F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	1
	ILLINOIS	CONTRACT NO. 66992		

*430 + 1 = 431 TOTAL SHEETS

1

P-93-035-01
D-93-032-10

INDEX OF SHEETS

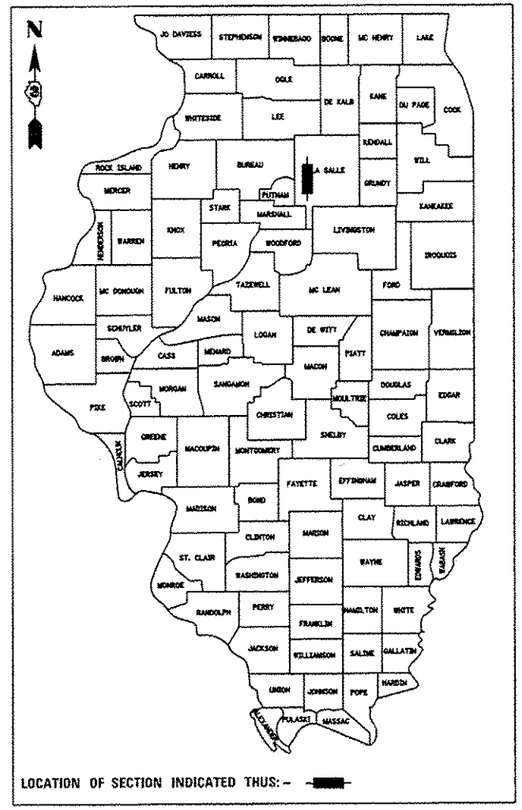
1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

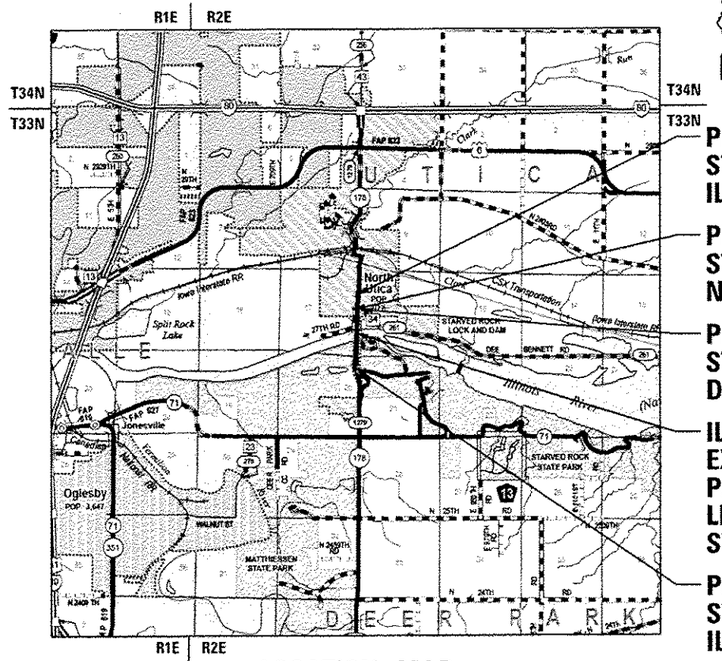
FAS ROUTE 1279 (IL 178)
SECTION (1) BR & I
PROJECT : ACRS-1279(114)
ILLINOIS RIVER BRIDGE REPLACEMENT
LASALLE COUNTY

C-93-072-10



LOCATION OF SECTION INDICATED THUS:- ■

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR
FAS ROUTE 1279 (IL 178)
DESIGN SPEED: 35-55 MPH
2015 ADT = 4,350
2035 ADT = 5,800
P.V. = 92.0% S.U. = 4.0% M.U. = 4.0%



LOCATION MAP

GROSS LENGTH = 5,300 FT. = 1.004 MILE
NET LENGTH = 5,300 FT. = 1.004 MILE

STATE OF ILLINOIS
AHMAD M. HAMMAD
081-005467
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

WSP | PARSONS BRINCKERHOFF

STATE OF ILLINOIS
W. R. POWELL
062-047570
LICENSED PROFESSIONAL ENGINEER

WSP | PARSONS BRINCKERHOFF

100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 12 20 16
Kevin Marchek P.E.
REGIONAL ENGINEER
Sept 30 20 16
Maureen M. Addis P.E. by
ENGINEER OF DESIGN AND ENVIRONMENT
Sept 30 20 16
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER JOE KANNEL, P.E.
UNIT CHIEF MICHELE LINDEMANN, P.E.
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66992

1 REV. 10-21-16

WSP | PARSONS BRINCKERHOFF
30 North LaSalle Street, Suite 4200
Chicago, IL 60602
(312) 782-8150 FAX# (312) 782-1684

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				80%FED 20%ST	100%VIL	80%ST 20%VIL	100%VIL
				BRIDGE	LIGHTING	BICYC/PED PATH	UTILITY
				0011	0021	0028	0043
				URBAN	URBAN	URBAN	URBAN
44213200	SAW CUTS	FOOT	177	177			
48100500	AGGREGATE SHOULDERS, TYPE A, 6"	SQ YD	2,098	2,098			
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	185	185			
48300400	PORTLAND CEMENT CONCRETE SHOULDERS 9"	SQ YD	5,750	5,750			
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1			
50105220	PIPE CULVERT REMOVAL	FOOT	409	409			
50200100	STRUCTURE EXCAVATION	CU YD	290	290			
50200300	COFFERDAM EXCAVATION	CU YD	273	273			
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	2,403.4	1,362.2	0.2		1,041.0
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1	1			
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1	1			
50300225	CONCRETE STRUCTURES	CU YD	2,425.0	2,425.0			
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1,828.0	1,828.0			
50300260	BRIDGE DECK GROOVING	SQ YD	4,579	4,579			

14

* SPECIALTY ITEM

⚠1 REV. 10-21-16

LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

PLOT SCALE = 100.0000 ' / in.
PLOT DATE = 8/10/2016

DESIGNED - RC
DRAWN - RC
CHECKED - ST
DATE - 08/2016

REVISED - --
REVISED - --
REVISED - --

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 4 OF 17 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	7
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80%FED 20%ST BRIDGE 0011 URBAN	100%VIL LIGHTING 0021 URBAN	80%ST 20%VIL BICYC/PED PATH 0028 URBAN	100%VIL UTILITY 0043 URBAN
50300265	SEAL COAT CONCRETE	CU YD	658	658			
50300280	CONCRETE ENCASEMENT	CU YD	15.4	15.4			
50300300	PROTECTIVE COAT	SQ YD	7,711	7,711			
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	140.2	140.2			
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1	1			
50500505	STUD SHEAR CONNECTORS	EACH	10,512	10,512			
50800105	REINFORCEMENT BARS	POUND	30	30			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	910,030	910,030			
50800515	BAR SPLICERS	EACH	96	96			
50800530	MECHANICAL SPLICERS	EACH	384	384			
50901720	BICYCLE RAILING	FOOT	3,756	3,756			
50901750	PARAPET RAILING	FOOT	1,213	1,213			
51201800	FURNISHING STEEL PILES HP14X73	FOOT	1,847	1,847			
51202305	DRIVING PILES	FOOT	1,847	1,847			

• SPECIALTY ITEM

△1 REV. 10-21-16

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
				80%FED 20%ST	100%VIL	80%ST 20%VIL	100%VIL
				BRIDGE	LIGHTING	BICYC/PED PATH	UTILITY
				0011	0021	0028	0043
				URBAN	URBAN	URBAN	URBAN
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1			
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	8	8			
Z0018010	DRAINAGE SCUPPERS, DS-33	EACH	8	8			
Z0034393	MODULAR EXPANSION JOINT 9"	FOOT	100	100			
~~Z0034396~~	~~MODULAR EXPANSION JOINT 12"~~	~~FOOT~~	~~100~~	~~100~~			
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	108	108			
Z0054400	ROCK FILL	CU YD	6,392	6,392			
Z0057300	SANITARY SEWER 18"	FOOT	1,680	817			863
Z0057500	SANITARY SEWER 24"	FOOT	80				80
Z0062456	TEMPORARY PAVEMENT	SQ YD	6,669	6,669			
• Z0067450	STEEL CASINGS 15"	FOOT	90				90
• X1400189	UNIT DUCT, 600V, 2-1C NO.6, 2-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1,205		1,205		
X0900034	HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED - 1400K	EACH	12	12			

• SPECIALTY ITEM

1 REV. 10-21-16

LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

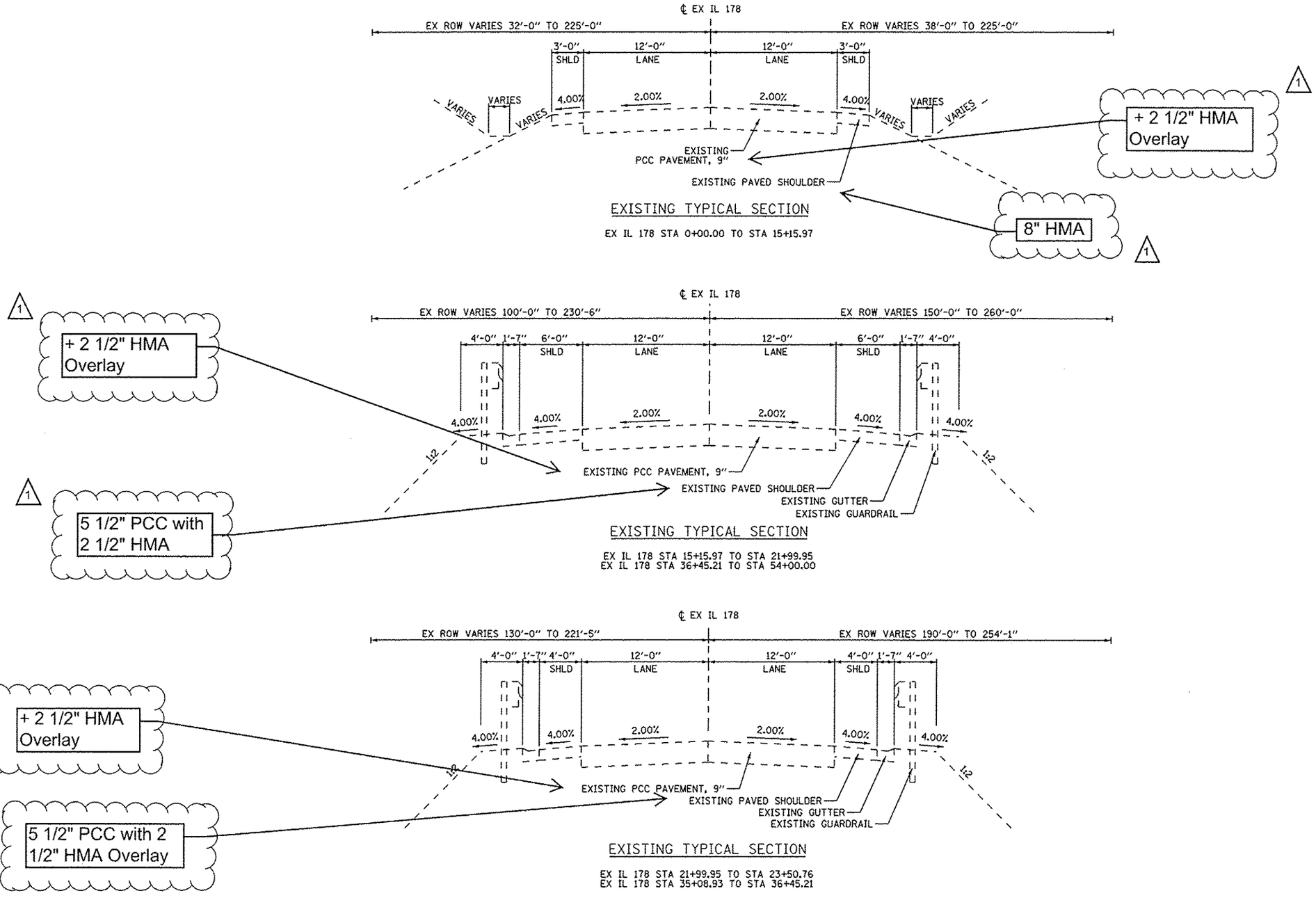
PLOT SCALE = 100.0000 ' / in.	DESIGNED - RC	REVISED - -- -------	
PLOT DATE = 8/10/2016	DRAWN - RC	REVISED - -- -------	
	CHECKED - ST	REVISED - -- -------	
	DATE - 08/2016	REVISED - -- -------	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 17 OF 17 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	20
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			



