

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

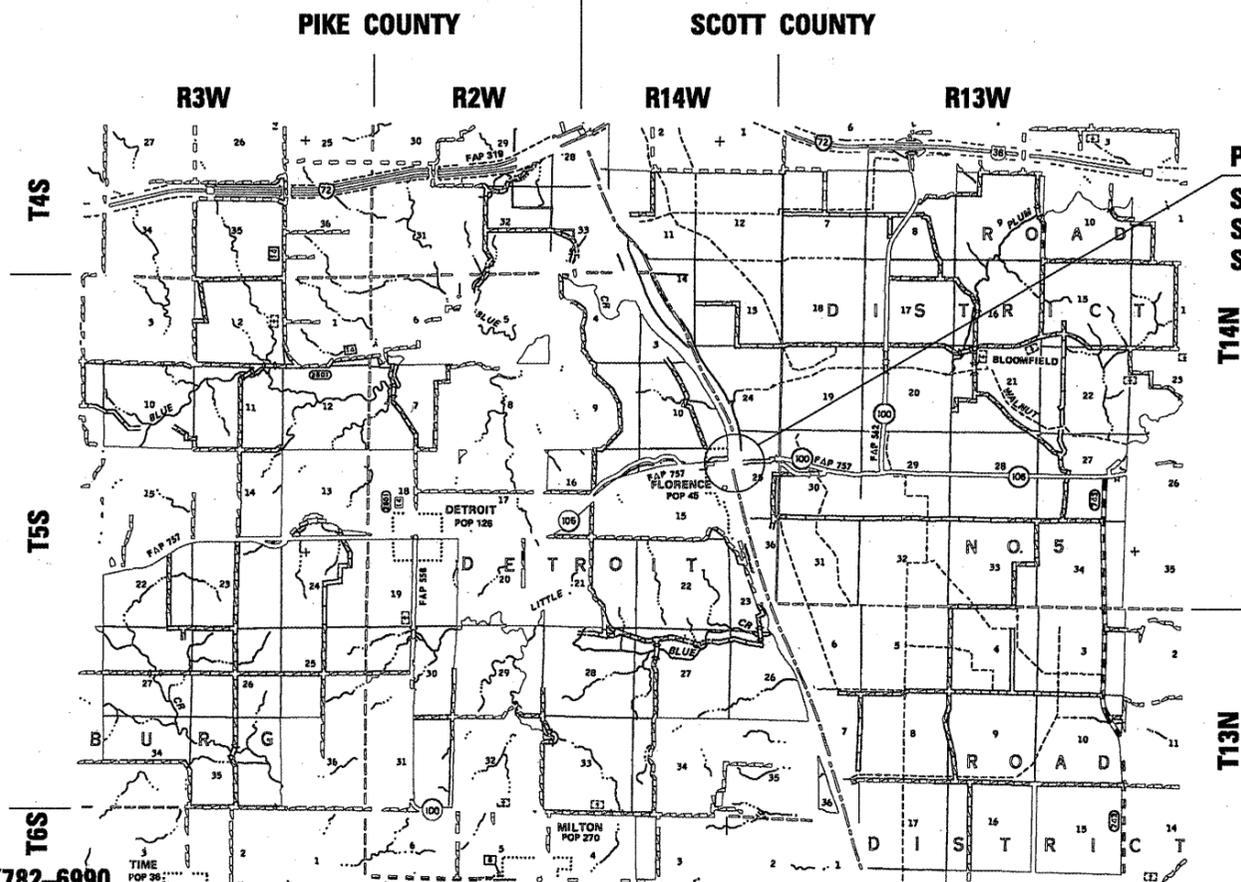
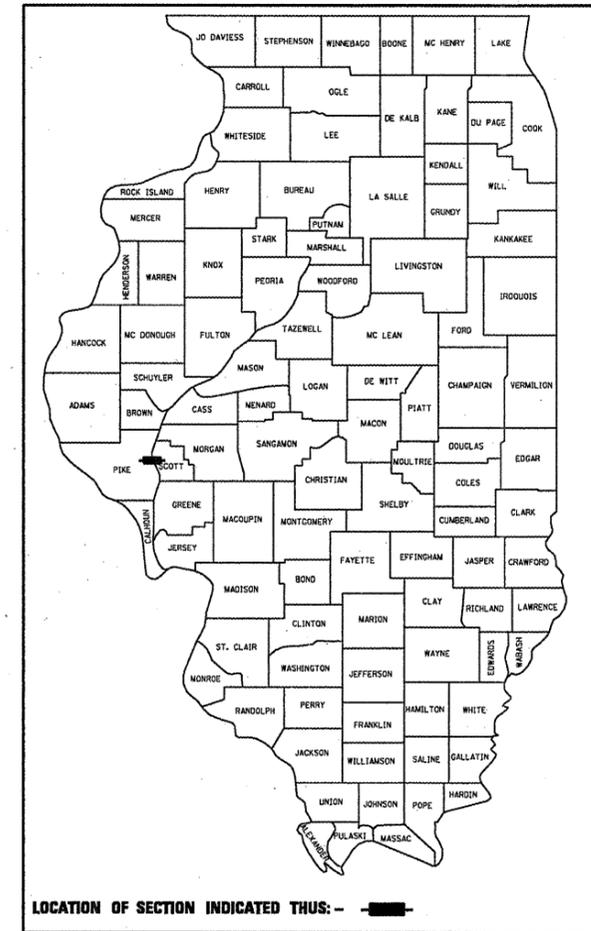
FAP ROUTE 757
SECTION 20 BR-2
PROJECT: F-0757(008)
STRUCTURE REPAIR
SCOTT COUNTY

C-96-016-09

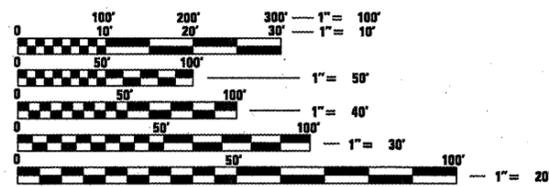
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
757	20 BR-2	SCOTT	30	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 72C39		

30+1=31
72C39
D-96-016-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2



PROJECT LOCATION
SN 086-0001
STA 577+18 TO
STA 608+99



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER JOHN NEGANGARD 217 /782-6990
SQUAD LEADER VINCE MADONIA 217 /785-9046

GROSS LENGTH = 3,181 FT. = 0.602 MILE
NET LENGTH = 3,181 FT. = 0.602 MILE

CONTRACT NO. 72C39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *November 3, 2008*
Regan Quack
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 5, 2008
Eric E. Horn
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

December 5, 2008
Christina M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GENERAL NOTES:

1. ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT AS INCLUDED IN THE PLANS.
2. NO EXCAVATION IS ANTICIPATED ON THIS PROJECT WHICH WOULD AFFECT UTILITIES, OTHER THAN THE INSTALLATION OF THE DETOUR SIGN POSTS. J. U. L. I. E. IS TO BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE - (800) 892-0123.
3. IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
4. THE COST FOR REMOVAL OF THE EXISTING EXPANSION JOINTS IS TO BE INCLUDED IN THE UNIT COSTS FOR JOINT REPLACEMENT
5. THE BUREAU OF OPERATIONS SHALL BE NOTIFIED TWO WEEKS PRIOR TO ANY ROAD CLOSURE CONTACT KYLE ARMSTRONG @ (217) 785-5312

INDEX OF SHEETS

- | | |
|------|-----------------------|
| 1 | COVERSHEET |
| 2 | GENERAL NOTES |
| 3 | SUMMARY OF QUANTITIES |
| 4-5 | DETOUR SIGNING |
| 6-30 | BRIDGE REPAIR PLANS |

LIST OF STANDARDS

- 000001-05
- 001001-02
- 001006
- 701001-02
- 701006-03
- 701011-02
- 701101-02
- 701106-02
- 701201-03
- 701301-03
- 701311-03
- 701901-01
- 780001-02
- BLR-21-0

DISTRICT SIX	
EXAMINED <u>Oct 30</u>	20 <u>08</u>
<i>[Signature]</i>	
OPERATIONS ENGINEER	
EXAMINED <u>Oct 28</u>	20 <u>08</u>
<i>[Signature]</i>	
PROGRAM IMPLEMENTATION ENGINEER	
EXAMINED <u>Oct 28</u>	20 <u>08</u>
<i>[Signature]</i>	
PROGRAM DEVELOPMENT ENGINEER	

FILE NAME =	USER NAME = madonievj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cd:\pw\work\FW100T\MADONIAVJ\dms77247\st	gennote.dgn	DRAWN -	REVISED -			757	20 BR-2	SCOTT	30	2	
PLOT SCALE = 100.0000 / / IN.	CHECKED -	REVISED -	SCALE:			SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
PLOT DATE = Oct-29-2008 07:52:30AM	DATE -	REVISED -	CONTRACT NO. 72C39								

Rev.

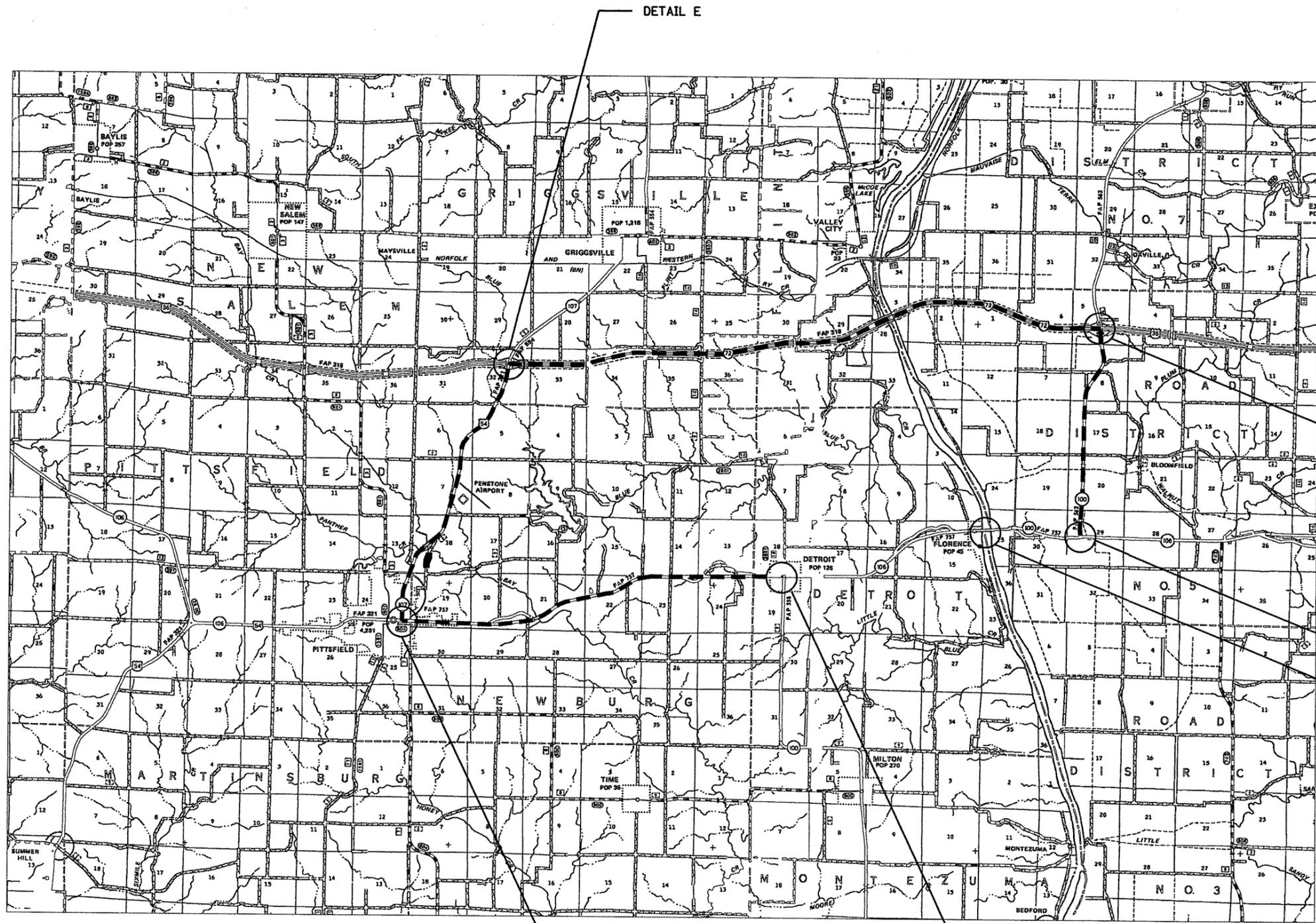
Structure
SN 086-0001
80% Fed
20% State

Pay Code	Item	Units	Total	SFTY-2A
50102400	CONCRETE REMOVAL	CU YD	14.7	14.7
50157300	PROTECTIVE SHIELD	SQ YD	54	54
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.1	14.1
50300300	PROTECTIVE COAT	SQ YD	57	57
50501130	STRUCTURAL STEEL REPAIR	POUND	1,690	1,690
50606400	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING	L SUM	1	1
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,890	2,890
52000220	FINGER PLATE EXPANSION JOINT, 6"	FOOT	95	95
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2	2
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	2000	2000
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	526	526
X0326233	TRAFFIC CONTROL GATE REPLACEMENT, NO. 1	L SUM	1	1
X0326234	TRAFFIC CONTROL GATE REPLACEMENT, NO. 2	L SUM	1	1
X0326235	DOLPHIN REPAIR NO. 1	L SUM	1	1
X0326236	DOLPHIN REPAIR NO. 2	L SUM	1	1

RESIDUES

* Specialty Items

FILE NAME =	USER NAME = laughlznr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
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	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 72C39						
	PLOT DATE = Nov-12-2008 10:13:07AM	DATE -	REVISED -											FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



DETAIL D

DETAIL A

BRIDGE CLOSURE
SN 086-0001
IL 100/106 OVER THE
ILLINOIS RIVER
STD-BLR 21

DETAIL B

DETAIL C

----- DETOUR ROUTE

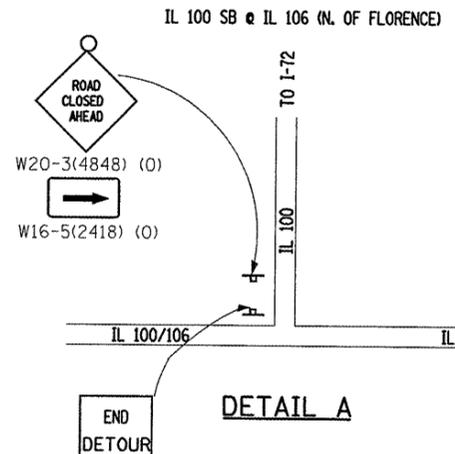
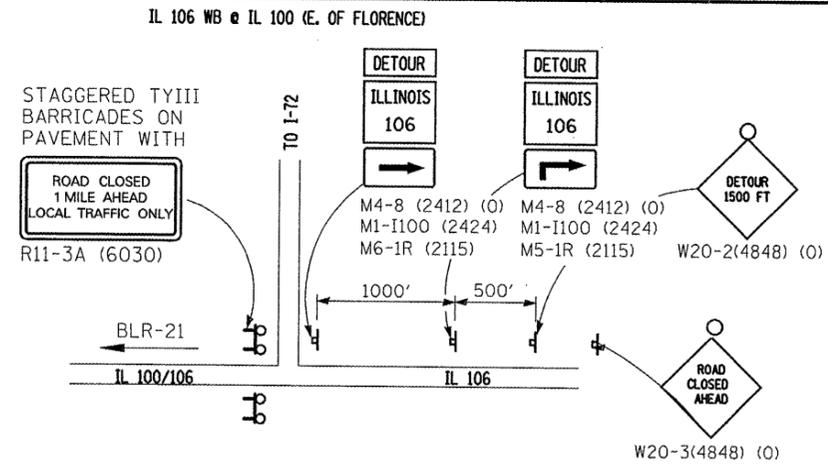
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

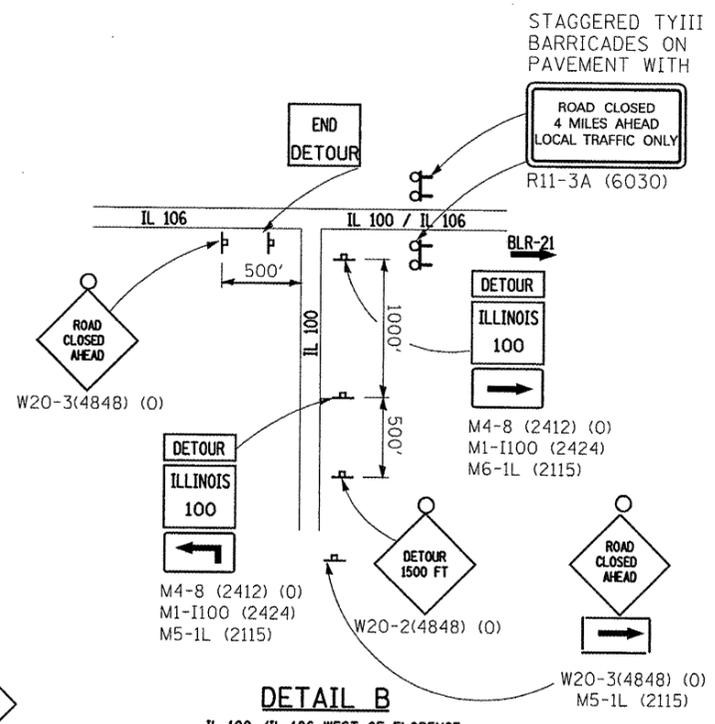
**DETOUR PLAN
DETOUR ROUTE**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

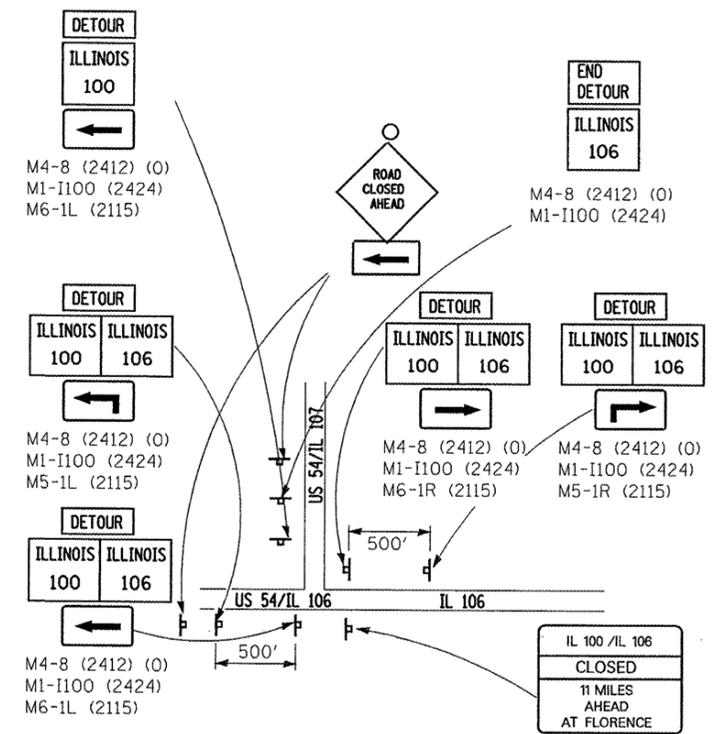
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757	20 BR-2	SCOTT	30	4
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 72C39	



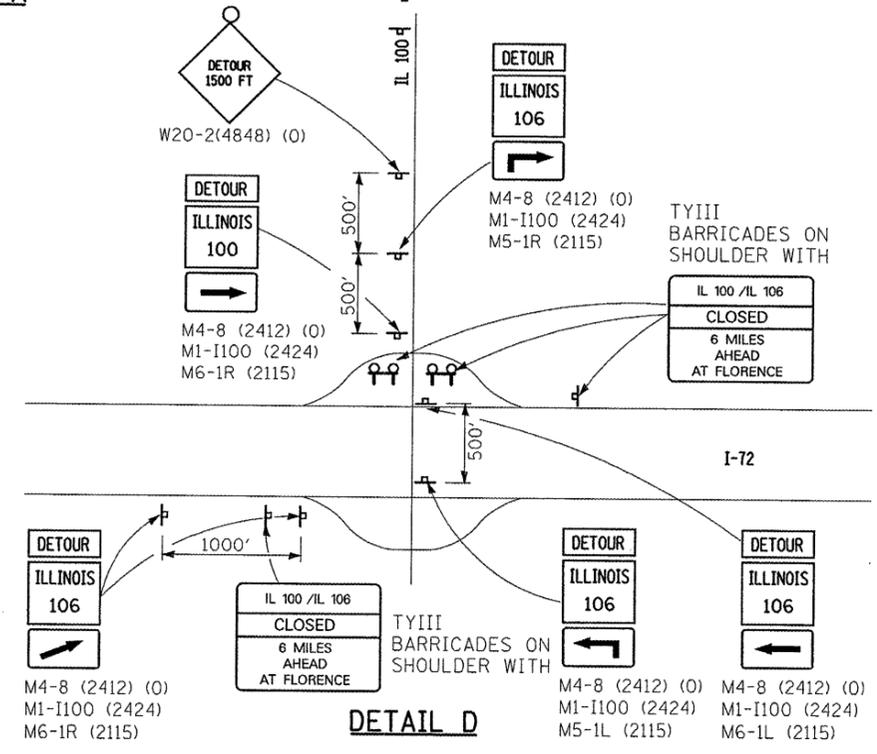
DETAIL A



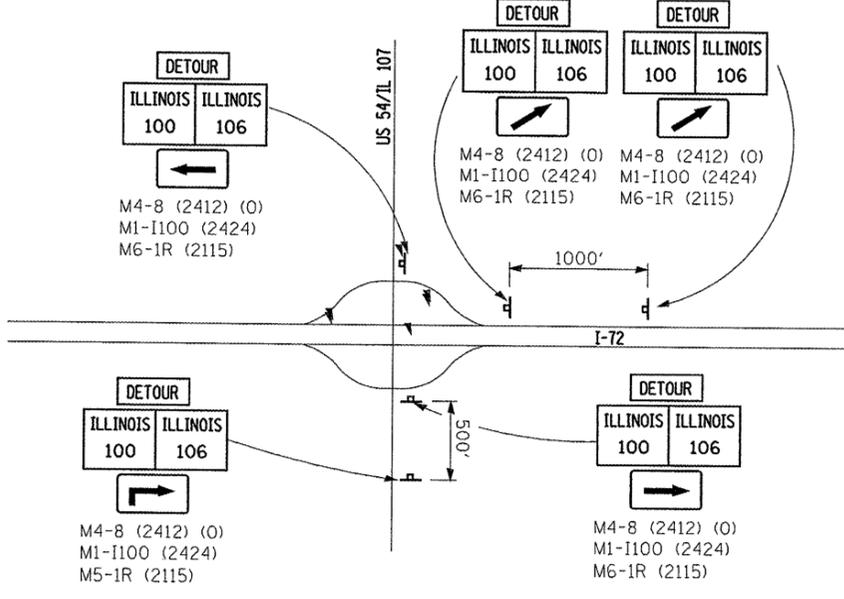
DETAIL B



DETAIL C



DETAIL D



DETAIL E

FILE NAME =	USER NAME = laughlinc	DESIGNED -	REVISED -
drawn	drawn	DRAWN -	REVISED -
PLOT SCALE = 1/8" = 1' / IN.	CHECKED -	CHECKED -	REVISED -
PLOT DATE = Nov-12-2008 10:13:21AM	DATE -	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR PLAN SIGN PLACEMENT DETAIL			
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	

