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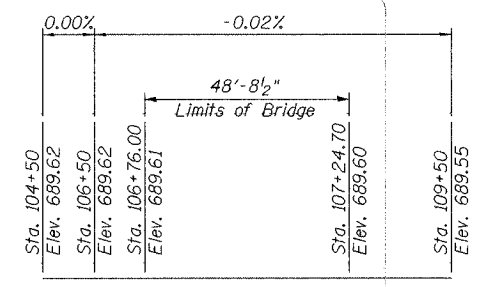
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GENERAL NOTES

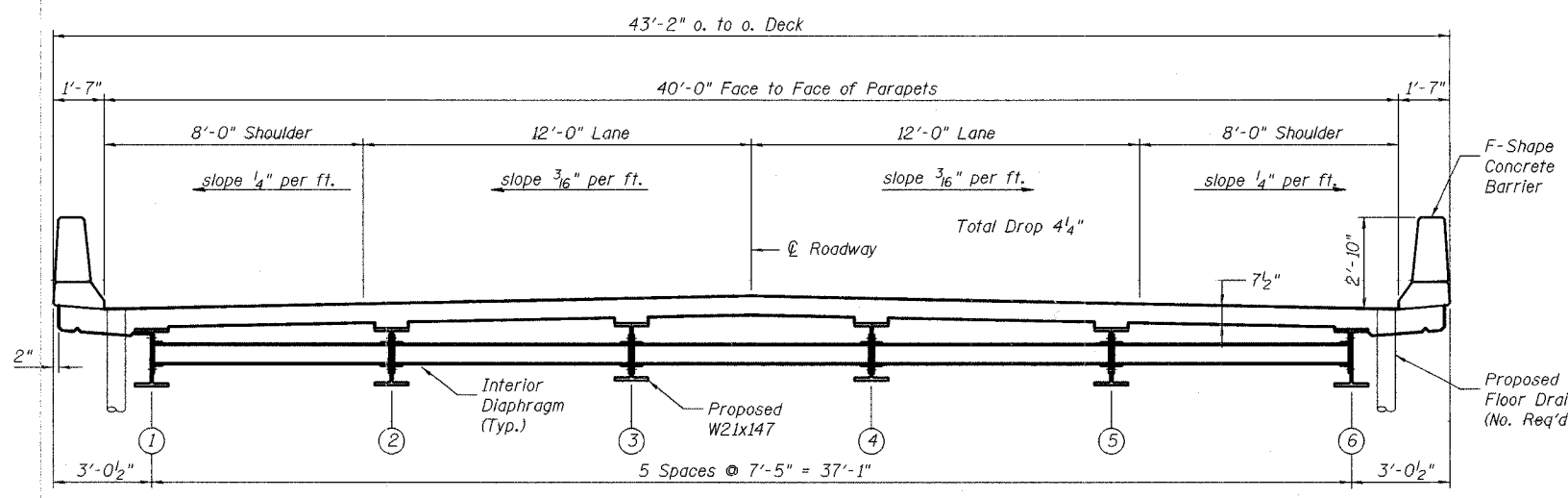
1. Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " Dia., open holes $\frac{5}{16}$ " unless otherwise noted.
 2. Calculated weight of Structural Steel (Grade 50) = 41,785 pounds.
 3. Calculated weight of Structural Steel (Grade 36) = 1,588 pounds.
 4. All Structural Steel shall be AASHTO M 270 Grade 50 except diaphragms, bearing plates, high strength bolts, and anchor bolts.
 5. Field welding of construction accessories will not be permitted to beams or girders.
 6. 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.
 7. Reinforcement bars shall conform to the requirements of AASHTO M31, M42 or M53 Grade 60.
 8. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 9. Backfill shall be placed behind the abutment after the superstructure has been poured and the false work removed. See Article 502.10 of the Standard Specifications.
 10. The back face of the Abutment Extensions, their Wingwalls, and Retaining Walls shall be waterproofed according to Article 503.18 of the Standard Specifications.
 11. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of false work, in addition to allowance for dead load deflection.
 12. 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 material. 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 for the work.
 13. The contractor shall drive one (1) metal shell test pile in a permanent location as directed by the Engineer before ordering the remainder of the piles.
 14. Bridge Seat Sealer shall be applied to the seat area of the abutments.
 15. Excavation behind existing abutment walls shall be done before removing the existing superstructure. (See S-10 for Structure Excavation Detail)
 16. Cover from the face of concrete to reinforcement bars shall be 3" for surfaces formed against earth and 2" for all other surfaces unless otherwise shown.
 17. Reinforcement bending details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 315, latest edition.
 18. Reinforcement Bars designated "(E)" shall be epoxy coated.
 19. Reinforcement bar splices shall be in accordance with the following table unless shown otherwise on the drawings.
- | Size | Basic Lap | Top Bars Lap |
|------|-----------|--------------|
| #4 | 1'-8" | 2'-5" |
| #5 | 2'-2" | 3'-0" |
| #6 | 2'-7" | 3'-7" |
| #7 | 3'-5" | 4'-10" |
| #8 | 4'-6" | 6'-4" |
| #9 | 5'-9" | 8'-1" |
20. The inorganic zinc rich primer/Acrylic Paint System shall be used for shop and field painting of structural steel bridge members except where otherwise noted. The color of the final finish coat for the beams shall be Reddish Brown, Munsell No. 2.5 YR 3/4. The top surface of the Wide Flange Beams and the Stud Shear Connectors shall not be painted.
 21. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water. This shall include the placement of material for run-arounds, causeways, etc.
- All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