1 REV. 10-24-2016

FILE NAME = TX168788 - IL178 Phase 2\Civil\Sheets\D868942-sht-typical.dgn

WSP PARSONS BRINCKERHOFF
30 North LaSalle Street, Suite 4200
Chicago, IL 60602
(312) 782-8150 FAX# (312) 782-1884

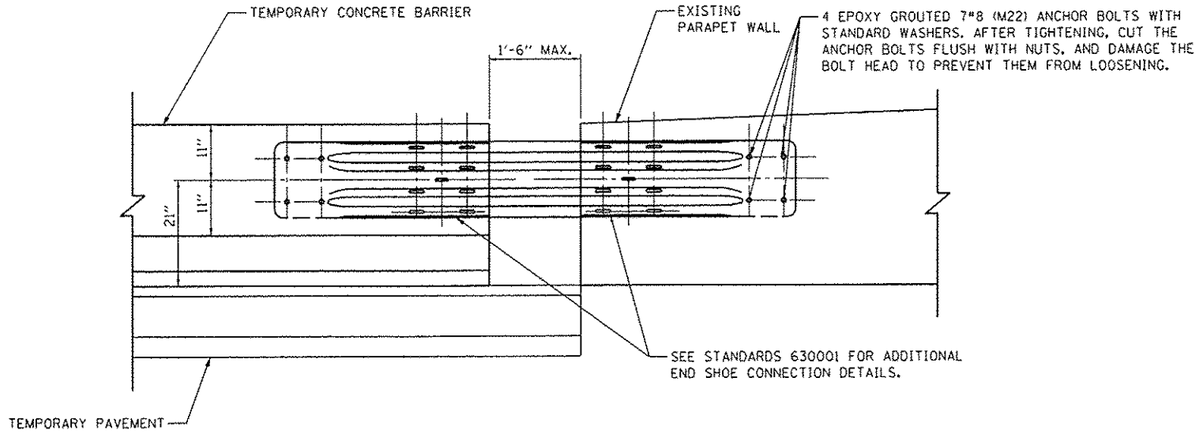
USER NAME = lanea	DESIGNED - ACL	REVISED -	
	DRAWN - ACL	REVISED -	
PLOT SCALE = 10.0000 ' / in.	CHECKED - WRP	REVISED -	
PLOT DATE = 13-SEP-2016	DATE - 8/5/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
EXISTING ILLINOIS ROUTE 178

SCALE: NONE | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	21
		CONTRACT NO. 66992		
		ILLINOIS FED. AID PROJECT P-93-035-01		

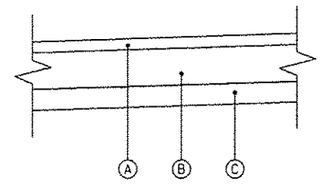


NOTES

1. THE TEMPORARY CONCRETE BARRIER SHALL BE INSTALLED SUCH THAT IT IS FLUSH WITH THE EXISTING PARAPET WALL TO AVOID BLUNT END CONDITIONS.
2. THIS DETAIL APPLIES DURING STAGE CONSTRUCTION TO CONNECT TEMPORARY CONCRETE BARRIER TO EXISTING PARAPET WALL AS SHOWN ON THE MOT PLANS.
3. CONNECTION BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING BARRIER WALL SHALL BE INCLUDED IN THE COST FOR TEMPORARY CONCRETE BARRIER OR RELOCATE TEMPORARY CONCRETE BARRIER PAY ITEMS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

TEMPORARY CONCRETE BARRIER CONNECTION DETAIL

N.T.S.



TEMPORARY PAVEMENT

(A) HOT-MIX ASPHALT SURFACE COURSE, 2" △1
(B) HOT-MIX ASPHALT BINDER COURSE, 6"
(C) AGGREGATE BASE COURSE TYPE A, 4"

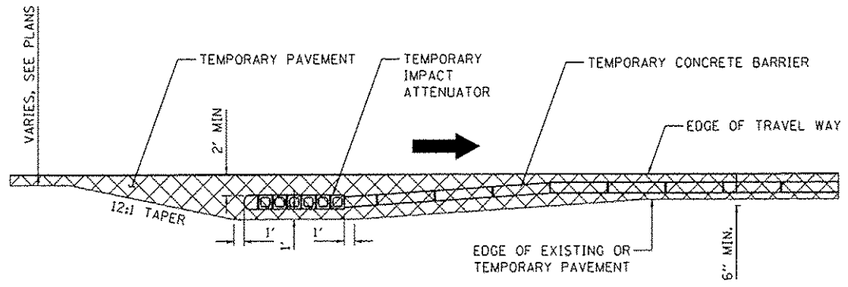
NOTES

1. THE CONTRACTOR SHALL HAVE THE OPTION TO USE UNDOWLED PORTLAND CEMENT CONCRETE IN PLACE OF HOT-MIX ASPHALT. SEE SPECIAL PROVISION FOR DETAILS.
2. ADDITIONAL THICKNESS OF AGGREGATE BASE COURSE TYPE A, 4" NEEDED TO MEET REQUIRED GRADES SHALL BE CONSIDERED INCIDENTIAL TO TEMPORARY PAVEMENT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

IL 178, N 27TH RD & DEE BENNETT RD

TEMPORARY PAVING SECTION

N.T.S.



TEMPORARY IMPACT ATTENUATOR LAYOUT AND TEMPORARY PAVEMENT PAD DETAIL

N.T.S.

△1 REV. 10-24-2016

LIN ENGINEERING, LTD. Consulting Engineers Westmont, Illinois		DESIGNED - NSA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILLINOIS ROUTE 178 MOT DETAILS			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - NSA	REVISED -					1279	(1) BR & I	LASALLE	430	81
	PLOT SCALE = 100.0000 ' / in.	CHECKED - ST	REVISED -							CONTRACT NO. 66992		
	PLOT DATE = 9/9/2016	DATE - 08/2016	REVISED -		SCALE: 1"=50'	SHEET NO. 23 OF 112 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

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

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

℄ PR IL 178

475
470
465
460
455

P.B. ROW

EX. ROW

0

1:2 MAX

2' 1' 12' LANE 12' LANE

475
470
465
460
455

16+00.00

⚠ SHEET ADDED 10-21-16

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

USER NAME = #USERNAME#	DESIGNED - NSA	REVISED - -- -------	
	DRAWN - NSA	REVISED - -- -------	
PLOT SCALE = 20.0000 ' / in.	CHECKED - ST	REVISED - -- -------	
PLOT DATE = 8/5/2016	DATE - 08/2016	REVISED - -- -------	

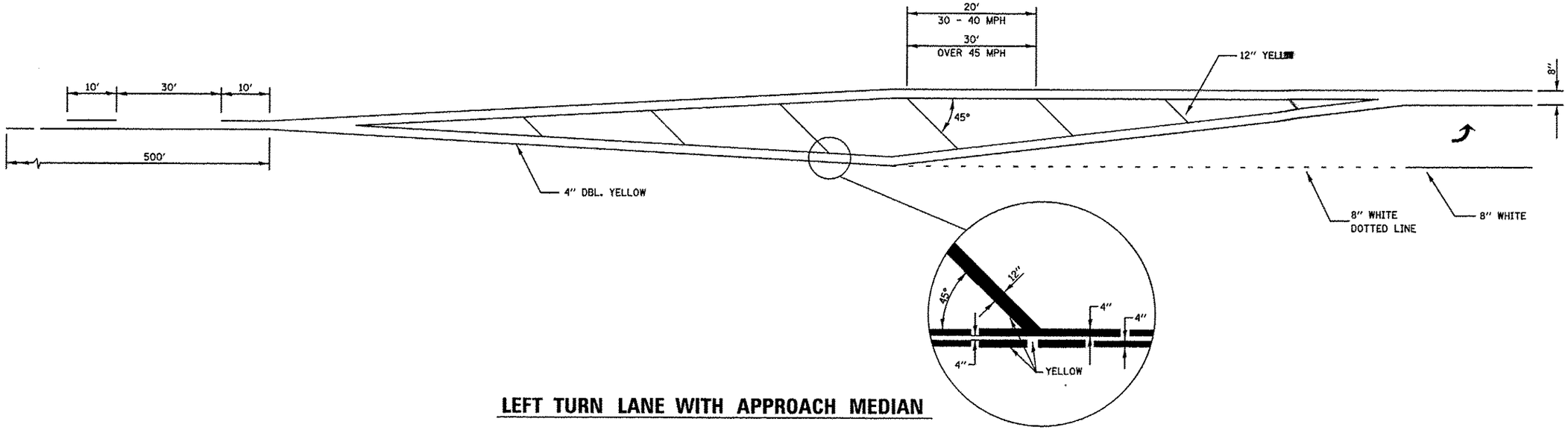
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 178
MOT CROSS SECTIONS – STAGE 1

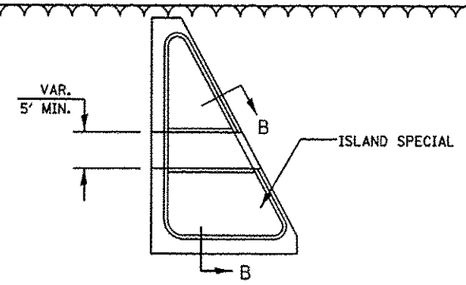
SCALE: 1"=10'H,5'V | SHEET NO. 31 OF 112 SHEETS | STA. 16+00.00 | TO STA. 16+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	89
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

1 RUB RAIL DETAIL ADDED

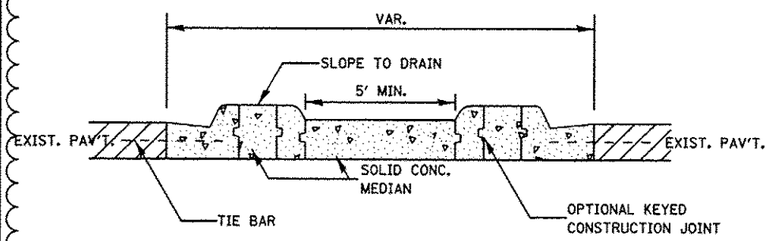


LEFT TURN LANE WITH APPROACH MEDIAN



SMALL ISLAND

(FOR TYPICAL DESIGN)



SECTION B-B

GENERAL NOTES

SEE STANDARDS 606001, 606301, 424031, AND PLAN SHEETS FOR STATION, OFFSETS, RADII, DIMENSIONS, AND DETAILS NOT SHOWN.