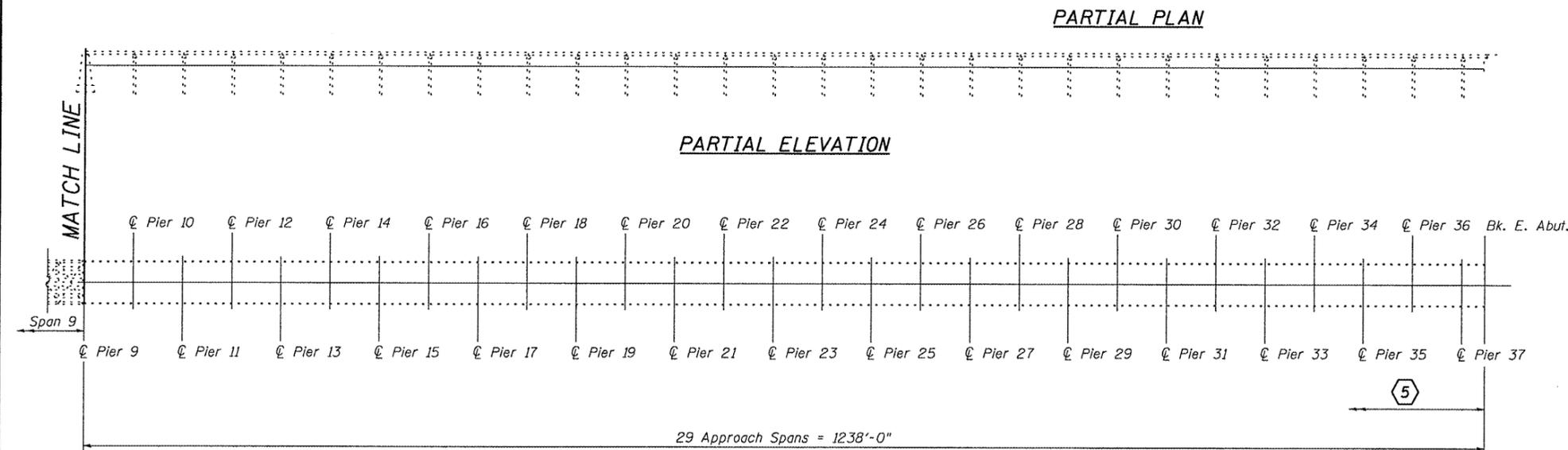
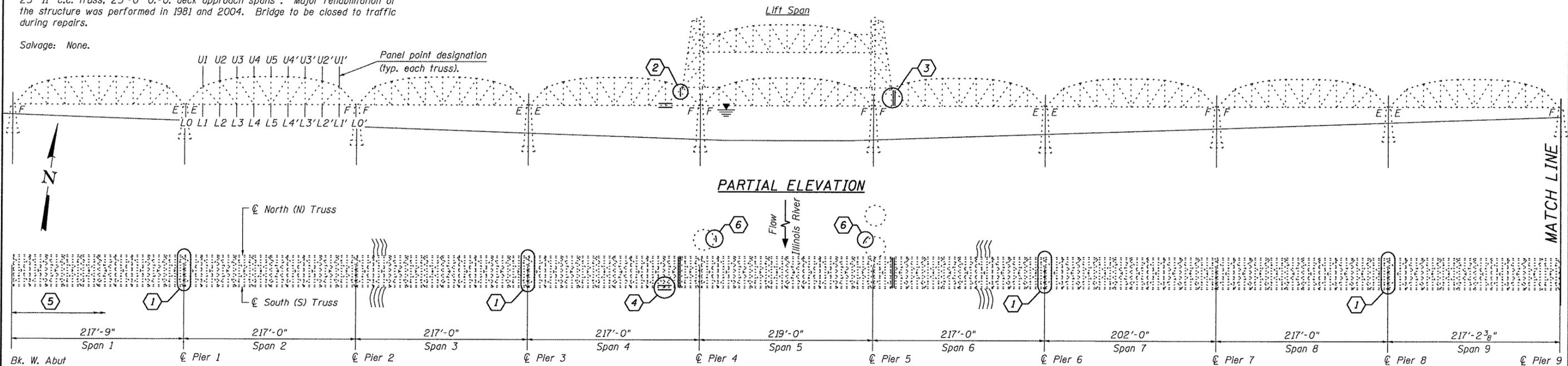
F.A.P. RTE. 757	SECTION 20 BR-2	COUNTY SCOTT	TOTAL SHEETS 30	SHEET NO. 5
CONTRACT NO. 72C39				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

Bench Mark: Not required.

Existing Structure: S.N. 086-0001 built in 1929 as S.B.I. Rte. 36 Sec. 20B, C & D. Structure consists of 8 fixed truss spans, one moveable truss span, & 29 WF approach spans at the east end of the structure. 3178'-11³/₈" bk.-bk. abuts., 25'-11" c.c. truss, 25'-0" O.-O. deck approach spans. Major rehabilitation of the structure was performed in 1981 and 2004. Bridge to be closed to traffic during repairs.

Salvage: None.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



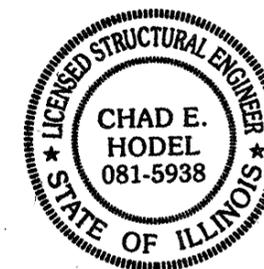
DESIGN SPECIFICATIONS

New Construction
2002 AASHTO Standard
Specifications - 17th Edition

DESIGN STRESSES

NEW CONSTRUCTION
FIELD UNITS

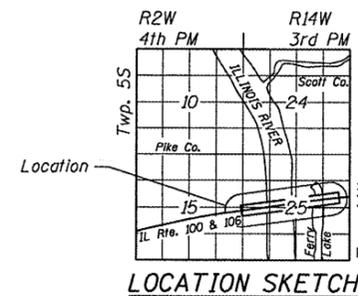
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (AASHTO M270 Grade 36)
fy = 50,000 psi (AASHTO M270 Grade 50)



Chad E. Hodel
11-25-08
Exp. 11-30-10

SCOPE OF WORK

- 1 Remove and replace existing deck expansion joint with finger plate expansion joint assemblies and drainage trough.
- 2 Remove and replace existing moveable traffic control gate and wire ropes.
- 3 Remove and replace existing moveable traffic control gate, wire ropes, and gate guide angles.
- 4 Clean, paint, and strengthen the existing bottom truss chord at panel point L2'S.
- 5 Partial depth deck slab repairs in all spans except span 5.
- 6 Repair existing pier protection dolphins.



GENERAL PLAN
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH	 7018 KINGSMILL CT., SPRINGFIELD, IL (217) 483-9457 DESIGN FIRM #184001036
CHECKED - SDS	
DRAWN - DLH	
CHECKED - CEH, SDS	

SHEET NO. 1 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 6
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts.
Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless noted otherwise.

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

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60.
See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to the 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.

Cleaning and painting of structural steel shall be performed as specified in the plans.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will not be required for this bridge.

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

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.

Burning of existing rivets or bolts will not be permitted when the subject fasteners are installed in existing structural steel to remain in place. Such rivets and bolts shall have the head of the fastener sheared off and the shank driven or drilled out. Extreme care shall be exercised when removing such fasteners so as not to damage the existing structural steel to remain. Removal of such fasteners will not be measured for payment but shall be included in the cost of the associated work. Any damage to the existing structural steel to remain in place due to the removal of such fasteners shall be repaired or replaced to the satisfaction of the Engineer at no additional cost to the Department.

Plans of the original construction and prior rehabilitation contracts are available for review at the IDOT District 6 office in Springfield, IL.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	14.7
Concrete Superstructure	Cu. Yd.	14.4
Reinforcement Bars, Epoxy Coated	Pound	2890
Traffic Control Gate Replacement, No. 1	L. Sum	1
Traffic Control Gate Replacement, No. 2	L. Sum	1
Structural Steel Repair	Pound	1690
Cleaning and Painting Structural Steel, Location 1	L. Sum	1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1
Deck Slab Repair (Partial)	Sq. Yd.	498
Finger Plate Expansion Joint, 6"	Foot	95
Protective Shield	Sq. Yd.	54
Dolphin Repair, No. 1	L. Sum	1
Dolphin Repair, No. 2	L. Sum	1

INDEX OF SHEETS

1. General Plan
2. General Data
3. Expansion Joint Removal Details
4. Expansion Joint Replacement Details
- 5.-6. Expansion Joint Details
- 7.-9. Traffic Control Gate Replacement Details
10. Traffic Control Gate Details
- 11.-12. Span 4 Truss Chord Strengthening Details
- 12a. Dolphin Repair Details
- 13.-19. Deck Slab Repairs
- 20.-25. Existing Bridge Details

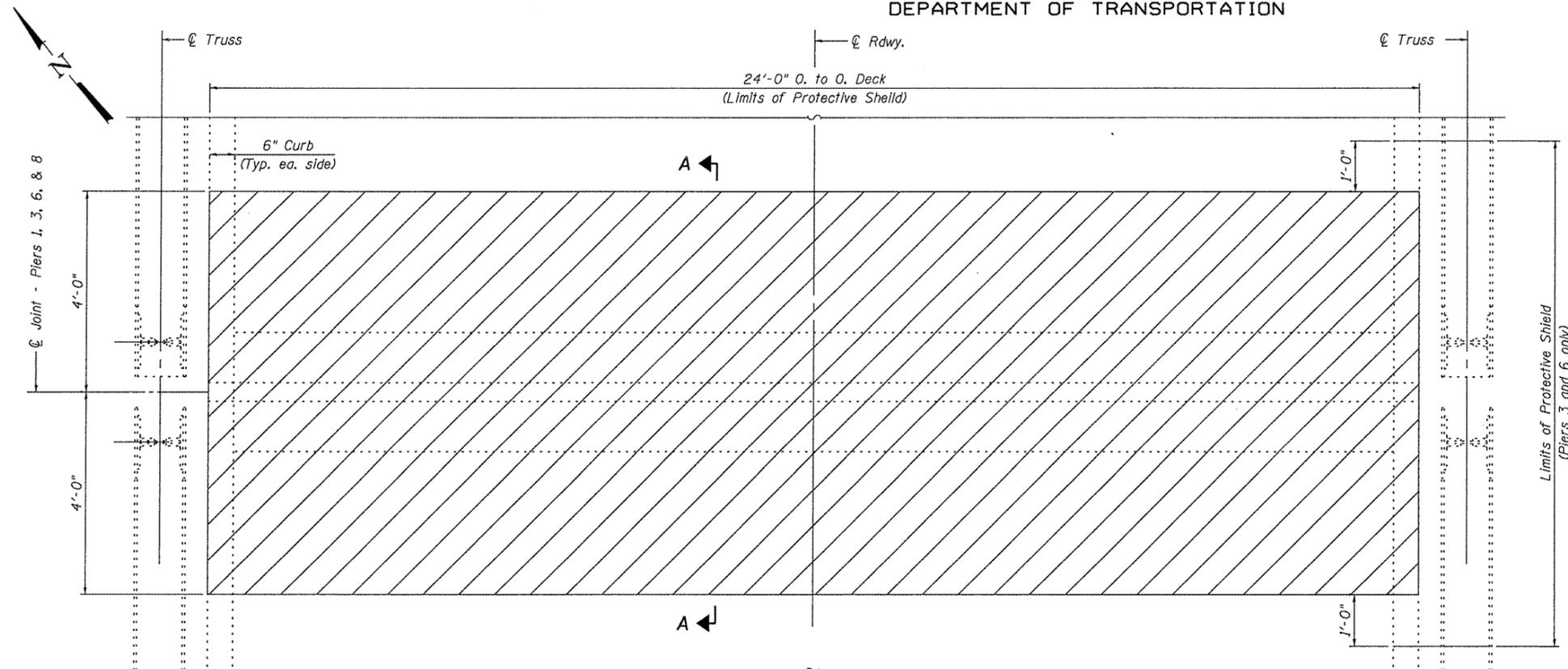
GENERAL DATA
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

WHKS & CO. ENGINEERING	7018 KINGSMILL CT., SPRINGFIELD, IL (217) 483-9457
	DESIGN FIRM #184001036

SHEET NO. 2 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 7
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXPANSION JOINT REMOVAL PLAN

Notes:

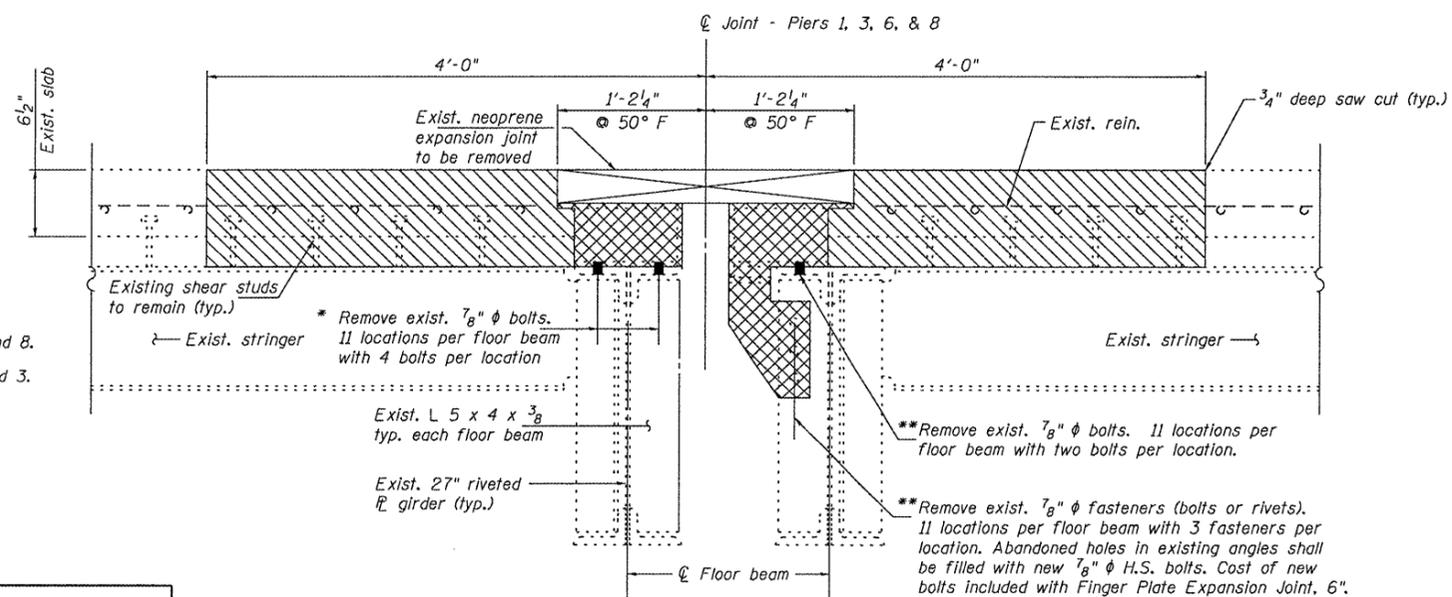
Hatched area indicates Concrete Removal.

Cross hatched area indicates removal of existing structural steel support assembly for existing expansion joint.

Removal and disposal of existing neoprene expansion joint and structural steel support assembly and fasteners shall be included with the cost of Concrete Removal.

Existing longitudinal reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.

Any existing reinforcement bars intended for reuse and damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or mechanical splice to the satisfaction of the Engineer. Cost included with Concrete Removal.



SECTION A-A

* Typical for both floor beams at piers 6 and 8.

** Typical for both floor beams at piers 1 and 3.

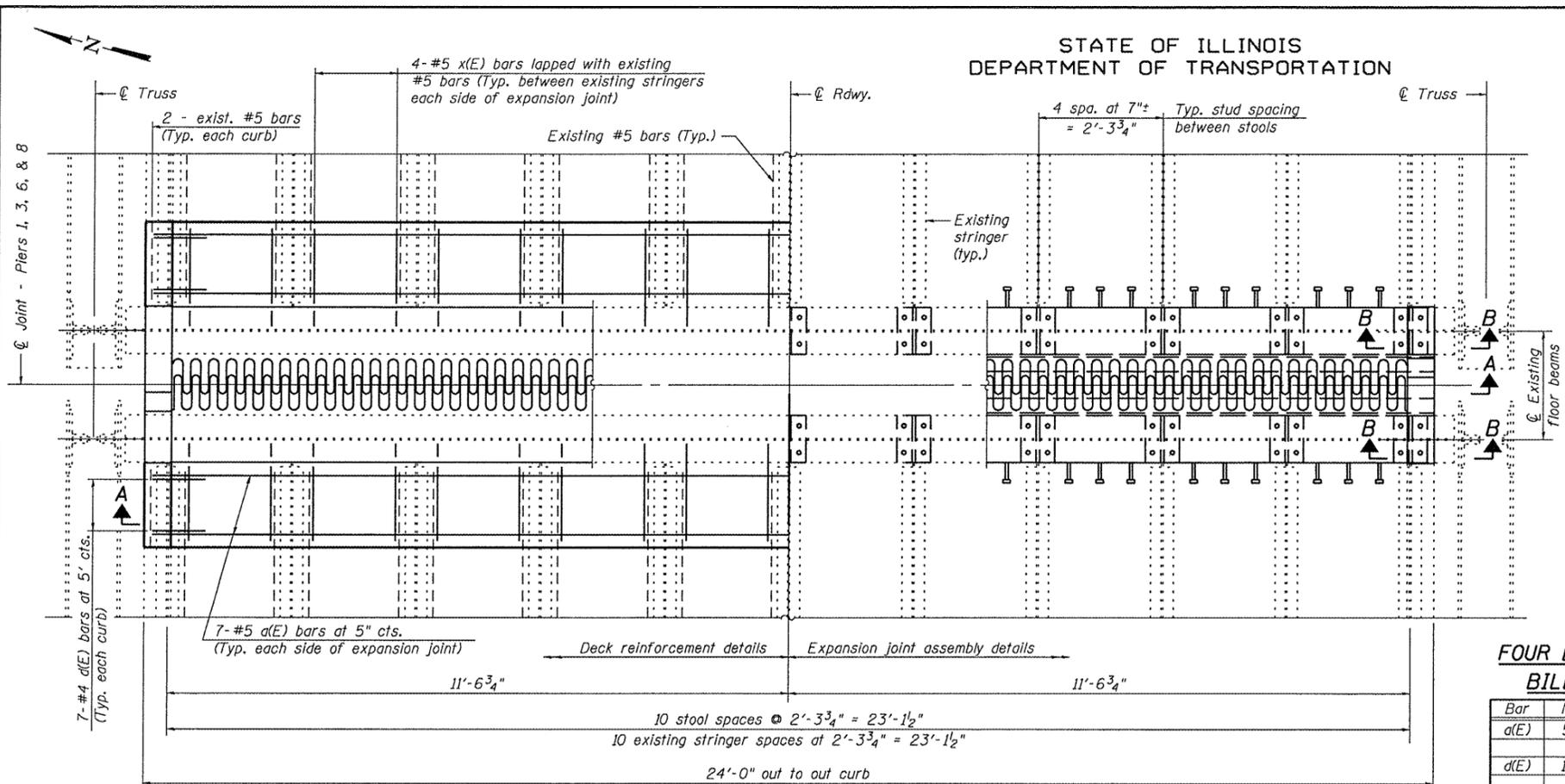
EXPANSION JOINT REMOVAL DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

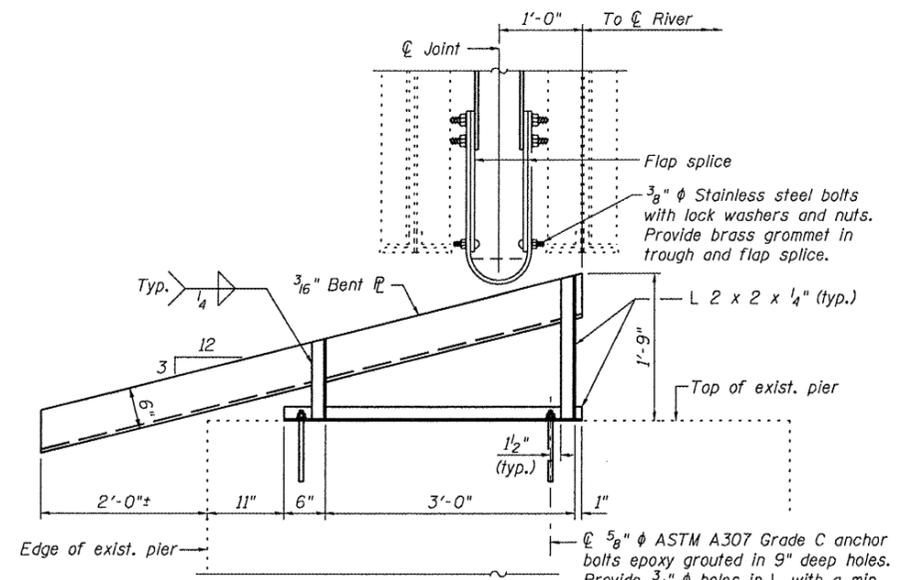
WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 3 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 8
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXPANSION JOINT REPLACEMENT PLANS

