

**GENERAL NOTES**

1. Fasteners shall be high strength bolts (AASHTO M164 type 3). Bolts M22  $\phi$ , open holes 24 mm  $\phi$ , unless otherwise noted.
2. Calculated mass of Structural Steel (M 270M, Grade 345W) = 334.090 kg
3. All structural steel shall be AASHTO M 270M Grade 345W.
- \* 4. Field welding of construction accessories will not be permitted to the girders.
5. 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 of plate girders.
- \* 6. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M 322M Grade 400.
- \* 7. Slope wall shall be reinforced with welded wire fabric, 152 x 152 - MW25.8 x MW25.8, with a mass of 2.91 kg/sq m.
- \* 8. The contractor shall drive 2-356  $\phi$  Metal Shell test piles in a permanent location. One each of the East and West Abutments, as directed by the Engineer before ordering the remainder of piles.
9. All dimensions are in millimeters (mm) except as noted.
- \* 10. The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project. No additional compensation will be made to properly dispose of the existing structure containing lead.
11. AASHTO M 270M Grade 345W structural steel shall only be painted, at the ends of the beams, for a distance equal to 675 mm. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type I. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel". The top of the top flanges shall not be painted.
- \* 12. All construction joints shall be bonded.

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ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL	SHEET NO. S-2
F.A.L. 80/94	2004-133F	LAKE COUNTY, INDIANA	90	80	28 SHEETS
ILLINOIS		FEDERAL PROJECT			

CONTRACT NO. 62898 INDOT DES. NO. 9910630

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
* (IN) Present Structure, Str. No. I-80-1-8461, Remove Portions	L. Sum			
* (IN) Field Welded Stud Shear Connector	Each			
* (IN) Test Pile, 356 mm	Each			
* (IN) Structure Backfill	m <sup>3</sup>			
* (IN) Excavation, Foundation, Unclassified	m <sup>3</sup>			
* (IN) Concrete, A, Substructure	m <sup>3</sup>			
* (IN) Concrete, C, Superstructure	m <sup>3</sup>			
* (IN) Surface Seal	L. Sum			
* (IN) Reinforcing Bars, Epoxy Coated	kg			
* (IN) Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m			
* (IN) Threaded Tie Bar Assembly, Epoxy Coated	Each			
* (IN) Anchor Bolt	Each			
* Noise Abatement Wall Anchor Rod Assembly	Each			
* Furnishing Structural Steel	L. Sum	0.16		
* Erecting Structural Steel	L. Sum			
* Storage of Structural Steel	**	501		
* (IN) Masonry Coat	L. Sum			

\*\* For Storage of Structural Steel one unit shall be equal to 5 metric tons. The quantity was calculated based on the assumption that 25% of the steel mass has to be stored for 30 calendar days.

(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

DESIGNED	BHS
CHECKED	KFA
DRAWN	BHS
CHECKED	GSP

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.L. ROUTE 80/94 (BORMAN EXPRESSWAY)  
 OVER HARRISON AVENUE  
**GENERAL NOTES, INDEX OF SHEETS AND  
 TOTAL BILL OF MATERIAL**  
 SECTION 2004-133F  
 LAKE COUNTY, INDIANA  
 STATION 8+754.874  
 STRUCTURE NO. I-80-1-8461 (EB & WB)  
 DATE 05/05 (016-1005 & 016-1006)

**AMERICAN**  
 CONSULTING ENGINEERS

**\* NOT INCLUDED IN CONTRACT**