THE SIDEWALK SHOULD DRAIN TO THE LOW SIDE OF THE ISLAND. IF NECESSARY THE SIDEWALK SHALL BE SLOPED TO DRAIN AT A MAXIMUM 2% GRADE.

SEE THE PLAN SHEETS FOR THE TYPE OF CURB & GUTTER TO BE USED ON ISLANDS.

THE SIDEWALK SHOULD NOT BE CLOSER THAN 3' FROM THE CORNER OF THE ISLAND.

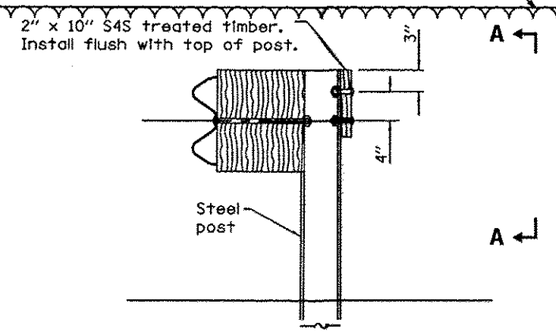
KEYED LONGITUDINAL CONSTRUCTION JOINTS SHALL BE CONSTRUCTED WITHOUT TIE BARS.

MEDIANS AND LARGE ISLANDS SHALL CONSIST OF PCC SIDEWALK 5", CONCRETE MEDIANS SURFACE 4", CONCRETE CURB, AND COMBINATION CONCRETE CURB & GUTTER, TYPE M OR B OR THE SIZE SPECIFIED. MEDIAN ISLAND CAN ALSO BE SOLID CONCRETE MEDIANS.

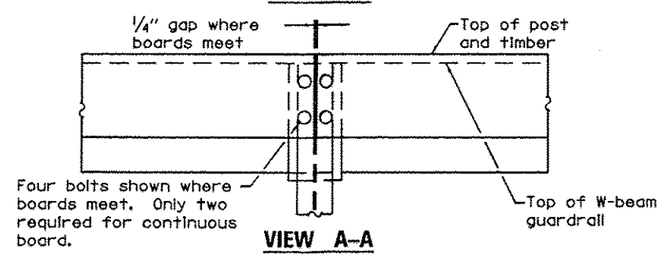
LOCATIONS, LAYOUTS, AND WIDTHS OF THE FLUSH SIDEWALK AREA, SHALL BE DETERMINED BY THE DESIGNER AND SHOWN ON THE PLANS.

THE SMALL ISLANDS WILL BE MEASURED FOR PAYMENT FROM E.O.P. TO E.O.P. AS DIRECTED BY THE ENGINEER, AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. FT. FOR CONCRETE MEDIAN (SPECIAL), WHICH SHALL INCLUDE THE CURB, COMBINATION CURB & GUTTER, SIDEWALK, AGGREGATE FILL, CONCRETE MEDIAN SURFACE, AND SOLID CONCRETE MEDIAN.

CONCRETE ISLAND



ELEVATION



VIEW A-A

RUB RAIL

WSP | PARSONS BRINCKERHOFF
30 North LaSalle Street, Suite 4200
Chicago, IL 60602
(312) 782-8150 FAX# (312) 782-1684

USER NAME = lenae	DESIGNED - ACL	REVISED - 10/19/2016
	DRAWN - ACL	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WRP	REVISED -
PLOT DATE = 19-OCT-2016	DATE - 8/5/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL DRAWINGS

SCALE: NONE | SHEET NO. 9 OF 10 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	220
		CONTRACT NO. 66992		
		ILLINOIS FED. AID PROJECT P-93-035-01		

FILE NAME = TV:\66992 - IL178 Phase 2\Civil\Sheets\D366992-art-detail.PLdgn

GENERAL NOTES:

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts $\frac{7}{8}$" ϕ, holes $\frac{15}{16}$" ϕ, unless otherwise noted.

2. Calculated weight of Structural Steel
AASHTO M270 Grade 50W = 5,305,870 lbs.
AASHTO M270 Grade HPS 70W = 785,300 lbs.

3. All structural steel shall be AASHTO M 270 Grade 50W except all flanges over piers which shall be AASHTO M 270, Grade HPS70W, as shown in the plans.

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

5. Reinforcement bars designated (E) shall be epoxy coated.

6. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

7. 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.

8. Concrete Sealer shall be applied to the designated areas of the abutments.

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

10. All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.

11. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

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

13. 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 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.

14. Construction and demolition activities shall be coordinated and approved by the United States Coast Guard (USCG) and the United States Army Corps of Engineers (USACE). No additional compensation or time will be allowed for USCG and USACE restrictions.

15. The Contractor is alerted that camber, dead load deflection values and theoretical grade elevations adjusted for dead load deflection shown on the girder detail drawings were developed based on deck pouring sequence shown on the contract drawings. Any deviation from this pouring sequence will result in changes to camber and elevations that reflect dead load defections. If the Contractor wishes to change the pouring sequence shown on the contract drawings, an evaluation of the structure shall be performed by an Illinois Licensed Structural Engineer retained by the Contractor. Calculations and any revised details shall be submitted to the Engineer for review and approval.

16. The erection of the structural steel shall be accomplished by a steel erection contractor or sub-contractor certified as an Advanced Certified Steel Erector (ASCE) by AISC. See Special Provisions for "Erection of Complex Steel Structures".

17. Slipforming of the parapet is not allowed.

18. The Contractor shall retain the services of an engineering firm, prequalified in the IDOT consultant selection category of Major Bridges, for preparation of Structural Assessment Report (s). Contractor's pre-approval shall not be applicable for this project. See Special Provisions.

19. The footing excavations shall be undercut by 6-in. and immediately filled with a mud slab consisting of seal coat concrete to prevent degradation of the exposed foundation material surface. If the Contractor cannot maintain a dry working condition due to water infiltration at the base of the excavation, a concrete seal coat with an estimated thickness of 6'-4" shall be required below the bottom of footing.

    The estimated seal coat thickness of 6'-4" is based on the Estimated Water Surface Elevation (EWSE) using procedures as identified in the Bridge Manual. It is noted these procedures may not be applicable due to the bottom of footing being within bedrock. The Contractor shall submit to the Engineer for approval the final seal coat design based on his means and methods for dewatering of the cofferdam.

20. It should be noted that the installation of sheet piling for the cofferdam may encounter hard driving. The Contractor should be aware of the boring logs and subsurface conditions when determining means and methods for the cofferdam type. The Contractor shall submit a cofferdam design including plans and computations prepared by an Illinois Licensed Structural Engineer for review and approval before any work on the cofferdams commences.

21. In addition to the cofferdam requirements in section 502 of the Standard Specifications, the Contractor shall furnish, install, provide temporary power, and subsequently remove one 180 degree red navigation light on the upstream and downstream sides of each cofferdam adjacent to the navigation channels. The cost is included in Cofferdam (Type 2) (Location 1) and Cofferdam (Type 2) (Location 2)

22. Maintain existing navigation lights on the existing structures until the existing structures are removed. Proposed navigation light shall be operational before the existing navigational lights are removed.

23. Due to large volumes of concrete placed in the substructure units of this contract, excessive heat of hydration may be present. The Contractor is alerted that the provisions of Article 1020.14 (b) of the Standard Specifications may apply in these cases.

24. The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

Current Ratings on File for Existing Structure
Inventory: HS 12.6
Operating: HS 20.8 ⚠1
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restriction are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Stone Riprap, Class A4	Sq. Yd.		3,770	3,770
Filter Fabric	Sq. Yd.		3,770	3,770
Removal of Existing Structures	Each	0.5	0.5	1
Structure Excavation	Cu. Yd.		290	290
Cofferdam Excavation	Cu. Yd.		273	273
* Rock Excavation for Structures	Cu. Yd.		856	856 ⚠1
Cofferdam (Type 2) (Location 1)	Each		1	1
Cofferdam (Type 2) (Location 2)	Each		1	1
Concrete Structures	Cu. Yd.		2,425	2,425
Concrete Superstructure	Cu. Yd.	1,828		1,828
Bridge Deck Grooving	Sq. Yd.	4,579		4,579
Concrete Encasement	Cu. Yd.		15.4	15.4
* Seal Coat Concrete	Cu. Yd.		658	658 ⚠1
Protective Coat	Sq. Yd.	7,711		7,711
Concrete Superstructure (Approach Slab)	Cu. Yd.	140.2		140.2
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	10,512		10,512
Reinforcement Bars, Epoxy Coated	Pound	522,910	387,120	910,030
Bar Splicers	Each		96	96
Mechanical Splicers	Each		384	384
Bicycle Railing	Foot	1,217		1,217
Parapet Railing	Foot	1,213		1,213
Furnishing Steel Piles HP 14x73	Foot		1,847	1,847
Driving Piles	Foot		1,847	1,847
Test Pile Steel HP 14x73	Each		2	2
Pile Shoes	Each		44	44
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		48	48
Anchor Bolts, 1½"	Each		72	72
Temporary Soil Retention System	Sq. Ft.		740	740
Concrete Sealer	Sq. Ft.		2,334	2,334
Geocomposite Wall Drain	Sq. Yd.		174	174
High Load Multi-Rotational Bearings, Guided Expansion, 450k	Each		12	12
High Load Multi-Rotational Bearings, Fixed - 1400k	Each		12	12
Granular Backfill for Structures	Cu. Yd.		602	602
Removal of Pier Protection Cell	L. Sum		1	1
Drainage Scuppers, DS-11	Each	8		8
Drainage Scuppers, DS-33	Each	8		8
Modular Expansion Joint 9" ⚠1	Foot	100		100
Pipe Underdrains For Structures 4"	Foot		108	108

* See Note 19

INDEX OF SHEETS

STATION 29+27.52
SECTION (1)BR & 1
BUILT BY
STATE OF ILLINOIS
F.A.S. ROUTE 1279
LOADING HL-93
STRUCTURE NO. 050-0256

NAME PLATE
See Std. 515001

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA I
STRUCTURE NO. 050-0256
SHEET NO. 2 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	223
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

