

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 301 (US 20)	(2HB-2)D	WINNEBAGO	107	24
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 2

43 SHEETS

Contract #64B07

GENERAL NOTES

Fasteners shall be AASHTO M164 Type I, mechanically galvanized. Bolts -7/8 in. diameter, holes - $\frac{9}{16}$ in. diameter, unless otherwise noted.

Calculated weight of Structural Steel = 56,684 lbs.

All structural steel shall be AASHTO M 270 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 (IL Modified). See Special Provisions.

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 an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch 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.

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.

Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (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 abutments and piers. See abutment and pier sheets for additional clarification.

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 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 Blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Partial depth saw cutting of the existing concrete deck over the top of the existing flanges shall be permitted. See Special Provisions for Removal Of Existing Non-Composite Bridge Decks.

The contractor may use slip form option for concrete parapets. See IDOT special provision.

A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site, see special provision for Containment and Disposal of Lead Paint Cleaning Residues.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. All existing steel shall be cleaned per Near White Blast Cleaning SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 OZ/E/U. 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 Blue, Munsell No. 10B 3/6.

The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or as approved by the Engineer before ordering the remainder of the piles.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 36.

TOTAL BILL OF MATERIAL

ITEM	Unit	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd		189	189
Concrete Removal	Cu Yd		60.1	60.1
Slope Wall Removal	Sq Yd		1102	1102
Removal of Existing Concrete Deck	Each		2	2
Protective Shielding	Sq Yd		502	502
Structure Excavation	Cu Yd		420	420
Concrete Structures	Cu Yd		156	156
Concrete Superstructure	Cu Yd	413.6	0	413.6
Bridge Deck Grooving	Sq Yd	1248	0	1248
Concrete Encasement	Cu Yd		4.4	4.4
Protective Coat	Sq Yd		1608	1608
Furnishing and Erecting Structural Steel	L Sum		0.48	0.48
Stud Shear Connectors	Each		7824	7824
Jack and Remove Existing Bearings	Each		20	20
Cleaning and Painting Steel Bridge No.1	L Sum		1	1
Cleaning and Painting Steel Bridge No. 2	L Sum		1	1
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues No. 2	L Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	104000	19820	123820
Bar Splicers	Each		164	164
Slope Wall 4 Inch	Sq Yd		1246	1246
Furnishing Steel Piles HP12X53	Foot		620	620
Driving Piles	Foot		554	554
Test Pile Steel HP12X53	Each		2	2
Name Plates	Each	2	0	2
Preformed Joint Strip Seal	Foot	168	0	168
Elastomeric Bearing Assembly, Type I	Each		12	12
Elastomeric Bearing Assembly, Type II	Each		12	12
Anchor Bolts, 1"	Each		56	56
Concrete Sealer	Sq Ft		2326	2326
Geocomposite Wall Drain	Sq Yd		92.7	92.7
Pipe Underdrains for Structures 4"	Foot		202	202
Structural Steel Removal	Pound		5056	5056
Drainage Scupper, DS-11	Each		4	4

GENERAL NOTES AND
TOTAL BILL OF MATERIALS
F.A.P. ROUTE 301 (US 20)
OVER PRAIRIE ROAD
SECTION (2HB-2)D
WINNEBAGO COUNTY
STATION 841+89.60
STRUCTURE NO. 101-0051 (W.B.)
STRUCTURE NO. 101-0052 (E.B.)

DESIGNED	SSM
CHECKED	JLA
DRAWN	GYR
CHECKED	SSM

Δ- Revised 9-05-07

Plans Prepared by: Kudrna & Associates, Ltd.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 301 (US 20)	(2HB-1D -1D)	WINNEBAGO	107	67
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 2

34 SHEETS

Contract #64B07

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized. Bolts -7/8 in. diameter, holes -5/16 in. diameter, unless otherwise noted.

Calculated weight of Structural Steel = 57,060 lbs. (Grade 36)
= 4,990 lbs. (Grade 50)

All structural steel shall be AASHTO M 270 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 (IL Modified). See Special Provisions

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 an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 1/4 inch 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.

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.

Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (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 abutments and piers. See abutment and pier sheets for additional clarification.

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 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 Blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Partial depth saw cutting of the existing concrete deck over the top of the existing flanges shall be permitted. See Special Provisions for Removal Of Existing Non-Composite Bridge Decks.

The contractor may use slip form option for concrete parapets. See IDOT special provision.

A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site, see special provision for Containment and Disposal of Lead Paint Cleaning Residues.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. All existing steel shall be cleaned per Near White Blast Cleaning SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 OZ/E/U. 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 Blue, Munsell No. 10B 3/6.

The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or as approved by the Engineer before ordering the remainder of the piles.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

TOTAL BILL OF MATERIAL

ITEM	Unit	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd	0	338	338.0
Slope Wall 4 Inch	Sq Yd	0	1591	1591
Concrete Removal	Cu Yd	0	140.2	140.2
Slope Wall Removal	Sq Yd	0	1407	1407
Removal of Existing Concrete Deck	Each	0	2	2
Protective Shield	Sq Yd	674	0	674
Structure Excavation	Cu Yd	0	487.3	487.3
Concrete Structures	Cu Yd	0	195.6	195.6
Concrete Superstructure	Cu Yd	462.0	0	462.0
Bridge Deck Grooving	Sq Yd	1400	0	1400
Concrete Encasement	Cu Yd	0	4	4.0
Protective Coat	Sq Yd	1772	0	1772
Furnishing and Erecting Structural Steel	L Sum	0.52	0	0.52
Stud Shear Connectors	Each	0	7236	7236
Jack and Remove Existing Bearings	Each	20	0	20
Cleaning and Painting Steel Bridge No. 3	L Sum	1	0	1
Cleaning and Painting Steel Bridge No. 4	L Sum	1	0	1
Containment and Disposal of Lead Paint Cleaning Residues No. 3	L Sum	1	0	1
Containment and Disposal of Lead Paint Cleaning Residues No. 4	L Sum	1	0	1
Reinforcement Bars, Epoxy Coated	Pound	125420	21640	147060
Bar Splicers	Each	0	212	212
Furnishing Steel Piles HP12X53	Foot	0	595	595
Driving Piles	Foot	0	536	536
Test Pile Steel HP12X53	Each	0	1	1
Name Plates	Each	2	0	2
Preformed Joint Strip Seal	Foot	218	0	218
Elastomeric Bearing Assembly, Type I	Each	12	0	12
Elastomeric Bearing Assembly, Type II	Each	12	0	12
Anchor Bolts, 1"	Each	56	0	56
Concrete Sealer	Sq Ft	0	4590	4590
Geocomposite Wall Drain	Sq Yd	0	124	124
Pipe Underdrains for Structures 4"	Foot	0	304	304
Structural Steel Removal	Pound	0	6433	6433
Drainage Scupper, DS-11	Each	0	4	4

GENERAL NOTES AND
TOTAL BILL OF MATERIALS
F.A.P. ROUTE 301 (US 20)
OVER SIMPSON ROAD
SECTION (2HB-1D)
WINNEBAGO COUNTY
STATION 849+27.97

STRUCTURE NO. 101-0053 (W.B.)
STRUCTURE NO. 101-0054 (E.B.)

DESIGNED	SSM
CHECKED	JLA
DRAWN	GYR
CHECKED	SSM

Revised 9-05-07

Plans Prepared by: Kudrna & Associates, Ltd.