

GENERAL NOTES:

- 1 Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts $\frac{7}{8}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- 2 Calculated weight of Structural Steel = 1,083,000 pounds AASHTO M 270 Grade 50W
- 3 All structural steel shall be AASHTO M 270 Grade 50W
- 4 No field welding is permitted except as specified in the contract documents.
- 5 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- 6 Reinforcement bars designated (E) shall be epoxy coated.
- 7 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 girder at each of these additional bracket locations.
- 8 Bearing seal surfaces shall be constructed or adjusted to their 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.
- 9 Ends of structural steel girders shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting shall not be required.
- 10 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- 11 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 12 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.
- 13 All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- 14 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- 15 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50 W.
- 16 The foundation design of three sided precast concrete structure is based on the following maximum service reactions applied at the top of the footing: 31 kips/ft (vertical), 2.0 kips/ft (horizontal)
The Contractor shall verify that the selected structure meets these design parameters. If the design parameters are exceeded, a complete foundation design with calculations, details, and the required seals shall be submitted for review and approval.

- 18 Structural Engineer's Seal does not include design of the precast elements.
19. All construction joints shall be bonded.
20. The DuPage River is used at times by canoeists. During construction the Contractor shall prevent debris from falling into the river and shall not dump debris into the river.

BILL OF MATERIAL

PAY ITEM DESCRIPTION	UNIT	SUPERSTRUCTURE	SUBSTRUCTURE	TOTAL
STONE RIPRAP, CLASS A4	Sq. Yd.	0	761	761
STONE RIPRAP, CLASS A4	Ton	0	954	954
FILTER FABRIC	Sq. Yd.	0	1,314	1,314
COFFERDAM EXCAVATION	Cu. Yd.	0	30	30
COFFERDAM (TYPE 1) (LOCATION-1)	Each	0	1	1
CONCRETE STRUCTURES	Cu. Yd.	0.0	415.5	415.5
CONCRETE SUPERSTRUCTURE	Cu. Yd.	1,043.5	0.0	1,043.5
BRIDGE DECK GROOVING	SQ YD	2,071	0	2,071
CONCRETE ENCASEMENT	Cu. Yd.	0	25	25
PROTECTIVE COAT	Sq. Yd.	3,629	0	3,629
FURNISHING AND ERECTING STRUCTURAL STEEL	L. Sum	1	0	1
STUD SHEAR CONNECTORS	Each	12,560	0	12,560
REINFORCEMENT BARS, EPOXY COATED	Pound	254,390	60,230	314,620
BAR SPLICERS	Each	124	0	124
BICYCLE RAILING	Foot	716	0	716
PARAPET RAILING	Foot	690	0	690
FURNISHING STEEL PILES HP14X73	Foot	0	1,379	1,379
DRIVING PILES	Foot	0	1,379	1,379
TEST PILE STEEL HP14X73	Each	0	2	2
PILE SHOES	Each	0	45	45
NAME PLATES	Each	1	0	1
DRILLED SHAFT IN SOIL	Cu. Yd.	0	42.1	42.1
DRILLED SHAFT IN ROCK	Cu. Yd.	0	11.0	11.0
ANCHOR BOLTS, 1"	Each	0	40	40
ANCHOR BOLTS, 1 1/2"	Each	0	20	20
GEOCOMPOSITE WALL DRAIN	Sq. Yd.	190	0	190
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	Foot	1,564	0	1,564
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 8"	Each	7	0	7
THREE SIDED PRECAST CONCRETE STRUCTURES 10' X 14'	Foot	0	89	89
DRAINAGE SYSTEM	Lump Sum	1	0	1
POROUS GRANULAR EMBANKMENT, SPECIAL	Cu. Yd.	0	293	293
DRAINAGE SCUPPERS, DS-12	Each	7	0	7
MECHANICALLY STABILIZED EARTH RETAINING WALL	Sq. Ft.	0	499	499
PIPE UNDERDRAIN FOR STRUCTURES 4"	Foot	0	205	205

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USER NAME = \$STB\$	DESIGNED - STB	REVISED -
PILOT SCALE = 1/8" = 1'-0"	CHECKED - NPP	REVISED -
PILOT DATE = 10/16/2012	DRAWN - SOI	REVISED -
	CHECKED - NPP	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ESTIMATED QUANTITIES AND GENERAL NOTES
STRUCTURE NO. 099-3035**

SHEET NO. 2 OF 38 SHEETS

F.A.U. RTE. 1644	SECTION 01-00181-00-PP	COUNTY WILL	TOTAL SHEETS 328	SHEET NO. 160
CONTRACT NO. 63647				ILLINOIS FED. AID PROJECT