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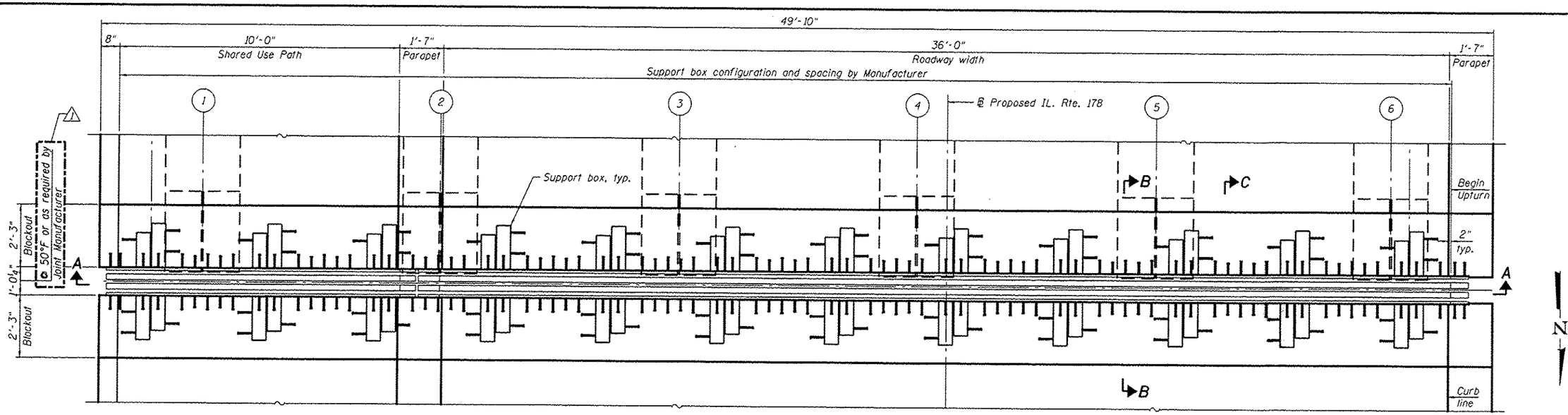
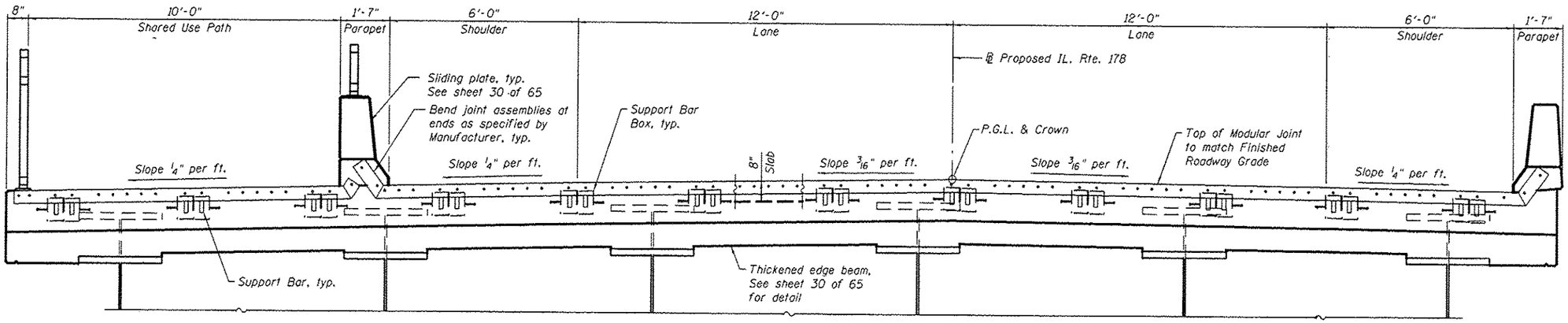


PLAN AT MODULAR EXPANSION JOINT

(N. Abutment shown S. Abutment similar)



SECTION A-A

Notes:

1. Joint shall be fabricated and installed according to the manufacturer's recommendations and as specified in the special provisions for a modular joint system and as approved by the Engineer.
2. Joint shall be fabricated to conform to the roadway profile and cross-slope.
3. The expansion joint assembly shall be hot dip galvanized in accordance with AASHTO M111 or M232 after fabrication.
4. Modular expansion joints shall be shipped in one piece unless noted.
5. No aluminum components shall be allowed.
6. All splices of center beams and edge beams located in the roadway shall be full penetration welds. (Upturn splices may be partial penetration welds)
7. See deck reinforcement plan sheet for bar size, designation and blockout dimensions.
8. Sliding plate assemblies as shown shall be provided for the parapets. The cost of furnishing and installing sliding plate assemblies shall be included with Modular Expansion Joint, 12".
9. Coordinate blockout dimensions and pocket locations and reinforcement bar layout with Joint Manufacturer. Blockout area to be poured after expansion assemblies have been adjusted.
10. The manufacturer's recommended installation methods shall be followed.
11. The modular expansion joint system, including anchorages and support bar boxes shall be supplied by the approved chosen manufacturer.
12. The details shown are intended to be schematic. The actual components of the expansion joint system may vary from those shown. This includes, but is not limited to the number of cells, number of support bars, support bar spacing, and support bar box size. However, the total required range of expansion remains unchanged regardless of manufacturer chosen.
13. The modular expansion joint system shall accommodate $8\frac{3}{4}$" total longitudinal movement
14. Coordinate joint upturns with the conduit location in parapet.
15. Cover plate shall be mounted towards oncoming traffic.

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STATE OF ILLINOIS
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MODULAR EXPANSION JOINT DETAILS - I
STRUCTURE NO. 050-0256
SHEET NO. 29 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	250
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

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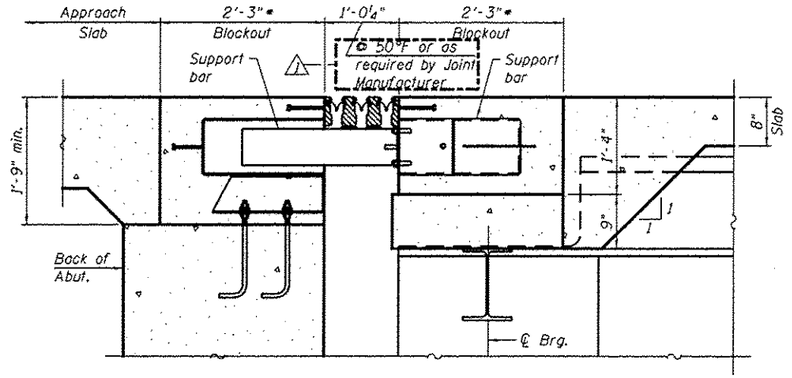
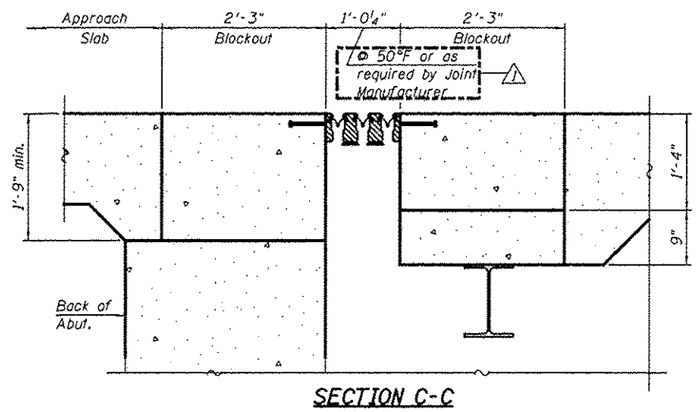
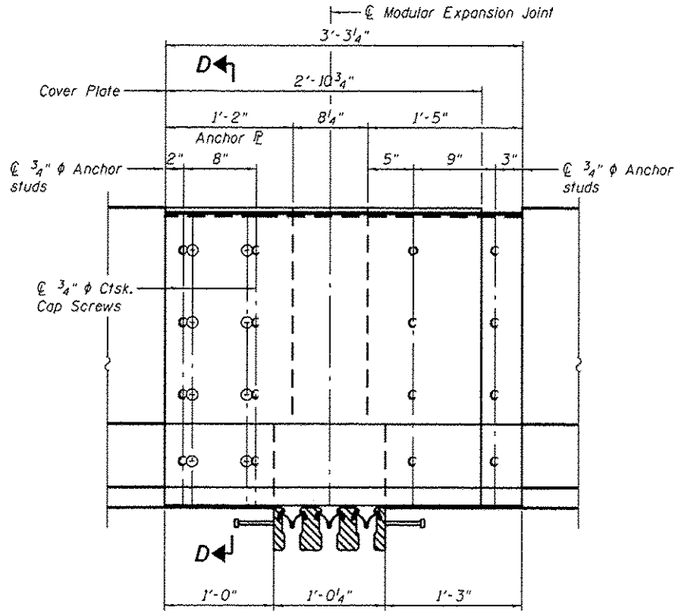


SECTION B-B

* Block dimension to be verified by Contractor with Joint Manufacturer. See Sheet 22 of 65 for blockout dimensions & additional detail of edge beam.



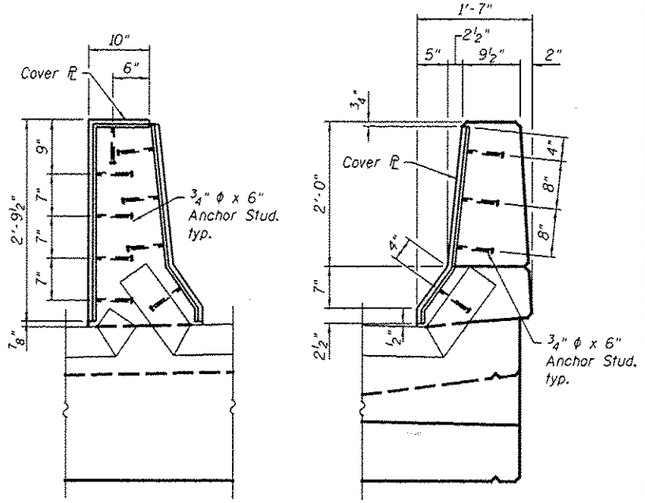
SECTION C-C



Direction of Traffic

PARAPET ELEVATION AT MODULAR EXPANSION JT.

(All dimensions are @ 50°F.)



