

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4 in. ϕ , holes 15/16 in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel:
Grade 50 = 3,704,060 lb
Grade 36 = 345,480 lb
- All structural steel shall be AASHTO M270 Grade 50, except diaphragms which may be AASHTO M270 Grade 36.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to all exposed surfaces at both abutments and Piers 6 & 9, as well as crash walls at Pier 1 (north face), Pier 2 (south face), Pier 12 (north face), and Pier 13 (south face).
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 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 the 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. 2.5 YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
- The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- Slipforming of the parapets is not allowed.
- The Contractor is alerted that the existing pier caps are continuous at the stage construction joint along with large column spacing. It is the Contractor's responsibility to adequately shore the caps against the footings prior to cutting the stage construction joint. Refer to "Stage II Temporary Shoring Detail" on Sheet S3 for details. Details & calculations for this work shall be prepared & sealed by an Illinois Licensed Structural Engineer and shall be submitted to the Engineer for review & acceptance.

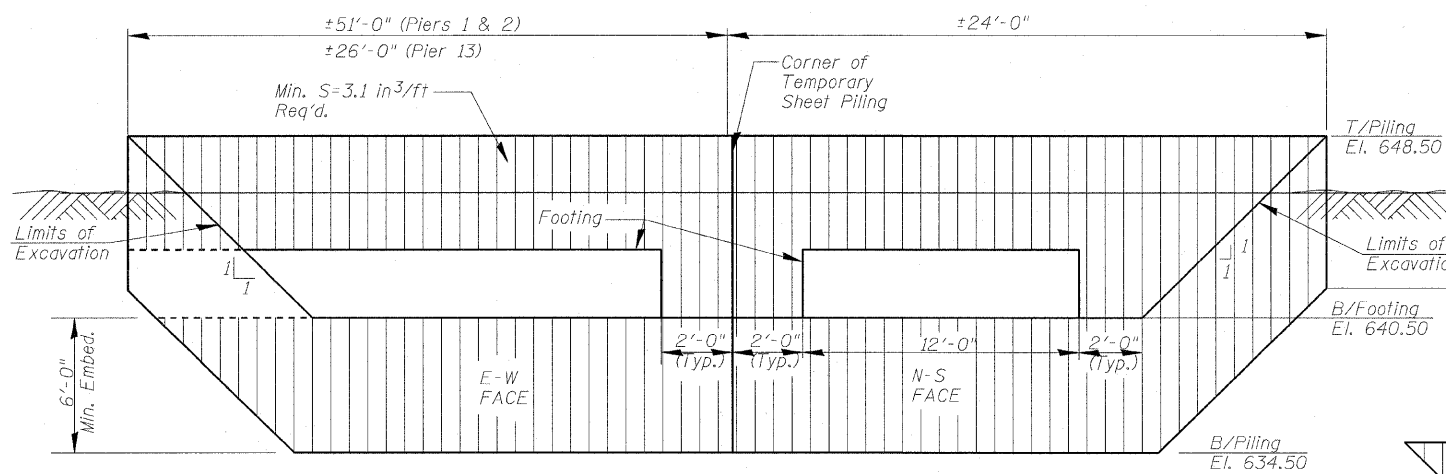
BRIDGE BILL OF MATERIAL

ITEM	UNIT	TOTAL QUANTITY
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	333.5
REMOVAL OF EXISTING STRUCTURES	L SUM	1
PROTECTIVE SHIELD	SQ YD	6,327
STRUCTURE EXCAVATION	CU YD	4,145.1
CONCRETE STRUCTURES	CU YD	4,001.8
CONCRETE SUPERSTRUCTURE	CU YD	3,996.2
BRIDGE DECK GROOVING	SQ YD	10,640
CONCRETE ENCASEMENT	CU YD	24.0
PROTECTIVE COAT	SQ YD	14,843
*ERECTING STRUCTURAL STEEL	L SUM	1
STUD SHEAR CONNECTORS	EACH	47,796
REINFORCEMENT BARS, EPOXY COATED	POUND	1,486,530
BAR SPLICERS	EACH	5,578
BRIDGE FENCE RAILING	FOOT	2,490
SLOPE WALL 4 INCH	SQ YD	693
FURNISHING STEEL PILES HP10X42	FOOT	2,672
FURNISHING STEEL PILES HP14X73	FOOT	8,600
DRIVING PILES	FOOT	11,272
TEST PILE STEEL HP10X42	EACH	2
TEST PILE STEEL HP14X73	EACH	4
TEMPORARY SHEET PILING	SQ FT	3,886
NAME PLATES	EACH	1
PREFORMED JOINT STRIP SEAL	FOOT	200
MODULAR EXPANSION JOINT 6"	FOOT	199
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	96
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	72
ANCHOR BOLTS, 1 IN	EACH	312
ANCHOR BOLTS, 1-1/2 IN	EACH	96
CONCRETE SEALER	SQ FT	12,792
GEOCOMPOSITE WALL DRAIN	SQ YD	133
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	207
DRAINAGE SCUPPERS, DS-12	EACH	16
TEMPORARY SOIL RETENTION SYSTEM	SQ FT	825
DRAINAGE SYSTEM	L SUM	1
TEMPORARY SHORING	EACH	18
BRACED EXCAVATION	CU YD	919.9
MAINTENANCE ENCLOSURE	L SUM	1

