

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS      | SHEET NO. |
|-----------------------|---------|----------|-------------------|-----------|
| F.A.P.<br>351         | 3277R   | COOK     | 66                | 20        |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS | FED. AID PROJECT- |           |

Contract No. 62206

**GENERAL NOTES**

Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.

Calculated weight of M270 Gr. 36 (ASTM A709 Gr. 36) Structural Steel = 168,160 Pounds.

Calculated weight of M270 Gr. 50 (ASTM A709 Gr. 50) Structural Steel = 435,300 Pounds.

Field welding of construction accessories will not be permitted to beams or girders.

Anchor bolts shall be set before bolting 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 wide flange beams.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-322 Grade 60.

All Construction joints shall be banded.

The back face of closed abutments and their wingwalls shall be waterproofed according to Article 503.18 of the Standard Specifications.

Bridge Seat Sealer shall be applied to the seat area of the abutments and pier.

Reinforcement bars designated (E) shall be epoxy coated.

The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. 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. See Special Provision for "Cleaning and Painting New Metal Structures".

Plan dimensions and details relative to existing structure 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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor shall provide all calculations required for Braced Excavation. See Special Provision for Braced Excavation.

See Typical Sections sheet of roadway plans for Commonwealth Edison duct bank facility under north sidewalk immediately adjacent to location of proposed north abutment and sidewalk retaining wall.

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**TOTAL BILL OF MATERIAL**

| ITEM                                                     | UNIT    | SUPER  | SUB     | TOTAL   |
|----------------------------------------------------------|---------|--------|---------|---------|
| Porous Granular Embankment, Special                      | Cu. Yd. |        | 814     | 814     |
| Concrete Removal                                         | Cu. Yd. |        | 182.0   | 182.0   |
| Concrete Deck Removal                                    | Sq. Ft. |        | 468     | 468     |
| Structure Excavation                                     | Cu. Yd. |        | 490     | 490     |
| Concrete Structures                                      | Cu. Yd. |        | 820.9   | 820.9   |
| Concrete Superstructure                                  | Cu. Yd. | 170.1  |         | 170.1   |
| Furnishing and Erecting Structural Steel                 | L. Sum  | 1      |         | 1       |
| Reinforcement Bars                                       | Pound   |        | 18,850  | 18,850  |
| Reinforcement Bars, Epoxy Coated                         | Pound   | 24,660 | 160,010 | 184,670 |
| Pipe Handrail, Special                                   | Foot    | 208    |         | 208     |
| Name Plates                                              | Each    |        | 1       | 1       |
| Membrane Waterproofing (Special)                         | Sq. Ft. | 5773   |         | 5773    |
| Bridge Seat Sealer                                       | Sq. Ft. |        | 634     | 634     |
| Pipe Underdrains For Structures 6"                       | Foot    |        | 170     | 170     |
| Non-Special Waste Disposal                               | Cu. Yd. |        | 179     | 179     |
| Geocomposite Wall Drain                                  | Sq. Yd. |        | 222     | 222     |
| Braced Excavation                                        | Cu. Yd. |        | 678     | 678     |
| Bar Splicers                                             | Each    | 198    | 128     | 326     |
| Drilled Shaft in Soil 36"                                | Foot    |        | 241.5   | 241.5   |
| Drilled Shaft in Soil 48"                                | Foot    |        | 89.5    | 89.5    |
| Drilled Shaft in Soil 54"                                | Foot    |        | 390.0   | 390.0   |
| Drilled Shaft in Rock 30"                                | Foot    |        | 42.0    | 42.0    |
| Drilled Shaft in Rock 42"                                | Foot    |        | 18.0    | 18.0    |
| Drilled Shaft in Rock 48"                                | Foot    |        | 72.0    | 72.0    |
| Permanent Steel Sheet Piling                             | Sq. Ft. |        | 2280    | 2280    |
| Temporary Ballast Retainer (Installed)                   | Foot    | 66     |         | 66      |
| Temporary Ballast Retainer (Installed and Removed)       | Foot    | 104    |         | 104     |
| Pipe Support                                             | Each    | 11     |         | 11      |
| Alignment Guide                                          | Each    | 2      |         | 2       |
| Conduit Embedded in Structure, 3" Dia., Galvanized Steel | Foot    | 104    |         | 104     |
| Conduit, 4" Dia., Galvanized Steel                       | Foot    | 104    |         | 104     |

**GENERAL NOTES & TOTAL BILL OF MATERIAL**

|              |                                                             |                                                                                                                                                |           |
|--------------|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Date 3/27/06 | Designed TDN                                                | CN RAILROAD BRIDGE<br>OVER U.S. 6 (159TH STREET)<br>F.A.P. RTE. 351 SECTION 3277R<br>COOK COUNTY<br>STATION 92+24.25<br>STRUCTURE NO. 016-2754 | Sheet No. |
| Revisions    | Drawn BKN                                                   |                                                                                                                                                | 2         |
|              | Checked DCS                                                 |                                                                                                                                                |           |
|              | Approved KWB                                                |                                                                                                                                                | of 30     |
| Prepared By: | <b>URS</b> 3040 N. University Ave., Suite 1<br>Decatur, IL. |                                                                                                                                                |           |