must be supplied by the Contractor.
 - Physical appearance to be equal to "Valentine Urban Systems - Chicago wall with rail".
 - For panel layout, overall stanchion location, spacing and details, see Sheets S-20 and S-21 of S-61.

3:02:03 PM 0161707-60X99-5025-Railing_ParapetMtd.dgn



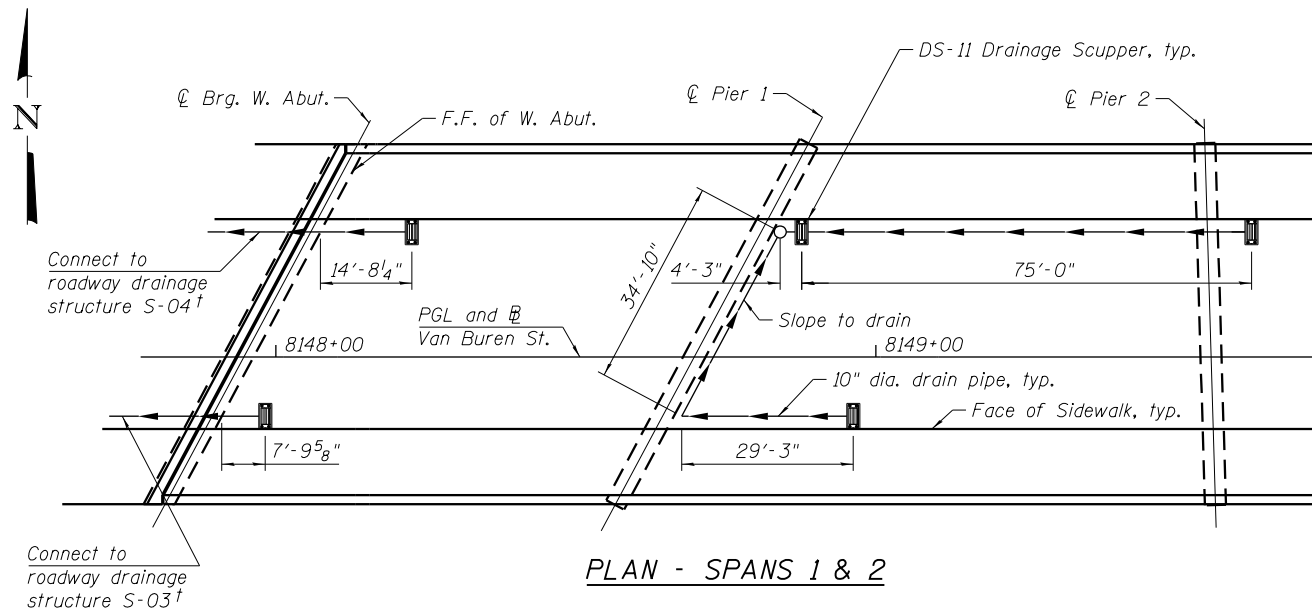
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

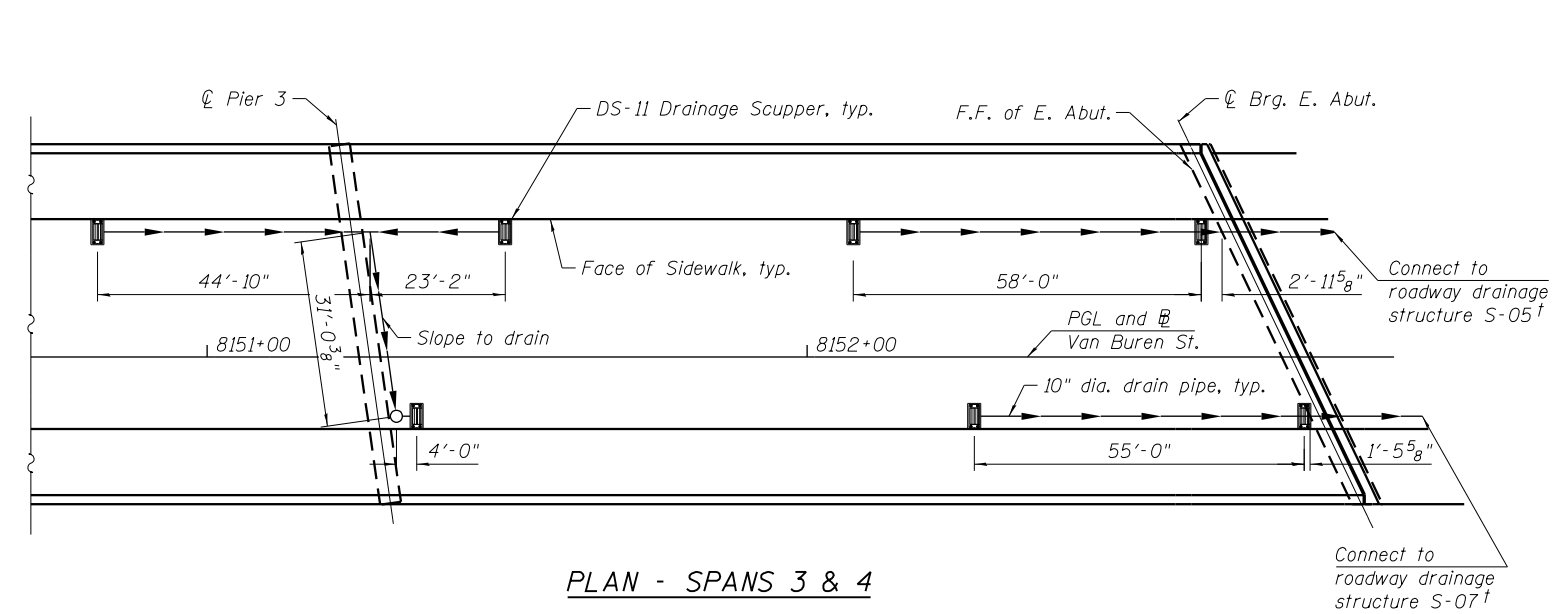
DECORATIVE RAILING PARAPET MOUNTED
STRUCTURE NO. 016-1707

SHEET NO. S-25 OF S-61 SHEETS

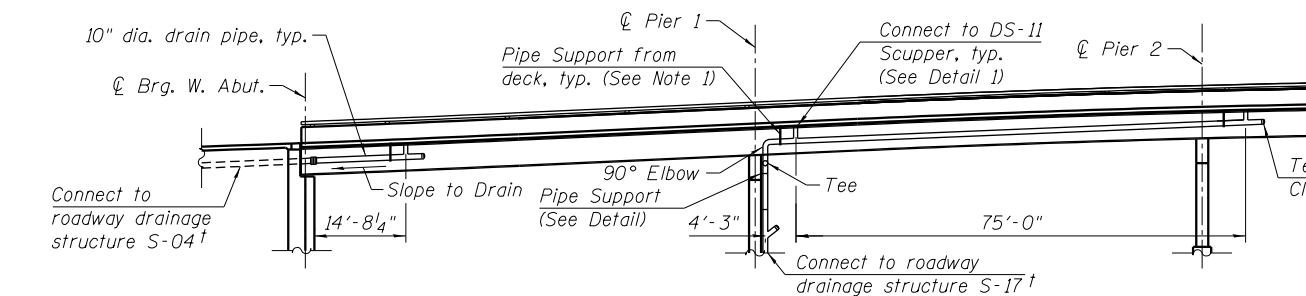
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	232
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



PLAN - SPANS 1 & 2

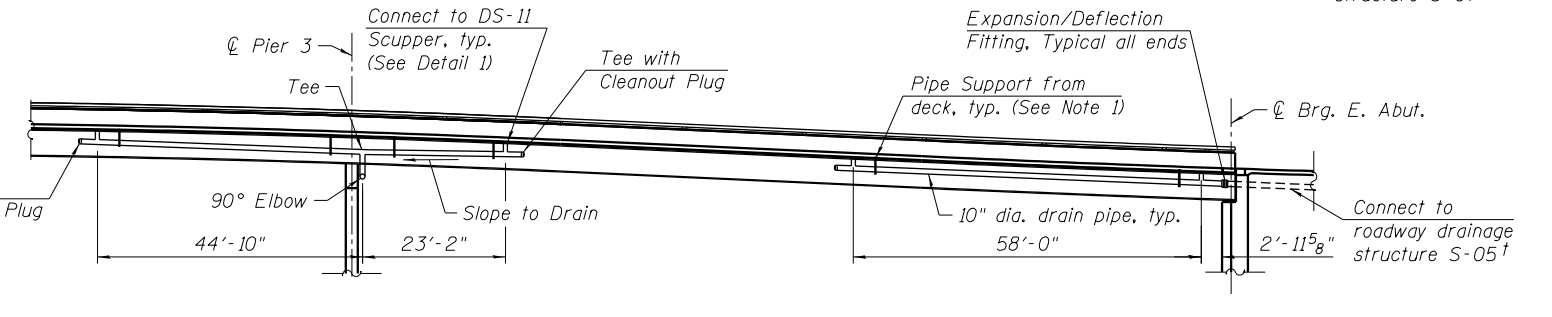


PLAN - SPANS 3 & 4



ELEVATION - SPANS 1 & 2 (NORTH)

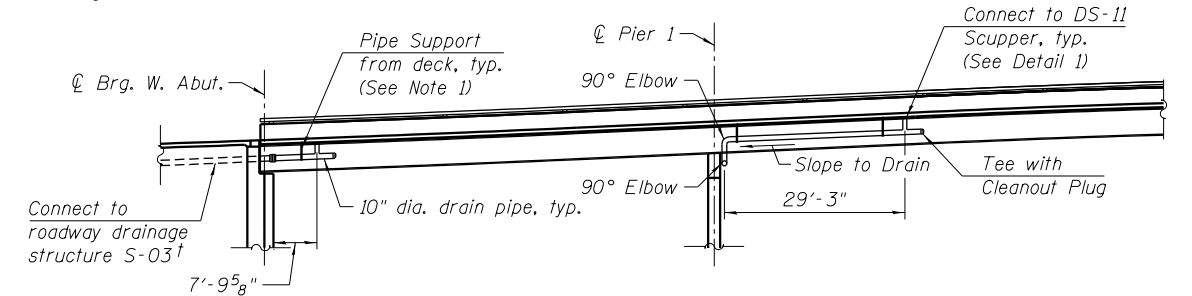
(Drainage System is located between Girders 3 and 4)



ELEVATION - SPANS 3 & 4 (NORTH)

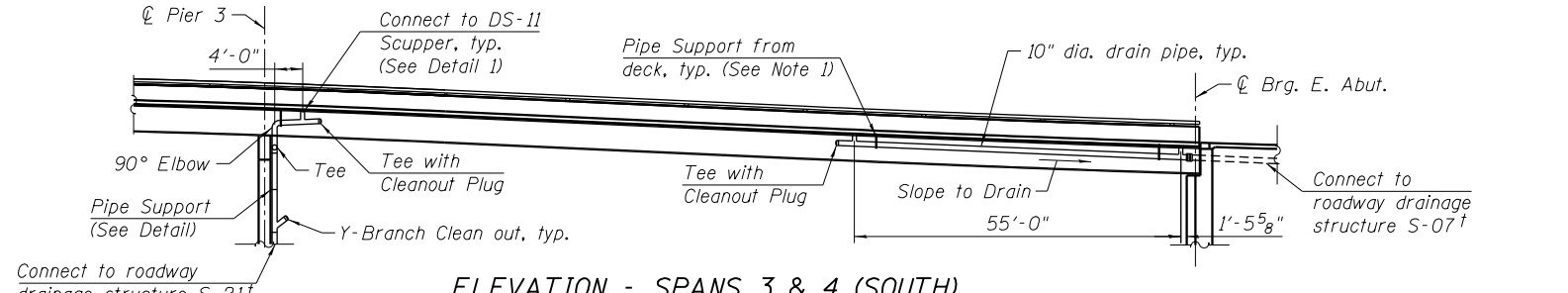
(Drainage System is located between Girders 3 and 4)

† 10" φ Ductile Iron Pipe. Cost included with Drainage System. See Drainage Plans for locations of drainage structures.



ELEVATION - SPANS 1 & 2 (SOUTH)

(Drainage System is located between Girders 9 and 10)



ELEVATION - SPANS 3 & 4 (SOUTH)

(Drainage System is located between Girders 9 and 10)

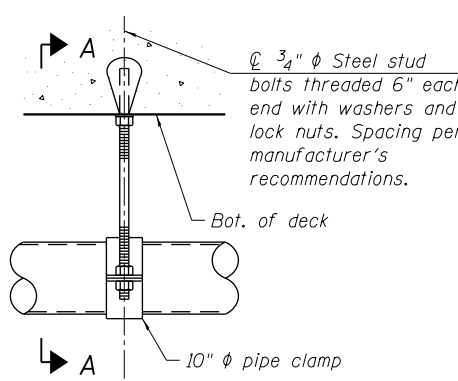
LEGEND

→ Indicates direction of flow

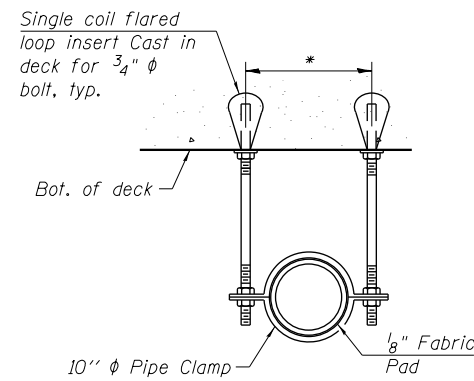
Notes:
 Provide structural support from proposed deck slab for drain pipe per manufacturer's recommendation, not to exceed 6' cts. Cost included with Drainage System.
 All pipes, pipe fittings and brackets needed shall be included with cost of Drainage System.
 See abutment details for block outs in backwalls of west and east abutments.
 The drainage system shall be painted with a finish coat of gray, Munsell No. 5B 7/1. Cost included with Drainage System.
 All pipes shall be reinforced fiberglass, unless noted otherwise.

BILL OF MATERIAL

Item	Unit	Quantity
Drainage System	L. Sum	1

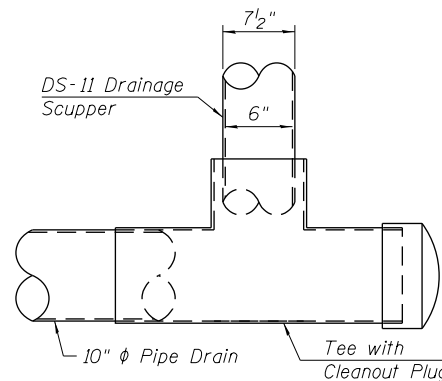


PIPE BRACKET DETAIL

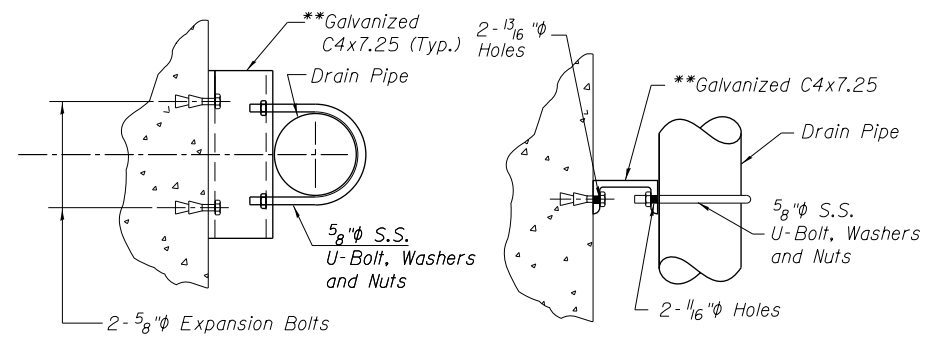


SECTION A-A

* Dimension as required by Pipe Clamp



DETAIL 1



PIPE SUPPORT DETAIL

**Provide curved C6x8.2 to fit Round Pier Columns where needed

10:22:47 AM 0161707-60X99-5026-Drainage_System.dgn



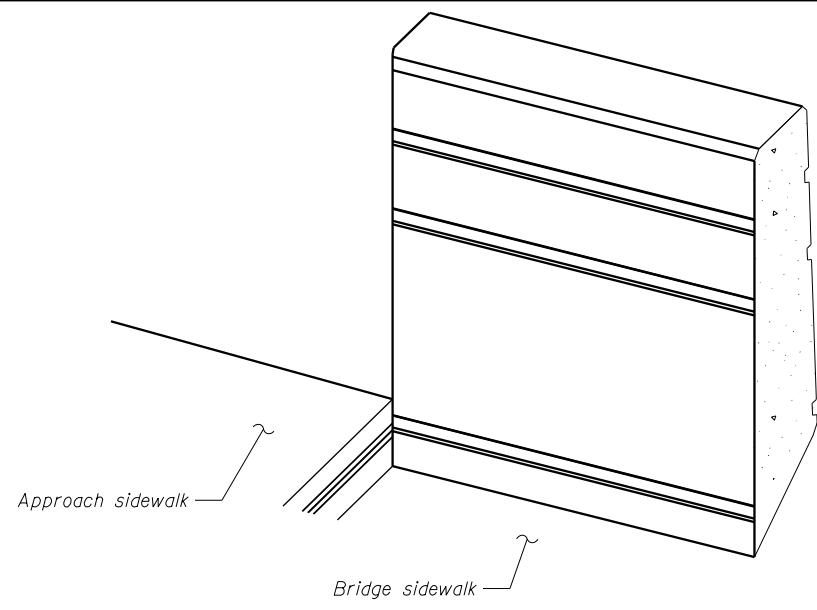
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STATE OF ILLINOIS
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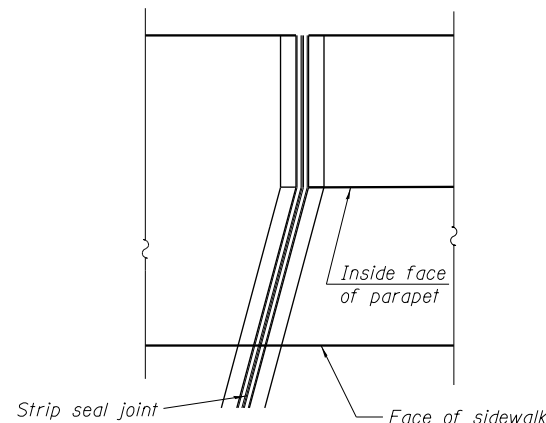
BRIDGE DRAINAGE SYSTEM
STRUCTURE NO. 016-1707

SHEET NO. S-26 OF S-61 SHEETS

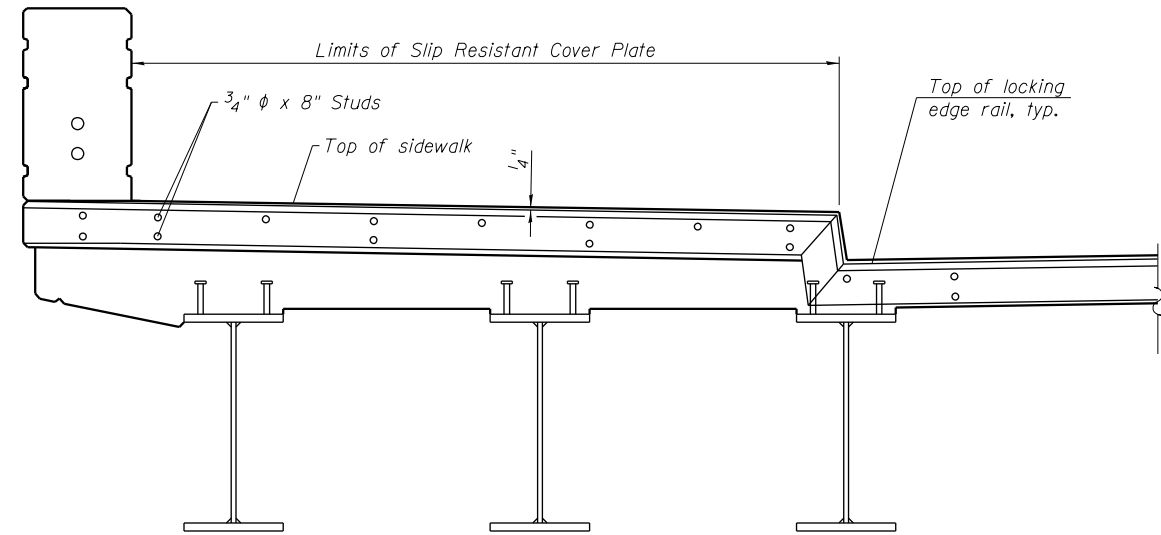
F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 233
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



TRIMETRIC VIEW



PLAN

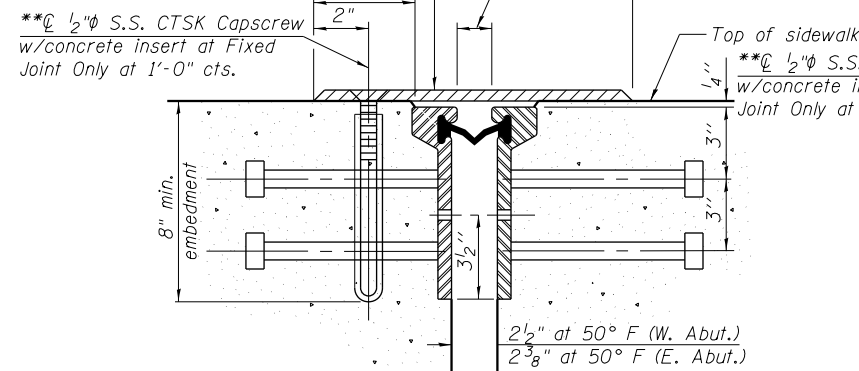


TYPICAL END TREATMENT AT SIDEWALK

Shorter plates with a single row of studs at 12" cts. may be necessary on sidewalks which are shallower than 9". See manufacturer's recommendation.

1/4" Thick Slip Resistant Cover Plate with 45° Chamfers**
 2" at 50° F (W. Abut.)
 1 7/8" at 50° F (E. Abut.)

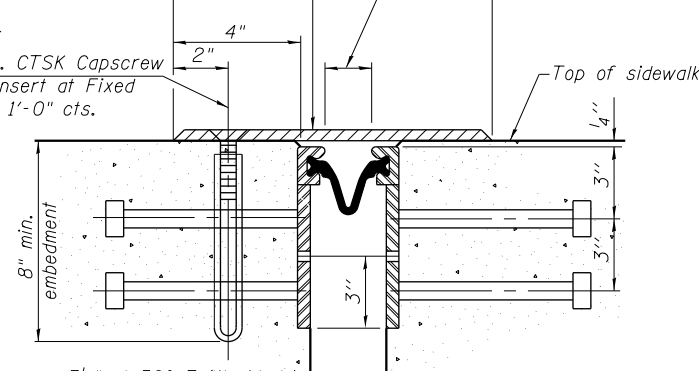
1/4" Thick Slip Resistant Cover Plate with 45° Chamfers**
 2" at 50° F (W. Abut.)
 1 7/8" at 50° F (E. Abut.)



SECTION THRU

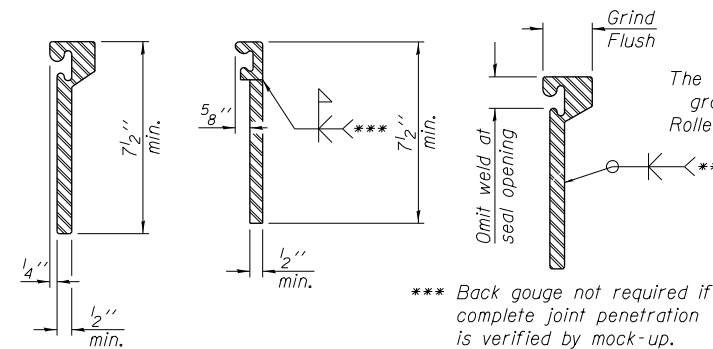
ROLLED RAIL JOINT AT SIDEWALK

** Cost shall be included with Preformed Joint Seal.



SECTION THRU

ROLLED RAIL JOINT AT SIDEWALK



ROLLED EXTRUDED RAIL WELDED RAIL LOCKING EDGE RAIL SPLICE

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

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

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components (except Expansion Joint plates and attached bars, see General Notes) shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	137

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

SECTION THRU

ROLLED RAIL JOINT AT ROADWAY

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

SECTION THRU

WELDED RAIL JOINT AT ROADWAY

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded. Cost shall be included with Preformed Joint Seal.

3:02:09 PM 0161707-60X99-5028-ExpJoint-Details.dgn



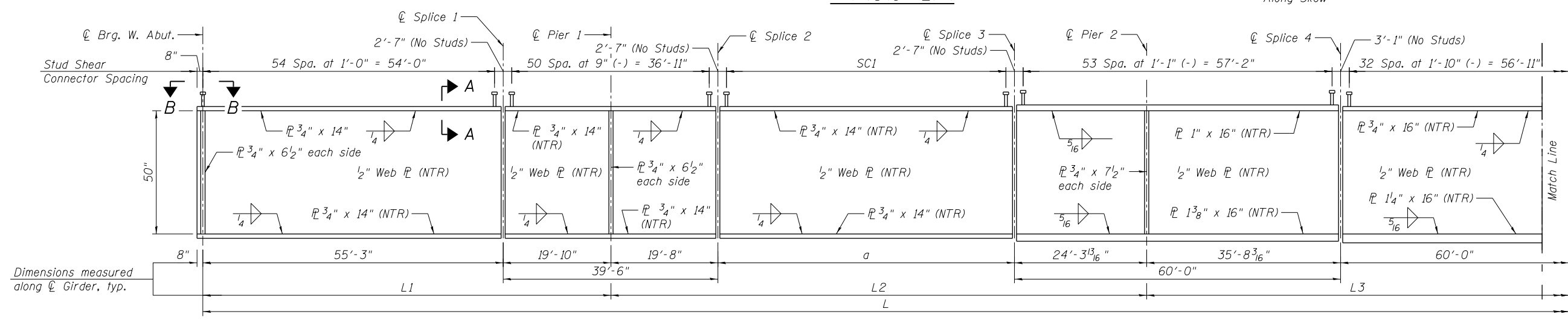
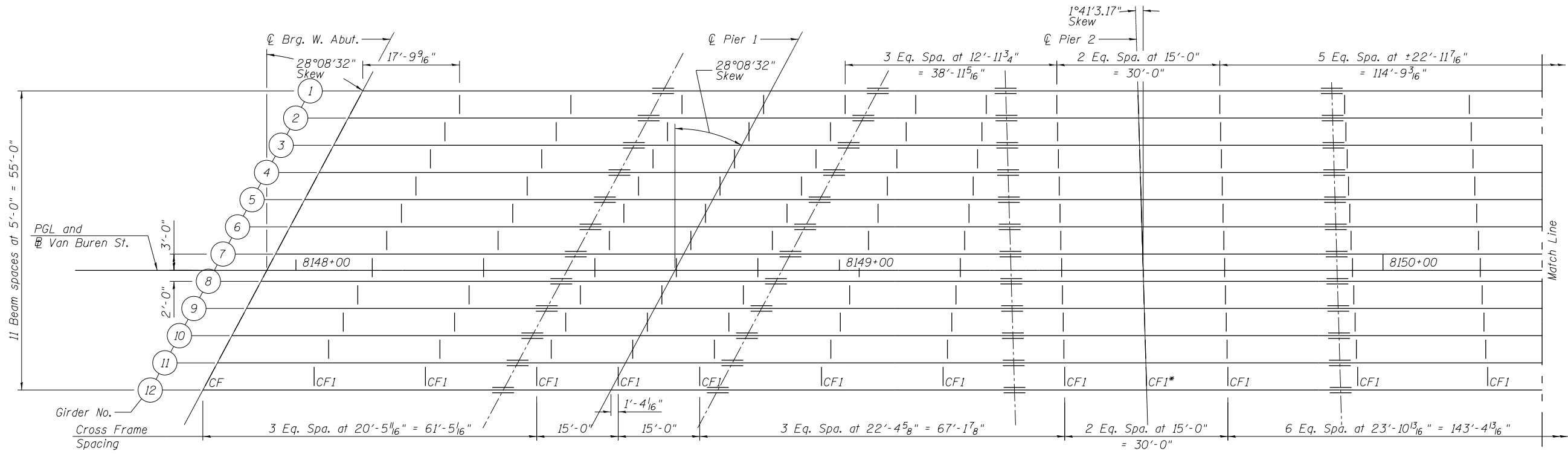
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PLOT DATE = 12/15/2016	CHECKED - WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-28 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	235
				CONTRACT NO. 60X99
ILLINOIS FED. AID PROJECT				

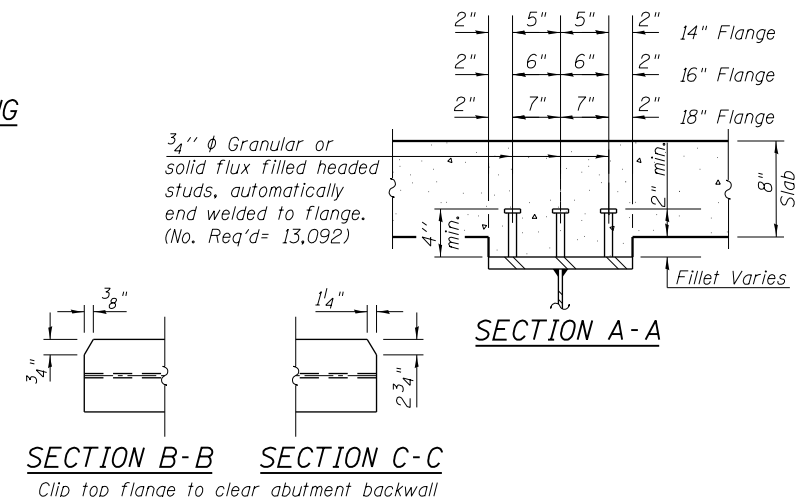


BEAM DIMENSIONS

Girder	L	L1	L2	L3	a
1	452'-7 ⁵ / ₈ "	75'-1"	67'-6 ⁷ / ₁₆ "	167'-5 ³ / ₈ "	23'-6 ⁹ / ₁₆ "
2	457'-8 ³ / ₈ "	75'-1"	70'-4 ¹ / ₄ "	168'-0 ³ / ₁₆ "	26'-4 ⁷ / ₁₆ "
3	462'-9 ¹ / ₈ "	75'-1"	73'-2 ¹ / ₈ "	168'-7"	29'-2 ⁵ / ₁₆ "
4	467'-9 ⁷ / ₈ "	75'-1"	76'-0"	169'-1 ³ / ₄ "	32'-0 ⁵ / ₈ "
5	472'-10 ⁵ / ₈ "	75'-1"	78'-9 ⁷ / ₈ "	169'-8 ⁹ / ₁₆ "	34'-10"
6	477'-11 ¹ / ₁₆ "	75'-1"	81'-7 ¹ / ₁₆ "	170'-3 ³ / ₈ "	37'-7 ⁷ / ₈ "
7	483'-0 ³ / ₁₆ "	75'-1"	84'-5 ⁹ / ₁₆ "	170'-10 ³ / ₁₆ "	40'-5 ³ / ₄ "
8	488'-0 ⁵ / ₁₆ "	75'-1"	87'-3 ¹ / ₁₆ "	171'-5"	43'-3 ⁹ / ₁₆ "
9	493'-1 ¹ / ₁₆ "	75'-1"	90'-1 ⁴ / ₄ "	171'-11 ³ / ₄ "	46'-1 ⁷ / ₁₆ "
10	498'-2 ⁷ / ₁₆ "	75'-1"	92'-11 ¹ / ₈ "	172'-6 ⁹ / ₁₆ "	48'-11 ⁵ / ₁₆ "
11	503'-3 ³ / ₁₆ "	75'-1"	95'-9"	173'-1 ³ / ₈ "	51'-9 ³ / ₁₆ "
12	508'-4"	75'-1"	98'-6 ⁷ / ₈ "	173'-8 ³ / ₁₆ "	54'-7"

STUD SHEAR CONNECTOR SPACING

Girder	SC1
1	28 Spa. at 9" (-) = 21'-0"
2	32 Spa. at 9" (-) = 23'-9"
3	36 Spa. at 9" (-) = 26'-7"
4	40 Spa. at 9" (-) = 29'-5"
5	44 Spa. at 9" (-) = 32'-3"
6	47 Spa. at 9" (-) = 35'-1"
7	51 Spa. at 9" (-) = 37'-11"
8	55 Spa. at 9" (-) = 40'-9"
9	59 Spa. at 9" (-) = 43'-6"
10	62 Spa. at 9" (-) = 46'-4"
11	66 Spa. at 9" (-) = 49'-2"
12	70 Spa. at 9" (-) = 52'-0"



Notes:

All plates of the girders, including bearing stiffeners and splice plates, shall be AASHTO M 270, Grade 50.

All cross frames, angles, fill plates and connecting plates may be AASHTO M270, Grade 36.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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.

Work this sheet with Sheet S-30 of S-61.

For cross frame details, see Sheet S-31 of S-61.

All structural steel shall be hot dip galvanized. Cost included with Furnishing and Erecting Structural Steel.

For notes on galvanized steel, see Sheet S-02 of S-61.

3:02:11 PM 0161707-60X99-5029-FramePlan1.dgn



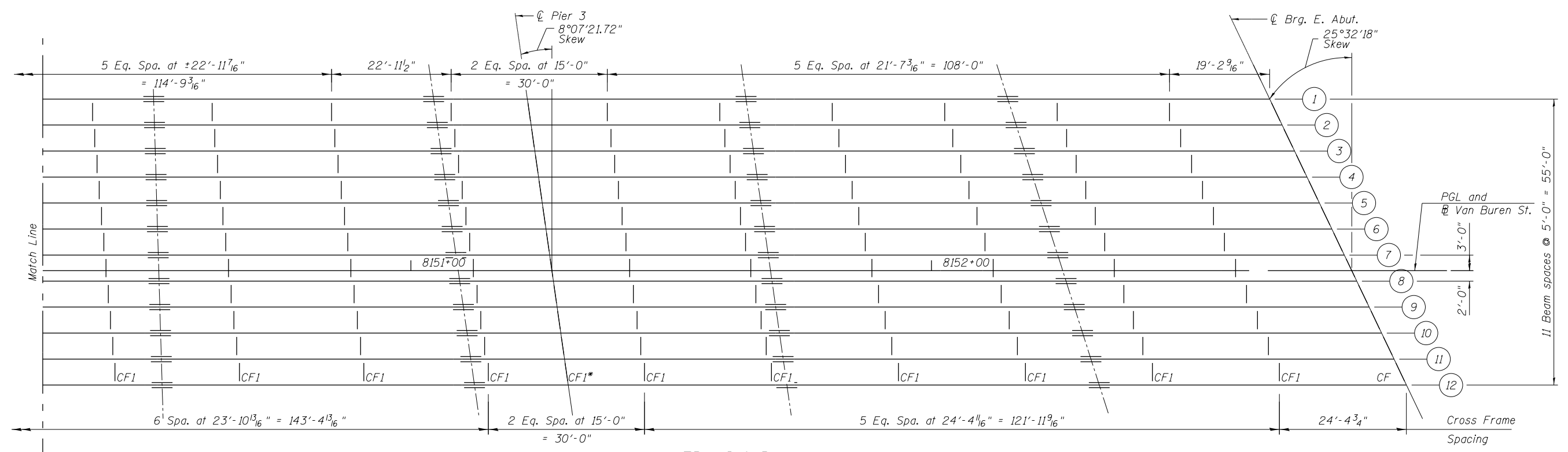
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PLOT DATE = 12/15/2016	DRAWN - JNP	REVISED
	CHECKED - DL	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

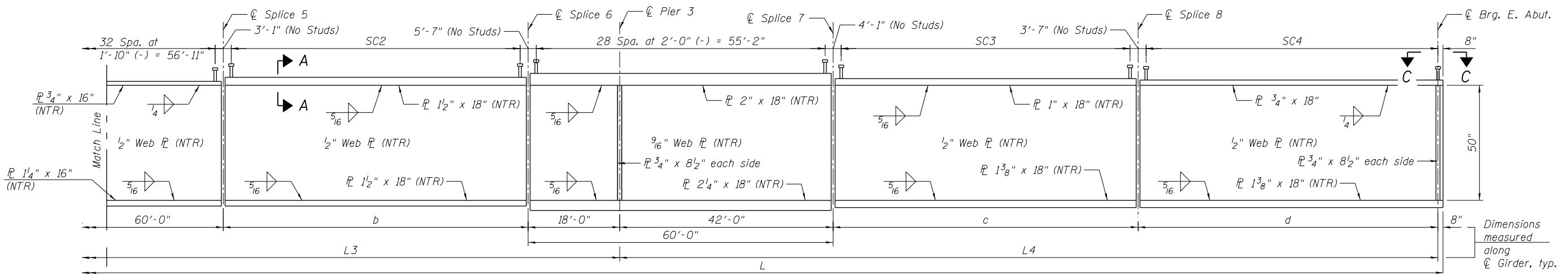
FRAMING PLAN 1
STRUCTURE NO. 016-1707

SHEET NO. S-29 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 236
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



FRAMING PLAN



GIRDER ELEVATION

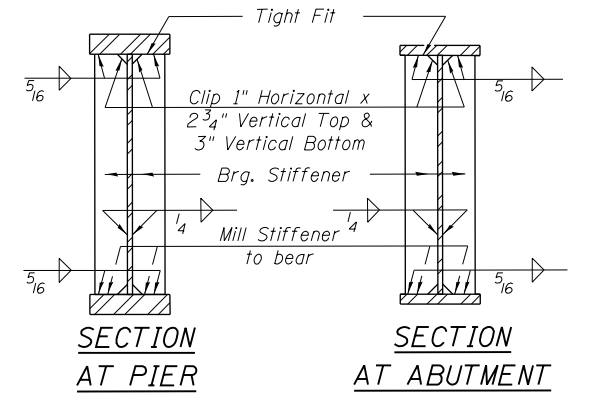
Notes:
Work this sheet with Sheet S-29 of S-61.
For Section A-A and Section C-C, see Sheet S-29 of S-61.

BEAM DIMENSIONS

Girder	L	L3	L4	b	c	d
1	452'-7 5/8"	167'-5 3/8"	142'-6 13/16"	53'-9 3/16"	50'-9 7/16"	49'-9 7/16"
2	457'-8 3/8"	168'-0 3/16"	144'-2 15/16"	54'-4"	51'-7 1/2"	50'-7 1/2"
3	462'-9 9/8"	168'-7"	145'-11"	54'-10 3/4"	52'-5 1/2"	51'-5 1/2"
4	467'-9 9/8"	169'-1 3/4"	147'-7 7/8"	55'-5 9/16"	53'-3 9/16"	52'-3 9/16"
5	472'-10 5/8"	169'-8 9/16"	149'-3 1/4"	56'-0 3/8"	54'-1 5/8"	53'-1 5/8"
6	477'-11 1/16"	170'-3 3/8"	150'-11 5/16"	56'-7 3/16"	54'-11 1/16"	53'-11 1/16"
7	483'-0 3/16"	170'-10 3/16"	152'-7 7/16"	57'-2"	55'-9 3/4"	54'-9 3/4"
8	488'-0 5/16"	171'-5"	154'-3 9/16"	57'-8 3/4"	56'-7 13/16"	55'-7 13/16"
9	493'-1 1/16"	171'-11 3/4"	155'-11 5/8"	58'-3 9/16"	57'-5 13/16"	56'-5 13/16"
10	498'-2 7/16"	172'-6 9/16"	157'-7 3/4"	58'-10 3/8"	58'-3 7/8"	57'-3 7/8"
11	503'-3 3/16"	173'-1 3/8"	159'-3 7/8"	59'-5 3/16"	59'-1 15/16"	58'-1 15/16"
12	508'-4"	173'-8 3/16"	160'-11 5/16"	60'-0"	60'-0"	59'-0"

STUD SHEAR CONNECTOR SPACING

Girder	SC2	SC3	SC4
1	27 Spa. at 1'-10" (-) = 49'-5"	25 Spa. at 1'-11" (-) = 46'-11"	29 Spa. at 1'-8" (-) = 48'-0"
2	28 Spa. at 1'-10" (-) = 50'-0"	25 Spa. at 1'-11" (-) = 47'-9"	30 Spa. at 1'-8" (-) = 48'-10"
3	28 Spa. at 1'-10" (-) = 50'-7"	26 Spa. at 1'-11" (-) = 48'-8"	30 Spa. at 1'-8" (-) = 49'-8"
4	28 Spa. at 1'-10" (-) = 51'-2"	26 Spa. at 1'-11" (-) = 49'-6"	31 Spa. at 1'-8" (-) = 50'-6"
5	29 Spa. at 1'-10" (-) = 51'-8"	27 Spa. at 1'-11" (-) = 50'-4"	31 Spa. at 1'-8" (-) = 51'-4"
6	29 Spa. at 1'-10" (-) = 52'-3"	27 Spa. at 1'-11" (-) = 51'-2"	32 Spa. at 1'-8" (-) = 52'-2"
7	29 Spa. at 1'-10" (-) = 52'-10"	28 Spa. at 1'-11" (-) = 52'-0"	32 Spa. at 1'-8" (-) = 53'-0"
8	30 Spa. at 1'-10" (-) = 53'-5"	28 Spa. at 1'-11" (-) = 52'-10"	33 Spa. at 1'-8" (-) = 53'-10"
9	30 Spa. at 1'-10" (-) = 54'-0"	28 Spa. at 1'-11" (-) = 53'-8"	33 Spa. at 1'-8" (-) = 54'-8"
10	30 Spa. at 1'-10" (-) = 54'-6"	29 Spa. at 1'-11" (-) = 54'-6"	34 Spa. at 1'-8" (-) = 55'-6"
11	31 Spa. at 1'-10" (-) = 55'-1"	29 Spa. at 1'-11" (-) = 55'-4"	34 Spa. at 1'-8" (-) = 56'-4"
12	31 Spa. at 1'-10" (-) = 55'-8"	30 Spa. at 1'-11" (-) = 56'-2"	35 Spa. at 1'-8" (-) = 57'-2"



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USER NAME = mkwilson	DESIGNED - WJC	REVISED
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PLOT DATE = 12/15/2016	DRAWN - JNP	REVISED
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN 2
STRUCTURE NO. 016-1707

SHEET NO. S-30 OF S-61 SHEETS

F.A.I. R.E. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 237
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X99	

GIRDER 9 MOMENT TABLE								
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4	
I_s	(in ⁴)	18,731	18,731	18,731	29,742	25,312	57,724	32,788
$I_c(n)$	(in ⁴)	40,875	-	40,875	-	56,332	-	64,805
$I_c(3n)$	(in ⁴)	30,174	-	30,174	-	40,523	-	47,858
$I_c(cr)$	(in ⁴)	-	22,707	-	34,578	-	62,598	-
S_s	(in ³)	727	727	727	1,245	1,120	2,213	1,379
$S_c(n)$	(in ³)	980	-	980	-	1,454	-	1,700
$S_c(3n)$	(in ³)	886	-	886	-	1,327	-	1,567
$S_c(cr)$	(in ³)	-	795	-	1,321	-	2,277	-
DC1	(k/')	0.70	0.70	0.70	0.77	0.75	0.93	0.79
M _{DC1}	('k)	358	291	-39	1,229	929	2,749	1,187
DC2*	(k/')	0.32	0.32	0.32	0.32	0.32	0.32	0.32
M _{DC2}	('k)	158	139	-10	520	387	1,034	486
DW	(k/')	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M _{DW}	('k)	73	64	-4	241	179	479	225
M _{ℓ · IM}	('k)	780	821	780	1,576	1,486	1,939	1,716
M _u (Strength I)	('k)	2,120	2,070	1,298	5,306	4,514	8,841	5,432
φ _r M _n	('k)	5,063	-	5,282	-	7,241	-	8,286
f _s DC1	(ksi)	5.9	4.8	-0.6	11.8	10.0	14.9	10.3
f _s DC2	(ksi)	2.1	2.1	-0.1	4.7	3.5	5.4	3.7
f _s DW	(ksi)	1.0	1.0	-0.1	2.2	1.6	2.5	1.7
f _s (ℓ+IM)	(ksi)	9.6	12.4	9.6	14.3	12.3	10.2	12.1
f _s (Service II)	(ksi)	21.5	24.0	11.6	37.4	31.0	36.2	31.5
0.95R _h F _{yr}	(ksi)	47.5	47.5	47.5	47.5	47.5	47.5	47.5
f _s (Total)(Strength I)	(ksi)	-	31.76	-	49.04	-	47.11	-
φ _r F _n	(ksi)	-	50.0	-	50.0	-	50.0	-
V _f	(k)	25.6	-	27.3	-	27.1	-	29.7

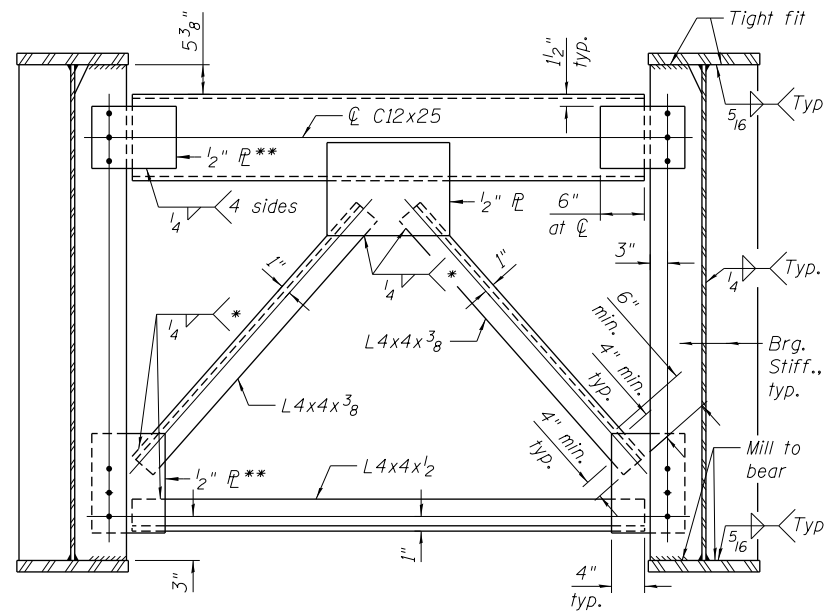
* Load allowance includes 0.05 k/' for duct banks

GIRDER 9 REACTION TABLE						
	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.	
R _{DC1}	(k)	23.11	51.58	101.26	163.98	43.84
R _{DC2}	(k)	9.98	23.63	42.53	61.08	17.60
R _{DW}	(k)	4.62	10.94	19.68	28.27	8.15
R _{ℓ · IM}	(k)	70.26	106.12	147.43	160.75	85.68
R _{Total}	(k)	107.97	192.27	310.90	414.08	155.27

GIRDER 11 MOMENT TABLE								
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4	
I_s	(in ⁴)	18,731	18,731	18,731	29,742	25,312	57,724	32,788
$I_c(n)$	(in ⁴)	40,875	-	40,875	-	56,332	-	64,805
$I_c(3n)$	(in ⁴)	30,174	-	30,174	-	40,523	-	47,858
$I_c(cr)$	(in ⁴)	-	22,707	-	34,578	-	62,598	-
S_s	(in ³)	727	727	727	1,245	1,120	2,213	1,379
$S_c(n)$	(in ³)	980	-	980	-	1,454	-	1,700
$S_c(3n)$	(in ³)	886	-	886	-	1,327	-	1,567
$S_c(cr)$	(in ³)	-	795	-	1,321	-	2,277	-
DC1	(k/')	0.70	0.70	0.70	0.77	0.75	0.93	0.79
M _{DC1}	('k)	341	334	28	1,236	897	2,837	1,303
DC2*	(k/')	0.32	0.32	0.32	0.32	0.32	0.32	0.32
M _{DC2}	('k)	150	157	18	529	380	1,072	531
DW	(k/')	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M _{DW}	('k)	70	73	8	245	176	496	246
M _{ℓ · IM}	('k)	786	866	830	1,575	1,498	1,994	1,798
M _u (Strength I)	('k)	2,094	2,239	1,522	5,330	4,482	9,120	5,808
φ _r M _n	('k)	5,075	-	5,286	-	7,241	-	8,286
f _s DC1	(ksi)	5.6	5.5	0.5	11.9	9.6	15.4	11.3
f _s DC2	(ksi)	2.0	2.4	0.2	4.8	3.4	5.6	4.1
f _s DW	(ksi)	0.9	1.1	0.1	2.2	1.6	2.6	1.9
f _s (ℓ+IM)	(ksi)	9.6	13.1	10.2	14.3	12.4	10.5	12.7
f _s (Service II)	(ksi)	21.1	26.0	14.0	37.5	30.7	37.3	33.8
0.95R _h F _{yr}	(ksi)	47.5	47.5	47.5	47.5	47.5	47.5	47.5
f _s (Total)(Strength I)	(ksi)	-	34.38	-	49.27	-	48.60	-
φ _r F _n	(ksi)	-	50.0	-	50.0	-	50.0	-
V _f	(k)	26.0	-	26.7	-	27.1	-	29.6

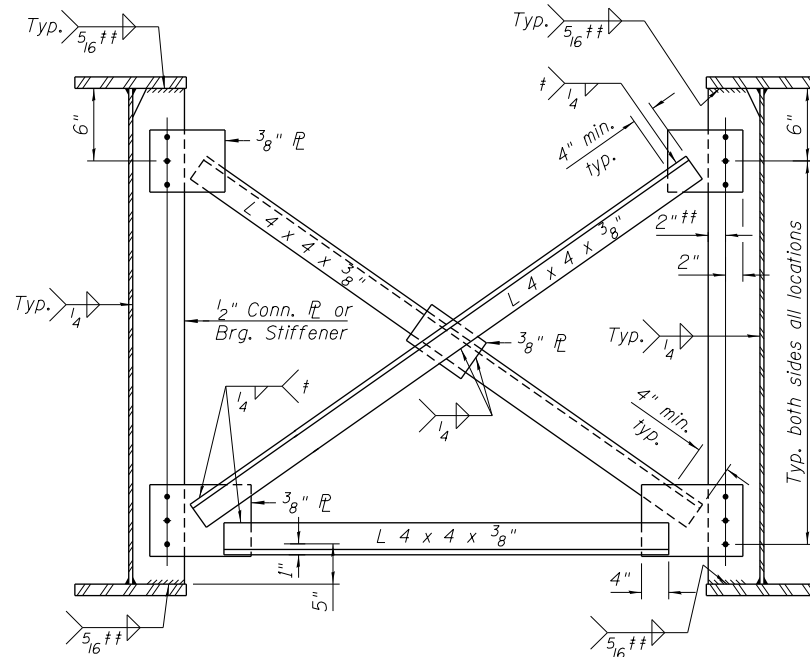
* Load allowance includes 0.05 k/' for duct banks

GIRDER 11 REACTION TABLE						
	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.	
R _{DC1}	(k)	22.53	55.14	102.11	166.36	45.84
R _{DC2}	(k)	9.73	25.12	43.09	62.22	18.37
R _{DW}	(k)	4.51	11.63	19.94	28.80	8.50
R _{ℓ · IM}	(k)	70.45	108.59	147.89	162.33	86.84
R _{Total}	(k)	107.22	200.48	313.03	419.71	159.55



END CROSS FRAME CF

(22 Required)



INTERIOR CROSS FRAME CF1

(253 Required)

Notes:
 Detail 1 5/16" φ holes for all 3/4" φ bolts.
 Two hardened washers required for each set of oversized holes.
 Place diaphragm with channel flanges and outstanding angle legs outward from abutment backwall.

* Weld on near side of 1/2" plate
 ** 1/2" plate to be bent for skewed structures.
 † Fillet weld angles along 3 sides on one face of gusset plate.
 †† Use 1/4" weld for locations where flange thickness is 3/4".

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

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

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

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

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

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

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

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

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

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

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

M_u (Strength I): Factored design moment (kip-ft.).
 1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ · IM}

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

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

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

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

f_s (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
 M_{ℓ · IM} / S_{c(n)} or M_{ℓ · IM} / S_{c(cr)} as applicable.

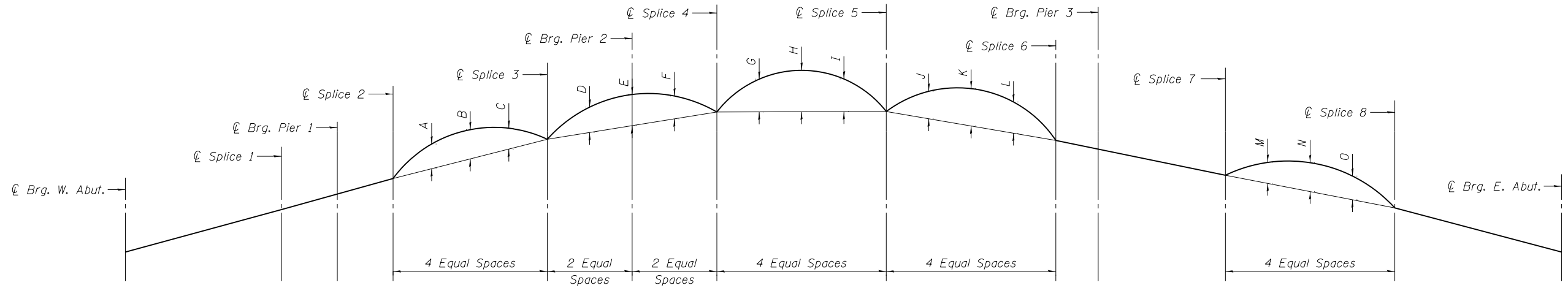
f_s (Service II): Sum of stresses as computed below (ksi).
 f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (ℓ · IM)

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

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

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

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



CAMBER DIAGRAM

TOP OF WEB ELEVATIONS

(For fabrication use only)

Girder	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier 1	℄ Splice 2	℄ Splice 3	℄ Brg. Pier 2	℄ Splice 4	℄ Splice 5	℄ Splice 6	℄ Brg. Pier 3	℄ Splice 7	℄ Splice 8	℄ Brg. E. Abut.
1	595.66	598.42	599.37	600.31	601.27	602.14	603.02	603.10	601.57	600.90	599.33	597.50	595.34
2	595.52	598.28	599.24	600.18	601.28	602.15	603.04	603.09	601.53	600.87	599.34	597.46	595.24
3	595.39	598.15	599.11	600.05	601.28	602.15	603.04	603.09	601.52	600.85	599.28	597.39	595.15
4	595.33	598.09	599.05	600.00	601.37	602.24	603.10	603.16	601.57	600.90	599.34	597.42	595.13
5	595.28	598.03	599.00	599.95	601.45	602.32	603.20	603.24	601.61	600.95	599.42	597.47	595.11
6	595.23	597.98	598.94	599.89	601.54	602.40	603.28	603.31	601.67	601.01	599.45	597.48	595.10
7	595.18	597.92	598.88	599.84	601.62	602.47	603.34	603.39	601.71	601.05	599.53	597.53	595.08
8	595.07	597.80	598.77	599.73	601.64	602.50	603.37	603.41	601.69	601.04	599.52	597.50	595.00
9	594.87	597.59	598.56	599.52	601.57	602.43	603.30	603.33	601.61	600.95	599.40	597.36	594.83
10	594.67	597.37	598.34	599.31	601.50	602.35	603.20	603.25	601.48	600.83	599.32	597.26	594.66
11	594.54	597.23	598.21	599.18	601.51	602.35	603.22	603.25	601.47	600.81	599.28	597.20	594.57
12	594.42	597.10	598.08	599.05	601.52	602.36	603.23	603.26	601.44	600.79	599.26	597.20	594.48

Note: See Sheet S-08 of S-61 for cross-slopes along the underside of the deck.