East Parapet

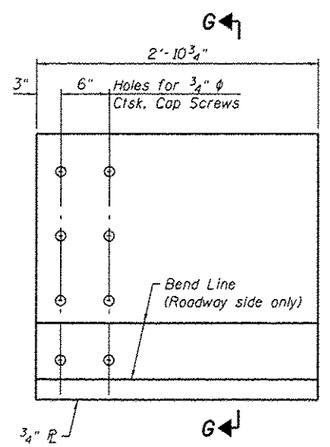
West Parapet

SECTION D-D

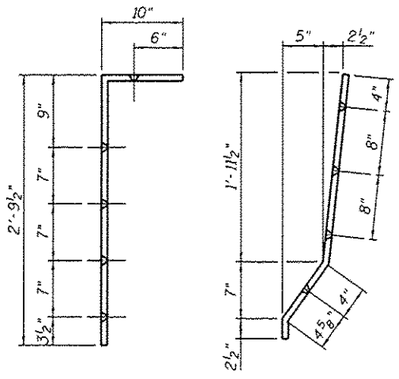
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Modular Expansion Joint, 9" ⚠1	Foot	100

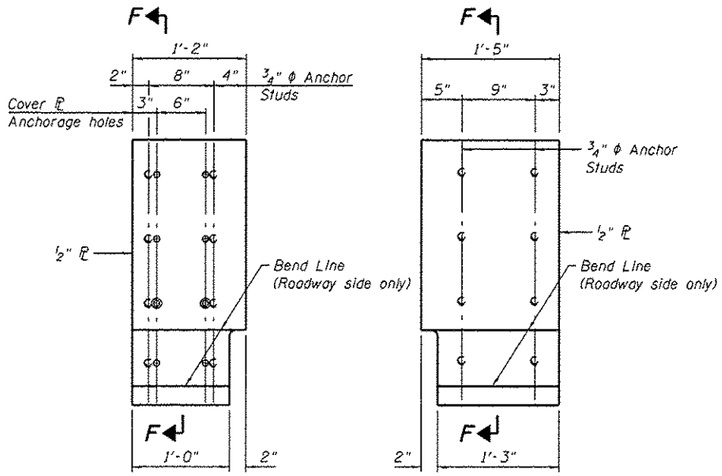
Notes:
Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



COVER PLATE

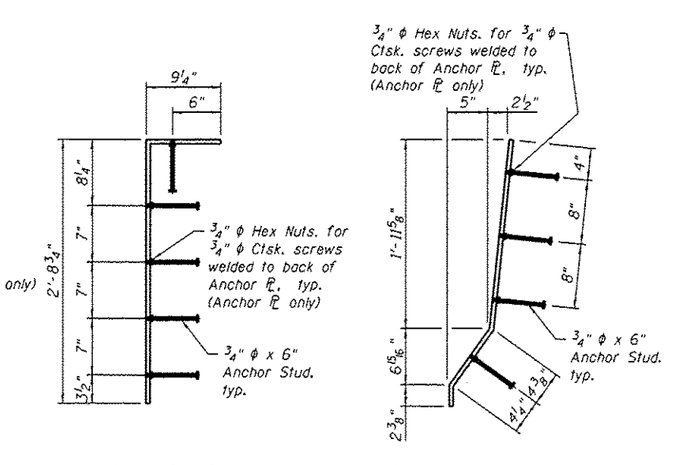


SECTION G-G



ANCHOR PLATE

SLIDE PLATE



SECTION F-F

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR EXPANSION JOINT DETAILS – II
STRUCTURE NO. 050-0256
SHEET NO. 30 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	251
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

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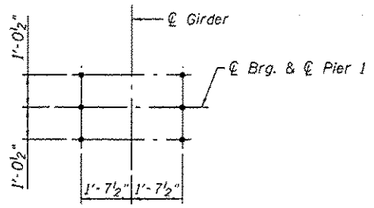
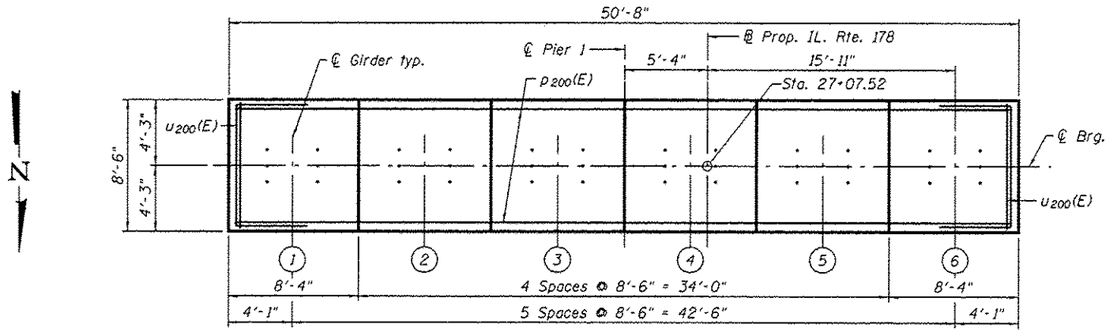
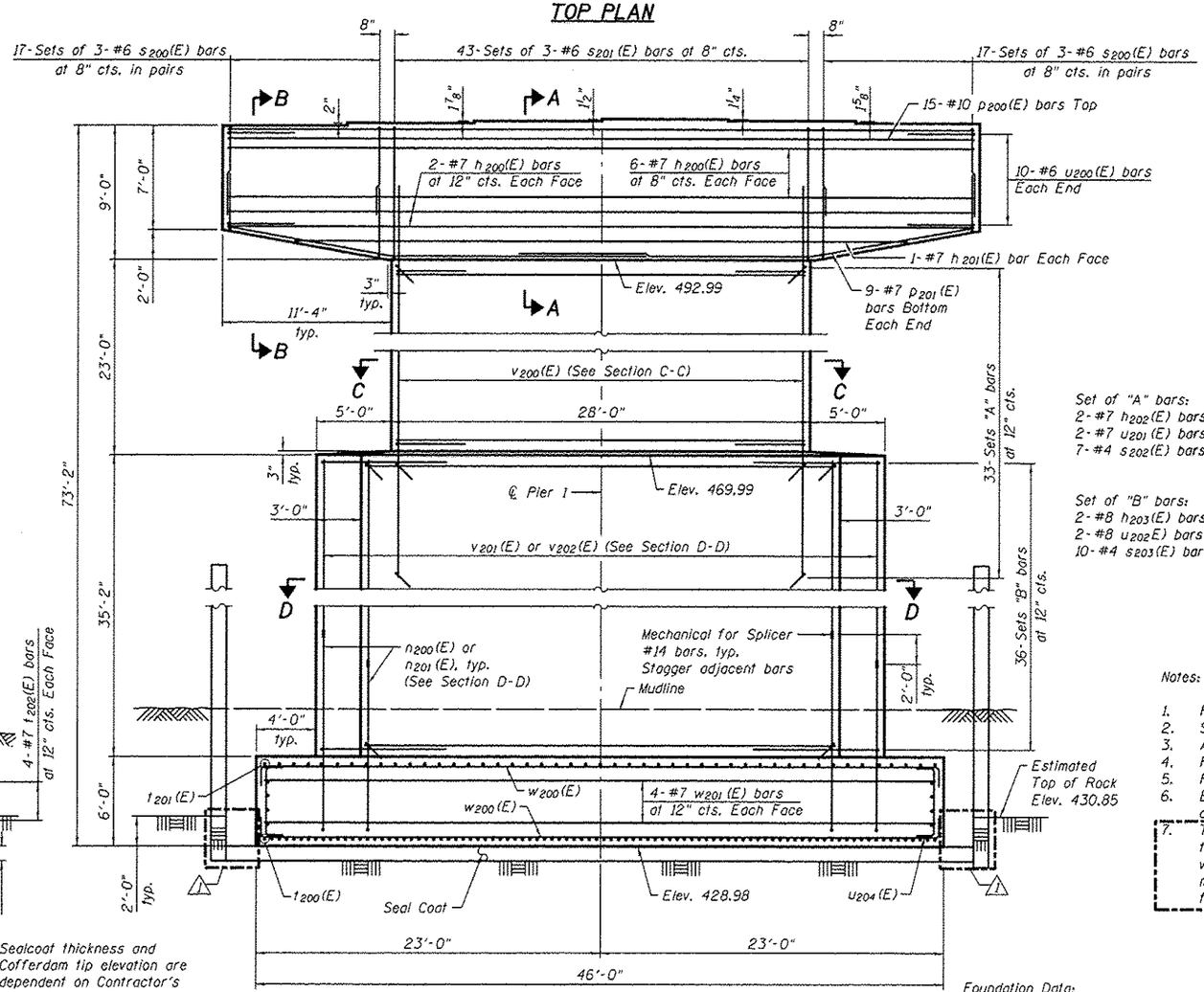
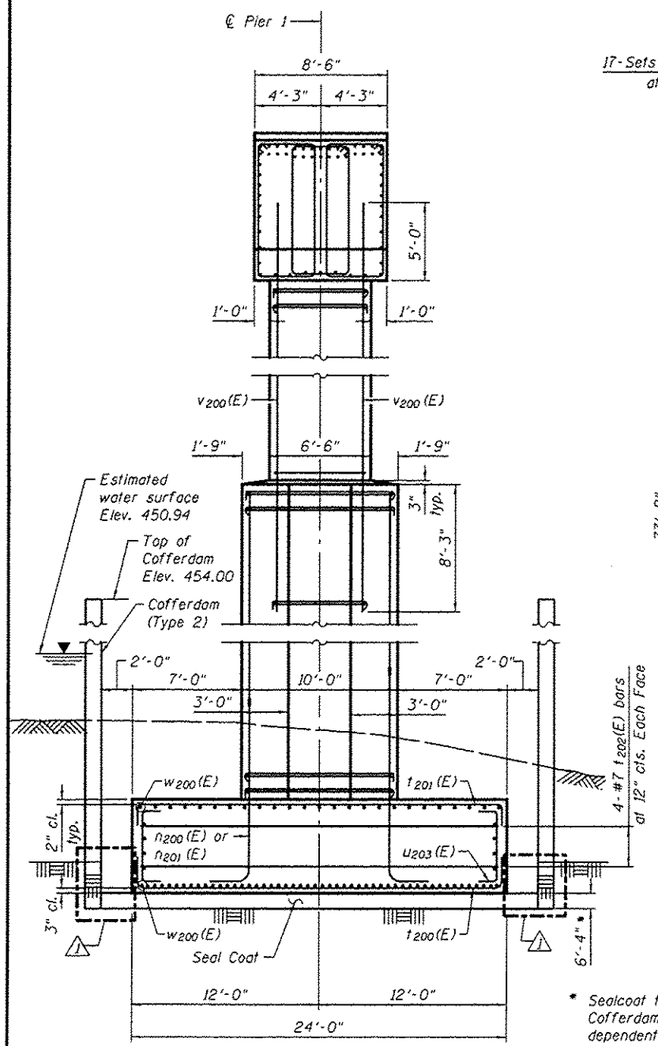


ANCHOR BOLT LAYOUT



TOP PLAN





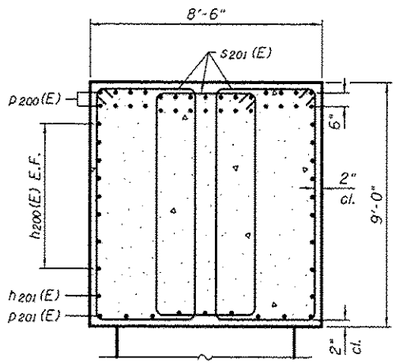
END VIEW

* Sealcoat thickness and Cofferdam tip elevation are dependent on Contractor's Cofferdam design. See General Note 19 on sheet 2 of 65.