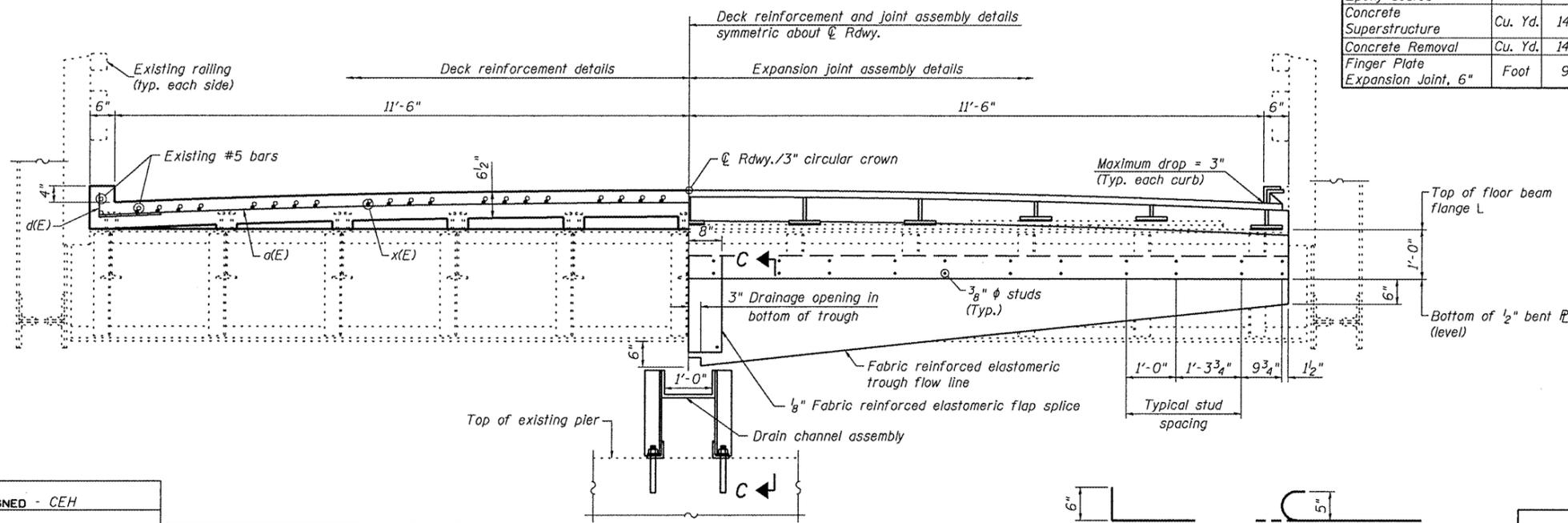


SECTION C-C

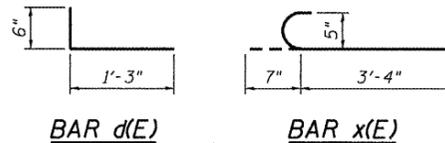
FOUR EXPANSION JOINTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	56	#5	23'-6"	—
d(E)	112	#5	1'-9"	L
x(E)	320	#5	3'-11"	C
Reinforcement Bars, Epoxy Coated	Pound		2890	
Concrete Superstructure	Cu. Yd.		14.4	
Concrete Removal	Cu. Yd.		14.7	
Finger Plate Expansion Joint, 6"	Foot		95	

Notes:
All structural steel for expansion joint assemblies shall conform to the minimum requirements of ASHTO M 270 Grade 50 unless noted otherwise.
Curb L's, curb stiffener R's, drain channel assembly, and stool shim R's shall conform to the minimum requirements of AASHTO M 270 Gr. 36.
The expansion joint and drain channel assembly and all associated hardware shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.
Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the joint assembly is installed at an ambient temperature other than 50° F.
The roadway expansion plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.
Portions of the existing railing may be removed and reinstalled to facilitate installation of expansion joint assembly. Existing fasteners that are removed with the existing railing shall be discarded and replaced in-kind. Removal and reinstallation of the existing railing including furnishing any new hardware is included with the cost of Finger Plate Expansion Joint, 6".
Furnishing and installing the drain channel assembly and all associated hardware is included in the cost of Finger Plate Expansion Joint, 6".
Existing longitudinal reinforcement may be cut as necessary to clear expansion joint assembly. Cost included with Finger Plate Expansion Joint, 6".
See sheet 6 of 25 for Section B-B.
Work this sheet with sheet 5 and 6 of 25.



SECTION A-A



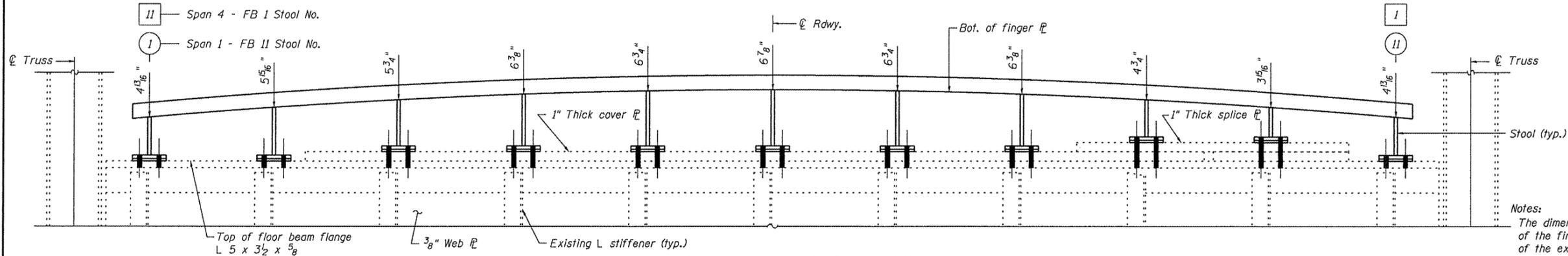
EXPANSION JOINT REPLACEMENT DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 4 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 9
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



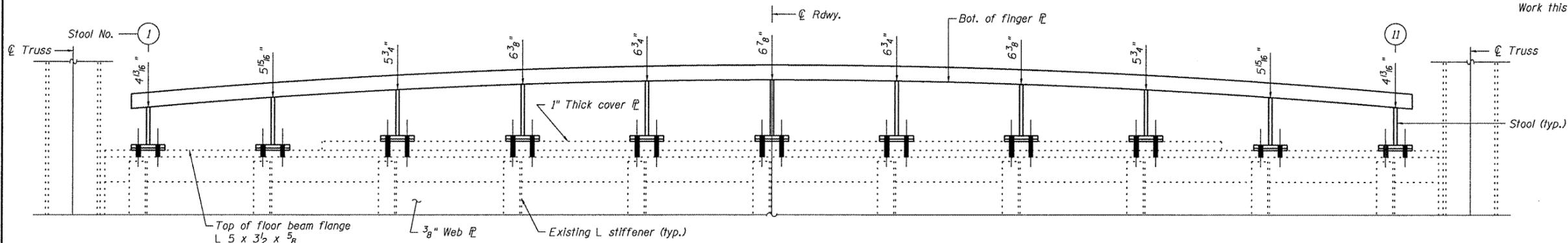
PARTIAL FLOOR BEAM ELEVATION

(Span 1 - FB 11: Looking East)
(Span 4 - FB 1: Looking West)

Notes:
The dimensions shown are from the bottom of the finger ℓ to the top most steel element of the exist. floor beam (flange ℓ , cover ℓ , or splice plate) at the subject stool location.

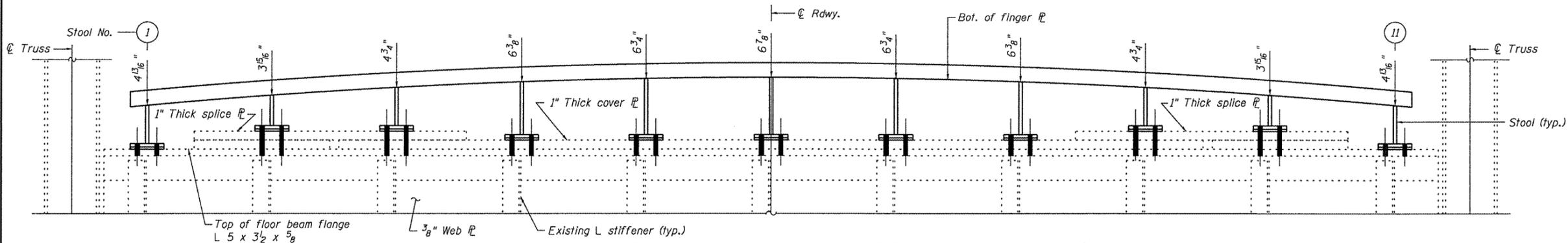
Curb assembly and exist. stringers omitted from the elevation views for clarity.

Work this sheet with sheet 4 and 6 of 25.



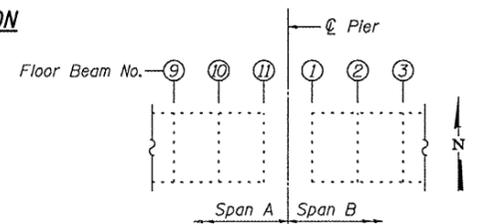
PARTIAL FLOOR BEAM ELEVATION

(Looking East)
(Span 2 - FB 1)
(Span 3 - FB 11)



PARTIAL FLOOR BEAM ELEVATION

(Looking East)
(Span 6 - FB 11)
(Span 7 - FB 1)
(Span 8 - FB 11)
(Span 9 - FB 11)



PARTIAL TRUSS FLOOR BEAM PLAN

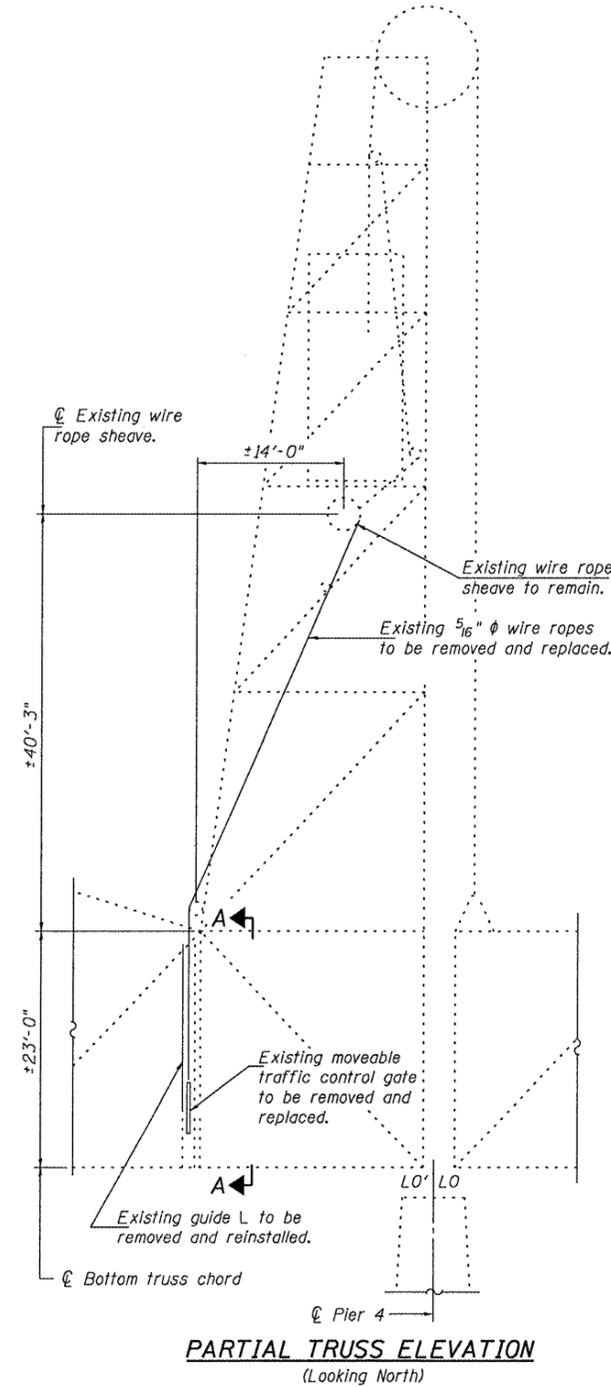
EXPANSION JOINT DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

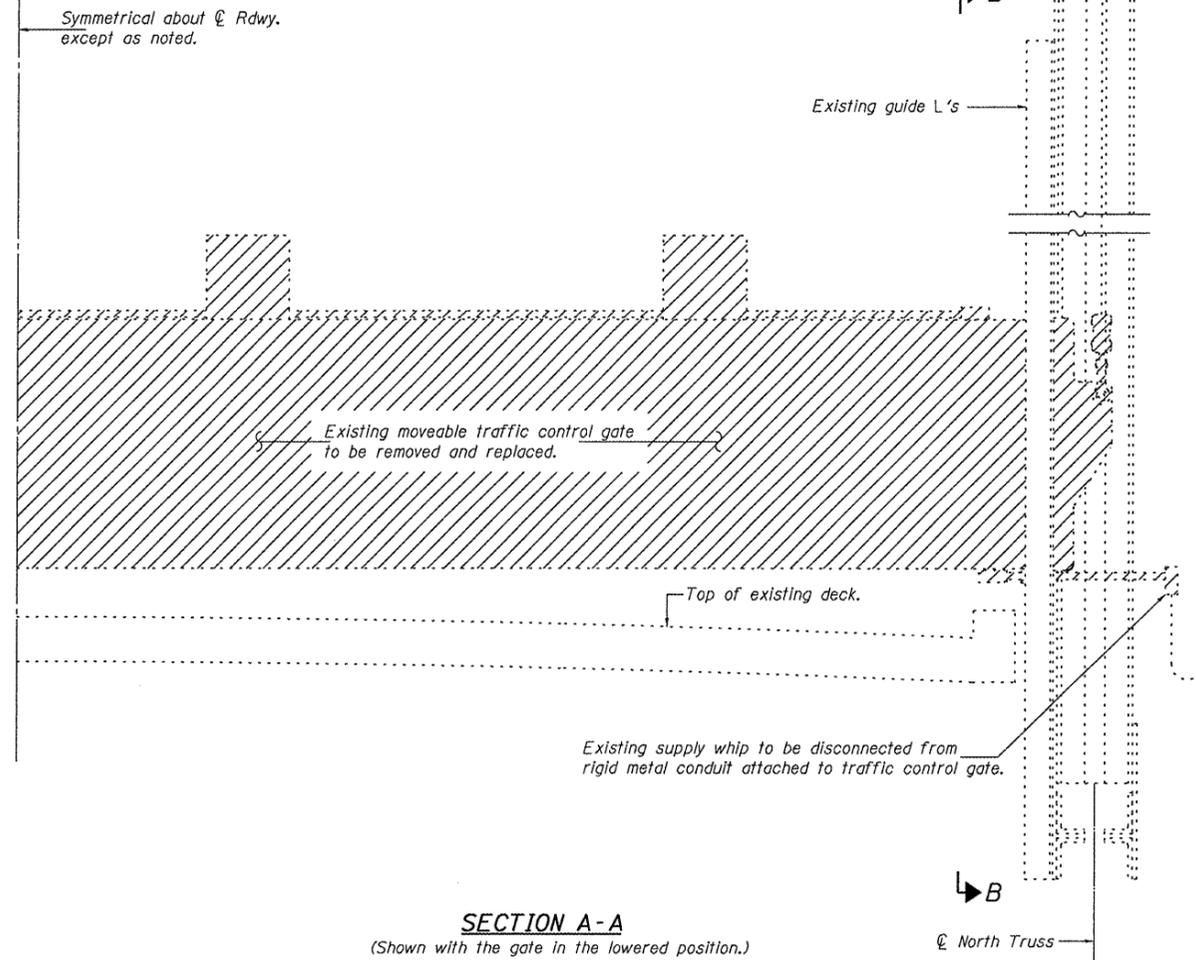
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DESIGN FIRM #194001036

SHEET NO. 5 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 10
	SN 086-0001		CONTRACT NO. 72C39		
	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

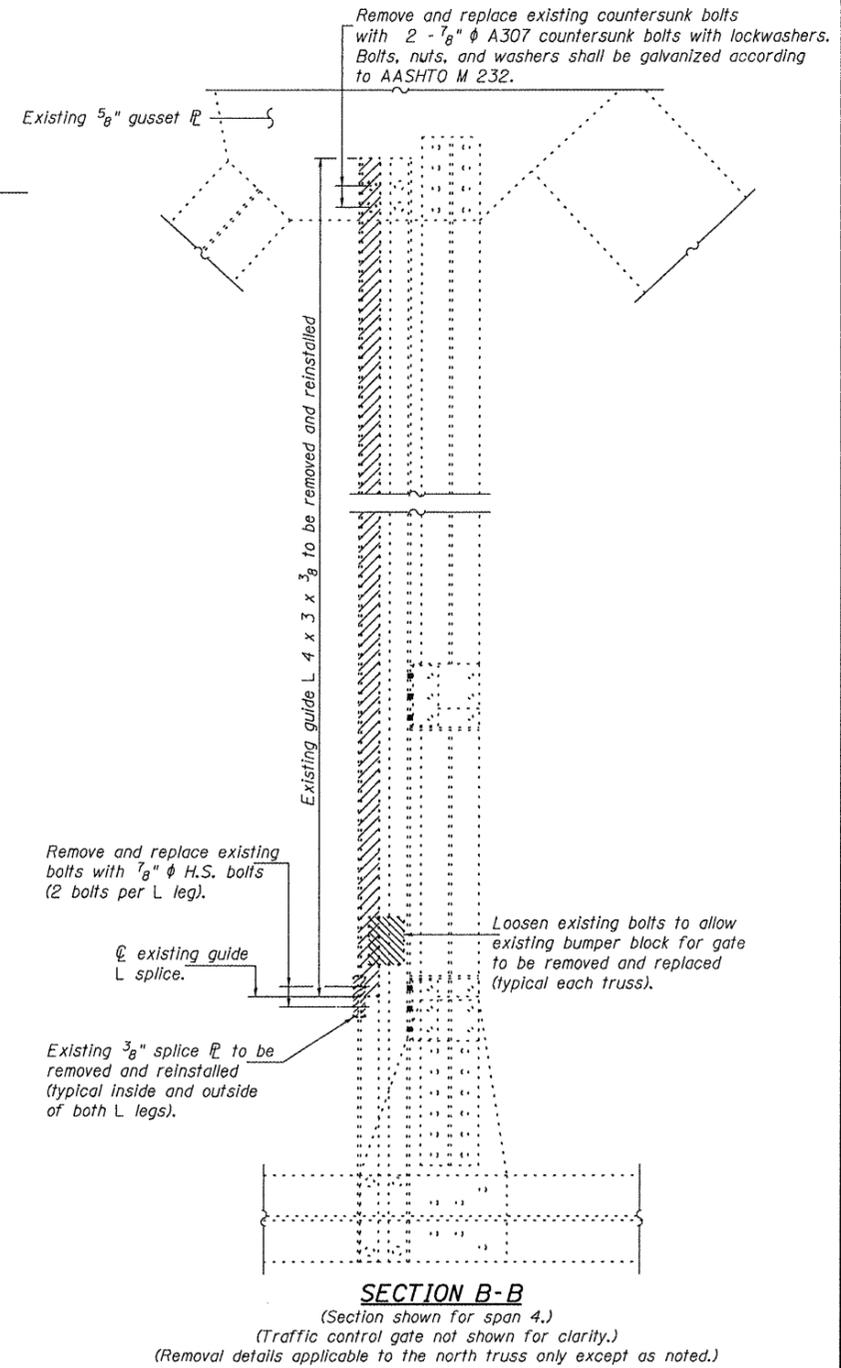
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PARTIAL TRUSS ELEVATION
(Looking North)



SECTION A-A
(Shown with the gate in the lowered position.)



SECTION B-B
(Section shown for span 4.)
(Traffic control gate not shown for clarity.)
(Removal details applicable to the north truss only except as noted.)

Notes:
Work this sheet with sheet 8 thru 10 of 25.

All work necessary to complete the removal and replacement of the traffic control gate in span 4 shall be performed in accordance with Sections 501 and 505 of the Standard Specifications, except as indicated on the plans, and be paid for at the contract unit price lump sum for Traffic Control Gate Replacement, No. 1. This price shall include all material, equipment, and labor necessary to satisfactorily remove, replace, furnish and install, and/or reinstall guide angles, traffic control gate, bumper block assemblies, electrical components, sign panels, and wire ropes as well as the disposal of all material being replaced as specified in the plans.