CAMBER TABLE

Girder	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	3/4"	7/8"	3/4"	1 3/8"	1 1/8"	1 3/8"	3/8"	4 1/8"	3/8"	2"	2 5/8"	2"	1"	1 3/8"	1"
2	5/8"	7/8"	5/8"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	4"	2 7/8"	2 1/8"	2 3/4"	2 1/8"	3/4"	1"	3/4"
3	3/4"	1"	3/4"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 1/8"	2 3/4"	2 1/8"	1"	1 3/8"	1"
4	3/4"	1 1/8"	3/4"	1 1/2"	2"	1 1/2"	3 7/8"	4"	3 7/8"	2 1/8"	2 3/4"	2 1/8"	1 1/8"	1 3/8"	1 1/8"
5	1"	1 1/4"	1"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 1/8"	2 3/4"	2 1/8"	7/8"	1 1/8"	7/8"
6	1"	1 3/8"	1"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 1/8"	2 3/4"	2 1/8"	1 1/8"	1 1/2"	1 1/8"
7	1"	1 3/8"	1"	1 1/2"	1 1/8"	1 1/2"	3 7/8"	4"	3 7/8"	2 1/8"	3"	2 1/8"	7/8"	1 1/4"	7/8"
8	1 1/8"	1 1/2"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 1/8"	2 3/8"	3"	2 3/8"	7/8"	1 1/4"
9	1 1/8"	1 5/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 1/8"	3"	2 1/8"	1 1/4"	1 1/2"	1 1/4"
10	1 1/8"	1 3/8"	1 1/8"	1 3/8"	1 1/8"	1 3/8"	3 7/8"	4"	3 7/8"	2 3/8"	3 1/8"	2 3/8"	1"	1 3/8"	1"
11	1 1/8"	1 3/4"	1 1/8"	1 3/8"	1 3/4"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 3/8"	3 1/8"	2 3/8"	1 1/4"	1 5/8"	1 1/4"
12	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/4"	1 3/8"	2 7/8"	3 7/8"	2 7/8"	2 3/8"	3 1/8"	2 3/8"	1 1/8"	1 5/8"	1 1/8"

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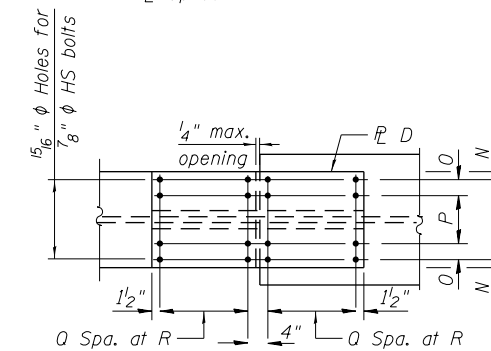
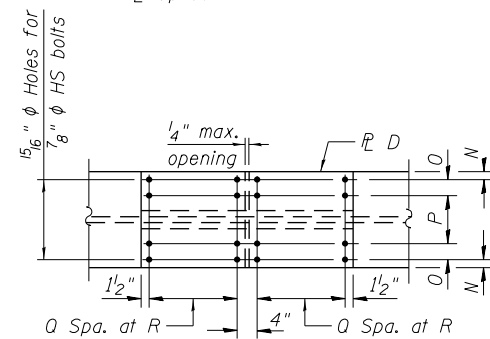
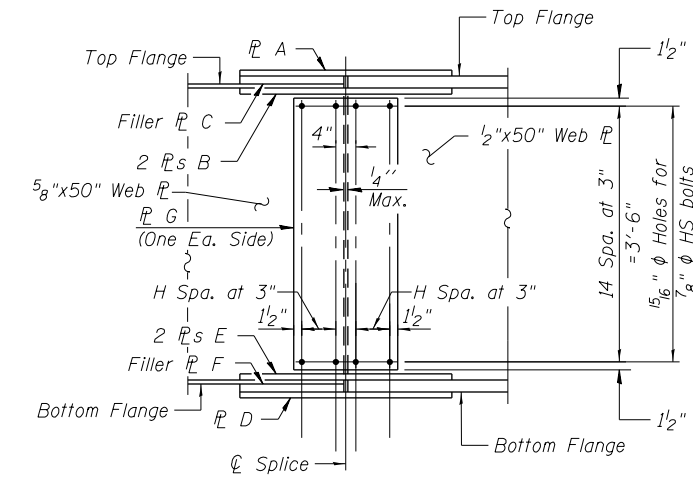
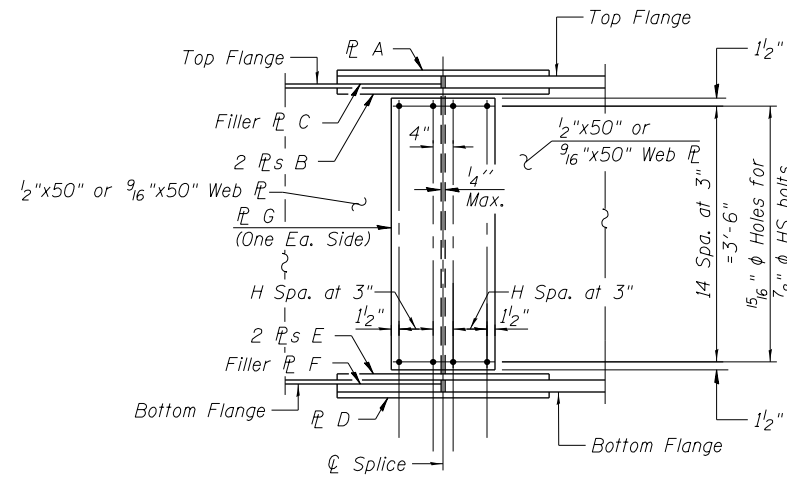
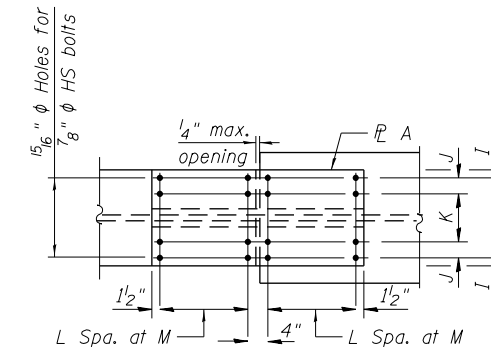
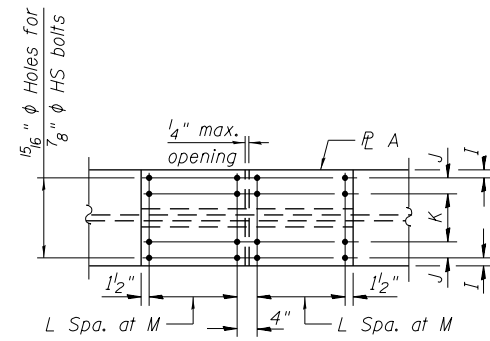
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS 2
STRUCTURE NO. 016-1707**

SHEET NO. S-32 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	239
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



FIELD SPLICE DETAIL
(SPLICE 1, 2, 4, 6, 7 & 8)
(72 Required)

FIELD SPLICE DETAIL (SPLICE 3 & 5)
(24 Required)

TABLE OF FIELD SPLICE DATA

Splice	PL A	PL B	Filler PL C	PL D	PL E	Filler PL F	PL G	H	I	J	K	L	M	N	O	P	Q	R
1	1/2" x 1'-2" x 2'-1"	5/8" x 6" x 2'-1"	N/A	1/2" x 1'-2" x 2'-1"	5/8" x 6" x 2'-1"	N/A	3/8" x 1'-1" x 3'-9"	1	1 1/2"	3"	5"	3	3"	1 1/2"	3"	5"	3	3"
2	1/2" x 1'-2" x 2'-1"	5/8" x 6" x 2'-1"	N/A	1/2" x 1'-2" x 2'-1"	5/8" x 6" x 2'-1"	N/A	3/8" x 1'-1" x 3'-9"	1	1 1/2"	3"	5"	3	3"	1 1/2"	3"	5"	3	3"
3	1/2" x 1'-2" x 2'-1"	5/8" x 6" x 2'-1"	1/4" x 1'-2" x 1'-0 1/2"	1/2" x 1'-2" x 2'-7"	5/8" x 6" x 2'-7"	5/8" x 1'-2" x 1'-3 1/2"	3/8" x 1'-1" x 3'-9"	1	1 1/2"	3"	5"	3	3"	1 1/2"	3"	5"	4	3"
4	1/2" x 1'-4" x 2'-7"	5/8" x 6 1/2" x 2'-7"	1/4" x 1'-4" x 1'-3 1/2"	5/8" x 1'-4" x 2'-7"	3/4" x 6 1/2" x 2'-7"	1/2" x 1'-4" x 1'-3 1/2"	3/8" x 1'-1" x 3'-9"	1	1 1/2"	3 1/2"	6"	4	3"	1 1/2"	3 1/2"	6"	4	3"
5	1/2" x 1'-4" x 2'-7"	5/8" x 6 1/2" x 2'-7"	3/4" x 1'-4" x 3'-7"	3/4" x 1'-4" x 3'-7"	7/8" x 6 1/2" x 3'-7"	1/4" x 1'-4" x 1'-9 1/2"	3/8" x 1'-7" x 3'-9"	2	1 1/2"	3"	6"	4	3"	1 1/2"	3 1/2"	6"	6	3"
6	1/2" x 1'-6" x 5'-1"	1" x 7 1/2" x 5'-1"	1/2" x 1'-6" x 2'-6 1/2"	3/4" x 1'-6" x 5'-1"	7/8" x 7 1/2" x 5'-1"	3/4" x 1'-6" x 2'-6 1/2"	3/8" x 1'-7" x 3'-9"	2	1 1/2"	4 1/2"	6"	9	3"	1 1/2"	4 1/2"	6"	9	3"
7	1/2" x 1'-6" x 3'-7"	5/8" x 7 1/2" x 3'-7"	1" x 1'-6" x 1'-9 1/2"	3/4" x 1'-6" x 4'-1"	7/8" x 7 1/2" x 4'-1"	7/8" x 1'-6" x 2'-0 1/2"	3/8" x 1'-7" x 3'-9"	2	1 1/2"	4 1/2"	6"	6	3"	1 1/2"	4 1/2"	6"	7	3"
8	1/2" x 1'-6" x 3'-1"	5/8" x 7 1/2" x 3'-1"	1/4" x 1'-6" x 1'-6 1/2"	3/4" x 1'-6" x 4'-1"	7/8" x 7 1/2" x 4'-1"	N/A	3/8" x 1'-7" x 3'-9"	2	1 1/2"	4 1/2"	6"	5	3"	1 1/2"	4 1/2"	6"	7	3"

Notes:
 All splice plates except filler plates shall meet NTR.
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
 All splice plates, except filler plates, shall be AASHTO M 270 Grade 50.

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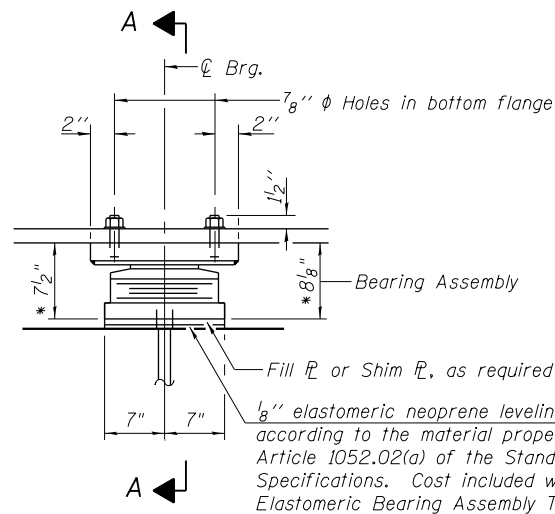
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	CHECKED - DL	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS 3
STRUCTURE NO. 016-1707

SHEET NO. S-33 OF S-61 SHEETS

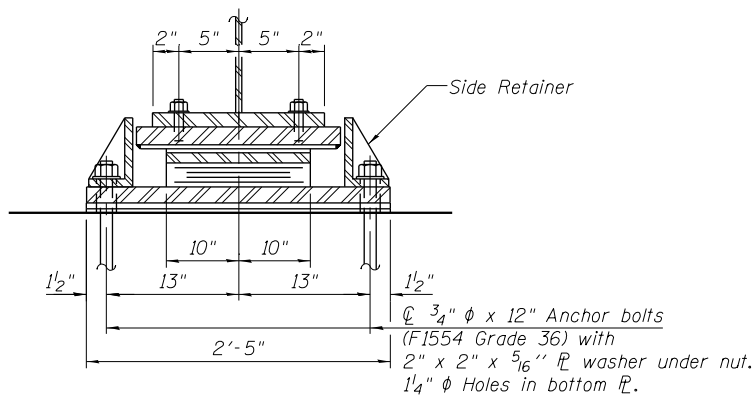
F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	240
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



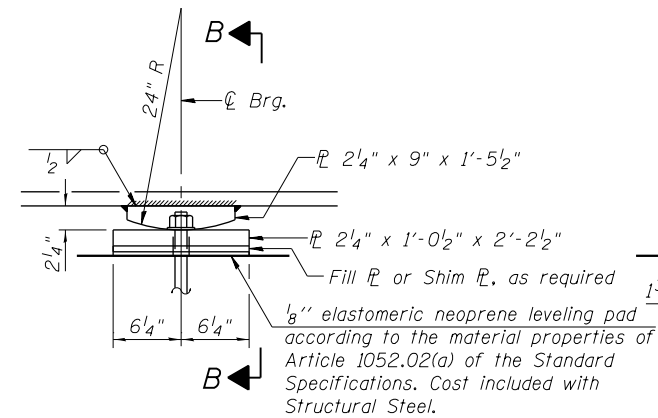
ELEVATION AT PIER
(Looking North)

TYPE II ELASTOMERIC EXP. BRG.
(at Pier 1)

* Does not include shim plates.

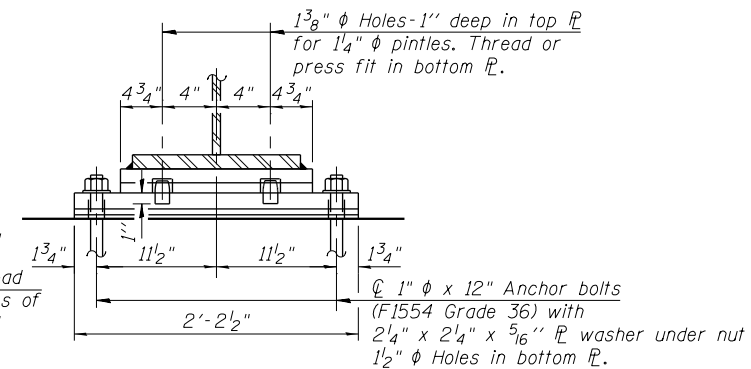


SECTION A-A

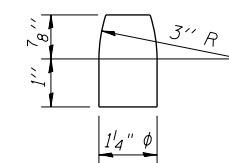


ELEVATION AT PIER
(Looking North)

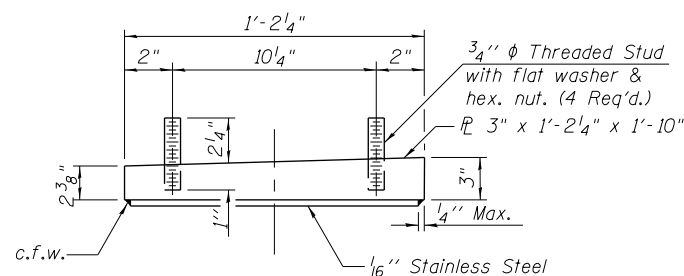
FIXED BEARING
(at Pier 2)



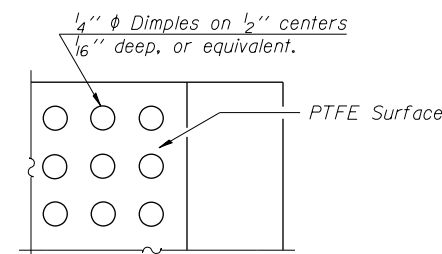
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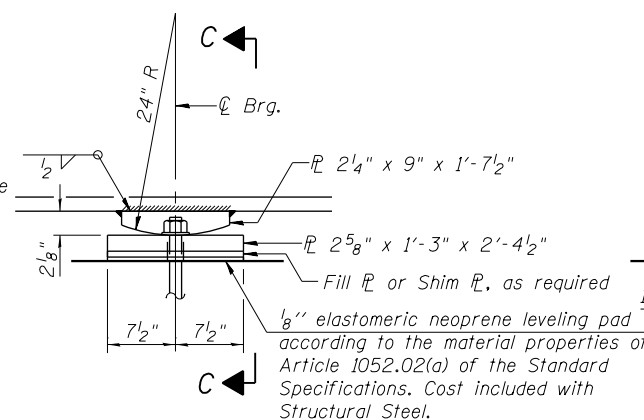
PINTLE



TOP BEARING ASSEMBLY



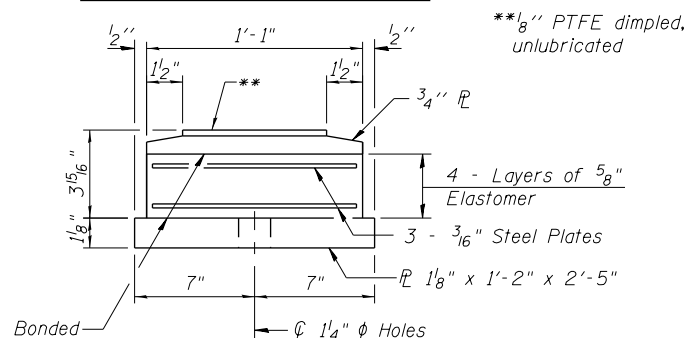
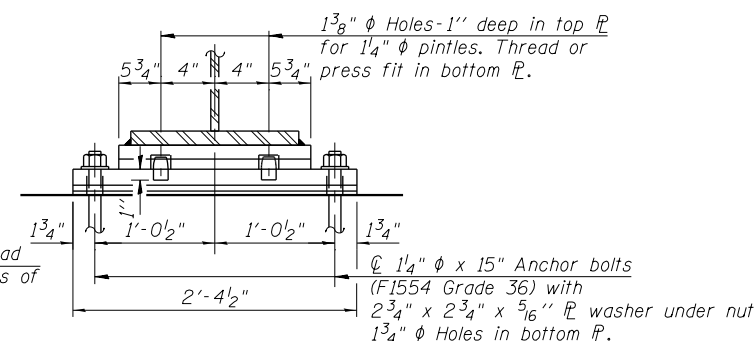
PLAN-PTFE SURFACE



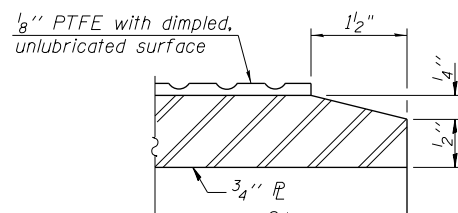
ELEVATION AT PIER
(Looking North)

SECTION C-C

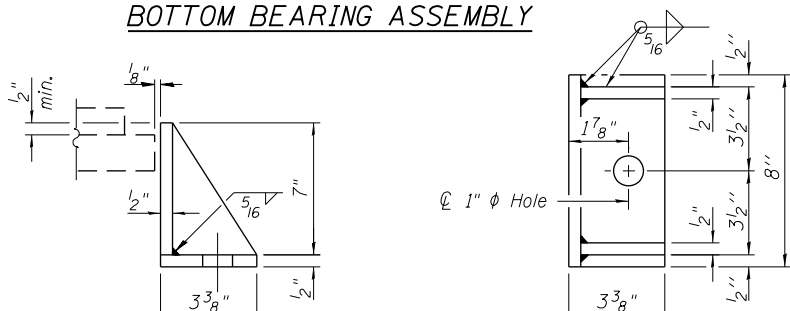
FIXED BEARING
(at Pier 3)



BOTTOM BEARING ASSEMBLY

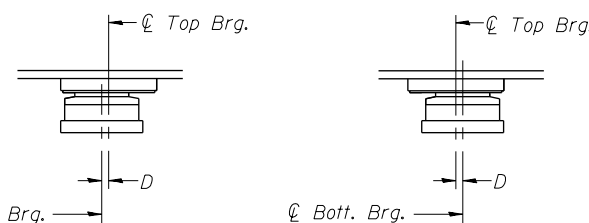


SECTION THRU PTFE



SIDE RETAINER

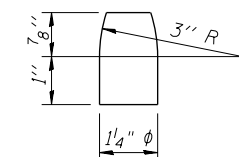
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



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

SETTING ANCHOR BOLTS AT EXP. BRG.

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



PINTLE

FILL PLATE THICKNESS TABLE

Location	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
Pier 1	-	-	5/8	-	5/8	-	-	-	-	-	-	-
Pier 2	1/8	1/8	1/8	-	-	-	3/8	1/8	-	1/8	1/8	-
Pier 3	5/8	1/4	-	5/8	-	1/2	3/8	-	1/2	1/4	-	-

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts, 3/4"	Each	24
Anchor Bolts, 1"	Each	24
Anchor Bolts, 1 1/4"	Each	24

3:02:24 PM 0161707-60X99-5035-Bearing_Details.dgn



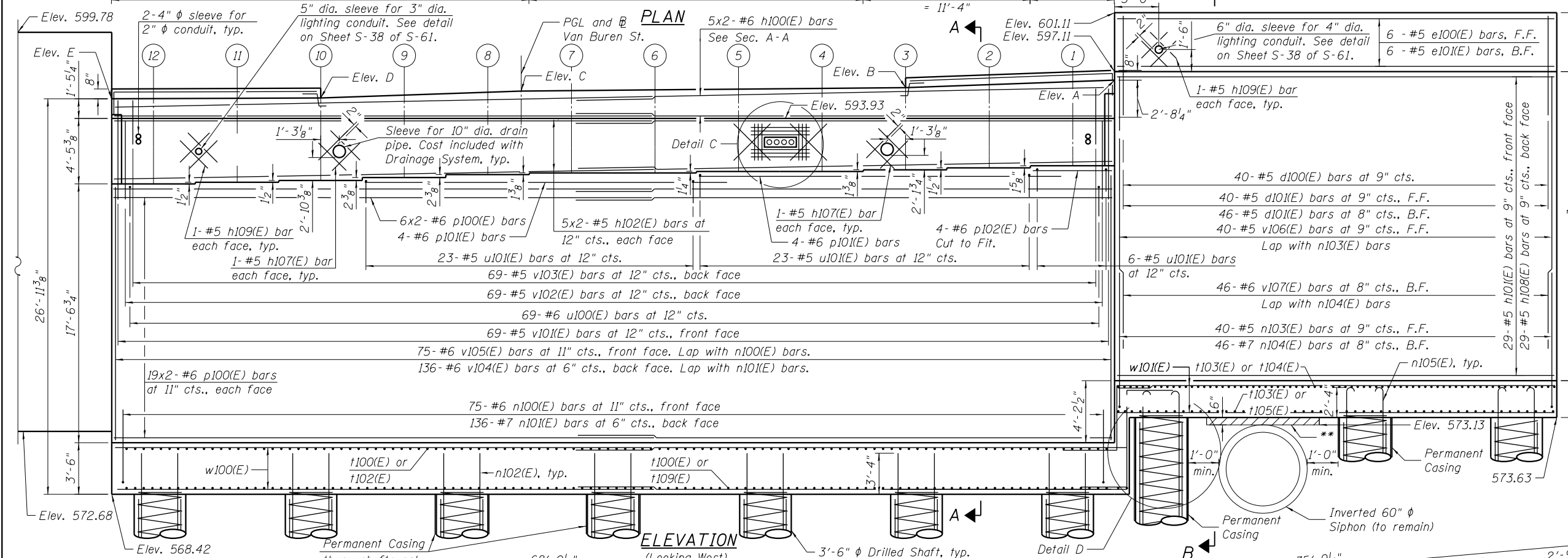
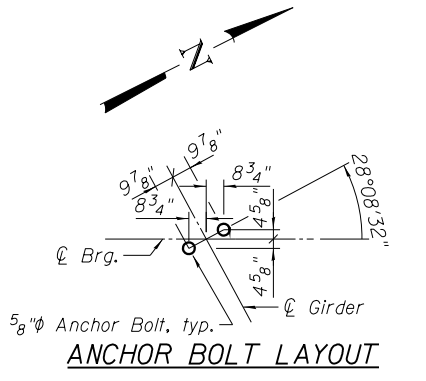
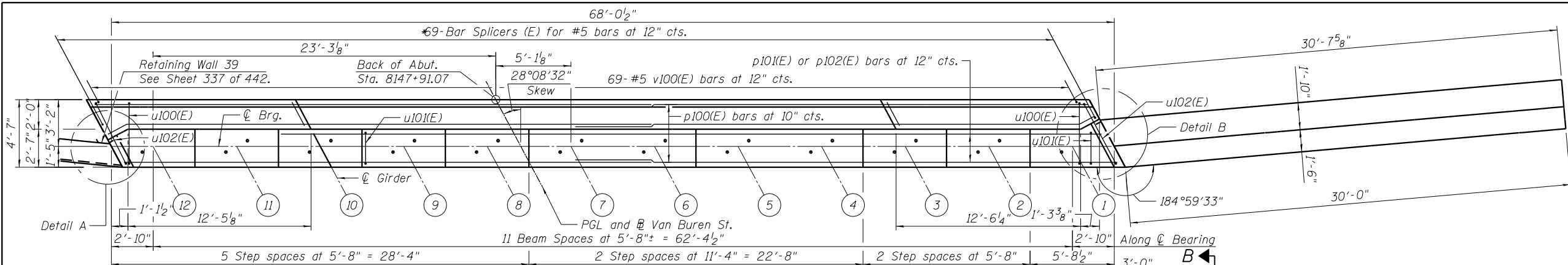
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PLOT DATE = 12/15/2016	DRAWN - JNP	REVISION
	CHECKED - TLR	REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER BEARING DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-35 OF S-61 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	242
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



ANCHOR BOLT LAYOUT

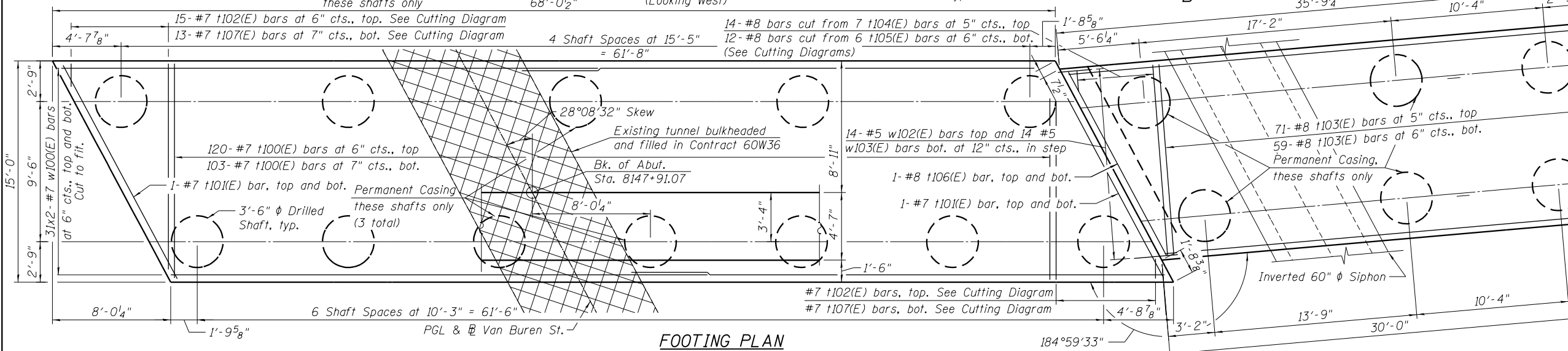
*Alternate with v100(E) bars. Place parallel to the beams.

** Foam filler, according to Article 1051.09 of the Standard Specifications. Cost included with Concrete Structures.

Notes:
 For Section A-A, Section B-B, Detail A, Detail B, Detail C, and Drilled Shaft Details, see Sheet S-37 of S-61.
 For Detail D and Bill of Materials, see Sheet S-38 of S-61.
 Siphon and drilled shaft locations at the Northwest wingwall shall be verified in the field and approved by the Engineer prior to drilled shaft construction.
 F.F. denotes front face.
 B.F. denotes back face.

TOP OF BACK WALL ELEVATIONS

Point	Front face	Back face
A - North Edge of Abut.	596.62	596.56
B - North Curb Line	596.12	596.04
C - PGL	595.89	595.81
D - South Curb Line	595.42	595.34
E - South Edge of Abut.	595.37	595.26



TOP OF SEAT ELEVATIONS

Girder No.	Seat Elevation
1	590.73
2	590.60
3	590.47
4	590.36
5	590.36
6	590.26
7	590.26
8	590.15
9	589.95
10	589.75
11	589.62
12	589.50

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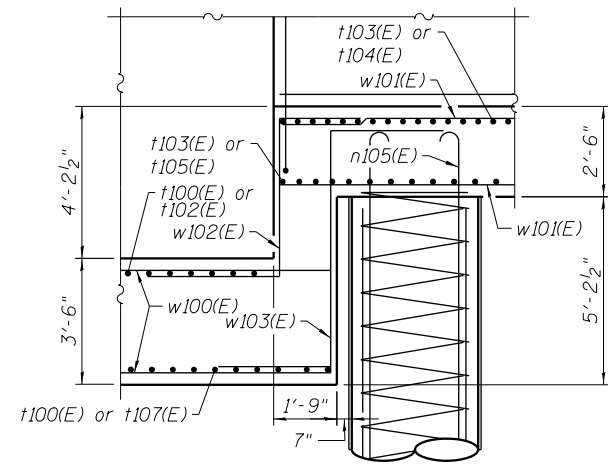
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PLOT SCALE = 8:0 '1" / in.	CHECKED - MDS	REVISED
PLOT DATE = 12/15/2016	DRAWN - JNP	REVISED
	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 016-1707**

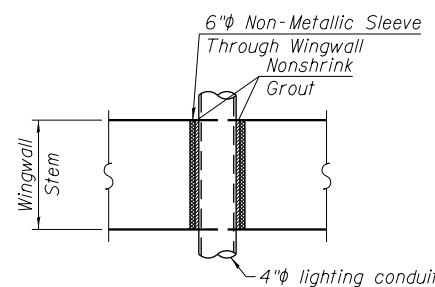
SHEET NO. S-36 OF S-61 SHEETS

F.A.I. R.E. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 243
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



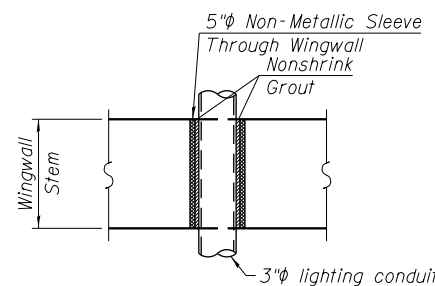
DETAIL D

Minimum Bar Laps	
Bar	Lap
#5(E)	3'-3"
#6(E)	3'-10"
#7(E)	5'-2"
#9	5'-9"
#6 spiral	3'-0"



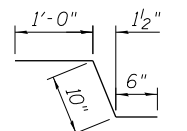
CONDUIT SLEEVE THRU WINGWALL

Furnishing and installing Non-Metallic Sleeve and Grout is included in the cost of Concrete Structures.

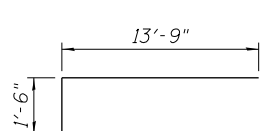


CONDUIT SLEEVE THRU ABUTMENT BACKWALL

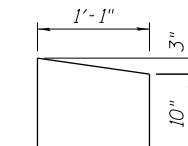
Furnishing and installing Non-Metallic Sleeve and Grout is included in the cost of Concrete Structures.



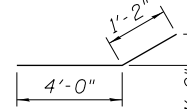
BAR c103(E)



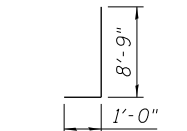
BAR c104(E)



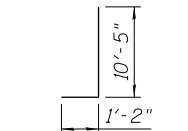
BAR d100(E)



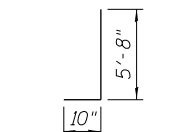
BAR h104(E)



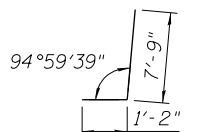
BAR n100(E)



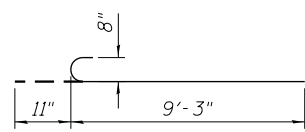
BAR n101(E)



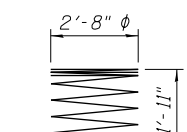
BAR n103(E)



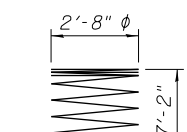
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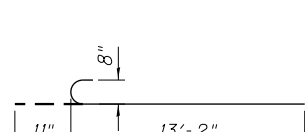
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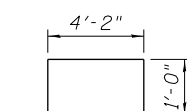
BAR sp100



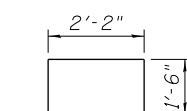
BAR sp101



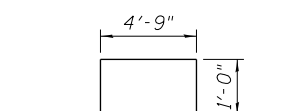
BAR t103(E)



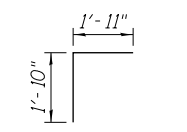
BAR u100(E)



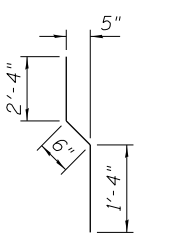
BAR u101(E)



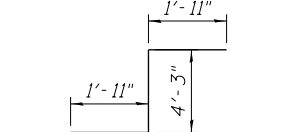
BAR u102(E)



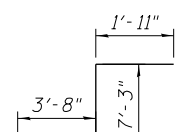
BAR v100(E)



BAR v103(E)



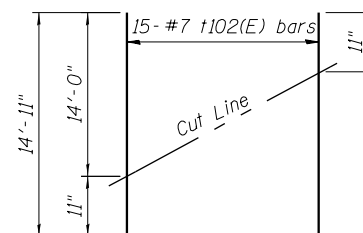
BAR w102(E)



BAR w103(E)

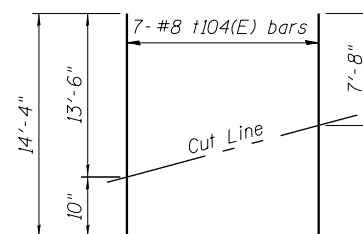
BILL OF MATERIAL

Item	Unit	Total
Porous Granular Backfill	Cu. Yd.	117
Structure Excavation	Cu. Yd.	1028
Concrete Structures	Cu. Yd.	473.8
Concrete Superstructure	Cu. Yd.	8.3
Reinforcement Bars	Pound	127,710
Reinforcement Bars, Epoxy Coated	Pound	59,290
Permanent Casing	Foot	644
Drilled Shaft in Soil	Cu. Yd.	581.7
Drilled Shaft in Rock	Cu. Yd.	14.1
Concrete Sealer	Sq. Ft.	2207
Geocomposite Wall Drain	Sq. Yd.	236
Granular Backfill for Structures	Cu. Yd.	223



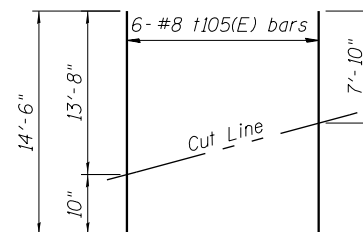
FIELD CUTTING DIAGRAM

Order t102(E) bars full length. Cut as shown and use remainder of bars in opposite end of footing.



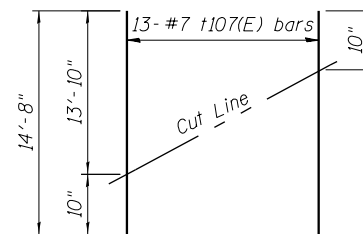
FIELD CUTTING DIAGRAM

Order t104(E) bars full length.



FIELD CUTTING DIAGRAM

Order t105(E) bars full length.



FIELD CUTTING DIAGRAM

Order t107(E) bars full length. Cut as shown and use remainder of bars in opposite end of footing.

Bar	No.	Size	Length	Shape
b107(E)	22	#5	1'-4"	—
b108(E)	4	#5	2'-2"	—
c103(E)	6	#5	2'-4"	~
c104(E)	6	#5	15'-3"	└
d100(E)	40	#5	3'-0"	└
d101(E)	86	#5	5'-4"	—
e100(E)	6	#5	29'-8"	—
e101(E)	6	#5	30'-3"	—
h100(E)	10	#6	35'-9"	—
h101(E)	29	#5	29'-8"	—
h102(E)	20	#5	35'-6"	—
h103(E)	6	#5	3'-10"	—
h104(E)	6	#5	5'-2"	~
h105(E)	8	#5	3'-6"	—
h106(E)	12	#5	4'-0"	—
h107(E)	16	#5	2'-10"	—
h108(E)	29	#5	8'-3"	—
h109(E)	16	#5	2'-6"	—
n100(E)	75	#6	9'-6"	└
n101(E)	136	#7	11'-7"	└
n102(E)	168	#8	10'-3"	—
n103(E)	40	#5	6'-6"	└
n104(E)	46	#7	8'-11"	└
n105(E)	84	#8	10'-2"	└
p100(E)	88	#6	35'-9"	—
p101(E)	8	#6	24'-9"	—
p102(E)	4	#6	6'-1"	—
* sp100	12	#6	91'-11"	
* sp101	6	#6	97'-2"	
t100(E)	223	#7	14'-8"	—
t101(E)	4	#7	16'-8"	—
t102(E)	15	#7	14'-11"	—
t103(E)	130	#8	14'-1"	└
t104(E)	7	#8	14'-4"	—
t105(E)	6	#8	14'-6"	—
t106(E)	2	#8	14'-4"	—
t107(E)	13	#7	14'-8"	—
u100(E)	69	#6	6'-2"	└
u101(E)	52	#5	5'-2"	└
u102(E)	2	#6	6'-9"	└
v100(E)	69	#5	3'-9"	└
v101(E)	69	#5	6'-9"	—
v102(E)	69	#5	5'-4"	—
v103(E)	69	#5	4'-2"	—
v104(E)	136	#6	15'-6"	—
v105(E)	75	#6	17'-5"	—
v106(E)	40	#5	20'-10"	—
v107(E)	46	#6	19'-5"	—
v108	336	#9	48'-10"	—
v109(E)	8	#5	6'-4"	—
v110(E)	12	#5	2'-6"	—
v111	168	#9	51'-6"	—
w100(E)	124	#7	37'-6"	—
w101(E)	66	#7	35'-3"	—
w102(E)	14	#5	8'-1"	└
w103(E)	14	#5	12'-10"	└

Bars indicated thus, 1x15-#5 etc., indicates 1 line of bars with 15 lengths per line.
* Length is height of spiral.

3:02:32 PM 0161707-60X99-5038-Abutment1-WestDetails2.dgn



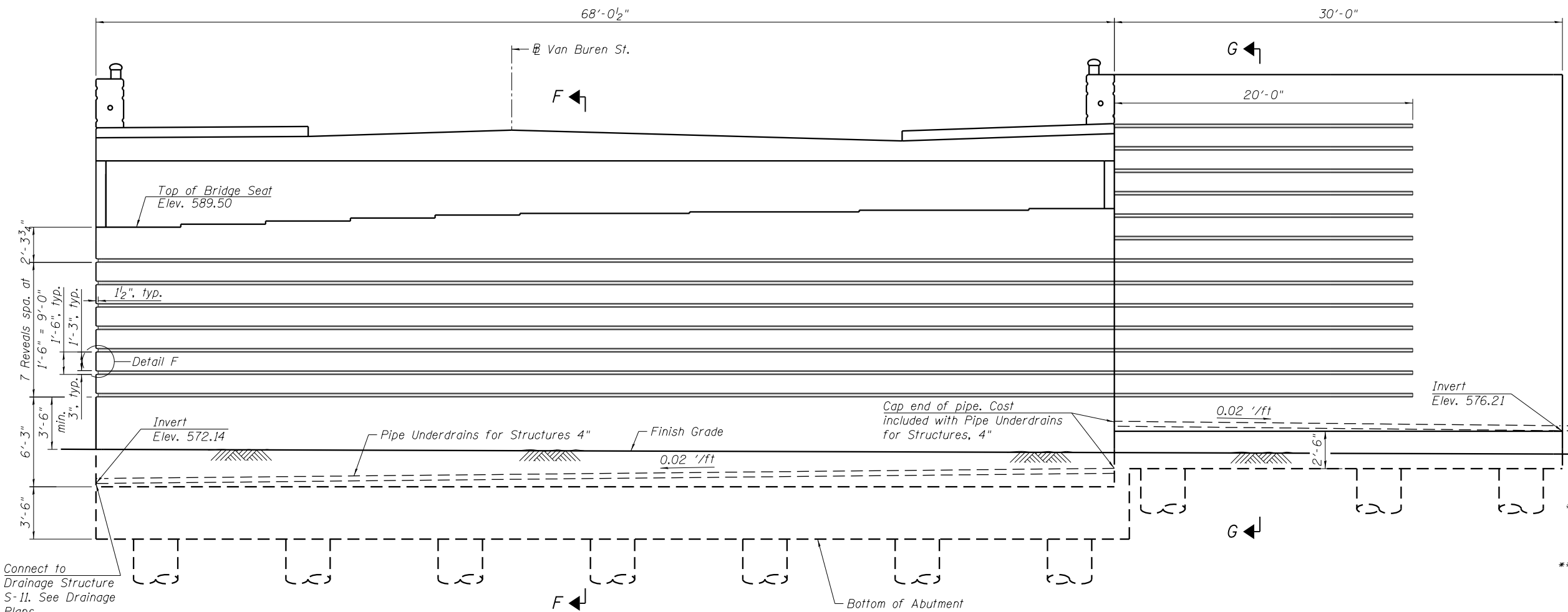
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PLOT DATE = 12/15/2016	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT DETAILS 2
STRUCTURE NO. 016-1707**

SHEET NO. S-38 OF S-61 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	245
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

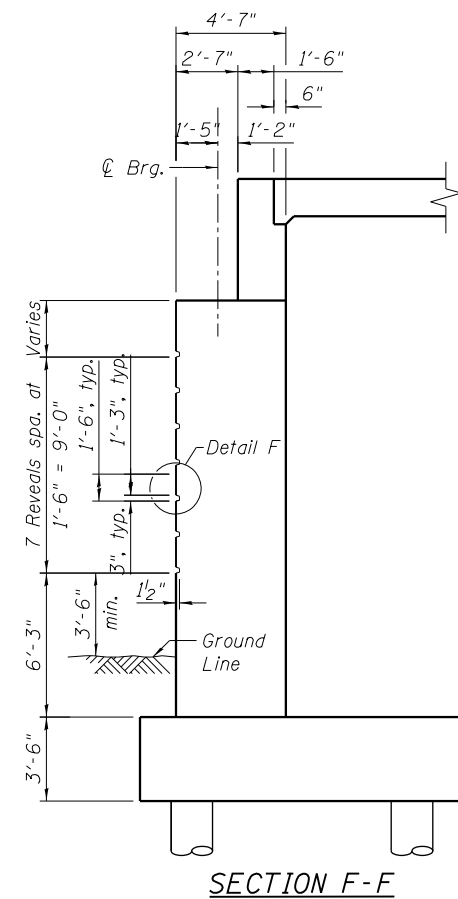


* Included in the Cost of Pipe Underdrains for Structures 4". See Special Provisions.
 ** Backfill remainder of Structure Excavation and over excavation with same material specified for Roadway Embankment.

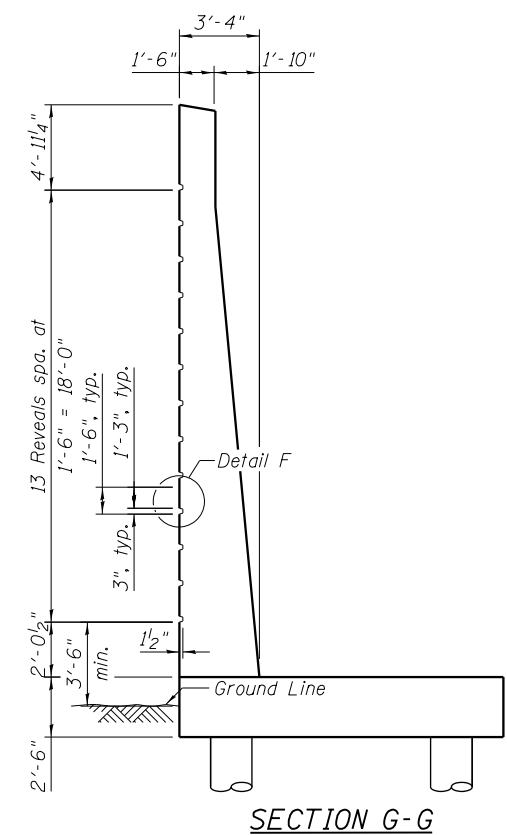
WEST ABUTMENT ELEVATION - ARCHITECTURAL DETAILS

(Looking West)

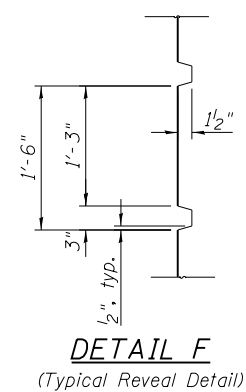
Note:
 The 3" x 1 1/2" reveal will not be paid separately and shall be included in the cost of Concrete Structures.



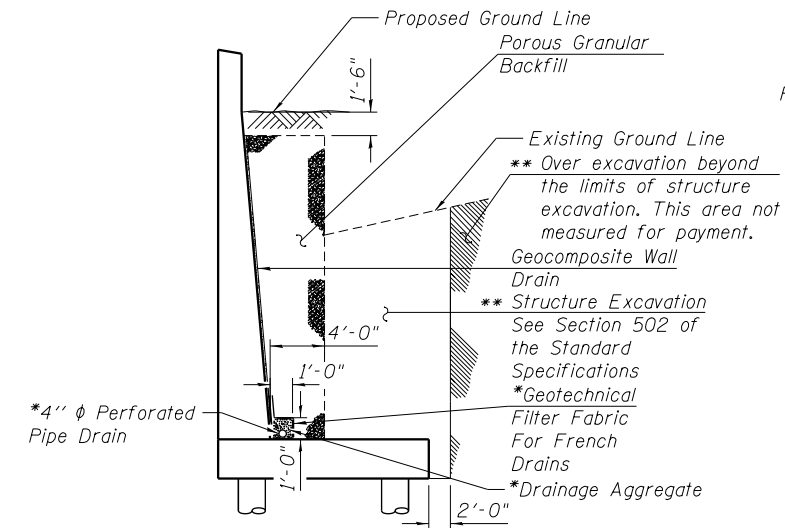
SECTION F-F



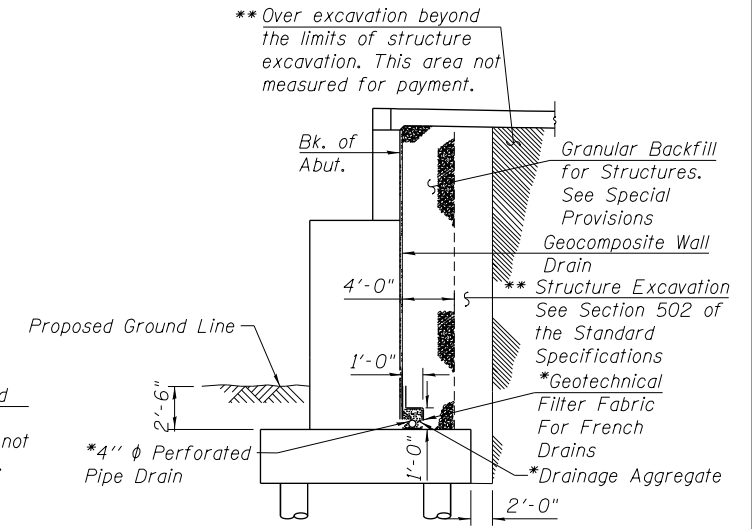
SECTION G-G



DETAIL F
 (Typical Reveal Detail)



SECTION THRU WINGWALL



SECTION THRU ABUTMENT

All drainage system components shall extend to the end of the Northwest wingwall and South end of the Abutment.

BILL OF MATERIAL

Item	Unit	Total
Pipe Underdrains for Structures 4"	Foot	100

3:02:35 PM 0161707-60X99-5039-Abutment_WestDetails3.dgn



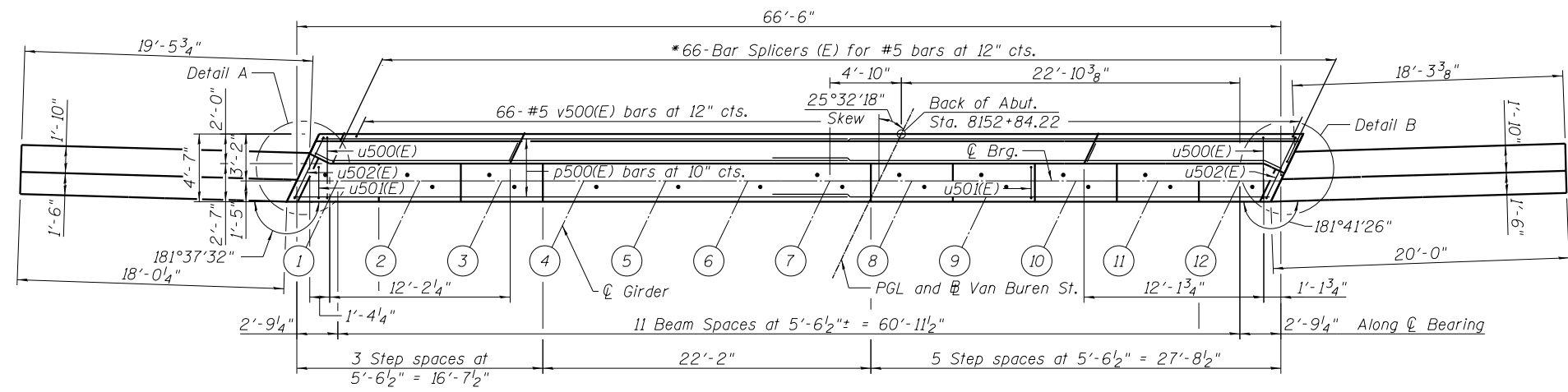
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	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

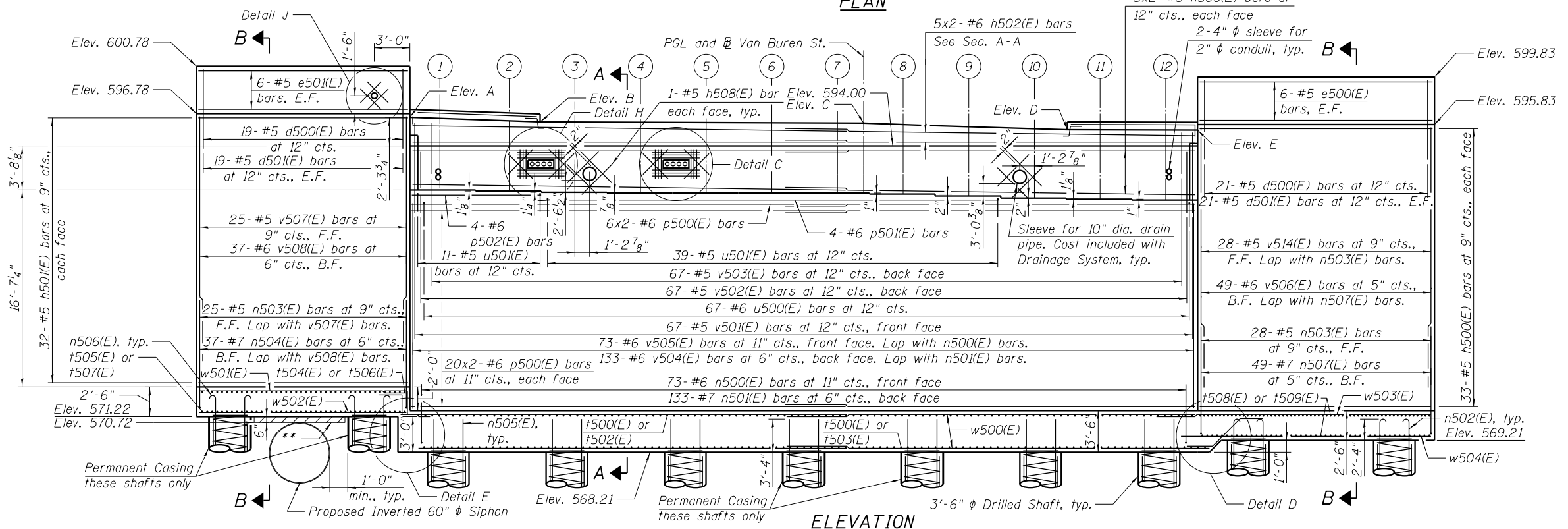
**WEST ABUTMENT DETAILS 3
 STRUCTURE NO. 016-1707**

SHEET NO. S-39 OF S-61 SHEETS

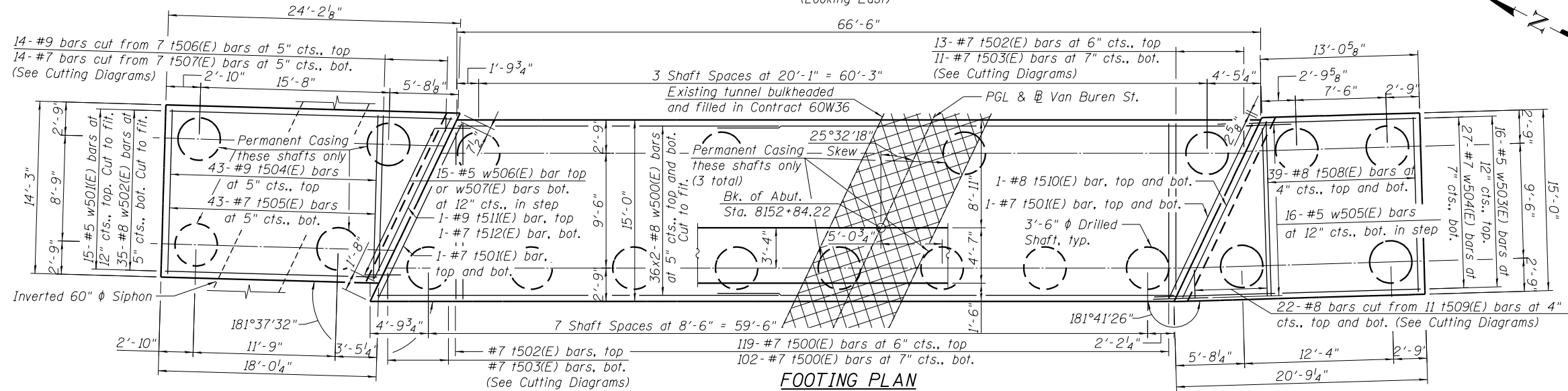
F.A.I. RE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	246
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



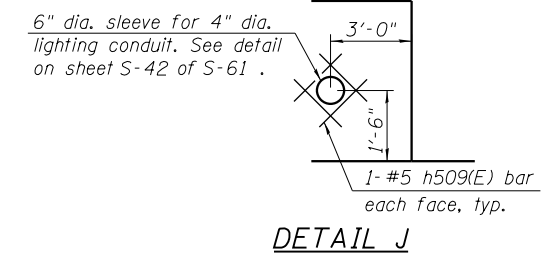
PLAN



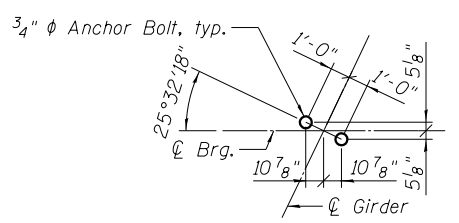
ELEVATION
(Looking East)



FOOTING PLAN



DETAIL J



ANCHOR BOLT LAYOUT

* Alternate with v500(E) bars. Place parallel to the beams.
 ** Foam filler, according to Article 1051.09 of the Standard Specifications. Cost included with Concrete Structures.

TOP OF SEAT ELEVATIONS

Girder No.	Seat Elevation
1	590.34
2	590.24
3	590.15
4	590.08
5	590.08
6	590.08
7	590.08
8	590.00
9	589.83
10	589.66
11	589.57
12	589.48

TOP OF BACK WALL ELEVATIONS

Point	Front face	Back face
A - North Edge of Abut.	596.31	596.27
B - North Curb Line	595.90	595.83
C - PGL	595.82	595.76
D - South Curb Line	595.41	595.35
E - South Edge of Abut.	595.42	595.33

Notes:
 For Section A-A, Section B-B, Detail A, Detail B, Detail C, and Drilled Shaft Details, see Sheet S-41 of S-61.
 For Detail D, Detail E, Detail H, and Bill of Material, see Sheet S-42 of S-61.
 Siphon and drilled shaft locations at the Northeast wingwall shall be verified in the field and approved by the Engineer prior to drilled shaft construction.
 F.F. denotes front face.
 B.F. denotes back face.
 E.F. denotes each face.

3:02:38 PM 0161707-60X99-5040-Abutment_EastP&E.dgn



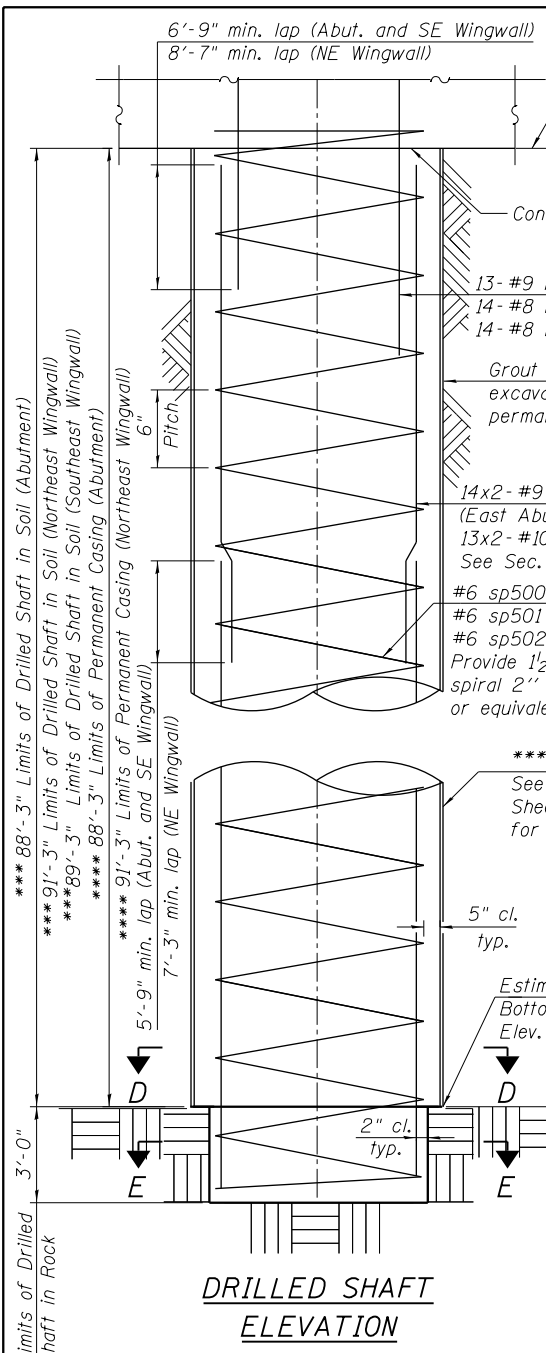
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	CHECKED - MDS	REVISD
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PLOT DATE = 12/15/2016	CHECKED - MDS	REVISD

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

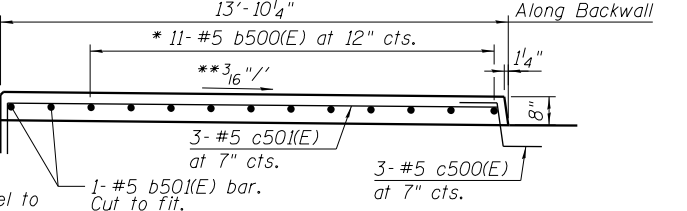
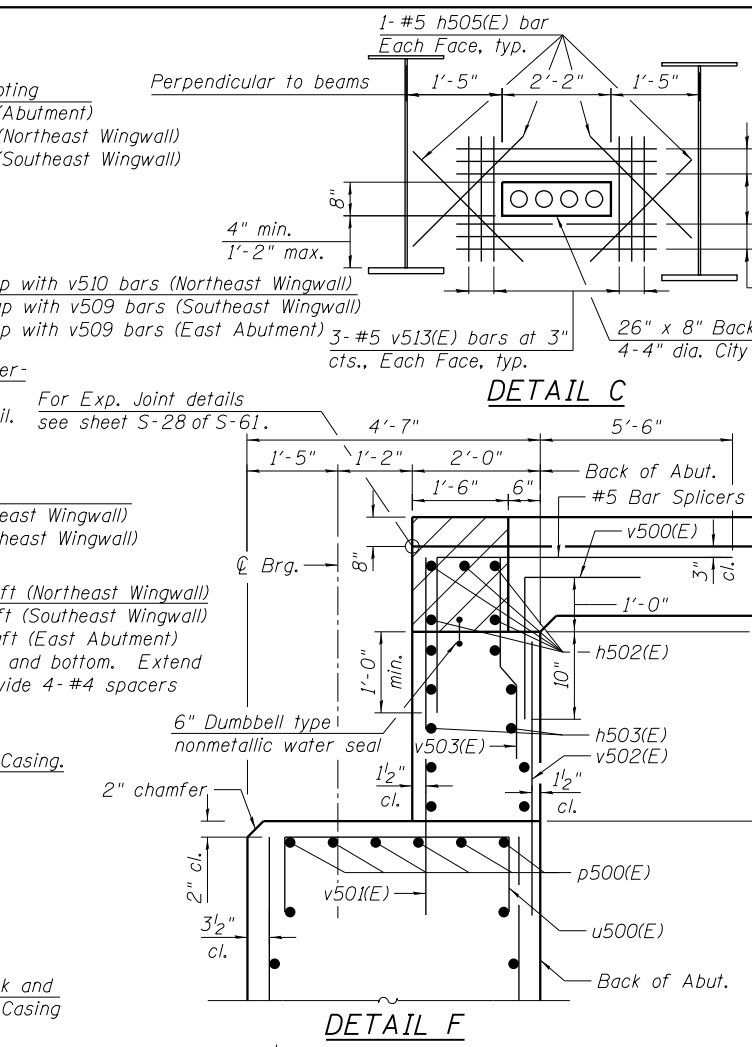
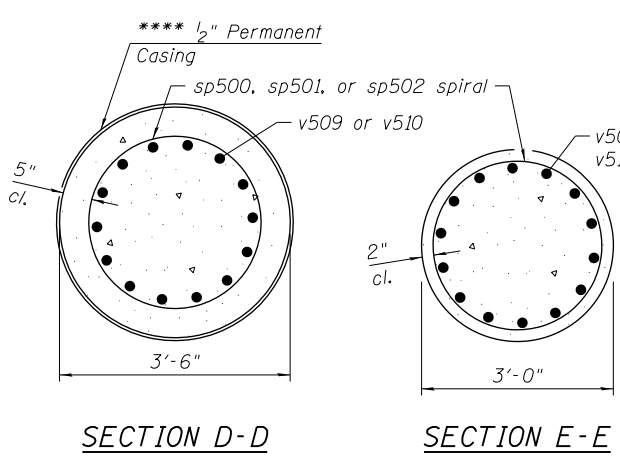
EAST ABUTMENT PLAN AND ELEVATION
 STRUCTURE NO. 016-1707

SHEET NO. S-40 OF S-61 SHEETS

F.A.I. R.E. = 90/94/290	SECTION = 2014-017B	COUNTY = COOK	TOTAL SHEETS = 442	SHEET NO. = 247
CONTRACT NO. 60X99				ILLINOIS FED. AID PROJECT



DRILLED SHAFT ELEVATION



SIDEWALK DETAIL
(North sidewalk shown, South sidewalk similar, opp. hand)

Notes:

Apply Concrete Sealer to all exposed concrete surfaces of the abutment.

