

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" dia., holes 15/16" dia., unless otherwise noted.
- Calculated weight of structural steel =
M270 Grade 36: 22,550 lbs.
M270 Grade 50: 116,880 lbs.
- No field welding is permitted except as specified in the contract documents.
- The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant(PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- 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 or 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 the 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 1/4 in. 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 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" (0.01). Adjustment shall be made either by grinding the surface or shimming the bearings.
- Concrete sealer shall be applied to the designated areas of the new bearing seats at Piers 7 and 39.
- The existing structural steel coating contains lead. The Contractor shall take all 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 bearings. Only Inorganic Zinc Rich Primer shall be applied to the new structural steel and the steel portions of the new elastomeric bearings in the shop under this contract and is included in "Furnishing and Erecting Structural Steel" and the elastomeric 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".

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- SD78 Pier 5 Widening Details
- SD79 Pier 6 Widening Details

TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|-------|---------|-------|---------|
| Concrete Removal | Cu Yd | | 0.8 | 0.8 |
| Removal of Existing Concrete Deck No. 2 | Each | 1 | | 1 |
| Protective Shield | Sq Yd | 6,087 | | 6,087 |
| Structure Excavation | Cu Yd | | 68 | 68 |
| Concrete Structures | Cu Yd | | 54.9 | 54.9 |
| Concrete Superstructure | Cu Yd | 1,994.2 | | 1,994.2 |
| Bridge Deck Grooving | Sq Yd | 6,171 | | 6,171 |
| Protective Coat | Sq Yd | 7,558 | | 7,558 |
| Furnishing and Erecting Structural Steel | L Sum | 0.17 | | 0.17 |
| Stud Shear Connectors | Each | 12,246 | | 12,246 |
| Reinforcement Bars, Epoxy Coated | Pound | 525,120 | 8,080 | 533,200 |
| Furnishing Steel Piles HP12x53 | Foot | | 195 | 195 |
| Driving Piles | Foot | | 195 | 195 |
| Test Pile Steel HP12x53 | Each | | 2 | 2 |
| Pile Shoes | Each | | 12 | 12 |
| Name Plates | Each | 1 | | 1 |
| Preformed Joint Strip Seal | Foot | 397.5 | | 397.5 |
| Finger Plate Expansion Joint, 4" | Foot | 52.0 | | 52.0 |
| Elastomeric Bearing Assembly, Type I | Each | 4 | | 4 |
| Elastomeric Bearing Assembly, Type II | Each | 9 | | 9 |
| Anchor Bolts, 3/4" | Each | 18 | | 18 |
| Anchor Bolts, 1" | Each | 14 | | 14 |
| Concrete Sealer | Sq Ft | | 42 | 42 |
| * Epoxy Crack Injection | Foot | | 21 | 21 |
| Jack and Remove Existing Bearings | Each | 7 | | 7 |
| Structural Steel Removal | Pound | 27,220 | | 27,220 |
| Structural Steel Repair | Pound | 62,730 | | 62,730 |
| Cleaning Bridge Seats | Sq Ft | | 2,056 | 2,056 |
| * Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches) | Sq Ft | | 1,115 | 1,115 |
| * Structural Repair of Concrete (Depth Greater Than 5 Inches) | Sq Ft | | 56 | 56 |
| Drainage Scuppers, DS-II | Each | 17 | | 17 |
| Temporary Shoring and Cribbing | Each | | 7 | 7 |
| Remove Conduit Attached to Structure | Foot | 3,008 | | 3,008 |

* Quantity includes a contingency (above the amounts shown in the bills of material) to account for uncertainties associated with the condition of the existing substructure and the age of the original inspection (2008-2009). Actual repair areas will be determined by the Engineer in the field.

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- SD81 HP Pile Details
- SD82 Soil Boring Logs - Pier 5
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For existing bridge plans, see Sheets SDX1 thru SDX26, immediately following Sheet SD83.

STATION 58+29.83
RE-BUILT 20__ BY
STATE OF ILLINOIS
FAP 372-SEC. 2013-038B-R
LOADING HS-20
STRUCTURE NO. 016-2457

SB NAME PLATE
(See Std. 515001)

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



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

| | | | |
|-------------|---------------------|------------------------|-----------|
| FILE NAME = | USER NAME = ksnider | DESIGNED - TPS | REVISED - |
| | | CHECKED - AJK | REVISED - |
| | | PLOT SCALE = | REVISED - |
| | | DRAWN - RMG | REVISED - |
| | | CHECKED - AJK | REVISED - |
| | | PLOT DATE = 12/20/2013 | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-2457

SHEET NO. SD4 OF SD83 SHEETS

| | | | | |
|---------------------------|-------------|--------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 372 | 2013-038B-R | COOK | 821 | 379 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60J16 | |

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