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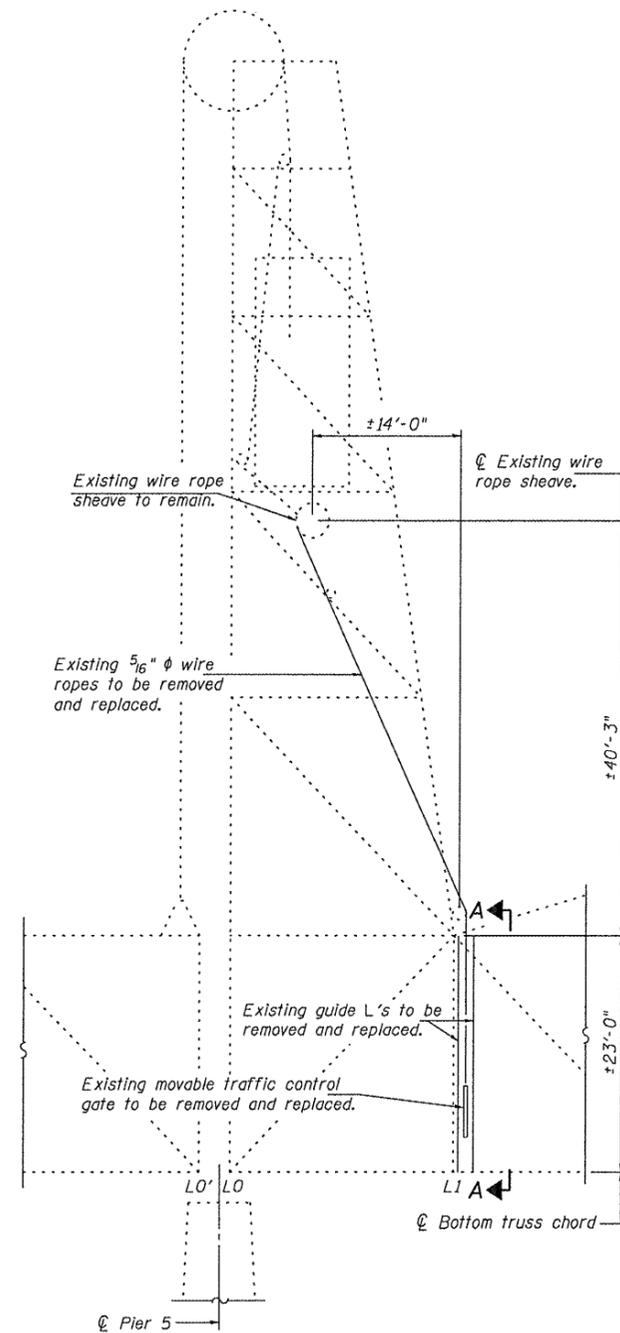
**TRAFFIC CONTROL GATE
REPLACEMENT DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

SHEET NO. 7 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 12
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. -		ILLINOIS	FED. AID PROJECT		

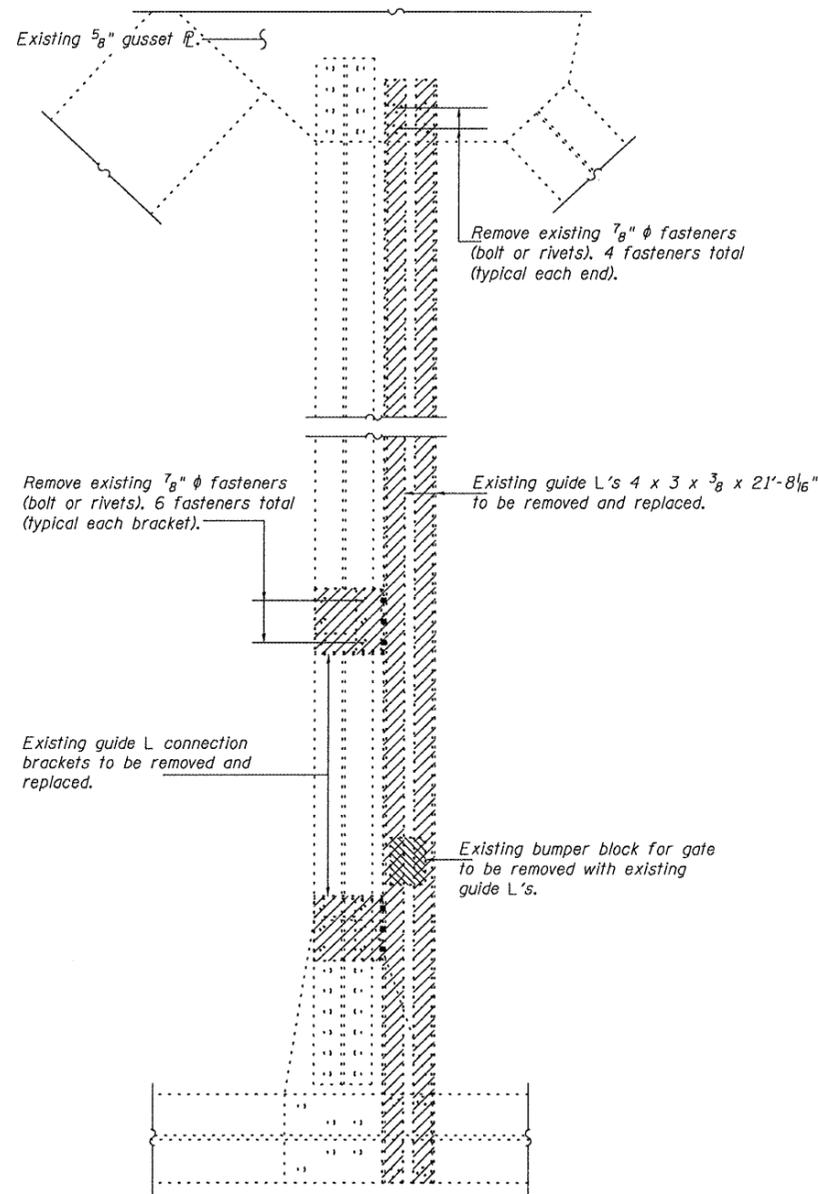
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL GATE REPLACEMENT PROCEDURE

1. Raise the lift span to lower the traffic control gates down to the roadway. (Vertical movement of the traffic control gates is mechanically controlled by raising and lowering the lift span. The Contractor shall coordinate operation of the lift span with the Engineer.)
2. Detach the existing wire ropes from the wire rope sheaves. The lift span shall not be lowered until the wire ropes for each end of a gate have been detached. Prior to detaching the wire ropes, it is recommended that a location on the sheaves be match-marked to an adjacent structural member to assist with synchronization of the sheaves when the new wire ropes are installed.
3. Detach the existing flexible electrical supply whip from the rigid metal conduit attached to the existing gates.
4. Remove the existing guide angles for the gates as indicated in the plans to allow the existing gates to be removed.
5. Remove existing gates.
6. Remove all existing grease and lubrication from the existing guide angles to be reused.
7. Install 3 out of the 4 proposed guide angles in span 6.
8. Install and block the proposed gates at a location $\pm 7"$ above the existing curbs as indicated in Section A-A on sheet 9 of 25.
9. Reinstall the existing guide angle at the gate in span 4 and install the remaining proposed guide angle at the gate in span 6.
10. Proposed bumper blocks shall be installed snug against the bottom of the gate at each set of guide angles. Bumper blocks shall be clamped in place by tightening the bolts welded to the block assembly.
11. Thickly coat the inside surface of the guide angles with grease. The grease provided by the Contractor shall be subject to approval of the Engineer and shall be suitable for prolonged exterior exposure with a high resistance to moisture, heat, and oxidation.
12. Connect the existing flexible electrical supply whip to the rigid metal conduit and electrical cable on the proposed gates.
13. Connect the proposed wire ropes to each end of the gates.
14. With the lift span in the raised position, connect the proposed wire ropes to the existing sheaves. Caution shall be exercised by the Contractor when connecting the wire ropes to the sheaves to ensure that the sheaves at each end of the gate remain synchronized. Adjustments shall be made to the sheave positions and/or ropes as required for the gates to smoothly operate in a balanced manner to the satisfaction of the Engineer. The lift span shall be cycled up and down as directed by the Engineer to ensure proper operation of the lift gates.



PARTIAL TRUSS ELEVATION
(Looking North)



SECTION B-B
(Section shown for span 6.)
(Traffic control gate not shown for clarity.)
(North truss shown. South truss similar.)

Notes:
See sheet 7 of 25 for Section A-A and location of Section B-B.

Work this sheet with sheets 7, 9, and 10 of 25.

All work necessary to complete the removal and replacement of the traffic control gate in span 6 shall be performed in accordance with Sections 501 and 505 of the Standard Specifications, except as indicated on the plans, and be paid for at the contract unit price lump sum for Traffic Control Gate Replacement, No. 2. This price shall include all material, equipment, and labor necessary to satisfactorily remove, replace, furnish and install, and/or reinstall guide angles, traffic control gate, bumper block assemblies, electrical components, sign panels, and wire ropes as well as the disposal of all material being replaced as specified in the plans.

**TRAFFIC CONTROL GATE
REPLACEMENT DETAILS**
**ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

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SHEET NO. 8 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	13
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

Notes:

Holes in proposed guide L's and brackets may be field drilled using existing members as a template or shop drilled at the Contractor's discretion.

Details shown for the proposed wire rope and traffic control gate in span 6 are also applicable to span 4 with the exception that the existing guide L's shall be reused as shown on sheet 7 of 25.

Proposed structural steel for the guide L's, brackets, and bumper block assembly shall conform to the requirements of AASHTO M 270, Grade 36.

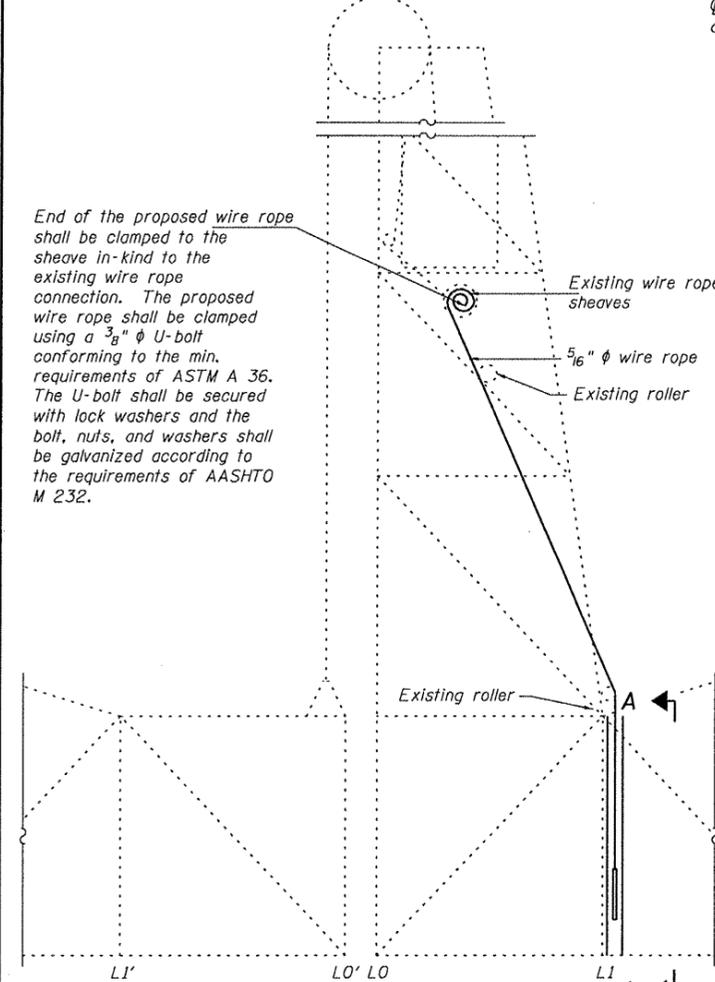
Proposed guide L's and brackets shall be painted in accordance with the paint notes shown on sheet 10 of 25 for the traffic control gate. Bumper block assemblies shall be galvanized in accordance with AASHTO M 111 and M 232.

Existing structural steel adjacent to the connections for the traffic control gate guide L's being removed and reinstalled, or replaced, shall be cleaned and painted in accordance with the Special Provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures for secondary connections and be included in the cost of Traffic Control Gate Replacement at the location specified.

Work this sheet with sheets 7, 8, and 10 of 25.

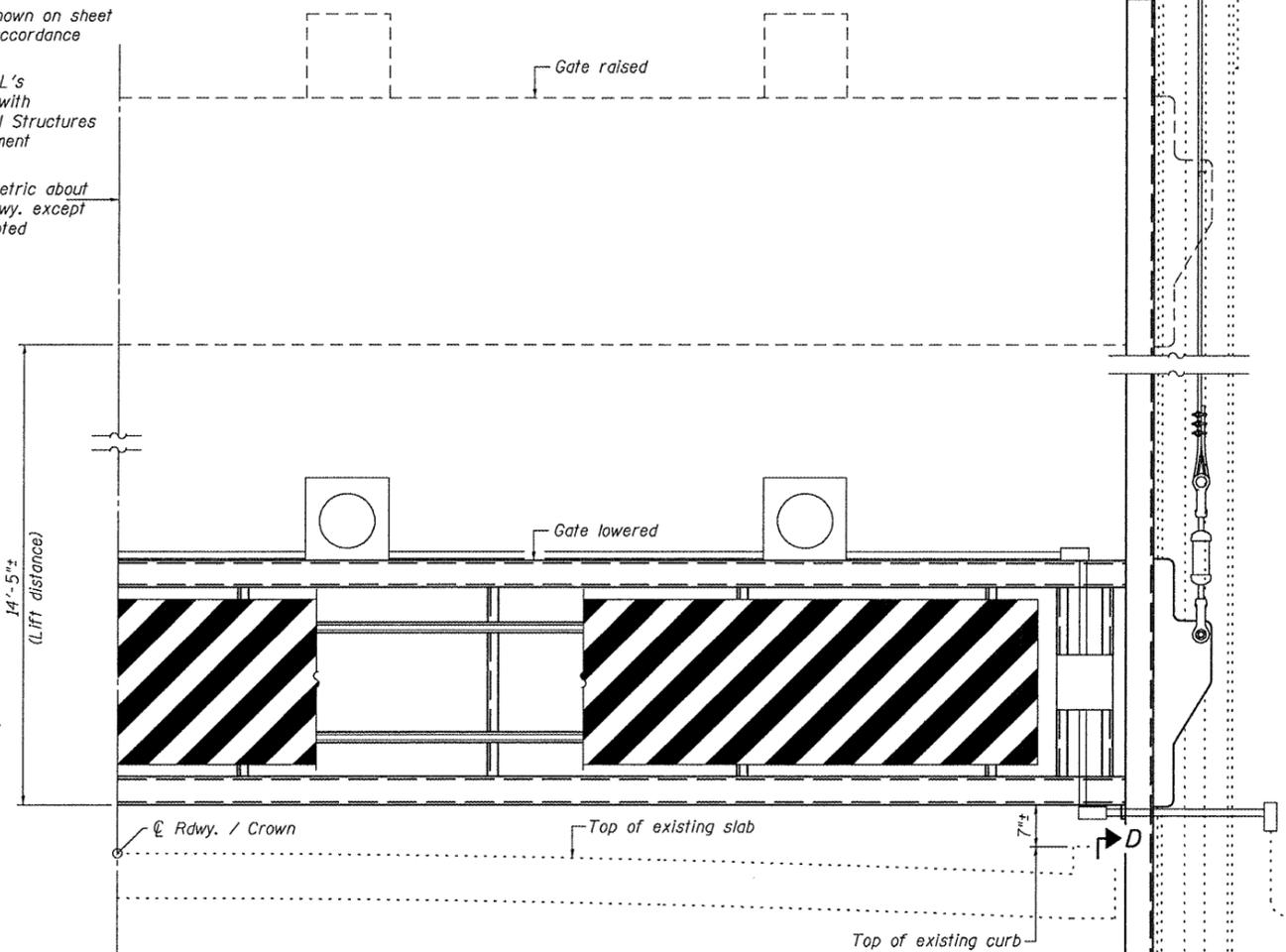
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing flexible electrical supply whip (north end only)

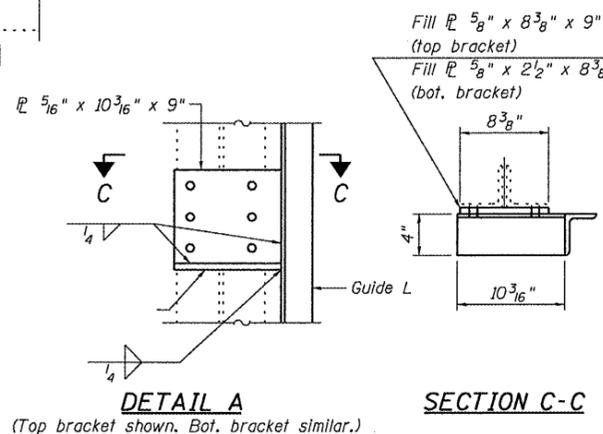


PARTIAL TRUSS ELEVATION
(Looking North)

Symmetric about
℄ Rdwy. except
as noted

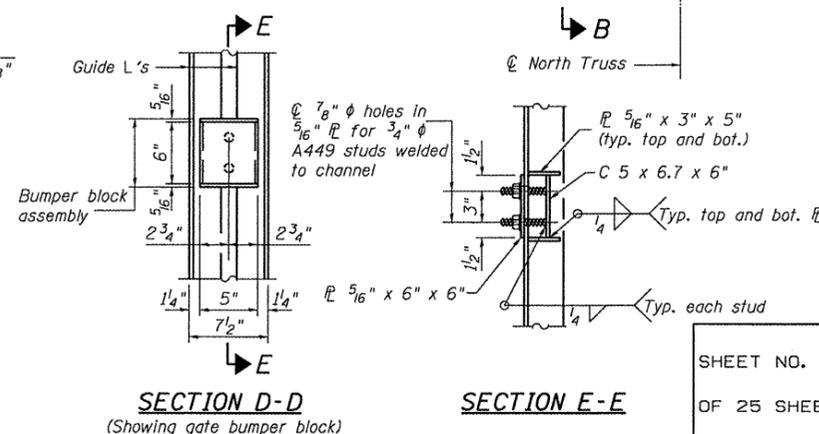


SECTION A-A



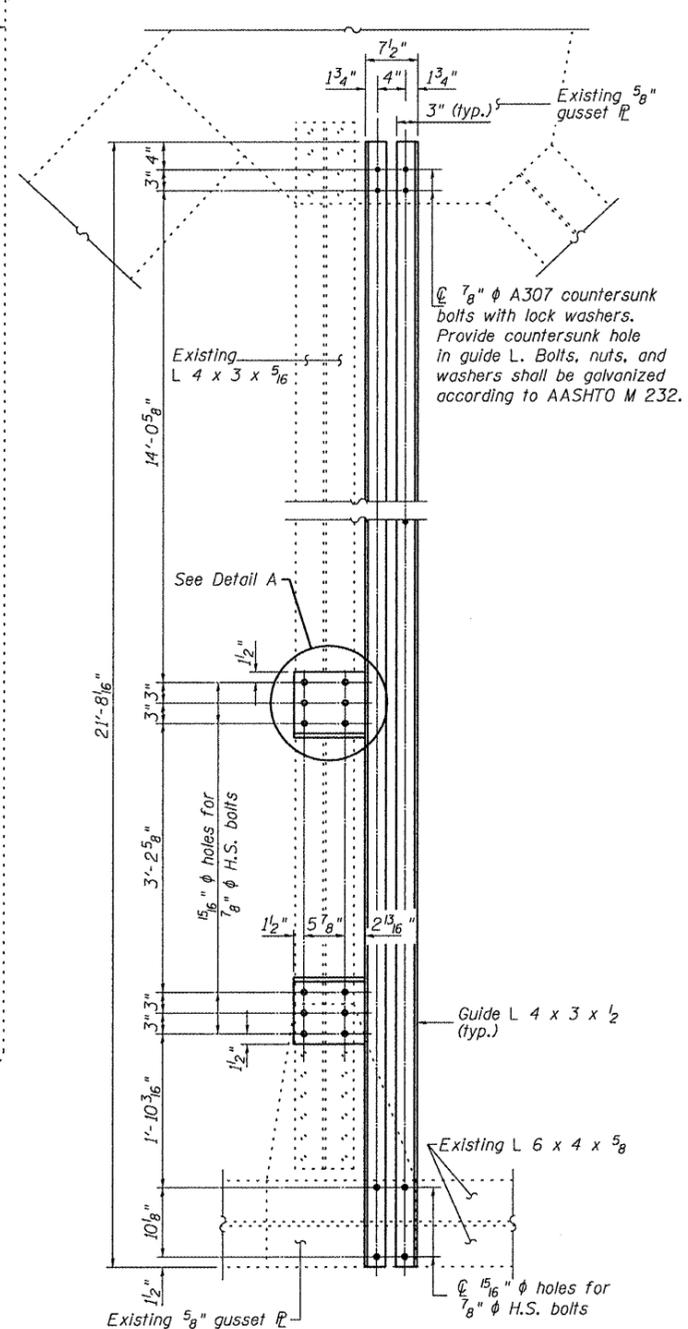
DETAIL A

SECTION C-C



SECTION D-D

SECTION E-E



SECTION B-B
(North truss shown. South truss similar.)
(See Section D-D for gate bumper block detail.)

**TRAFFIC CONTROL GATE
REPLACEMENT DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

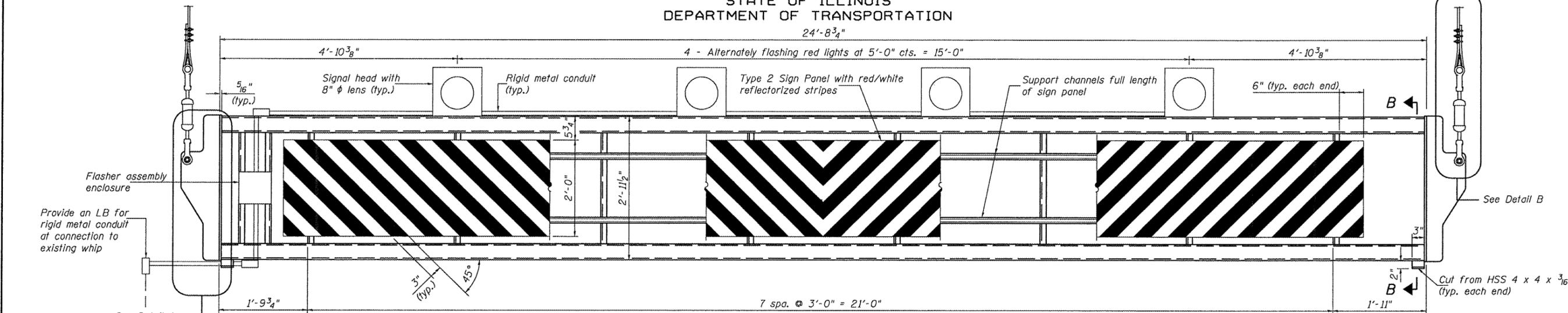
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SHEET NO. 9 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	19
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

24'-8³/₄"



ELEVATION

Notes:

HSS members shall conform to the requirements of ASTM A500, Grade D. Steel plate material and angles shall conform to the requirements of AASHTO M 270, Grade 36.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel. The entire responsibility to determine the proper size of the electrical cable and conduit, conduit placement, and to provide all necessary fittings, clamps, bushings, and appurtenant hardware as may be required to complete the installation of the conduit and light fixtures. It is permissible for the Contractor to use the inside of the HSS member as conduit. The Contractor shall furnish details for the conduit and electrical system, including the method of attachment to the gate and connection to the existing flexible electrical supply whip, to the Engineer for review and approval prior to ordering material.