Pour steps monolithically with cap.

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

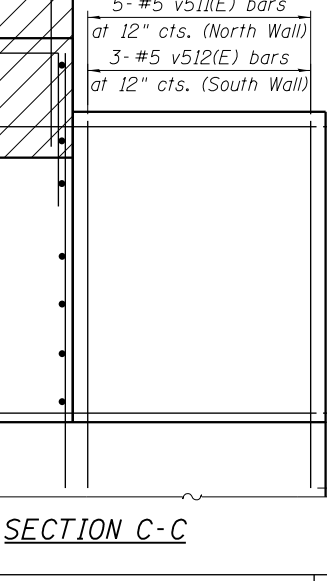
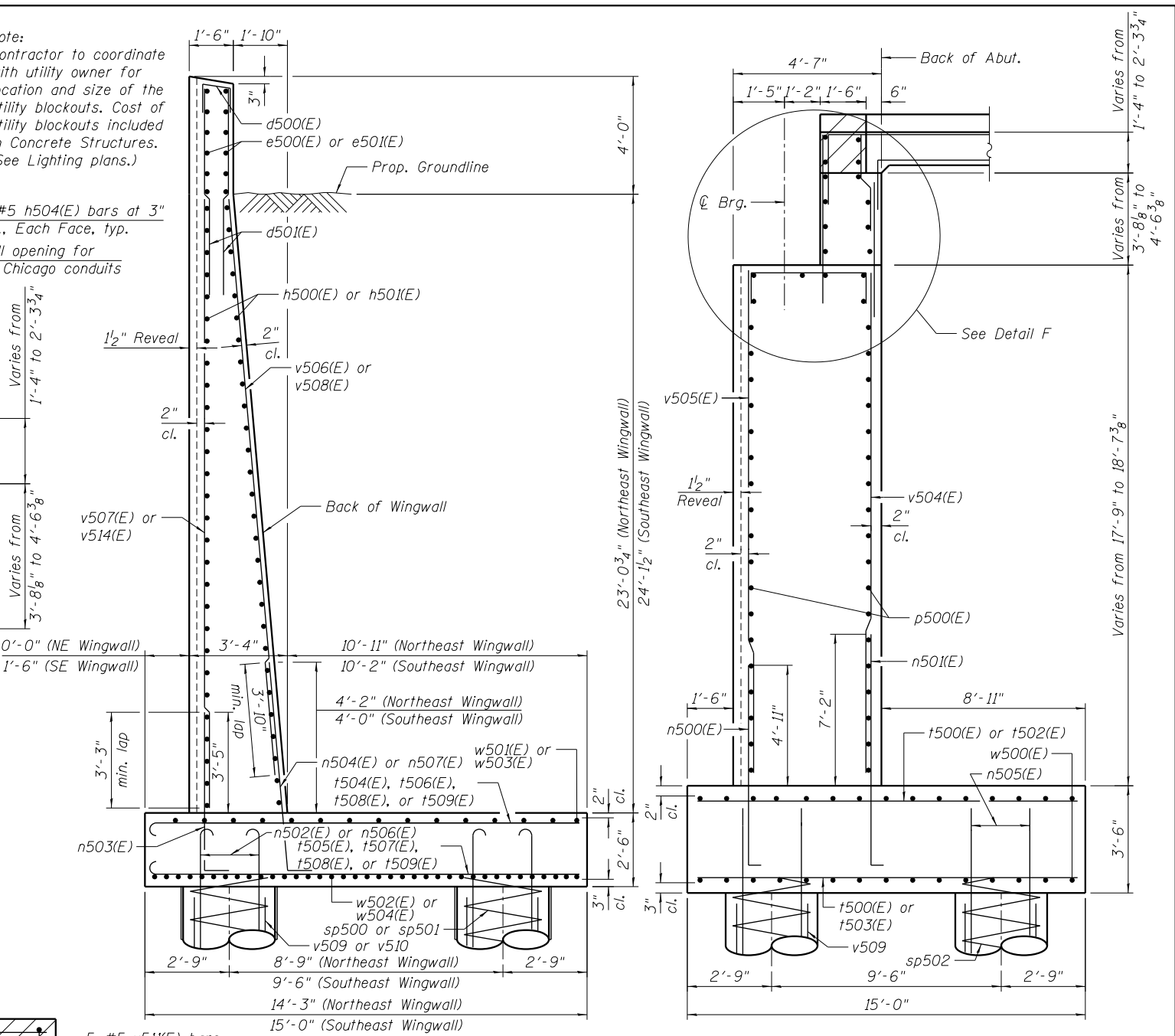
Space u500(E), u501(E), p500(E), p501(E), and p502(E) bars to miss anchor bolts.

*** The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.

**** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of the casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.

When splicing spiral reinforcement is necessary, the spirals shall be provided with 1/2" extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.

Back of Abut.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS 1
STRUCTURE NO. 016-1707

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	248
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



USER NAME =	DESIGNED -	REVISIONS
mkwilson	JRM	
CHECKED -	MDS	REVISIONS
PLOT SCALE =	DRAWN -	REVISIONS
0:2.0000 " = 1"	JNP	
PLOT DATE =	CHECKED -	REVISIONS
12/15/2016	JRM	

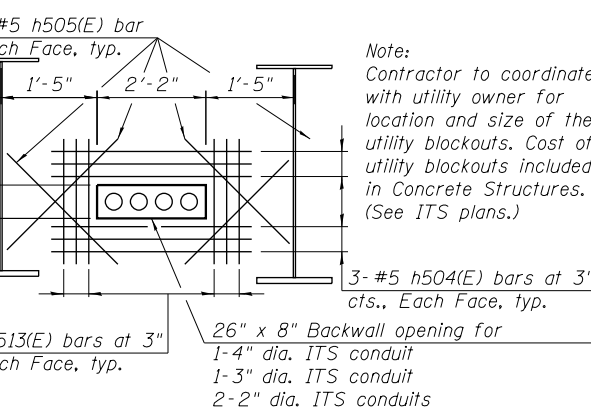
3:02:40 PM 0161707-60X99-S041-Abutment-EastDetails.dgn

BILL OF MATERIAL

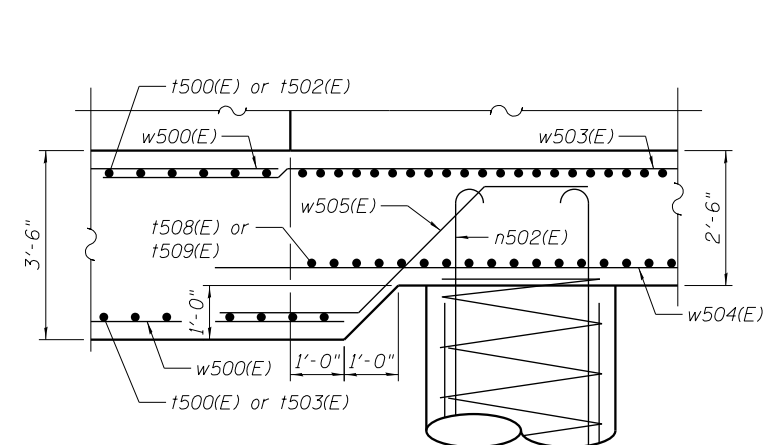
Bar	No.	Size	Length	Shape
w500(E)	144	#8	37'-11"	
w501(E)	15	#5	23'-10"	
w502(E)	35	#8	23'-10"	
w503(E)	16	#5	22'-4"	
w504(E)	27	#7	23'-0"	
w505(E)	16	#5	9'-2"	
w506(E)	15	#5	5'-10"	
w507(E)	15	#5	10'-7"	
Porous Granular Backfill			Cu. Yd.	163
Structure Excavation			Cu. Yd.	1981
Concrete Structures			Cu. Yd.	500.3
Concrete Superstructure			Cu. Yd.	7.4
Reinforcement Bars			Pound	143,440
Reinforcement Bars, Epoxy Coated			Pound	69,810
Permanent Casing			Foot	630
Drilled Shaft in Soil			Cu. Yd.	634.8
Drilled Shaft in Rock			Cu. Yd.	15.7
Concrete Sealer			Sq. Ft.	2471
Geocomposite Wall Drain			Sq. Yd.	266
Granular Backfill for Structures			Cu. Yd.	221

Bar	No.	Size	Length	Shape
b500(E)	22	#5	1'-4"	
b501(E)	4	#5	2'-2"	
c500(E)	6	#5	2'-4"	
c501(E)	6	#5	14'-11"	
d500(E)	40	#5	3'-0"	
d501(E)	80	#5	5'-4"	
e500(E)	12	#5	19'-8"	
e501(E)	12	#5	17'-8"	
h500(E)	33	#5	19'-8"	
h501(E)	32	#5	17'-8"	
h502(E)	10	#6	35'-0"	
h503(E)	20	#5	34'-9"	
h504(E)	24	#5	4'-0"	
h505(E)	16	#5	3'-6"	
h506(E)	6	#5	5'-3"	
h507(E)	6	#5	4'-2"	
h508(E)	16	#5	2'-10"	
h509(E)	8	#5	2'-6"	
n500(E)	73	#6	9'-2"	
n501(E)	133	#7	11'-7"	
n502(E)	56	#8	10'-2"	
n503(E)	53	#5	6'-6"	
n504(E)	37	#7	7'-7"	
n505(E)	168	#8	10'-3"	
n506(E)	52	#9	12'-4"	
n507(E)	49	#7	7'-5"	
p500(E)	92	#6	35'-0"	
p501(E)	4	#6	40'-9"	
p502(E)	4	#6	11'-4"	
sp500	4	#6	94'-3"	
sp501	4	#6	92'-3"	
sp502	12	#6	91'-3"	
t500(E)	221	#7	14'-8"	
t501(E)	4	#7	16'-3"	
t502(E)	13	#7	14'-11"	
t503(E)	11	#7	15'-1"	
t504(E)	43	#9	15'-2"	
t505(E)	43	#7	14'-9"	
t506(E)	7	#9	14'-11"	
t507(E)	7	#7	14'-11"	
t508(E)	78	#8	14'-8"	
t509(E)	22	#8	14'-11"	
t510(E)	2	#8	16'-6"	
t511(E)	1	#9	15'-3"	
t512(E)	1	#7	15'-3"	
u500(E)	67	#6	6'-2"	
u501(E)	50	#5	4'-10"	
u502(E)	2	#6	6'-9"	
v500(E)	66	#5	3'-9"	
v501(E)	67	#5	6'-10"	
v502(E)	67	#5	5'-7"	
v503(E)	67	#5	3'-10"	
v504(E)	133	#6	15'-2"	
v505(E)	73	#6	17'-5"	
v506(E)	49	#6	23'-10"	
v507(E)	25	#5	22'-9"	
v508(E)	37	#6	22'-8"	
v509	448	#9	48'-10"	
v510	104	#10	50'-7"	
v511(E)	5	#5	6'-6"	
v512(E)	3	#5	6'-5"	
v513(E)	24	#5	2'-6"	
v514(E)	28	#5	23'-9"	

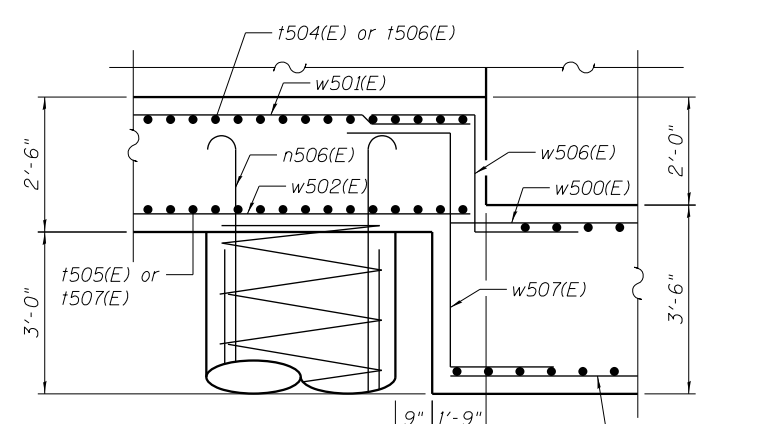
Bars indicated thus, 1x15-#5 etc., indicates 1 line of bars with 15 lengths per line.
 * Length is height of spiral.



DETAIL H

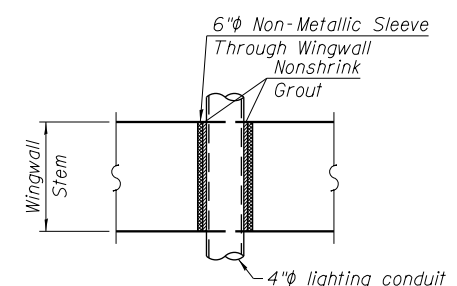


DETAIL D

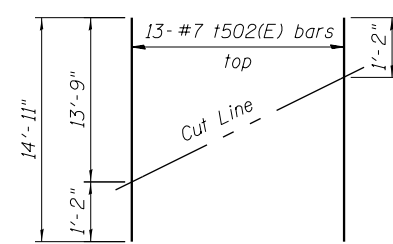
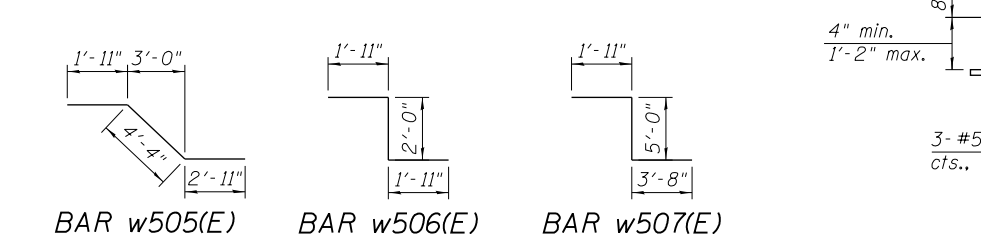
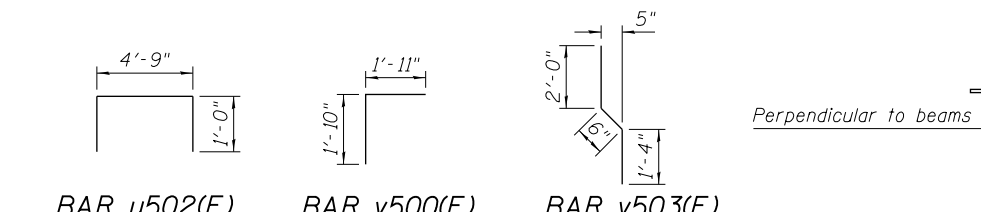
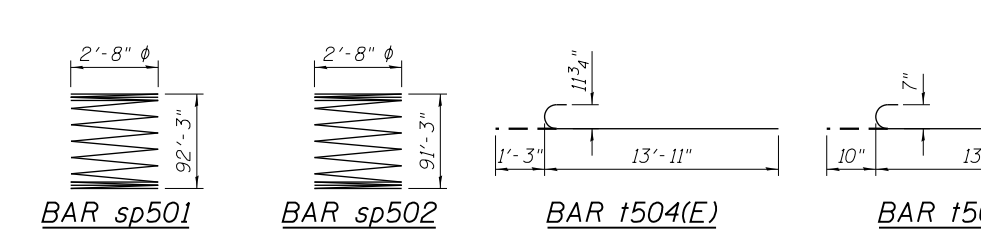
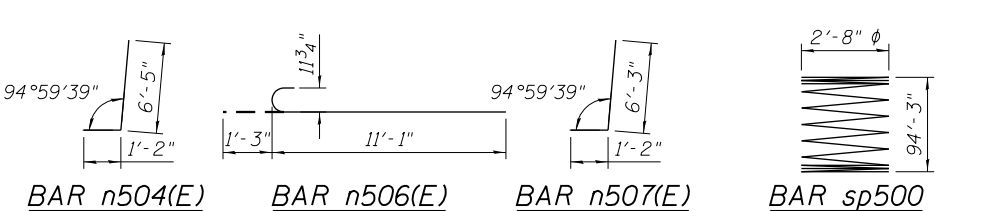
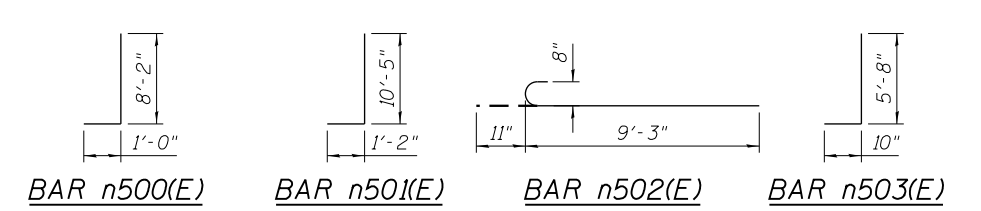
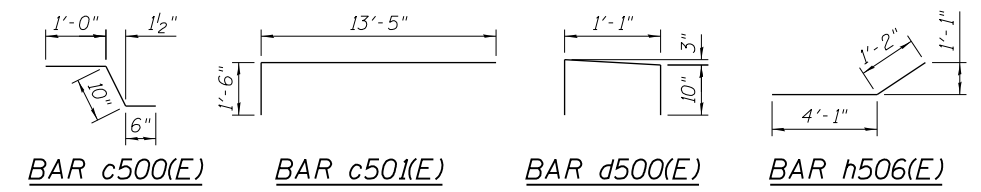


DETAIL E

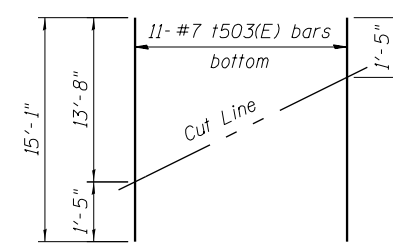
Bar	Lap
#5(E)	3'-3"
#6(E)	3'-10"
#7(E)	5'-2"
#8(E)	6'-9"
#9(E)	8'-7"
#9	5'-9"
#10	7'-3"
#6 spiral	3'-0"



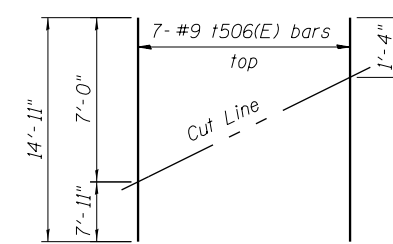
CONDUIT SLEEVE THRU WINGWALL
 Furnishing and installing Non-Metallic Sleeve and Grout is included in the cost of Concrete Structures.



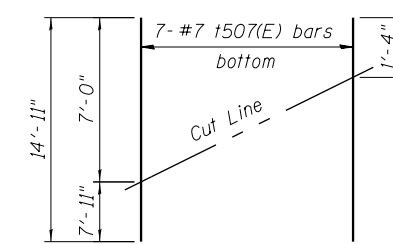
FIELD CUTTING DIAGRAM
 Order t502(E) bars full length. Cut as shown and use remainder of bars in opposite end of footing.



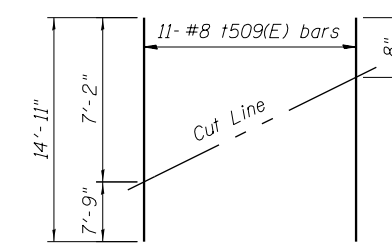
FIELD CUTTING DIAGRAM
 Order t503(E) bars full length. Cut as shown and use remainder of bars in opposite end of footing.



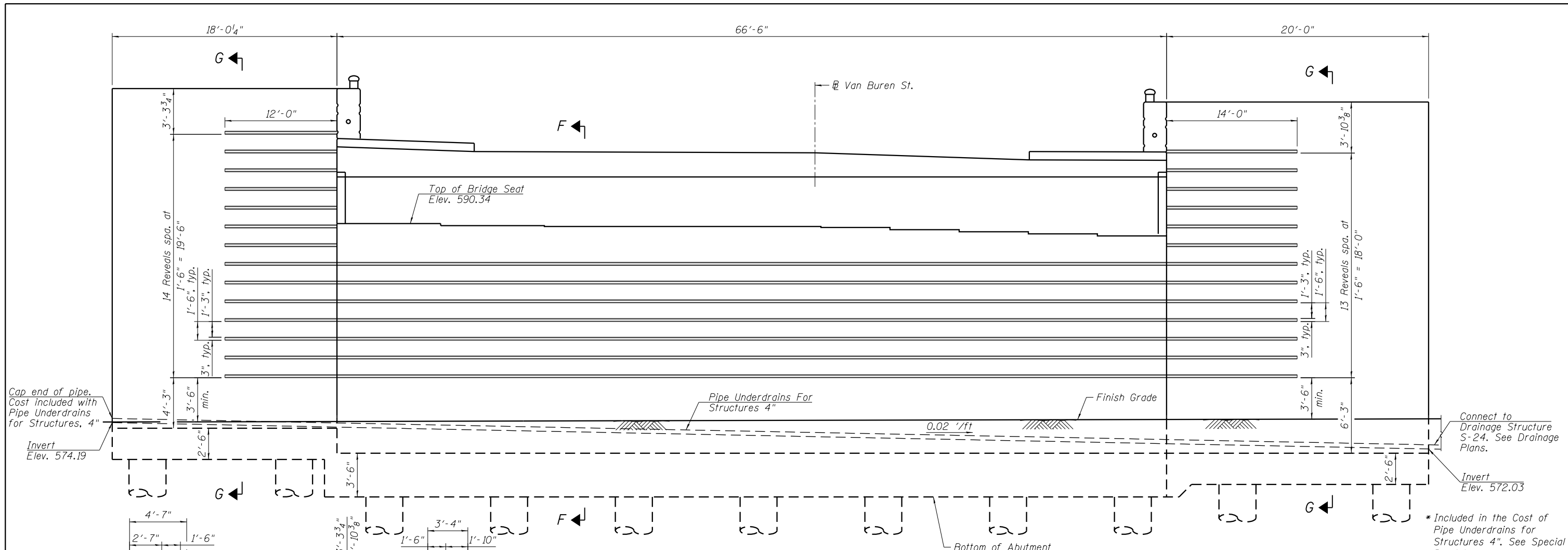
FIELD CUTTING DIAGRAM
 Order t506(E) bars full length.



FIELD CUTTING DIAGRAM
 Order t507(E) bars full length.

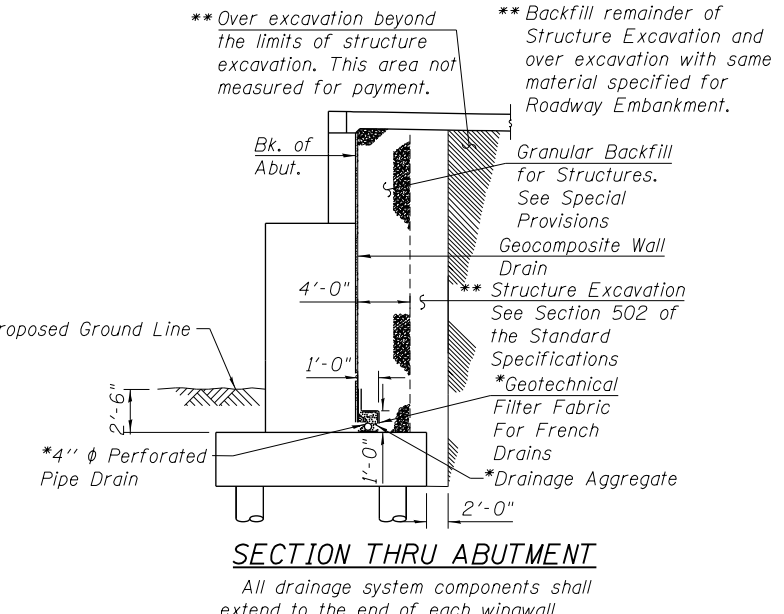
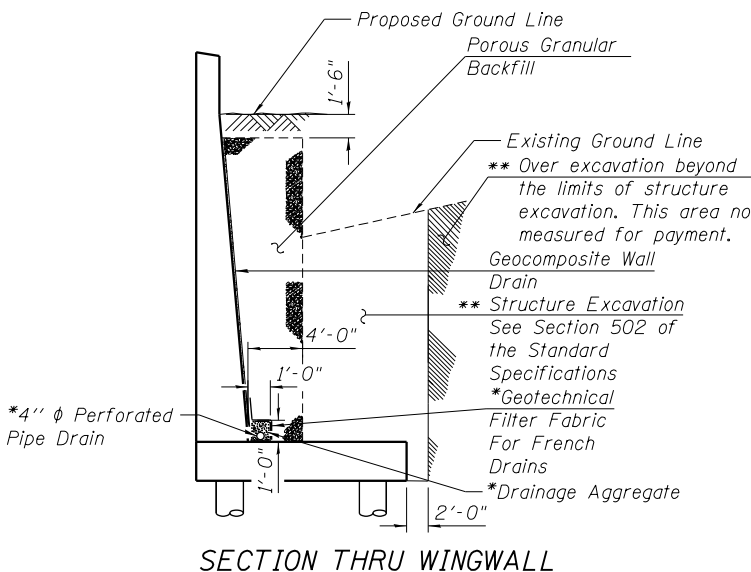
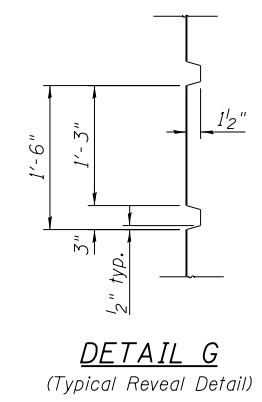
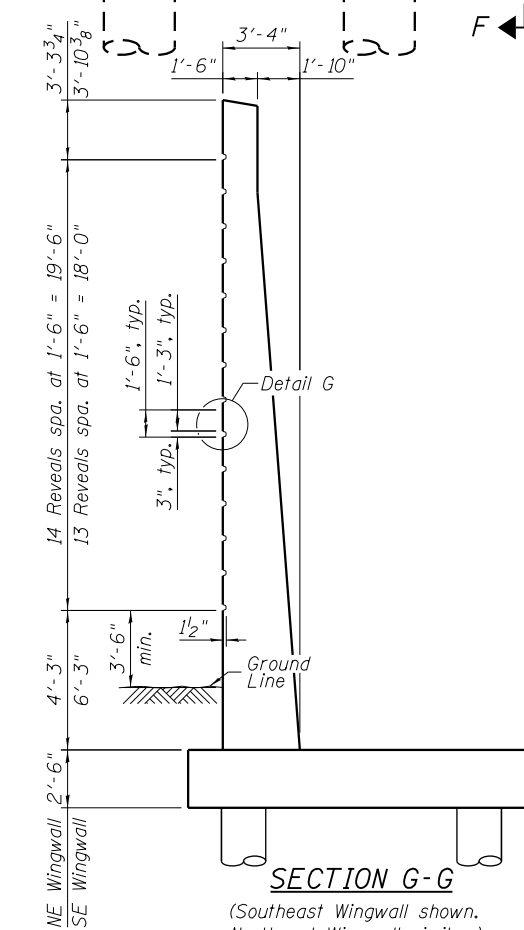
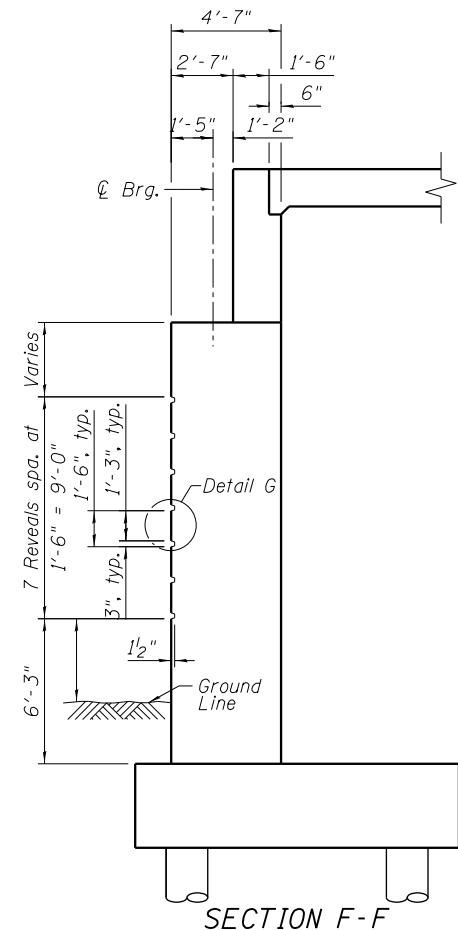


FIELD CUTTING DIAGRAM
 Order t509(E) bars full length.



EAST ABUTMENT ELEVATION - ARCHITECTURAL DETAILS
(Looking East)

Note:
The 3" x 1/2" reveal will not be paid separately and shall be included in the cost Concrete Structures.



BILL OF MATERIAL

Item	Unit	Total
Pipe Underdrains For Structures 4"	Foot	105

3:02:46 PM 0161707-60X99-5043-Abutment1-EastDetails3.dgn



USER NAME = mkwilson	DESIGNED - JRM	REVISED
PLOT SCALE = 0:2' = 1" / 16'	CHECKED - MDS	REVISED
PLOT DATE = 12/15/2016	DRAWN - JNP	REVISED
	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT DETAILS 3
STRUCTURE NO. 016-1707**

SHEET NO. S-43 OF S-61 SHEETS

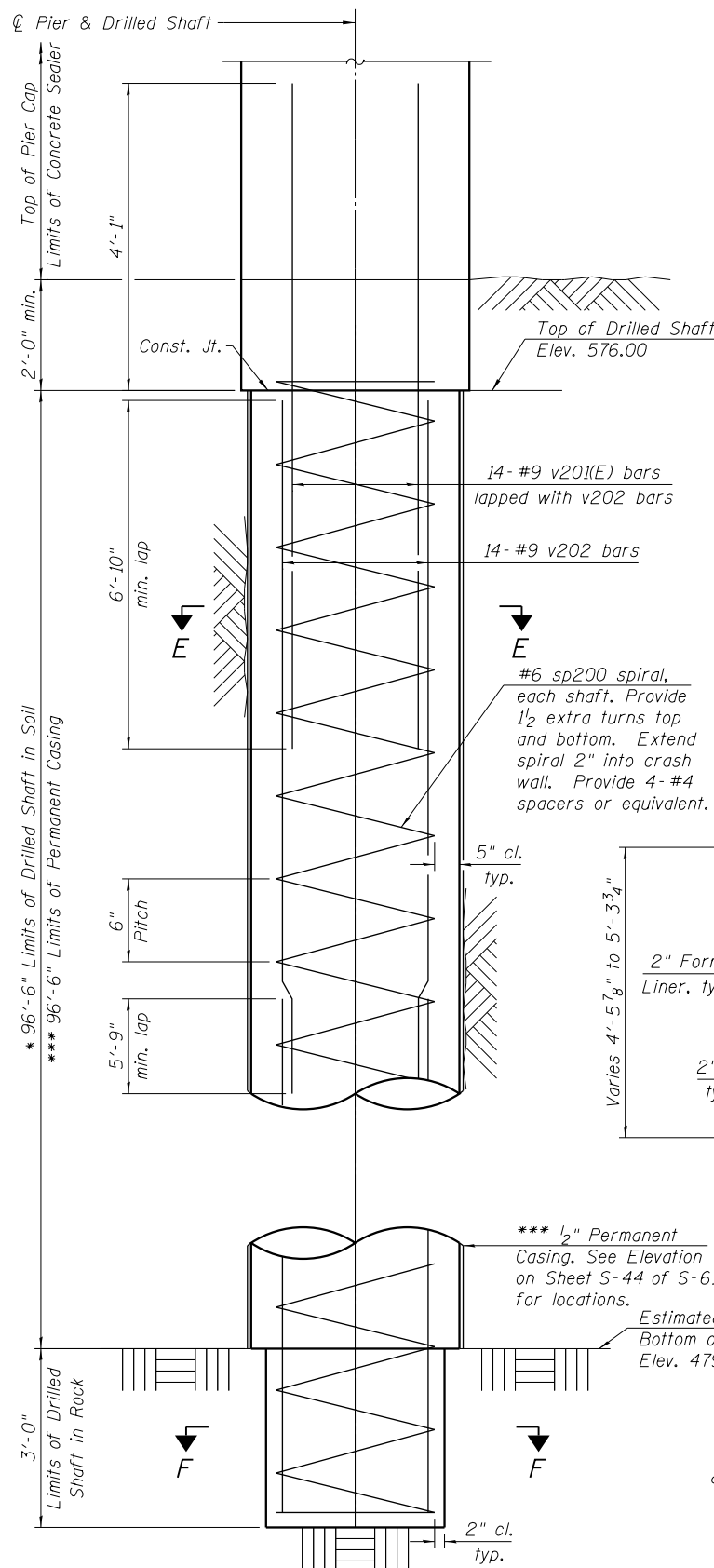
F.A.I. R.E. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 250
CONTRACT NO. 60X99				ILLINOIS FED. AID PROJECT

BILL OF MATERIAL

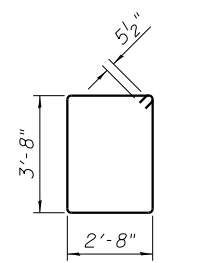
Bar	No.	Size	Length	Shape
h200(E)	12	#5	35'-6"	—
h201(E)	4	#5	20'-3"	—
h202(E)	4	#5	33'-10"	—
h203(E)	4	#5	5'-6"	—
h204(E)	14	#7	55'-0"	—
h205(E)	30	#6	55'-0"	—
p200(E)	18	#8	37'-3"	—
p201(E)	7	#7	53'-9"	—
p202(E)	14	#7	11'-11"	—
s200(E)	36	#5	9'-2"	□
s201(E)	75	#5	13'-7"	□
s202(E)	48	#5	8'-8"	□
s203(E)	112	#5	14'-4"	□
sp200	6	#6	99'-6"	⊞
u200(E)	12	#6	10'-4"	□
u201(E)	18	#5	4'-8"	□
u202(E)	29	#5	5'-6"	□
u203(E)	7	#5	6'-4"	□
u204(E)	34	#6	11'-2"	□
v200(E)	64	#8	10'-10"	⌋
v201(E)	84	#9	11'-1"	—
v202	168	#9	52'-6"	—
Structure Excavation		Cu. Yd.	53	
Concrete Structures		Cu. Yd.	114.8	
Reinforcement Bars		Pound	44,910	
Reinforcement Bars, Epoxy Coated		Pound	17,240	
Permanent Casing		Foot	97	
Drilled Shaft in Soil		Cu. Yd.	206.4	
Drilled Shaft in Rock		Cu. Yd.	4.7	
Concrete Sealer		Sq. Ft.	2,241	

Bars indicated thus 1x15 etc., indicates 1 line of bars with 15 lengths per line.

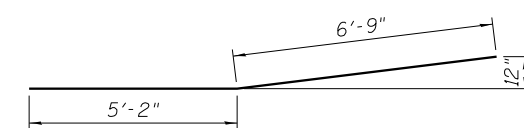
- Notes:
- Apply concrete sealer to all exposed concrete surfaces of the pier.
 - The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 - Length is height of spiral.
 - Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.
 - When splicing spiral reinforcement is necessary, the spirals shall be provided with 11#2" extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate in 130° standard hook.



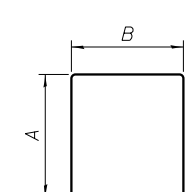
DRILLED SHAFT ELEVATION



BAR s201(E)

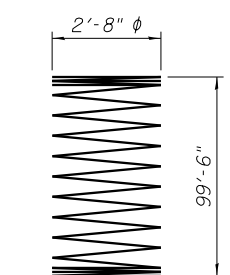


BAR p202(E)

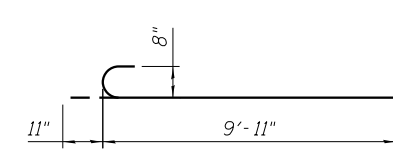


BARS s200(E), s202(E), s203(E) u200(E) through u204(E)

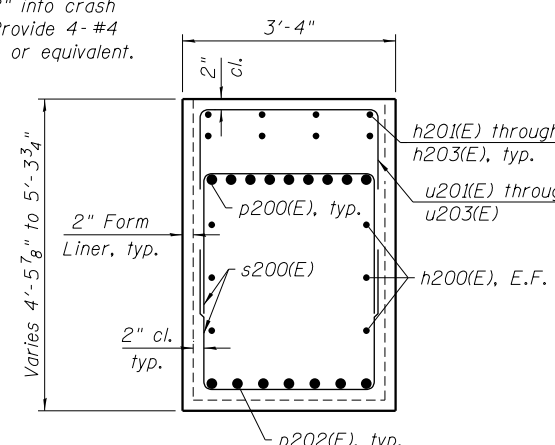
Bar	A	B
s200(E)	3'-3"	2'-8"
s202(E)	3'-0"	2'-8"
s203(E)	5'-5"	3'-6"
u200(E)	3'-10"	2'-8"
u201(E)	1'-0"	2'-8"
u202(E)	1'-5"	2'-8"
u203(E)	1'-10"	2'-8"
u204(E)	3'-10"	3'-6"



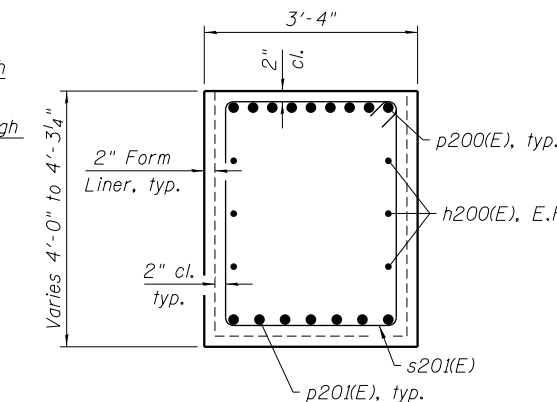
BAR sp200



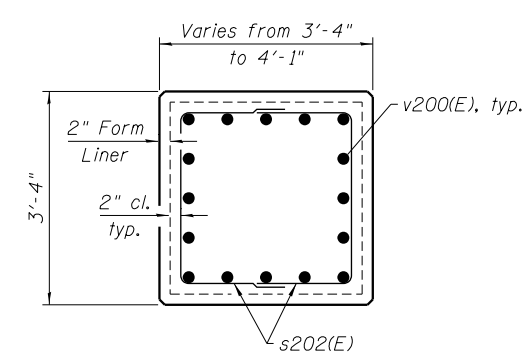
BAR v200(E)



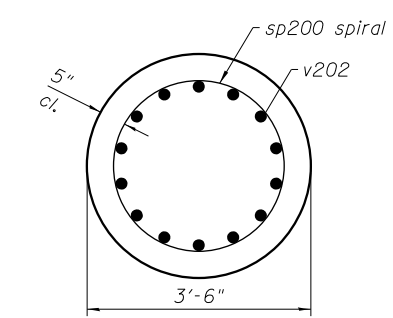
SECTION B-B



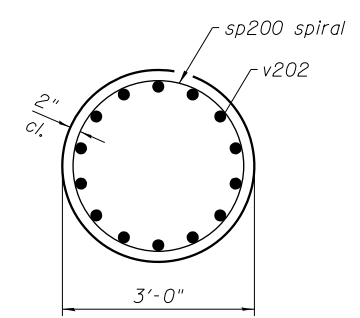
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

3:02:51 PM 0161707-60X99-5045-Pier 1-Details

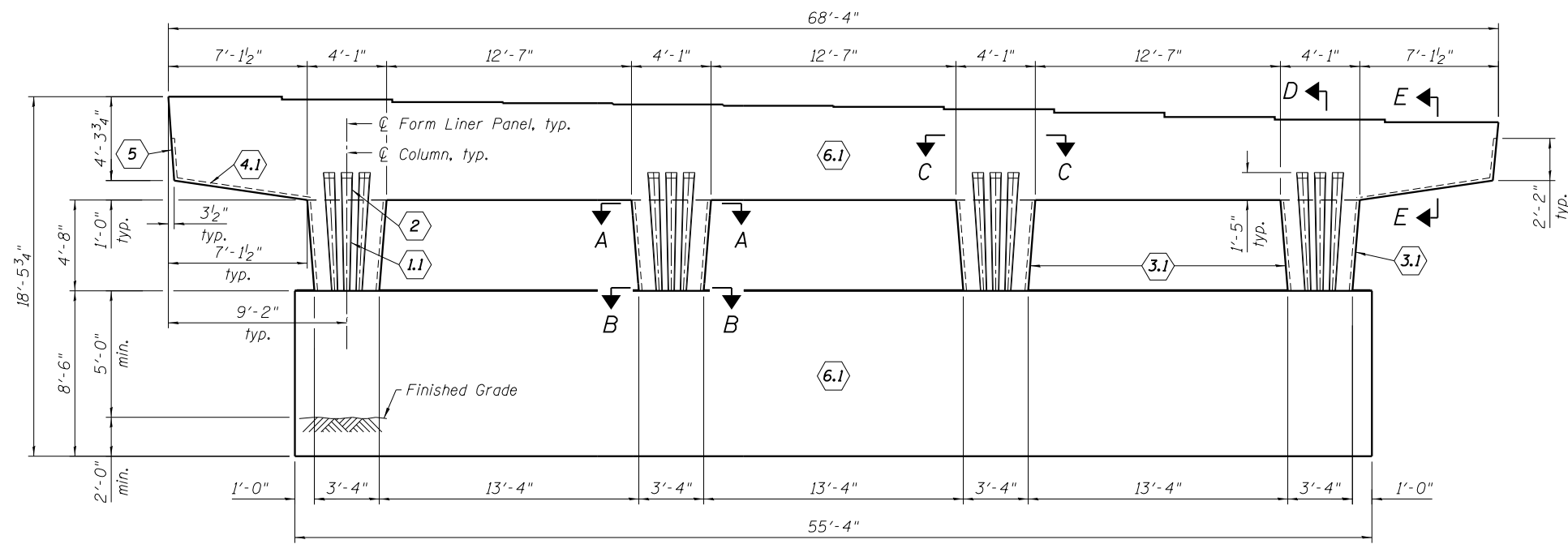


USER NAME = mkwilson	DESIGNED - TLR	REVISED
PLOT SCALE = 3/0 '4' / 1/4"	CHECKED - JRM	REVISED
PLOT DATE = 12/15/2016	DRAWN - TLR	REVISED
	CHECKED - JRM	REVISED

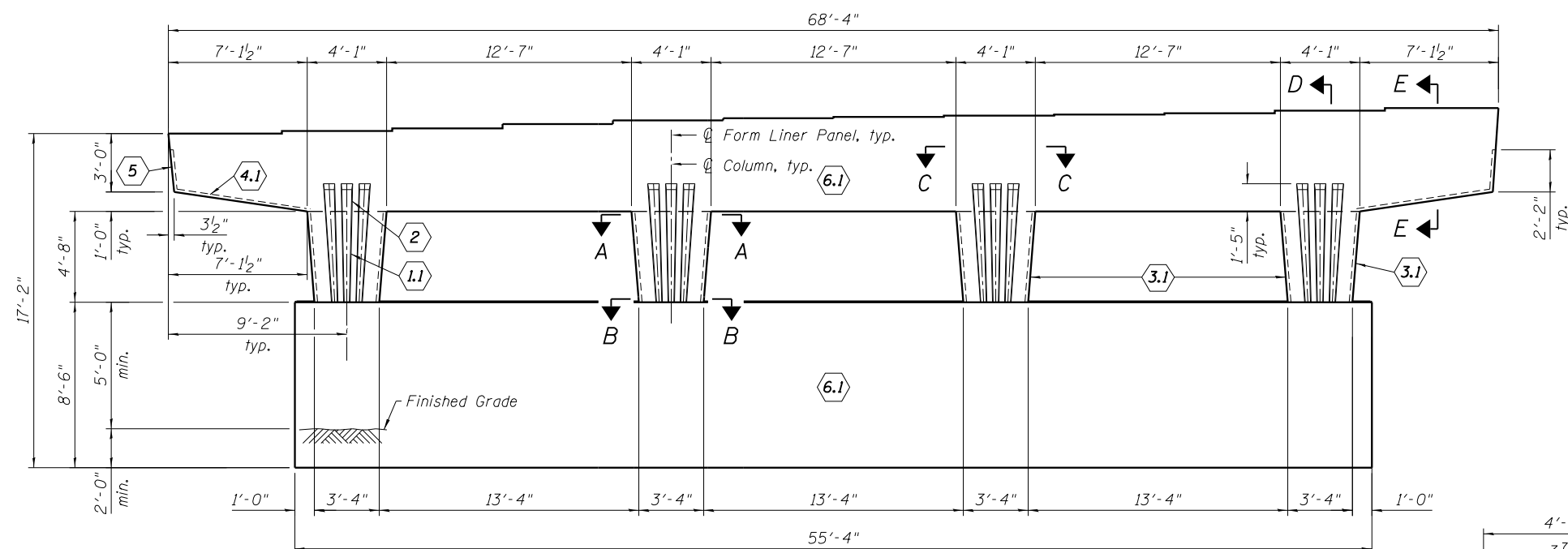
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 DETAILS
STRUCTURE NO. 016-1707**
SHEET NO. S-45 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 252
			CONTRACT NO. 60X99	
ILLINOIS FED. AID PROJECT				

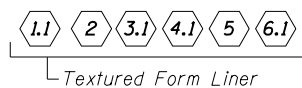


ELEVATION
Looking East



ELEVATION
Looking West

LEGEND

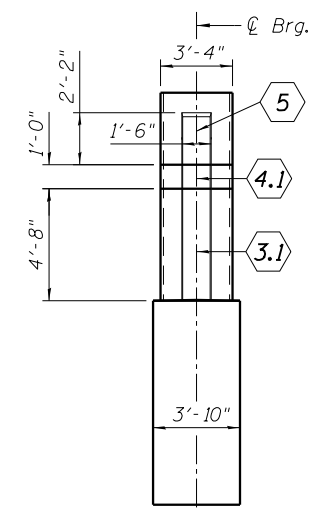


Notes:

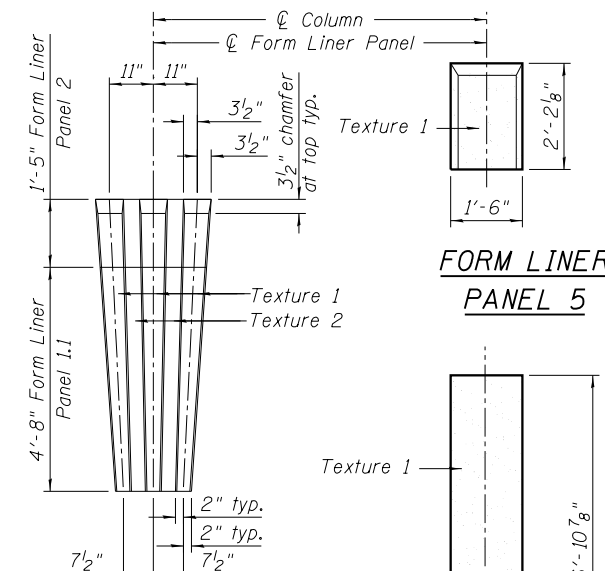
- Form liner panel (6.1) shall have a smooth finish. Cost included with Rubbed Finish.
- Tapered fluting - dimensions vary, see elevation profile.
- Form liner panel (2) is continuation of panel (1.1). Keep adjacent form liners aligned.
- Hand clean and smooth the surface of the construction joint between the pier and cap.
- Texture 1: Light Sandblast as selected from manufacturer's standard pattern selection.
- Texture 2: Smooth

BILL OF MATERIAL

Item	Unit	Total
Rubbed Finish	Sq. Ft.	1,338
Form Liner Textured Surface	Sq. Ft.	366

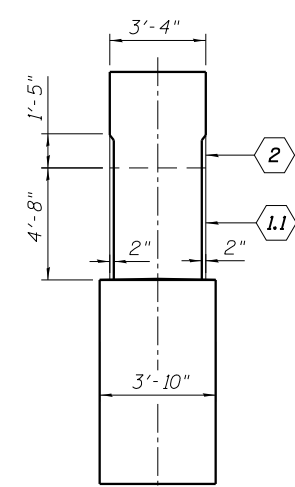


PIER END VIEW
(Looking North)
(Looking South - Sim.)

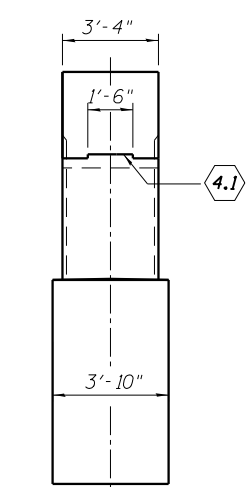


FORM LINER PANEL 5

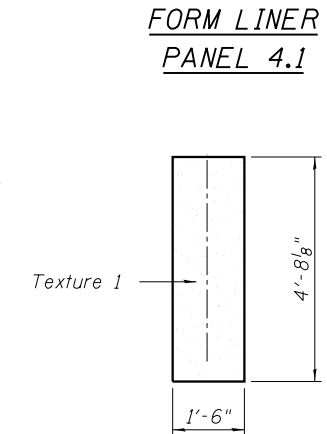
FORM LINER PANEL 1.1 & 2



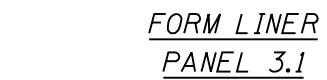
SECTION D-D



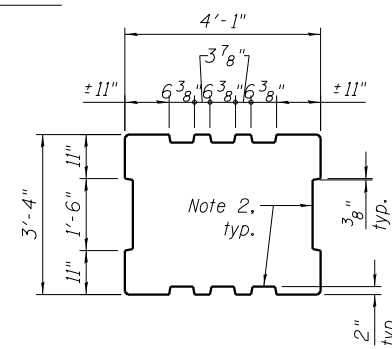
SECTION E-E



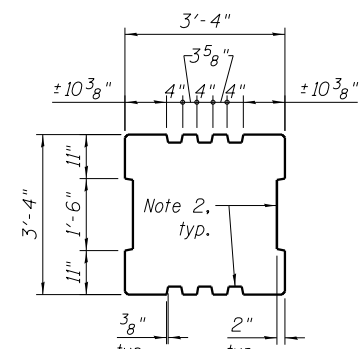
FORM LINER PANEL 4.1



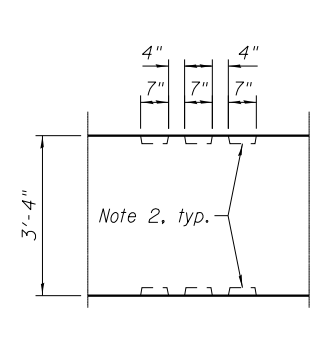
FORM LINER PANEL 3.1



SECTION A-A
At Top of Column



SECTION B-B
At Bottom of Column



SECTION C-C
In Cap

3:02:54 PM 0161707-60X99-5046-Pier 1.ArchDetails



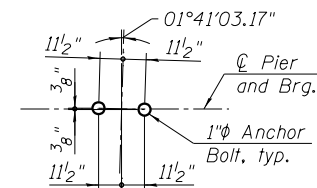
USER NAME = mkwilson	DESIGNED - TLR	REVISED
PLOT SCALE = 8:0 ' = 1/4" / in.	CHECKED - JRM	REVISED
PLOT DATE = 12/15/2016	DRAWN - TLR	REVISED
	CHECKED - JRM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

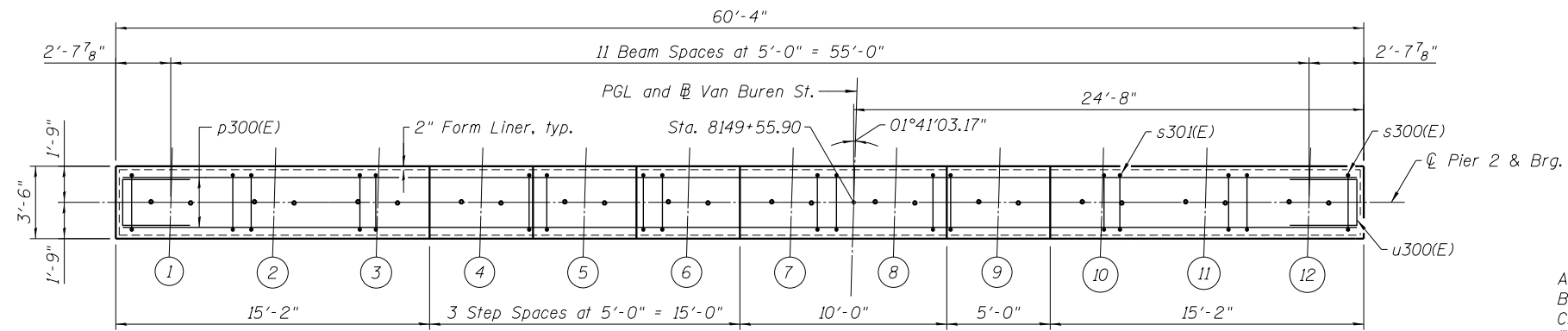
PIER 1 ARCHITECTURAL DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-46 OF S-61 SHEETS

F.A.I. R.E. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 253
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

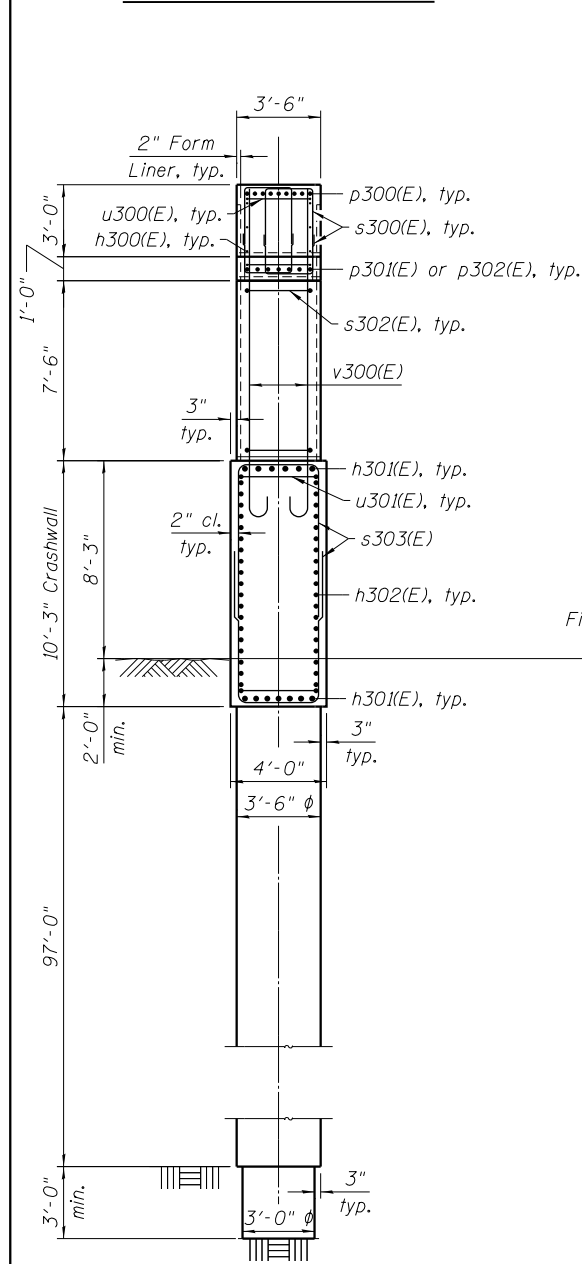


ANCHOR BOLT LAYOUT



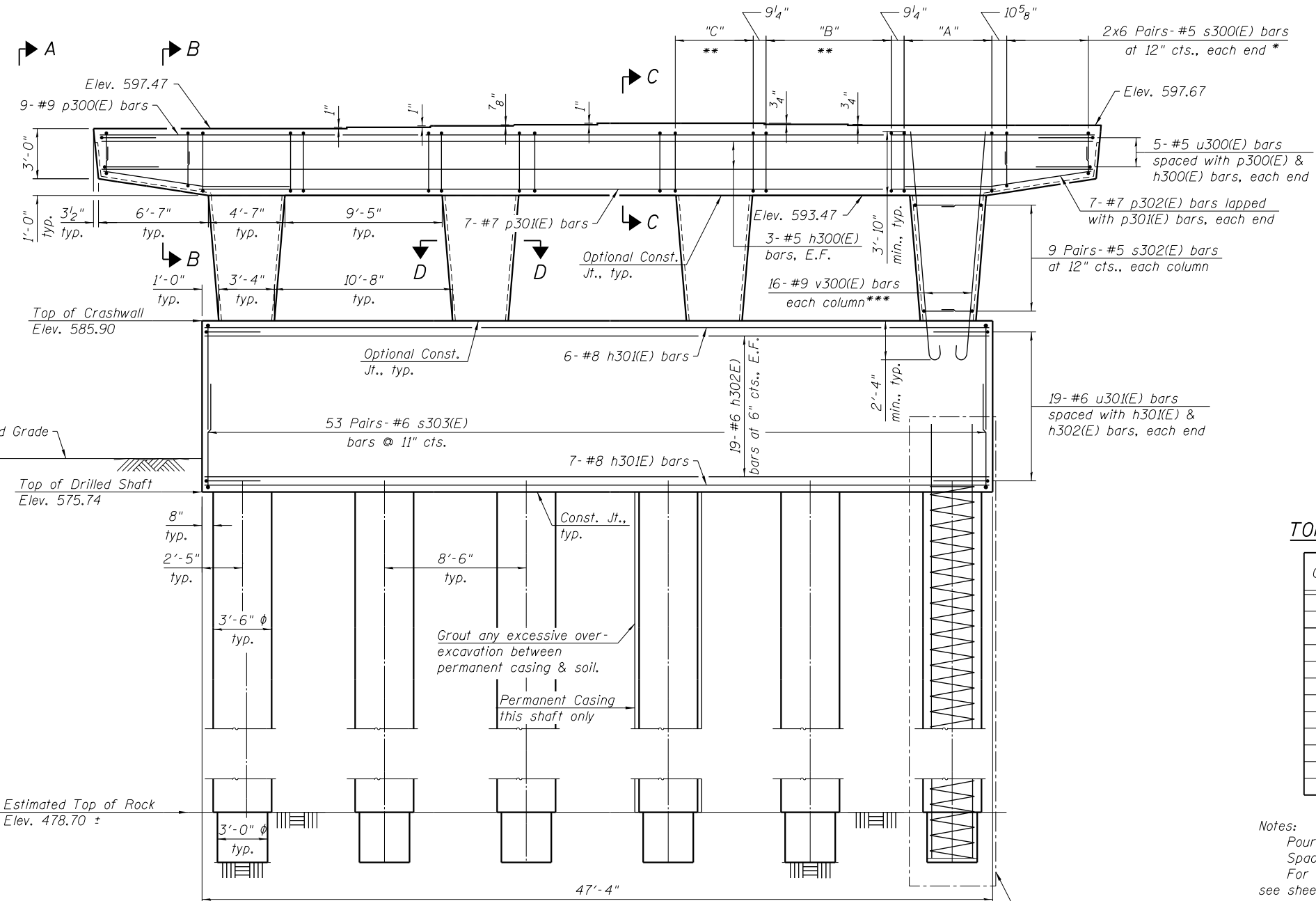
TOP PLAN

- A: 2x10 - #5 s301(E) bars at 7" cts., typ. each end
- B: 2x10 - #5 s301(E) bars at 10" cts., typ.
- C: 2x9 - #5 s301(E) bars at 7" cts., typ.
- * Cut vertical legs of bars to fit. Min. lap is 2'-7".
- ** Typ. each bay
- *** Rotate bars to maintain minimum clearance.



