

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Fasteners shall be high strength bolts. Flange splice holes shall be $1\frac{5}{16}$ " ϕ for $1\frac{1}{8}$ " ϕ bolts. Web splice holes shall be $1\frac{3}{16}$ " ϕ for $3/4$ " ϕ bolts.

The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing".

After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included in the cost of Furnishing and Erecting Structural Steel.

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction.

Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system.

Cost shall be included with Concrete Removal.

Diaphragm connection holes shall be $1\frac{5}{16}$ " ϕ for $3/4$ " ϕ bolts. Two hardened washers shall be required at diaphragm connections.

All construction joints shall be bonded.

The existing 2" ϕ and 4" ϕ conduits shown in Section A-A, on sheet 3 of 5, are to be removed and re-installed. Cost shall be included in the cost of Concrete Removal.

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

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.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted.

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. 2.5 YR 3/4. See Special Provision "Cleaning and Painting New Metal Structures".

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.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

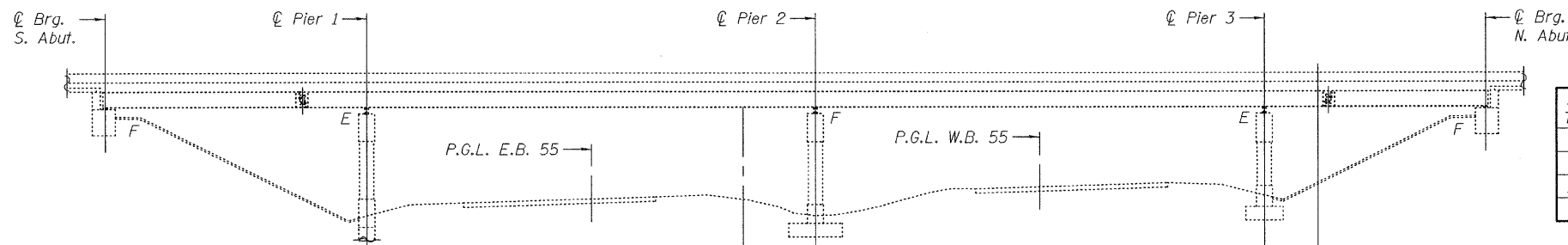
The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

The steel beam which is part of the temporary slab support system currently installed over Beam 24 on Span 3 is to be removed and returned to the District.

The beam should be delivered to the District Maintenance Yard at 1101 Biesterfeld Rd., Elk Grove, IL 60007 between the hours of 8 am and 2 pm.

Mr. Shaker Asfour should be notified prior to the delivery of the beam at 847-956-1501. The beam splices may be removed for transport but the beam should not be cut. The contractor shall be responsible for providing the crane to unload the beam. Cost included with Concrete Removal.

Cost included with Concrete Removal.

