F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00016-00-BT	MADISON	310	149
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 97433		

GENERAL NOTES

The contractor shall assume full responsibility for imposed construction loading on the existing deteriorated bridge structures prior to the repair work being performed. After the repair work is performed per the plans, all bridge structures shall be limited to an AASHTO H15 loading as shown below. The new repaired and refurbished structures shall not be loaded with a vehicle that exceeds either 15 tons of total vehicle weight or a 12 ton axle weight. Once the proposed decking is installed the contractor shall take precautions to protect the decking surface and railings from any damage caused by construction activities.

Treated timber shall be according to Sections 507 and 1007 of the Standard Specifications. Wood members shall be free of knots warping and twisting and visually graded No. 1 Southern Pine or No. 1 Douglas Fir - Larch, or approved equivalent.

Plan dimensions and details relative to existing structure are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work; however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bolt holes in lumber shall be in accordance with Article 507.08 of the IDOT Standard Specifications.

All dimensions are shown in inches unless otherwise noted.

Lumber sizes shown are nominal dimensions in inches. Lumber shall be surfaced four sides.

Holes for all hardware shall be predrilled to avoid splitting.

All Structural Steel, including angles and plates, shall conform to AASHTO M270 in accordance with Article 1006.04 and shall be hot dipped galvanized according to AASHTO M232.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 and IDOT Special Provisions. Shop drawings for all reinforcement shall be submitted to the Engineer for approval prior to fabrication.

Reinforcement bars designated (E) shall be epoxy coated. See Bikeway Plans for underground utility locations. See Bikeway Plans for profile grade of trail.

Bolts and lag screws shall conform to ASTM A307. All hardware including anchors, plates, bolts, screws, nails, nuts and washers, etc. shall be stainless steel in accordance with Article 1006.17 of the IDOT Standard Specifications, unless otherwise noted.

Fence rail and Wood Rail are designed for horizontal loading of 50 lb/ft per horizontal rail only, in accordance with AASHTO Article 2.7.3

Furnishing and placement of riprap and bedding shall be in accordance with Section 281 of the latest IDOT Standard Specifications. Furnishing and placement of filter fabric shall be in accordance with Section 282 of the latest IDOT Standard Specifications.

An 18 inch diameter D.I.P. sewer is currently located on and adjacent to this structure. The 18 inch diameter sewer, owned and operated by the Village of Glen Carbon, shall remain in service through all construction activities including but not limited to: excavation, the partial removal of the structure, and replacement of the substructure and superstructure. The cost associated with construction activities around the sewer will not be paid for separately but will be included in the price bid for other items.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The embankment configuration shown shall be the minimum embankment that must be constructed.

Payment for furnishing all material, labor and excavation necessary to construct the concrete approach slab, including concrete, preformed joint filler and epoxy coated reinforcement bars and all other appurtenances and incidental work, complete in place, will be considered completely covered by the contract unit price per square yard for Bridge Approach Pavement (Special).

Payment for furnishing & installing all material, necessary to construct the treated timber superstructure, including all stringers, blocks, decking, posts, rails, bracing, hardware plates, angles, shims and all other appurenances and incidental work, complete in place, will be considered completely covered by the contract unit price per foot board measure for Treated Timber.

Payment for furnishing and installing all material, necessary for new treated timber substructure members including all backwall, pier cap longitudinal and diagonal bracing, hardware and all other appurtenances and incidental work, complete in place, will be considered completely covered by the contract unit price per foot board measure for Treated Timber.

During construction operations, temporary bracing and/or shoring shall be provided wherever necessary to take care of all loads to which the structure may be subjected, including equipment and the operation of same. Such bracing and/or shoring shall be left in place as long may be required for safety. When a temporary shoring or cribbing support system is required, the Contractor shall provide details and computations, prepared and sealed by an Illinois licensed Structural Engineer, to the Engineer for review and approval. When ever possible the support system shall be installed prior to starting the associated repair. If no system is specified, but during the course of repair the need for temporary shoring or cribbing becomes apparent or is directed by the Engineer due to a structural concern, the Contractor shall not proceed with any further removal work until an appropriate and approved support system is installed.

DESIGN SPECIFICATIONS

2002 AASHTO, 17th Edition
1997 AASHTO Guide Specifications for Design of Pedestrian Bridges

LOADING

Pedestrian Live Load = 85 psf
Vehicle Live Load = H-15

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi (Concrete)
fy = 36,000 psi (Structural Steel)
fy = 45,000 psi (Bolts, Nuts, etc.)
Design stresses for wood members shall be as specified in Section 1007 of the IDOT Standard Specifications.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Removal of Existing Structures, Special	Each	1		1
	Wood Rail	Foot	58		58
	Tree Removal, Acres	Acres		0.05	0.05
	Channel Excavation	Cu. Yd.		80	80
	Furnished Excavation	Cu. Yd.		105	105
	Porous Granular Embankment, Special	Cu. Yd.		17	17
	Stone Riprap, Class A6	Sq. Yd.		585	585
	Filter Fabric	Sq. Yd.		585	585
	Bridge Approach Pavement (Special)	Sq. Yd.	14		14
*	Concrete Encasement	Cu. Yd.		5.0	5.0
	Treated Timber	F.B.M.	10538	1488	12025
	Timber Beam Repair	Lump Sum		1	1
	Cofferdam (Type 1) - Location 1	Each		1	1

* Concrete Encasement quantity has been increased to account for hidden deficiencies

Sheet 2 of 11

GENERAL NOTES

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GLEN CARBON HERITAGE
BIKE TRAIL OVER JUDY BRANCH
MADISON COUNTY
STATION 108+17.70
STRUCTURE NO. 1

REVISIONS			
NO.	DATE	BY	REMARKS

SCALE: NOT TO SCALE, FOLLOW DIMENSIONS

DSN. BY:	DB	DATE:	10/18/12	SHEET
DWN. BY:	EER	DATE:	10/18/12	149
CHK'D:	WWH	DATE:	10/18/12	
DGN NAME:		JOB NO. E064403	DGN. NO.	OF 310 SHTS