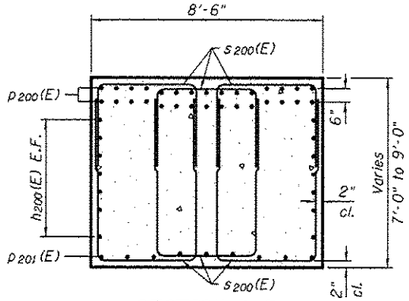
ELEVATION
(Looking South)

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	502.15
2	502.32
3	502.48
4	502.60
5	502.51
6	502.36



SECTION A-A



Set of "A" bars:
2-#7 h202(E) bars
2-#7 u201(E) bars
7-#4 s202(E) bars

Set of "B" bars:
2-#8 h203(E) bars
2-#8 u202E) bars
10-#4 s203(E) bars

SECTION B-B

Notes:

1. For footing plan, see sheet 56 of 65.
2. Space reinforcement in cap to miss anchor bolts.
3. All edges shall have standard ¾" chamfer.
4. Pour steps monolithically with cap.
5. For section C-C, and D-D, see sheet 56 of 65.
6. Bars indicated thus, 3x2-#5 etc. indicates 3 lines of bars with 2 lengths of bars per line.
7. The bottom of footing elevation(s) shall be adjusted to ensure a minimum embedment of 24 inches in non-weathered rock. The rock excavation shall be made to allow the base of the embedded portion of the footing to be cast against undisturbed rock surfaces. ⚠1

Foundation Data:
Spread Footing Bearing on Rock
Maximum Applied Service Bearing Pressure, Qmax = 46.6 ksf

MINIMUM BAR LAP
#7 bar = 5'-0"
#10 bar = 8'-9"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1
STRUCTURE NO. 050-0256
SHEET NO. 55 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	276
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

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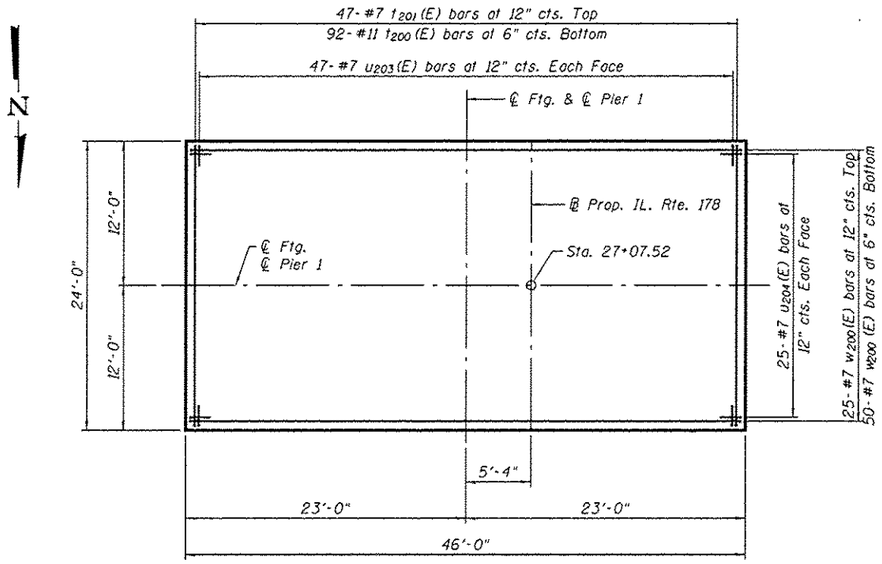
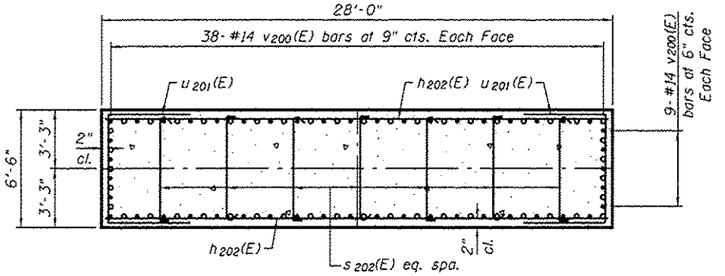
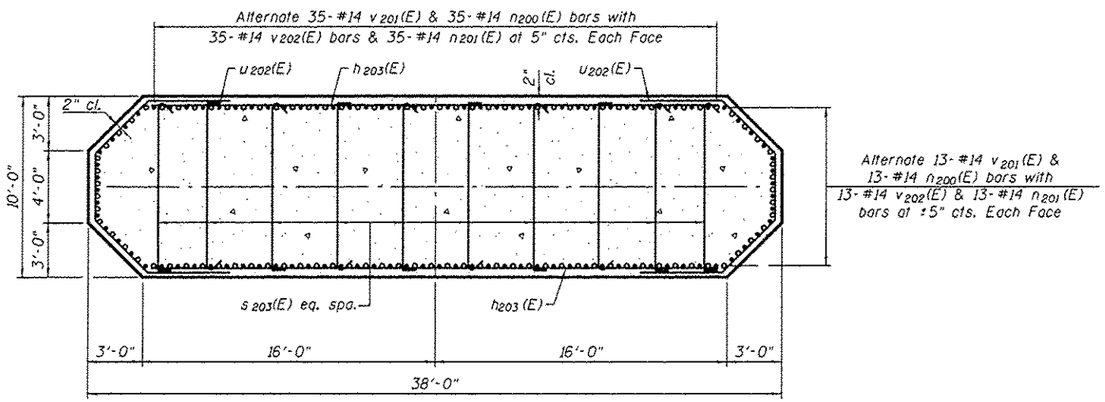


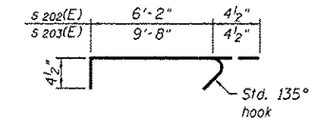
FOOTING PLAN



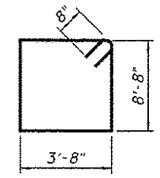
SECTION C-C



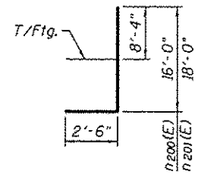
SECTION D-D



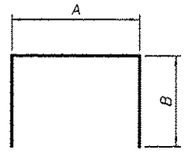
BARS s202(E) & s203(E)



BAR s201(E)

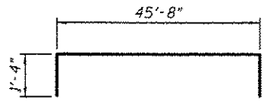


BARS n200(E) & n201(E)

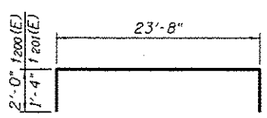


A & B DIMENSIONS

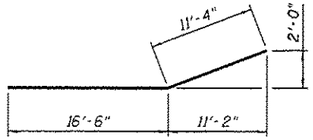
Bar	A	B
s200(E)	3'-8"	6'-3"
u200(E)	8'-2"	4'-4"
u201(E)	6'-2"	5'-0"
u203(E)	7'-5"	1'-2"
u204(E)	7'-7"	1'-2"



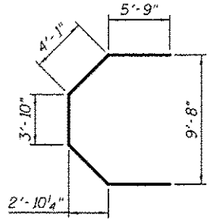
BAR w200(E)



BARS t200(E) & t201(E)



BAR p201(E)



BAR u202(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h200(E)	16	#7	50'-4"	
h201(E)	2	#7	39'-0"	
h202(E)	66	#7	27'-8"	
h203(E)	72	#8	31'-8"	
* n200(E)	96	#14	18'-6"	
* n201(E)	96	#14	20'-6"	
p200(E)	30	#10	50'-4"	
p201(E)	18	#7	27'-10"	
s200(E)	204	#6	16'-2"	
s201(E)	129	#6	26'-0"	
s202(E)	231	#4	6'-11"	
s203(E)	360	#4	10'-5"	
t200(E)	92	#11	27'-8"	
t201(E)	47	#7	26'-4"	
t202(E)	8	#7	23'-8"	
u200(E)	20	#6	16'-10"	
u201(E)	66	#7	16'-2"	
u202(E)	72	#8	23'-6"	
u203(E)	94	#7	9'-9"	
u204(E)	50	#7	9'-11"	
v200(E)	94	#14	36'-3"	
* v201(E)	96	#14	24'-9"	
* v202(E)	96	#14	22'-9"	
w200(E)	75	#7	48'-4"	
w201(E)	8	#7	45'-8"	
Concrete Structures			Cu. Yd.	1,013
Reinforcement Bars, Epoxy Coated			Pound	156,990
Cofferdam Excavation			Cu. Yd.	104
Cofferdam (Type-2) (Location-1)			Each	1
Seal Coat Concrete			Cu. Yd.	428
Rock Excavation for Structures			Cu. Yd.	329

* The bar length is to the center of mechanical splicer. The Contractor shall adjust the length as required for the selected mechanical splicer.

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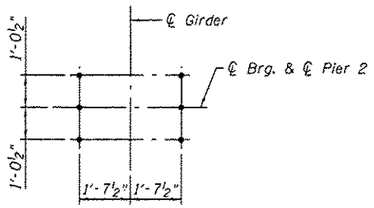
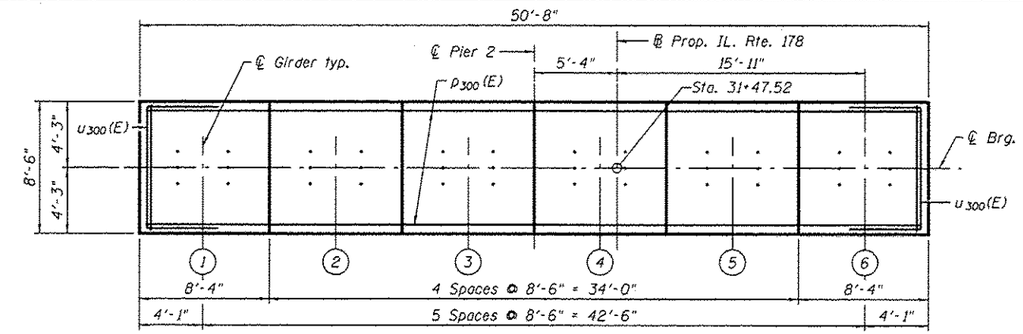
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 050-0256
SHEET NO. 56 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	277
		CONTRACT NO. 66992		
		ILLINOIS FED. AID PROJECT		



