

Contract #98910

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	40.4	40.4
Removal of Existing Concrete Deck	L. Sum	1	-	1
Structure Excavation	Cu. Yd.	-	28.5	28.5
Floor Drains	Each	21	-	21
Concrete Structures	Cu. Yd.	-	48.7	48.7
Concrete Superstructure	Cu. Yd.	197.8	-	197.8
Bridge Deck Grooving	Sq. Yd.	774	-	774
Protective Coat	Sq. Yd.	953	-	953
Jack and Remove Existing Bearings	Each	36	-	36
Structural Steel Repair	Pound	34,110	-	34,110
Cleaning and Painting Steel Bridge	L. Sum	1	-	1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	49500	4710	54210
Bar Splicers	Each	-	51	51
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	106	-	106
Anchor Bolts, 3/4" ϕ	Each	-	72	72
Concrete Sealer	Sq. Ft.	-	986	986
Epoxy Crack Injection	Foot	-	80	80
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq. Ft.	-	21.0	21.0
Rivet Removal and Replacement	Each	350	-	350
Temporary Shoring and Cribbing	Each	8	-	8
Protective Shield	Sq. Yd.	1275	-	1275

Protective Shield System shall be provided within the limits of the superstructure rehabilitation. Quantity is based on a 4 foot overhang from the outside edge of the truss. See Special Provision.

STATION 1212+84.95
REBUILT 20 BY
STATE OF ILLINOIS
S.B.I. RT. 150 SEC. (133A)D,I
LOADING HS20
STR NO. 002-0009

NAME PLATE

See Std. 515001

For location see Sheet 1 of 23.
New Name Plate shall be located next to existing Name Plate.

SEQUENCE OF CONSTRUCTION

1. Replace lateral bracing in Span 1.
2. Remove concrete deck and approaches.
3. Install temporary supports for steel repairs.
4. Remove existing stringer bearings.
5. Remove existing stringer bearing pedestals and abutment backwalls.
6. Make repairs to steel framing and substructure.
7. Construct new stringer bearing pedestals and abutment backwalls.
8. Install new stringer bearings and end diaphragms.
9. Pour new concrete deck and approaches.

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Current Ratings on File for Existing Structure

Inventory: HS 16.3
Operating: HS 27.5
Live Load Restrictions: Yes (36 Ton)

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.

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 3/4 in. ϕ , holes 13/16 in. ϕ , unless otherwise noted.

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.

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.

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 based upon the unit price bid for the work.

The Theoretical Grade Elevations are provided in these plans to aid the Contractor. It is the Contractor's responsibility to match the top of new deck to the top of existing deck elevations.

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 / 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 steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Existing areas of steel as shown on the plans shall be cleaned according to SSPC-SP10 and painted using the paint system specified in above note. See Special Provision for "Cleaning and Painting Existing Steel Structures".

The Contractor shall submit calculations and details demonstrating the structural integrity of the bridge is maintained under the additional imposed loads of the containment system. See Special Provisions for "Containment and Disposal of Lead Paint Cleaning Residues".

A minimum of one air monitor will be required to monitor abrasive blasting operations at this site. See Special Provision for "Containment and Disposal of Lead Paint Cleaning Residues".

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

Concrete Sealer shall be applied to the designated areas of the abutments and piers.

Plan structural steel and concrete repairs were prepared in accordance with the Structure Feasibility Report, prepared by Teng & Associates, Inc., dated May 31, 2006 and a follow up inspection on April 17, 2008. The Engineer may determine during construction that modification or additions to these repairs may be necessary. Any such modifications shall be approved by the Engineer and shall be paid for at the same rate as the unit bid price for the particular item.

After steel has been cleaned, corroded rivets outside the areas of Structural Steel Removal shall be removed and replaced with high strength bolts as directed by the Engineer and shall be paid for as Rivet Removal and Replacement. Burning of rivet heads in removing existing rivets is not permitted except as specified in the Special Provisions. Rivet removal and replacement for Structural Steel Repair shall be paid for under Structural Steel Repair.

The Contractor shall submit Structural Assessment Report(s) as required for the Contractor's means and methods of construction. See Special Provisions.

The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for the complete or partial removal, or replacement of the structure. An Existing Structure Information Package is available upon request as noted in the special provisions.

The SSPC-QP1 and SSPC-QP2 Painting Contractor Certifications will be required for this bridge.

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL DATA
OLD ILLINOIS ROUTE 3
OVER SEXTON CREEK
S.B.I. ROUTE 150 - SECTION (133A)D,I
ALEXANDER COUNTY
STATION 1212+84.95
STRUCTURE NO. 002-0009

LE LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: DL5	Checked By: STD	Drawn By: AJF
Date: Feb 2009	File: 002-0009.dgn	