| CODE NO. | DESCRIPTION | UNIT | TOTAL |
|----------|--|----------|--------|
| 20900110 | Porous Granular Backfill | Cu. Yds. | 123 |
| 28100107 | Stone Rip Rap CL A4 | Sq. Yds. | 90 |
| 28200200 | Filter Fabric | Sq. Yds. | 90 |
| 50101600 | Removal of Existing Superstructures | L. Sum. | 1 |
| 50102400 | Concrete Removal | Cu. Yds. | 36.8 |
| 50200100 | Structure Excavation | Cu. Yds. | 320 |
| 50200510 | Cofferdams (Special) | Each | 2 |
| 50300100 | Floor Drains | Each | 8 |
| 50300225 | Concrete Structures | Cu. Yds. | 17.8 |
| 50300255 | Concrete Superstructures | Cu. Yds. | 66.3 |
| 50300260 | Bridge Deck Grooving | Sq. Yds. | 193 |
| 50300300 | Protective Coat | Sq. Yds. | 65 |
| 50301245 | Formed Concrete Repair (Depth <= 5") | SF | 5 |
| 50500105 | Furnishing and Erecting Structural Steel | L. Sum | 1 |
| 50500505 | Stud Shear Connectors | Each | 1008 |
| 50800205 | Reinforcement Bars (Epoxy Coated) | Pound | 26,780 |
| 51201000 | Furnishing Metal Pile Shells, 12" | Foot | 429 |
| 51202600 | Driving and Filling Shells | Foot | 429 |
| 51203200 | Test Pile Metal Shells | Each | 1 |
| 51500100 | Name Plates | Each | 1 |
| 59000100 | Epoxy Crack Sealing | Foot | 65 |
| 59100100 | Geocomposite Wall Drain | Sq. Yds. | 67 |
| 60100915 | Pipe Drain, 6" | Foot | 67 |



PROFILE GRADE
(along PGL)



TYPICAL CROSS SECTION
Not to Scale

| | |
|----------|-----|
| DESIGNED | MGH |
| CHECKED | RGD |
| DRAWN | WJH |
| CHECKED | NRF |

| | |
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| SMITH ENGINEERING CONSULTANTS, INC. | |
| CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS | |
| www.smithengineering.com | |
| REVISIONS | |
| NAME | DATE |
| WJH | 1-11-06 |
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ILLINOIS DEPARTMENT OF TRANSPORTATION

General Notes, Bill of Material, and Index of Sheets
Harlem Avenue Over Black Walnut Creek
Will County
Section 139B-MFT
SN. 099-3091

DATE 5-26-2005