VIEW A-A

Drilled shaft reinforcement not shown for clarity



ELEVATION

Looking East

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	597.47
2	597.47
3	597.47
4	597.55
5	597.64
6	597.71
7	597.79
8	597.79
9	597.73
10	597.67
11	597.67
12	597.67

- Notes:
- Four steps monolithically with cap.
 - Space reinforcement in cap to miss anchor bolts.
 - For Sections B-B, C-C, D-D, and Bill of Materials, see sheet S-48 of S-61.

3:02:57_PM 0161707-60X99-S047-Pier 2.P&E



USER NAME = mkwilson
 CHECKED - JRM
 PLOT SCALE = 8:0 '±' / in.
 DRAWN - TLR
 PLOT DATE = 12/15/2016
 CHECKED - JRM

DESIGNED - TLR
 CHECKED - JRM
 DRAWN - TLR
 CHECKED - JRM

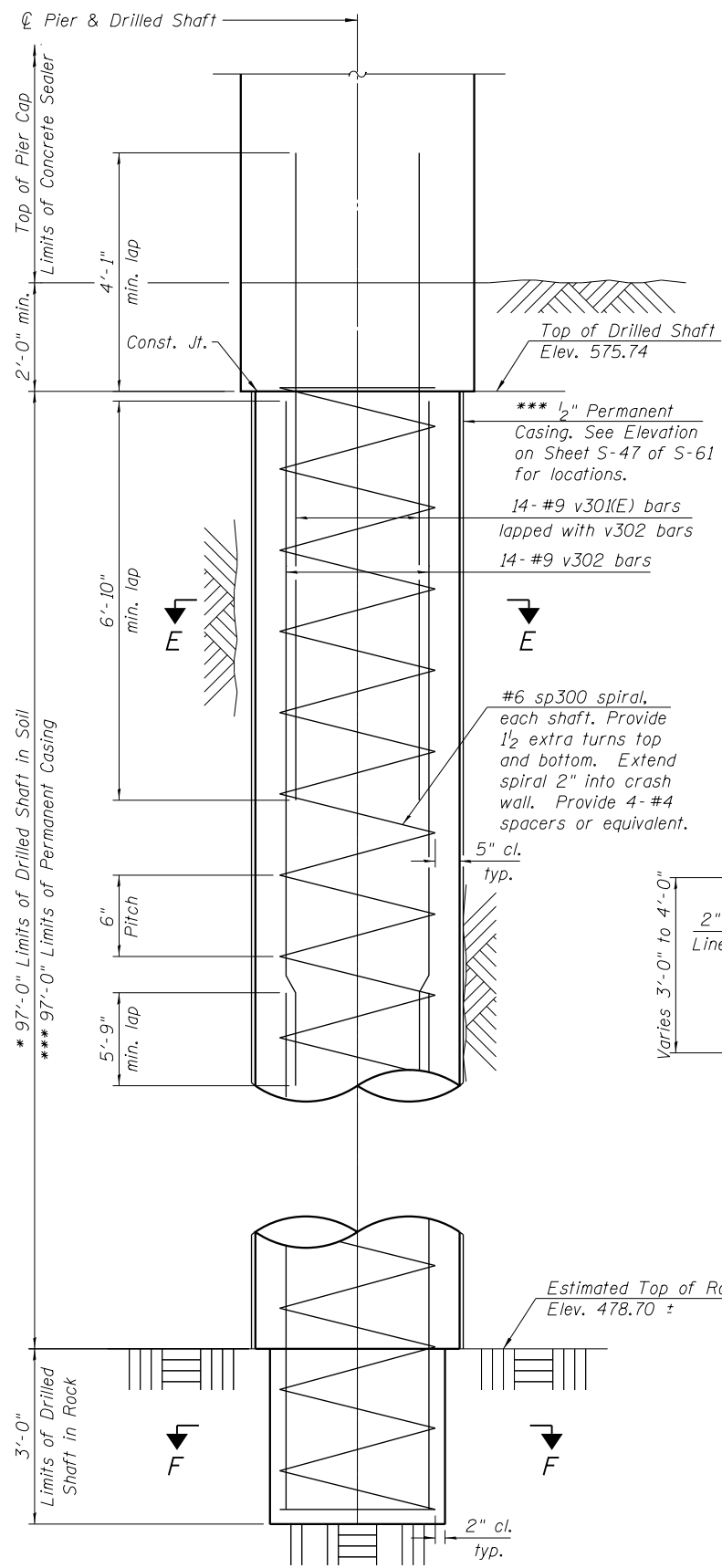
REVISED
 REVISED
 REVISED
 REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

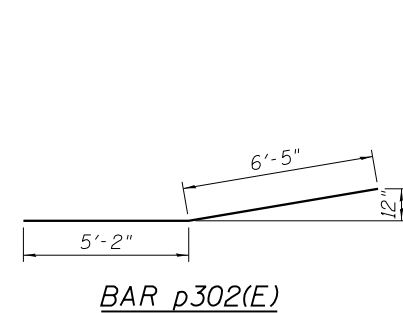
PIER 2 PLAN AND ELEVATION
 STRUCTURE NO. 016-1707

SHEET NO. S-47 OF S-61 SHEETS

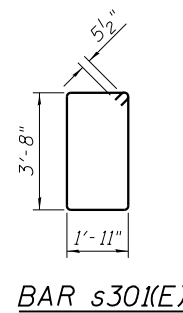
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	254
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



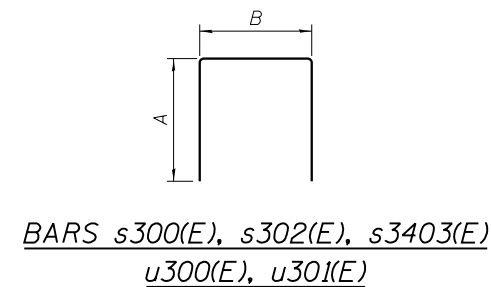
DRILLED SHAFT ELEVATION



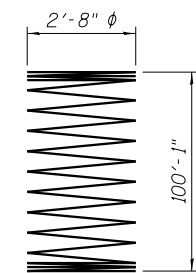
BAR p302(E)



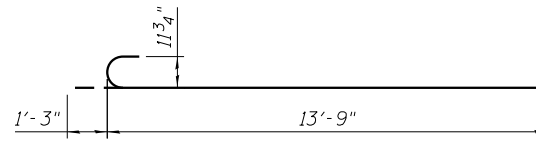
BAR s301(E)



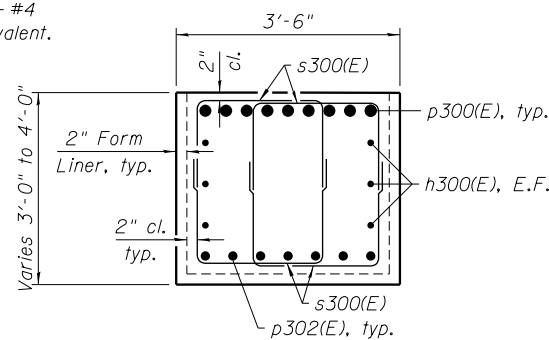
Bar	A	B
s300(E)	3'-3"	2'-0"
s302(E)	3'-3"	2'-10"
s303(E)	6'-11"	4'-0"
u300(E)	3'-3"	2'-10"
u301(E)	3'-10"	4'-0"



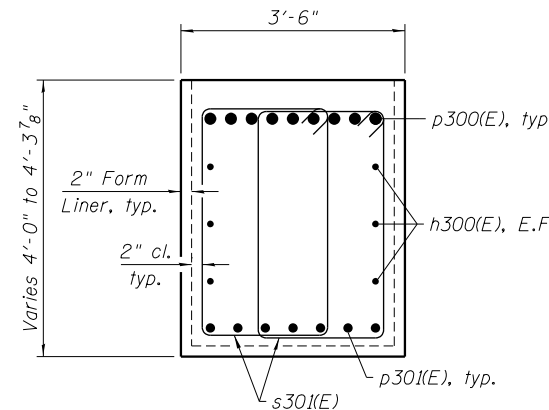
BAR sp300



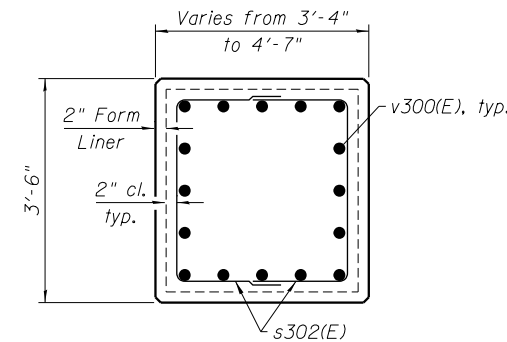
BAR v300(E)



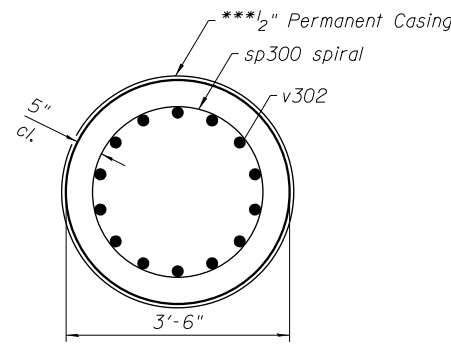
SECTION B-B



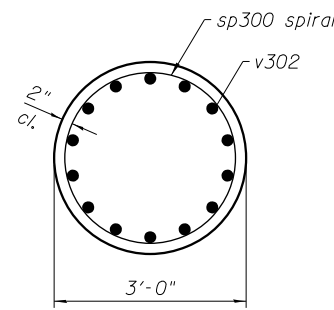
SECTION C-C



SECTION D-D



SECTION E-E



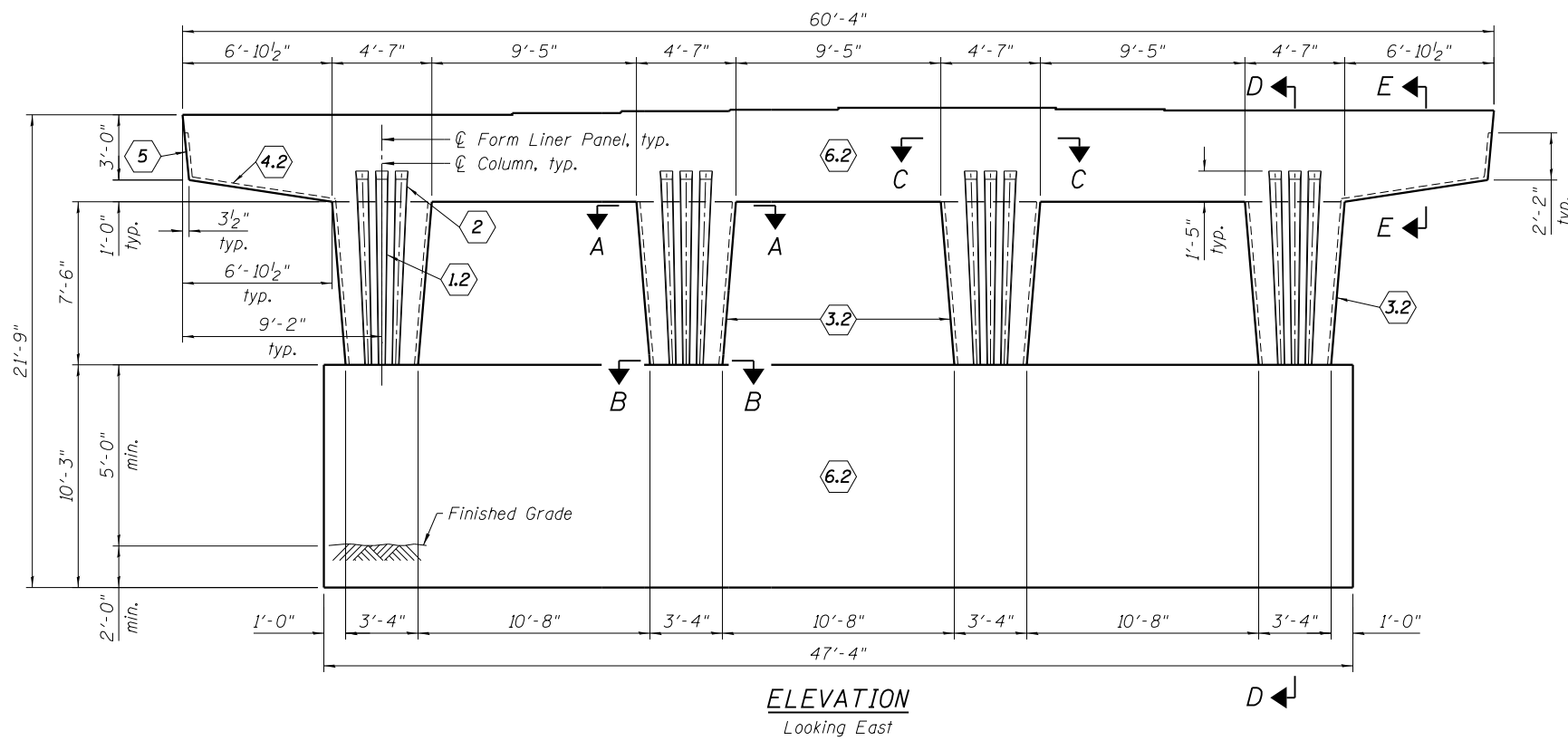
SECTION F-F

BILL OF MATERIAL

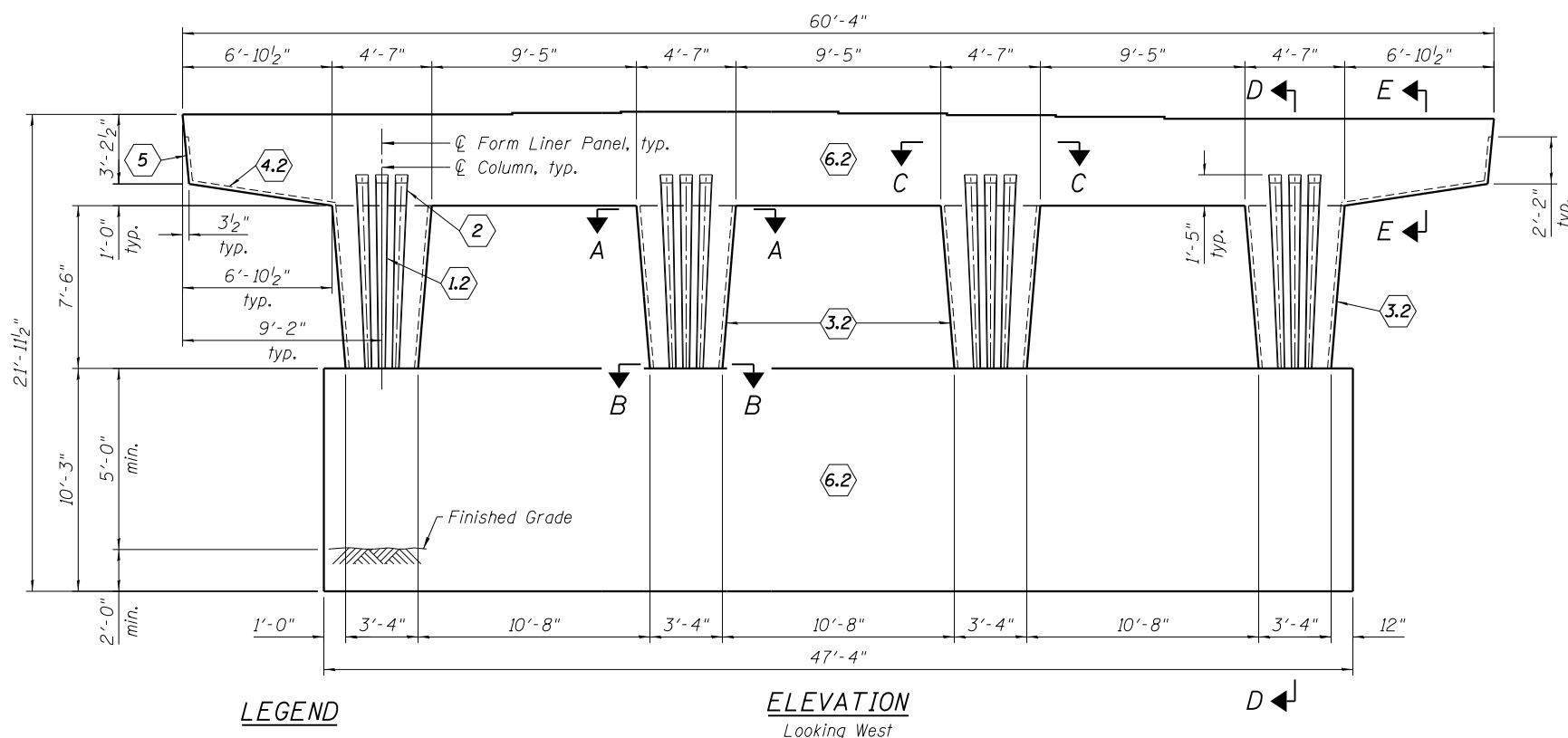
Bar	No.	Size	Length	Shape
h300(E)	6	#5	59'-4"	—
h301(E)	13	#8	47'-0"	—
h302(E)	38	#6	47'-0"	—
p300(E)	9	#9	59'-6"	—
p301(E)	7	#7	46'-4"	—
p302(E)	14	#7	11'-7"	—
s300(E)	48	#5	8'-6"	□
s301(E)	134	#5	12'-1"	□
s302(E)	72	#5	9'-4"	□
s303(E)	106	#6	17'-10"	□
sp300	6	#6	100'-1"	—
u300(E)	10	#5	9'-4"	□
u301(E)	38	#6	11'-8"	□
v300(E)	64	#9	15'-0"	—
v301(E)	152	#9	11'-1"	—
v302	304	#9	52'-9"	—
Structure Excavation		Cu. Yd.	50	
Concrete Structures		Cu. Yd.	119.2	
Reinforcement Bars		Pound	69,600	
Reinforcement Bars, Epoxy Coated		Pound	22,910	
Permanent Casing		Foot	97	
Drilled Shaft in Soil		Cu. Yd.	207.4	
Drilled Shaft in Rock		Cu. Yd.	4.7	
Concrete Sealer		Sq. Ft.	2,298	

Bars indicated thus 1x15 etc., indicates 1 line of bars with 15 lengths per line.

- Notes:
- Apply concrete sealer to all exposed concrete surfaces of the pier.
 - The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 - Length is height of spiral.
 - Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.
 - When splicing spiral reinforcement is necessary, the spirals shall be provided with 11#2" extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate in 130° standard hook.



ELEVATION
Looking East



ELEVATION
Looking West

LEGEND

1.2	2	3.2	4.2	5	6.2
-----	---	-----	-----	---	-----

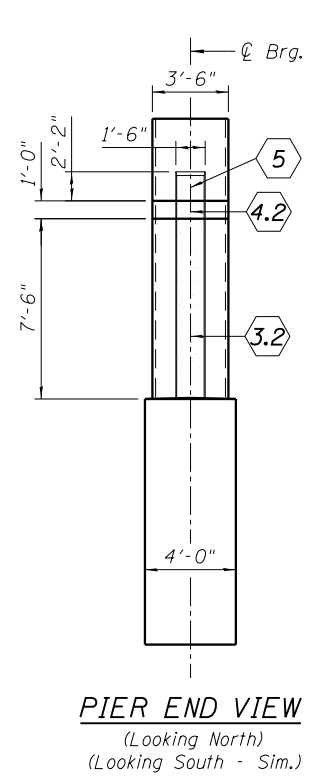
Textured Form Liner

BILL OF MATERIAL

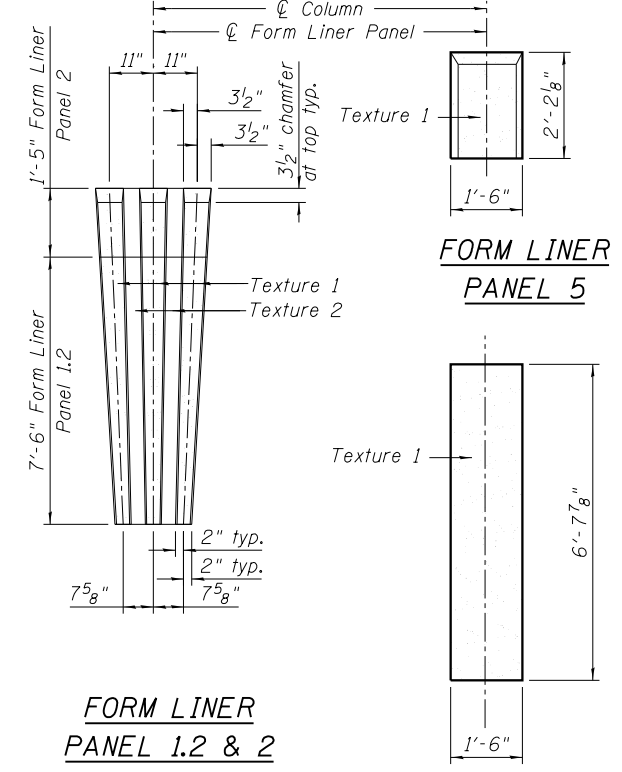
Item	Unit	Total
Rubbed Finish	Sq. Ft.	1,268
Form Liner Textured Surface	Sq. Ft.	555

Notes:

Form liner panel (6.2) shall have a smooth finish. Cost included with Rubbed Finish.
 Tapered fluting - dimensions vary, see elevation profile.
 Form liner panel (2) is continuation of panel (1.1). Keep adjacent form liners aligned.
 Hand clean and smooth the surface of the construction joint between the pier and cap.
 Texture 1: Light Sandblast as selected from manufacturer's standard pattern selection.
 Texture 2: Smooth



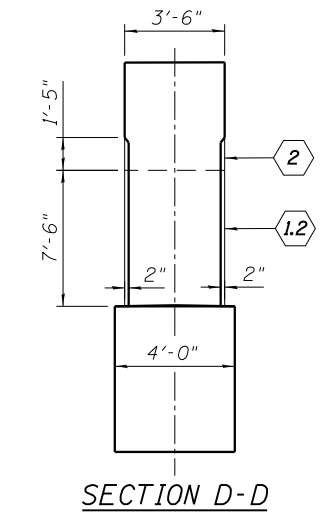
PIER END VIEW
(Looking North)
(Looking South - Sim.)



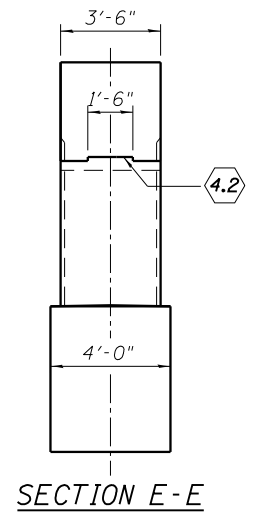
FORM LINER PANEL 1.2 & 2

FORM LINER PANEL 5

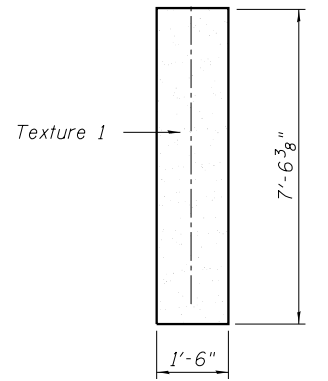
FORM LINER PANEL 4.2



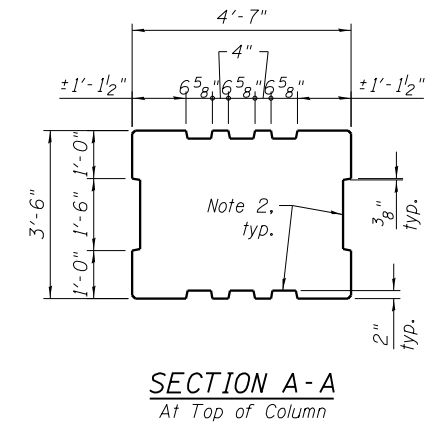
SECTION D-D



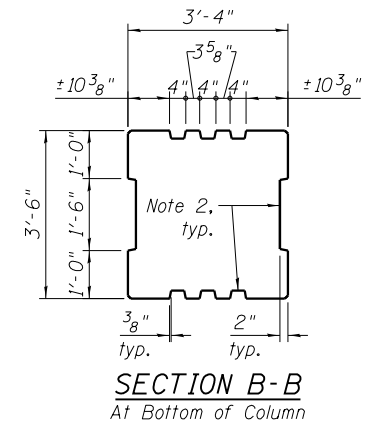
SECTION E-E



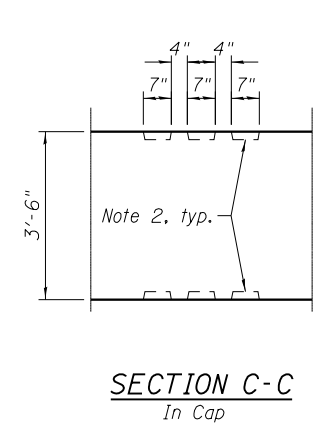
FORM LINER PANEL 3.2



SECTION A-A
At Top of Column



SECTION B-B
At Bottom of Column



SECTION C-C
In Cap

3:03:03 PM 01/17/07-60X99-5049-Pier 2_ArchDetails



USER NAME =	mkwilson	DESIGNED -	TLR	REVISED
		CHECKED -	JRM	REVISED
PLOT SCALE =	8:0 ' = 1" / in.	DRAWN -	TLR	REVISED
PLOT DATE =	12/15/2016	CHECKED -	JRM	REVISED

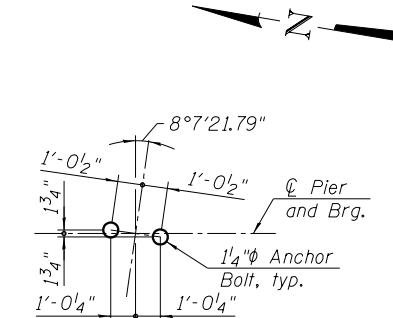
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 ARCHITECTURAL DETAILS
STRUCTURE NO. 016-1707

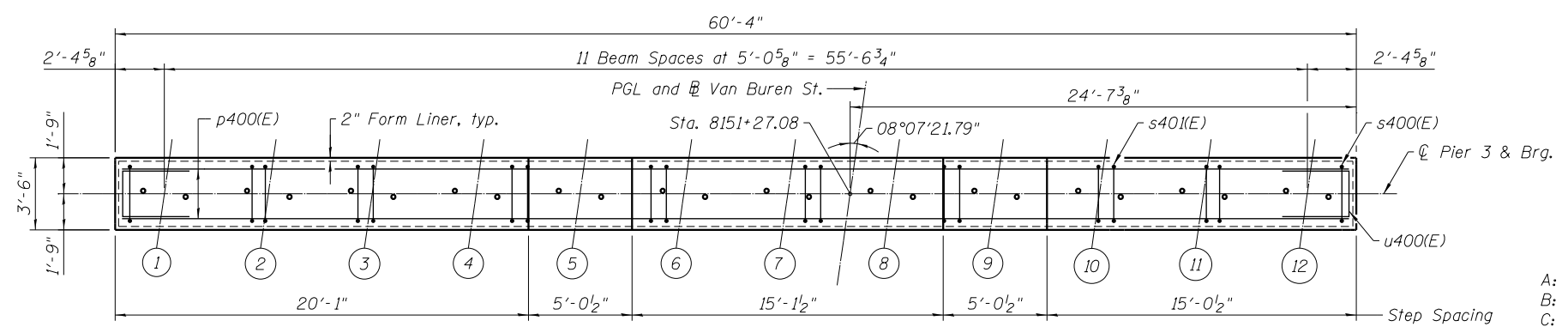
SHEET NO. S-49 OF S-61 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	256
CONTRACT NO. 60X99				

ILLINOIS FED. AID PROJECT

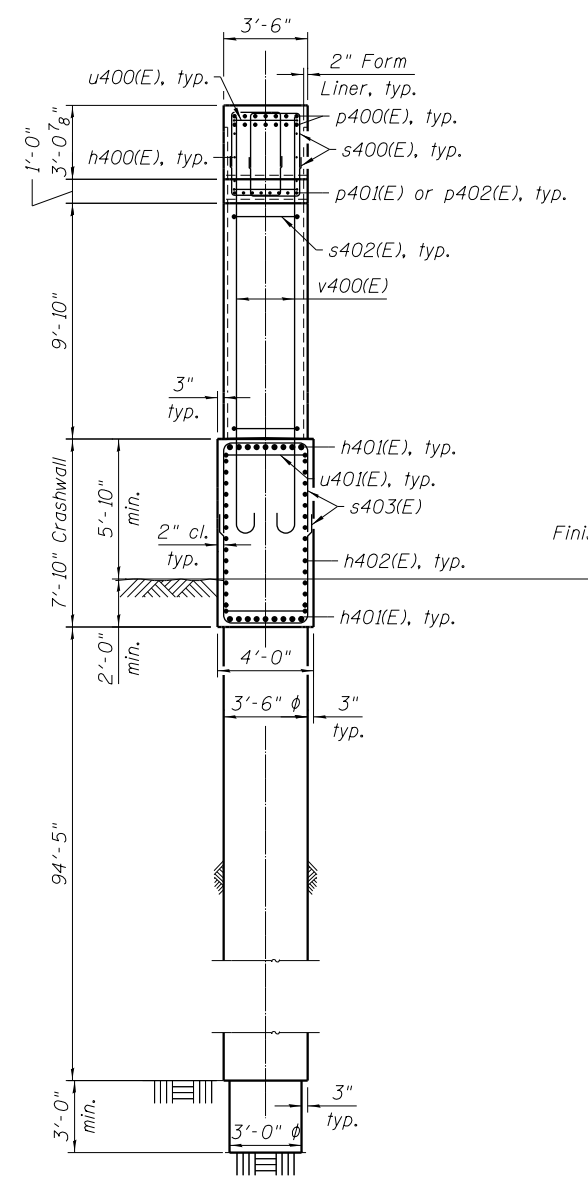


ANCHOR BOLT LAYOUT



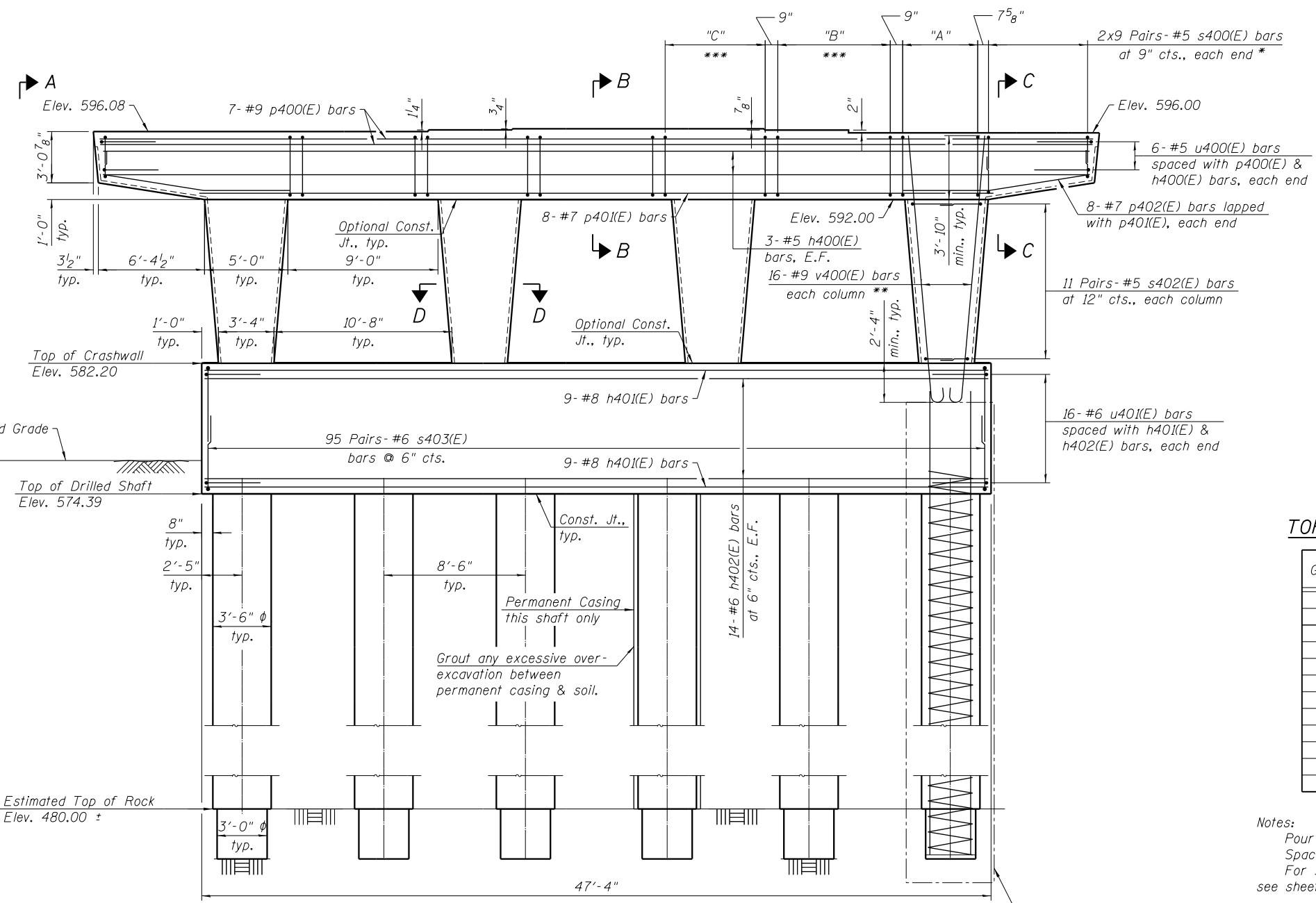
TOP PLAN

- A: 2x10- #5 s401(E) bars at 6" cts., typ. each end
- B: 2x10- #5 s401(E) bars at 9" cts., typ.
- C: 2x13- #5 s401(E) bars at 6" cts., typ.
- * Cut vertical legs of bars to fit. Min. lap is 2'-7".
- ** Rotate bars to maintain minimum clearance.
- *** Typ. each bay.



VIEW A-A

Drilled shaft reinforcement not shown for clarity



ELEVATION

Looking East

2x9 Pairs- #5 s400(E) bars at 9" cts., each end *

6- #5 u400(E) bars spaced with p400(E) & h400(E) bars, each end

8- #7 p402(E) bars lapped with p401(E), each end

11 Pairs- #5 s402(E) bars at 12" cts., each column

16- #6 u401(E) bars spaced with h401(E) & h402(E) bars, each end

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	596.08
2	596.08
3	596.08
4	596.08
5	596.18
6	596.24
7	596.24
8	596.24
9	596.17
10	596.00
11	596.00
12	596.00

Notes:
 Four steps monolithically with cap.
 Space reinforcement in cap to miss anchor bolts.
 For Sections B-B, C-C, D-D, and Bill of Materials, see sheet S-51 of S-61.

3:03:06 PM 0161707-60X99-S050-Pier 3.P&E



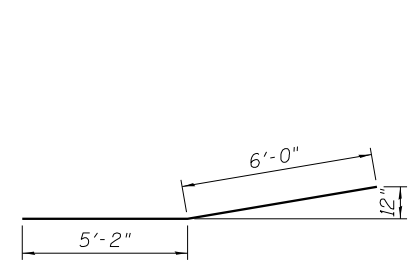
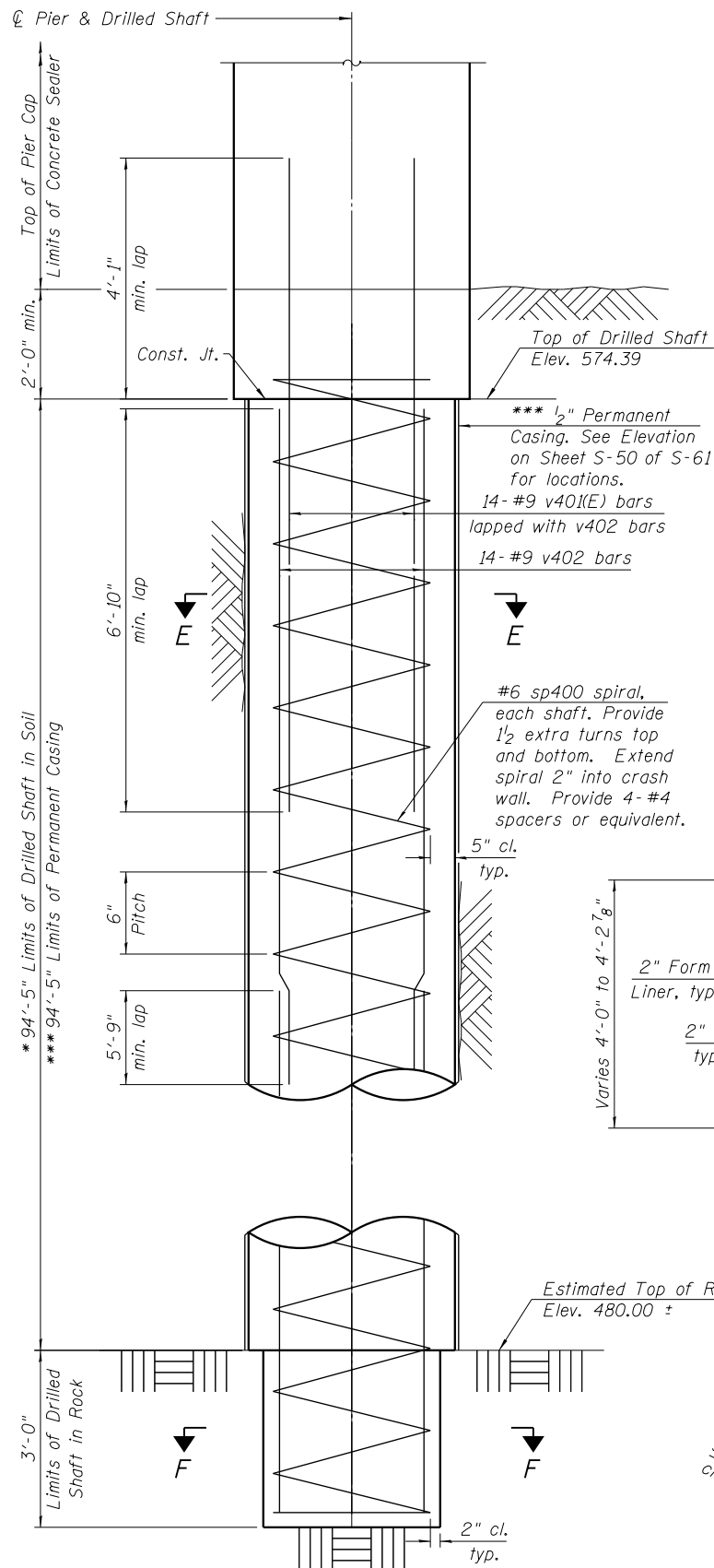
USER NAME = mkwilson	DESIGNED - TLR	REVISED
CHECKED - JRM	REVISOR - JRM	REVISOR
PLOT SCALE = 8:0 '1" / in.	DRAWN - TLR	REVISOR
PLOT DATE = 12/15/2016	CHECKED - JRM	REVISOR

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

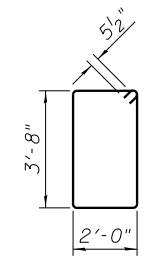
**PIER 3 PLAN AND ELEVATION
 STRUCTURE NO. 016-1707**

SHEET NO. S-50 OF S-61 SHEETS

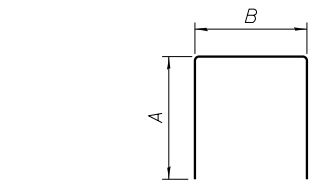
F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 257
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



BAR p402(E)

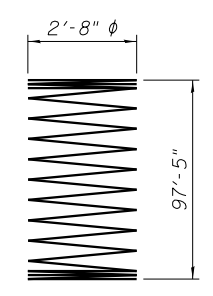


BAR s401(E)

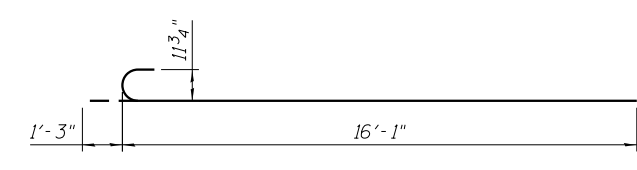


BARS s400(E), s402(E), s403(E)
u400(E), u401(E)

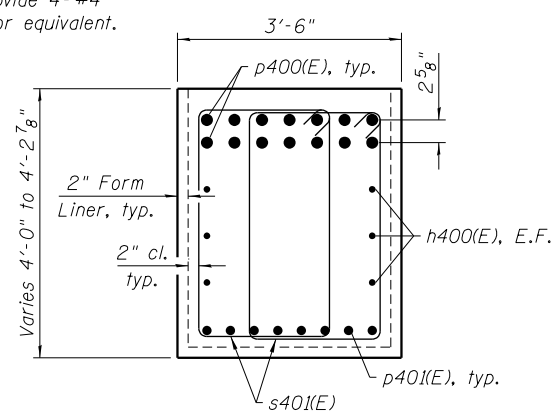
Bar	A	B
s400(E)	3'-3"	2'-0"
s402(E)	3'-3"	2'-10"
s403(E)	5'-8"	3'-8"
u400(E)	3'-3"	2'-10"
u401(E)	3'-10"	3'-8"



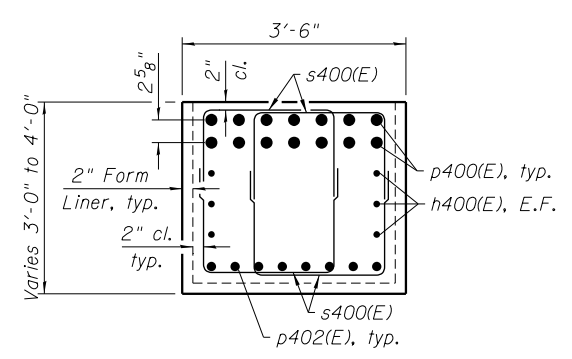
BAR sp400



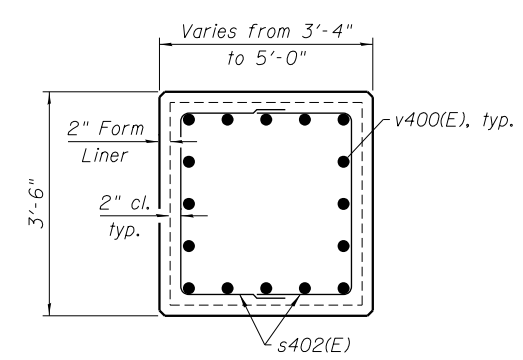
BAR v400(E)



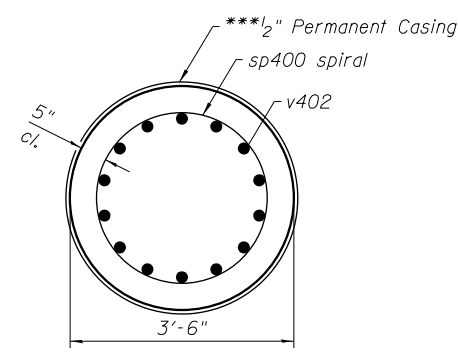
SECTION B-B



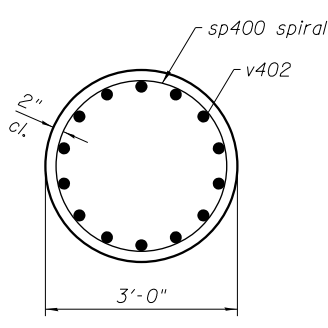
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h400(E)	6	#5	59'-4"	—
h401(E)	18	#8	47'-0"	—
h402(E)	28	#6	47'-0"	—
p400(E)	14	#9	59'-6"	—
p401(E)	8	#7	47'-8"	—
p402(E)	16	#7	12'-9"	—
s400(E)	72	#5	8'-6"	□
s401(E)	152	#5	12'-3"	□
s402(E)	88	#5	9'-4"	□
s403(E)	190	#6	15'-0"	□
** sp400	6	#6	97'-5"	⊘
u400(E)	12	#5	9'-4"	□
u401(E)	32	#6	11'-4"	□
v400(E)	64	#9	17'-4"	⌋
v401(E)	84	#9	11'-1"	—
v402	168	#9	51'-5"	—
Structure Excavation		Cu. Yd.	51	
Concrete Structures		Cu. Yd.	107.7	
Reinforcement Bars		Pound	44,000	
Reinforcement Bars, Epoxy Coated		Pound	23,960	
Permanent Casing		Foot	95	
Drilled Shaft in Soil		Cu. Yd.	201.9	
Drilled Shaft in Rock		Cu. Yd.	4.7	
Concrete Sealer		Sq. Ft.	2,194	

Bars indicated thus 1x15 etc., indicates 1 line of bars with 15 lengths per line.

Notes:
 Apply concrete sealer to all exposed concrete surfaces of the pier.
 * The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 ** Length is height of spiral.
 *** Contractor may need to increase the casing thickness to withstand the installation process. The Estimated Top of Rock/Bottom of Permanent Casing Elevation is shown. The limits of casing shall be adjusted as necessary, and as approved, such that the actual installed casing length extends to the as-encountered top of rock at each shaft. See Article 516.06(d) of the Standard Specifications.
 When splicing spiral reinforcement is necessary, the spirals shall be provided with 11#2" extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate in 130° standard hook.

3:03:09 PM 01/17/17-60X99-5051-Pier 3_Details

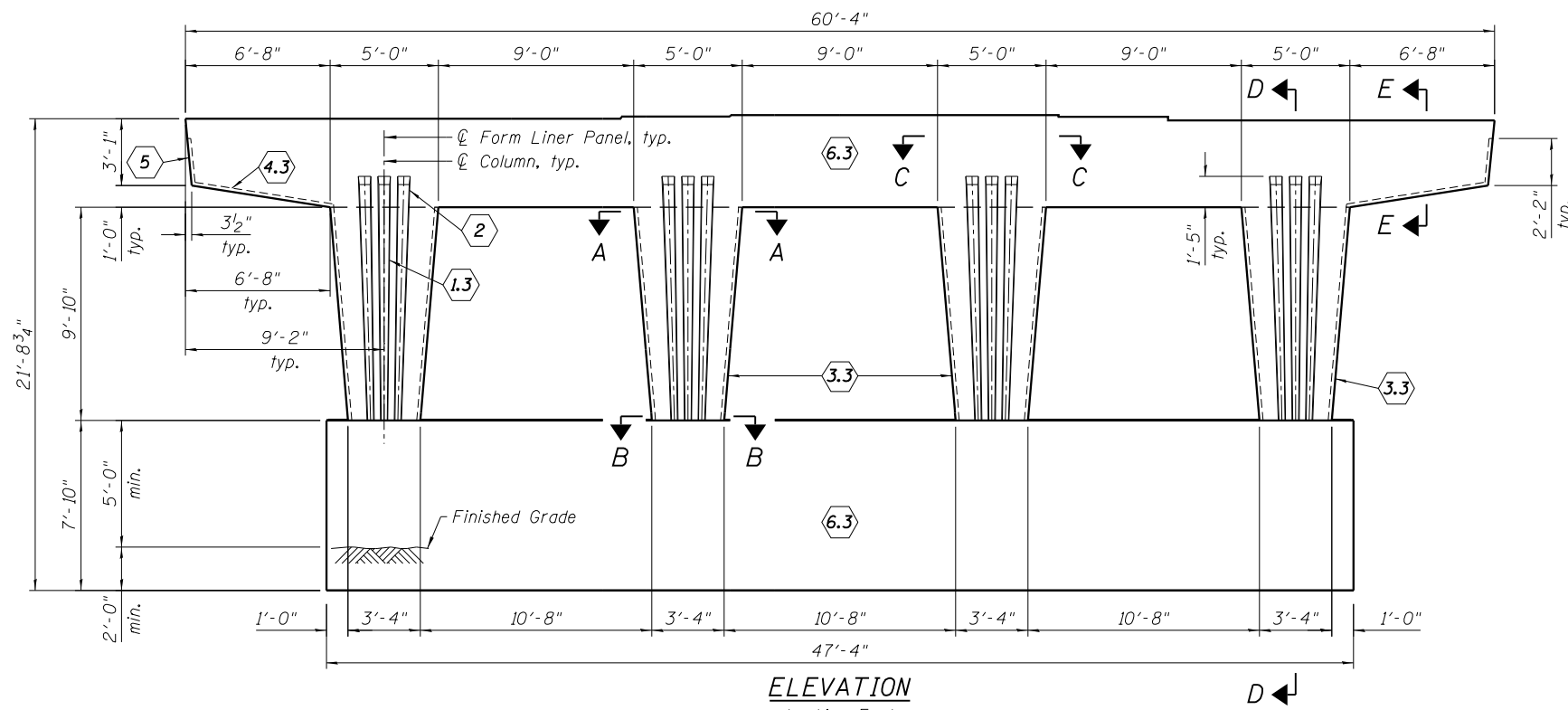


USER NAME = mkwilson	DESIGNED - TLR	REVISED
PLOT SCALE = 3/0 '±' / 1in.	CHECKED - JRM	REVISED
PLOT DATE = 12/15/2016	DRAWN - TLR	REVISED
	CHECKED - JRM	REVISED

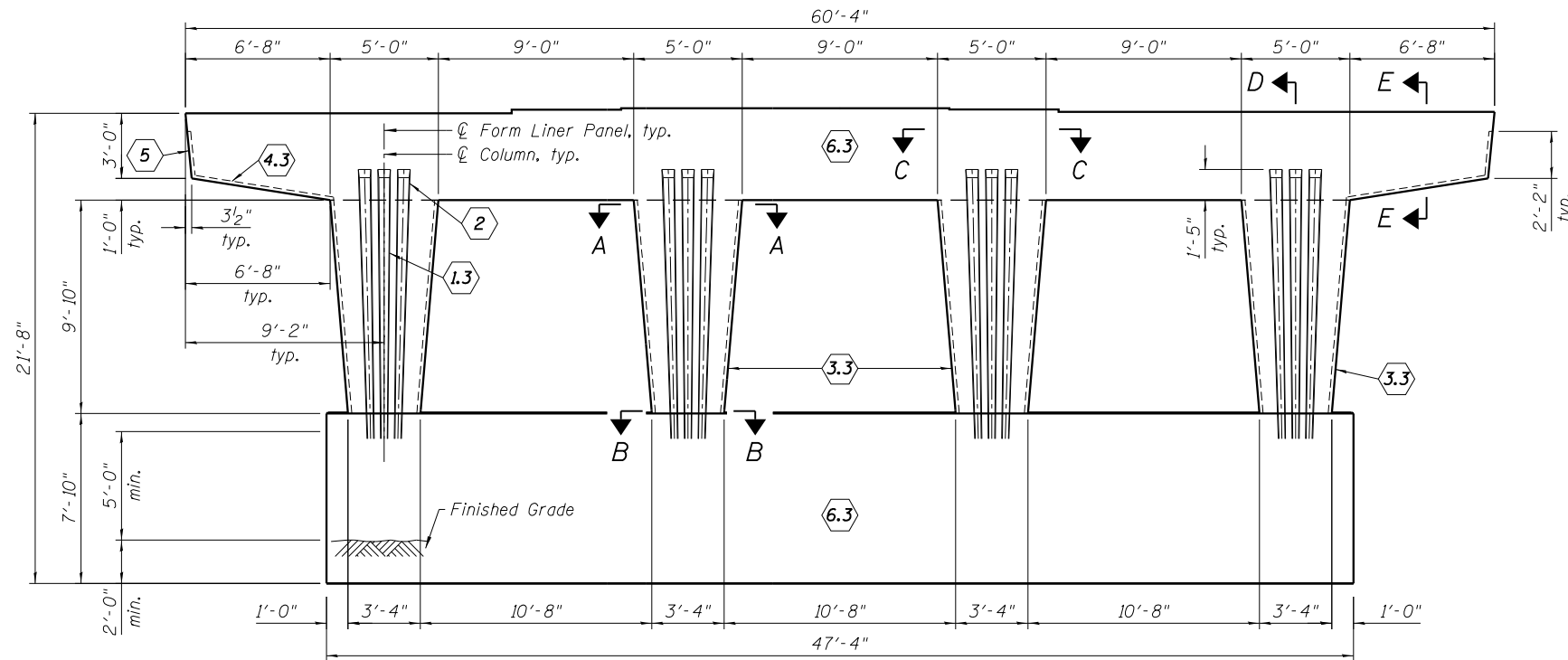
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS
STRUCTURE NO. 016-1707
SHEET NO. S-51 OF S-61 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 258
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



ELEVATION
Looking East



ELEVATION
Looking West

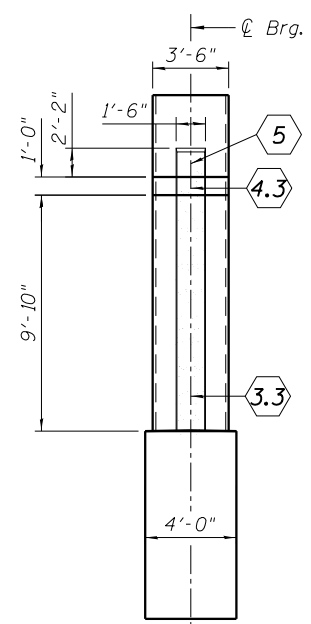
LEGEND

1.3	2	3.3	4.3	5	6.3
Textured Form Liner					

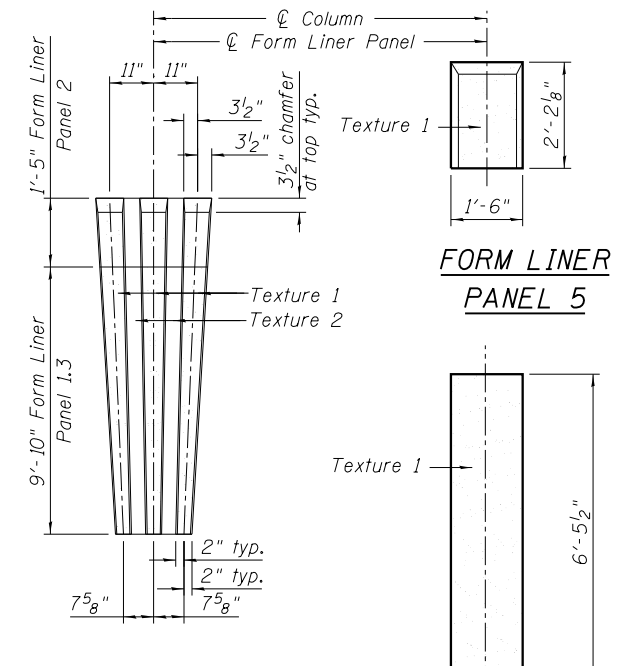
BILL OF MATERIAL

Item	Unit	Total
Rubbed Finish	Sq. Ft.	1,033
Form Liner Textured Surface	Sq. Ft.	712

Notes:
 Form liner panel (6.3) shall have a smooth finish. Cost included with Rubbed Finish.
 Tapered fluting - dimensions vary, see elevation profile.
 Form liner panel (2) is continuation of panel (1.1). Keep adjacent form liners aligned.
 Hand clean and smooth the surface of the construction joint between the pier and cap.
 Texture 1: Light Sandblast as selected from manufacturer's standard pattern selection.
 Texture 2: Smooth

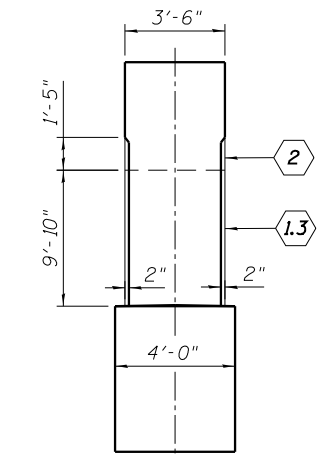
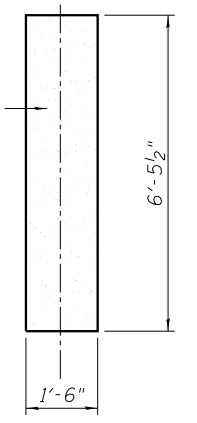


PIER END VIEW
(Looking North)
(Looking South - Sim.)