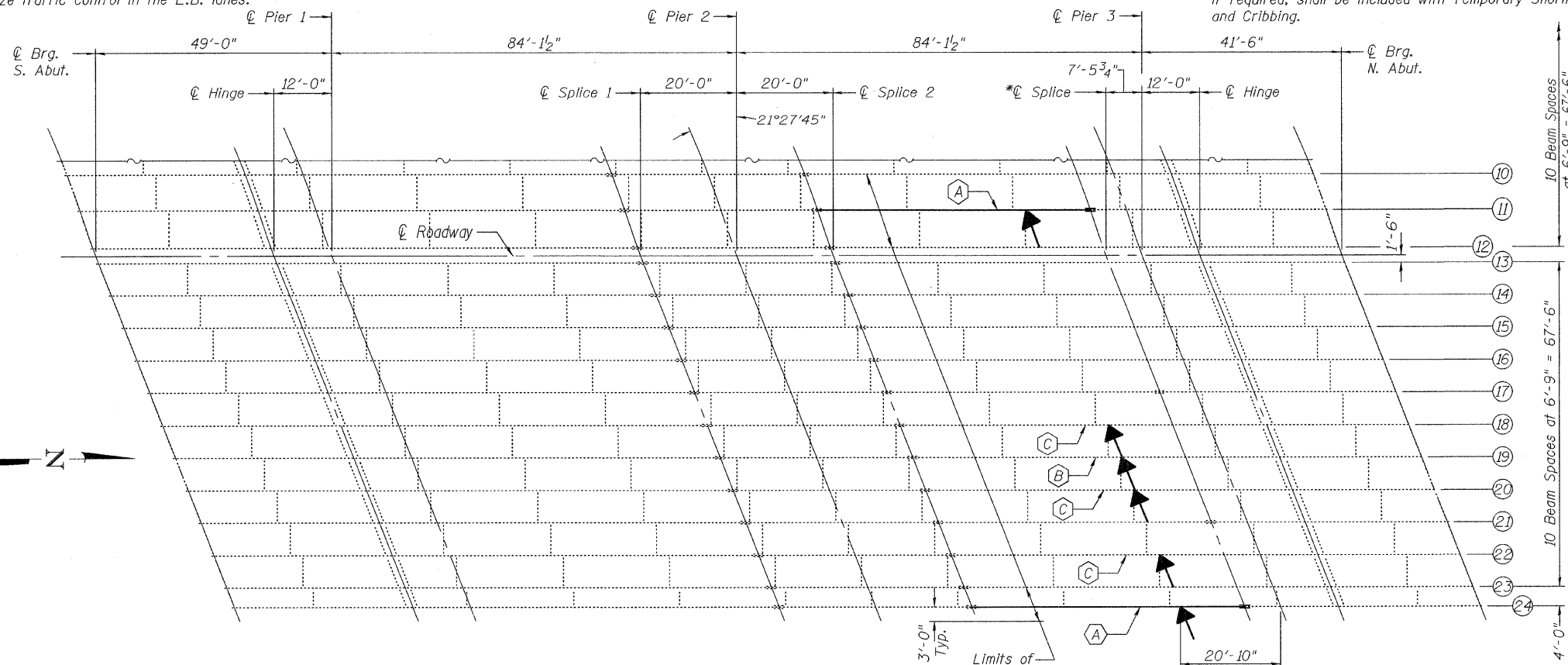


| Q | (k) | 21.1 |
|-------|-----|------|
| L | (k) | 31.1 |
| Imp. | (k) | 9.3 |
| Total | (k) | 61.5 |

Temporary shoring for Beams 11 and 24 may be required to facilitate alignment of existing splices. Use 12"x12" timbers or HP's. Cost shall be included in the cost of temporary shoring and cribbing. The shoring shall be removed as soon as possible after the splice has been connected to minimize traffic control in the E.B. lanes.

ELEVATION

Temporary shoring is required for Beams 11 and 24 South of hinge. To be paid for as Temporary Shoring and Cribbing. Removal and Replacement of the slopewall, if required, shall be included with Temporary Shoring and Cribbing.

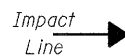


SCOPE OF WORK

- (A) Remove and replace existing beam section.
- (B) Beam Straightening.
- (C) Beam Straightening and Strengthening.

*Location of Existing Splice at Beam 24
Location of New Splice at Beam 11

PARTIAL FRAMING PLAN



TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|---|---------|----------|
| Concrete Removal | Cu. Yd. | 30.5 |
| Concrete Superstructure | Cu. Yd. | 30.5 |
| Reinforcement Bars, Epoxy Coated | Pound | 6,460 |
| Stud Shear Connectors | Each | 392 |
| Furnishing and Erecting Structural Steel | Pound | 20,620 |
| Beam Straightening | L.S. | 0.75 |
| Removing and Re-erecting Existing Railing | Foot | 74 |
| Protective Shield | Sq. Yd. | 155 |
| Temporary Shoring and Cribbing | L.S. | 1 |
| Mechanical Splicers | Each | 268 |
| Bridge Deck Grooving | Sq. Yd. | 48 |
| Protective Coat | Sq. Yd. | 104.5 |
| Structural Steel Removal | Pound | 18,830 |

PLAN AND ELEVATION

SN 016-0316

DESIGNED: Alan J. Holloway
CHECKED: [Signature]
DRAWN: [Signature]
CHECKED: ATH [Signature]

January 22, 2010
EXAMINED: [Signature]
PASSED: [Signature]
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2010

| | | | | | |
|-------------------------|------------------------------|-----------------------|--------------------|--------------------|----------------|
| SHEET NO. 1 5 SHEETS | F.A.I. RTE. 55 | SECTION 2009-070BR | COUNTY Cook | TOTAL SHEETS 17 | SHEET NO. 4 |
| | FED. ROAD DIST. NO. ILLINOIS | | CONTRACT NO. 60H78 | | |