Conduit layout shown is diagrammatic and is not intended to show exact location. It shall be the Contractor's responsibility to determine the proper size of the electrical cable and conduit, conduit placement, and to provide all necessary fittings, clamps, bushings, and appurtenant hardware as may be required to complete the installation of the conduit and light fixtures. It is permissible for the Contractor to use the inside of the HSS member as conduit. The Contractor shall furnish details for the conduit and electrical system, including the method of attachment to the gate and connection to the existing flexible electrical supply whip, to the Engineer for review and approval prior to ordering material.

Wire rope shall conform to the requirements of ASTM A 475 for extra high-strength grade. Wire rope shall be 7-wire strand construction with a Class C zinc coating. The estimated length of required wire rope at each end of the gate is 65 feet according to the existing plans. The Contractor shall field verify the length of required wire rope prior to ordering material.

The compression spring shall have closed ground ends and a free length of 4.5 inches. The minimum rate of compression shall be 1000 pounds per inch with a maximum solid compressed length of 3 inches.

The number and spacing of the wire rope clips shall be as specified by the wire rope clip manufacturer to develop the breaking strength of the wire rope. Installation of the wire rope clips shall be according to the manufacturer's directions.

No. 2¹/₂" clevis shall have minimum safe working load capacity of 7500 pounds based on 5:1 safety factor.

2" ϕ pipe and pipe end caps shall be hot dipped galvanized. Pipe end caps shall be of the same grade of material and the thickness shall be equal to or greater than the thickness of the pipe. Pipe end caps shall be tool tightened after assembly of the connection hardware to prevent loosening due to vibrations. All other components in Detail B except the wire ropes shall be galvanized in accordance with AASHTO M 111 or M 232.

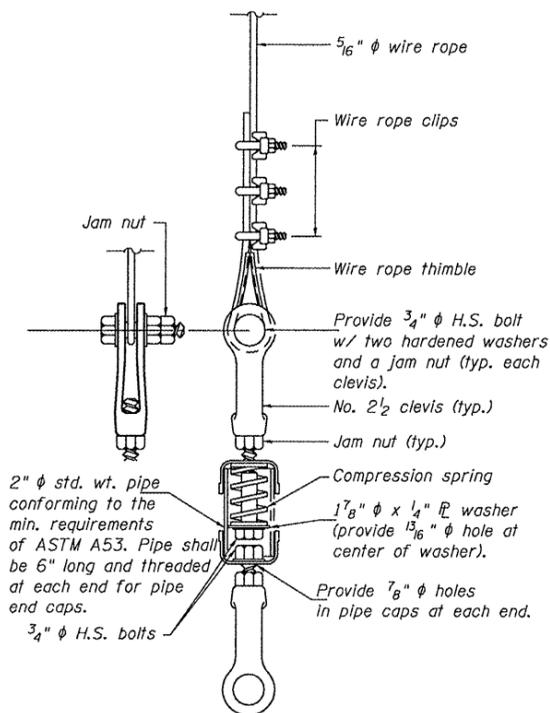
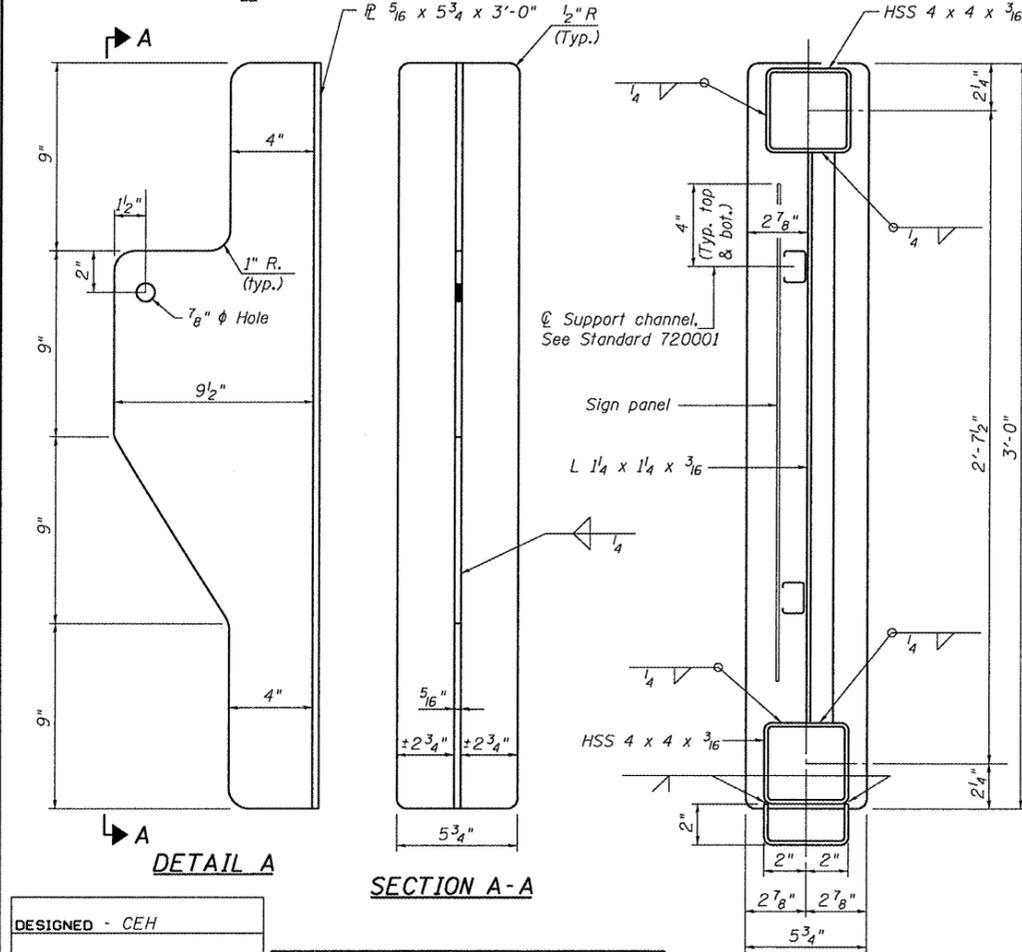
Furnishing, fabricating, and painting structural steel for the new traffic control gates as well as furnishing and installing the wire ropes and all connection hardware shall be included in the cost of Traffic Control Gate Replacement at the location specified.

Sign panel shall be furnished and installed in accordance with Section 720 of the Standard Specifications except as indicated in the plans. The cost of furnishing and installing the sign panel, support channels, and all hardware necessary shall be included in the cost of Traffic Control Gate Replacement at the location specified.

All electrical components shall be furnished and installed in accordance with the applicable portions of Division 800 of the Standard Specifications except as indicated in the plans. The cost of furnishing and installing the electrical components and all necessary hardware and connecting the existing electrical supply whip is included in the cost of Traffic Control Gate Replacement at the location specified.

Work this sheet with sheets 7 thru 9 of 25.

Existing flexible electrical supply whip (typ. at north end of each gate)



DETAIL B
(Showing connection hardware and section thru pipe)

**TRAFFIC CONTROL GATE DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

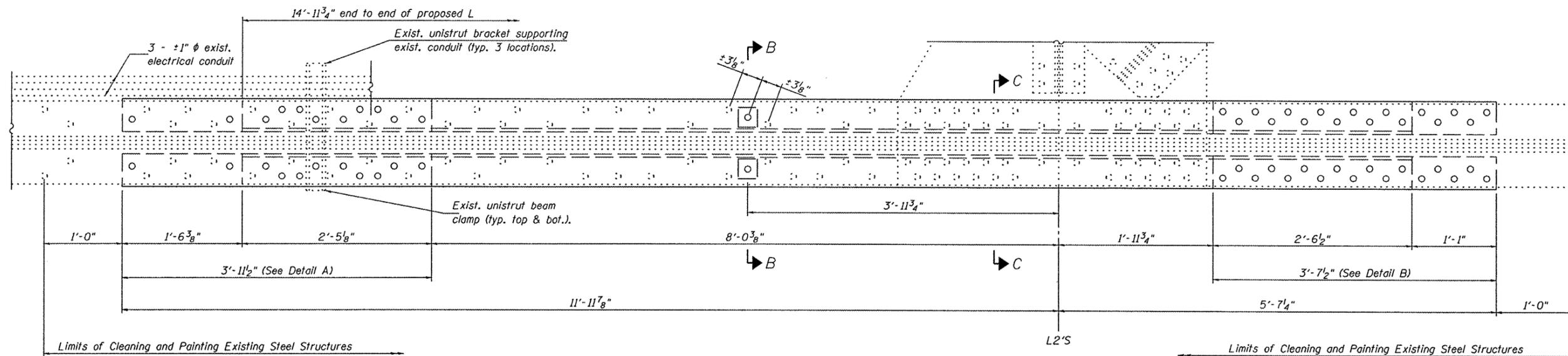
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SHEET NO. 10 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30-15	SHEET NO. 15
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



REPAIR DETAIL ELEVATION
(Span 4 - Looking North)

Notes:

The Contractor shall field verify the layout of the existing and proposed holes for the connections of the proposed structural steel angles and plates prior to ordering materials. It is recommended that the centers of the existing holes be exposed and located by shearing off the heads of the subject rivets. The minimum distance between the centers of any of the holes in any direction shall not be less than 2 5/8\".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Structural steel angles shall conform to the requirements of AASHTO M 270, Grade 50. Structural steel plates shall conform to the requirements of AASHTO M 270, Grade 36.

The existing bottom chord shall be cleaned and painted within the limits shown according to the special provision "Cleaning and Painting Existing Steel Structures". The entire specified area shall be cleaned per the requirements for Near White Blast Cleaning SSPC-SP10 and painted according to the requirements of Paint System 1 - OZ/E/U. All contact surfaces between the proposed and existing structural steel shall be masked off and protected from the application of the intermediate and top coats. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. Cleaning and painting shall be performed prior to the final installation of the proposed structural steel. Cost included with Cleaning and Painting Structural Steel, Location No. 1.

The proposed structural steel shall receive a full shop application of the Organic Zinc Rich Primer / Epoxy / Urethane Paint System. All contact surfaces of the proposed structural steel sections shall be masked off and protected from the application of the intermediate and top coats. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8. See special provision for Cleaning and Painting New Metal Structures.

All work necessary to complete the truss chord strengthening shall be performed in accordance with Sections 501 and 505 of the Standard Specifications except as indicated in the plans and be paid for at the contract unit price per pound for Structural Steel Repair. This price shall include all material, labor, and equipment necessary to strengthen members as indicated in the plans.

Existing electrical conduit within the truss chord strengthening area shall be temporarily supported and the existing unistrut beam clamps loosened and removed. Methods of temporary support shall be submitted to the Engineer for review and approval prior to loosening unistrut beam clamps. Additional conduit supports may be loosened to provide necessary clearance for drilling holes in existing truss chord. Location of unistrut brackets may be adjusted horizontally as necessary to accommodate proposed H.S. bolts required for the truss chord strengthening. Unistrut brackets shall be reinstalled on existing truss chord with new beam clamps capable of accommodating proposed structural steel angles and plates. Cost included with Structural Steel Repair.

Existing rivet holes specified in the plans to be abandoned shall be sealed on the exterior surface of the chord with a silicone sealant suitable for structural steel after the proposed structural steel members are installed. The silicone sealant shall be approved for prolonged exterior exposure without losing flexibility or adhesion to painted surfaces and shall be subject to approval of the Engineer. Cost included with Structural Steel Repair.

Note A:

Holes in existing steel shall be field drilled using holes in proposed angles and plates as a template. Holes in existing steel may be subdrilled using a template and reamed to the final specified size in assembly at the Contractor's discretion.

Note B:

Holes in proposed angles and plates shall be field drilled using holes in existing steel as a template. Holes in proposed angles and plates may be subdrilled in the shop and reamed to the final specified size in assembly at the Contractor's discretion.

Note C:

7/8\"

Note D:

Existing 7/8\"

Work this sheet with sheet 12 of 25.

TRUSS CHORD STRENGTHENING PROCEDURE

- Field verify the layout of the existing and proposed fastener holes.
- Loosen and remove unistrut brackets and temporarily support electrical conduit.
- Remove and replace existing H.S. bolts as indicated in Section C-C and Note D.
- Remove existing fasteners in the vertical legs of the truss chord within the limits of Details A and B.
- Clean and paint the existing bottom truss chord within the limits shown in the plans.
- Locate and field drill holes in existing and proposed steel members per Notes A and B.
- Install proposed angles and structural plates. Steps 6 and 7 shall be completed one angle at a time. Threaded tie rod assemblies shall not be installed until the proposed members at each end of the tie rods are in place.
- Reattach existing electrical conduit and unistrut brackets to bottom truss chord.
- Seal abandoned holes in bottom truss chord.

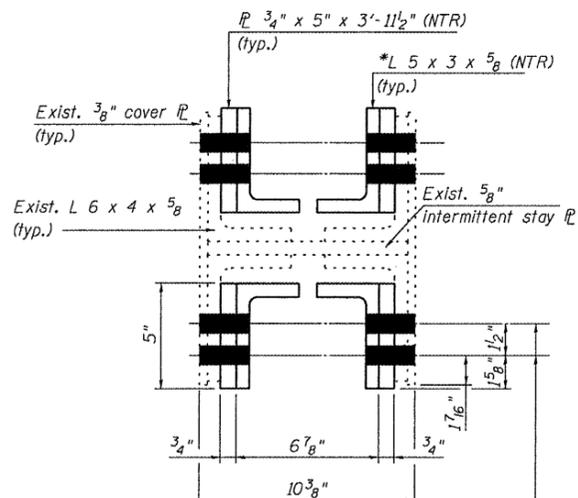
SPAN 4 TRUSS CHORD
STRENGTHENING DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

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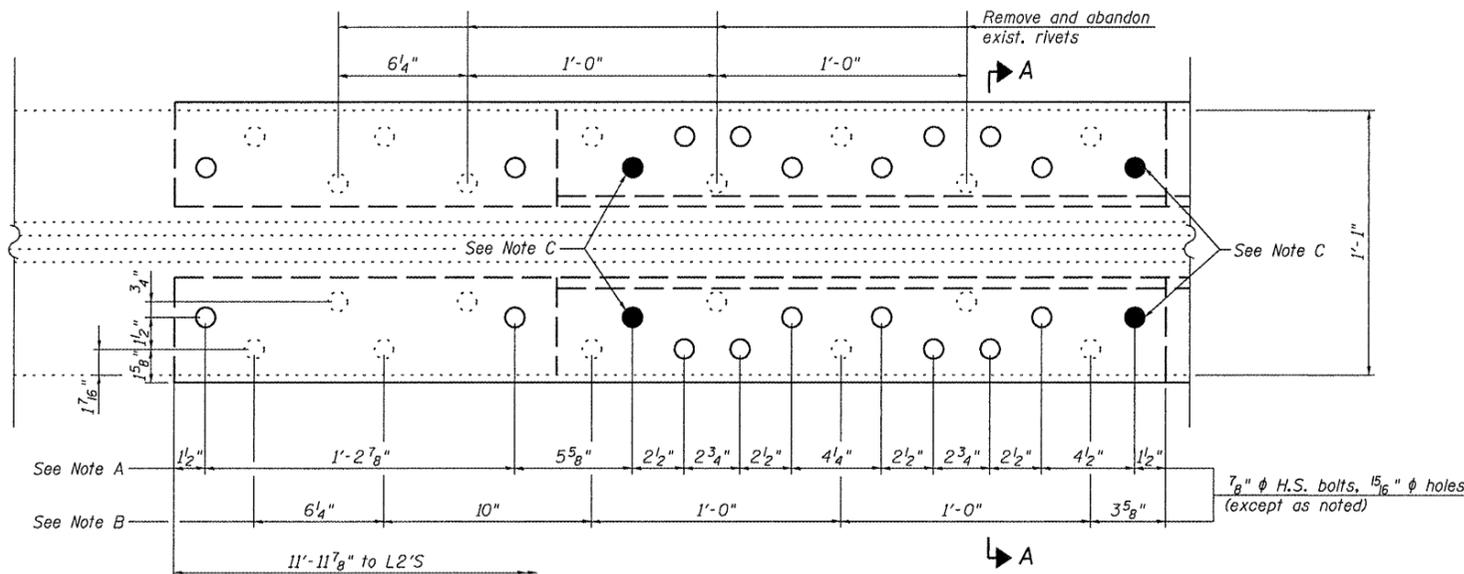
SHEET NO. 11 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 16
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT			

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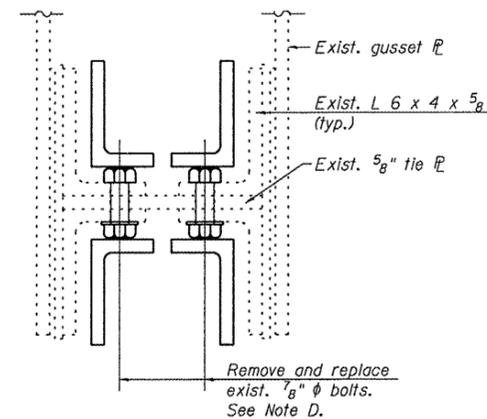
SECTION A-A

(See Section B-B for details of threaded rods)

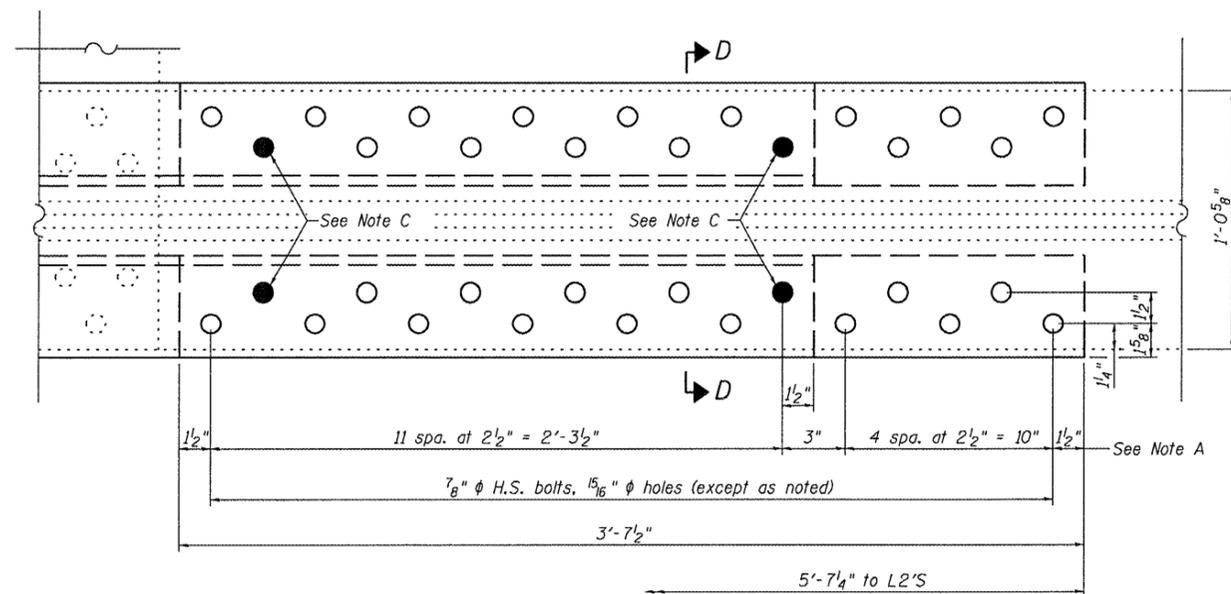


DETAIL A

(● indicates threaded rod)

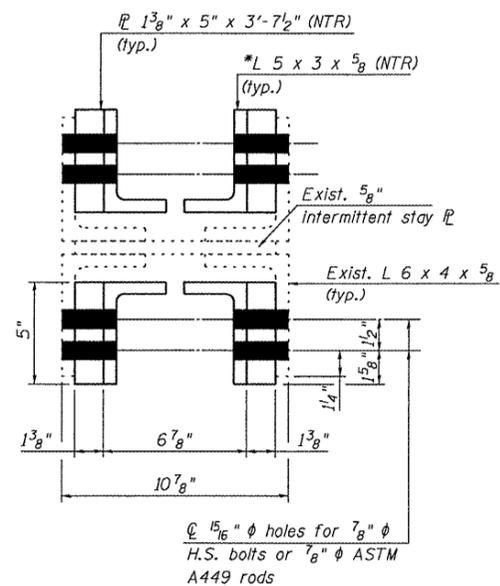


SECTION C-C



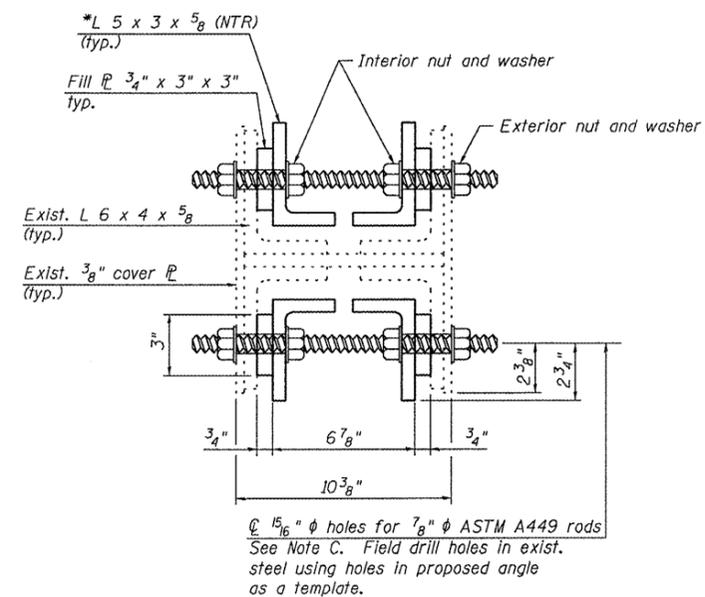
DETAIL B

(● indicates threaded rod)



SECTION D-D

(See Section B-B for details of threaded rods)



SECTION B-B

SPAN 4 TRUSS CHORD
STRENGTHENING DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

* Proposed L shall be fabricated from L 5 x 3 1/2 x 5/8. In lieu of the L 5 x 3 1/2 x 5/8 the Contractor may fabricate the proposed section from 5/8 inch thick PL's having the same minimum material requirements specified for the L's and joined with a complete joint penetration groove weld ground flush. Furnishing and fabricating the proposed section from welded PL's shall not be at additional cost to the Department.