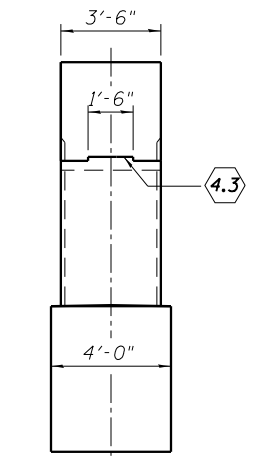


FORM LINER PANEL 1.3 & 2

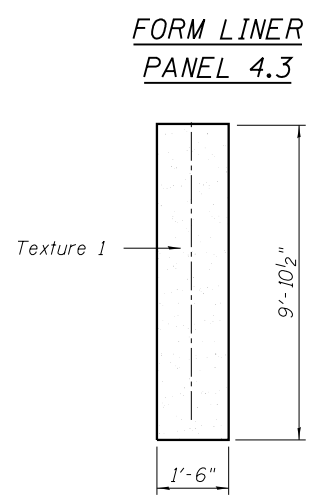
FORM LINER PANEL 5



SECTION D-D

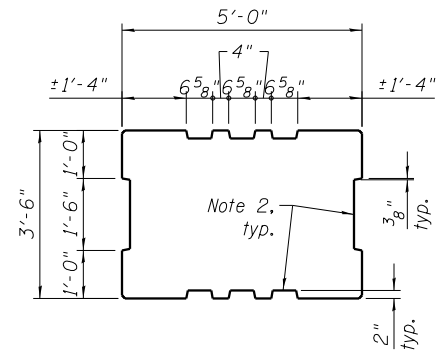


SECTION E-E

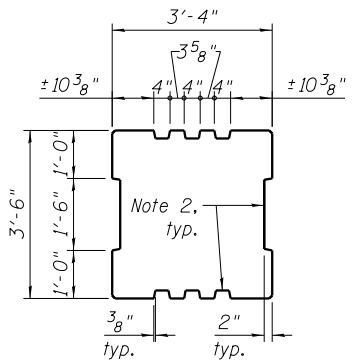


FORM LINER PANEL 4.3

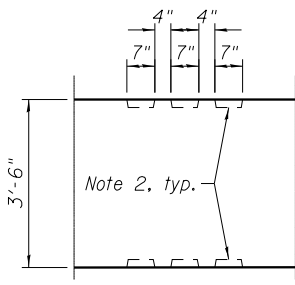
FORM LINER PANEL 3.3



SECTION A-A
At Top of Column



SECTION B-B
At Bottom of Column



SECTION C-C
In Cap

3:03:12 PM 0161707-60X99-5052-Pier 3_ArchDetails



USER NAME = mkwilson	DESIGNED - TLR	REVISED
CHECKED - JRM	REVISOR	REVISOR
PLOT SCALE = 8:0 '3' / 1 in.	DRAWN - TLR	REVISOR
PLOT DATE = 12/15/2016	CHECKED - JRM	REVISOR

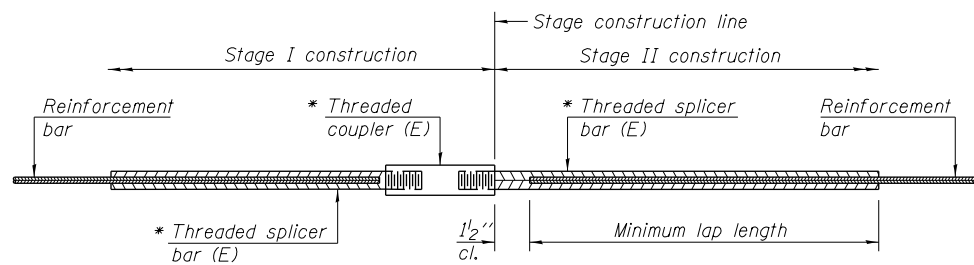
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 ARCHITECTURAL DETAILS
STRUCTURE NO. 016-1707

SHEET NO. S-52 OF S-61 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	259
CONTRACT NO. 60X99				

ILLINOIS FED. AID PROJECT



STANDARD BAR SPLICER ASSEMBLY

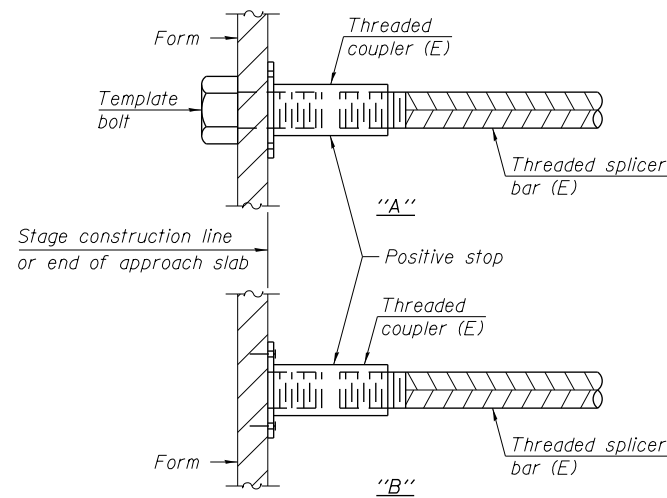
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

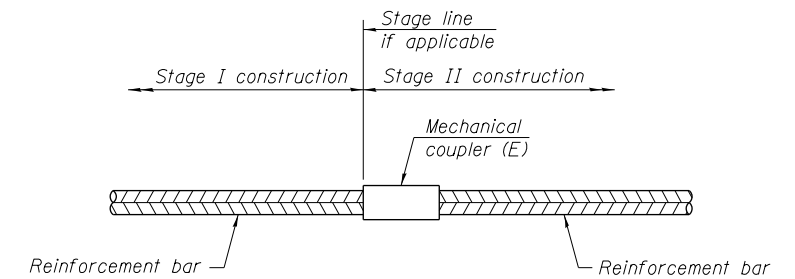
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



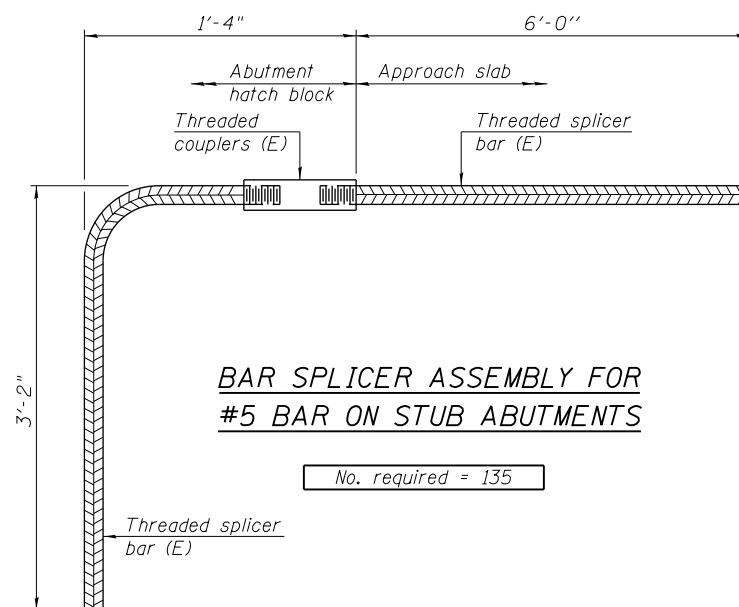
INSTALLATION AND SETTING METHODS

"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 = 135

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.

3:03:14 PM 0161707-60X99-5053-Bar Splice.dgn

BSD-1

6-8-15



USER NAME = mkwilson	DESIGNED - JNP	REVISED
PLOT SCALE = 0:2.0000 ' / in.	CHECKED - JRM	REVISED
PLOT DATE = 12/15/2016	DRAWN - JNP	REVISED
	CHECKED - JRM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-1707**

SHEET NO. S-53 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	260
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



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BORING LOG 2055-B-01

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 593.52 ft
North: 1898392.15 ft
East: 1171221.90 ft
Station: 8147+32.81
Offset: 7.5987 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
490.0	-AUGER REFUSAL- -Possible Boulder-														
	Boring terminated at 103.50 ft														

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling: 04-21-2013 Complete Drilling: 04-22-2013
Drilling Contractor: Wang Testing Services Drill Rig: D-50 TMR
Driller: R&N Logger: A. Happel Checked by: C. Marin
Drilling Method: 2.25" SSA to 10', mud rotary thereafter, boring
backfilled upon completion

WATER LEVEL DATA

While Drilling: Rotary wash
At Completion of Drilling: unable to measure
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG 2055-B-02

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 595.62 ft
North: 1898407.45 ft
East: 1171767.90 ft
Station: 8152+79.03
Offset: 6.0657 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
594.2	17-inch thick CONCRETE -PAVEMENT-														
593.1	9-inch thick CRUSHED STONE -BASE COURSE-			1	5 4 3	NP	6					11	1 2 2	0.57 B	25
	Medium dense, black and gray LOAM, trace gravel -FILL-			2	6 12 17	NP	11					30	1 1 2	0.49 B	24
588.8	Very stiff (2.50 - 2.75 P), brown and gray SILTY CLAY LOAM with fine sand lenses, trace gravel -FILL-			3	5 7 7	NP	12								
586.6	Dense, black and gray LOAM to SILTY LOAM, trace gravel, brick, and wood -FILL-			4	3 4 28	NP	11					35	1 1 2	0.42 B	25
584.4	-FILL- boring offset 3 feet south due to obstruction Stiff, gray SILTY CLAY LOAM, trace gravel			5	2 3 4	1.64 B	22								
				6	3 3 3	1.07 B	24					40	1 2 1	0.33 B	27
580.1	Gray SILTY LOAM														
579.1	Soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel			7	1 2 1	0.66 B	18								
				8	2 2 2	0.49 B	21					45	1 2 2	0.50 P	25
				9	2 2 2	0.41 B	23								
				10	2 2 1	0.49 B	23					50	2 2 2	0.41 B	26

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling: 04-22-2013 Complete Drilling: 04-29-2013
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: P&N Logger: A. Happel Checked by: C. Marin
Drilling Method: 2.25" SSA to 10', mud rotary thereafter, boring
backfilled upon completion

WATER LEVEL DATA

While Drilling: Rotary wash
At Completion of Drilling: unable to measure
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



USER NAME = mkwilson	DESIGNED - WJC	REVISED
PLOT SCALE = 0:2.0000 '1" / In.	CHECKED - DL	REVISED
PLOT DATE = 12/15/2016	DRAWN - RVV	REVISED
	CHECKED - WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 2
STRUCTURE NO. 016-1707

SHEET NO. S-55 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	262
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



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BORING LOG 2055-B-02

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 595.62 ft
North: 1898407.45 ft
East: 1171767.90 ft
Station: 8152+79.03
Offset: 6.0657 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
543.9	Medium stiff to hard, gray SILTY CLAY to CLAY, trace to little gravel						518.9	Hard, gray SILTY CLAY LOAM, trace gravel and seams of fine sand to silt					
	<i>thin, gray medium sand lenses</i>	55	17	2 3 10	0.82 B	17			80	22	20 27 30	7.13 B	13
		60	18	4 5 9	1.00 P	23	-L _c (%)=26, P _c (%)=14- -%Gravel=6.2- -%Sand=22.1- -%Silt=52.6- -%Clay=19.1- -A-6 (6)-		85	23	19 21 27	5.33 B	13
		65	19	4 9 13	3.61 B	14	Very dense, gray, medium SAND, trace gravel		90	24	24 37 37	NP	14
		70	20	5 10 15	4.10 B	22	Hard, gray SILTY CLAY LOAM, some gravel		95	25	5 10 15	4.50 P	10
		75	21	5 9 10	3.03 B	18	Gray SILTY LOAM		98	25	5 9 10	4.50 P	10
							498.6	-HARD DRILLING-					
							497.6	-AUGER REFUSAL-					
								Possible Boulders					
								Boring terminated at 98.00 ft					

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling 04-22-2013 Complete Drilling 04-29-2013
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR
Driller P&N Logger A. Happel Checked by C. Marin
Drilling Method 2.25" SSA to 10', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling Rotary wash
At Completion of Drilling unable to measure
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG 2055-B-03

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 579.03 ft
North: 1898462.94 ft
East: 1171413.63 ft
Station: 8149+26.26
Offset: 58.3388 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
578.56	578.56-inch thick, black SILTY CLAY LOAM												
	-TOPSOIL- Very stiff to hard, brown and gray SILTY CLAY LOAM, trace gravel and brick												
	-FILL-												
		14	1	7 9 9	4.50 P	14			30	11	0 2 1	0.49 B	27
		14	2	3 4 4	2.46 B	14			30	12	0 2 1	0.49 B	27
		16	3	4 5 5	2.50 P	16			35	13	1 1 2	0.49 B	26
		24	4	1 2 2	0.49 B	24	Soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel		35	13	1 1 2	0.49 B	26
		25	5	0 2 1	0.41 B	25			40	14	2 2 4	0.74 B	20
		26	6	0 2 2	0.57 B	26	Medium stiff to very stiff, gray SILTY CLAY to CLAY, trace gravel		40	14	2 2 4	0.74 B	20
		26	7	0 1 2	0.49 B	26			45	15	3 7 9	2.30 B	16
		26	8	0 1 2	0.41 B	26			45	15	3 7 9	2.30 B	16
		27	9	1 1 1	0.41 B	27			50	16	4 8 11	2.46 B	18
		27	10	1 1 1	0.49 B	27			50	16	4 8 11	2.46 B	18

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling 05-15-2013 Complete Drilling 05-16-2013
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR
Driller P&N Logger F. Bozga Checked by C. Marin
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling Rotary wash
At Completion of Drilling unable to measure
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

3:03:23 PM 01/17/17-60X99-5056-Boring_3.dgn



USER NAME = mkwilson	DESIGNED - WJC	REVISED
CHECKED - DL	REVISED	
PLOT SCALE = 0:2.0000 ' / In.	DRAWN - RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED - WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 3
STRUCTURE NO. 016-1707

SHEET NO. S-56 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	263
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



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BORING LOG 2055-B-04

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 575.69 ft
North: 1898363.22 ft
East: 1171499.16 ft
Station: 8150+09.25
Offset: 43.5063 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
518.9	Medium dense, gray SILT	55	17	5 8 12	3.36 B	10	518.9		80	22	50/5"	NP	9
513.9	Hard, gray SILTY CLAY LOAM, trace gravel	60	18	4 5 8	NP	25	513.9		85	23	34 42 45	NP	22
508.9	Very dense, gray SILT to SILTY LOAM, trace to some gravel	65	19	12 21 29	9.89 B	14	508.9		90	24	22 40 45	NP	19
		70	20	23 50/4"	NP	13	483.7	-HARD DRILLING- Boulders, Sandy Gravel	95	25	50/2"	NR	
		75	21	36 50/3"	NP	12	478.7	-AUGER REFUSAL- Strong, light gray, fair rock mass quality, bedded fresh DOLOSTONE, up to 18-inch beds, 1- to 18-inch spaced joints, horizontal and oblique joints with	100				

WANGENG 1:1000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling 05-19-2013 Complete Drilling 05-20-2013
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR
Driller P&N Logger F. Bozga Checked by C. Marin
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling Rotary wash
At Completion of Drilling unable to measure
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG 2055-B-04

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 575.69 ft
North: 1898363.22 ft
East: 1171499.16 ft
Station: 8150+09.25
Offset: 43.5063 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
518.9	less than 0.2- to 3-inch greenish gray silty infilling, hard joint wall, with stylolitic surfaces, and moderately vuggy porosity. -Run 1 - RECOVERY = 95% RQD = 53%	80	1				518.9		80				
513.9		110	2				513.9		110				
508.9		115					508.9		115				
		120					483.7		120				
		125					478.7		125				

WANGENG 1:1000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling 05-19-2013 Complete Drilling 05-20-2013
Drilling Contractor Wang Testing Services Drill Rig CME-55 TMR
Driller P&N Logger F. Bozga Checked by C. Marin
Drilling Method 2.25" HSA to 10', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling Rotary wash
At Completion of Drilling unable to measure
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

3:03:28 PM 01/17/17-60X99-5068-Boring_5.dgn



USER NAME = mkwilson	DESIGNED - WJC	REVISED
CHECKED - DL	REVISOR	
PLOT SCALE = 0:2.0000 ' = 1"	DRAWN - RVV	REVISOR
PLOT DATE = 12/15/2016	CHECKED - WJC	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 5
STRUCTURE NO. 016-1707

SHEET NO. S-58 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	265
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



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BORING LOG 2055-B-05

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 576.97 ft
North: 1898475.15 ft
East: 1171596.44 ft
Station: 8151+09.33
Offset: 65.9333 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
470.0	to 18-inch spaced joints, horizontal joints with less than 0.2- to 2-inch greenish gray silty infilling, hard joint wall, with stylolitic surfaces, and moderately vuggy porosity. Run 1 - RECOVERY=98% RQD=82% 98.5ft-Qu=10300 psi →	105		1											
	Boring terminated at 107.00 ft														

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling: 05-21-2013
Complete Drilling: 05-23-2013
Drilling Contractor: Wang Testing Services
Drill Rig: CME-55 TMR
Driller: P/N
Logger: F. Bozga
Checked by: C. Marin
Drilling Method: 3.25" HSA to 25', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling: Rotary wash
At Completion of Drilling: unable to measure
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



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BORING LOG 2055-B-06

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 575.52 ft
North: 1898460.17 ft
East: 1171341.21 ft
Station: 8148+53.80
Offset: 57.3869 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
575.5	15.5-inch thick ASPHALT -PAVEMENT- Medium dense, gray CRUSHED STONE -BASE COURSE-	8		11	4 7 8	NP	8								
572.5	Very soft to medium stiff, gray CLAY to SILTY CLAY, trace gravel	24		12	1 1 2	0.33 B	24								
		25		13	0 1 1	0.25 B	25	543.8	Medium stiff to very stiff, gray SILTY CLAY to CLAY, trace gravel	30					
		27		14	0 0 1	0.25 B	27								
		26		15	0 1 1	0.25 B	26								
		25		16	0 1 1	0.25 B	25								
		26		17	1 1 1	0.25 B	26								
		28		18	0 1 2	0.33 B	28								
		27		19	0 1 2	0.25 B	27								
		28		20	1 1 2	< 0.25 P	28								

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling: 05-13-2013
Complete Drilling: 05-15-2013
Drilling Contractor: Wang Testing Services
Drill Rig: CME-55 TMR
Driller: P/N
Logger: F. Bozga
Checked by: C. Marin
Drilling Method: 2.25" HSA to 15', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling: Rotary wash
At Completion of Drilling: unable to measure
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



USER NAME = mkwilson	DESIGNED - WJC	REVISED
PLOT SCALE = 0:2.0000 ' / In.	CHECKED - DL	REVISED
PLOT DATE = 12/15/2016	DRAWN - RVV	REVISED
	CHECKED - WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 7
STRUCTURE NO. 016-1707

SHEET NO. S-60 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	267
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	



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1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG 2055-B-06

WEI Job No.: 1100-04-01

Client: **AECOM**
Project: **Circle Interchange Reconstruction**
Location: **Section 17, T39N, R14E of 3rd PM**

Datum: NAVD 88
Elevation: 575.52 ft
North: 1898460.17 ft
East: 1171341.21 ft
Station: 8148+53.80
Offset: 57.3869 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
518.8	Possible cobble-rich layer	55	17	4 6 7	1.75 P	22	498.4	-HARD DRILLING- Very dense, gray SILTY LOAM to SILT, trace to some gravel	80	22	50/4	NP	11
518.8	Dense, gray SILTY LOAM, trace gravel	60	18	8 16 23	NP	18			85	23	29 40 33	NP	22
513.8	Hard, gray SILTY CLAY LOAM, trace to little gravel	65	19	13 25 38	10.25 B	15			90	24	19 23 28	NP	17
	-HARD DRILLING-	70	20	14 23 27	8.04 B	15	481.5	Probably weathered DOLOSTONE	95	25	25	NP	16
		75	21	47 60/5	9.02 B	12	479.5	-AUGER REFUSAL- Strong, light gray, good rock mass quality, bedded fresh DOLOSTONE, with shale partings, up to 18-inch beds, 1- to 18-inch spaced joints, horizontal and oblique joints with less than 0.2- to 1-inch greenish	100				

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

GENERAL NOTES

Begin Drilling: 05-13-2013 Complete Drilling: 05-15-2013
Drilling Contractor: Wang Testing Services Drill Rig: CME-55 TMR
Driller: P/N Logger: F. Bozga Checked by: C. Marin
Drilling Method: 2.25" HSA to 15', mud rotary thereafter, boring backfilled upon completion

WATER LEVEL DATA

While Drilling: Rotary wash
At Completion of Drilling: unable to measure
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG 2055-B-06

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469.5	gray silty infilling, hard joint wall, with stylolitic surfaces, and moderately wuggy porosity. Run 1 - RECOVERY = 98% RQD = 72% 97.5ft-Qu=10330 psi -->	105	1				469.5		105				
	Boring terminated at 106.00 ft								110				
									115				
									120				
									125				

WANGENG 11000401.GPJ WANGENG.GDT 12/15/14

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USER NAME = mkwilson	DESIGNED - WJC	REVISED
PLOT SCALE = 0:2.0000 '1" / In.	CHECKED - DL	REVISED
PLOT DATE = 12/15/2016	DRAWN - RVV	REVISED
	CHECKED - WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 8
STRUCTURE NO. 016-1707

SHEET NO. S-61 OF S-61 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	268
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

FOR INFORMATION ONLY

F.A.P. RTE. 1405 1423	SECTION 0202.2-4B-R	COUNTY COOK	TOTAL SHEETS 192	SHEET NO. 1
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOACED IN CITY OF CHICAGO

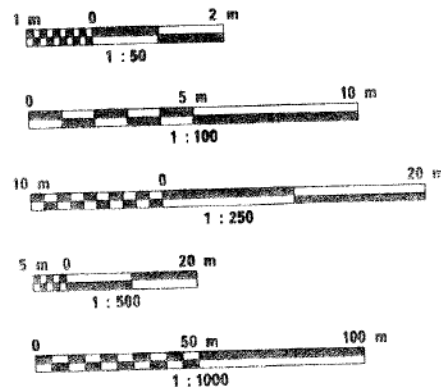
TRAFFIC DATA

ADT = 8,300
SPEED = 50 KMH

DESIGN DESIGNATION

FAP ROUTE 1405 8,300 (2010) ADT

METRIC RATIOS



DISTRICT 1 - DESIGN /CONSULTANT SERVICES SECTION /RICK YOUNG (847) 705-4247

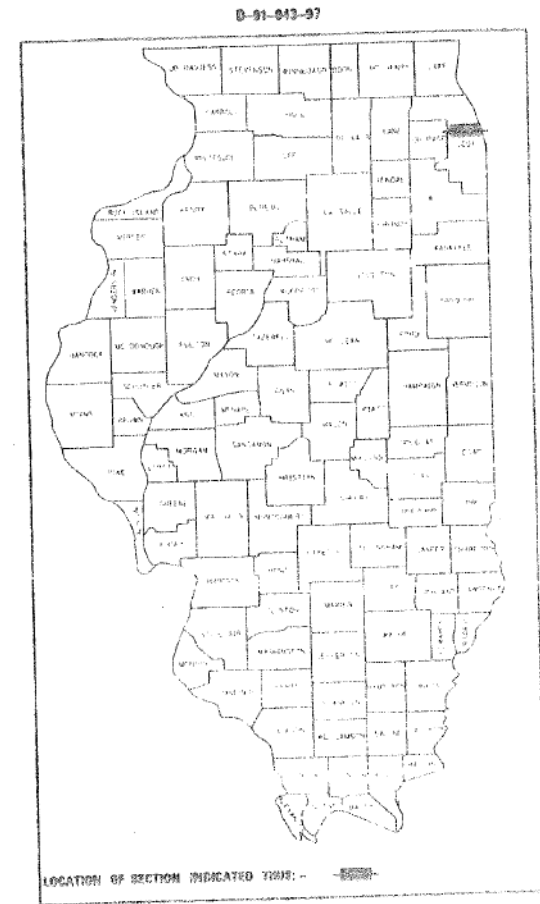
STATE OF ILLINOIS
CITY OF CHICAGO
RICHARD M. DALEY
MAYOR
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES & TRANSIT
THOMAS R. WALKER, COMMISSIONER
S.L. KADERBEK, S.E., P.E., DEPUTY COMMISSIONER/CHIEF ENGINEER
CONTRACT PLANS

LAKE STREET BRIDGE
OVER I-90/94
BRIDGE STRUCTURE NO. 016-2052
F.A.P. ROUTE NO. 1405

VAN BUREN STREET BRIDGE
OVER I-90/94
BRIDGE STRUCTURE NO. 016-2055
F.A.P. ROUTE NO. 1423

BETWEEN HALSTED AND DES PLAINES STREET
CDOT PROJECT NO. E-9-001
SECTION NO. 99-E9001-00-BR
SPECIFICATION NO. PE90019901

COOK COUNTY
FEDERAL PROJECT NO. SPM-6000(044)
STATE JOB NO. C-88-004-99



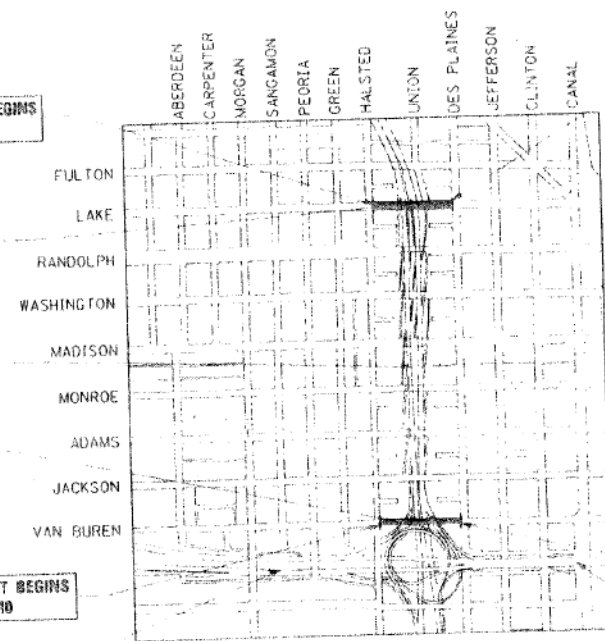
DIGGER (312) 744-7000

IMPROVEMENT BEGINS
STA. 1+242.000

SN: 016-2052
LAKE STREET OVER I-90/94 INCLUDES
THE REHABILITATION OF THE EXISTING 4-SPAN
STEEL I-BEAM STRUCTURE AND THE
REHABILITATION OF THE EXISTING 4-SPAN
STEEL I-BEAM ENTRANCE RAMP STRUCTURE

SN: 016-2055
VAN BUREN STREET OVER I-90/94 INCLUDES
THE REHABILITATION OF THE EXISTING 9-
SPAN STEEL I-BEAM STRUCTURE

IMPROVEMENT BEGINS
STA. 1+217.910



IMPROVEMENT ENDS
STA. 1+492.010

IMPROVEMENT ENDS
STA. 1+471.146

CONGRESS PKWY

LOCATION MAP
NET LENGTH OF IMPROVEMENTS = 804 METERS = 0.500 KM



LICENSE NO. 081-0089
LICENSE EXPIRES 11/2009



LICENSE NO. 62-28382
LICENSE EXPIRES 11/2010

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
APPROVED *April 16, 1999*
LOCAL AGENCY REPRESENTATIVE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
APPROVED *February 17, 1999*
James S. Maguire
BUREAU CHIEF OF LOCAL ROADS AND STREETS

APPROVED *February 11, 1999*
John P. Lee
DISTRICT ENGINEER

3:03:40 PM
D:\60X99-SHT-AS-BUILT-01



USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1" / 1in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

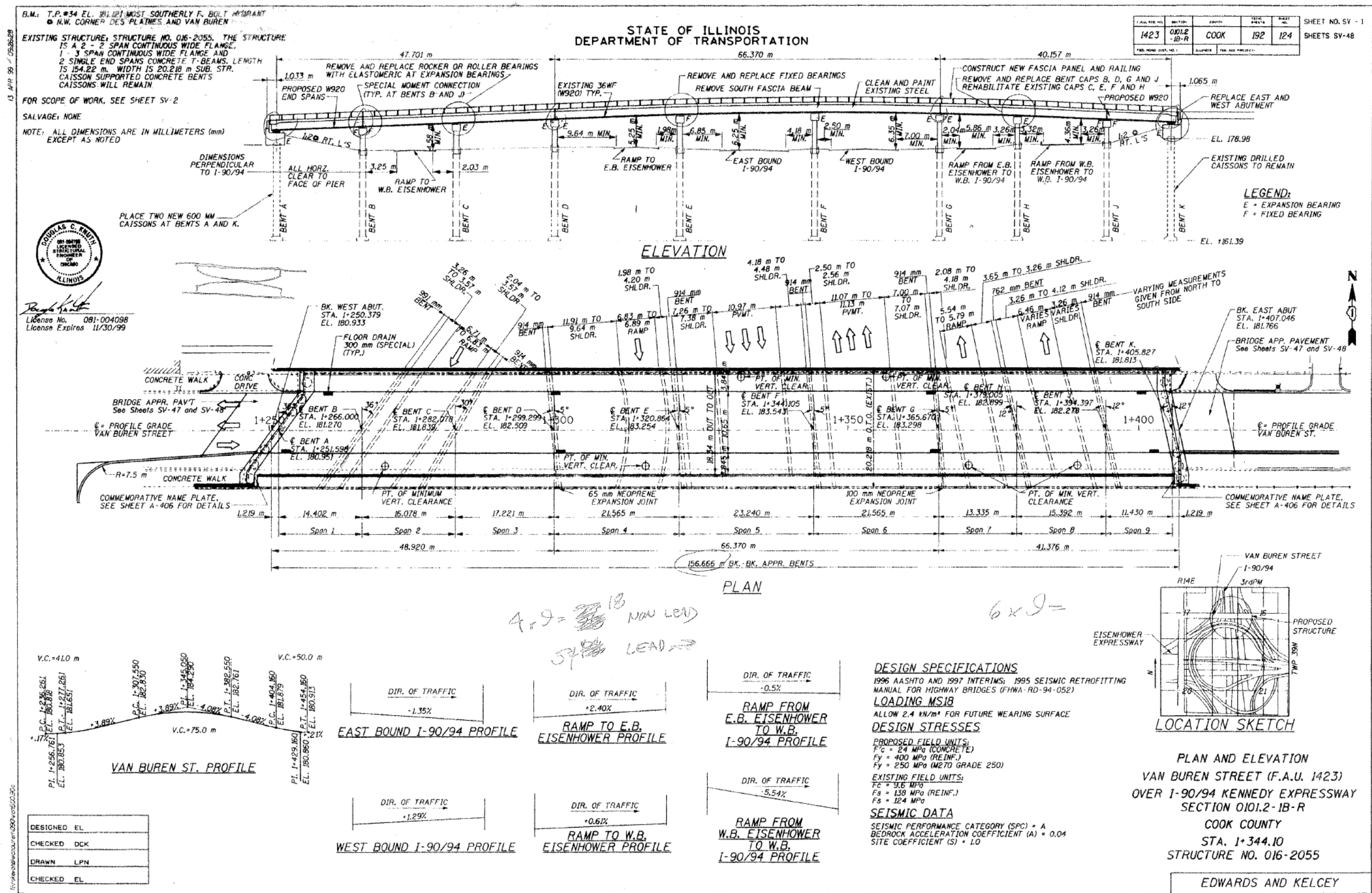
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-01 OF AB-68 SHEETS

F.A.I. RTE. 90/94/290	SECTION 2014-017B	COUNTY COOK	TOTAL SHEETS 442	SHEET NO. 269
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X99	

FOR INFORMATION ONLY



B.M.: T.P. #34 EL. 181.121 MOST SOUTHERLY F. BOLT W/BRANT
 N.W. CORNER DES PLAINES AND VAN BUREN

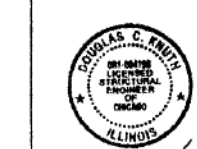
EXISTING STRUCTURE: STRUCTURE NO. 016-2055. THE STRUCTURE IS A 2 - 2 SPAN CONTINUOUS WIDE FLANGE, 1 - 3 SPAN CONTINUOUS WIDE FLANGE AND 2 SINGLE END SPANS CONCRETE T-BEAMS. LENGTH IS 154.22 m. WIDTH IS 20.218 m SUB. STR. CAISSON SUPPORTED CONCRETE BENTS CAISSONS WILL REMAIN

FOR SCOPE OF WORK, SEE SHEET SV-2

SALVAGE: NONE

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT AS NOTED

1423	0012	COOK	192	124	SHEET NO. SV-1
					SHEETS SV-48



License No. 081-004098
 License Expires 11/30/99

DESIGNED	EL
CHECKED	DCK
DRAWN	LPN
CHECKED	EL

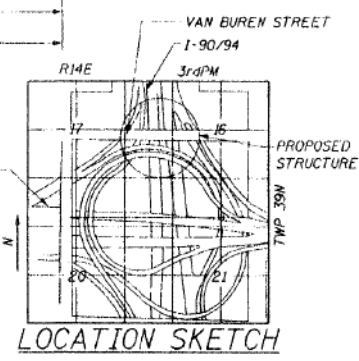
DESIGN SPECIFICATIONS
 1996 AASHTO AND 1997 INTERIMS; 1995 SEISMIC RETROFITTING MANUAL FOR HIGHWAY BRIDGES (FHWA-RD-94-052)

LOADING MS18
 ALLOW 2.4 kN/m² FOR FUTURE WEARING SURFACE

DESIGN STRESSES
 PROPOSED FIELD UNITS:
 F_c = 24 MPa (CONCRETE)
 F_y = 400 MPa (REINF.)
 F_s = 250 MPa (M270 GRADE 250)

EXISTING FIELD UNITS:
 F_c = 31.6 MPa
 F_s = 138 MPa (REINF.)
 F_s = 124 MPa

SEISMIC DATA
 SEISMIC PERFORMANCE CATEGORY (SPC) = A
 BEDROCK ACCELERATION COEFFICIENT (A) = 0.04
 SITE COEFFICIENT (S) = 1.0



PLAN AND ELEVATION
 VAN BUREN STREET (F.A.U. 1423)
 OVER I-90/94 KENNEDY EXPRESSWAY
 SECTION 0101.2-1B-R
 COOK COUNTY
 STA. 1+344.10
 STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

11/15/2016 10:00 AM

3:03:44 PM 0160X99-SHT-AS-BUILT-02



USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1" / 1in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-02 OF AB-68 SHEETS

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	270
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
1423	0101.2-1B-R	COOK	192	125
SHEET NO. SV - 2 SHEETS SV-48				

GENERAL NOTES

1. **REINFORCEMENT BARS**
Reinforcement bars shall conform to the requirements of AASHTO M-31M, M-42M or M-53M, Grade 400.
2. **CONCRETE CHAMFERS**
All exposed concrete corners shall have 20 mm chamfers otherwise shown in the plans.
3. **STRUCTURAL STEEL**
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, connection angles and plates, cover plates, sidewalk connections and all splice plate materials except fill plates.
Calculated mass of new structural steel = 67,770 kg.
Calculated mass of structural steel removal = 51,660 kg.
4. **FIELD WELDING**
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the engineer.
5. **BOLTED CONNECTIONS**
Fasteners for structural steel shall be High Strength Bolts M22 with 24 mm diameter holes unless otherwise noted.
6. **ANCHOR BOLTS**
Anchor bolts shall be set before bolting diaphragms over supports.
7. **PAINTING NEW STEEL**
The inorganic zinc rich primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 10Y-7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell No. 10Y-7/1. See Special Provision, "Cleaning and Painting New Metal Structure". Expansion joint plates and attached bars shall be shop painted with inorganic zinc rich primer.
8. **PAINTING OF EXISTING STEEL OF HIGHWAY GRADE SEPARATION STRUCTURES**
Cleaning and painting of the existing structural steel shall be as specified in the Special Provision "Cleaning and Painting Existing Steel Structures". All existing structural steel within 1.5 meters of either side of expansion joints and all surfaces of the two beams adjacent to the existing open longitudinal joint shall be cleaned by Method 1. The exterior and the bottom flange of the fascia beams shall be cleaned by Method 3. All remaining structural steel shall be cleaned by Method 2. The aluminum epoxy mastic/acrylic paint system shall be used for painting of the existing structural steel. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 10Y-7/1. See Special Provisions for "Cleaning and Painting Existing Steel Structures".
9. **LEAD PAINT**
The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.
10. **BEARING SEAT SURFACES**
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 3 mm adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims (For Type I Elastomeric bearings, shims of the dimensions of top plate shall be provided and placed as detailed).
11. **PLAN DIMENSIONS**
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Metric dimensions for bolt spacings, bolt hole diameters, edge clearances, etc. are soft converted (rounded to nearest millimeters) based upon data available from existing plans.

All dimensions are in millimeters (mm) except as noted.
12. **SEAT SEALER**
Bridge Seat Sealer shall be applied to the seat area of the Bridge abutments, and bents D and G.
13. **PROTECTIVE SHIELDING**
The Contractor will be required to salvage the 3" x 8" oak timbers used for the protective shielding once they are no longer needed, and he shall deliver them to the District Bridge Office at I 290 and Blesterfield.

SCOPE OF WORK

1. Remove and replace existing deck.
2. Remove existing expansion bearings and replace with elastomeric bearings. Remove and replace fixed bearings.
3. Remove and replace bent caps under expansion joints. Repair bent areas under longitudinal joints.
4. Remove and replace concrete abutment. Add two additional 600 mm caissons per abutment.
5. Replace concrete t-beam end spans with new steel stringers to be spliced to existing steel stringers at Bents B and J.
6. Replace expansion joints with neoprene joints.
7. Remove south fascia beam line, and diaphragms between fascia beam and beam line 9.
8. Install stud shear connectors in positive moment areas of existing and new beam lines.
9. All existing structural steel shall be cleaned and painted.
10. Diaphragms under expansion joints will be replaced.
11. Remove and replace approach slabs.
12. Remove and replace existing sidewalk and place new railing.
13. Eliminate longitudinal joint and install diaphragms.
14. Remove cantilever ends at remaining existing Bents C, E, F and H, south side of the structure (See Bent Concrete Removal Sketch, Sheet SV-3).
15. Utility conduits will be removed and replaced.
16. Light standards will be removed.

TOTAL BILL OF MATERIAL - VAN BUREN

DESCRIPTION	UNIT	SUB-STRUCTURE	SUPER STRUCTURE	TOTAL QUANTITY
Drainage System	L. Sum	-	0.2	0.2
Jacking and Cribbing	Each	-	90	90
Protective Shield	M ²	-	820	820
Caisson Shafts 1065 mm	M ³	30	-	30
Caisson Shafts 1370 mm	M ³	50	-	50
Porous Granular Backfill	M ³	29	-	29
Removal of Existing Superstructure	Each	-	1	1
Concrete Removal	M ³	190.8	-	190.8
Removal of Existing Concrete Deck	Each	-	1	1
Slope Wall Removal	M ²	30	-	30
Structure Excavation	M ³	283	-	283
Neoprene Expansion Joint, 50 mm	M	-	46.0	46.0
Neoprene Expansion Joint, 65 mm	M	-	19.0	19.0
Neoprene Expansion Joint, 100 mm	M	-	19.0	19.0
Elastomeric Bearing Assembly, Type I	Each	-	63	63
Elastomeric Bearing Assembly, Type II	Each	-	18	18
Concrete Structures	M ³	257.9	-	257.9
Concrete Superstructure	M ³	-	952.1	952.1
Bridge Deck Grooving	M ²	-	1,580	1,580
Protective Coat	M ²	-	2,900	2,900
Floor Drains (Special)	Each	-	8	8
Formed Concrete Repair (Depth ≤ 125 mm)	M ²	3.0	-	3.0
Formed Concrete Repair (Depth > 125 mm)	M ²	2.0	-	2.0
Stud Shear Connectors	Each	17307	-	17307
Furnishing and Erecting Structural Steel	L. Sum	-	0.3	0.3
Structural Steel Removal	L. Sum	-	0.3	0.3
Cleaning and Painting Steel Bridge	L. Sum	-	0.6	0.6
Blasting Residue Containment and Disposal	L. Sum	-	0.6	0.6
Power Tool Cleaning Residue Containment and Disposal	L. Sum	-	0.5	0.5
Reinforcement Bars, Epoxy Coated	Kg.	39,600	136,370	175,970
Slope Wall 100 mm	M ²	30	-	30
Expansion Bolts M12	Each	36	-	36
Bridge Seat Sealer	M ²	116	-	116

GENERAL NOTES AND QUANTITIES
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED EL
CHECKED JDB
DRAWN TEH
CHECKED EL

USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 "1" / in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

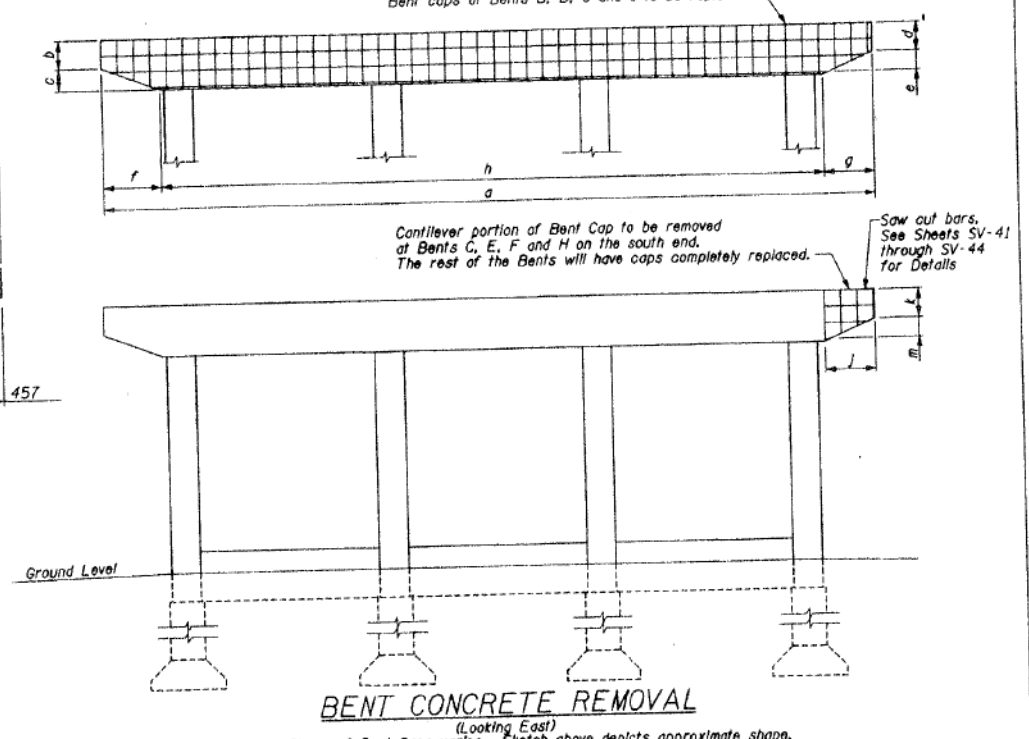
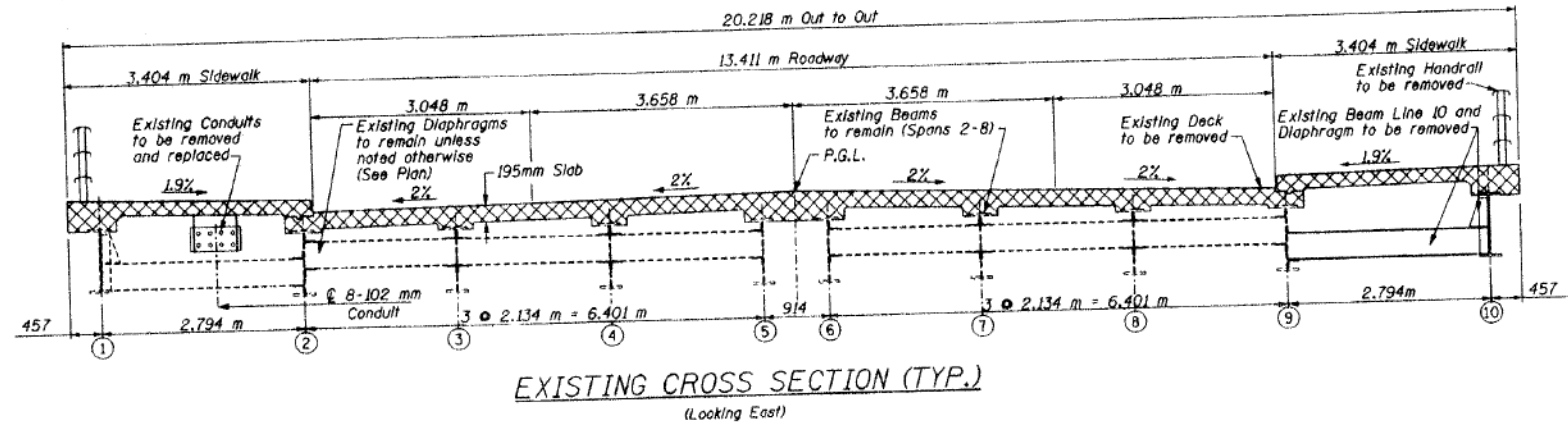
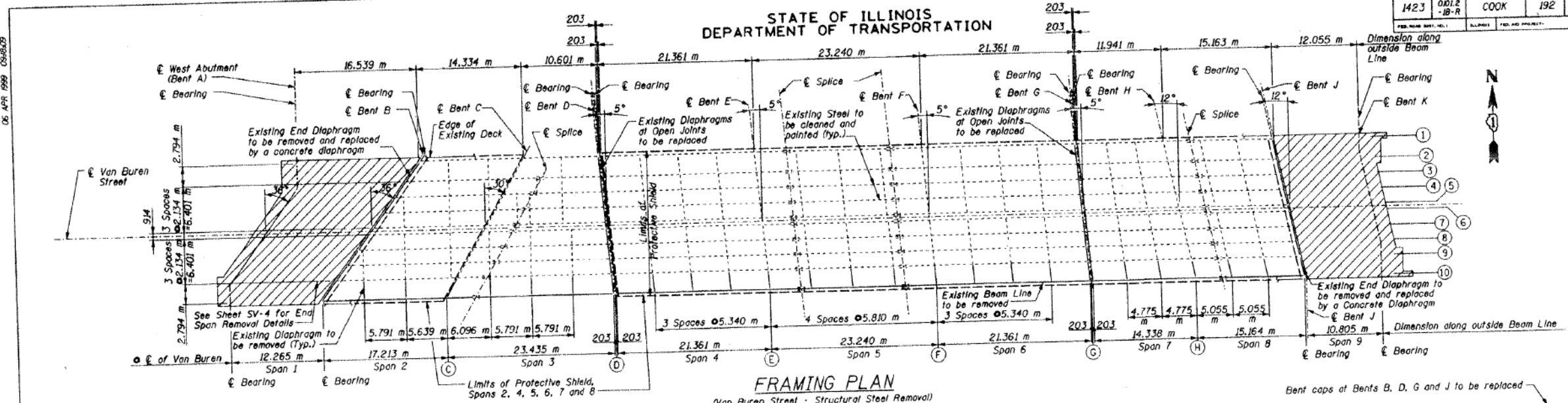
SHEET NO. AB-03 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	271
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

PROJECT NO.	SECTION	SHEET	TOTAL SHEETS	SHEET NO.
1423	0101.2-IB-R	COOK	192	126
SHEET NO. SV - 3				SHEETS SV-48

06 APR 1999 09:40:03



LEGEND

- Removal of Existing Concrete Deck
- Removal of Existing Concrete End Spans (Cast in Place T-Beams)
- Structural Steel Removal
- Concrete Removal
- Existing Steel to Remain
- Limits of Protective Shield

Dim.	Bent							
	B	D	G	J	C	E	F	H
a	24.991	20.296	20.296	20.670	-	-	-	-
b	0.762	0.686	0.686	0.686	-	-	-	-
c	0.460	0.302	0.359	0.457	-	-	-	-
d	0.762	0.686	0.686	0.686	-	-	-	-
e	0.203	0.365	0.324	0.292	-	-	-	-
f	1.758	1.427	1.427	1.454	-	-	-	-
g	1.758	1.427	1.427	1.454	-	-	-	-
h	21.475	17.442	17.442	17.762	-	-	-	-
j	-	-	-	-	1.664	1.402	1.478	1.500
k	-	-	-	-	0.762	0.762	0.762	0.762
m	-	-	-	-	0.502	0.616	0.581	0.356
Width	0.991	0.914	0.914	0.914	0.914	0.991	0.914	0.813

BENT CONCRETE REMOVAL TABLE
(Table dimensions in meters)

NOTES:

- Existing reinforcement extending into the Removed Area shall be cleaned, straightened and incorporated into the new construction. Cost included with "Concrete Removal".
- Coordinate Demolition Work with Sheets SV-4 and SV-37 through 44.
- All dimensions are in millimeters (mm), except as noted.

BRIDGE REMOVAL PLAN
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-IB-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED EL	
CHECKED	JDB
DRAWN	SSD
CHECKED	EL/JDB

3:03:53 PM 0160X99-SHT-AS-BUILT-04



USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1" / in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-04 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	272
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

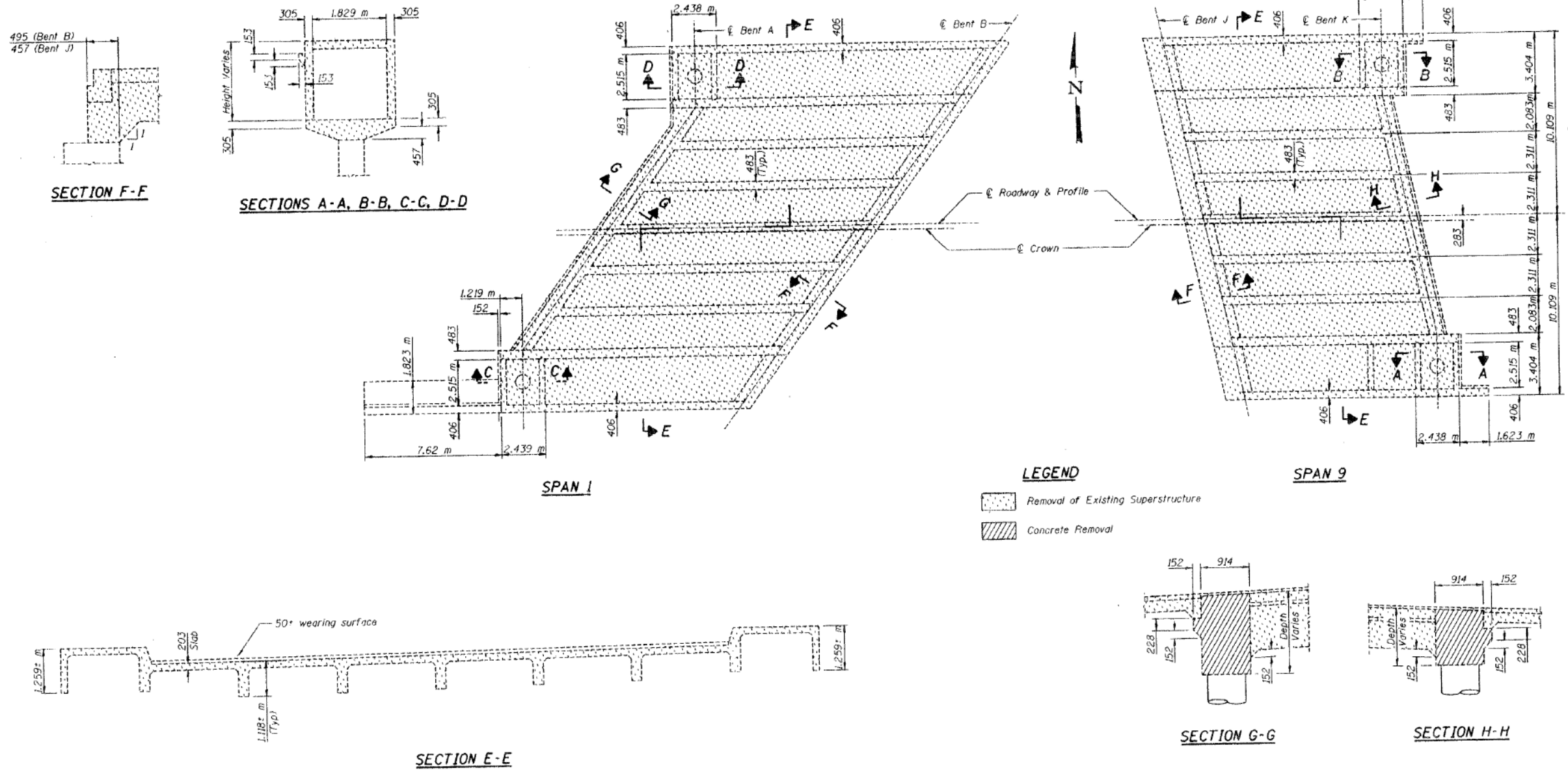
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-1B-R	COOK	192	127
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. SV - 4
SHEETS SV - 48

06 APR 1999 09:48:45

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



DESIGNED	TK
CHECKED	PL
DRAWN	NC
CHECKED	TK

**CONCRETE REMOVAL
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055**

LIN ENGINEERING, LTD.

3:03:57 PM 0160X99-SHT-AS-BUILT-05



USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1" / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

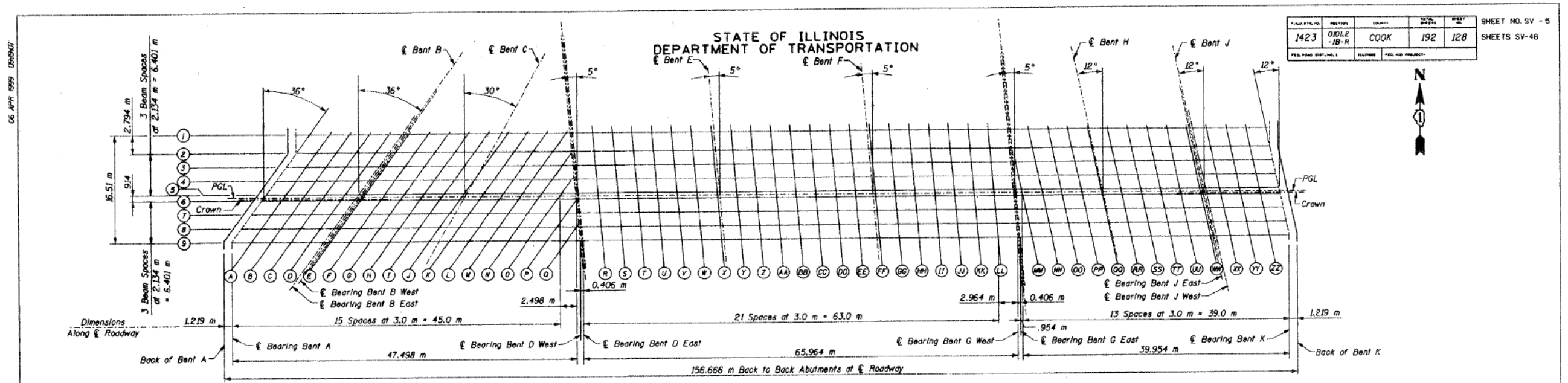
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-05 OF AB-68 SHEETS

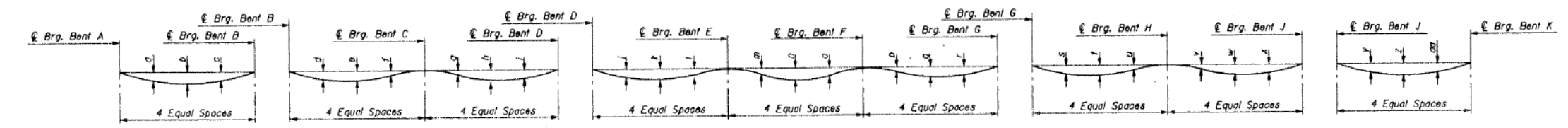
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	273
			CONTRACT NO. 60X99	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-IB-R	COOK	192	128
SHEET NO. SV - 5 SHEETS SV-48				

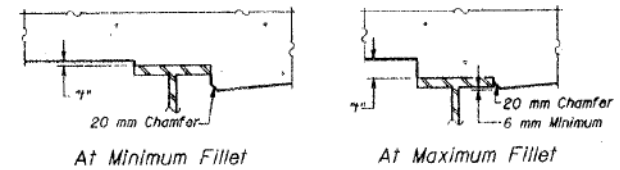
TOP OF DECK ELEVATIONS



Girder Line Number	Span 1			Span 2			Span 3			Span 4			Span 5			Span 6			Span 7			Span 8			Span 9		
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	aa
1	9	13	9	4	5	3	0	0	0	13	15	8	3	7	3	8	15	13	1	1	0	3	6	5	3	4	3
2	5	7	5	4	5	3	0	2	1	13	15	8	3	7	3	8	15	13	1	1	0	3	6	5	2	3	2
3	5	7	5	4	5	2	1	3	2	13	15	8	3	7	3	8	15	13	1	1	0	3	6	5	2	3	2
4	5	7	5	4	5	2	2	5	4	10	12	6	2	5	2	6	12	10	1	1	0	3	6	4	2	3	2
5	5	7	5	3	4	2	3	6	5	10	12	6	2	5	2	6	12	10	1	1	0	2	4	3	2	3	2
6	5	7	5	3	4	1	4	7	6	10	12	6	2	5	2	6	12	10	1	1	0	2	4	3	2	3	2
7	5	7	5	4	5	2	3	6	5	13	15	8	3	7	3	8	15	13	2	3	1	3	5	4	2	3	2
8	5	7	5	4	4	2	3	6	5	13	15	8	3	7	3	8	15	13	2	3	1	3	5	4	2	3	2
9	5	7	5	4	4	2	3	6	5	13	15	8	3	7	3	8	15	13	2	3	1	2	5	4	2	3	2

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)
 Notes: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown above. All dimensions are in millimeters (mm) except as noted. All offsets are in meters.



To determine 'T': After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals as shown in the tables. These elevations subtracted from the 'Theoretical Grade Elevations Adjusted for Dead Load Deflection' shown above, minus slab thickness, equals the fillet heights 'T' above top flange of beams.

FILLET HEIGHTS

- NOTES:
- Work this sheet with Sheets SV-6 through SV-9.
 - All dimensions are in millimeters (mm) except as noted.

