

GENERAL NOTES

- For new structural steel elements, fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8"φ, holes 15/16"φ, unless otherwise noted.
- Calculated weight of Structural Steel =
 M 270 Grade 36: 18,170 lbs
 M 270 Grade 50: 250,550 lbs
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.

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 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.

- 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.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the designated areas of the South Abutment and Pier 4.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel and the steel portions of new elastomeric and HLMR bearings. Only Inorganic Zinc Rich Primer shall be applied to the new structural steel and the steel portions of the new elastomeric and HLMR bearings in the shop under this contract and is included in "Furnishing and Erecting Structural Steel" and the elastomeric and HLMR bearing pay items, respectively. The intermediate and top coats shall be applied under a separate painting contract.
- Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutment.
- 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.

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- For existing bridge plans, see Sheets SEX1 thru SEX13 immediately following Sheet SE46.

SCOPE OF WORK

- Remove existing concrete deck and microsilica concrete overlay and replace with new 8" reinforced concrete deck.
- Make new deck composite in positive moment areas only by adding shear studs to all existing and proposed girders.
- Remove and replace existing expansion joints and drainage scuppers.
- Remove and replace existing backwall.
- Widen abutment, piers and slopewall.
- Remove and replace approach slab and wingwalls.
- Repair spalls, delaminations and open cracks in substructure using formed concrete repair and epoxy crack injection. Replace failed slopewall panels.
- Add two additional steel girder lines.
- Remove wind bracing from the structure.
- Perform miscellaneous repairs including fixing unseated anchor bolts and debris/vegetation removal.
- Remove and dispose of existing electrical conduits and junction boxes attached to the girders and/or deck.

TOTAL BILL OF MATERIAL

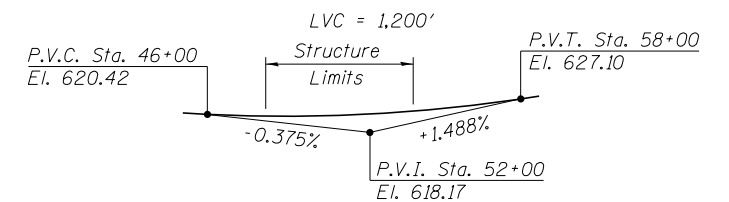
ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd		33.2	33.2
Slope Wall Removal	Sq Yd		17	17
Removal of Existing Concrete Deck No. 3	Each	1		1
Protective Shield	Sq Yd	2,098		2,098
Structure Excavation	Cu Yd		213	213
Floor Drains	Each	40		40
Concrete Structures	Cu Yd		187.2	187.2
Concrete Superstructure	Cu Yd	931.8		931.8
Bridge Deck Grooving	Sq Yd	2,901		2,901
Concrete Encasement	Cu Yd		1.8	1.8
Protective Coat	Sq Yd	3,488		3,488
* Furnishing and Erecting Structural Steel	L Sum	0.28		0.28
Stud Shear Connectors	Each	10,752		10,752
Reinforcement Bars, Epoxy Coated	Pound	231,670	35,640	267,310
Bar Splicers	Each		45	45
Mechanical Splicers	Each		118	118
Slope Wall 6 Inch	Sq Yd		60	60
Furnishing Steel Piles HP12x53	Foot		132	132
Driving Piles	Foot		132	132
Test Pile Steel HP12x53	Each		1	1
Pile Shoes	Each		5	5
Name Plates	Each	1		1
Permanent Casing	Foot		186	186
Drilled Shaft in Soil	Cu Yd		50.8	50.8
Drilled Shaft in Rock	Cu Yd		8.8	8.8
Preformed Joint Strip Seal	Foot	46.5		46.5
Elastomeric Bearing Assembly, Type II	Each	4		4
Anchor Bolts, 3/4"	Each	24		24
Anchor Bolts, 1"	Each	4		4
Anchor Bolts, 1 1/2"	Each	1		1
Concrete Sealer	Sq Ft		1,013	1,013
** Epoxy Crack Injection	Foot		11	11
Geocomposite Wall Drain	Sq Yd		45	45
Structural Steel Removal	Pound	3,710		3,710
Cleaning Bridge Seats	Sq Ft		440	440
** Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		79	79
** Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		5	5
Drainage Scuppers, DS-11	Each	4		4
Pipe Underdrains for Structures 4"	Foot		55	55
*** Selective Clearing	Unit		1	1
Temporary Shoring and Cribbing	Each		3	3
Remove Conduit Attached to Structure	Foot	1,626		1,626
High Load Multi-Rotational Bearings, Guided Expansion, 250K	Each	2		2
High Load Multi-Rotational Bearings, Guided Expansion, 300K	Each	2		2
Granular Backfill for Structures	Cu Yd		103	103

- * Remainder of this item is installed with other structures in this Contract. See the other structures for remaining quantity.
- ** Quantity includes a contingency (above the amounts shown in the individual bills of material) to account for uncertainties associated with the condition of the existing substructure and the age of the original inspection (2008-9). Actual repair areas will be determined by the Engineer in the field.
- *** The quantity for this item is estimated. The intent for this work is to remove accumulations of rubbish, vegetation, etc. on the existing slopewalls and other areas.

STATION 50+80.50
 RE-BUILT 201- BY
 STATE OF ILLINOIS
 F.A.P. RT. 372
 SECTION 2013-038B-R
 LOADING HS-20
 STRUCTURE NO. 016-0483

NAME PLATE
 See Std. 515001

Existing Name Plate shall be cleaned and relocated next to the new Name Plate.
 Cost included with Name Plates.



PROFILE GRADE SB IL-171
 (Along \bar{C} of Roadway)



Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10093

FILE NAME =	USER NAME = jsurber	DESIGNED - JLS	REVISED -
		CHECKED - AJK	REVISED -
0160483.60J16.002.gnotes.dgn	PLOT SCALE =	DRAWN - RMG	REVISED -
	PLOT DATE = 12/20/2013	CHECKED - AJK	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
 STRUCTURE NO. 016-0483**

SHEET NO. SE2 OF SE46 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-038B-R	COOK	821	486
CONTRACT NO.			60J16	
ILLINOIS FED. AID PROJECT				