Note:
Work this sheet with sheet 11 of 25.

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SHEET NO. 12 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 12
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT			

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Notes:

Cross-hatched area indicates limits of existing damaged sheetpiling to be removed and repaired. Hand thermal cutting followed by grinding is allowed to remove the existing sheetpiling within the limits shown.

Hatched area indicates limits of existing concrete to be removed and replaced. The depth of concrete removal shall be increased as necessary to remove all loose and unsound concrete. Concrete removal shall be performed prior to ordering reinforcement and the length of the $h_{10}(E)$ bars shall be increased as necessary to position the reinforcement bars as shown and accommodate any increased depth of concrete removal. Concrete removal and replacement in excess of the limits shown and any required additional reinforcement shall be subject to approval of the Engineer and be paid for according to Article 109.04 of the Standard Specifications.

The Contractor shall take sufficient precautions to prevent construction and demolition debris from falling into the river.

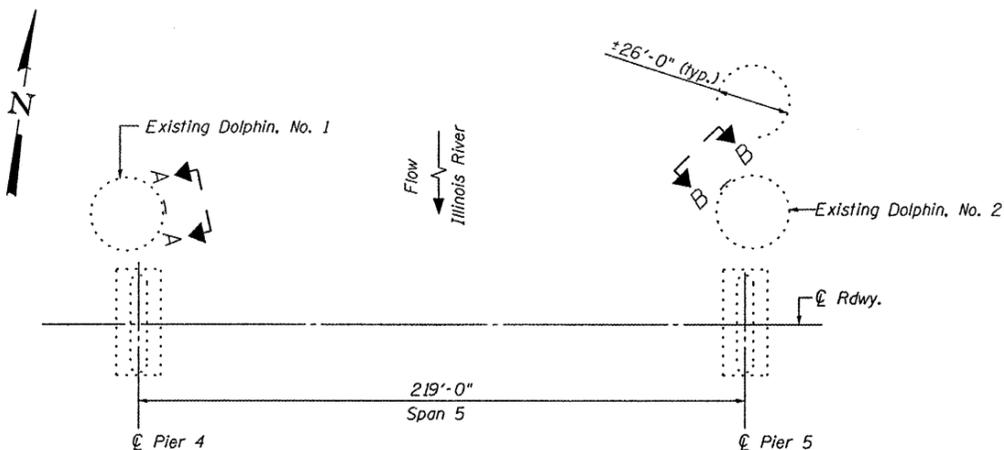
Self-Consolidating Concrete is allowed for the dolphin repairs. Notched openings shall be provided in the top of the curved structural steel plates as necessary to facilitate concrete placement. The concrete shall either be finished flush with the outer face of the steel plate or ground flush with the outer face of the steel plate after the concrete has hardened. Details and number of required notches shall be determined by the Contractor and shall be subject to approval of the Engineer. See special provisions for Self-Consolidating Concrete for Cast-In-Place Construction.

The proposed curved structural steel plates may be field welded to the existing steel sheetpiling or temporary construction accessories may be welded to both of the steel components to facilitate repair of the dolphins. All temporary construction accessories shall be removed after the repairs are complete and any remaining weld material ground smooth.

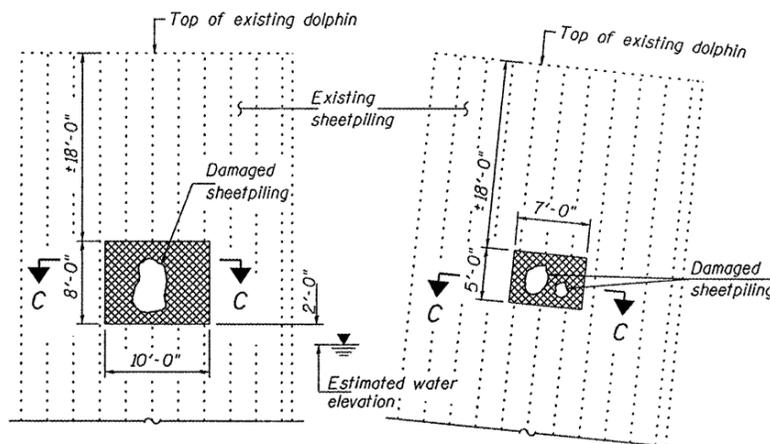
The Contractor shall seal the joints between the proposed steel plate and existing sheetpiling to prevent concrete leakage during concrete placement. Sealing method shall be subject to approval of the Engineer.

Structural steel plates shall conform to the requirements of AASHTO M 270, Grade 36. The estimated radius of the curved structural steel plates is 13'-0". The Contractor shall field verify the radius of the curved structural steel plates such that the outside surface of the plates can be positioned approximately flush with the outside surface of the webs of the existing sheetpiling. Painting or priming the curved structural steel plates is not required.

All work necessary to complete the repair of the dolphins shall be performed in accordance with Sections 501, 503, and 505 of the Standard Specifications, except as indicated on the plans, and be paid for at the unit price lump sum for Dolphin Repair at the location specified. This price shall include all material, labor, and equipment necessary to satisfactorily remove and dispose of existing steel sheetpiling and concrete and furnish and install all proposed steel plates, shear studs, reinforcement, and concrete as indicated in the plans.

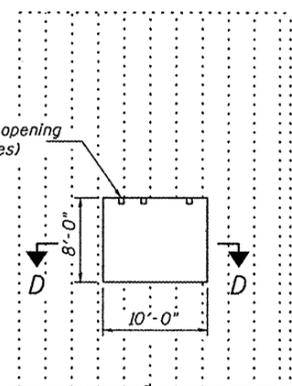


PARTIAL PLAN
(Bridge omitted from view for clarity.)

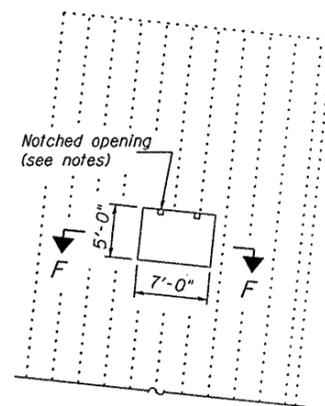


SECTION A-A
(Showing removal details.)

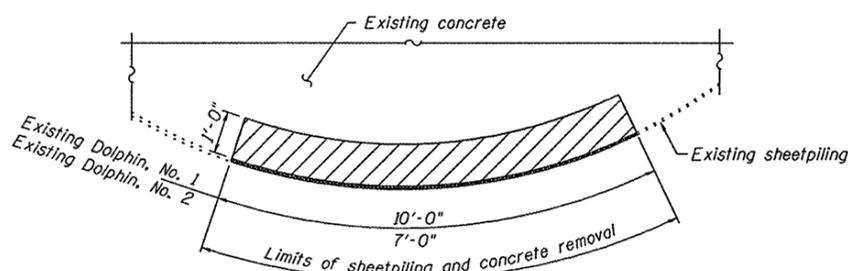
SECTION B-B
(Showing removal details.)



SECTION A-A
(Showing repair details.)

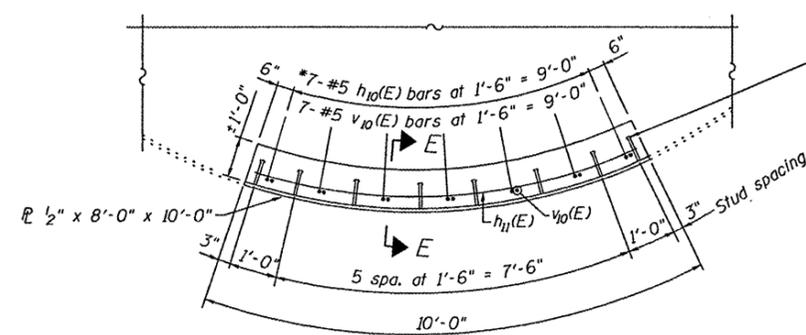


SECTION B-B
(Showing repair details.)



SECTION C-C

* Epoxy grout $h_{10}(E)$ bars in 9" min. deep drilled holes according to Section 584 of the Standard Specifications. Cost included with Dolphin Repair.

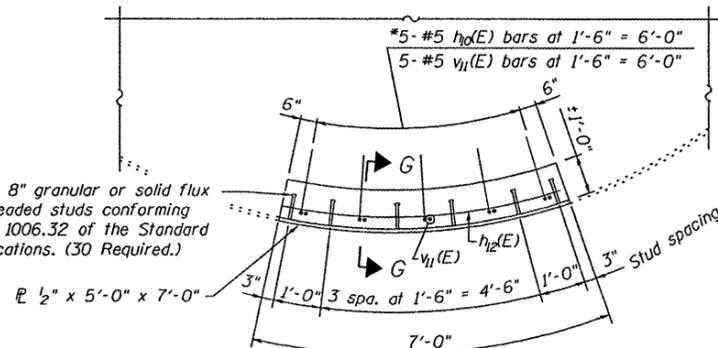


SECTION D-D

(All radial dimensions are provided along the $\frac{1}{2}$ " R.)

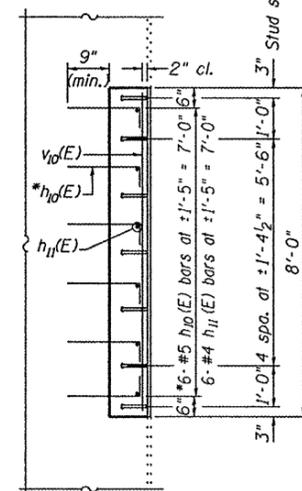
$\frac{3}{4}$ " ϕ x 8" granular or solid flux filled headed studs conforming to Art. 1006.32 of the Standard Specifications. (56 Required)

$\frac{3}{4}$ " ϕ x 8" granular or solid flux filled headed studs conforming to Art. 1006.32 of the Standard Specifications. (30 Required.)

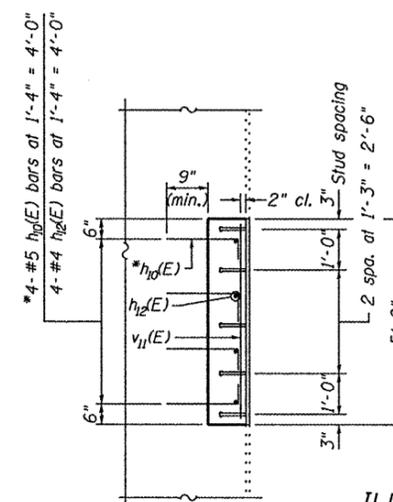


SECTION F-F

(All radial dimensions are provided along the $\frac{1}{2}$ " R.)



SECTION E-E

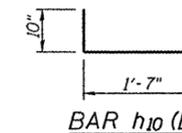


SECTION G-G

BAR LIST

Bar	No.	Size	Length	Shape
$h_{10}(E)$	62	#5	2'-5"	—
$h_{11}(E)$	6	#4	9'-8"	—
$h_{12}(E)$	4	#4	6'-8"	—
$v_{10}(E)$	7	#5	7'-8"	—
$v_{11}(E)$	5	#5	4'-8"	—

($h_{11}(E)$ and $h_{12}(E)$ bars shall be sprung into shape in the field.)



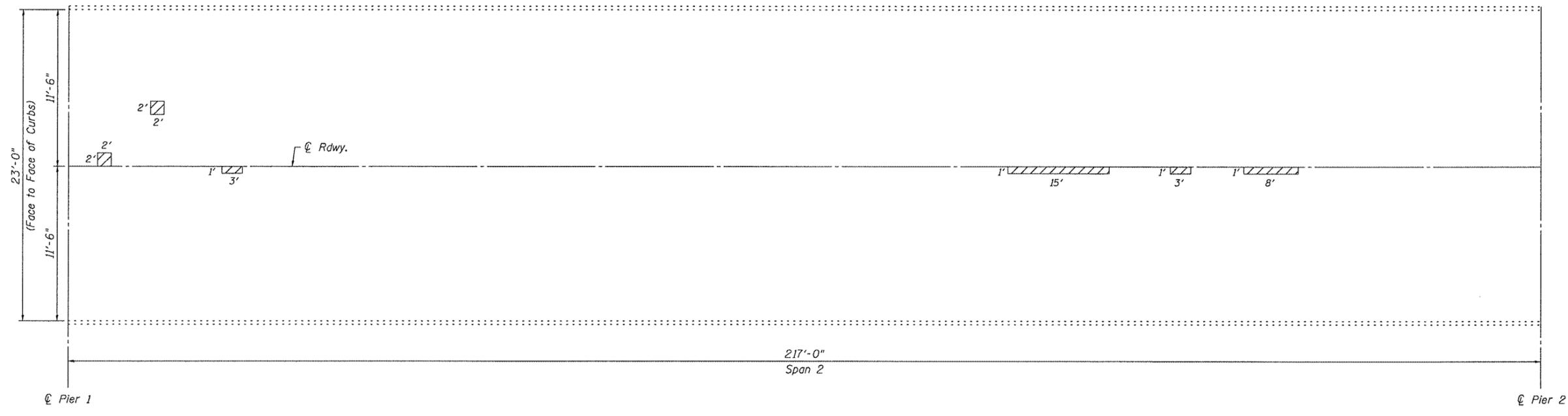
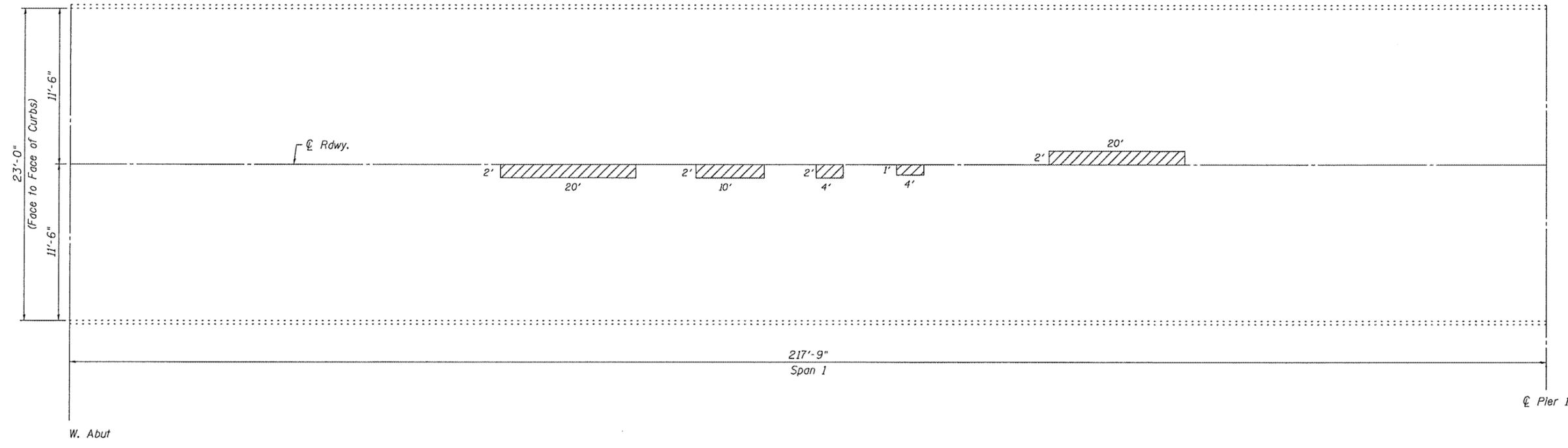
DOLPHIN REPAIR DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

WHKS & CO.
ENGINEERING
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(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 12A	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 17A
OF 25 SHEETS	SN 086-0001	CONTRACT NO. 72C39			
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

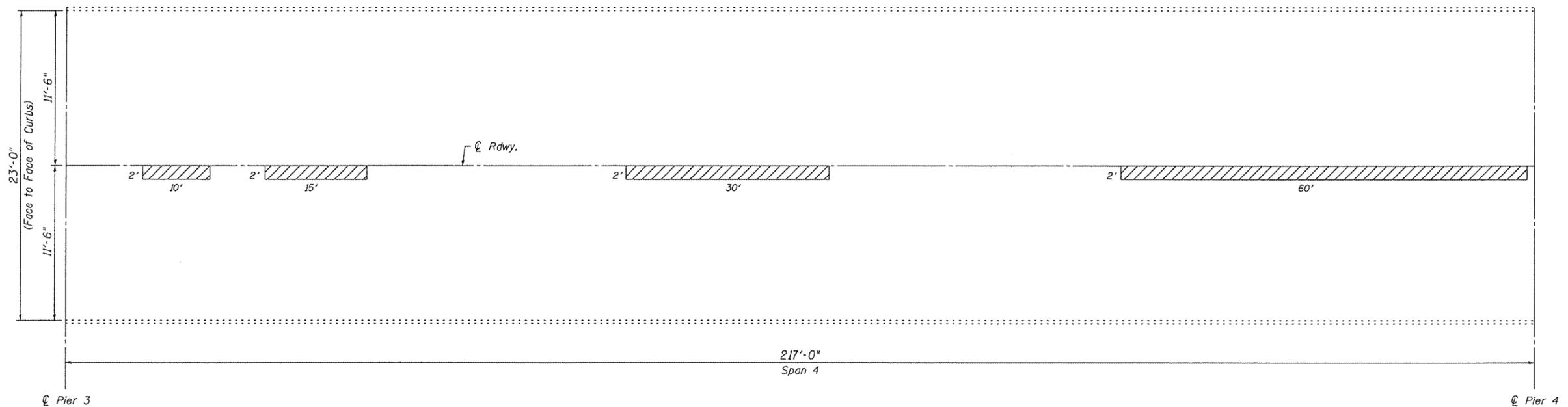
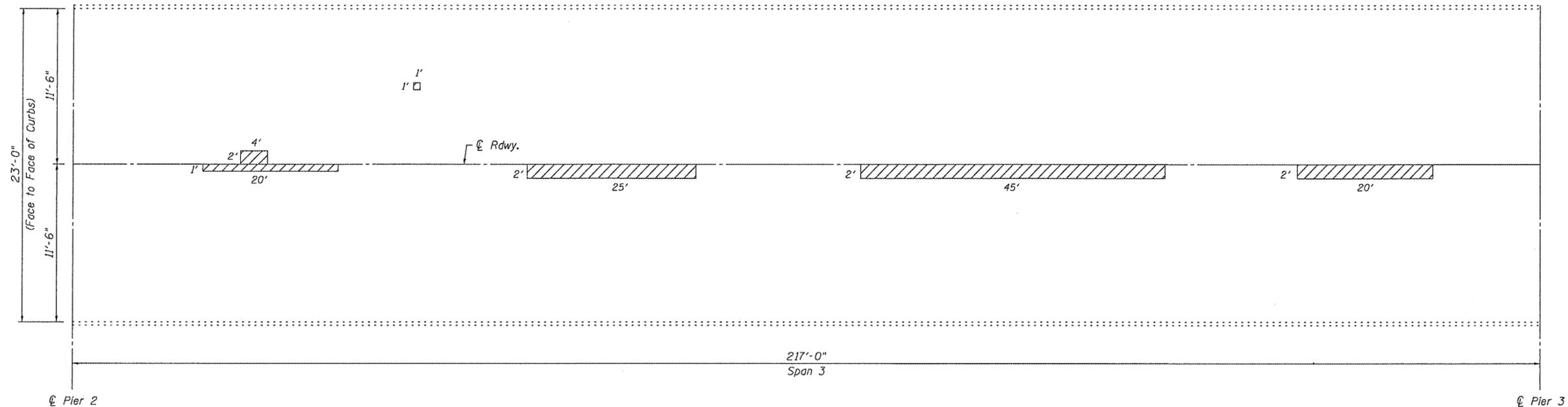
WHKS & CO.
ENGINEERING

7018 KINGSMILL CT.
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

Notes:
Hatching indicates estimated areas of the deck requiring partial depth patches. See Special Provisions for Deck Slab Repair. Cost included with Deck Slab Repair (Partial).