TOP OF DECK ELEVATIONS
 LOCATION GRID AND DETAILS
 VAN BUREN STREET (F.A.U. 1423)
 OVER I-90/94 KENNEDY EXPRESSWAY
 SECTION 0101.2-IB-R
 COOK COUNTY
 STA. 1+344.10
 STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED EL	
CHECKED JOB	
DRAWN SSD	
CHECKED EL	

3:04:01 PM D:\60X99-SHT-AS-BUILT-06



USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1' / 'in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-06 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	274
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-IB-R	COOK	192	129
SHEETS SV-48				

BEAM 1

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+255.256	9.652	181.018	181.018
€ Brg. West Abut	1+256.457	9.652	181.042	181.042
A	1+261.616	9.652	181.158	181.170
B	1+264.616	9.652	181.236	181.250
C	1+267.616	9.652	181.323	181.335
D	1+270.616	9.652	181.417	181.423
€ West Brg. Bent	1+272.713	9.652	181.488	181.488
€ Bent B	1+273.018	9.652	181.499	181.499
€ East Brg. Bent	1+273.323	9.652	181.510	181.510
E	1+273.616	9.652	181.520	181.522
F	1+276.616	9.652	181.631	181.635
G	1+279.616	9.652	181.748	181.753
H	1+282.616	9.652	181.865	181.869
I	1+285.616	9.652	181.981	181.983
J	1+288.616	9.652	182.098	182.099
€ Brg. Bent C	1+287.655	9.652	182.061	182.061
K	1+291.616	9.652	182.215	182.215
L	1+294.616	9.652	182.332	182.332
M	1+297.616	9.652	182.448	182.448
N				
O				
P				
Q				
€ West Brg. Bent	1+298.251	9.652	182.473	182.473
€ Bent D	1+298.454	9.652	182.481	182.481
€ East Brg. Bent	1+298.657	9.652	182.489	182.489
R	1+301.657	9.652	182.606	182.612
S	1+304.657	9.652	182.723	182.736
T	1+307.657	9.652	182.839	182.853
U	1+310.657	9.652	182.951	182.966
V	1+313.657	9.652	183.063	183.065
W	1+316.657	9.652	183.176	183.174
X	1+319.657	9.652	183.229	183.233
€ Brg. Bent E	1+320.019	9.652	183.238	183.238
Y	1+322.657	9.652	183.302	183.303
Z	1+325.657	9.652	183.366	183.369
AA	1+328.657	9.652	183.420	183.425
BB	1+331.657	9.652	183.465	183.472
CC	1+334.657	9.652	183.500	183.505
DD	1+337.657	9.652	183.526	183.529
EE	1+340.657	9.652	183.542	183.543
€ Brg. Bent F	1+343.260	9.652	183.548	183.548
FF	1+343.657	9.652	183.548	183.552
GG	1+346.657	9.652	183.545	183.553
HH	1+349.657	9.652	183.532	183.544
II	1+352.657	9.652	183.510	183.525
JJ	1+355.657	9.652	183.478	183.492
KK	1+358.657	9.652	183.437	183.450
LL	1+361.657	9.652	183.396	183.392
€ West Brg. Bent	1+364.622	9.652	183.326	183.326
€ Bent G	1+364.825	9.652	183.322	183.322
€ East Brg. Bent	1+365.028	9.652	183.317	183.317
MM	1+364.774	9.652	183.323	183.323
NN	1+367.774	9.652	183.252	183.253
OO	1+370.774	9.652	183.172	183.173
PP	1+373.774	9.652	183.083	183.083
QQ	1+376.774	9.652	182.984	182.984
€ Brg. Bent H	1+376.952	9.652	182.977	182.977
RR	1+379.774	9.652	182.875	182.876
SS	1+382.774	9.652	182.757	182.760
TT	1+385.774	9.652	182.634	182.640
UU	1+388.774	9.652	182.512	182.517
VV	1+391.774	9.652	182.390	182.392
€ West Brg. Bent	1+392.116	9.652	182.376	182.376
€ Bent J	1+392.344	9.652	182.366	182.366
€ East Brg. Bent	1+392.573	9.652	182.354	182.354
XX	1+394.774	9.652	182.267	182.270
YY	1+397.774	9.652	182.145	182.149
ZZ	1+400.774	9.652	182.023	182.026
€ Brg. East Abut	1+404.400	9.652	181.874	181.874
Bk. East Abutment	1+404.619	9.652	181.825	181.825

BEAM 2

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+255.256	6.858	180.901	180.901
€ Brg. West Abut	1+256.475	6.858	180.925	180.925
A	1+259.581	6.858	180.969	180.974
B	1+262.581	6.858	181.039	181.047
C	1+265.581	6.858	181.117	181.125
D	1+268.581	6.858	181.204	181.208
€ West Brg. Bent	1+270.678	6.858	181.301	181.301
€ Bent B	1+270.983	6.858	181.312	181.312
€ East Brg. Bent	1+271.288	6.858	181.322	181.322
E	1+271.591	6.858	181.332	181.332
F	1+274.581	6.858	181.437	181.441
G	1+277.581	6.858	181.555	181.555
H	1+280.581	6.858	181.667	181.670
I	1+283.581	6.858	181.784	181.786
J	1+286.581	6.858	181.901	181.902
€ Brg. Bent C	1+286.037	6.858	181.880	181.880
K	1+289.581	6.858	182.018	182.018
L	1+292.581	6.858	182.134	182.136
M	1+295.581	6.858	182.251	182.252
N				
O				
P				
Q				
€ West Brg. Bent	1+298.496	6.858	182.365	182.365
€ Bent D	1+298.699	6.858	182.373	182.373
€ East Brg. Bent	1+298.902	6.858	182.381	182.381
R	1+301.902	6.858	182.497	182.503
S	1+304.902	6.858	182.614	182.627
T	1+307.902	6.858	182.731	182.745
U	1+310.902	6.858	182.842	182.857
V	1+313.902	6.858	182.955	182.955
W	1+316.902	6.858	183.035	183.043
X	1+319.902	6.858	183.117	183.121
€ Brg. Bent E	1+320.264	6.858	183.126	183.126
Y	1+322.902	6.858	183.190	183.191
Z	1+325.902	6.858	183.253	183.256
AA	1+328.902	6.858	183.306	183.311
BB	1+331.902	6.858	183.350	183.357
CC	1+334.902	6.858	183.384	183.389
DD	1+337.902	6.858	183.409	183.412
EE	1+340.902	6.858	183.424	183.425
€ Brg. Bent F	1+343.505	6.858	183.430	183.430
FF	1+343.902	6.858	183.430	183.434
GG	1+346.902	6.858	183.426	183.434
HH	1+349.902	6.858	183.413	183.425
II	1+352.902	6.858	183.390	183.405
JJ	1+355.902	6.858	183.357	183.371
KK	1+358.902	6.858	183.315	183.328
LL	1+361.902	6.858	183.263	183.269
€ West Brg. Bent	1+364.867	6.858	183.203	183.203
€ Bent G	1+365.070	6.858	183.198	183.198
€ East Brg. Bent	1+365.273	6.858	183.194	183.194
MM	1+365.369	6.858	183.192	183.192
NN	1+368.369	6.858	183.119	183.120
OO	1+371.369	6.858	183.037	183.038
PP	1+374.369	6.858	182.946	182.946
QQ	1+377.369	6.858	182.845	182.845
€ Brg. Bent H	1+377.547	6.858	182.838	182.838
RR	1+380.369	6.858	182.734	182.735
SS	1+383.369	6.858	182.614	182.617
TT	1+386.369	6.858	182.492	182.498
UU	1+389.369	6.858	182.370	182.375
VV	1+392.369	6.858	182.247	182.250
€ West Brg. Bent	1+392.711	6.858	182.233	182.233
€ Bent J	1+392.939	6.858	182.224	182.224
€ East Brg. Bent	1+393.168	6.858	182.212	182.212
XX	1+395.369	6.858	182.125	182.127
YY	1+398.369	6.858	182.003	182.006
ZZ	1+401.369	6.858	181.880	181.882
€ Brg. East Abut	1+404.400	6.858	181.757	181.757
Bk. East Abutment	1+405.619	6.858	181.708	181.708

BEAM 3

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+253.812	4.724	180.909	180.909
€ Brg. West Abut	1+255.031	4.724	180.931	180.931
A	1+258.031	4.724	180.991	180.995
B	1+261.031	4.724	181.060	181.066
C	1+264.031	4.724	181.136	181.143
D	1+267.031	4.724	181.221	181.224
€ West Brg. Bent	1+269.128	4.724	181.285	181.285
€ Bent B	1+269.433	4.724	181.295	181.295
€ East Brg. Bent	1+269.738	4.724	181.305	181.305
E	1+270.031	4.724	181.314	181.314
F	1+273.031	4.724	181.415	181.419
G	1+276.031	4.724	181.525	181.530
H	1+279.031	4.724	181.641	181.643
I	1+282.031	4.724	181.758	181.758
J	1+285.031	4.724	181.875	181.875
€ Brg. Bent C	1+284.806	4.724	181.866	181.866
K	1+288.031	4.724	181.991	181.991
L	1+291.031	4.724	182.106	182.109
M	1+294.031	4.724	182.225	182.226
N	1+297.031	4.724	182.342	182.344
O				
P				
Q				
€ West Brg. Bent	1+298.683	4.724	182.406	182.406
€ Bent D	1+298.886	4.724	182.414	182.414
€ East Brg. Bent	1+299.089	4.724	182.422	182.422
R	1+302.089	4.724	182.539	182.545
S	1+305.089	4.724	182.655	182.668
T	1+308.089	4.724	182.772	182.786
U	1+311.089	4.724	182.882	182.897
V	1+314.089	4.724	182.983	182.995
W	1+317.089	4.724	183.074	183.082
X	1+320.089	4.724	183.156	183.160
€ Brg. Bent E	1+320.451	4.724	183.165	183.165
Y	1+323.089	4.724	183.228	183.229
Z	1+326.089	4.724	183.290	183.293
AA	1+329.089	4.724	183.343	183.346
BB	1+332.089	4.724	183.386	183.393
CC	1+335.089	4.724	183.420	183.425
DD	1+338.089	4.724	183.444	183.447
EE	1+341.089	4.724	183.459	183.460
€ Brg. Bent F	1+343.692	4.724	183.464	183.464
FF	1+344.089	4.724	183.464	183.468
GG	1+347.089	4.724	183.460	183.468
HH	1+350.089	4.724	183.446	183.458
II	1+353.089	4.724	183.422	183.437
JJ	1+356.089	4.724	183.389	183.403
KK	1+359.089	4.724	183.346	183.359
LL	1+362.089	4.724	183.294	183.300
€ West Brg. Bent	1+365.054	4.724	183.233	183.233
€ Bent G	1+365.257	4.724	183.228	183.228
€ East Brg. Bent	1+365.460	4.724	183.223	183.223
MM	1+365.823	4.724	183.215	183.215
NN	1+368.823	4.724	183.141	183.142
OO	1+371.823	4.724	183.056	183.059
PP	1+374.823	4.724	182.965	182.965
QQ	1+377.823	4.724	182.863	182.863
€ Brg. Bent H	1+378.001	4.724	182.856	182.856
RR	1+380.823	4.724	182.751	1

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-IB-R	COOK	192	130
SHEET NO. SV - 7 SHEETS SV-48				

BEAM 4

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+252.261	2.590	180.923	180.923
€ Brg. West Abut	1+253.480	2.590	180.943	180.943
A	1+256.480	2.590	180.999	181.004
B	1+259.480	2.590	181.063	181.070
C	1+262.480	2.590	181.136	181.146
D	1+265.480	2.590	181.219	181.229
€ West Brg. Bent	1+267.577	2.590	181.278	181.278
€ Bent B	1+267.882	2.590	181.287	181.287
€ East Brg. Bent	1+268.187	2.590	181.296	181.296
E	1+268.480	2.590	181.305	181.307
F	1+271.480	2.590	181.402	181.406
G	1+274.480	2.590	181.507	181.512
H	1+277.480	2.590	181.621	181.623
I	1+280.480	2.590	181.737	181.738
J	1+283.480	2.590	181.854	181.854
€ Brg. Bent C	1+283.574	2.590	181.858	181.858
K	1+286.480	2.590	181.971	181.971
L	1+289.480	2.590	182.088	182.090
M	1+292.480	2.590	182.204	182.209
N	1+295.480	2.590	182.321	182.325
O	1+298.480	2.590	182.438	182.440
€ West Brg. Bent	1+298.869	2.590	182.453	182.453
€ Bent D	1+299.072	2.590	182.461	182.461
€ East Brg. Bent	1+299.275	2.590	182.469	182.469
P	1+302.275	2.590	182.586	182.592
S	1+305.275	2.590	182.703	182.716
T	1+308.275	2.590	182.819	182.833
U	1+311.275	2.590	182.929	182.944
V	1+314.275	2.590	183.029	183.041
W	1+317.275	2.590	183.119	183.127
X	1+320.275	2.590	183.200	183.204
€ Brg. Bent E	1+320.637	2.590	183.210	183.210
Y	1+323.275	2.590	183.272	183.273
Z	1+326.275	2.590	183.334	183.337
AA	1+329.275	2.590	183.396	183.391
BB	1+332.275	2.590	183.429	183.436
CC	1+335.275	2.590	183.467	183.467
DD	1+338.275	2.590	183.486	183.489
EE	1+341.275	2.590	183.500	183.501
€ Brg. Bent F	1+343.878	2.590	183.504	183.504
FF	1+344.275	2.590	183.504	183.504
GG	1+347.275	2.590	183.499	183.507
HH	1+350.275	2.590	183.484	183.496
II	1+353.275	2.590	183.460	183.475
JJ	1+356.275	2.590	183.426	183.440
KK	1+359.275	2.590	183.383	183.396
LL	1+362.275	2.590	183.330	183.336
€ West Brg. Bent	1+365.240	2.590	183.268	183.268
€ Bent G	1+365.443	2.590	183.264	183.264
€ East Brg. Bent	1+365.646	2.590	183.259	183.259
MN	1+368.276	2.590	183.245	183.245
NN	1+369.276	2.590	183.169	183.170
OO	1+372.276	2.590	183.085	183.086
PP	1+375.276	2.590	182.990	182.990
QQ	1+378.276	2.590	182.896	182.886
€ Brg. Bent H	1+378.454	2.590	182.880	182.880
RR	1+381.276	2.590	182.773	182.774
SS	1+384.276	2.590	182.651	182.654
TT	1+387.276	2.590	182.529	182.535
UU	1+390.276	2.590	182.407	182.411
VV	1+393.276	2.590	182.284	182.286
€ West Brg. Bent	1+393.618	2.590	182.270	182.270
€ Bent J	1+393.846	2.590	182.261	182.261
€ East Brg. Bent	1+394.075	2.590	182.253	182.253
XX	1+396.276	2.590	182.162	182.164
YY	1+399.276	2.590	182.040	182.043
ZZ	1+402.276	2.590	181.917	181.919
€ Brg. East Abut	1+405.276	2.590	181.796	181.796
Bk. East Abutment	1+406.495	2.590	181.748	181.748

BEAM 5

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+250.711	0.456	180.931	180.931
€ Brg. West Abut	1+251.930	0.456	180.949	180.949
A	1+254.930	0.456	181.001	181.006
B	1+257.930	0.456	181.061	181.068
C	1+260.930	0.456	181.129	181.135
D	1+263.930	0.456	181.206	181.209
€ West Brg. Bent	1+266.027	0.456	181.264	181.264
€ Bent B	1+266.332	0.456	181.273	181.273
€ East Brg. Bent	1+266.637	0.456	181.282	181.282
E	1+266.930	0.456	181.290	181.291
F	1+269.930	0.456	181.383	181.386
G	1+272.930	0.456	181.484	181.484
H	1+275.930	0.456	181.593	181.595
I	1+278.930	0.456	181.709	181.710
J	1+281.930	0.456	181.826	181.826
€ Brg. Bent C	1+282.342	0.456	181.842	181.842
K	1+284.930	0.456	181.943	181.943
L	1+287.930	0.456	182.062	182.062
M	1+290.930	0.456	182.176	182.182
N	1+293.930	0.456	182.293	182.298
O	1+296.930	0.456	182.410	182.412
€ West Brg. Bent	1+299.056	0.456	182.492	182.492
€ Bent D	1+299.259	0.456	182.500	182.500
€ East Brg. Bent	1+299.462	0.456	182.508	182.508
P	1+302.462	0.456	182.625	182.630
S	1+305.462	0.456	182.742	182.752
T	1+308.462	0.456	182.858	182.869
U	1+311.462	0.456	182.967	182.979
V	1+314.462	0.456	183.067	183.076
W	1+317.462	0.456	183.157	183.163
X	1+320.462	0.456	183.237	183.240
€ Brg. Bent E	1+320.824	0.456	183.246	183.246
Y	1+323.462	0.456	183.308	183.309
Z	1+326.462	0.456	183.369	183.371
AA	1+329.462	0.456	183.421	183.425
BB	1+332.462	0.456	183.463	183.468
CC	1+335.462	0.456	183.496	183.500
DD	1+338.462	0.456	183.519	183.521
EE	1+341.462	0.456	183.532	183.533
€ Brg. Bent F	1+344.065	0.456	183.536	183.536
FF	1+344.462	0.456	183.536	183.539
GG	1+347.462	0.456	183.530	183.536
HH	1+350.462	0.456	183.515	183.524
II	1+353.462	0.456	183.490	183.502
JJ	1+356.462	0.456	183.456	183.467
KK	1+359.462	0.456	183.412	183.422
LL	1+362.462	0.456	183.359	183.364
€ West Brg. Bent	1+365.427	0.456	183.296	183.296
€ Bent G	1+365.630	0.456	183.292	183.292
€ East Brg. Bent	1+365.833	0.456	183.287	183.287
MN	1+366.730	0.456	183.266	183.266
NN	1+369.730	0.456	183.189	183.190
OO	1+372.730	0.456	183.103	183.104
PP	1+375.730	0.456	183.007	183.007
QQ	1+378.730	0.456	182.902	182.902
€ Brg. Bent H	1+378.908	0.456	182.895	182.895
RR	1+381.730	0.456	182.787	182.787
SS	1+384.730	0.456	182.665	182.667
TT	1+387.730	0.456	182.543	182.547
UU	1+390.730	0.456	182.420	182.423
VV	1+393.730	0.456	182.298	182.299
€ West Brg. Bent	1+394.072	0.456	182.284	182.284
€ Bent J	1+394.300	0.456	182.275	182.275
€ East Brg. Bent	1+394.529	0.456	182.266	182.266
XX	1+396.730	0.456	182.175	182.177
YY	1+399.730	0.456	182.053	182.056
ZZ	1+402.730	0.456	181.931	181.932
€ Brg. East Abut	1+405.730	0.456	181.810	181.810
Bk. East Abutment	1+406.949	0.456	181.762	181.762

PGL

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+250.379	0.000	180.933	180.933
€ Brg. West Abut	1+251.598	0.000	180.951	180.951
A	1+254.598	0.000	181.002	181.006
B	1+257.598	0.000	181.061	181.067
C	1+260.598	0.000	181.129	181.135
D	1+263.598	0.000	181.206	181.207
€ West Brg. Bent	1+265.695	0.000	181.262	181.262
€ Bent B	1+265.000	0.000	181.27	181.27
€ East Brg. Bent	1+266.305	0.000	181.279	181.279
E	1+266.598	0.000	181.288	181.289
F	1+269.598	0.000	181.379	181.382
G	1+272.598	0.000	181.479	181.483
H	1+275.598	0.000	181.589	181.59
I	1+278.598	0.000	181.703	181.704
J	1+281.598	0.000	181.82	181.82
€ Brg. Bent C	1+282.078	0.000	181.839	181.839
K	1+284.598	0.000	181.937	181.937
L	1+287.598	0.000	182.053	182.056
M	1+290.598	0.000	182.17	182.176
N	1+293.598	0.000	182.287	182.292
O	1+296.598	0.000	182.404	182.406
€ West Brg. Bent	1+299.096	0.000	182.501	182.501
€ Bent D	1+299.299	0.000	182.509	182.509
€ East Brg. Bent	1+299.502	0.000	182.517	182.517
P	1+302.502	0.000	182.634	182.639
S	1+305.502	0.000	182.75	182.76
T	1+308.502	0.000	183.067	183.076
U	1+311.502	0.000	183.183	183.197
V	1+314.502	0.000	183.299	183.309
W	1+317.502	0.000	183.415	183.421
X	1+320.502	0.000	183.531	183.534
€ Brg. Bent E	1+320.864	0.000	183.536	183.536
Y	1+323.502	0.000	183.598	183.603
Z	1+326.502	0.000	183.660	183.667
AA	1+329.502	0.000	183.722	183.729
BB	1+332.502	0.000	183.784	183.791
CC	1+335.502	0.000	183.846	183.853
DD	1+338.502	0.000	183.908	183.915
EE	1+341.502	0.000	183.970	183.977
€ Brg. Bent F	1+344.105	0.000	184.032	184.039
FF	1+344.502	0.000	184.032	184.039
GG	1+347.502	0.000	184.032	184.039
HH	1+350.502	0.000	184.032	184.039
II	1+353.502	0.000	184.032	184.039
JJ	1+356.502	0.000	184.032	184.039
KK	1+359.502	0.000	184.032	184.039
LL	1+362.502	0.000	184.032	184.039
€ West Brg. Bent	1+365.467	0.000	183.302	183.302
€ Bent G	1+365.670	0.000	183.298	183.298
€ East Brg. Bent	1+365.873	0.000	183.293	183.293
MN	1+366.827	0.000	183.271	183.271
NN	1+369.827	0.000	183.194	183.195
OO	1+372.827	0.000	183.117	183.118
PP	1+375.827	0.000	183.041	183.041
QQ	1+378.827	0.000	182.965	182.965
€ Brg. Bent H	1+379.005	0.000	182.899	182.899
RR	1+381.827	0.000	182.79	18

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS	SHEET NO. SV - 8
1423	0101.2-1B-R	192	131	SHEETS SV - 48
DESIGNED BY		CHECKED BY		
DRAWN BY		DATE		

CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+250.177	-0.278	180.934	180.934
€ Brg. West Abut	1+251.396	-0.278	180.952	180.952
A	1+254.396	-0.278	181.002	181.002
B	1+257.396	-0.278	181.061	181.068
C	1+260.396	-0.278	181.128	181.135
D	1+263.396	-0.278	181.203	181.207
€ West Brg. Bent	1+265.493	-0.278	181.260	181.260
€ Bent B	1+265.799	-0.278	181.268	181.268
€ East Brg. Bent	1+266.103	-0.278	181.277	181.277
E	1+266.396	-0.278	181.286	181.288
F	1+269.396	-0.278	181.377	181.380
G	1+272.396	-0.278	181.476	181.480
H	1+275.396	-0.278	181.584	181.585
I	1+278.396	-0.278	181.699	181.700
J	1+281.396	-0.278	181.816	181.816
€ Brg. Bent C	1+281.917	-0.278	181.836	181.829
K	1+284.396	-0.278	181.933	181.933
L	1+287.396	-0.278	182.050	182.042
M	1+290.396	-0.278	182.166	182.173
N	1+293.396	-0.278	182.283	182.289
O	1+296.396	-0.278	182.400	182.403
€ West Brg. Bent	1+299.120	-0.278	182.506	182.506
€ Bent D	1+299.323	-0.278	182.514	182.514
€ East Brg. Bent	1+299.526	-0.278	182.522	182.522
R	1+302.526	-0.278	182.639	182.644
S	1+305.526	-0.278	182.755	182.755
T	1+308.526	-0.278	182.872	182.883
U	1+311.526	-0.278	182.981	182.993
V	1+314.526	-0.278	183.080	183.089
W	1+317.526	-0.278	183.170	183.167
X	1+320.526	-0.278	183.250	183.253
€ Brg. Bent E	1+320.888	-0.278	183.259	183.256
Y	1+323.526	-0.278	183.320	183.318
Z	1+326.526	-0.278	183.382	183.384
AA	1+329.526	-0.278	183.433	183.430
BB	1+332.526	-0.278	183.475	183.472
CC	1+335.526	-0.278	183.507	183.504
DD	1+338.526	-0.278	183.530	183.527
EE	1+341.526	-0.278	183.543	183.540
€ Brg. Bent F	1+344.129	-0.278	183.547	183.544
FF	1+344.526	-0.278	183.547	183.544
GG	1+347.526	-0.278	183.541	183.538
HH	1+350.526	-0.278	183.526	183.523
II	1+353.526	-0.278	183.501	183.496
JJ	1+356.526	-0.278	183.466	183.463
KK	1+359.526	-0.278	183.422	183.419
LL	1+362.526	-0.278	183.368	183.370
€ West Brg. Bent	1+365.491	-0.278	183.306	183.302
€ Bent G	1+365.694	-0.278	183.301	183.298
€ East Brg. Bent	1+365.897	-0.278	183.296	183.293
MM	1+366.886	-0.278	183.273	183.269
NN	1+369.886	-0.278	183.196	183.192
OO	1+372.886	-0.278	183.109	183.106
PP	1+375.886	-0.278	183.013	183.009
QQ	1+378.886	-0.278	182.907	182.903
€ Brg. Bent H	1+379.064	-0.278	182.900	182.896
RR	1+381.886	-0.278	182.792	182.787
SS	1+384.886	-0.278	182.669	182.665
TT	1+387.886	-0.278	182.547	182.543
UU	1+390.886	-0.278	182.425	182.420
VV	1+393.886	-0.278	182.302	182.298
€ West Brg. Bent	1+394.228	-0.278	182.289	182.284
€ Bent J	1+394.456	-0.278	182.279	182.275
€ East Brg. Bent	1+394.685	-0.278	182.271	182.266
XX	1+396.886	-0.278	182.180	182.176
YY	1+399.886	-0.278	182.061	182.053
ZZ	1+402.886	-0.278	181.935	181.931
€ Brg. East Abut	1+405.886	-0.278	181.814	181.810
Bk. East Abutment	1+407.105	-0.278	181.767	181.763

BEAM 6

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+250.047	-0.456	180.929	180.929
€ Brg. West Abut	1+251.266	-0.456	180.947	180.947
A	1+254.266	-0.456	180.997	181.002
B	1+257.266	-0.456	181.055	181.062
C	1+260.266	-0.456	181.122	181.128
D	1+263.266	-0.456	181.196	181.199
€ West Brg. Bent	1+265.363	-0.456	181.253	181.253
€ Bent B	1+265.668	-0.456	181.262	181.262
€ East Brg. Bent	1+265.973	-0.456	181.270	181.270
E	1+266.266	-0.456	181.279	181.281
F	1+269.266	-0.456	181.370	181.373
G	1+272.266	-0.456	181.469	181.473
H	1+275.266	-0.456	181.576	181.577
I	1+278.266	-0.456	181.691	181.692
J	1+281.266	-0.456	181.808	181.808
€ Brg. Bent C	1+281.814	-0.456	181.829	181.829
K	1+284.266	-0.456	181.925	181.925
L	1+287.266	-0.456	182.042	182.042
M	1+290.266	-0.456	182.158	182.165
N	1+293.266	-0.456	182.275	182.281
O	1+296.266	-0.456	182.392	182.395
€ West Brg. Bent	1+299.136	-0.456	182.504	182.504
€ Bent D	1+299.339	-0.456	182.512	182.512
€ East Brg. Bent	1+299.542	-0.456	182.519	182.519
R	1+302.542	-0.456	182.636	182.641
S	1+305.542	-0.456	182.753	182.763
T	1+308.542	-0.456	182.869	182.880
U	1+311.542	-0.456	182.978	182.990
V	1+314.542	-0.456	183.077	183.086
W	1+317.542	-0.456	183.167	183.173
X	1+320.542	-0.456	183.247	183.250
€ Brg. Bent E	1+320.904	-0.456	183.256	183.256
Y	1+323.542	-0.456	183.318	183.318
Z	1+326.542	-0.456	183.379	183.381
AA	1+329.542	-0.456	183.430	183.434
BB	1+332.542	-0.456	183.472	183.477
CC	1+335.542	-0.456	183.504	183.504
DD	1+338.542	-0.456	183.527	183.527
EE	1+341.542	-0.456	183.540	183.541
€ Brg. Bent F	1+344.145	-0.456	183.544	183.544
FF	1+344.542	-0.456	183.544	183.544
GG	1+347.542	-0.456	183.530	183.534
HH	1+350.542	-0.456	183.523	183.522
II	1+353.542	-0.456	183.496	183.500
JJ	1+356.542	-0.456	183.463	183.474
KK	1+359.542	-0.456	183.419	183.429
LL	1+362.542	-0.456	183.365	183.370
€ West Brg. Bent	1+365.507	-0.456	183.302	183.302
€ Bent G	1+365.710	-0.456	183.298	183.298
€ East Brg. Bent	1+365.913	-0.456	183.293	183.293
MM	1+366.924	-0.456	183.269	183.269
NN	1+369.924	-0.456	183.192	183.192
OO	1+372.924	-0.456	183.105	183.106
PP	1+375.924	-0.456	183.009	183.009
QQ	1+378.924	-0.456	182.903	182.903
€ Brg. Bent H	1+379.102	-0.456	182.896	182.896
RR	1+381.924	-0.456	182.787	182.788
SS	1+384.924	-0.456	182.667	182.667
TT	1+387.924	-0.456	182.543	182.547
UU	1+390.924	-0.456	182.420	182.423
VV	1+393.924	-0.456	182.298	182.299
€ West Brg. Bent	1+394.266	-0.456	182.284	182.284
€ Bent J	1+394.494	-0.456	182.275	182.275
€ East Brg. Bent	1+394.723	-0.456	182.266	182.266
XX	1+396.924	-0.456	182.176	182.178
YY	1+399.924	-0.456	182.053	182.056
ZZ	1+402.924	-0.456	181.931	181.933
€ Brg. East Abut	1+405.924	-0.456	181.810	181.810
Bk. East Abutment	1+407.143	-0.456	181.763	181.763

BEAM 7

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+248.497	-2.590	180.876	180.876
€ Brg. West Abut	1+249.716	-2.590	180.892	180.892
A	1+252.716	-2.590	180.938	180.943
B	1+255.716	-2.590	180.992	180.999
C	1+258.716	-2.590	181.054	181.061
D	1+261.716	-2.590	181.125	181.128
€ West Brg. Bent	1+263.813	-2.590	181.179	181.179
€ Bent B	1+264.118	-2.590	181.187	181.187
€ East Brg. Bent	1+264.423	-2.590	181.195	181.195
E	1+264.716	-2.590	181.203	181.205
F	1+267.716	-2.590	181.290	181.294
G	1+270.716	-2.590	181.385	181.390
H	1+273.716	-2.590	181.488	181.490
I	1+276.716	-2.590	181.590	181.590
J	1+279.716	-2.590	181.716	181.716
€ Brg. Bent C	1+280.582	-2.590	181.749	181.749
K	1+282.716	-2.590	181.832	181.832
L	1+285.716	-2.590	181.949	181.952
M	1+288.716	-2.590	182.066	182.072
N	1+291.716	-2.590	182.183	182.188
O	1+294.716	-2.590	182.303	182.303
P	1+297.716	-2.590	182.416	182.417
€ West Brg. Bent	1+299.323	-2.590	182.479	182.479
€ Bent D	1+299.526	-2.590	182.487	182.487
€ East Brg. Bent	1+299.729	-2.590	182.495	182.495
R	1+302.729	-2.590	182.611	182.617
S	1+305.729	-2.590	182.728	182.741
T	1+308.729	-2.590	182.844	182.858
U	1+311.729	-2.590	182.953	182.968
V	1+314.729	-2.590	183.051	183.063
W	1+317.729	-2.590	183.140	183.148
X	1+320.729	-2.590	183.220	183.224
€ Brg. Bent E	1+321.091	-2.590	183.229	183.229
Y	1+323.729	-2.590	183.290	183.292
Z	1+326.729	-2.590	183.350	183.353
AA	1+329.729	-2.590	183.401	183.406
BB	1+332.729	-2.590	183.442	183.449
CC	1+335.729	-2.590	183.474	183.479
DD	1+338.729	-2.590	183.496	183.499
EE	1+341.729	-2.590	183.509	183.511
€ Brg. Bent F	1+344.332	-2.590	183.512	183.512
FF	1+344.729	-2.590	183.512	183.516
GG	1+347.729	-2.590	183.505	183.513
HH	1+350.729	-2.590	183.489	183.501
II	1+353.729	-2.590	183.464	183.479
JJ	1+356.729	-2.590	183.428	183.442
KK	1+359.729	-2.590	183.384	183.397
LL	1+362.729	-2.590	183.329	183.335
€ West Brg. Bent	1+365.694	-2.590	183.266	183.266
€ Bent G	1+365.897	-2.590	183.261	183.261
€ East Brg. Bent	1+366.100	-2.590	183.257	183.257
MM	1+367.378	-2.590	183.226	183.226
NN	1+370.378	-2.590	183.147	183.149
OO	1+373.378	-2.590	183.05	

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.U. FILE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. SV - 9 SHEETS SV-48
1423	0012-1B-R	COOK	192	132	
FED. AID PROJ. NO.	ILLINOIS	FED. AID PROJECT			

BEAM 8					BEAM 9				
Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. West Abutment	1+246.946	-4.724	180.853	180.853	Bk. West Abutment	1+245.502	-6.858	180.880	180.880
Brig. West Abut	1+248.865	-4.724	180.868	180.868	Brig. West Abut	1+246.721	-6.858	180.893	180.893
A	1+251.865	-4.724	180.929	180.914	A	1+249.615	-6.858	180.929	180.914
B	1+254.865	-4.724	180.969	180.966	B	1+252.615	-6.858	180.974	180.961
C	1+257.865	-4.724	181.017	181.023	C	1+255.615	-6.858	181.028	181.034
D	1+260.865	-4.724	181.063	181.066	D	1+258.615	-6.858	181.090	181.093
West Brig. Bent	1+262.262	-4.724	181.134	181.134	West Brig. Bent	1+260.712	-6.858	181.138	181.138
Bent B	1+262.567	-4.724	181.142	181.142	Bent B	1+261.017	-6.858	181.145	181.145
East Brig. Bent	1+262.872	-4.724	181.150	181.15	East Brig. Bent	1+261.322	-6.858	181.153	181.153
E	1+263.865	-4.724	181.158	181.16	E	1+261.615	-6.858	181.160	181.162
F	1+266.865	-4.724	181.240	181.244	F	1+264.615	-6.858	181.238	181.242
G	1+269.865	-4.724	181.331	181.335	G	1+267.615	-6.858	181.325	181.329
H	1+272.865	-4.724	181.429	181.431	H	1+270.615	-6.858	181.419	181.421
I	1+275.865	-4.724	181.536	181.537	I	1+273.615	-6.858	181.522	181.523
J	1+278.865	-4.724	181.651	181.651	J	1+276.615	-6.858	181.633	181.634
Brig. Bent C	1+279.350	-4.724	181.697	181.697	Brig. Bent C	1+278.129	-6.858	181.691	181.691
K	1+281.865	-4.724	181.768	181.768	K	1+279.615	-6.858	181.750	181.750
L	1+284.865	-4.724	181.888	181.888	L	1+282.615	-6.858	181.866	181.869
M	1+287.865	-4.724	182.002	182.008	M	1+285.615	-6.858	181.983	181.989
N	1+290.865	-4.724	182.118	182.123	N	1+288.615	-6.858	182.100	182.105
O	1+293.865	-4.724	182.235	182.239	O	1+291.615	-6.858	182.217	182.220
P	1+296.865	-4.724	182.352	182.354	P	1+294.615	-6.858	182.334	182.336
Q	1+299.865	-4.724	182.469	182.47	Q	1+297.615	-6.858	182.450	182.451
West Brig. Bent	1+299.509	-4.724	182.482	182.482	West Brig. Bent	1+299.696	-6.858	182.531	182.531
Bent D	1+299.712	-4.724	182.490	182.49	Bent D	1+299.899	-6.858	182.539	182.539
East Brig. Bent	1+299.915	-4.724	182.498	182.498	East Brig. Bent	1+300.102	-6.858	182.547	182.547
R	1+302.915	-4.724	182.615	182.621	R	1+303.102	-6.858	182.664	182.670
S	1+305.915	-4.724	182.732	182.745	S	1+306.102	-6.858	182.781	182.794
T	1+308.915	-4.724	182.847	182.861	T	1+309.102	-6.858	182.896	182.910
U	1+311.915	-4.724	182.955	182.97	U	1+312.102	-6.858	183.003	183.018
V	1+314.915	-4.724	183.053	183.065	V	1+315.102	-6.858	183.101	183.113
W	1+317.915	-4.724	183.142	183.15	W	1+318.102	-6.858	183.199	183.197
X	1+320.915	-4.724	183.221	183.225	X	1+321.102	-6.858	183.267	183.271
Brig. Bent E	1+321.277	-4.724	183.229	183.229	Brig. Bent E	1+321.464	-6.858	183.276	183.276
Y	1+323.915	-4.724	183.290	183.291	Y	1+324.102	-6.858	183.336	183.338
Z	1+326.915	-4.724	183.350	183.353	Z	1+327.102	-6.858	183.395	183.398
AA	1+329.915	-4.724	183.400	183.405	AA	1+330.102	-6.858	183.445	183.450
BB	1+332.915	-4.724	183.441	183.448	BB	1+333.102	-6.858	183.485	183.492
CC	1+335.915	-4.724	183.472	183.477	CC	1+336.102	-6.858	183.525	183.520
DD	1+338.915	-4.724	183.493	183.496	DD	1+339.102	-6.858	183.536	183.539
EE	1+341.915	-4.724	183.505	183.506	EE	1+342.102	-6.858	183.548	183.550
Brig. Bent F	1+344.518	-4.724	183.508	183.508	Brig. Bent F	1+344.705	-6.858	183.550	183.550
FF	1+344.915	-4.724	183.508	183.512	FF	1+345.102	-6.858	183.550	183.554
GG	1+347.915	-4.724	183.501	183.509	GG	1+348.102	-6.858	183.542	183.550
HH	1+350.915	-4.724	183.484	183.496	HH	1+351.102	-6.858	183.525	183.537
II	1+353.915	-4.724	183.458	183.473	II	1+354.102	-6.858	183.499	183.513
JJ	1+356.915	-4.724	183.422	183.436	JJ	1+357.102	-6.858	183.461	183.475
KK	1+359.915	-4.724	183.377	183.39	KK	1+360.102	-6.858	183.415	183.428
LL	1+362.915	-4.724	183.322	183.328	LL	1+363.102	-6.858	183.360	183.366
West Brig. Bent	1+365.880	-4.724	183.258	183.258	West Brig. Bent	1+366.067	-6.858	183.296	183.296
Brig. Bent G	1+366.083	-4.724	183.253	183.253	Brig. Bent G	1+366.270	-6.858	183.291	183.291
East Brig. Bent	1+366.286	-4.724	183.248	183.248	East Brig. Bent	1+366.473	-6.858	183.286	183.286
MM	1+367.831	-4.724	183.211	183.211	MM	1+368.285	-6.858	183.241	183.241
NN	1+370.831	-4.724	183.131	183.133	NN	1+371.285	-6.858	183.160	183.162
OO	1+373.831	-4.724	183.041	183.044	OO	1+374.285	-6.858	183.068	183.071
PP	1+376.831	-4.724	182.942	182.943	PP	1+377.285	-6.858	182.968	182.969
QQ	1+379.831	-4.724	182.833	182.833	QQ	1+380.285	-6.858	182.857	182.857
Brig. Bent H	1+380.009	-4.724	182.826	182.826	Brig. Bent H	1+380.463	-6.858	182.851	182.851
RR	1+382.831	-4.724	182.714	182.715	RR	1+383.285	-6.858	182.738	182.739
SS	1+385.831	-4.724	182.582	182.596	SS	1+386.285	-6.858	182.615	182.617
TT	1+388.831	-4.724	182.470	182.475	TT	1+389.285	-6.858	182.493	182.498
UU	1+391.831	-4.724	182.347	182.351	UU	1+392.285	-6.858	182.371	182.375
VV	1+394.831	-4.724	182.225	182.227	VV	1+395.285	-6.858	182.248	182.250
West Brig. Bent	1+395.173	-4.724	182.211	182.211	West Brig. Bent	1+395.627	-6.858	182.234	182.234
Bent J	1+395.401	-4.724	182.202	182.202	Bent J	1+395.855	-6.858	182.225	182.225
East Brig. Bent	1+395.630	-4.724	182.192	182.192	East Brig. Bent	1+396.084	-6.858	182.216	182.216
XX	1+397.831	-4.724	182.103	182.105	XX	1+398.285	-6.858	182.126	182.128
YY	1+400.831	-4.724	181.980	182.001	YY	1+401.285	-6.858	182.004	182.007
ZZ	1+403.831	-4.724	181.858	181.860	ZZ	1+404.285	-6.858	181.881	181.883
Brig. East Abut	1+406.831	-4.724	181.739	181.739	Brig. East Abut	1+407.254	-6.858	181.765	181.765
Bk. East Abutment	1+408.050	-4.724	181.692	181.692	Bk. East Abutment	1+408.473	-6.858	181.719	181.719

DESIGNED EL
CHECKED ABJ/MRS
DRAWN SSD
CHECKED EL

TOP OF DECK ELEVATIONS
BEAMS 8 AND 9
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

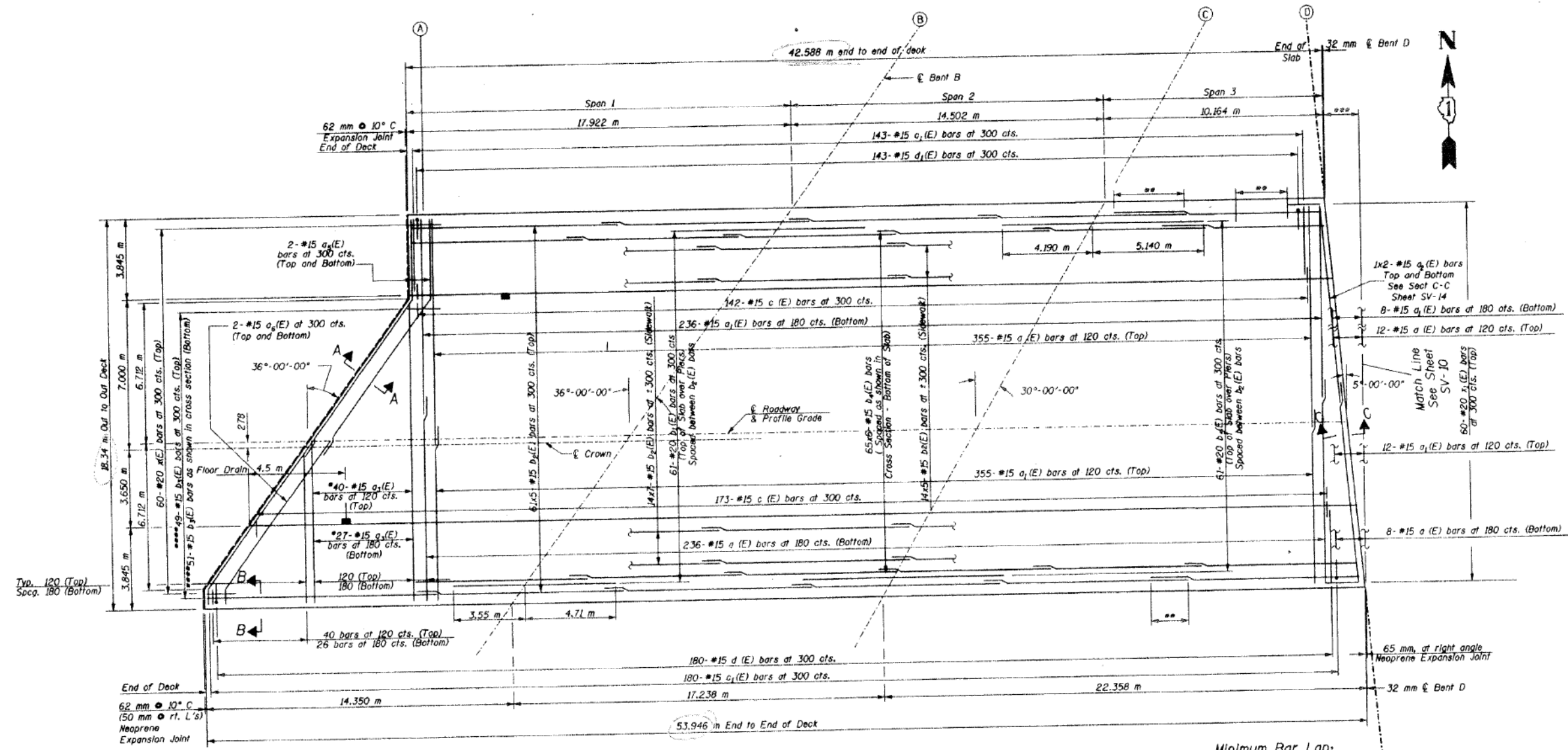
FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

P.A.I. DIST. NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
1423	01012-1B-R	COOK	192	133
FED. ROAD DIST. NO. 1	SUBAREA	FED. AID PROJECT		

SHEET NO. SV - 18
SHEETS SV-48

06 APR 1999 09:05:50



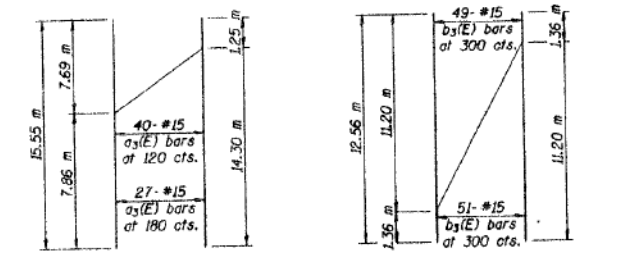
PLAN

Minimum Bar Lap:
#15 Bars-640 mm

- * Order a₃(E) bars full length. Cut by Cutting Diagram 1 and use remainder of bars in the west most portion of the slab.
- ** Splice length varies to accommodate span.
- *** Cut bars in field to fit skew and use remainder on adjacent Span 4, at other side of the joint.
- **** Order b₃(E) full length. Cut by Cutting Diagram 2 and use remainder of bars on the east most portion of the slab.

NOTES:

1. See Sheets SV-13 and SV-14 for Superstructure Details and Bill of Materials.
2. Reinforcement Bars designated (E) shall be epoxy coated.
3. Bars indicated thus 20x3-#15 etc. Indicates 20 lines of bars with 3 lengths per line.
4. All dimensions are in millimeters (mm) except as noted.
5. See Sheet SV-14 for Sections A-A, B-B, and C-C.
6. For additional bars along Bent B, see Sheet SV-23.
7. Cut reinforcement in field to clear floor drains.



CUTTING DIAGRAM 1 CUTTING DIAGRAM 2

**DECK REINFORCEMENT PLAN
SPANS 1 TO 3
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055**

EDWARDS AND KELCEY

DESIGNED EL/TK
CHECKED AJN/PL
DRAWN SSD
CHECKED EL

3:04:23 PM 0160X99-SHT-AS-BUILT-11



USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1' / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-11 OF AB-68 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	279
			CONTRACT NO. 60X99	

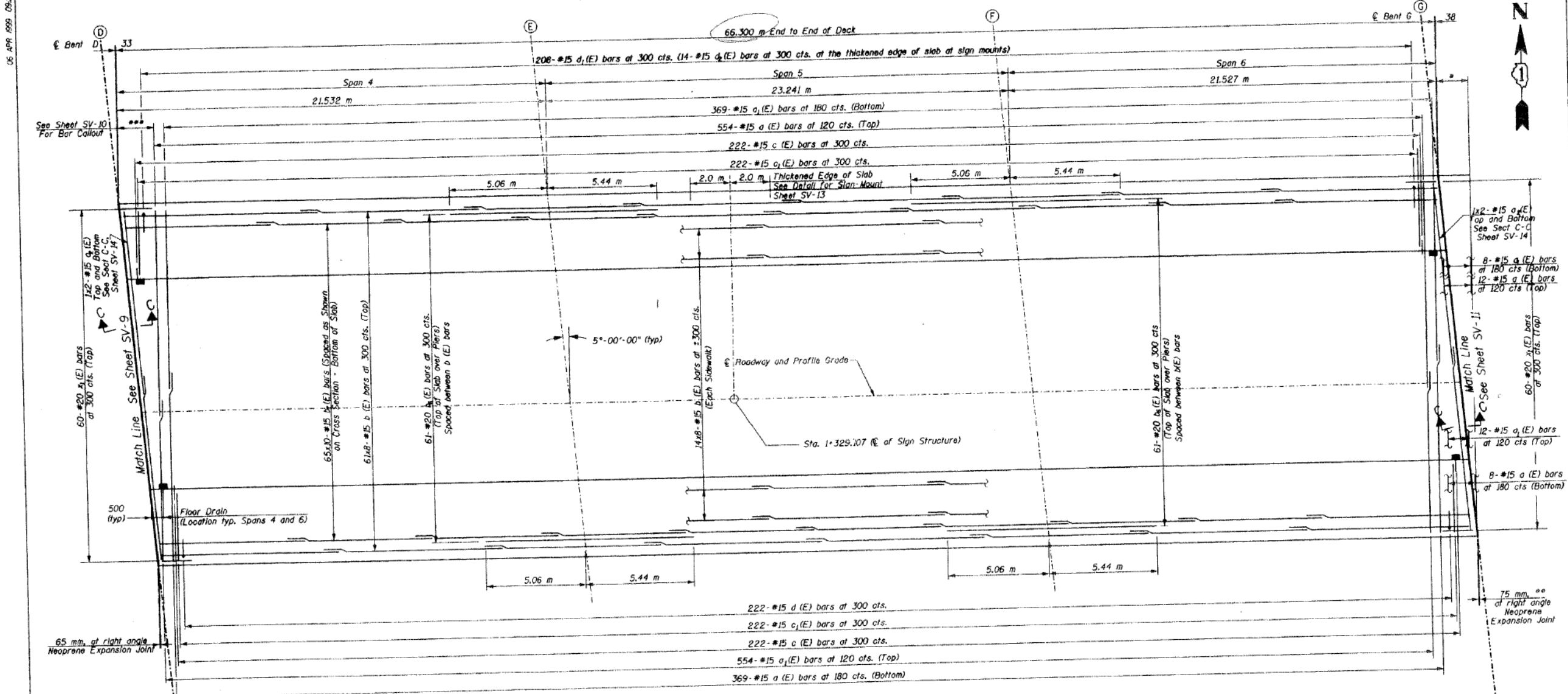
ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PLAN SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-1B-R	COOK	192	134
SHEET NO. SV - 11 SHEETS SV-40				

06 APR 1999 09:23:31



PLAN

Minimum Bar Lap:
#15 Bars-640 mm

- * Cut bars in field to fit skew and use an adjacent span.
- ** The 100 mm Expansion Joint only has a 75 mm gap between the adjacent spans deck edges.
- *** Use cut bars from adjacent Span 3.

DESIGNED	TK/EL
CHECKED	PL/AJN
DRAWN	SSD
CHECKED	EL

- NOTES:**
- All dimensions are in millimeters (mm) except as noted.
 - For Section C-C, see Sheet SV-14.
 - Cut reinforcement in field to clear floor drains.

**DECK REINFORCEMENT PLAN
SPANS 4 TO 6
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055**

14100 EDWARDS AND KELCEY

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USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1' / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-12 OF AB-68 SHEETS

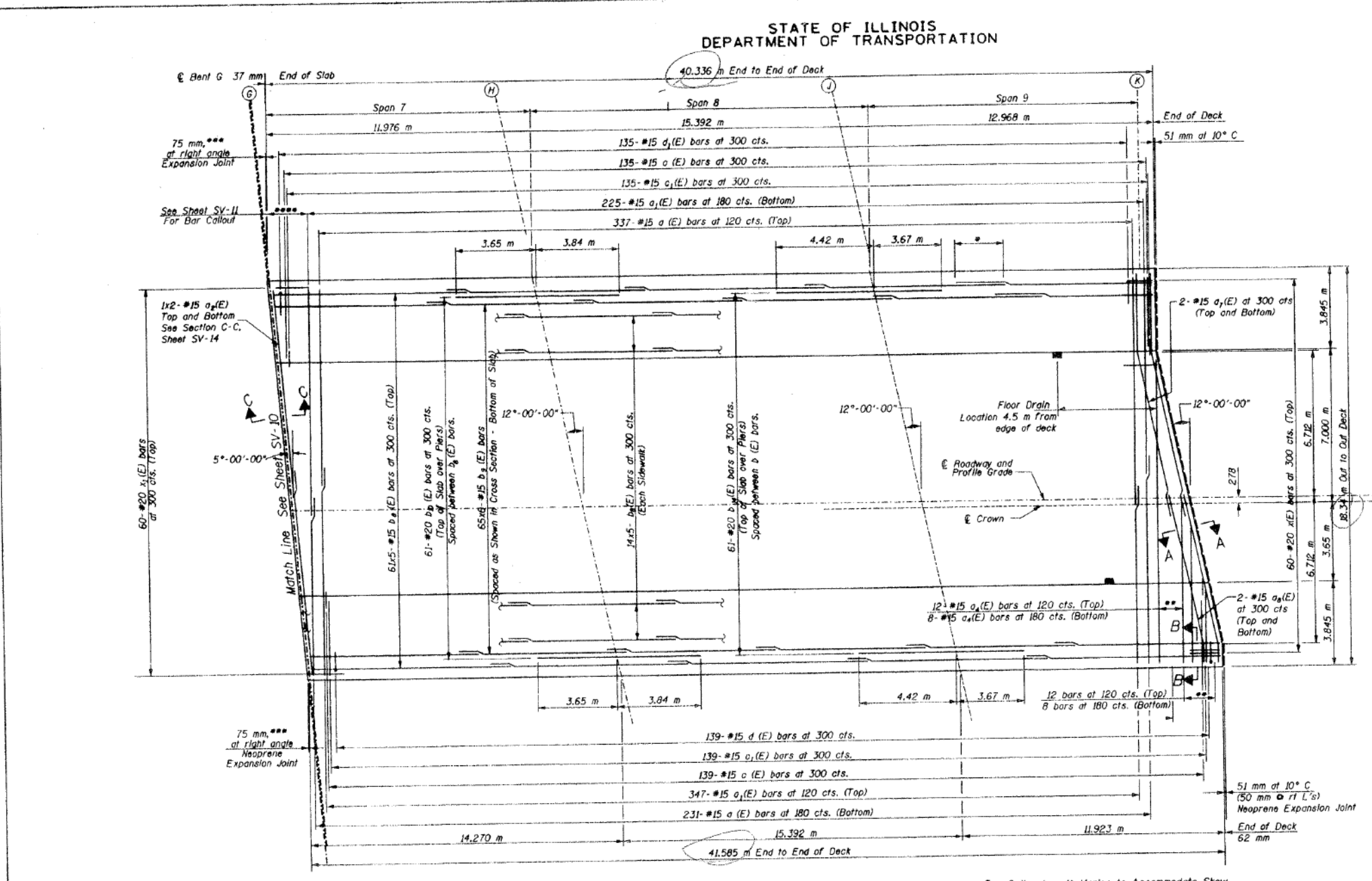
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90/94/290	2014-017B	COOK	442	280
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

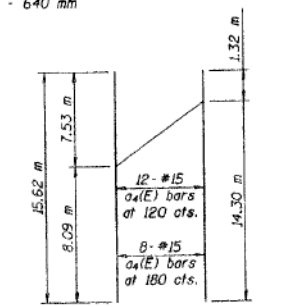
PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. SV - 12
1423	0101.2-1B-R	COOK	192	135
FACILITY NAME		SHEETS		SHEETS SV-48
ILLINOIS		FEDERAL PROJECT		

06 APR 1995 09:22:56

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Minimum Bar Lap:
#15 BARS - 640 mm



PLAN

- NOTES:**
- All dimensions are in millimeter (mm) except as noted.
 - See Sheet SV-14 for Sections A-A, B-B and C-C.
 - For additional bars along Bent J, see Sheet SV-24.
 - Cut reinforcement in field to clear floor drains.
- * Splice Length Varies to Accommodate Skew.
 ** Order a₁(E) bars full length. Cut by Cutting Diagram 3 and use remainder of bars in the east most portion of the slab.
 *** The 100 mm Expansion Joint only has a 75 mm gap between the adjacent spans deck edges.
 **** Use cut bars from adjacent Span 6.

