Sht. No. Sht. Title

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Edge of Deck ---

600 North Side

1.5 m South Side

SECTION A-A

(For location of Section A-A,

see Sht. No. 1 of 91).

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CU M 1582.0 SQ M 5036

UNIT SUPER SUB TOTAL

151

1148.3

3.5

1148.3

1585.5

50.36

CONTRACT NO. 62854

TOTAL BILL OF MATERIAL

GENERAL NOTES

THE FABRICATION OF THE STRUCTURAL STEEL, BEARINGS AND MODULAR EXPANSION JOINTS FOR THIS BRIDGE WAS INCLUDED IN CONTRACT NO. 62744. ALL WORK SHOWN THAT IS RELATED TO THE FABRICATION IS FOR INFORMATION ONLY AND IS NOT INCLUDED IN THIS CONTRACT.

- 1. All dimensions are in millimeters (mm) except as noted
- 2. Fasteners shall be high strength bolts (AASHTO MI64M, Type 3). Bolts M22, open holes 24 mm \$\phi\$, unless otherwise noted.
- 3. Calculated mass of structural steel for the fabrication contract = 2,157,500 kg for M 270M Grade 345 and is provided for information only.
- 4. 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 necessary 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. 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."

 The cost is included for payment under Erecting Structural Steel.
- 5. Field welding of construction accessories will not be permitted to the beams or girders.
- 6. Anchor bolts shall be set before bolting cross frames over supports.
- 7. 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 & connection plates and all splice plate material except fill plates.
- 8. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M 322M Grade 400.
- 9. Slope walls shall be reinforced with welded wire fabric, 152 x 152 MW25.8 x MW25.8 with a mass of 2.91 kg/m²
- 10. The embankment configuration shown shall be the minimum embankment that must be constructed prior to
- 11. The Contractor shall drive one steel test pile in a permanent location at the East and West Abutments and one at each Pier as directed by the Engineer before ordering the remainder of piles.
- 12. 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
- 13. Bridge Seat Sealer shall be applied to the seat area of the East and West Abutments and at Piers 3 and 6.
- 14. 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.
- 15. All construction joints shall be bonded.
- 16. Before starting work, the Contractor shall submit an erection plan of the steel girders and cross frames (including the proposed method to keep the girders vertical) and the maintenance of traffic plan for erecting the girders to the Engineer for approval prior to start of work according to Art. 505.08(e) of the Standard Specifications. The maintenance of traffic plan shall take into account staging positions, false work locations, sequence of girder erection, and provisions for stability of girders and bearings during erection.
- 17. The Stability of the partially erected curved Steel Components is the Contractor's responsibility during all Phases of Construction. Temporary Shoring <u>Towers or other means of temporary support may be required during erection at locations</u> determined by the Steel Erector, The cost is included in the pay item "Erecting Structural Steel".
- 18. All steel girders are designed for final conditions. It is Contractor's responsibility to ensure steel girders are not overstressed during construction and that adequate horizontal and vertical clearance to traffic is maintained.
- 19. The Contractor shall submit for approval a detailed steel erection procedure/plan. The Contractor shall retain the services of an Illinois Licensed Structural Engineer who shall review and sign and seal the procedure /plan. The plan shall include an evaluation of the stability of the girders during erection. The cost is included in the pay item "Erecting Structural Steel".
- 20. The Contractor is alerted that the camber and dead load deflection values shown within these drawings were developed based on the deck pouring sequence shown on Sheet 21, 27, & 33 of 91 sheets. Any deviation from this pouring sequence shall require the contractor to retain the services of an Illinois Licensed Structural Engineer to analyze the structure for the revised pouring sequence. Details and calculations with the required signature and seal shall be submitted to the Engineer for review and approval. Cost included in the pay item "Erecting Structural Steel".

BUILT 200 BY GPM LOADING MS18 STR. NO. 016-2804

NAME PLATE See Std. 515001

STATION 120+796,063 STATE OF ILLINOIS F.A.I. RT. 94, SEC. (0203.1 & 0312-708W)

76 Pier 3 Pier 4 78 Pier 5 79 Pier 6 80 Pler 7 81 Pier 8 82 Bar Splicer Assembly Details 83-91A

SQ M 6425.5 33.9 6459.4 Erecting Structural Steel L SUM Stud Shear Connectors EACH 223,460 142,480 365,940 Reinforcement Bars, Epoxy Coated Slopewall 100 mm 324 324 Furnishing Steel Piles HP 310x79 990.0 990.0 3596.2 Furnishing Steel Piles HP 360x108 3596.2 Driving Steel Piles 4586.2 4586.2 Test Pile Steel HP310x79 EACH Test Pile Steel HP360x108 EACH Temporary Sheet Piling EACH Drainage Scuppers, DS-11 EACH Erecting Modular Expansion Joint Swivel 240 mm Erecting Modular Expansion Joint 160 mm Neoprene Expansion Joint, 50 mm Erecting Floating Bearings, Guided Expansion 750 kN EACH Erecting Floating Bearings, Guided Expansion 1000 kN EACH Erecting Floating Bearings, Gulded Expansion 2250 kN FACE Erecting Floating Bearings, Guided Expansion 1250 kN EACH Erecting Floating Bearings, Fixed 2250 kN FACH Erecting Floating Bearings, Fixed 2500 kN FACH Bridge Seat Sealer SQ M 57.9 57.9 Bar Spilcers EACH 62 62 SUM Drainage System Furnishing and Erecting Structural Steel 1170 kg

Elev. 187.00 E. Abut. N. End Elev. 186.87 E. Abut. S. End r ♀ € Bearina Swivel Modular Expansion Joint Details At Piers 3 and 6 Elev. 188.37 W. Abut. NE End Elev. 188.50 W. Abut. SW End. Back of butmen Backfill with uncompacted porous aranular embankment with a 600gradation of CA-5 or CA-7 by Poured superstructure is in place. against Limits shall be 300mm from the end **Undisturbed** of each winawall. Excavation for placing Embankment 3.0 m Typ. 150 (At Rt. 1's) TVD. Piles 100 mm Conc., Slopewall

Porous Granular Embankme

Structure Excavation

Concrete Structures

Bridge Deck Grooving

Protective Coat

Concrete Superstructure

SECTION THRU ABUTMENT

Cost to be included in the item "Porous Granular Embankment".

for as "Structure Excavation" *160 mm Dia. perforated drain pipe shall be situated at the bottom of an approximate 600 x 600 area of porous aranular embankment. The 600 x 600 area shall be wrapped completely in geotechnical fabric for french drains. Extend pipe parallel with the cap until intersecting with the sideslopes. Pipe shall drain onto concrete headwalls (Article 601.05 of the Standard Specifications and Highway Standard 601101.)

Porous Granular Embankment is paid

* Geotechnical fabric

for french drains

Bridge Contractor after

1. All dimensions are in millimeters (mm) except as noted

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

GENERAL NOTES, QUANTITIES & INDEX WB I-80/94 TO SB IL 394 - RAMP G FAI 80/94 - FAP 332 SECTION 0203.1B STA. 120+796-063 STRUCTURE NO. 016-2804

DATE 3/23/05 SCALE ----

HNTB

DESIGNED

CHECKED

PCA/GPM

DRAWN

CHECKED