

BRIDGE GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts are 7/8" diameter in 1 5/16" diameter holes unless otherwise noted.
- Calculated weight of Structural Steel: AASHTO M270 Grade 36 = 45,930 lbs.
AASHTO M270 Grade 50 = 411,930 lbs.
- All structural steel shall be AASHTO M270 Grade 50 except diaphragms and diaphragm connections shall be AASHTO M270 Grade 36.
- No field welding is permitted except as specified in the contract documents.
- The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- 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.
- Bearing seat surface shall be constructed or adjusted to the designed 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 the designated areas of the piers and abutments. Exposed surface areas of new concrete for abutment backwalls, abutment bridge seats, and front faces of pile caps shall be treated with Concrete Sealer. Exposed surface areas of new concrete for Piers 1 thru 5 shall be treated with Concrete Sealer.
- Cleaning and field painting of existing structural steel shall be done under a separate painting contract.
- 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. 2.5YR 3/4.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutment extensions.
- Slipforming of the parapets is not allowed.
- Protective Shield System shall be erected at Spans 2, 3, 4, 7 and 8. The payment width shall be the out-to-out width of the widened structure.

- Current Ratings on File for Existing Structure
Inventory: HS22.3
Operating: HS37.3
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.
- Removal of the existing superstructure concrete and steel beams for Unit 2 (Span 5) will be paid as "Removal of Existing Superstructures". Removal of the existing superstructure concrete for Unit 1 (Spans 1 thru 4) and Unit 3 (Spans 6 thru 10) will be paid as "Removal of Existing Concrete Deck".

LOADING HS20-44 (NEW CONST.)
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS (NEW CONST.)
2002 AASHTO Standard Specifications for Highway Bridges

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.038g
Site Coefficient (S) = 1.0

DESIGN STRESSES

FIELD UNITS (New Construction)

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

FIELD UNITS (Exist. Construction)

f'c = 3,500 psi
fy = 40,000 psi (Substr. Reinforcement)
fy = 33,000 psi (Structural Steel)

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USER NAME =	DESIGNED - J.J.G. 6/15/2012	REVISED -
	CHECKED - J.A.Z. 6/15/2012	REVISED -
PLOT SCALE =	DRAWN - E.E.J. 6/15/2012	REVISED -
PLOT DATE =	CHECKED - J.J.G. 6/15/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES & INDEX OF SHEETS
STRUCTURE NO. 045-0039
 SHEET NO. S2 OF 116 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	(10 & 11VB) R-3	KANE	507	223
CONTRACT NO. 60133				
ILLINOIS FED. AID PROJECT				