GENERAL NOTES

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

Calculated weight of Structural Steel = 2,174,090 lbs (M 270 Gr. 50).

Calculated weight of Structural Steel = 97,080 lbs (M 270 Gr. 36).

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

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior 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 girder at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the abutment seat areas, front faces of backwalls and hatchblocks.

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

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.

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

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

When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

Seal coat thickness design is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. /1

Slipforming of parapet is not allowed.

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, ect. 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.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.		645	645
Stone Riprap, Class A5	Sq. Yd.		1640	1640
Filter Fabric	Sq. Yd.		1640	1640
Removal of Existing Structures No. 1	Each			1
Removal of Existing Structures No. 2	Each			1
Structure Excavation	Cu. Yd.		666	666
Cofferdam (Type 2), Location 1	Each		1	1
Cofferdam Excavation	Cu. Yd.		1231	1231
Concrete Structures	Cu. Yd.		1247.1	1247.1
Concrete Superstructure	Cu. Yd.	1452.5		1452.5
Bridge Deck Grooving	Sq. Yd.	4138.2		4138.2
Seal Coat Concrete	Cu. Yd.		395.2	395.2
Concrete Encasement	Cu. Yd.		33.8	33.8
Protective Coat	Sq. Yd.	5259		5259
Furnishing and Erecting Structural Steel	L. Sum	.46		.46
Stud Shear Connectors	Each	10512		10512
Reinforcement Bars, Epoxy Coated	Pound	378630	164440	543070
Bar Splicers	Each		192	192
Furnishing Metal Shell Piles 14"x .312"	Foot		6846	6846
Furnishing Steel Piles HP14x117	Foot		3600	3600
Test Pile Metal Shells	Each		4	4
Test Pile Steel HP14x117	Each		2	2
Driving Piles	Foot		10446	10446
Pile Shoes	Each		268	268
Temporary Soil Retention System	Sq. Ft.		1624	1624
Name Plates	Each	2		2
Preformed Joint Strip Seal	Foot	197		197
Elastomeric Bearing Assembly, Type II	Each	24		24
Anchor Bolts, 1"	Each	48		48
Anchor Bolts, 1½"	Each	24		24
Concrete Sealer	Sq. Ft.		4022	4022
Geocomposite Wall Drain	Sq. Yd.		248	248
Pipe Underdrains for Structures, 4"	Foot		320	320
Drainage Scuppers, DS-11	Each	8		8
Form Liner Textured Surface	Sq. Ft.	5970	4572	10542
Staining Concrete Structures	Sq. Ft.	5970	4572	10542

INDEX OF SHEETS

WATERWAY INFORMATION

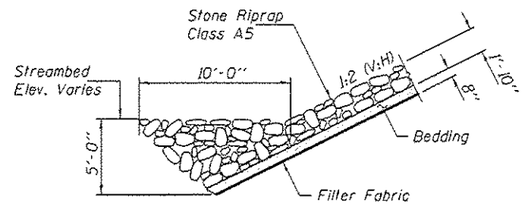
Drainage Area = 6532.87 sq. mi.

Existing Low Grade Elev. = 708.59 ft @ Sta. 491+52
Proposed Low Grade Elev. = 710.4 ft @ Sta. 930+62

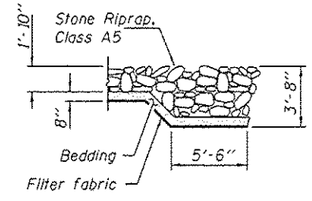
Flood		Discharge (cfs)		Waterway Opening (Sq.Ft.)		Natural H.W.E.	Head (ft.)		Headwater Elev.	
		Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed
10-YR	Main Channel	18052	15916	4353	4720					
	Relief Struc.	7473	9609	2143	2852					
	Total	25525	25525			696.3	0.2	0.1	696.5	696.4
50-YR (Design)	Main Channel	23661	20859	5060	5513					
	Relief Struc.	10464	13266	2629	3505					
	Total	34125	34125			698.2	0.3	0.2	698.5	698.4
100-YR	Main Channel	25971	22895	5335	5822					
	Relief Struc.	11719	14795	2819	3760					
	Total	37690	37690			699.0	0.3	0.2	699.3	699.2
Overtopping	Main Channel									
	Relief Struc.									
	Total									
500-YR	Main Channel	30162	27412	5911	6465					
	Relief Struc.	15463	18213	3220	4292					
	Total	45625	45625			700.5	0.4	0.2	700.9	700.7

10 Year Velocity through Existing Bridge = 3.49 fps

10 Year Velocity through Proposed Bridge = 3.37 fps



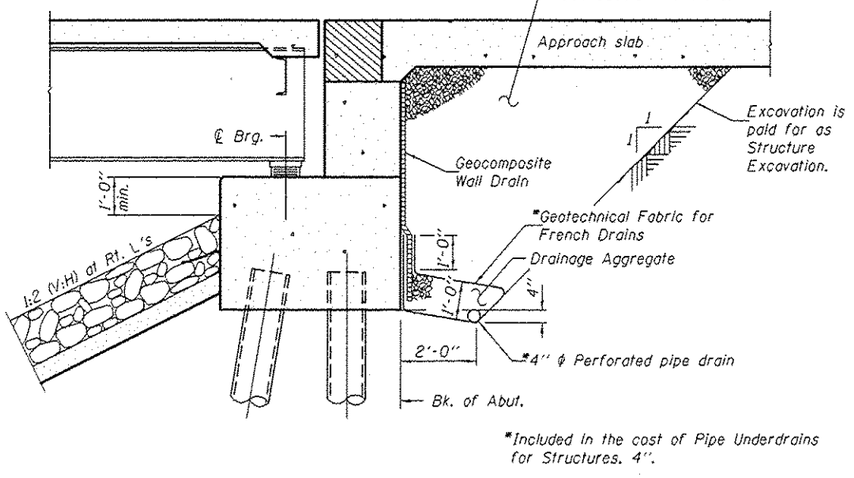
SECTION B-B



SECTION A-A

DESIGN SCOUR ELEVATION TABLE

	Design Scour Elevations (ft.)			
	W. Abut.	Pier (WB)	Pier (EB)	E. Abut.
0500	702.00	669.50	674.40	699.40



*Included in the cost of Pipe Underdrains for Structures, 4".

SECTION THRU PILE SUPPORTED STUB ABUTMENT

(Horizontal dimensions are at Rt. L's)

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

Geocomposite wall drains and 4" ϕ pipe underdrains shall be extended behind the entire abutment cap.

DESIGNED	-	Nick R. Barnett	
CHECKED	-	Al-Barrao R. Shabib	
DRAWN	-	h.t. duong	
CHECKED	-	NRB/GRA	

EXAMINED — Joyce F. Oldfield, ACTING ENGINEER OF BRIDGE DESIGN
PASSED — Carl Puzey, ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - OCTOBER 4, 2013
REVISED /1 10/21/2013 NRB
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 101-0195 (E.B.) & 101-0196 (W.B.)
SHEET NO. 2 OF 55 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	3BR & 3BR-1	WINNEBAGO	290	101
		CONTRACT NO. 64D19		
		ILLINOIS FED. AID PROJECT		