DECK REINFORCEMENT PLAN
SPANS 7 TO 9
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055
EDWARDS AND KELCEY

DESIGNED	TK/EL
CHECKED	PL/AJN
DRAWN	SSD
CHECKED	EL

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USER NAME =	mkwilson	DESIGNED	WJC	REVISED	
		CHECKED	DL	REVISED	
PLOT SCALE =	0x2.0000 '1' / 'in.	DRAWN	RVV	REVISED	
PLOT DATE =	12/15/2016	CHECKED	WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

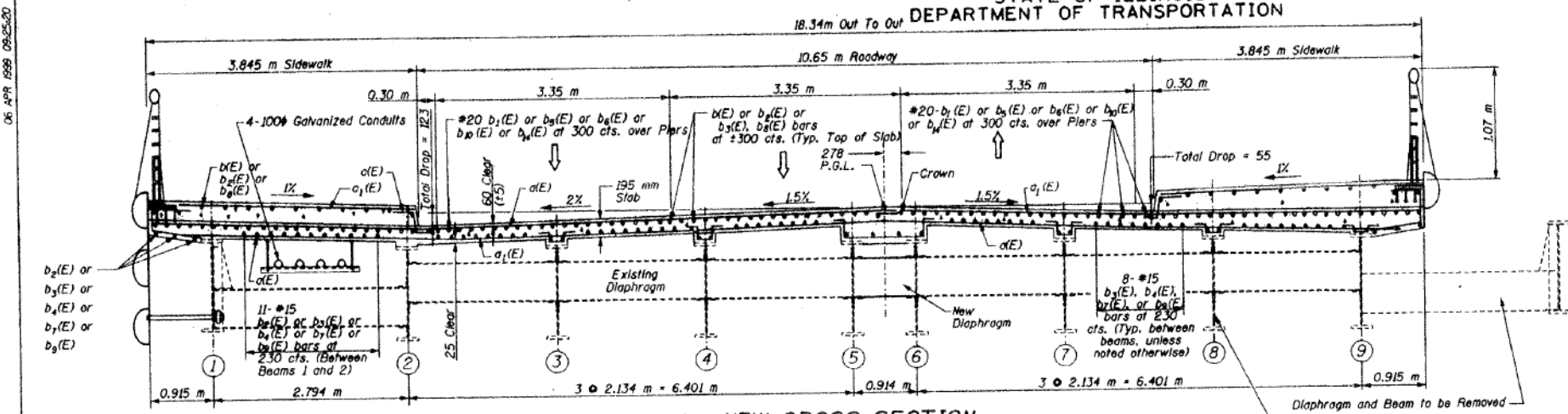
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F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	281
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ILLINOIS FED. AID PROJECT				

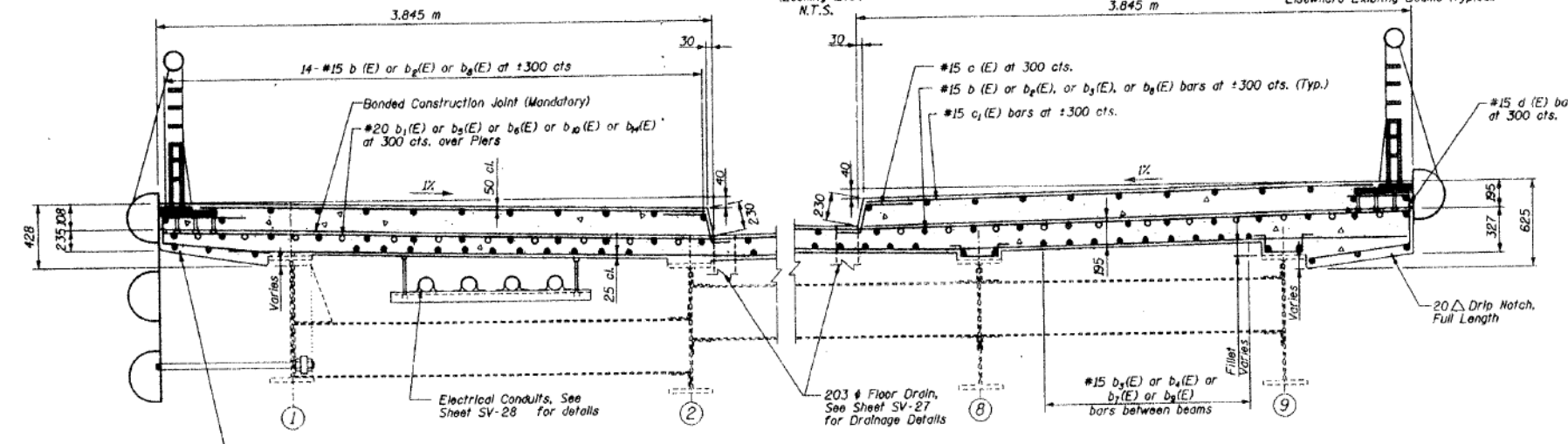
FOR INFORMATION ONLY

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-1B-R	COOK	192	136
SHEET NO. SV - 13				
SHEETS SV-48				

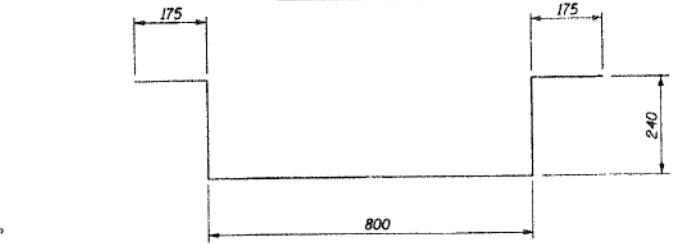
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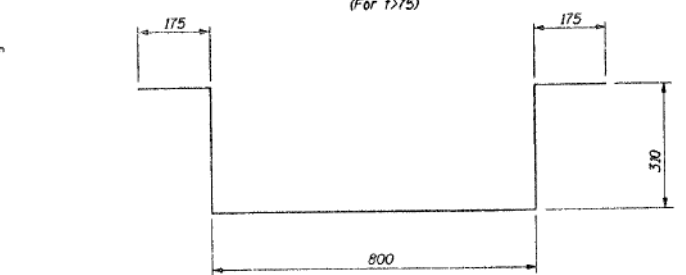
NEW CROSS SECTION
N.T.S.



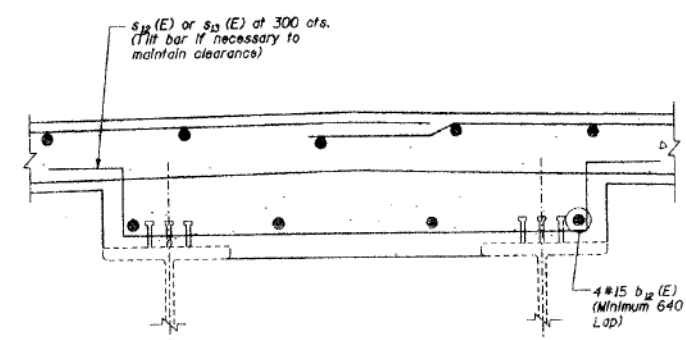
SIDEWALK SECTION
N.T.S.



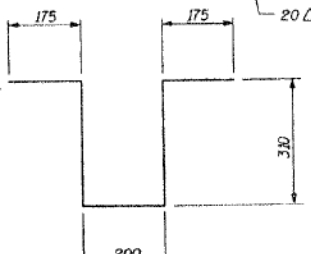
BAR S12 (E)
(For 1>175)



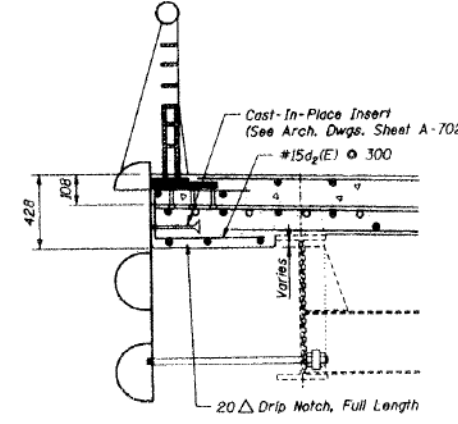
BAR S13 (E)
(For 1>150)



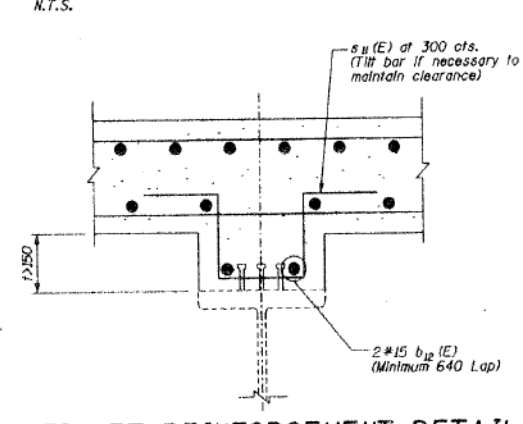
FILLET REINFORCEMENT DETAIL FOR BEAMS 5 and 6 (FULL LENGTH OF BRIDGE)
N.T.S.



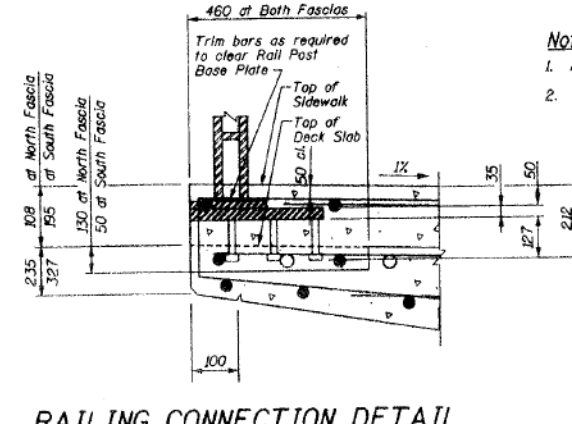
BAR S11 (E)
(For 1>150)



DETAIL AT SIGN-MOUNT LOCATIONS



FILLET REINFORCEMENT DETAIL
For additional details, see New Cross Section N.T.S.



RAILING CONNECTION DETAIL
N.T.S.

- Notes:**
- All dimensions are in millimeters (mm), except as noted.
 - Additional reinforcement is required for fillet heights in excess of 150 mm as shown in the Details. The S11(E) through S13(E) bars are detailed in the Bar List; however, the placement of the bars is not shown on the plans. The Contractor shall place the bars between rows of stud shear connectors in accordance with the details shown on this sheet. Bars S12(E) and S13(E) are for the fillets at beams 5 and 6 and shall be placed for the full length of the bridge.

DECK CROSS SECTION AND SIDEWALK DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED	EL
CHECKED	AJN
DRAWN	SSD
CHECKED	AJN/EL

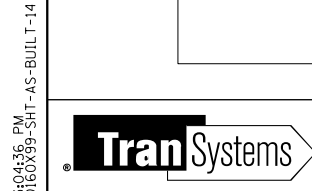
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	CHECKED	DL	REVISED
PLOT SCALE = 0x2.0000 '1' / 'in.	DRAWN	RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED	WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-14 OF AB-68 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	282
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				



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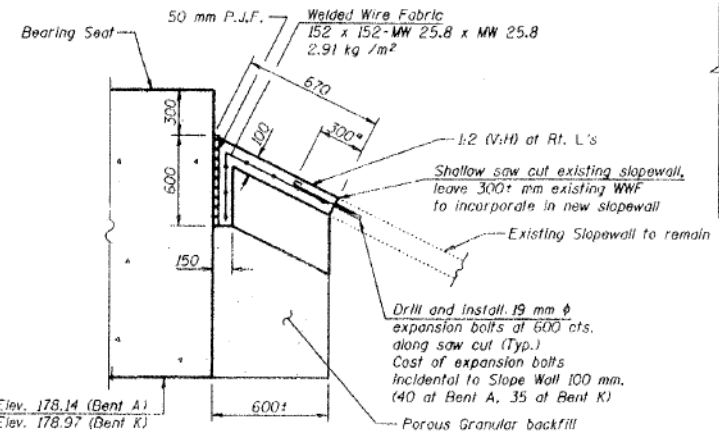
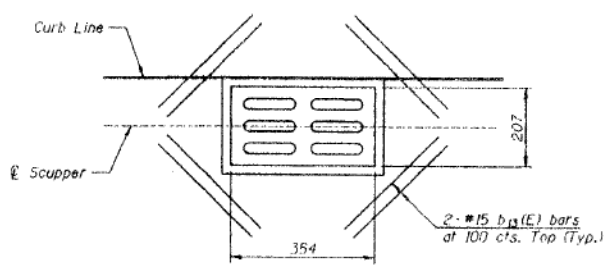
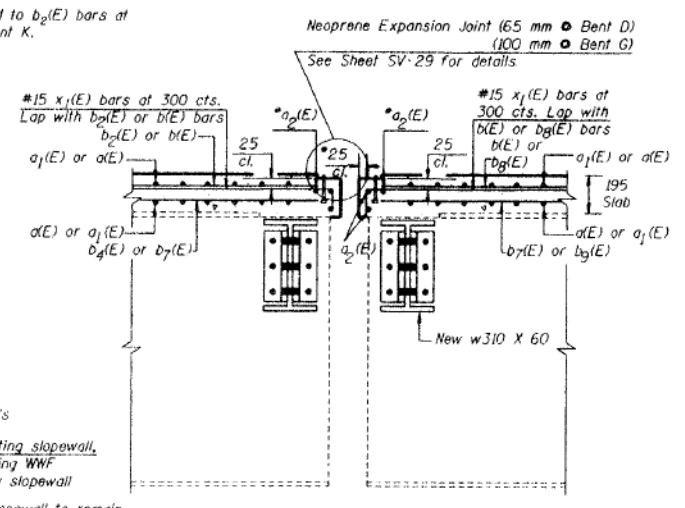
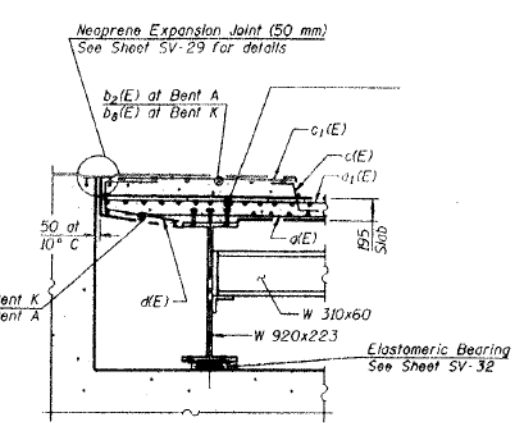
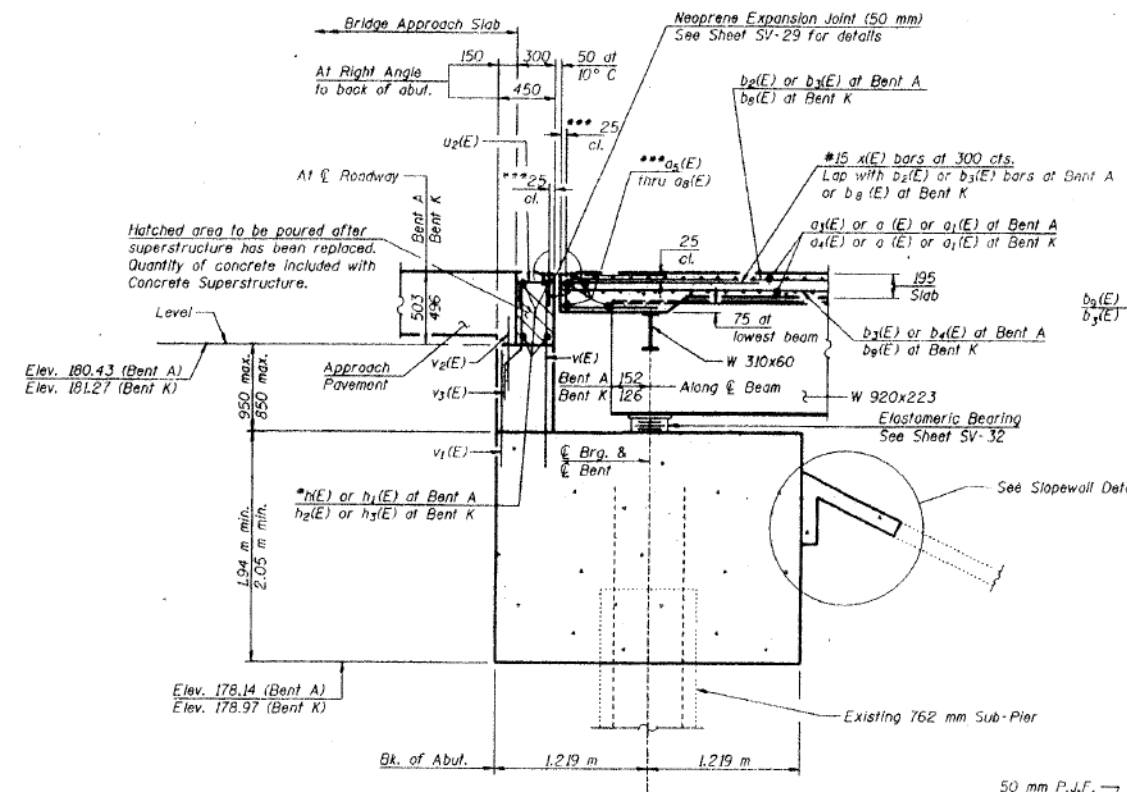
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
M23	0101.2-IB-A	COOK	192	137
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
a(E)	2122	#15	8.090	
a ₁ (E)	2126	#15	10.800	
a ₂ (E)	16	#15	9.800	
a ₃ (E)	67	#15	15.550	
a ₄ (E)	20	#15	15.620	
a ₅ (E)	4	#15	12.490	
a ₆ (E)	4	#15	9.700	
a ₇ (E)	4	#15	11.060	
a ₈ (E)	4	#15	8.270	
b(E)	712	#15	8.915	
b ₁ (E)	61	#20	8.260	
b ₂ (E)	473	#15	9.460	
b ₃ (E)	100	#15	12.560	
b ₄ (E)	390	#15	7.990	
b ₅ (E)	61	#20	9.330	
b ₆ (E)	122	#20	10.500	
b ₇ (E)	650	#15	7.260	
b ₈ (E)	445	#15	8.940	
b ₉ (E)	390	#15	7.560	
b ₁₀ (E)	61	#20	7.490	
b ₁₁ (E)	125	#15	9.640	
b ₁₂ (E)	64	#15	0.400	
b ₁₃ (E)	61	#20	8.090	
c(E)	1033	#15	0.730	
c ₁ (E)	1041	#15	3.740	
d(E)	541	#15	1.460	C
d ₁ (E)	496	#15	1.275	C
d ₂ (E)	14	#15	1.380	C
m(E)	96	#15	2.830	
m ₁ (E)	16	#15	3.760	
m ₂ (E)	96	#15	3.280	
m ₃ (E)	16	#15	4.410	
m ₄ (E)	8	#15	9.360	
m ₅ (E)	8	#15	11.170	
m ₆ (E)	16	#15	2.510	
m ₇ (E)	16	#15	2.870	
s ₄ (E)	130	#15	2.830	
s ₅ (E)	130	#15	2.730	
s ₆ (E)	148	#15	3.180	
s ₇ (E)	148	#15	3.060	
s ₈ (E)	1044	#15	1.170	
s ₉ (E)	47	#15	1.630	
s ₁₀ (E)	574	#15	1.770	
x(E)	120	#20	2.290	
x ₁ (E)	240	#20	1.650	
Reinforcement Bars, Epoxy Coated			kg	136,370
Concrete Superstructure			m ³	950.4

06 APR 1998 09:25:29



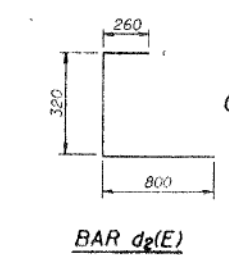
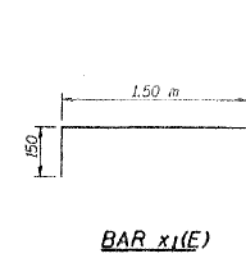
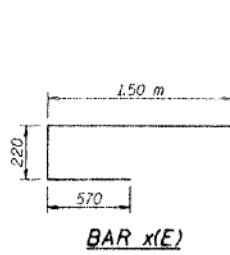
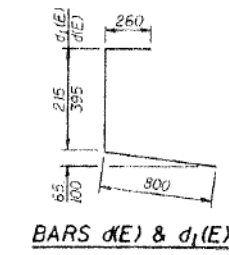
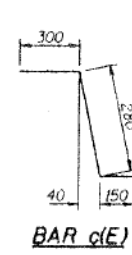
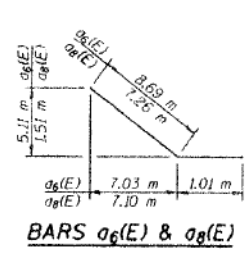
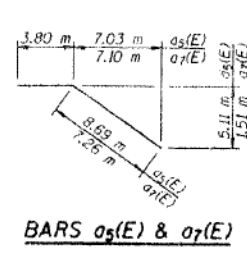
NOTES:

1. All dimensions are in millimeters (mm) except as noted.
2. **Estimated quantity-actual number to be determined in the field.
3. Reinforcement Bars designated (E) shall be epoxy coated.

DECK REINFORCEMENT DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-IB-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED TK/EL
CHECKED PL/AJN
DRAWN SSD
CHECKED EL



3:04:41 PM 0160X99-SHT-AS-BUILT-15



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PLOT SCALE = 0x2.0000 '1' / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-15 OF AB-68 SHEETS

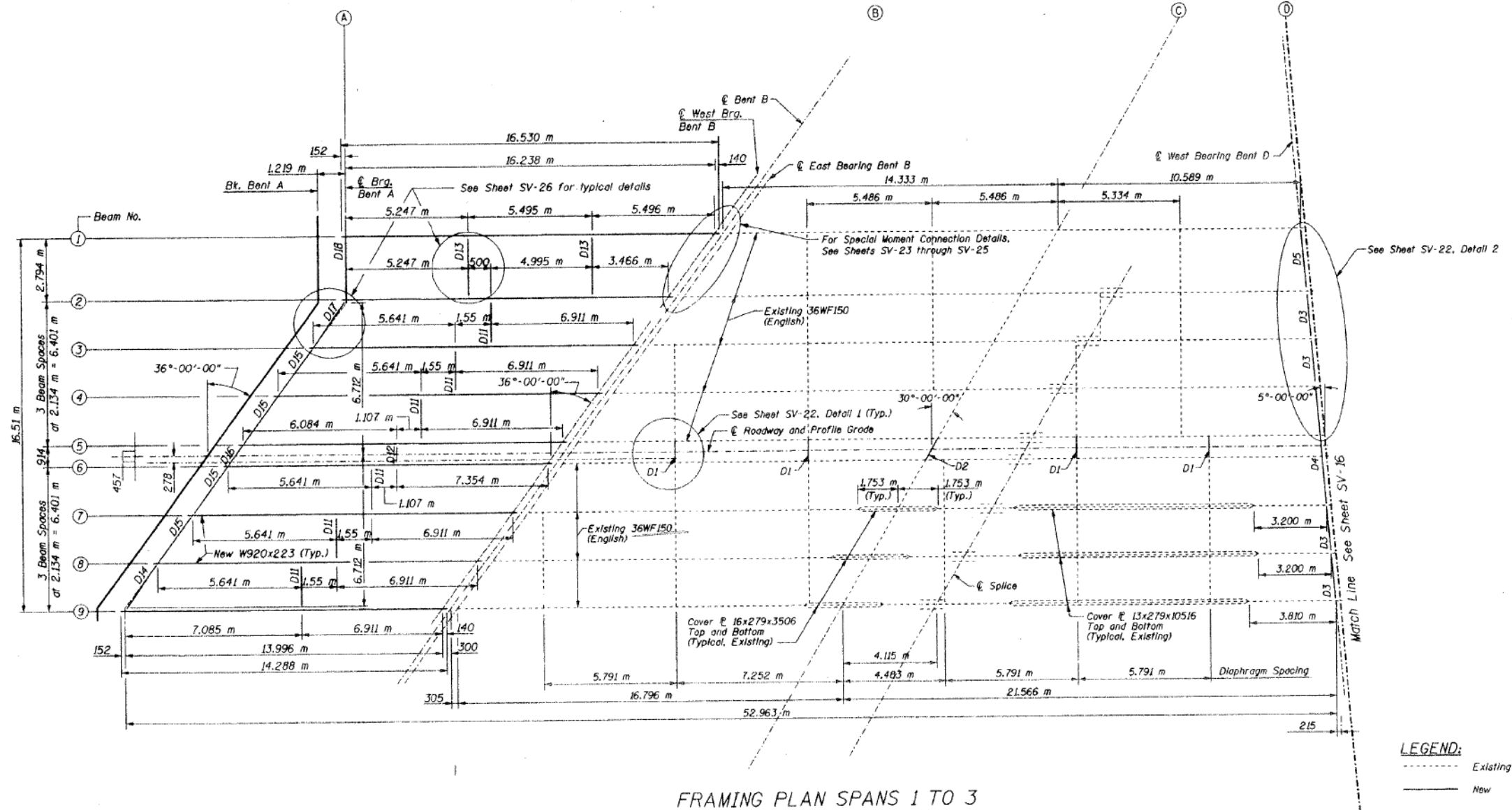
F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	283
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	011.2-1B-R	COOK	192	138
SHEET NO. SV - 15 SHEETS SV - 48				

06 APR 1999 08:25:17



FRAMING PLAN SPANS 1 TO 3

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
Bent A	180.781	180.651	180.621	180.591	180.561	180.561	180.531	180.501	180.501
Bent B West	181.226	181.034	180.982	180.930	180.884	180.866	180.823	180.771	180.747
Bent B East	181.227	181.035	180.983	180.931	180.885	180.864	180.821	180.769	180.745
Bent C	181.800	181.617	181.565	181.516	181.468	181.446	181.408	181.344	181.307
Bent D West	182.210	182.106	182.113	182.122	182.131	182.131	182.137	182.146	182.152

DESIGNED	EL/TK
CHECKED	AJN/PL
DRAWN	SSD
CHECKED	AJN/PL

NOTES:

- All dimensions are in millimeters (mm) unless otherwise noted.
- See Sheets SV-18 and SV-19 for Beam Elevations and Details and Sheets SV-22 through SV-25 for Diaphragm Details.
- All ends of top cover plates and channel shear connectors shall be inspected, by the Engineer, for cracks when the deck is removed. If any cracks are found, the Bureau of Bridges and Structures shall be contacted for further disposition.
- Top of Beam Elevations for the existing steel include cover plate thicknesses and are equal to existing top of Beam Elevations.
- Remove existing Sole Plates and grind existing welds smooth to base metal.

FRAMING PLAN-SPANS 1 TO 3
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

9 I 6' + 3' = 9'

~~180.561~~ (512 + 10') (9) = 41,472 sq ft

7,605 sq ft x 0.10 = 836.6 sq ft

3:04:45 PM 0160X99-SHT-AS-BUILT-16



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	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1" / in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-16 OF AB-68 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	284
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

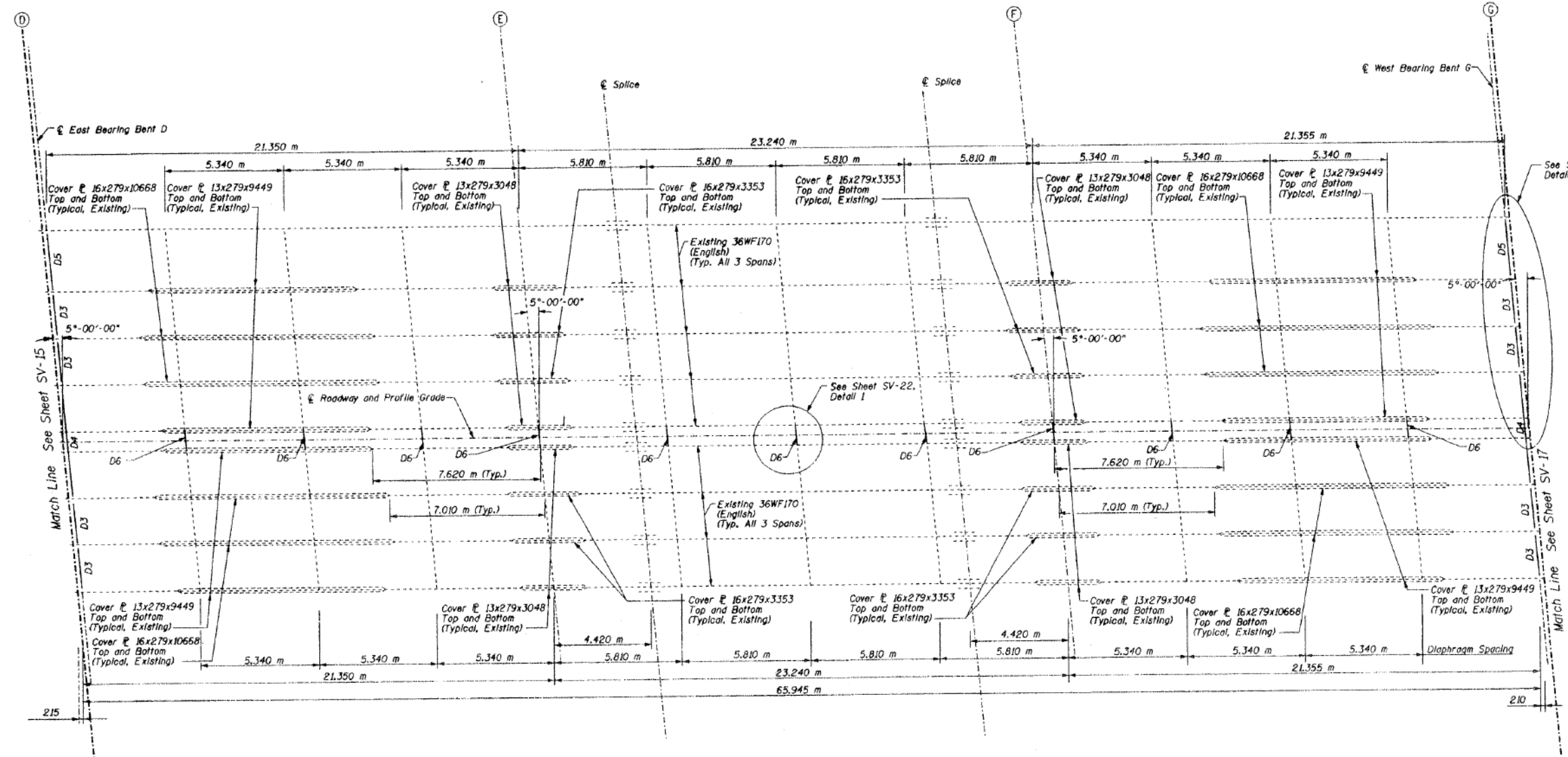
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
1423	0101.2-1B-R	COOK	192	139
SHEET NO. SV - 16 SHEETS SV-48				

06 APR 1999 09:26:37

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FRAMING PLAN SPANS 4 TO 6

LEGEND:
 - - - - - Existing
 _____ New

- NOTES:**
- All dimensions are in millimeters (mm) unless otherwise noted.
 - Work sheet with sheets SV-18 and SV-22.

DESIGNED EL	
CHECKED	AJN
DRAWN	SSD
CHECKED	AJN

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
Bent D East	182.218	182.114	182.121	182.130	182.139	182.139	182.145	182.154	182.160
Bent E	182.976	182.873	182.879	182.879	182.885	182.885	182.891	182.898	182.900
Bent F	183.268	183.159	183.166	182.879	183.159	183.159	183.166	183.166	183.159
Bent G West	183.038	182.916	182.916	183.166	182.901	182.901	182.901	182.889	182.889

FRAMING PLAN-SPANS 4 TO 6
 VAN BUREN STREET (F.A.U. 1423)
 OVER I-90/94 KENNEDY EXPRESSWAY
 SECTION 0101.2-1B-R
 COOK COUNTY
 STA. 1+344.10
 STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

3:04:50 PM 01/06/2016 59-SHT-AS-BUILT-17



USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
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PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-17 OF AB-68 SHEETS

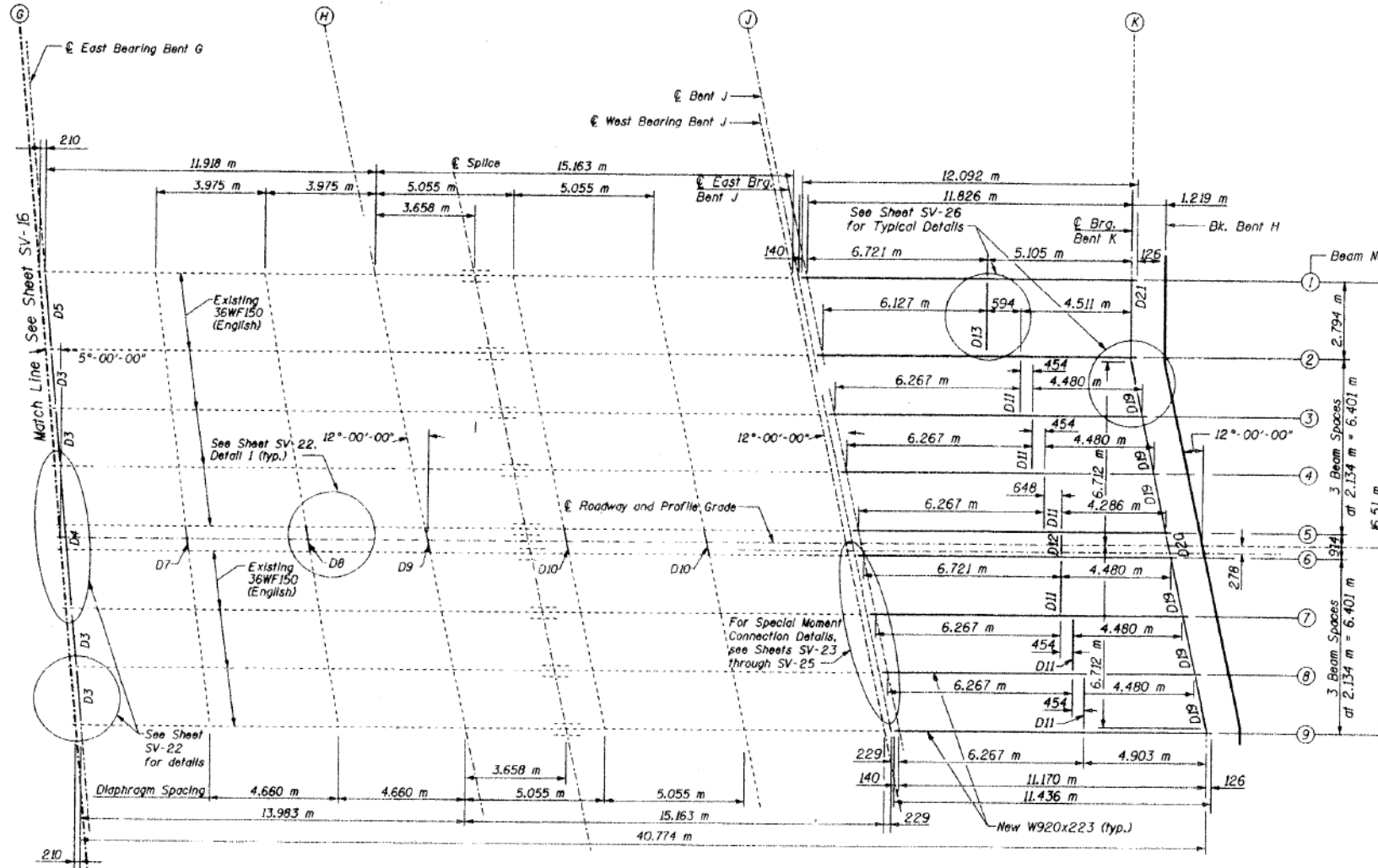
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	285
CONTRACT NO. 60X99				

ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	DATE	SHEET NO.
1423	0101.2-1B-R	COOK	192	140
SHEET NO. SV - 17				
SHEETS SV-48				



FRAMING PLAN SPANS 7 TO 9

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
Bent G East	183.030	182.908	182.908	182.899	182.893	182.893	182.893	182.881	182.881
Bent H	182.720	182.580	182.565	182.550	182.528	182.528	182.510	182.495	182.480
Bent J West	182.135	181.995	181.976	181.958	181.934	183.934	181.912	181.894	181.879
Bent J East	182.137	181.916	181.975	181.957	181.936	181.936	181.914	181.896	182.878
Bent K	181.651	181.541	181.521	181.501	181.481	181.481	181.461	181.441	181.421

DESIGNED	EL/TK
CHECKED	AJN/PL
DRAWN	SSD
CHECKED	AJN/PL

Item	Size	Number Required	Connection Detail
D1	W410x53	4	Detail 1, Sheet SV-22
D2	W410x53	1	Detail 1, Sheet SV-22
D3	W310x60	16	Detail 2, Sheet SV-22
D4	W310x60	4	Detail 2, Sheet SV-22
D5	W410x53	4	Detail 1, Sheet SV-22
D6	W410x53	11	Detail 1, Sheet SV-22
D7	W410x53	1	Detail 1, Sheet SV-22
D8	W410x53	1	Detail 1, Sheet SV-22
D9	W410x53	1	Detail 1, Sheet SV-22
D10	W410x53	2	Detail 1, Sheet SV-22
D11	W410x53	12	Int. Diaph. Det. Sheet SV-26
D12	W410x53	2	Int. Diaph. Det. Sheet SV-26
D13	W310x60	3	Int. Diaph. Det. Sheet SV-26
D14	W310x60	1	End Diaph. Det. Sheet SV-26
D15	W310x60	4	End Diaph. Det. Sheet SV-26
D16	W310x60	1	End Diaph. Det. Sheet SV-26
D17	W310x60	1	End Diaph. Det. Sheet SV-26
D18	W310x60	1	End Diaph. Det. Sheet SV-26
D19	W310x60	6	End Diaph. Det. Sheet SV-26
D20	W310x60	1	End Diaph. Det. Sheet SV-26
D21	W310x60	1	End Diaph. Det. Sheet SV-26

FRAMING PLAN-SPANS 7 TO 9
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

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	CHECKED DL	REVISED
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PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-18 OF AB-68 SHEETS

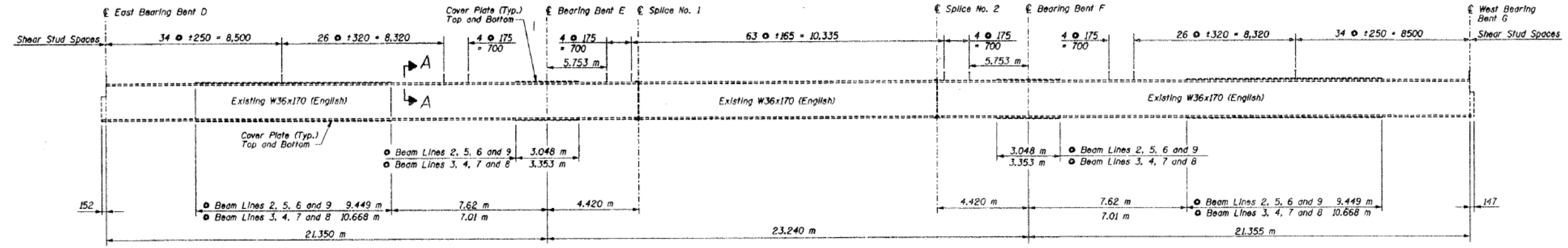
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	286
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

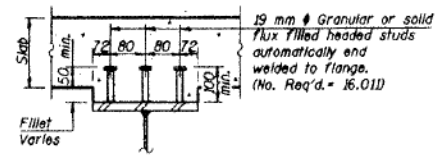
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	0101.2-1B-R	COOK	192	141
DESIGNED BY	CHECKED BY	DRAWN BY	DATE	

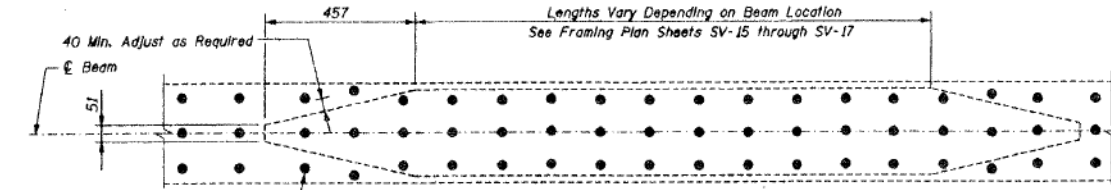
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TYPICAL CENTER SPAN BEAM ELEVATION (SPANS 4 TO 6)
Beam Lines 1 Through 9



SECTION A-A



EXISTING COVER PLATE DETAIL

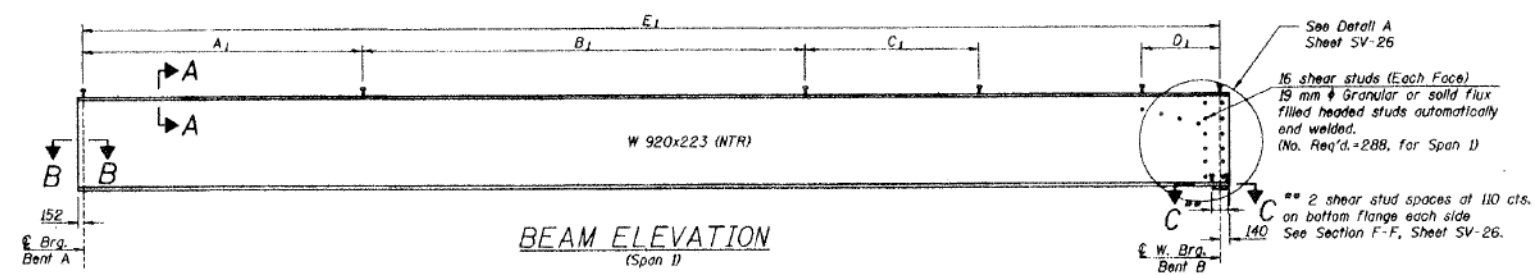


TABLE - SPAN 1

Beam No.	A ₁	B ₁	C ₁	D ₁	E ₁
1	22 Spa. at 155	52 Spa. at 200	7 Spa. at 100	11 Spa. at 100	16.238 m
2	18 Spa. at 155	45 Spa. at 200	7 Spa. at 100	11 Spa. at 100	14.209 m
3 thru 8	18 Spa. at 155	45 Spa. at 200	7 Spa. at 100	11 Spa. at 100	14.102 m
9	18 Spa. at 155	45 Spa. at 200	7 Spa. at 100	11 Spa. at 100	13.996 m

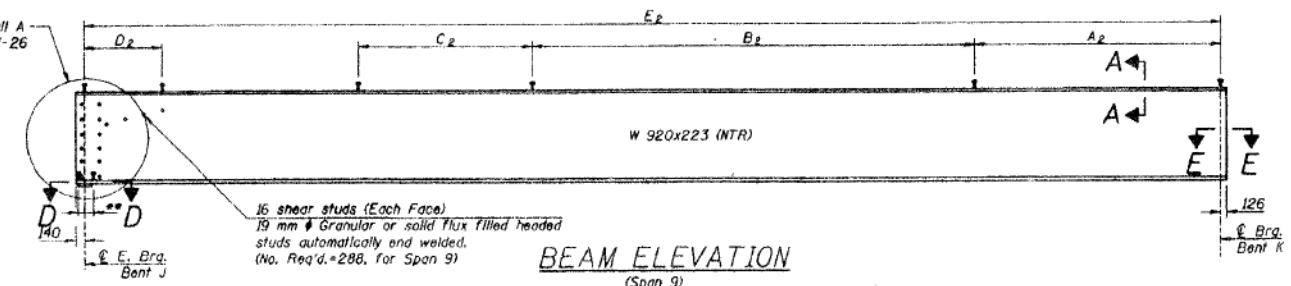


TABLE - SPAN 9

Beam No.	A ₂	B ₂	C ₂	D ₂	E ₂
1	18 Spa. at 160	29 Spa. at 220	7 Spa. at 100	11 Spa. at 100	11.826 m
2	17 Spa. at 160	27 Spa. at 220	7 Spa. at 100	11 Spa. at 100	11.232 m
3 thru 8	17 Spa. at 160	27 Spa. at 220	7 Spa. at 100	11 Spa. at 100	11.201 m
9	17 Spa. at 160	27 Spa. at 220	7 Spa. at 100	11 Spa. at 100	11.170 m

NOTES:

- All dimensions are in millimeters (mm) unless otherwise noted.
- NTR denotes members to which notch toughness requirements are applicable.
- For splice details, see Sheets SV-23 through SV-26.
- For sections B-B thru E-E, see Sheet SV-26

BEAM ELEVATION AND DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED	EL/TK
CHECKED	AJN/PL
DRAWN	SSD
CHECKED	EL

USER NAME =	mkwilson	DESIGNED	WJC	REVISED	
		CHECKED	DL	REVISED	
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PLOT DATE =	12/15/2016	CHECKED	WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-19 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	287
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60X99	

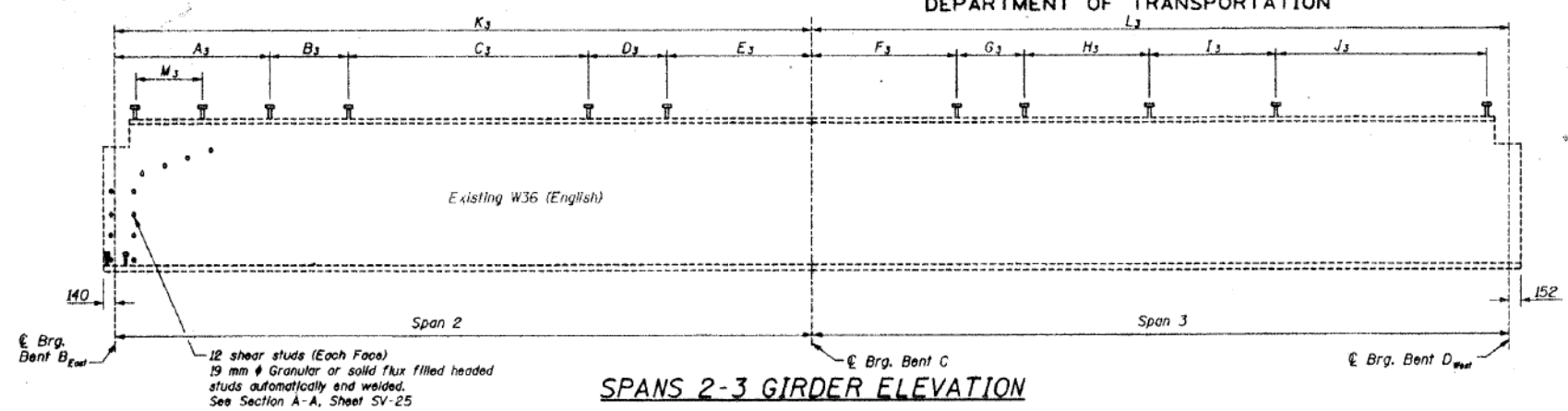
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FOR INFORMATION ONLY

PROJECT NO.	SECTION	COUNTY	DATE	SHEET NO.
1423	01012-1B-R	COOK	192	142
SHEET NO. SV - 19				
SHEETS SV-48				

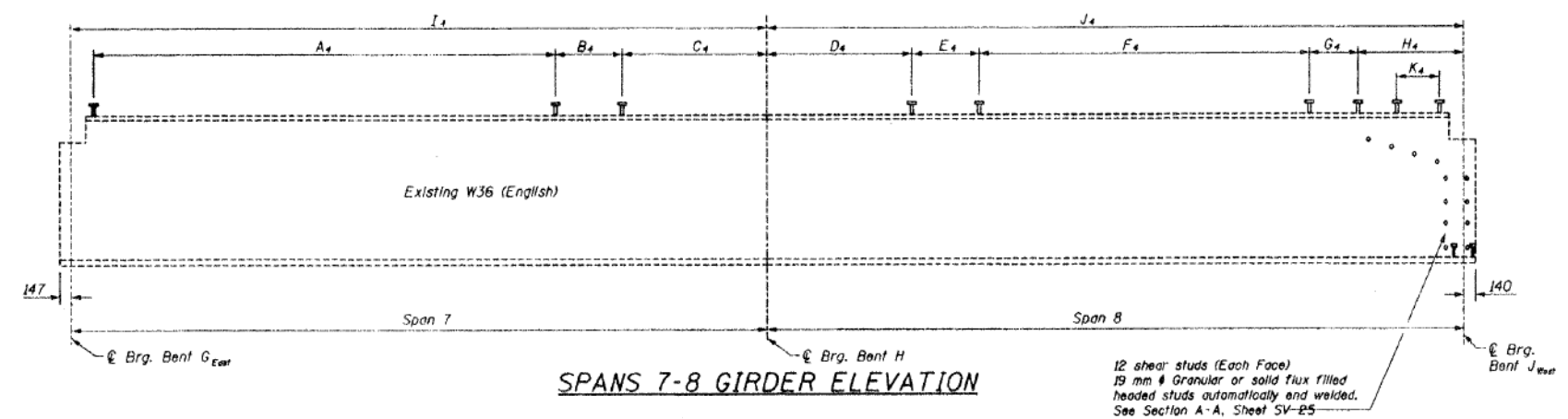
06 APR 1999 08:30:51



SPANS 2-3 GIRDER ELEVATION

TABLE - SPANS 2-3

Beam	M ₃	A ₃	B ₃	C ₃	D ₃	E ₃	F ₃	G ₃	H ₃	I ₃	J ₃	K ₃	L ₃
Girder 1	11 Spa. at 100	2.153 m	4 Spa. at 150	42 Spa. at 210	4 Spa. at 150	2.160 m	1.460 m	4 Spa. at 150		46 Spa. at 180		14.333 m	10.589 m
Girder 2	11 Spa. at 100	2.379 m	4 Spa. at 150	42 Spa. at 210	4 Spa. at 150	2.350 m	1.970 m	4 Spa. at 150		47 Spa. at 205		14.750 m	12.446 m
Girder 3	11 Spa. at 100	2.553 m	4 Spa. at 150	43 Spa. at 205	4 Spa. at 150	2.500 m	2.220 m	4 Spa. at 150		48 Spa. at 225		15.068 m	13.066 m
Girder 4	11 Spa. at 100	2.736 m	4 Spa. at 150	44 Spa. at 200	4 Spa. at 150	2.650 m	2.400 m	4 Spa. at 150	19 Spa. at 200	17 Spa. at 260	19 Spa. at 200	15.387 m	15.283 m
Girder 5	11 Spa. at 100	2.905 m	4 Spa. at 150	44 Spa. at 200	4 Spa. at 150	2.800 m	2.780 m	4 Spa. at 150	21 Spa. at 200	17 Spa. at 275	21 Spa. at 200	15.705 m	16.702 m
Girder 6	11 Spa. at 100	2.982 m	4 Spa. at 150	44 Spa. at 200	4 Spa. at 150	2.860 m	2.800 m	4 Spa. at 150	21 Spa. at 200	17 Spa. at 310	21 Spa. at 200	15.841 m	17.310 m
Girder 7	11 Spa. at 100	3.160 m	4 Spa. at 150	44 Spa. at 200	4 Spa. at 150	3.000 m	3.180 m	4 Spa. at 150	23 Spa. at 205	17 Spa. at 310	23 Spa. at 205	16.159 m	18.729 m
Girder 8	11 Spa. at 100	3.128 m	4 Spa. at 150	45 Spa. at 200	4 Spa. at 150	3.150 m	3.460 m	4 Spa. at 150	24 Spa. at 210	18 Spa. at 320	24 Spa. at 210	16.478 m	20.146 m
Girder 9	11 Spa. at 100	3.097 m	4 Spa. at 150	46 Spa. at 200	4 Spa. at 150	3.300 m	3.720 m	4 Spa. at 150	26 Spa. at 210	19 Spa. at 320	26 Spa. at 210	16.796 m	21.566 m



SPANS 7-8 GIRDER ELEVATION

TABLE - SPANS 7-8

Beam	A ₄	B ₄	C ₄	D ₄	E ₄	F ₄	G ₄	H ₄	I ₄	J ₄	K ₄
Girder 1	42 Spa. at 230	4 Spa. at 150	1.410 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	11.917 m	15.163 m	11 Spa. at 100
Girder 2	43 Spa. at 230	4 Spa. at 150	1.530 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	12.267 m	15.163 m	11 Spa. at 100
Girder 3	44 Spa. at 230	4 Spa. at 150	1.560 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	12.534 m	15.163 m	11 Spa. at 100
Girder 4	45 Spa. at 230	4 Spa. at 150	1.600 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	12.801 m	15.163 m	11 Spa. at 100
Girder 5	46 Spa. at 230	4 Spa. at 150	1.640 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	13.068 m	15.163 m	11 Spa. at 100
Girder 6	46 Spa. at 230	4 Spa. at 150	1.750 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	13.182 m	15.163 m	11 Spa. at 100
Girder 7	47 Spa. at 230	4 Spa. at 150	1.790 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	13.449 m	15.163 m	11 Spa. at 100
Girder 8	48 Spa. at 230	4 Spa. at 150	1.820 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	13.716 m	15.163 m	11 Spa. at 100
Girder 9	49 Spa. at 230	4 Spa. at 150	1.860 m	2.433 m	4 Spa. at 150	44 Spa. at 210	4 Spa. at 150	2.291 m	13.983 m	15.163 m	11 Spa. at 100

- NOTES:
- See Sheet SV-25 for Special Framing Details at Bents B and J.
 - All dimensions are in millimeters (mm) unless otherwise noted.

DESIGNED EL.	
CHECKED JDB	
DRAWN TEH	
CHECKED EL.	

BEAM ELEVATION AND DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

3:05:03 PM
D:\60X99-SHT-AS-BUILT-20



USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1' / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-20 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	288
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROJECT NO.	1423	SHEET NO.	SV - 20	DATE	192	DRAWN BY	COOK	CHECKED BY	EL
SECTION		2014-017B		COUNTY		COOK		SHEETS SV-48	

SPANS 7 - 9 (WORST CASE BEAM - LINE 8)

	0.4 Span 7	Bent H	0.5 Span 8	Bent J	0.6 Span 9
I_s (10^6 mm^4)	3762	3762	3762	3762	3762
I_c (n) (10^6 mm^4)	9333		9333		9333
I_c (3n) (10^6 mm^4)	6618		6618		6618
S_s (10^3 mm^3)	8259	8259	8259	8259	8259
S_c (n) (10^3 mm^3)	12051		12051		12051
S_c (3n) (10^3 mm^3)	10676		10676		10676
Z (10^3 mm^3)	9521	9521	9521	9521	9521
Q (kN/m)	12.48	22.84	12.48	22.84	12.48
M_p (kN-m)	179	474	116	370	193
S_p (kN/m)	10.36		10.36		10.36
M_{S_p} (kN-m)	162		119		90
M_t (kN-m)	409	212	383	202	264
$M[\text{Imp}]$ (kN-m)	119	61	111	58	79
S_3 ($M_t + M[\text{Imp}]$) (kN-m)	880	455	823	433	572
M_a (kN-m)	1587	1208	1375	1044	1112
M_u (kN-m)	2166	2166	2166	2166	2166
f_{s_p} (Non-comp) (MPa)	22	57	14	45	23
f_{s_p} (Comp) (MPa)	15		11		8
$F_s S_3$ ($\frac{1}{2} + \text{Imp}$) (MPa)	73	55	68	52	48
f_s (Overload) (MPa)	110	112	93	97	79
f_s (Total) (MPa)	143	146	121	126	103
VR (kN)	223		238		216

SPANS 4 - 6 (TYPICAL FOR ALL BEAMS)

	0.4 Span 4*	Bent E or F*	0.5 Span 5
I_s (10^6 mm^4)	5910	5910	4370
I_c (n) (10^6 mm^4)	13754		11404
I_c (3n) (10^6 mm^4)	9946		8178
S_s (10^3 mm^3)	12518	12518	9504
S_c (n) (10^3 mm^3)	17288		14035
S_c (3n) (10^3 mm^3)	15551		12542
Z (10^3 mm^3)	14124	14124	10948
Q (kN/m)	12.77	23.13	12.77
M_p (kN-m)	448	1072	234
S_p (kN/m)	10.36		10.36
M_{S_p} (kN-m)	390		254
M_t (kN-m)	755	413	678
$M[\text{Imp}]$ (kN-m)	196	107	170
S_3 ($M_t + M[\text{Imp}]$) (kN-m)	1585	867	1414
M_a (kN-m)	3150	2521	2473
M_u (kN-m)	3214	3214	2491
f_{s_p} (Non-comp) (MPa)	36	86	25
f_{s_p} (Comp) (MPa)	25		20
$F_s S_3$ ($\frac{1}{2} + \text{Imp}$) (MPa)	92	69	101
f_s (Overload) (MPa)	153	155	146
f_s (Total) (MPa)	199	202	190
VR (kN)	241		252

* These beam locations have cover plates.

	Bent G east	Bent H	Bent J	Bent K
R_p (kN)	104	343	245	100
R_t (kN)	158	188	186	142
Imp. (kN)	46	44	45	43
R (Total) (kN)	308	575	476	285

	Bent D east, G west	Bent E, F
R_p (kN)	169	489
R_t (kN)	175	227
Imp. (kN)	46	41
R (Total) (kN)	390	757

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (total and overload).

I_c (n) and S_c (n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

I_c (3n) and S_c (3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed Dead Loads (See AASHTO 10.38).

VR is the maximum Live Load + Impact shear range in span.

Z is the plastic section modulus used to determine M_u in negative bending areas.

M_a (Applied Moment) = $1.3[M_p + M_{S_p} + S_3(M_t + M[\text{Imp}])]$

M_u (Plastic Moment Capacity) is computed according to AASHTO 10.48.1 and 10.50.1.1.

f_s (Total) is the sum of the stresses due to $1.3[M_p + M_{S_p} + S_3(M_t + M[\text{Imp}])]$.

f_s (Overload) is the sum of the stresses due to $[M_p + M_{S_p} + S_3(M_t + M[\text{Imp}])]$.

SPANS 1 - 3 (WORST CASE BEAM - LINE 8)

	0.4 Span 1	Bent B	0.5 Span 2	Bent C*	0.6 Span 3*
I_s (10^6 mm^4)	3762	3762	3762	5275	5275
I_c (n) (10^6 mm^4)	9333		9333		11493
I_c (3n) (10^6 mm^4)	6618		6618		8294
S_s (10^3 mm^3)	8259	8259	8259	11272	11272
S_c (n) (10^3 mm^3)	12051		12051		15247
S_c (3n) (10^3 mm^3)	10676		10676		13654
Z (10^3 mm^3)	9521	9521	9521	12671	12671
Q (kN/m)	12.48	22.84	12.48	22.84	12.48
M_p (kN-m)	306	440	59	824	418
S_p (kN/m)	10.36		10.36		10.36
M_{S_p} (kN-m)	183		85		367
M_t (kN-m)	427	229	429	321	666
$M[\text{Imp}]$ (kN-m)	124	66	120	90	173
S_3 ($M_t + M[\text{Imp}]$) (kN-m)	918	492	915	685	1398
M_a (kN-m)	1829	1212	1378	1962	2838
M_u (kN-m)	2166	2166	2166	2883	2883
f_{s_p} (Non-comp) (MPa)	37	53	7	73	37
f_{s_p} (Comp) (MPa)	17		8		27
$F_s S_3$ ($\frac{1}{2} + \text{Imp}$) (MPa)	76	60	86	61	92
f_s (Overload) (MPa)	130	113	101	134	156
f_s (Total) (MPa)	169	147	131	174	203
VR (kN)	228		249		236

* These beam locations have cover plates.

