

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
INDEX OF DRAWINGS

| | | | | | |
|--------------------------|---------|----------|-------------------|-----------|--------------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. 2 |
| F. A. I. 80/94 | * | COOK | 870 | 516 | 91 SHEETS |
| FED. ROAD DIST. NO. 1 | | ILLINOIS | FED. AID PROJECT- | | CONTRACT NO. 62108 |
| (0203.1 & 0312-708W) R-3 | | | | | |

GENERAL NOTES

THE FABRICATION OF THE STRUCTURAL STEEL AND BEARINGS FOR THIS BRIDGE WAS INCLUDED IN CONTRACT NO. 62898. ALL WORK SHOWN THAT IS RELATED TO THE FABRICATION IS FOR INFORMATION ONLY AND IS NOT INCLUDED IN THIS CONTRACT.

- All dimensions are in millimeters (mm) except as noted.
- Fasteners shall be high strength bolts. Bolts M 22, open holes 24 mm ϕ , unless otherwise noted.
- Calculated mass of structural steel:
For SN 016-2800 (Units 1&2): 999,240 kg for M 270M Grade 345 and 5,660 kg for M 270M Grade 250.
For SN 016-2845 (Unit 3): 140,620 kg for M 270M Grade 345 and 690 kg for M 270M Grade 250.
- The same organic zinc rich primer / epoxy / urethane Paint System used for the fabrication contract shall be used for painting of structural steel left partially or fully unpainted in the fabrication contract due to construction requirements. This includes, but is not necessarily limited to, masked off connection surfaces and field installed fasteners. Any structural steel that was painted under the fabrication contract whose paint system may have been damaged during the fabrication contract shall be spot cleaned and touched up in the field. For SN 016-2800 (Units 1 & 2), the color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1; and the color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. For SN 016-2845 (Unit 3), the color of the final finish coat for all interior and exterior steel surfaces shall be Interstate Green Munsell No. 7.5G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures." The cost is included for payment under Erecting Structural Steel.
- Field welding of construction accessories will not be permitted to the beams or girders.
- Anchor bolts shall be set before bolting cross frames / diaphragms over supports.
- The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs, the cross frames and connection plates, diaphragms and connection plates, and all splice plate material except fill plates.
- Reinforcement bars shall conform to the requirements of AASHTO M 31M or M 322M Grade 400.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
- The Contractor shall drive one steel test pile in a permanent location at the South Abutment, Abutment F, Pier 1, and Pier F1; and two steel test piles in a permanent location at the North Abutment, Pier 2, Pier 3 and Pier 4 as directed by the Engineer before ordering the remainder of piles.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 3 mm adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two 3mm adjusting shims shall be provided for each bearing and placed as detailed.
- Bridge Seat Sealer shall be applied to the seat area of the Abutments and Pier 2, including future widening.
- All construction joints shall be bonded.
- 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 requirements 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 4.5 MPa or a minimum compressive strength of 24 MPa.
- The stability of the partially erected structural steel is the Contractor's responsibility during all phases of construction. The Contractor shall submit for review and approval by the Engineer an erection plan with calculations for the erection of the structural steel. The plan must address as a minimum subassembly of the girders, erection of the girders, placement of cross frames/diaphragms, bolting of cross frames/diaphragms, and removal of temporary supports. See Special Provisions for "Erecting Structural Steel". The cost of this work is included in the pay item "Erecting Structural Steel" or "Erecting Structural Steel (Girder Spans)".

| Sht. No. | Sht. Title |
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| 4 | Footing Layout |
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| 7 | Top of Slab Elevations - 2 - Spans 3-5 - Unit 1 |
| 8 | Top of Slab Elevations - 3 - Spans 3-5 - Unit 1 |
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| 32 | Drainage Scupper DS-33 |
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TOTAL BILL OF MATERIAL