SHEET NO. 13 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 18
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

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DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

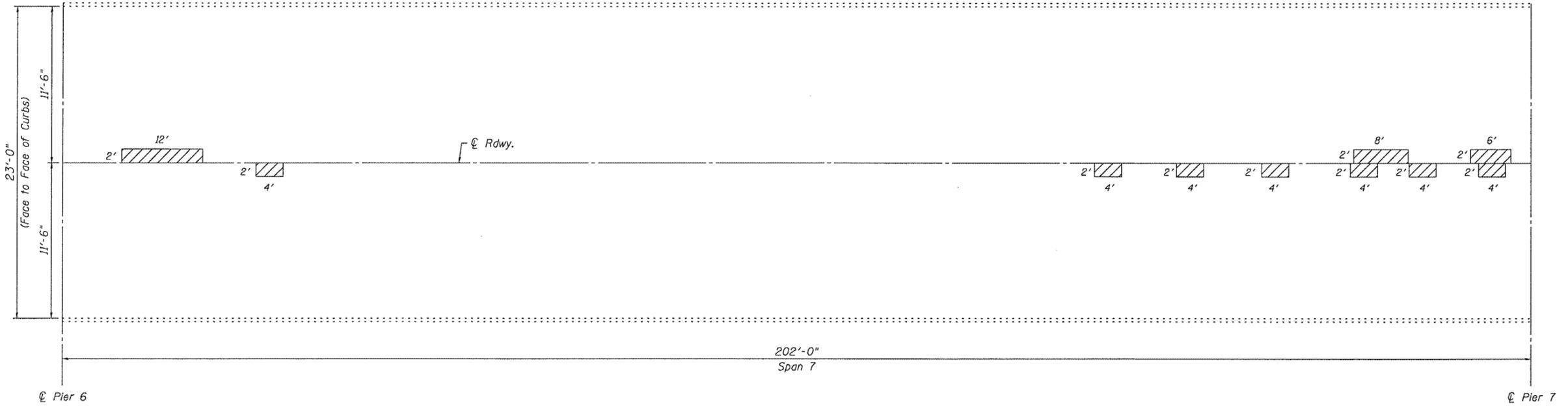
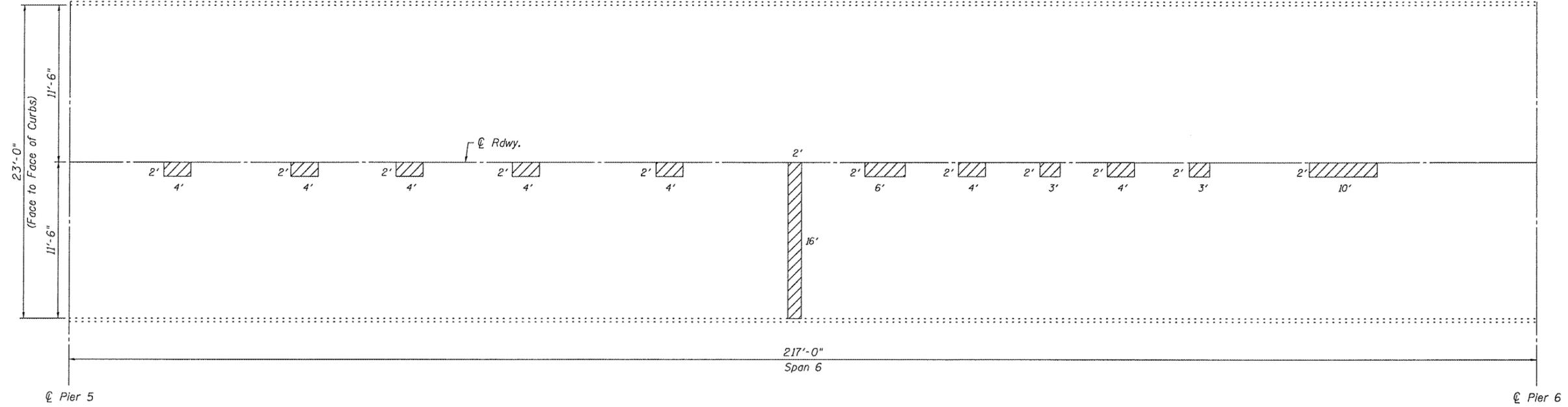
DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

W H K S & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
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DESIGN FIRM #184001036

Notes:
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Cost included with Deck Slab Repair (Partial).

SHEET NO. 14 OF 25 SHEETS	F.A.P. RTE. 757	SECTION 20BR-2	COUNTY SCOTT/PIKE	TOTAL SHEETS 30	SHEET NO. 19
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

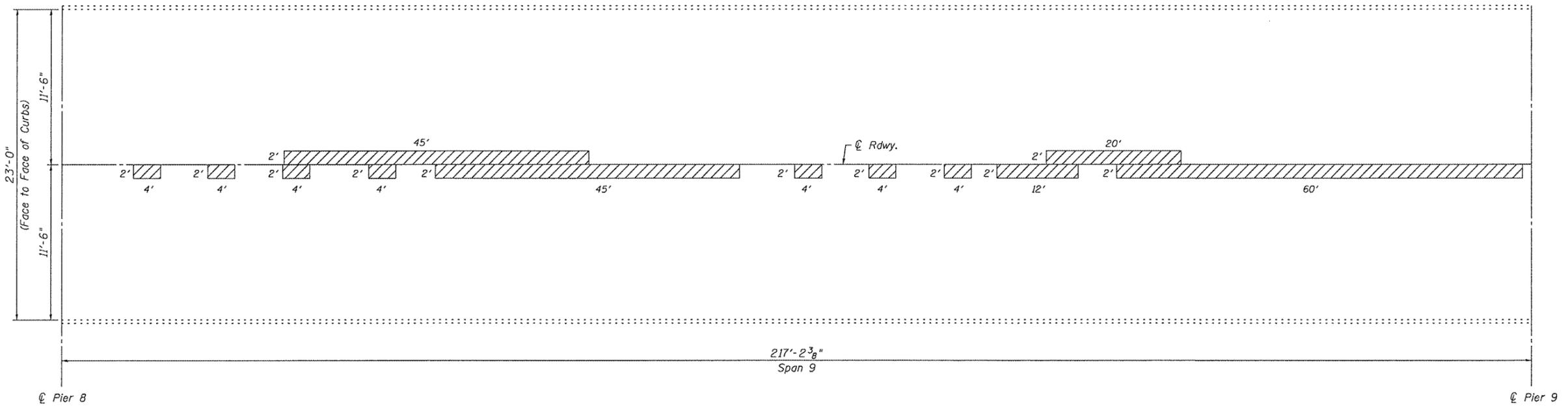
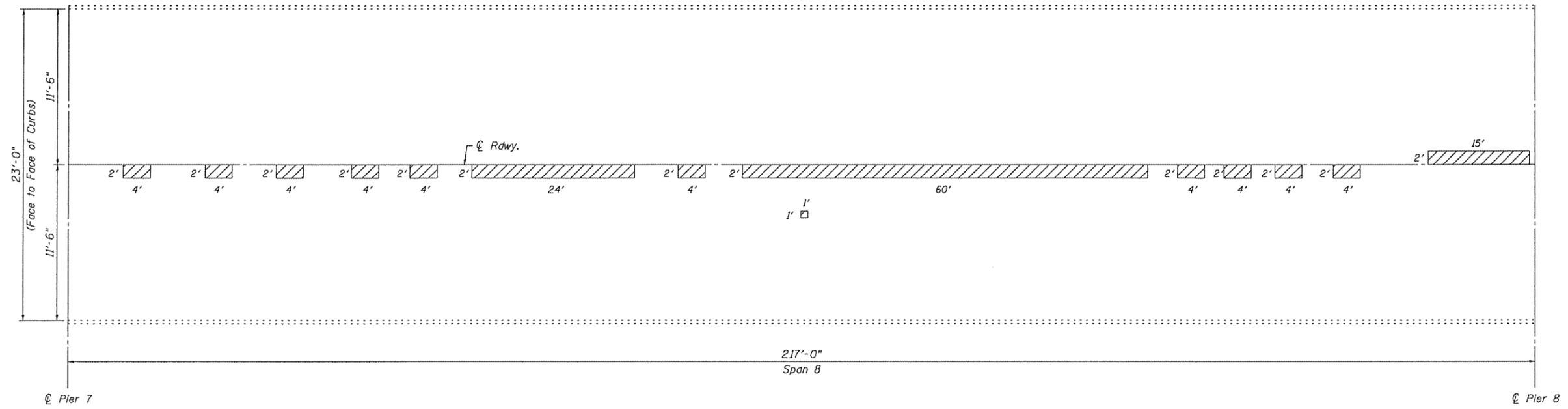
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Notes:
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**DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

SHEET NO. 15 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	20
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



**DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

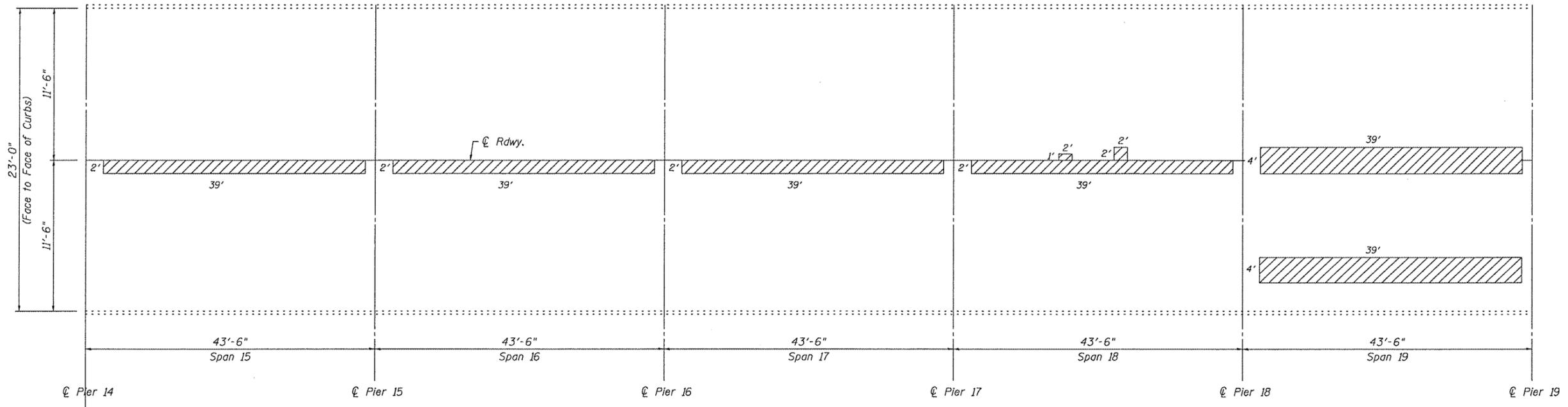
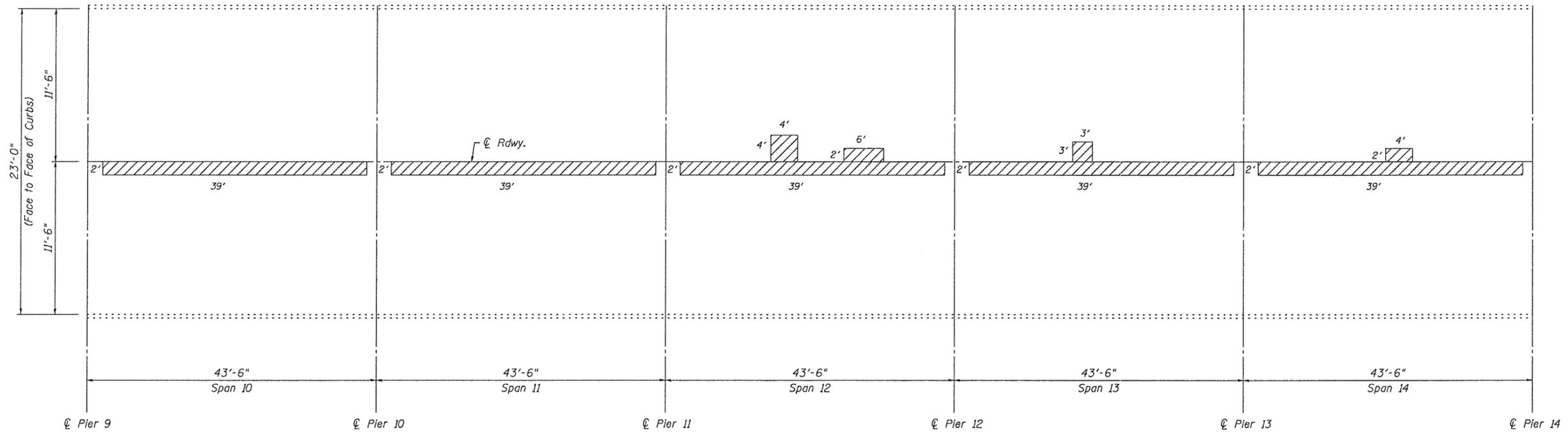
DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

W H K S & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

Notes:
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SHEET NO. 16 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	21
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

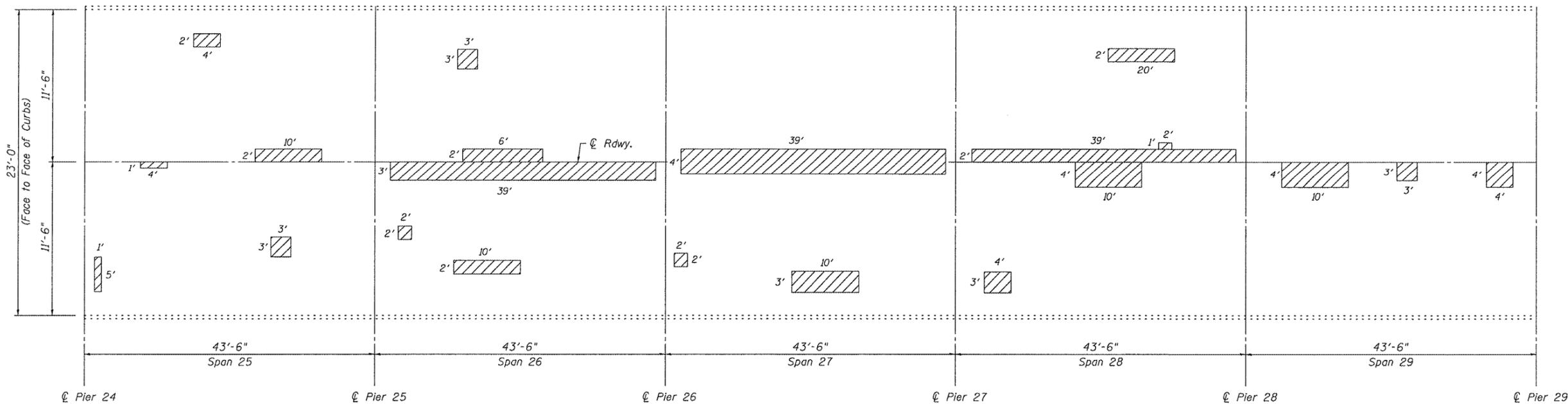
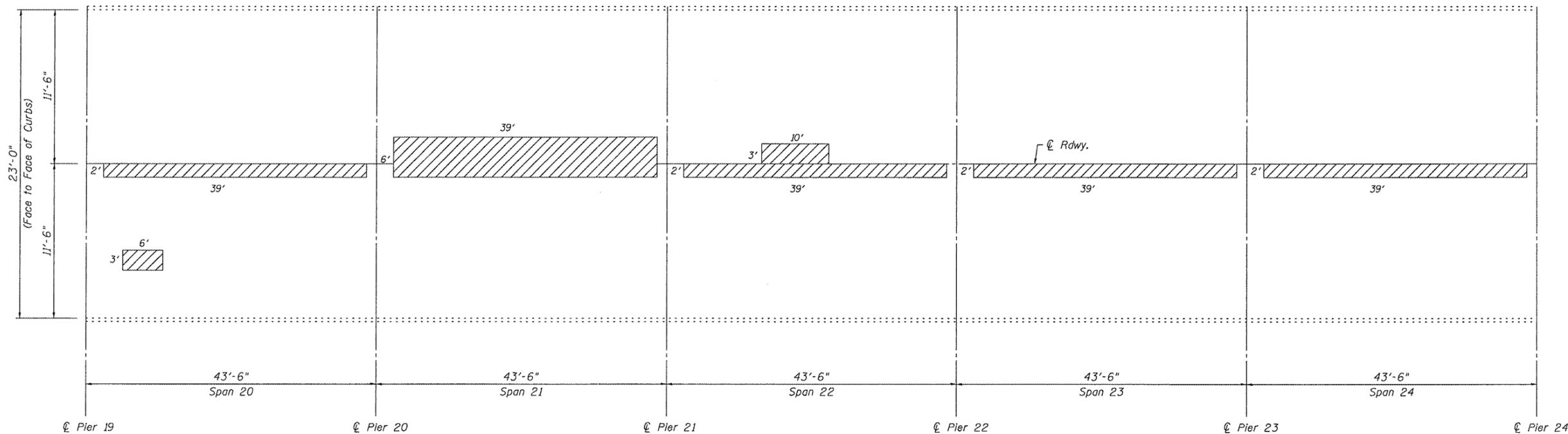
WHKS & CO.
ENGINEERING

7018 KINGSMILL CT.,
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(217) 483-9457
DESIGN FIRM #184001036

Notes:
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SHEET NO. 17 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	22
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

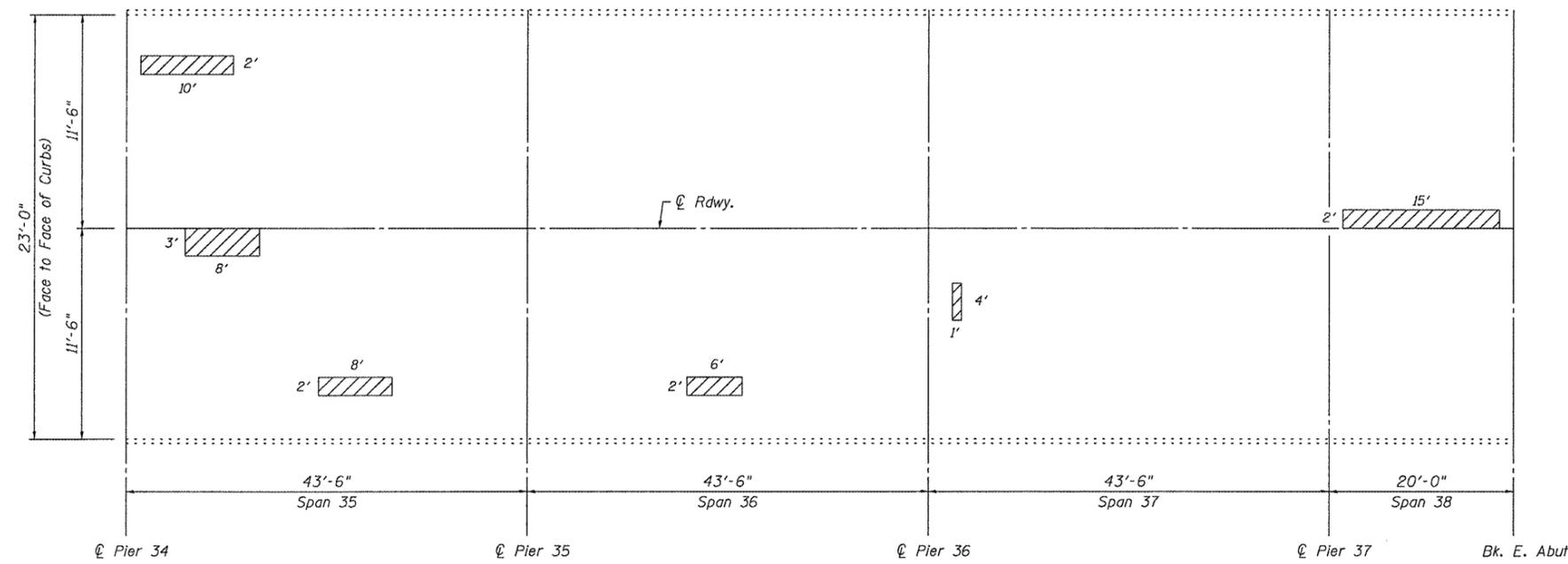
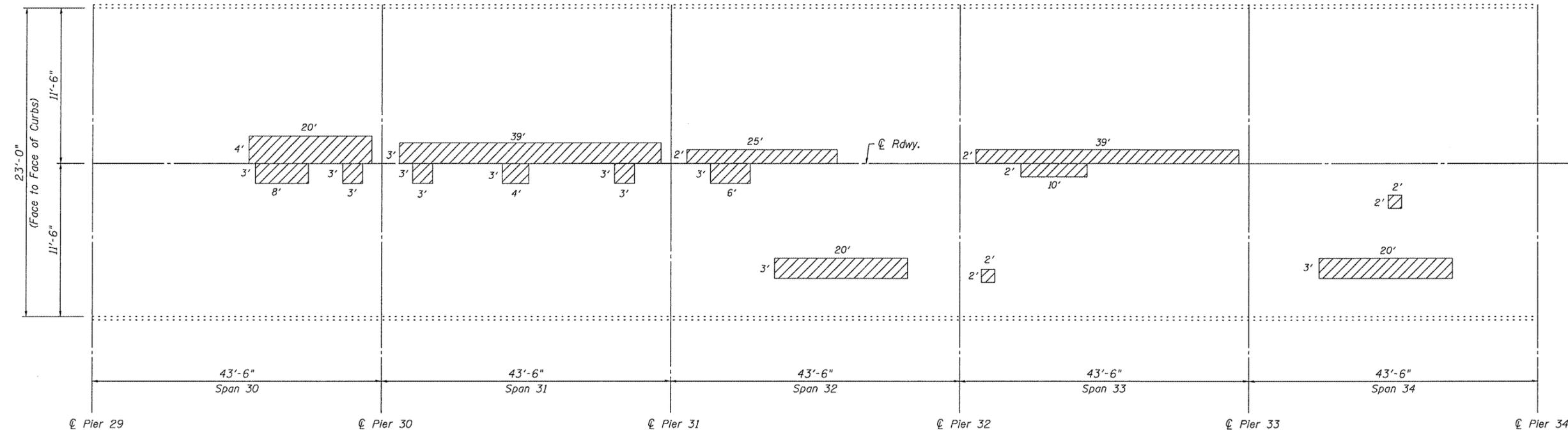
DESIGNED - CEH
CHECKED - SDS
DRAWN - DLH
CHECKED - CEH, SDS

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Notes:
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SHEET NO. 18 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	23
	SN 086-0001		CONTRACT NO. 72C39		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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Cost included with Deck Slab Repair (Partial).