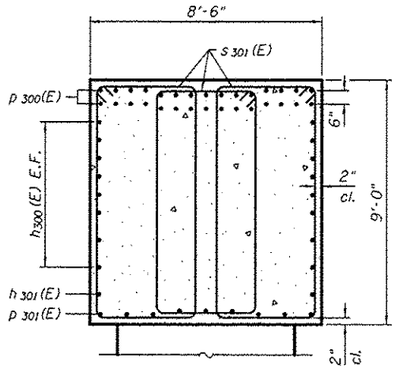
ANCHOR BOLT LAYOUT



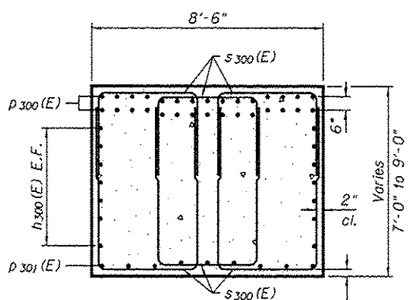
TOP PLAN

TOP OF SEAT ELEVATION

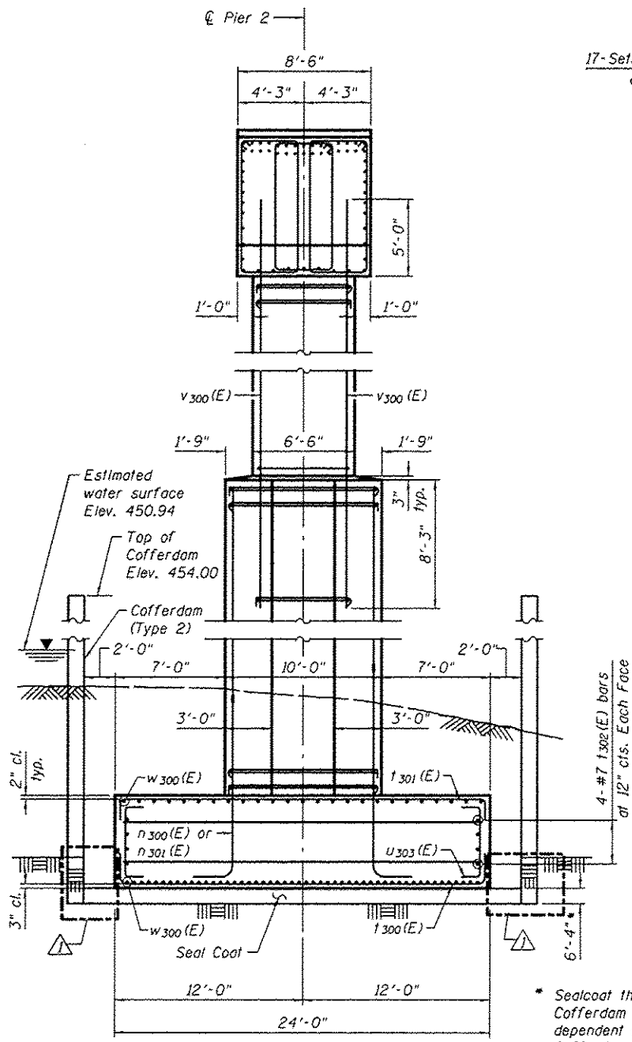
Girder No.	Seat Elevation
1	502.15
2	502.32
3	502.48
4	502.60
5	502.51
6	502.36



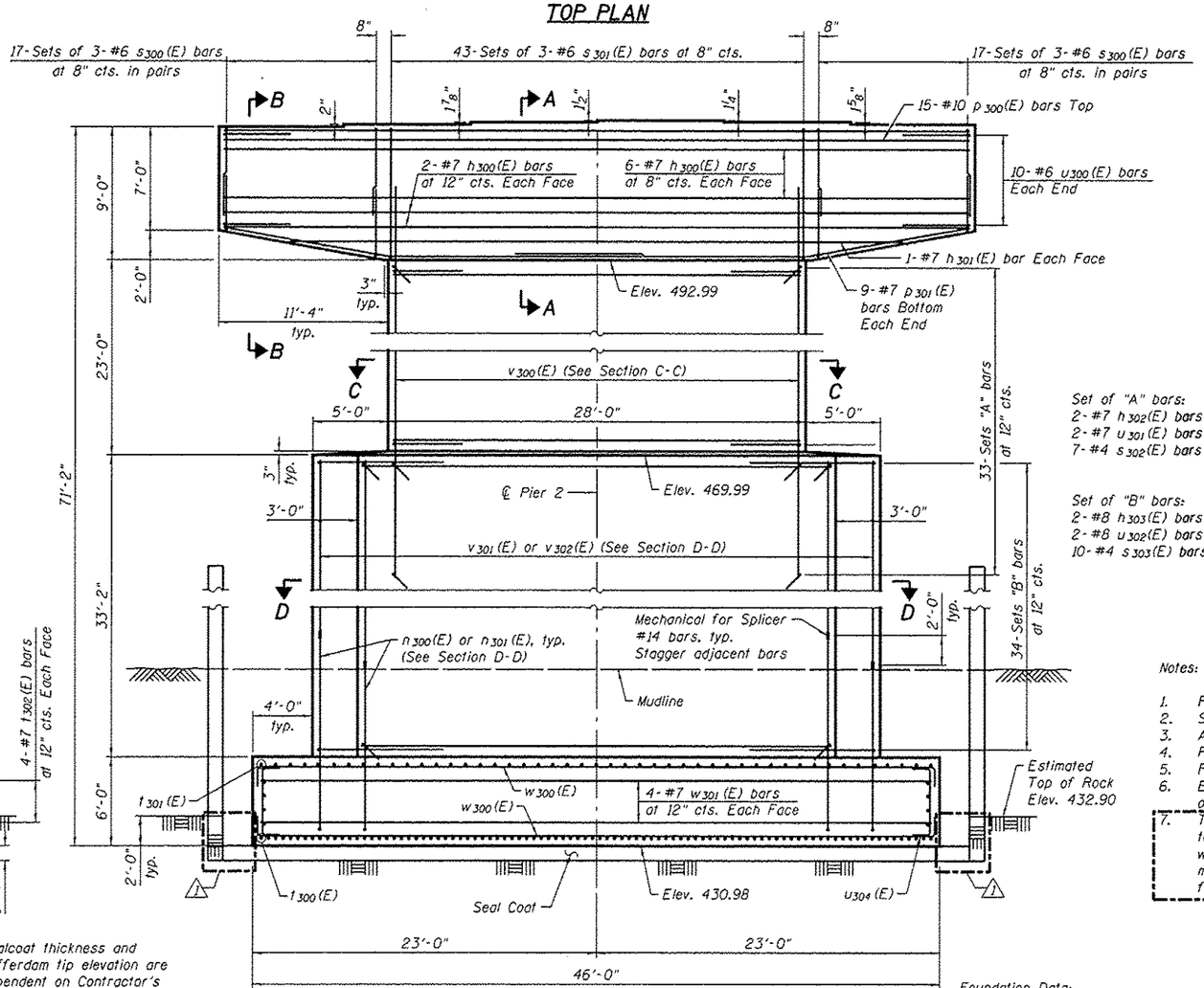
SECTION A-A



SECTION B-B



END VIEW



ELEVATION
(Looking South)

* Sealcoat thickness and Cofferdam tip elevation are dependent on Contractor's Cofferdam design, See General Note 19 on sheet 2 of 65.

Set of "A" bars:
2 - #7 h 302 (E) bars
2 - #7 u 301 (E) bars
7 - #4 s 302 (E) bars

Set of "B" bars:
2 - #8 h 303 (E) bars
2 - #8 u 302 (E) bars
10 - #4 s 303 (E) bars

Notes:

1. For footing plan, see sheet 58 of 65.
2. Space reinforcement in cap to miss anchor bolts.
3. All edges shall have standard ¾" chamfer.
4. Pour steps monolithically with cap.
5. For section C-C, and D-D, see sheet 58 of 65.
6. Bars indicated thus, 3x2-#5 etc. indicates 3 lines of bars with 2 lengths of bars per line.
7. The bottom of footing elevation(s) shall be adjusted to ensure a minimum embedment of 24 inches in non-weathered rock. The rock excavation shall be made to allow the base of the embedded portion of the footing to be cast against undisturbed rock surfaces. ⚠1

Foundation Data:
Spread Footing Bearing on Rock
Maximum Applied Service Bearing Pressure, Qmax = 46.6 ksf

MINIMUM BAR LAP

#7 bar = 5'-0"
#10 bar = 8'-9"

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USER NAME = patold	DESIGNED - JZ	REVISED - ⚠1 10/20/2016 JZ
	CHECKED - IJL	REVISED -
PLOT SCALE = N.T.S.	DRAWN - DCP	REVISED -
PLOT DATE = 10/20/2016	CHECKED - AH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
STRUCTURE NO. 050-0256
SHEET NO. 57 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	278
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			

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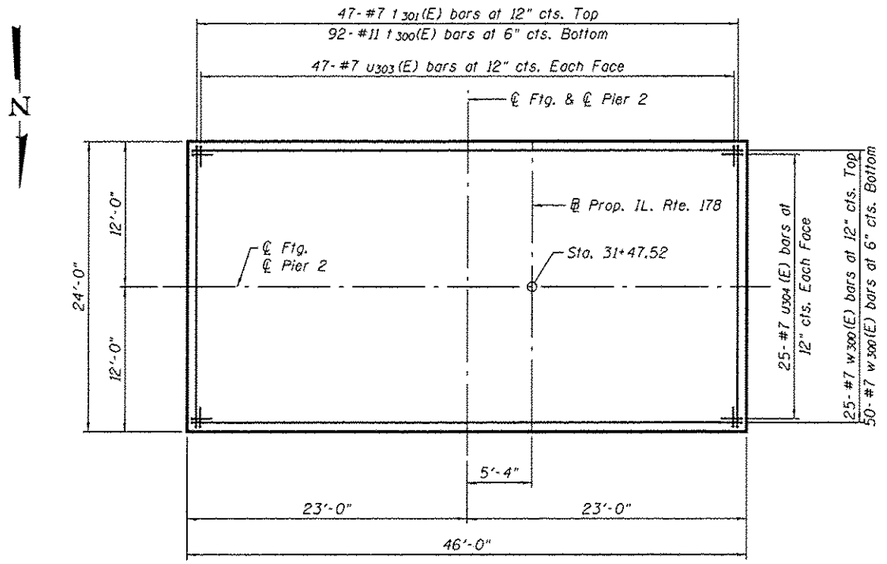
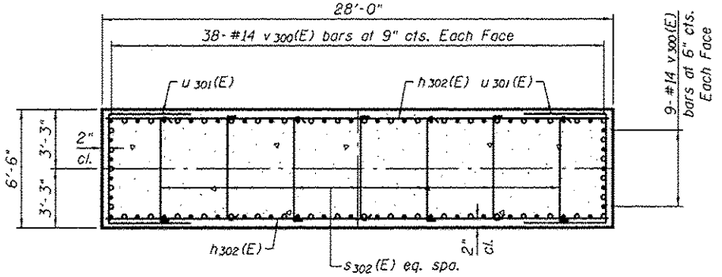
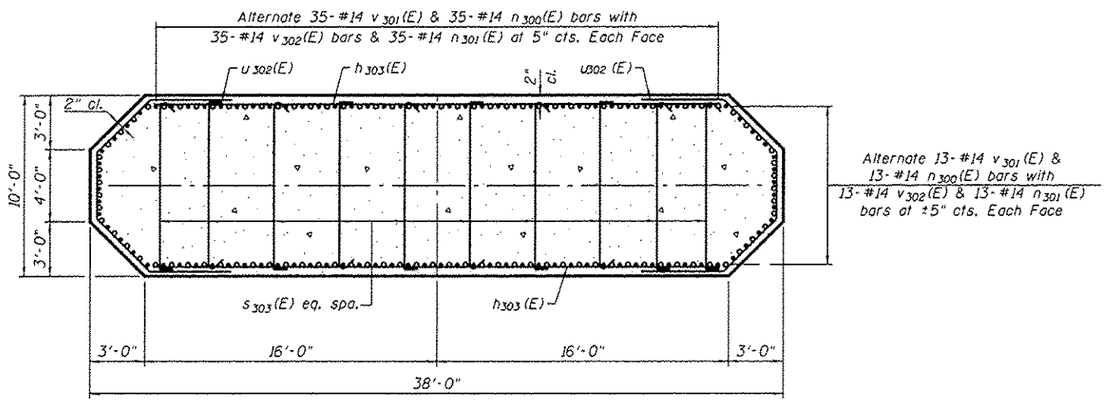