*FURNISHING STRUCTURAL STEEL is paid for under a separate contract.

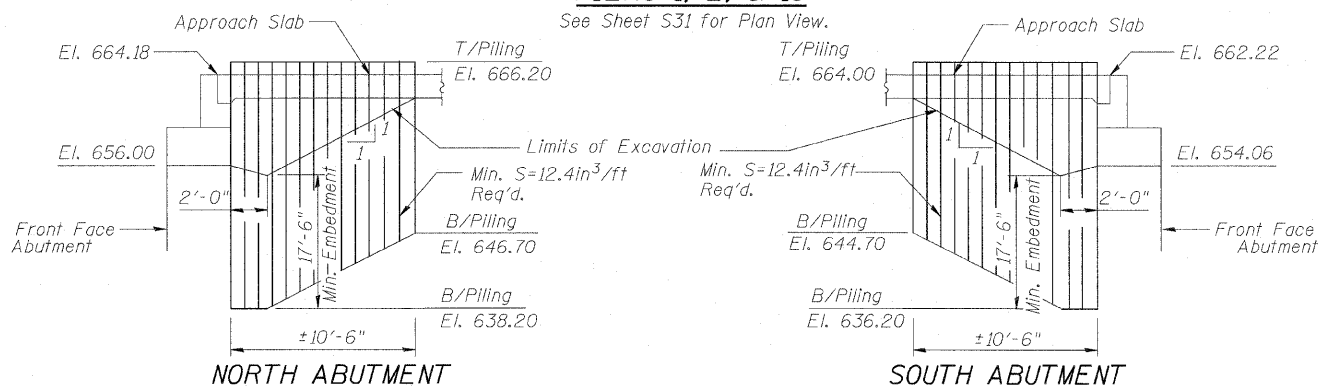
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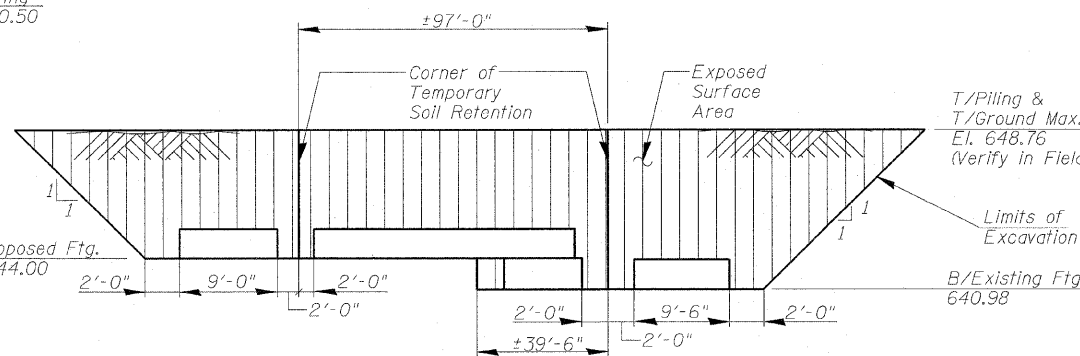
PIERS 1, 2, & 13

See Sheet S31 for Plan View.



TEMPORARY SHEET PILING DETAILS

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.



PIER 6

See Sheet S31 for Plan View.

TEMPORARY SOIL RETENTION SYSTEM DETAILS

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES & TOTAL BILL OF MATERIAL
 FAP 330 US 12/45 (MANNHEIM RD.) OVER
 500 LINE RR & FRANKLIN AVE.
 STRUCTURE NO. 016-2815
 SECTION 465 VB-R-1 COOK COUNTY
 STA. 183+33.30 DRAWN BY JHR
 DATE 7/2009 CHECKED BY DSB

EARTHTECH | AECOM