| ITEM | UNIT | SUPER | SUB | TOTAL |
|--|-------|---------|---------|---------|
| Porous Granular Embankment (Special) | Cu M | - | 266 | 266 |
| Structure Excavation | Cu M | - | 918 | 918 |
| Cofferdam (Pier 4) | Each | - | 1 | 1 |
| Cofferdam Excavation | Cu M | - | 470 | 470 |
| Seal Coat Concrete | Cu M | - | 133 | 134 |
| Concrete Structures | Cu M | - | 935.6 | 935.6 |
| Concrete Superstructure | Cu M | 1,078.4 | - | 1,078.4 |
| Bridge Deck Grooving | Sq M | 4,287 | - | 4,287 |
| Protective Coat | Sq M | 4,943 | - | 4,943 |
| Furnishing & Erecting Structural Steel | KG | - | 874 | 874 |
| Erecting Structural Steel | L Sum | 0.55 | - | 0.55 |
| Erecting Floating Bearings, Gilded Expansion 2000 KN | Each | - | 10 | 10 |
| Erecting Floating Bearings, Fixed 2250 KN | Each | - | 12 | 12 |
| Erecting Elastomeric Bearing Assembly, Type I | Each | - | 24 | 24 |
| Erecting Elastomeric Bearing Assembly, Type III | Each | - | 9 | 9 |
| Stud Shear Connectors | Each | 11,531 | - | 11,531 |
| Reinforcement Bars, Epoxy Coated | KG | 195,380 | 96,300 | 291,680 |
| Stone Riprap, Class A4 | Sq M | - | 802 | 802 |
| Filter Fabric | Sq M | - | 1,040 | 1,040 |
| Furnishing Steel Piles HP 360x108 | M | - | 3,201.2 | 3,201.2 |
| Driving Steel Piles | M | - | 3,201.2 | 3,201.2 |
| Test Pile Steel HP 360x108 | Each | - | 10 | 10 |
| Name Plates | Each | 1 | - | 1 |
| Drainage Scuppers, DS-11 | Each | 9 | - | 9 |
| Drainage Scuppers, DS-33 | Each | 2 | - | 2 |
| Floor Drain | Each | 2 | - | 2 |
| Strip Seal Expansion Joint Assembly | M | 15.3 | - | 15.3 |
| Neoprene Expansion Joint, 100 mm | M | 36.9 | - | 36.9 |
| Bridge Seat Sealer | Sq M | - | 79 | 79 |
| Bar Splicers | Each | - | 120 | 120 |
| Controlled Low-Strength Material | Cu M | - | 31 | 31 |
| Structure Excavation, Common | Cu M | - | 154 | 154 |
| Porous Granular Backfill | Cu M | - | 46 | 46 |
| Structural Subdrain (Filter Fabric) (6") | M | - | 21 | 21 |
| High Performance Concrete for Bridges & Drainage Structures (Class DK - HPC) | Cu M | 126.4 | - | 126.4 |
| Concrete for Bridges & Drainage Structures (Class SD) | Cu M | 32.9 | - | 32.9 |
| Concrete for Bridges & Drainage Structures (Class SP) | Cu M | - | 89.9 | 89.9 |
| Bridge Deck Grooving | Sq M | 494 | - | 494 |
| Furnishing & Erecting Structural Steel (Miscellaneous) | KG | - | 111 | 111 |
| Erecting Structural Steel (Girder Spans) | L Sum | 1 | - | 1 |
| Stud-Type Shear Connectors | Each | 6,093 | - | 6,093 |
| Reinforcing Steel, Epoxy Coated | KG | 21,470 | 8,330 | 29,800 |
| Furnishing Steel Piles | M | - | 425 | 425 |
| Driving Steel Piles | Each | - | 199 | 199 |
| Test Piles | M | - | 31 | 31 |
| Scupper | Each | 2 | - | 2 |
| Erecting Elastomeric Bearing, Type I (800 In3<V<1000 In3) | Each | - | 12 | 12 |
| Geocomposite Wall Drain | Sq M | - | 20 | 20 |
| Bridge Expansion Joint Closure Preformed Joint Seal 4 | M | 10.7 | - | 10.7 |
| Bridge Expansion Joint Closure Neoprene Seal and Anchor Blocks 4 | M | 10.5 | - | 10.5 |
| Riprap, Hand-Laid | Sq M | - | 148 | 148 |
| Apply Concrete Sealant | Sq M | 664 | 12 | 676 |

Bill of Material Note:

IDOT pay item - Unit 1, Unit 2, Pier 2, and Unit 2 Joint at Pier 2.
ISTHA pay item - Unit 3 and Unit 3 Joint at Pier 2

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| DESIGNED | PCA |
| CHECKED | MEA |
| DRAWN | LK |
| CHECKED | MEA |

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ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GENERAL NOTES & QUANTITIES

SB IL ROUTE 394 / RAMP F OVER THORN CREEK
F.A.P. 332 SECTION (0203.1 & 0312-708W) R-3
COOK COUNTY

STA. 440+704.350 STRUCTURE NO. 016-2800/2845

DATE JUL 18, 2005
SCALE ---

HNTB