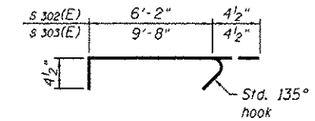
FOOTING PLAN



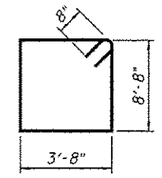
SECTION C-C



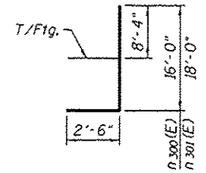
SECTION D-D



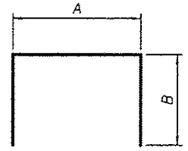
BARS s302(E) & s303(E)



BAR s 301(E)

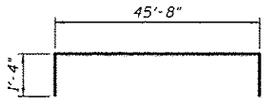


BARS n 300(E) & n 301(E)

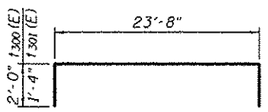


A & B DIMENSIONS

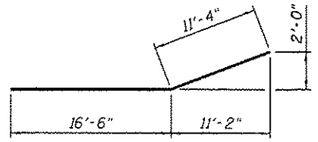
Bar	A	B
s 300(E)	3'-8"	6'-3"
u 300(E)	8'-2"	4'-4"
u 301(E)	6'-2"	5'-0"
u 303(E)	7'-5"	1'-2"
u 304(E)	7'-7"	1'-2"



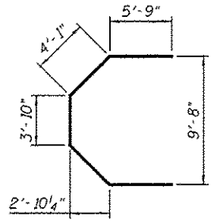
BAR w300(E)



BARS t 300(E) & t 301(E)



BAR p 301(E)



BAR u302 (E)

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h 300(E)	16	#7	50'-4"	
	h 301(E)	2	#7	39'-0"	
	h 302(E)	66	#7	27'-8"	
	h 303(E)	68	#8	31'-8"	
*	n 300(E)	96	#14	16'-1"	
*	n 301(E)	96	#14	18'-1"	
	p 300(E)	30	#10	50'-4"	
	p 301(E)	18	#7	27'-10"	
	s 300(E)	204	#6	16'-2"	
	s 301(E)	129	#6	26'-0"	
	s 302(E)	231	#4	6'-11"	
	s 303(E)	340	#4	10'-5"	
	t 300(E)	92	#11	27'-8"	
	t 301(E)	47	#7	26'-4"	
	t 302(E)	8	#7	23'-8"	
	u 300(E)	20	#6	16'-10"	
	u 301(E)	66	#7	16'-2"	
	u 302(E)	68	#8	23'-6"	
	u 303(E)	94	#7	9'-9"	
	u 304(E)	50	#7	9'-11"	
	v 300(E)	94	#14	36'-3"	
*	v 301(E)	96	#14	22'-9"	
*	v 302(E)	96	#14	20'-9"	
	w 300(E)	75	#7	48'-4"	
	w 301(E)	8	#7	45'-8"	

Concrete Structures	Cu. Yd.	986
Reinforcement Bars, Epoxy Coated	Pound	151,150
Cofferdam Excavation	Cu. Yd.	169
Cofferdam (Type-2) (Location-2)	Each	1
Seal Coat Concrete	Cu. Yd.	428
Rock Excavation for Structures	Cu. Yd.	329

1

* The bar length is to the center of mechanical splicer. The Contractor shall adjust the length as required for the selected mechanical splicer.

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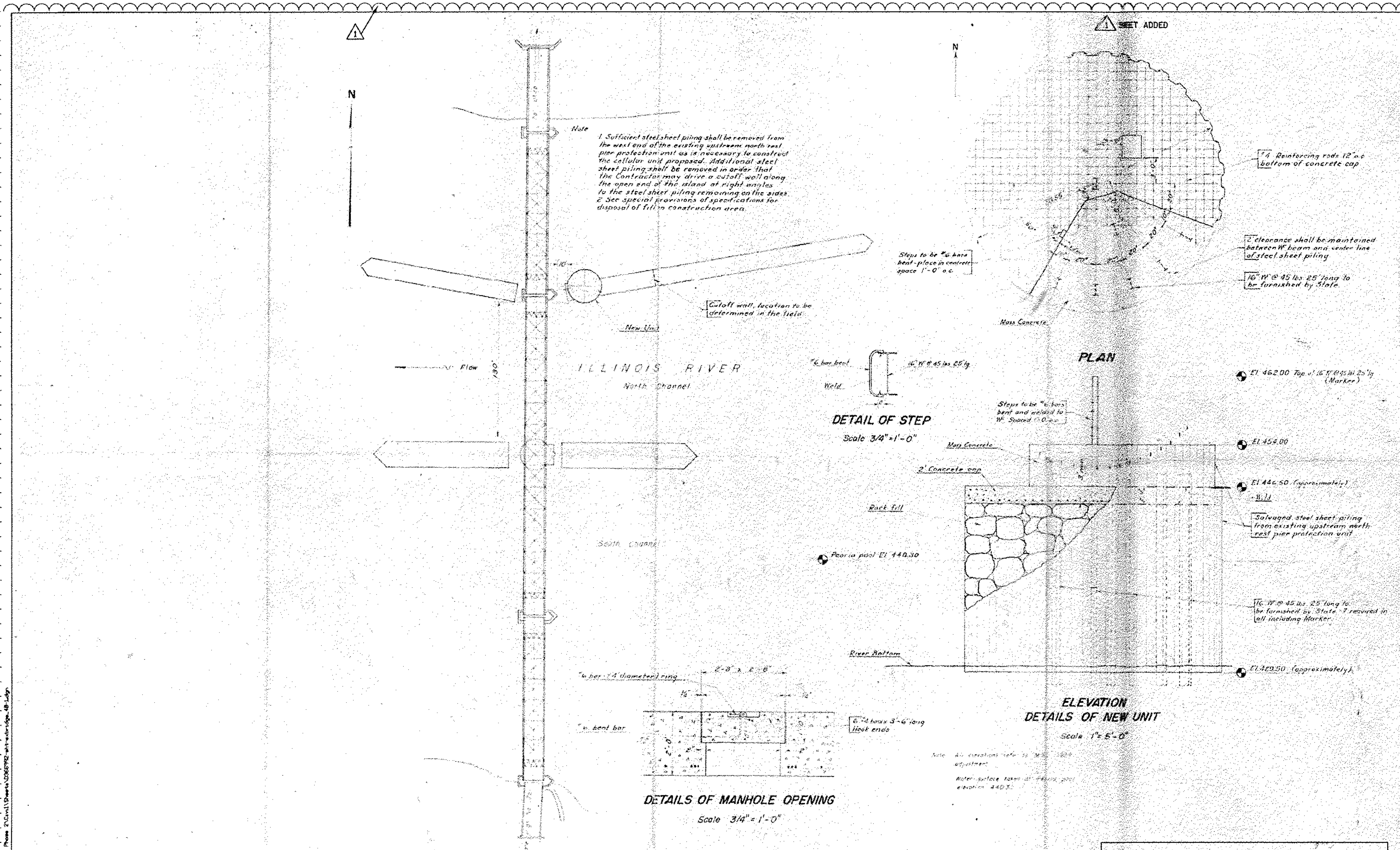
USER NAME = pateld	DESIGNED - JZ	REVISED - ⚠1 10/20/2016 JZ	
	CHECKED - IJL	REVISED -	
PLOT SCALE = N.T.S.	DRAWN - DCP	REVISED -	
PLOT DATE = 10/20/2016	CHECKED - AH	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 050-0256
SHEET NO. 58 OF 65 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1)BR & 1	LASALLE	430	279
		CONTRACT NO. 66992		
	ILLINOIS FED. AID PROJECT			



SHEET ADDED
N
Note
1. Sufficient steel sheet piling shall be removed from the west end of the existing upstream north rest pier protection unit as is necessary to construct the cellular unit proposed. Additional steel sheet piling shall be removed in order that the Contractor may drive a cutoff wall along the open end of the island at right angles to the steel sheet piling remaining on the sides.
2. See special provisions of specifications for disposal of fill in construction area.
Cutoff wall, location to be determined in the field
New Unit
Flow
ILLINOIS RIVER
North Channel
South Channel
DETAIL OF STEP
Scale 3/4" = 1'-0"
Weld
DETAILS OF MANHOLE OPENING
Scale 3/4" = 1'-0"
Peoria pool El. 440.30
#4 Reinforcing rods 12" o.c. bottom of concrete cap
2" clearance shall be maintained between W. beam and center line of steel sheet piling
16" W @ 45 lbs 25' long to be furnished by State
Mass Concrete
PLAN
El. 462.00 Top of 16" W @ 45 lbs 25' lg (Marker)
El. 454.00
2' Concrete cap
El. 446.50 (approximately)
Rock fill
Salvaged steel sheet piling from existing upstream north rest pier protection unit
River Bottom
El. 429.50 (approximately)
ELEVATION
DETAILS OF NEW UNIT
Scale 1" = 5'-0"

SHEET ADDED 10-21-16

FOR INFORMATION ONLY

WSP PARSONS BRINCKERHOFF 30 North LaSalle Street, Suite 4200 Chicago, IL 60602 (312) 782-8150 FAX# (312) 782-1684	USER NAME =	DESIGNED -	REVISED - 10/21/2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE =	CHECKED -	REVISED -	
	PLOT DATE = 21-OCT-2016	DATE - 10/21/2016	REVISED -	

EXISTING BRIDGE PLANS

SCALE: NONE | SHEET NO. 39A OF 39 SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1279	(1) BR & I	LASALLE	430	325A

CONTRACT NO. 66992

ILLINOIS FED. AID PROJECT P-93-035-01