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GENERAL NOTES

CAST-IN-PLACE CONCRETE

All exposed concrete edges shall have a_4^3 " x 45° chamfer, except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of one foot below finished ground level.

REINFORCING BARS

Reinforcement bars, including epoxy coated reinforcement bars, shall conform to the requirements of astm a615, a616 or a185 grade 60, deformed bars

Cover from the face of concrete to face of reinforcement bars shall be 3" for surfaces formed against earth and 2" for all other surfaces unless otherwise shown.

Reinforcement bar bending dimensions are out to out.

Reinforcement bending details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 315, latest edition.

Reinforcement bars designated "(E)" shall be epoxy coated.

Reinforcement bar splices for f'c=4,000 psi concrete shall be in accordance with the Arema Manual for Railway Engineering unless shown otherwise on the drawing.

| Lap Splices | | | | | | | |
|-------------|----------------------|----------------------------------|--|--|--|--|--|
| Bar Size | Minimum Lap (in.) | Min. Development Length (in.) | | | | | |
| #4 | 15 | 9 | | | | | |
| #5 | 23 | 14 | | | | | |
| #6 | 33 | 20 | | | | | |
| #7 | 45 | 26 | | | | | |
| #8 | 59 | 35 | | | | | |
| #9 | 74 | 44 | | | | | |
| #10 | 94 | 55 | | | | | |
| #11 | 116 | 68 | | | | | |

Top Bars are horizontal reinforcement so placed that more than 12 inches of fresh concrete is cast in the member below the development length of splice.

STRUCTURAL STEEL

All structural steel shall be astm a50, except where otherwise noted. Notch toughness resistant (n.t.r.) steel elements are designated on the plans.

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, webs and all splice plate material of the steel girders.

Fastener's shall be high strength bolts AASHTO ASTM A325 78" diameter, holes: ¹⁵16 " diameter, unless otherwise noted.

Calculated weight of Structural Steel = 941,936 pounds.

Field welding will not be permitted to the steel bridge beams or girders unless shown on the plans. Field welding in other areas will be permitted only when approved by the engineer.

CONSTRUCTION

Do not scale dimensions for construction, scale applies only to full size drawinas,

No construction joints except those shown on the plans will be allowed unless approved by the engineer.

Temporary sheeting, bracing or cofferdams shall be constructed as required for the excavation to protect the adjacent areas from settling or falling into the excavated areas. This work, shall be incidental to Structure Excavation, except where indicated otherwise.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.

An application of sealant shall be applied to the surfaces of all abutment seats.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of *binch*. Adjustment shall be made either by grinding the surface or by shimming the bearing. One $_{\mathcal{B}}^{I}$ adjusting shim of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

Plan dimensions and details relative to existing structures have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of work. however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Construction joints shown in the retaining walls and retaining wall caps and face walls shall be placed in an alternating sequence utilizing the construction and expansion joints.

The inorganic-zinc rich acrylic/acrylic paint system shall be used for shop and field painting of structural steel except where otherwise noted. The color of the acrylic finish coat shall be as determined by the Engineer.

Where protective surface treatment is specified, it shall conform to the requirements of section 503.19 of the standard specifications. Measurement and payment shall conform to the requirements of of section 503 of the Standard specifications, under the item "Protective Coat."

Design soil bearing pressure at abutments = 3.5 tons.



| M | USER NAME = dabezicd | DESIGNED - | BMR | REVISED - | STATE OF ILLINOIS | G | ENER | AL NOTES AND L |
|---|------------------------------|------------|------------|-----------|------------------------------|--------------|------|--------------------------|
| | PLOT SCALE = 0.083333 '/ IN. | DRAWN - | CQM | REVISED - | | | | |
| | PLOT DATE = 1/21/2011 | CHECKED ~ | DD | REVISED - | DEPARTMENT OF TRANSPORTATION | STRUCTURE NG | | |
| | | DATE - | 11/23/2010 | REVISED - | | SCALE: | NONE | SHEET NO. 2 OF 61 SHEETS |

TOTAL BILL OF MATERIAL

| Item | Unit | Super | Sub | Total | |
|--|---------|---------|---------|---------|--|
| CONCRETE STRUCTURES | CU. YD. | | 2,406 | 2,406 | |
| FURNISHING AND ERECTING STRUCTURAL STEEL | POUND | 941,936 | | 941,936 | |
| STUD SHEAR CONNECTORS | EACH | | 3,650 | 3,650 | |
| UNTREATED TIMBER LAGGING | SQ FT | | 24,189 | 24,189 | |
| REINFORCEMENT BARS, EPOXY COATED | POUND | | 481,200 | 481,200 | |
| MECHANICAL SPLICERS | EACH | | 340 | 340 | |
| GEOCOMPOSITE WALL DRAIN | SQ. YD. | | 3,055 | 3,055 | |
| PIPE UNDERDRAINS FOR STRUCTURES 4" | FOOT | | 1,879 | 1,879 | |
| DRILLING AND SETTING SOLDIER PILES (IN SOIL) | CU FT | | 4,614 | 4,614 | |
| CONSTRUCTION OF JUMP SPANS | LSUM | | 1 | 1 | |
| STRUCTURE EXCAVATION | CU YD | | 2,398 | 2,398 | |
| POROUS GRANULAR EMBANKMENT, SPECIAL | LIN FT | 1 | 490 | 490 | |
| MEMBRANE WATERPROOFING | SQ FT | 4,602 | | 4,602 | |
| FORM LINER TEXTURED SURFACE | SQ FT | | 26,300 | 26,300 | |
| BALLAST DRAINS | LIN FT | 375 | | 375 | |
| STEEL RAILING (SPECIAL) | LIN FT | | 1,700 | 1,700 | |
| TEMPORARY SOIL RETENTION SYSTEM | SQ FT | | 800 | 800 | |
| FURNISHING SOLDIER PILES (W 21 X 101) | FOOT | | 1,301 | 1,301 | |
| FURNISHING SOLDIER PILES (W 21 X 147) | FOOT | | 352 | 352 | |
| FURNISHING SOLDIER PILES (W 33 X 201) | FOOT | | 928 | 928 | |
| FURNISHING SOLDIER PILES (W 36 X 282) | FOOT | | 1,248 | 1,248 | |
| FURNISHING SOLDIER PILES (W 36 X302) | FOOT | | 3,532 | 3,532 | |
| STEEL BEARING ASSEMBLY | EACH | | 38 | 38 | |
| ANCHOR BOLTS. 1 1/2 IN DIAMETER | EACH | | 38 | 38 | |
| ANCHOR BOLTS1 1/4 INCH DIAMETER | EACH | | 76 | 76 | |

STATION BUILT BY STATE OF ILLINOIS LOADING HL-93 STRUCTURE NO.

NAME PLATE See Std. 515001

INDEX OF DRAWINGS SECTION COUNTY TOTAL SHEE SHEETS NO. 06-00050-00-GS COOK 209 1537 96 NO. 016-7721 CONTRACT NO. 63556 S STA. TO STA. FED. ROAD DIST. NO. 1 JULINOIS FED. AID PROJECT CRE-90030