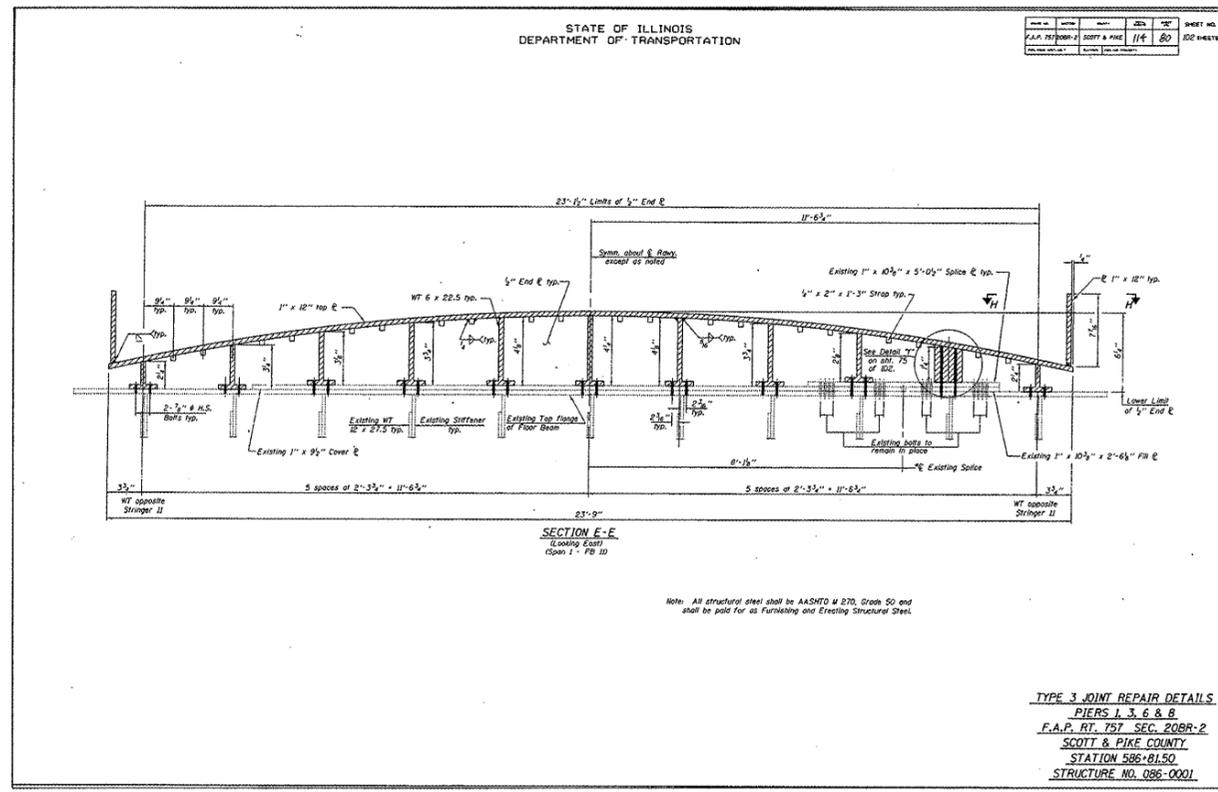
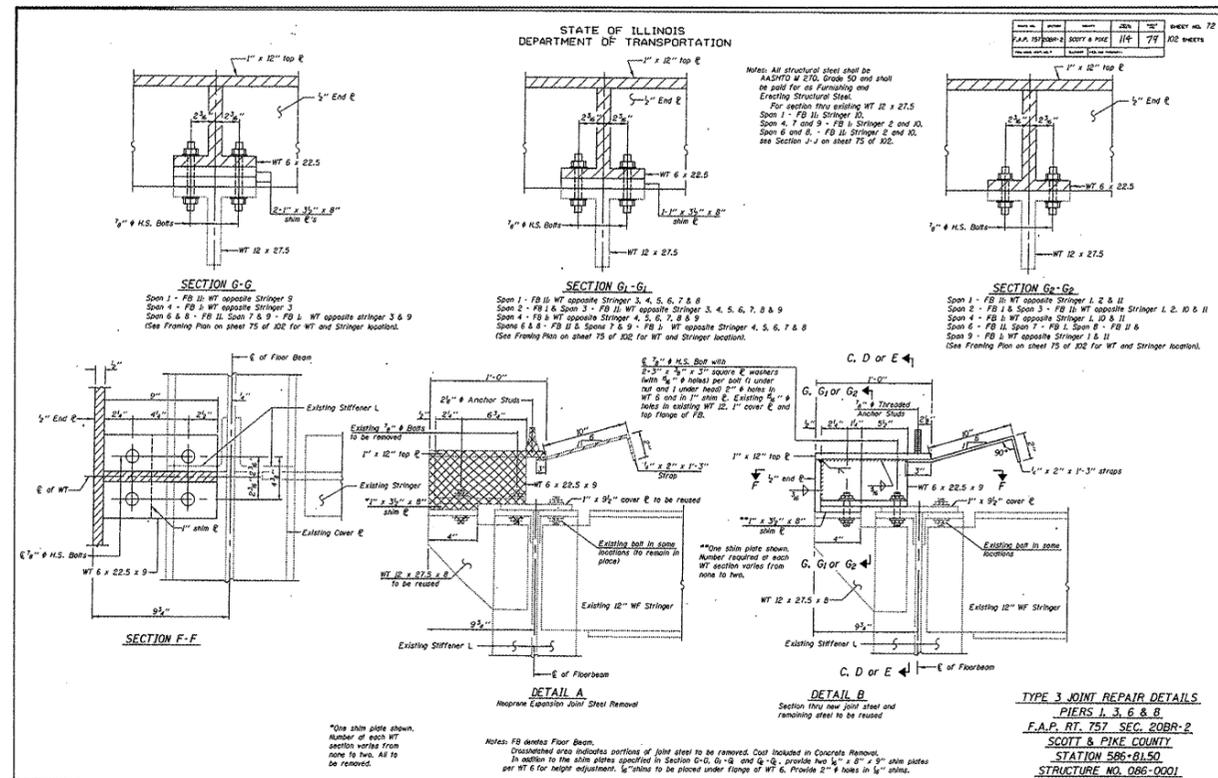
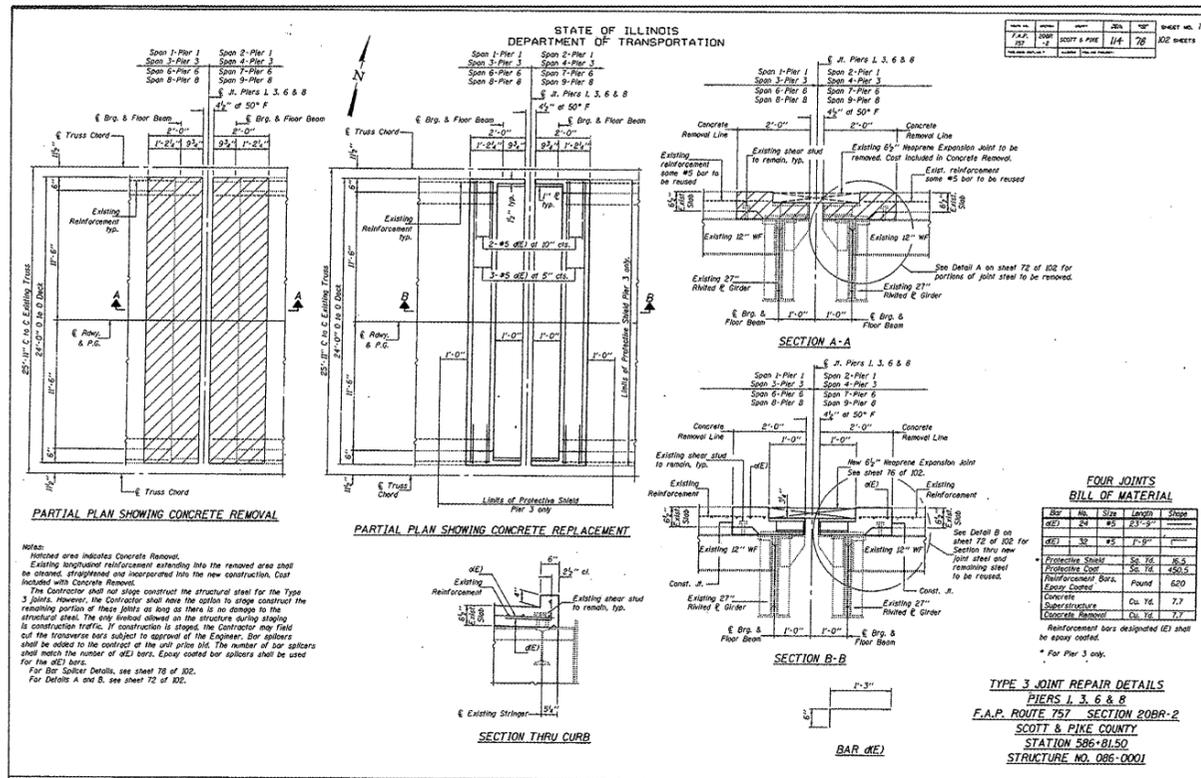
DECK SLAB REPAIRS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

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SHEET NO. 19 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	24
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



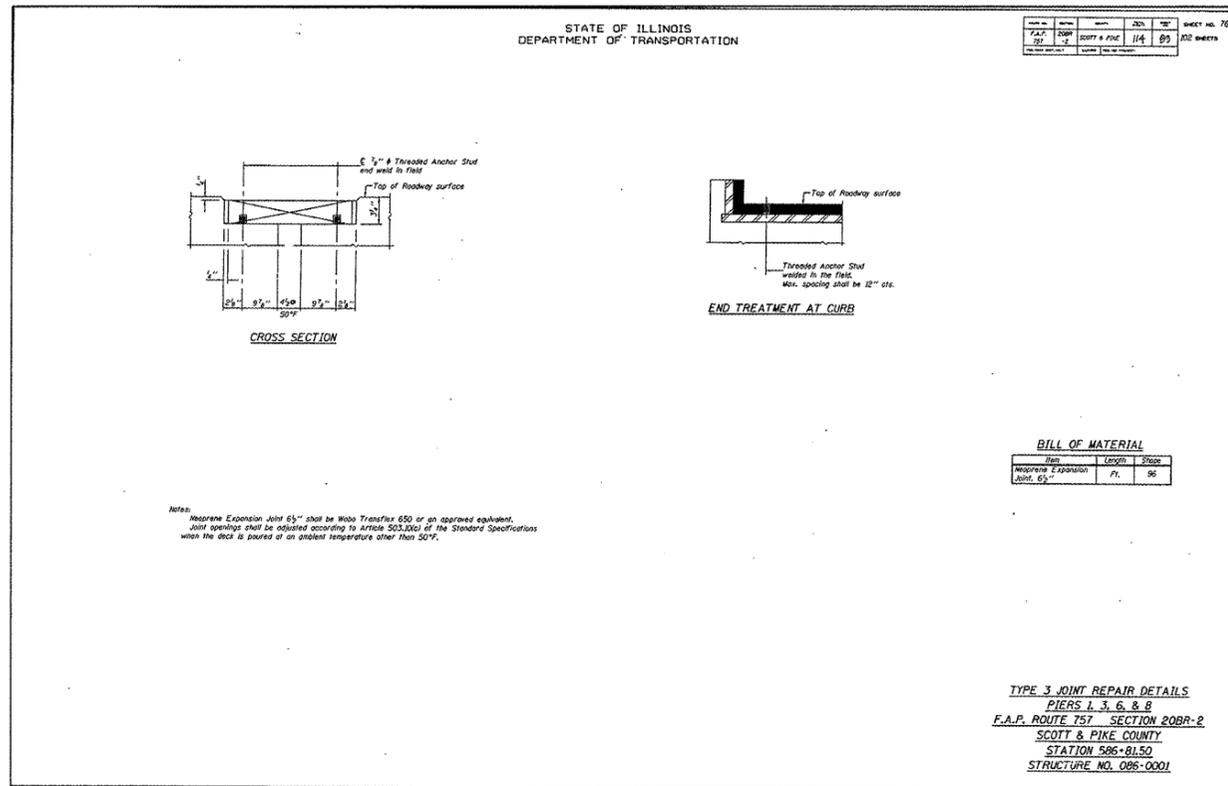
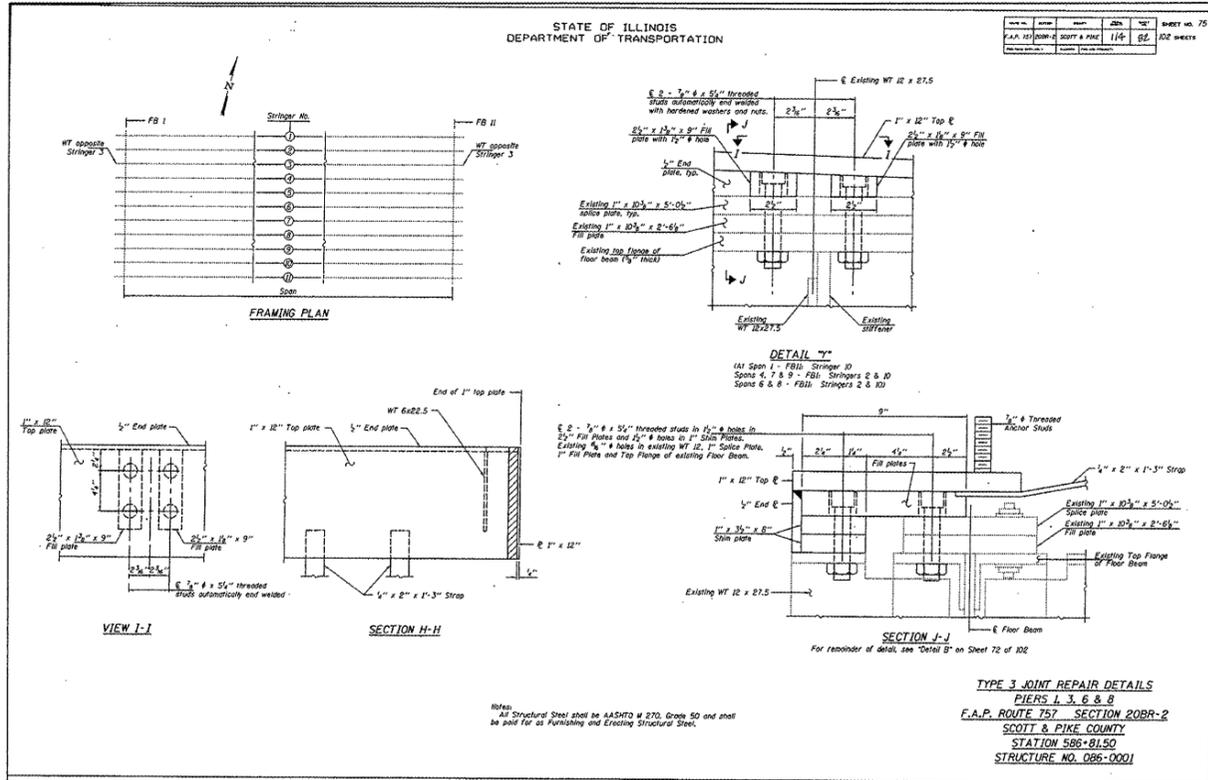
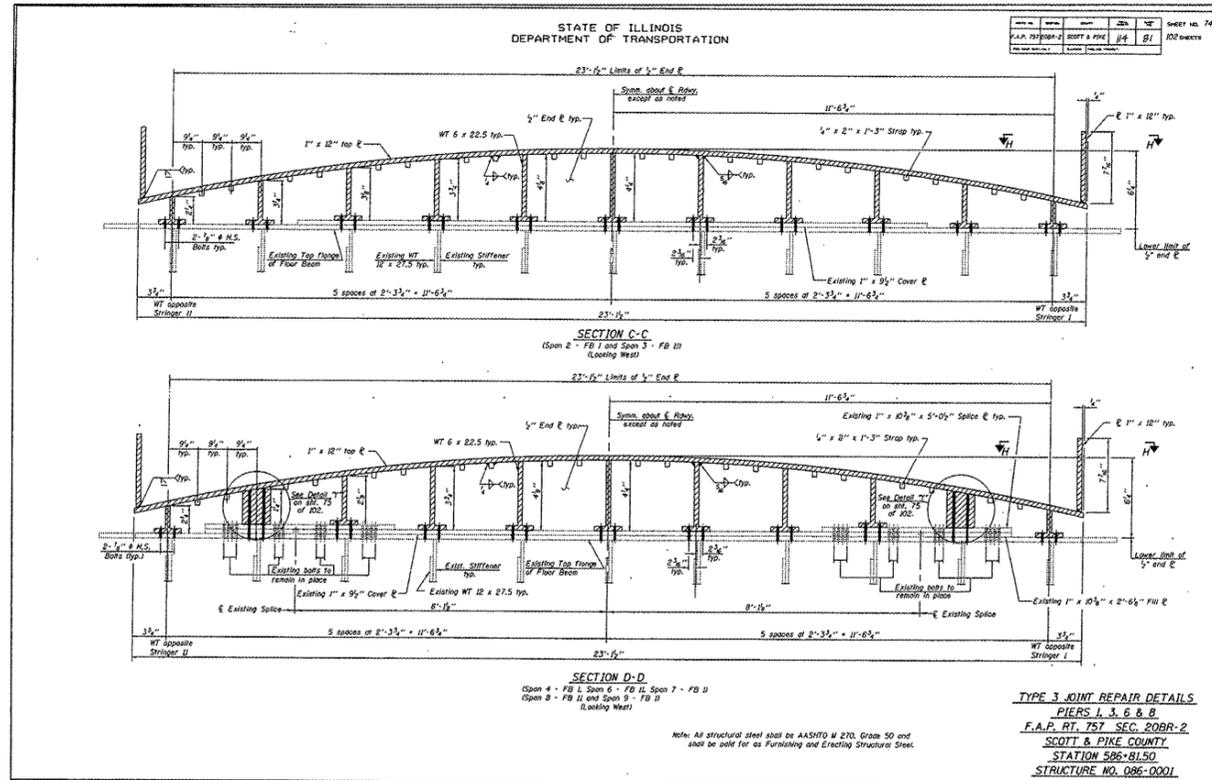
EXISTING EXPANSION JOINT DETAILS

FOR INFORMATION ONLY

**EXISTING BRIDGE DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS**

SHEET NO. 20 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	25
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



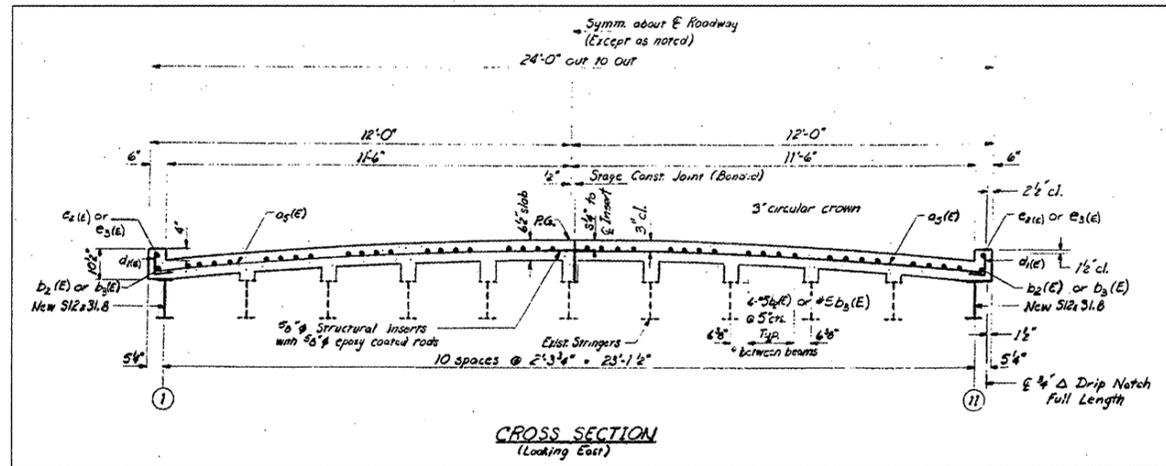
EXISTING EXPANSION JOINT DETAILS

FOR INFORMATION ONLY

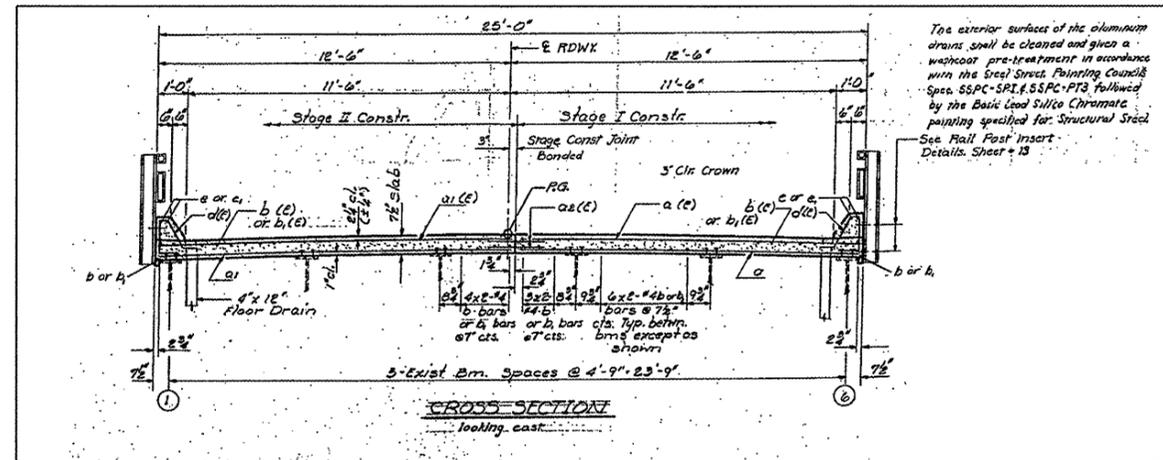
EXISTING BRIDGE DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

SHEET NO. 21 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	26
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING SLAB DETAILS - TRUSS SPANS



EXISTING SLAB DETAILS - APPROACH SPANS

FOR INFORMATION ONLY

EXISTING BRIDGE DETAILS
ILLINOIS ROUTES 100 & 106 OVER
ILLINOIS RIVER
PUBLIC WATERS

SHEET NO. 25 OF 25 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	757	20BR-2	SCOTT/PIKE	30	30
SN 086-0001			CONTRACT NO. 72C39		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					