DESIGNED	EL
CHECKED	AJN
DRAWN	MJD
CHECKED	EL

	Bent A	Bent B	Bent C	Bent D west
R_p (kN)	132	274	437	160
R_t (kN)	159	190	201	173
Imp. (kN)	46	42	40	45
R (Total) (kN)	337	506	678	378

BEAM MOMENT AND REACTION TABLES
YAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROJECT NO. 1423	SECTION 01012-IB-R	SHEET NO. 192	SHEET TOTAL 144	SHEET NO. SV - 21 SHEETS SV-48
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SPANS 7 - 9 (LEAST WORST CASE BEAM - LINE 2)

	0.4 Span 7	Bent H	0.5 Span 8	Bent J	0.6 Span 9
I_s (10^6 mm^4)	3762	3762	3762	3762	3762
$I_c (n)$ (10^6 mm^4)	9333		9333		9333
$I_c (3n)$ (10^6 mm^4)	6618		6618		6618
S_s (10^3 mm^3)	8259	8259	8259	8259	8259
$S_c (n)$ (10^3 mm^3)	12051		12051		12051
$S_c (3n)$ (10^3 mm^3)	10676		10676		10676
Z (10^3 mm^3)	9521	9521	9521	9521	9521
Q (kN/m)	12.48	22.84	12.48	22.84	12.48
M_p (kN-m)	129	419	128	376	193
S_p (kN/m)	10.36		10.36		91
M_{s_p} (kN-m)	117		131		288
M_L (kN-m)	348	196	365	180	288
M_{Imp} (kN-m)	104	59	106	52	86
$S_3 [M_L + M_{Imp}]$ (kN-m)	753	425	785	387	623
M_a (kN-m)	1299	1097	1357	992	1179
M_u (kN-m)	2166	2166	2166	2166	2166
f_{s_p} (Non-comp) (MPa)	15	51	16	46	23
f_{s_p} (Comp) (MPa)	11		12		9
$f_{s_3} (k + Imp)$ (MPa)	63	52	65	47	52
f_s (Overload) (MPa)	90	103	93	93	84
f_s (Total) (MPa)	117	134	121	121	109
VR (kN)	218		232		210

SPANS 1 - 3 (LEAST WORST CASE BEAM - LINE 2)

	0.4 Span 1	Bent B	0.5 Span 2	Bent C	0.6 Span 3
I_s (10^6 mm^4)	3762	3762	3762	3762	3762
$I_c (n)$ (10^6 mm^4)	9333		9333		9333
$I_c (3n)$ (10^6 mm^4)	6618		6618		6618
S_s (10^3 mm^3)	8259	8259	8259	8259	8259
$S_c (n)$ (10^3 mm^3)	12051		12051		12051
$S_c (3n)$ (10^3 mm^3)	10676		10676		10676
Z (10^3 mm^3)	9521	9521	9521	9521	9521
Q (kN/m)	12.48	22.84	12.48	22.84	12.48
M_p (kN-m)	324	475	91	380	144
S_p (kN/m)	10.36		10.36		10.36
M_{s_p} (kN-m)	179		102		129
M_L (kN-m)	423	210	360	191	353
M_{Imp} (kN-m)	122	61	105	56	105
$S_3 [M_L + M_{Imp}]$ (kN-m)	908	452	775	412	763
M_a (kN-m)	1834	1205	1258	1030	1347
M_u (kN-m)	2166	2166	2166	2166	2166
f_{s_p} (Non-comp) (MPa)	39	58	11	46	17
f_{s_p} (Comp) (MPa)	17		10		12
$f_{s_3} (k + Imp)$ (MPa)	75	54	64	50	63
f_s (Overload) (MPa)	131	112	85	96	92
f_s (Total) (MPa)	170	146	111	190	120
VR (kN)	225		239		217

	Bent G east	Bent H	Bent J	Bent K
R_p (kN)	86	325	247	99
R_L (kN)	151	187	184	145
$Imp.$ (kN)	45	43	44	44
R (Total) (kN)	282	555	475	288

	Bent A	Bent B	Bent C	Bent D west
R_p (kN)	132	278	318	90
R_L (kN)	158	188	187	152
$Imp.$ (kN)	46	43	43	46
R (Total) (kN)	336	509	548	288

I_s and S_s are the moment of Inertia and section modulus of the steel section used in computing f_s (total and overload).

$I_c (n)$ and $S_c (n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

$I_c (3n)$ and $S_c (3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed Dead Loads (See AASHTO 10.38).

VR is the maximum Live Load + Impact shear range in span.

Z is the plastic section modulus used to determine M_u in negative bending areas.

M_a (Applied Moment) = $1.3[M_p + M_{s_p} + S_3(M_L + M_{Imp})]$

M_u (Plastic Moment Capacity) is computed according to AASHTO 10.48.1 and 10.50.1.1.

f_s (Total) is the sum of the stresses due to $1.3[M_p + M_{s_p} + S_3(M_L + M_{Imp})]$.

f_s (Overload) is the sum of the stresses due to $[M_p + M_{s_p} + S_3(M_L + M_{Imp})]$.

DESIGNED	EL
CHECKED	AJN
DRAWN	MJO
CHECKED	EL

	E. Brg. G	H	W. Brg. J	E. Brg. J	K
R_p (kN)	161.9	516.9	201.8	199.5	160.2
R_L (kN)	340.7	404.4	201.7	201.7	325.3
$Imp.$ (kN)	102.2	121.3	60.5	60.5	97.6
R (Total) (kN)	604.8	1042.7	464.1	461.7	583.0

	A	W. Brg. B	E. Brg. B	C	W. Brg. D
R_p (kN)	226.7	252.7	214.5	689.8	265.4
R_L (kN)	353.3	209.0	209.0	449.8	374.5
$Imp.$ (kN)	106.0	62.7	62.7	134.9	112.4
R (Total) (kN)	685.9	524.4	486.2	1274.5	752.3

	0.4 Sp. 1	0.6 Sp. 9
I_s (10^6 mm^4)	3763	3763
$I_c (n)$ (10^6 mm^4)	9299	9299
$I_c (3n)$ (10^6 mm^4)	6868	6868
S_s (10^3 mm^3)	8280	8280
$S_c (n)$ (10^3 mm^3)	11664	11664
$S_c (3n)$ (10^3 mm^3)	10580	10580
Z (10^3 mm^3)	9540	9540
Q (kN/m)	12.4	12.4
M_p (kN-m)	407.0	216.3
S_p (kN/m)	10.4	10.4
M_{s_p} (kN-m)	247.3	113.5
M_L (kN-m)	503.1	327.5
M_{Imp} (kN-m)	140.9	98.2
$S_3 [M_L + M_{Imp}]$ (kN-m)	1073.3	709.4
M_a (kN-m)	2245.8	1350.9
M_u (kN-m)	4041	4041
f_{s_p} non-comp (MPa)	49.2	26.1
f_{s_p} comp (MPa)	23.4	10.7
$f_{s_3} (k + Imp)$ (MPa)	101.4	67.1
f_s (Overload) (MPa)	174.0	103.9
f_s (Total) (MPa)	226.2	135.1
VR (kN)	228.1	216.0

BEAM MOMENT AND REACTION TABLES
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 01012-IB-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

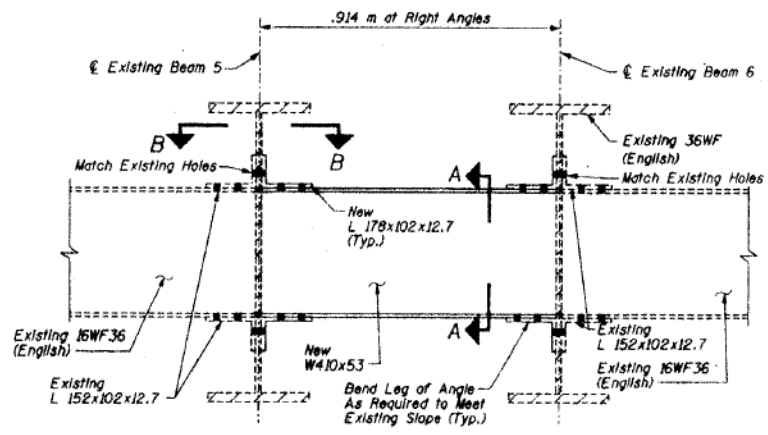
EDWARDS AND KELCEY

FOR INFORMATION ONLY

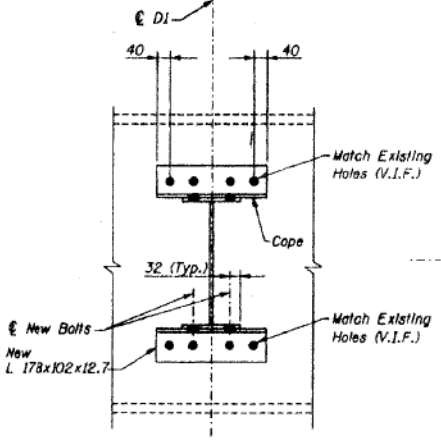
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. SV - 22
1423	0101.2-IB-R	COOK	192	145	SHEETS SV - 48
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			

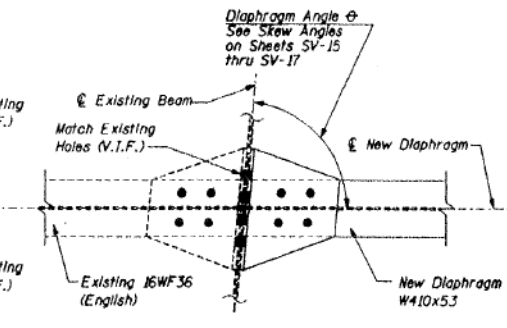
06 APR 1999 08:34:40



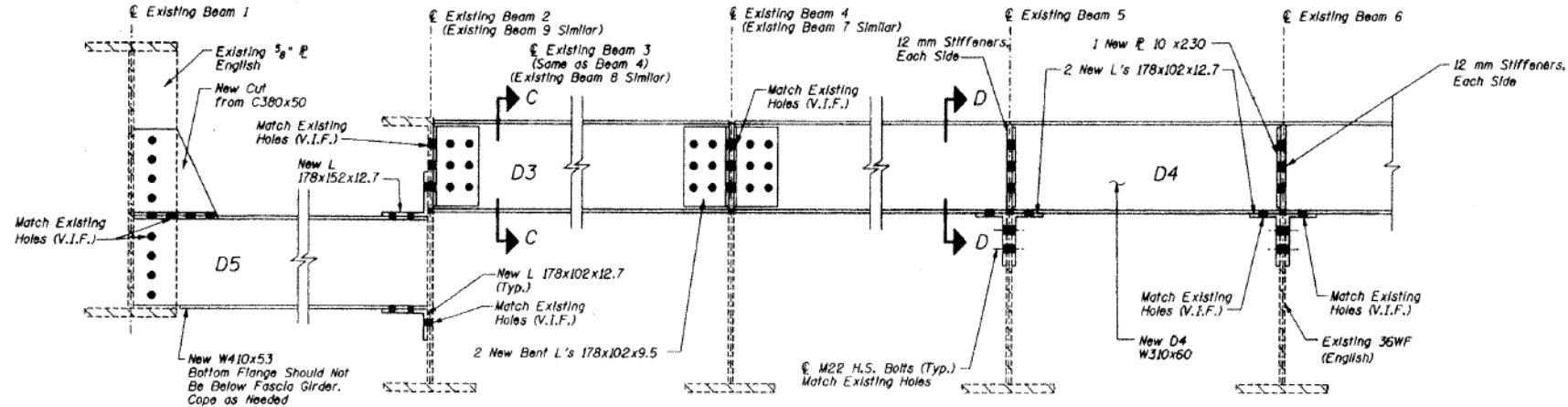
DETAIL 1
(DL, D2, D6, D7, D8, D9 AND D10)
(Typical at Bents C, E, F and H, and Between Bents)
(For Location of Detail, See Sheets SV-15 to SV-17)
(See Table on Sheet SV-17 for Number of Diaphragms Required)



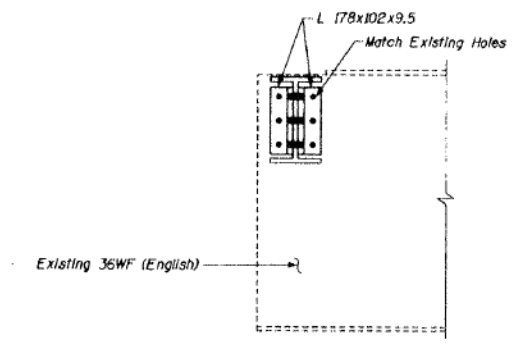
SECTION A-A
(From Detail 1)



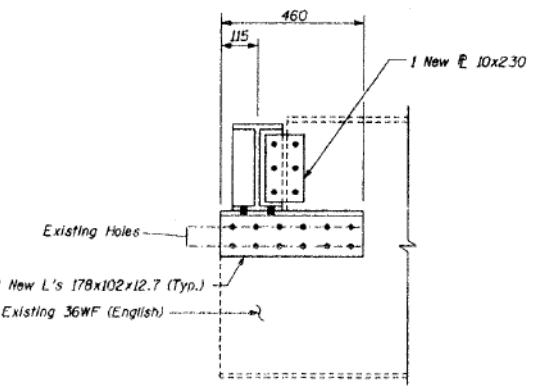
SECTION B-B
(From Detail 1)



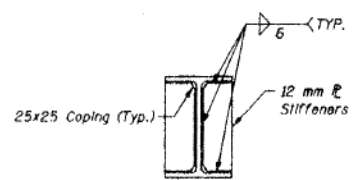
DETAIL 2
(Typical at Bents D and G, Looking East)



SECTION C-C
(From Detail 2)



SECTION D-D
(From Detail 2)



STIFFENER DETAIL
(Over Girders 5 and 6, Bents D and G)

NOTES:

- All dimensions are in millimeters (mm) unless otherwise noted.
- Use existing bolt holes as templates when matching new steel to existing beams. Verify all dimensions in the field before ordering materials.
- For location of details, see Framing Plan Sheets SV-15 through SV-17.
- Cost of field drilling is included with "Furnishing and Erecting Structural Steel".
- V.I.F. means verify in field.
- See Sheet SV-17 for diaphragm list and number required.

DIAPHRAGM CONNECTION DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-IB-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED	EL
CHECKED	MEZ/JDB
DRAWN	SSD
CHECKED	EL/JDB

USER NAME =	mkwilson	DESIGNED	WJC	REVISED	
		CHECKED	DL	REVISED	
PLOT SCALE =	0x2.0000 '1' / in.	DRAWN	RVV	REVISED	
PLOT DATE =	12/15/2016	CHECKED	WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-23 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	291
			CONTRACT NO. 60X99	
ILLINOIS FED. AID PROJECT				

3:05:15 PM 01/06/99 -SHT-AS-BUILT-23

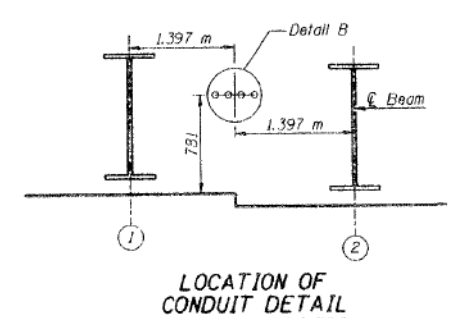
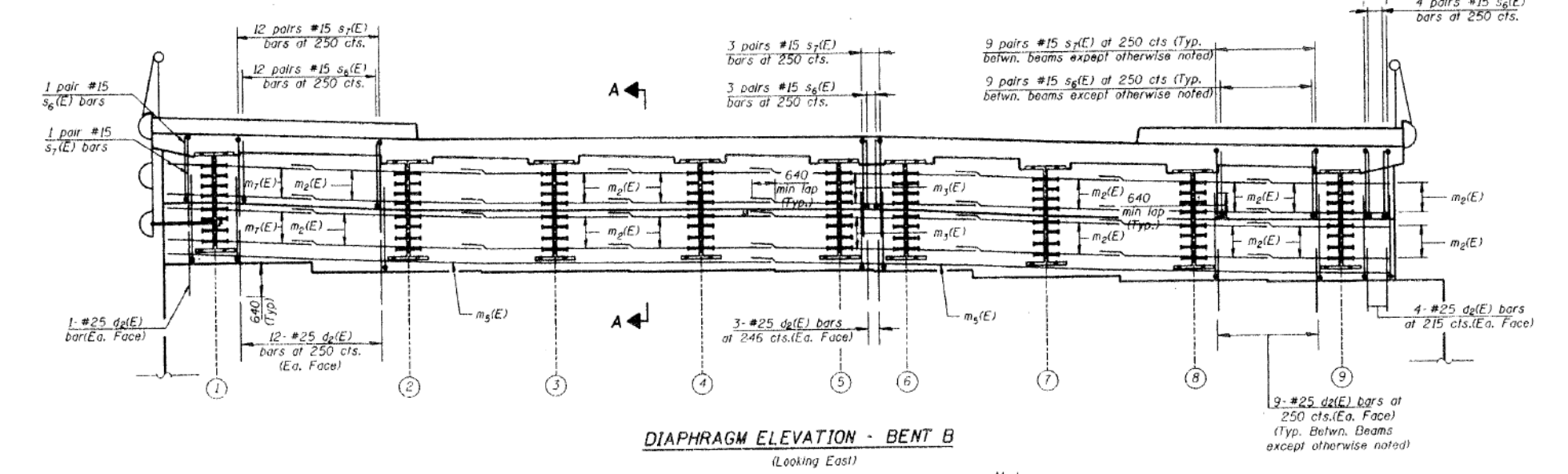
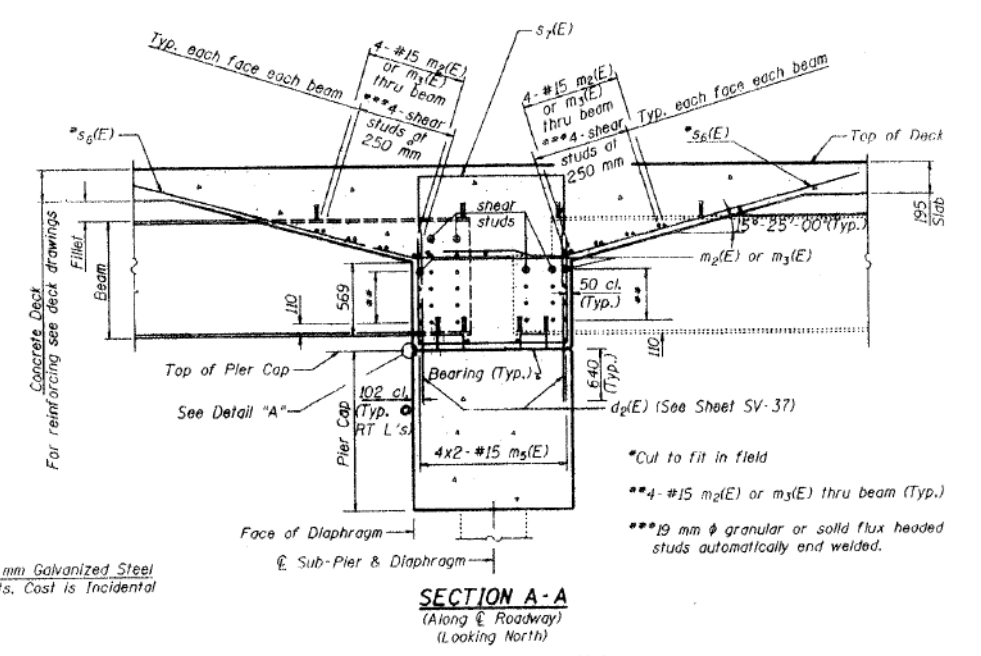
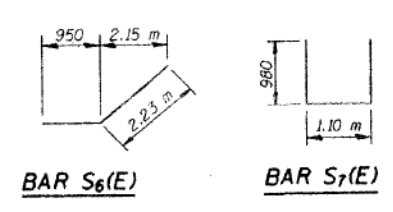
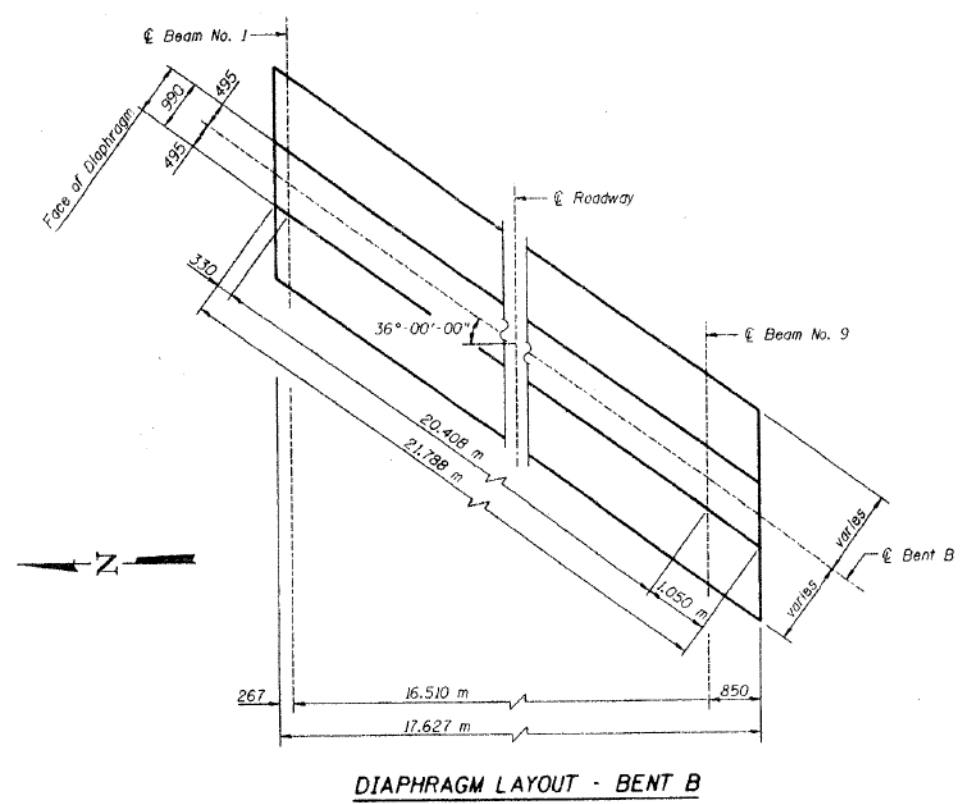


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1423	01012-1B-R	COOK	192	146
SHEET NO. SV - 23 SHEETS SV - 48				

06 APR 1999 09:35:24



- Note:**
1. Work this sheet with Sheet SV-25.
 2. For quantities of Reinforcement Bars (Epoxy Coated) and Concrete Superstructure See Sheet SV-14.

BENT B DIAPHRAGM DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 01012-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

LIN ENGINEERING, LTD.

DESIGNED	TK
CHECKED	PL
DRAWN	NC
CHECKED	PL

Note:
Place s6(E) and s7(E) bars parallel to E Roadway

3:05:19 PM 0160X99-SHT-AS-BUILT-24



USER NAME	= mkwilson	DESIGNED	WJC	REVISED	
		CHECKED	DL	REVISED	
PLOT SCALE	= 0x2.0000 '1' / 1n.	DRAWN	RVV	REVISED	
PLOT DATE	= 12/15/2016	CHECKED	WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-24 OF AB-68 SHEETS

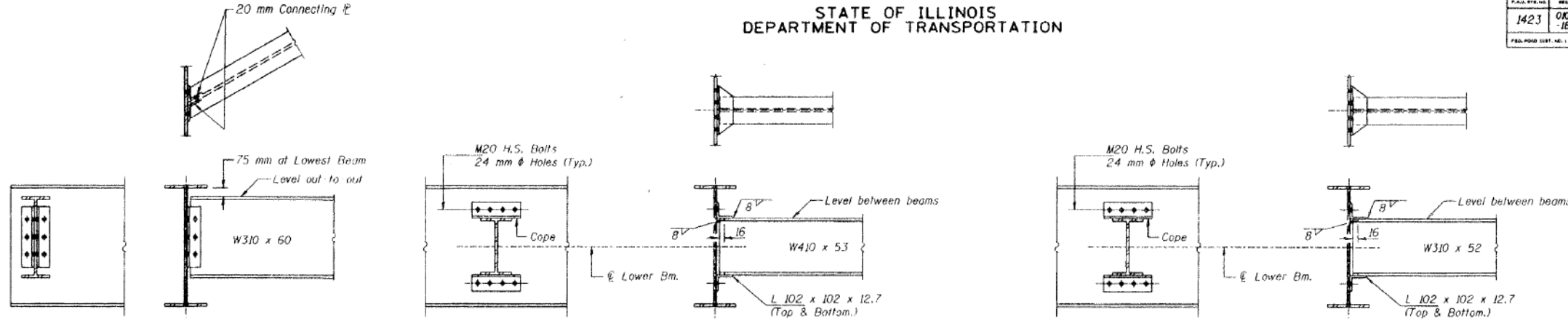
F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	292
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PAGE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. SV - 26
1423	01012-1B-R	COOK	192	149	SHEETS SV - 48
FED. ROAD DIST. NO. 1		ALPHEI	FED. AID PROJECT		

05 APR 1999 09:37:4



Note: Two hardened washers shall be required over all holes in diaphragm connection.

END DIAPHRAGM

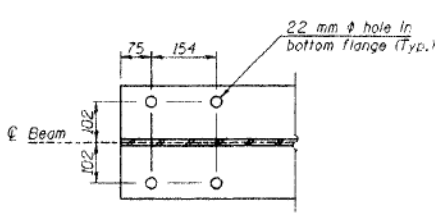
- No. Required
- 1 D14 1 D18
 - 4 D15 6 D19
 - 1 D16 1 D20
 - 1 D17 1 D21

INTERIOR DIAPHRAGM

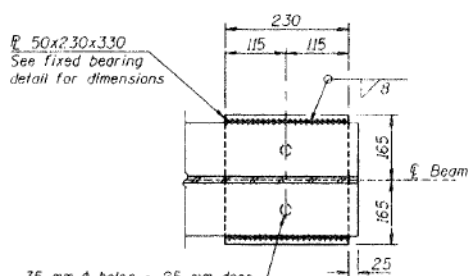
- No. Required
- 12 D11
 - 2 D12

INTERIOR DIAPHRAGM

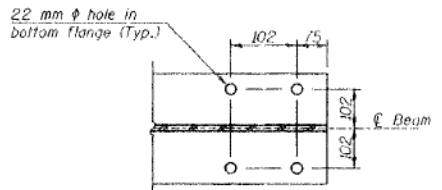
- No. Required
- 3 D13



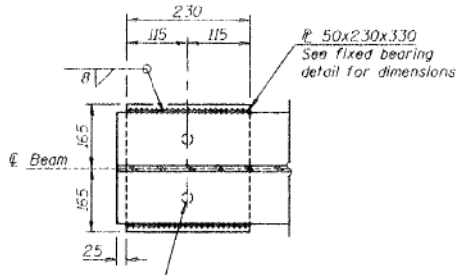
SECTION B-B



SECTION C-C

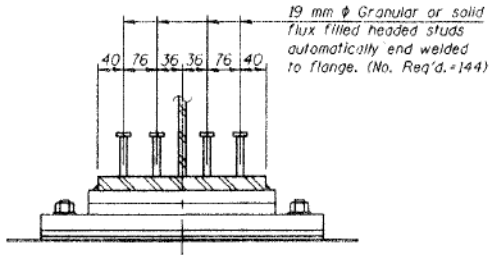


SECTION E-E

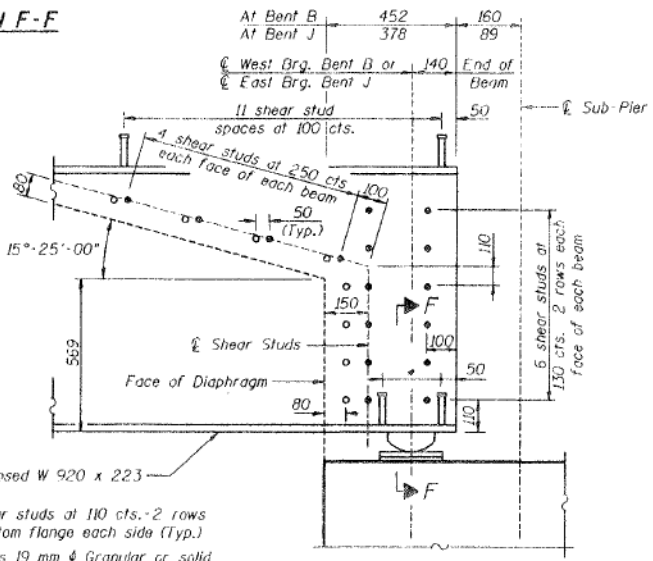


SECTION D-D

Sections B-B, C-C, D-D and E-E are taken from Sheet SV-1B.



SECTION F-F



DETAIL A

- * 3 shear studs at 110 cts., 2 rows on bottom flange each side (Typ.)
- Denotes 19 mm ϕ Granular or solid flux filled headed studs automatically end welded. (No. Req'd.=576, total for Spans 1 and 9)
- Denotes 30 mm ϕ holes for m(E) thru m_y (E) bars.

NOTE: Dimensions shown are along ϕ of the beam.

NOTE:
1. All dimensions are in millimeters (mm) except as noted.
2. Work this Sheet with Sheet SV-1B

BEAM DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

LIN ENGINEERING, LTD.

DESIGNED	TK
CHECKED	PL
DRAWN	NC
CHECKED	TK

3:05:31 PM 0160X99-SHT-AS-BUILT-27



USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1' / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-27 OF AB-68 SHEETS

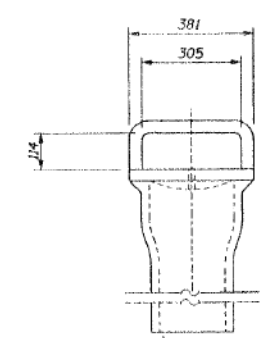
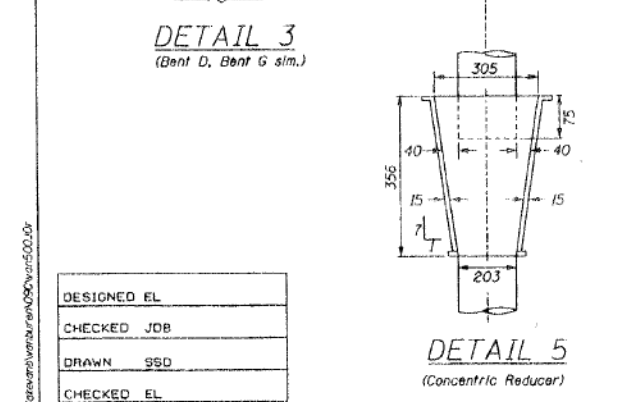
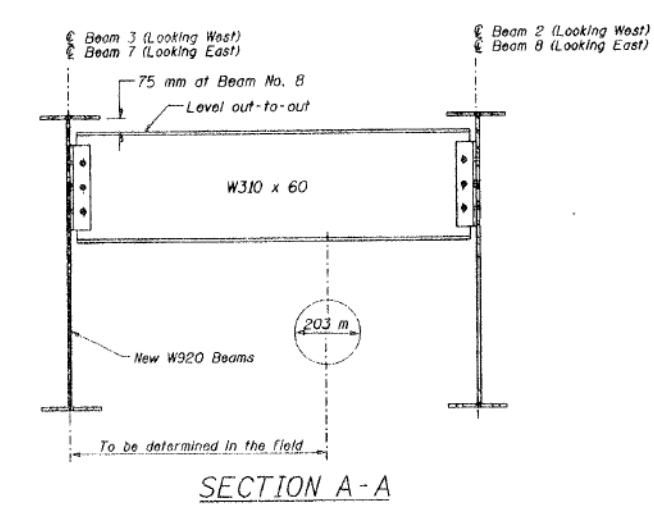
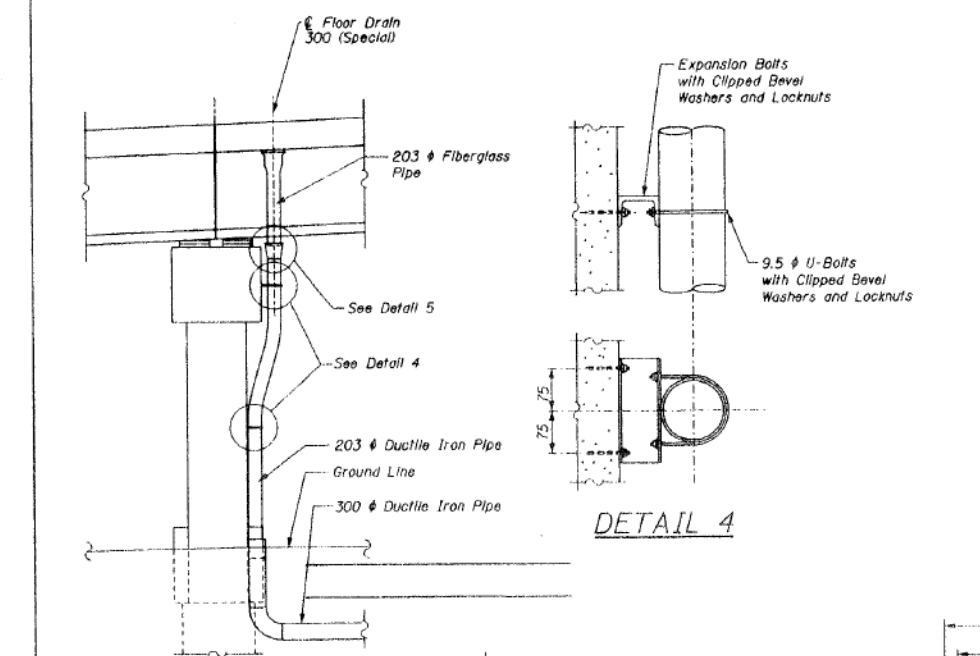
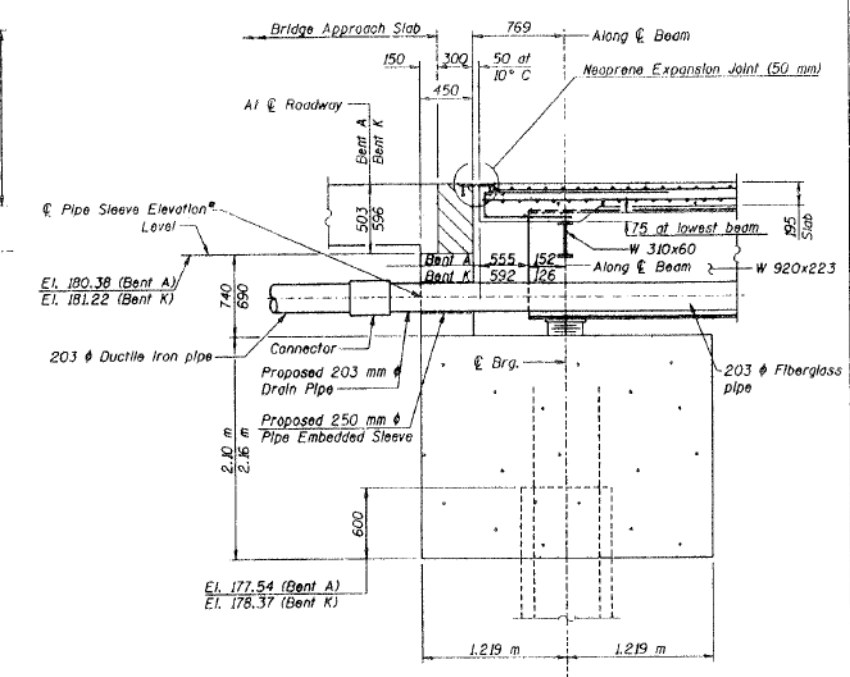
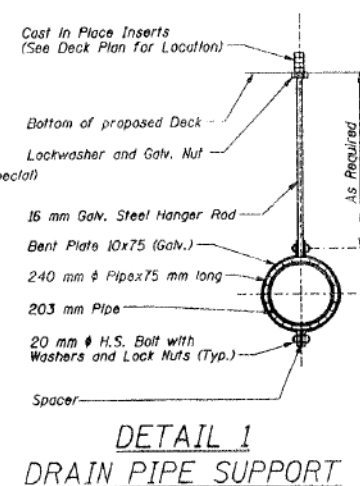
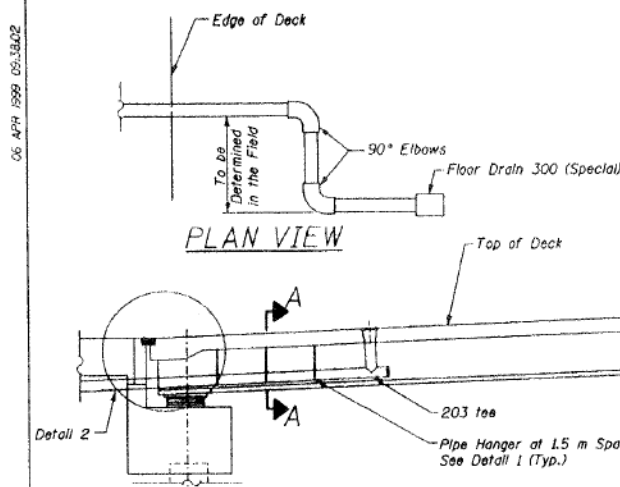
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	295
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DRAWN	DATE	SHEET NO.
1423	0101.2-1B-A	COOK	192	150
SHEET NO. SV - 27 SHEETS SV-48				

* Pipe Sleeve Elevations		
Between Beams	Bent A	Bent K
2 and 3	179.919	180.834
7 and 8	179.859	180.794



- NOTES:**
- Bent D shown. Bent G is similar.
 - All pipe hangers, supports and hardware shall be galvanized by the hot-dip process. The zinc coating shall conform to the requirements of AASHTO M232.
 - Pipe hangers shall be provided on all horizontal pipes at each tee, elbow or change in direction and at intermediate points not more than 1.50 m on centers.
 - All dimensions are in millimeter (mm) unless noted otherwise.
 - Floor Drains shall be paid for separately as "Floor Drain (Special)".
 - Connector coupling between Bridge Drainage System and ductile iron storm sewer shall be paid for as "Bridge Drainage System".
 - Floor Drains shall be temporarily supported during deck construction.

DRAINAGE DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055
EDWARDS AND KELCEY

DESIGNED	EL
CHECKED	JDB
DRAWN	SSD
CHECKED	EL

USER NAME = mkwilson	DESIGNED WJC	REVISED
	CHECKED DL	REVISED
PLOT SCALE = 0x2.0000 '1" / 1in.	DRAWN RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED WJC	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-28 OF AB-68 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	296
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

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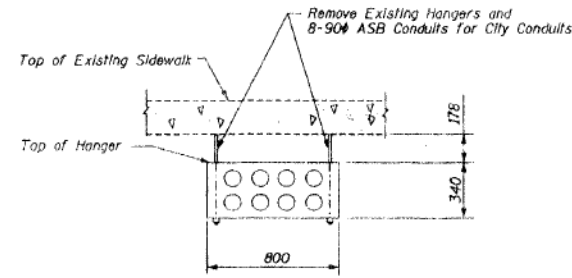


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

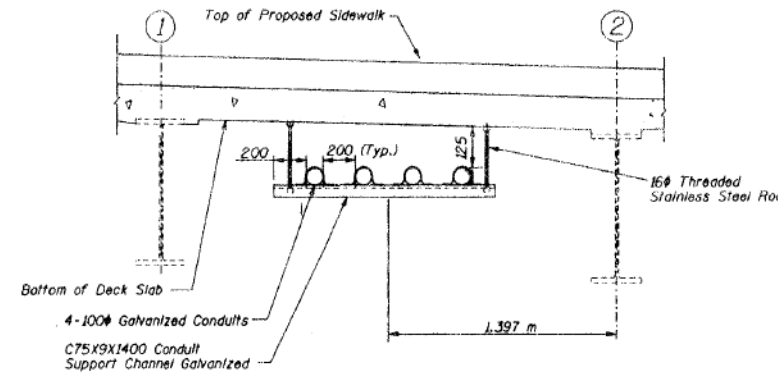
FACILITY NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. SV - 28
1423	0101.2-1B-R	COOK	192	151	SHEETS SV-48
PROJECT NO.	ILLINOIS	FED. AID PROJECT			

06 APR 1995 09:38:55



EXISTING CONDUITS

Removal of Existing conduit and hangers to be Included with Removal of Existing Concrete Deck



Maximum Distance Between Hangers is 2 m.

PROPOSED CONDUITS

N.T.S.

NOTES:

- All dimensions are in millimeters (mm) except as noted.
- See Sheet EV-1 for Existing and Proposed Electrical Details on the bridge.
- The Contractor shall coordinate with the utility companies in installing conduit supports.
- The cost of inserts is included with "Concrete Superstructure".

I:\sketch\vanburen\09\vanb500.dwg

DESIGNED	EL
CHECKED	HDD
DRAWN	SSD
CHECKED	HDD

CONDUIT DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

3:05:38 PM
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USER NAME = mkwilson	DESIGNED	WJC	REVISED
	CHECKED	DL	REVISED
PLOT SCALE = 0:2.0000 '1" / 1in.	DRAWN	RVV	REVISED
PLOT DATE = 12/15/2016	CHECKED	WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

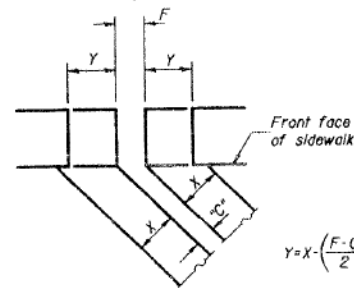
SHEET NO. AB-29 OF AB-68 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	297
			CONTRACT NO. 60X99	
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

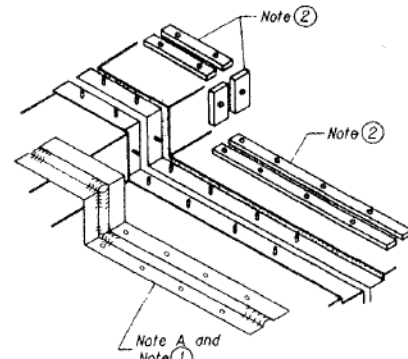
PROJECT NO.	SHEET NO.	DATE	REVISED	SHEET NO.	SHEET NO.
1423	01012-1B-R	COOK	192	152	
SHEET NO. SV - 29			SHEETS SV - 40		



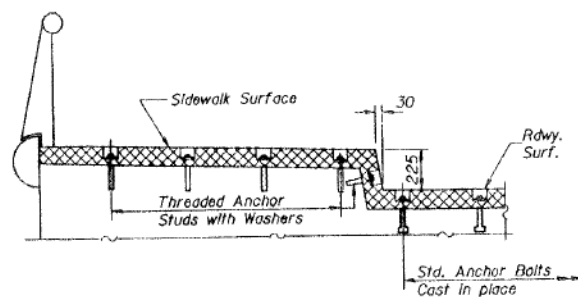
FORMING BLOCKOUT SKETCH

$$Y = X \cdot \left(\frac{F-C}{2} \right)$$

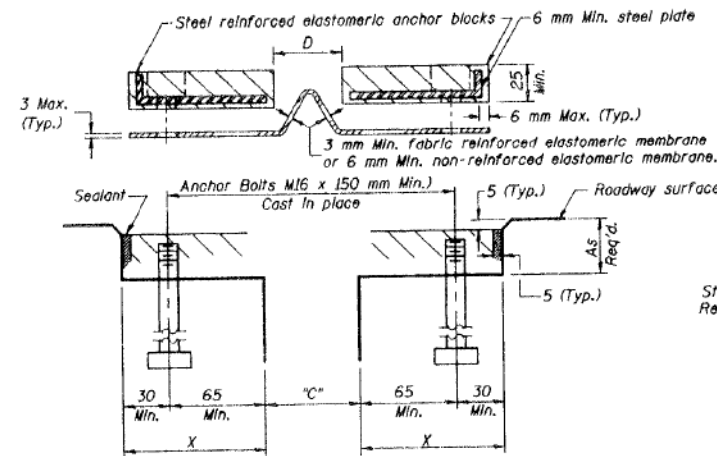
For dimension "F" see Sheets SV-10 through SV-12



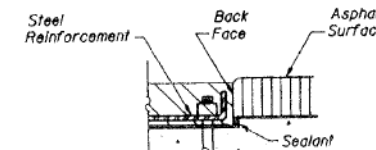
AT SIDEWALK



AT SIDEWALK TYPICAL END TREATMENTS



CROSS SECTION



ANCHOR BLOCK WITH ASPHALT SURFACE

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane.
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.
The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.
Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 10 °C.
The roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted.
All dimensions are in millimeters (mm) except as noted.

SKREW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 40 mm from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 300 cts.

INSTALLATION NOTES

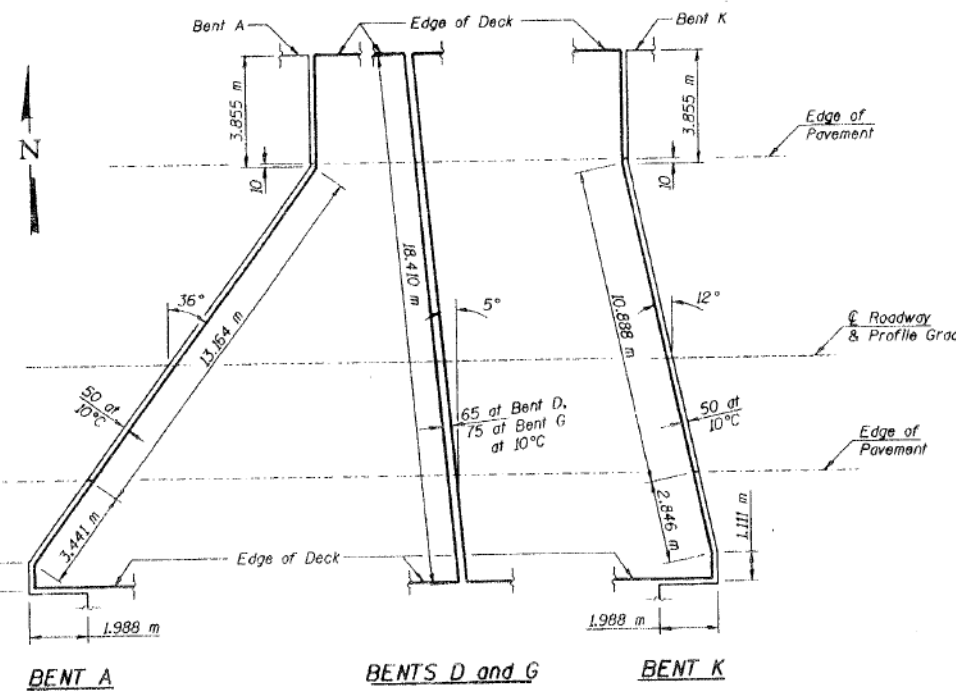
- ① Install continuous seal in roadway and sidewalk.
- ② Install anchor blocks as indicated.

NOTE A: Maximum spacing of anchor bolts shall be 300 centers.

Joint Size	°C at 10 °C	"D" at 10 °C
50	50	40 Min.
65	65	45 Min.
100	75	65 Min.

BILL OF MATERIAL

Item	Unit	Quantity
Neoprene Expansion Joint, 50 mm	m	46.0
Neoprene Expansion Joint, 65 mm	m	19.0
Neoprene Expansion Joint, 100 mm	m	19.0



EXPANSION JOINT LAYOUT

EXPANSION JOINT DETAILS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

LIN ENGINEERING, LTD.

DESIGNED	TK
CHECKED	PL
DRAWN	NC
CHECKED	PL

USER NAME = mkwilson	DESIGNED	WJC	REVISED	
	CHECKED	DL	REVISED	
PLOT SCALE = 0x2.0000 '1" / 1in.	DRAWN	RVV	REVISED	
PLOT DATE = 12/15/2016	CHECKED	WJC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-30 OF AB-68 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	298
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

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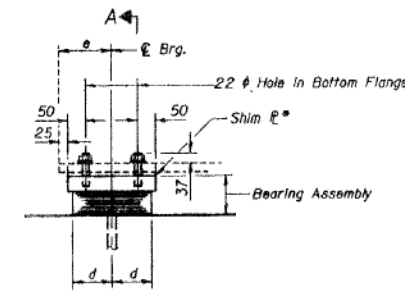


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

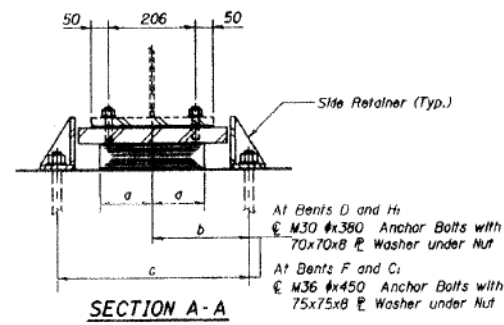
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1423	0101.2-1B-R	COOK	192	153
FED. ROAD DIST. NO. 1	ILL. ROAD DIST. NO. 1	FED. AID PROJECT		

06 APR 1999 09:40:22



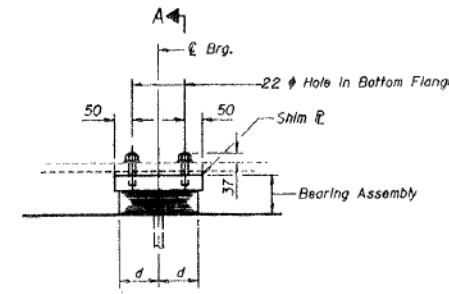
ELEVATION AT BENT D

* See Table on this sheet



SECTION A-A

Notes: Anchor bolts at fixed bearings may be built into the masonry.
See Sheets SV-36, SV-41, SV-42 and SV-43 for Anchor Bolt Installation.

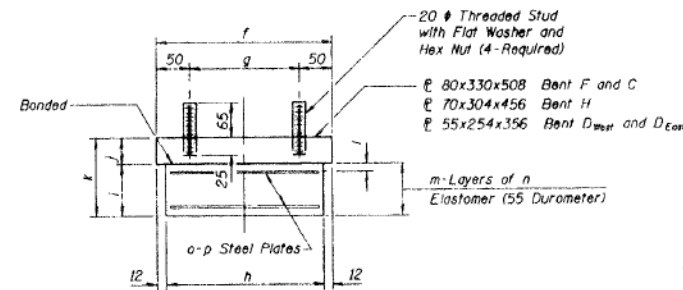


ELEVATION AT BENTS H, F, and C

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	45

TYPE I ELASTOMERIC EXPANSION BEARING

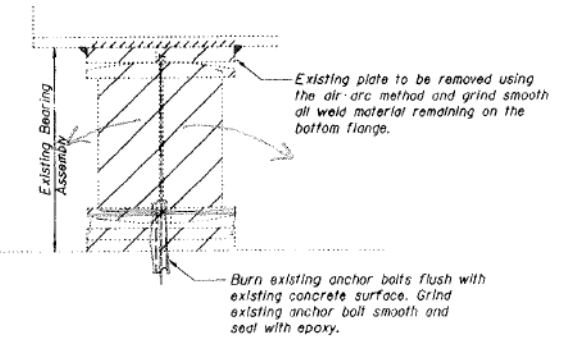


BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

REQUIRED SHIM PLATE (mm)

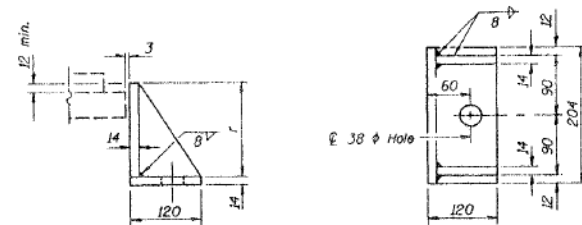
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
Bent D _{East}	13	-	6	12	-	-	9	18	-
Bent D _{West}	-	-	6	12	-	-	9	18	-



EXISTING BEARING REMOVAL DETAIL

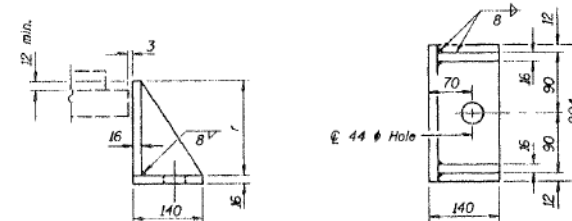
NOTE:

1. Do the same at all existing rocker, roller and fixed bearings.



SIDE RETAINER @ BENTS D and H

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.



SIDE RETAINER @ BENTS F and C

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

TYPE I BEARING																	
Location	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	r
Bent D _{East} and D _{West}	153	241	482	115	152	254	154	230	60	55	115	10	5	10	4	2.5	112
Bent H	203	291	582	140	NA	304	204	280	61	70	131	13	4	13	3	3	126
Bent F and C	229	327	654	153	NA	330	230	306	71	80	151	14	4	14	3	5	156

DESIGNED	AJN
CHECKED	TEH
DRAWN	SSD
CHECKED	AJN/EL

BEARING DETAILS
TYPE I BEARING
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 0101.2-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

3:05:46 PM
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USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1" / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-31 OF AB-68 SHEETS

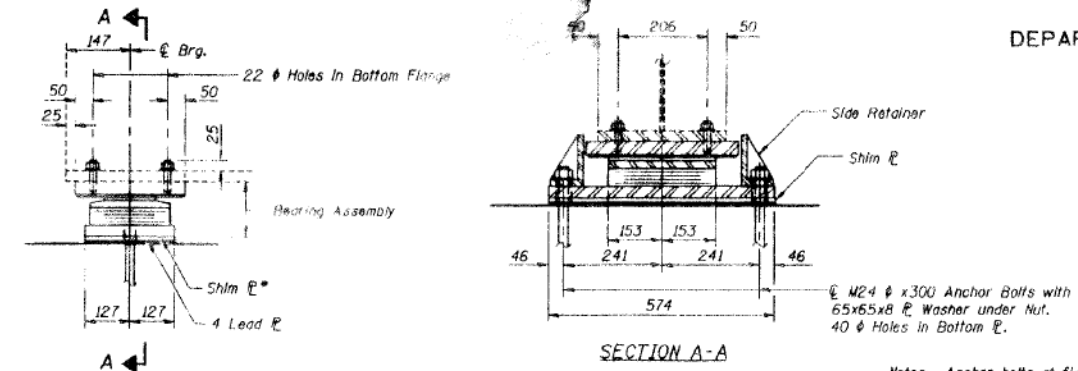
F.A.I. RE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	299
CONTRACT NO. 60X99				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

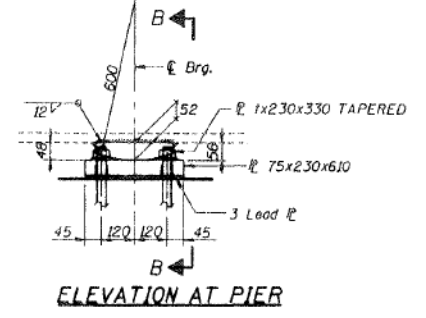
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1423	01012-1B-R	COOK	192	154	SHEETS SV-48
FED. AID DIST. NO.	ILLINOIS	FED. AID PROJ. NO.			

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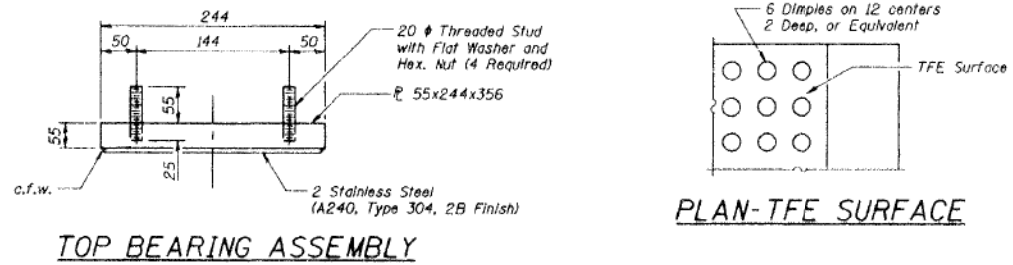


ELEVATION AT BENT G
See Table on this sheet
TYPE II ELASTOMERIC EXPANSION BEARING
(Typical Bearings G_{East} and G_{West})

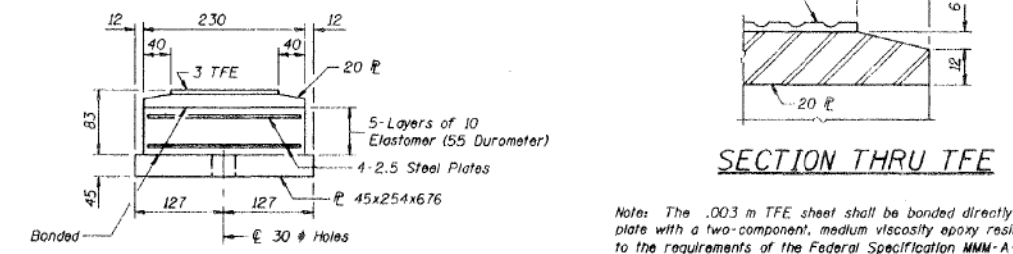
Notes: Anchor bolts of fixed bearings may be built into the masonry.
See sheet SV-39 for Anchor Bolt Installation.



ELEVATION AT PIER
FIXED BEARING
(Typical Bent E)

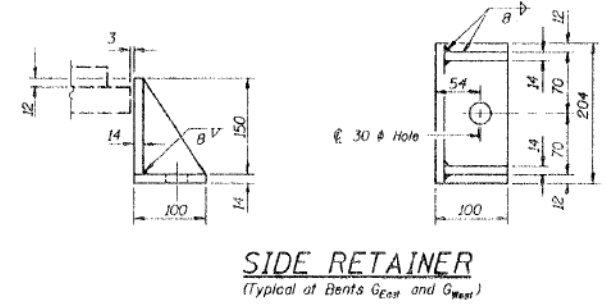


TOP BEARING ASSEMBLY
PLAN-TFE SURFACE

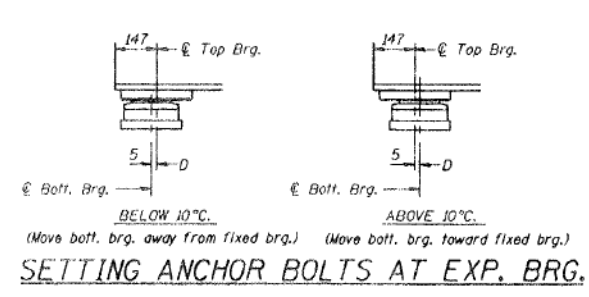


BOTTOM BEARING ASSEMBLY
SECTION THRU TFE

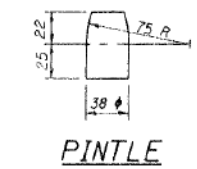
Note: The .003 m TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of .003 m TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER
(Typical at Bents G_{East} and G_{West})
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.



$D = 1mm$ per each 10m of expansion for every 1° temperature change from the normal temperature of $10^\circ C$.



PINTLE

REQUIRED SHIM PLATE (mm)

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
Bent G_{East}	-	-	-	19	13	13	13	-	-
Bent G_{West}	3	-	-	19	13	13	13	-	-

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	18

Note:
1. All dimensions are in millimeter (mm) except as noted.

BEARING DETAILS
TYPE II AND FIXED BEARINGS
VAN BUREN STREET (F.A.U. 1423)
OVER I-90/94 KENNEDY EXPRESSWAY
SECTION 01012-1B-R
COOK COUNTY
STA. 1+344.10
STRUCTURE NO. 016-2055

EDWARDS AND KELCEY

DESIGNED	AJN
CHECKED	TEH
DRAWN	SSD
CHECKED	AJN/EL

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USER NAME = mkwilson	DESIGNED WJC	REVISED
PLOT SCALE = 0x2.0000 '1" / in.	CHECKED DL	REVISED
PLOT DATE = 12/15/2016	DRAWN RVV	REVISED
	CHECKED WJC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AS-BUILTS SN 016-1707

SHEET NO. AB-32 OF AB-68 SHEETS

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2014-017B	COOK	442	300
CONTRACT NO. 60X99			ILLINOIS FED. AID PROJECT	