

9-0039 was originally built in 1973. It is a two-span, steel non-continuous structure with PPC I-beam concrete bents. The structure length is 275'-0" back-to-back approach bents and the width is 68'-0" out-to-out. The two span lengths are both 98'-6" and the approach spans are both 38'-4".

to be repaired using staged construction. Bridge deck joints, abutment bearings and wearing surface to be repaired.

page.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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 qualified personnel approved by the Engineer. Any cracks that can not 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.

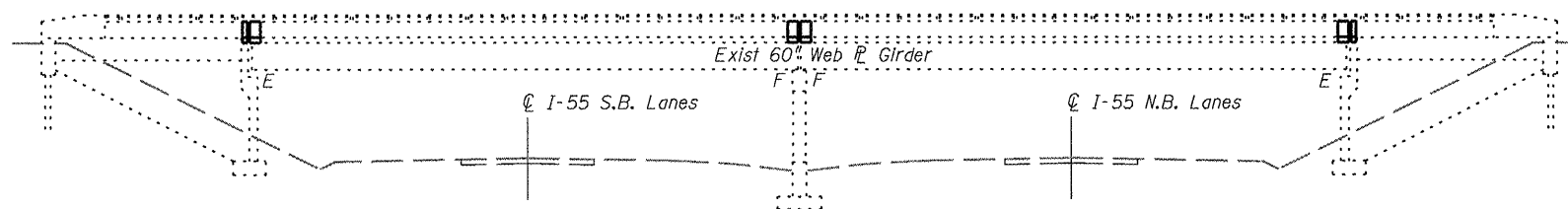
Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

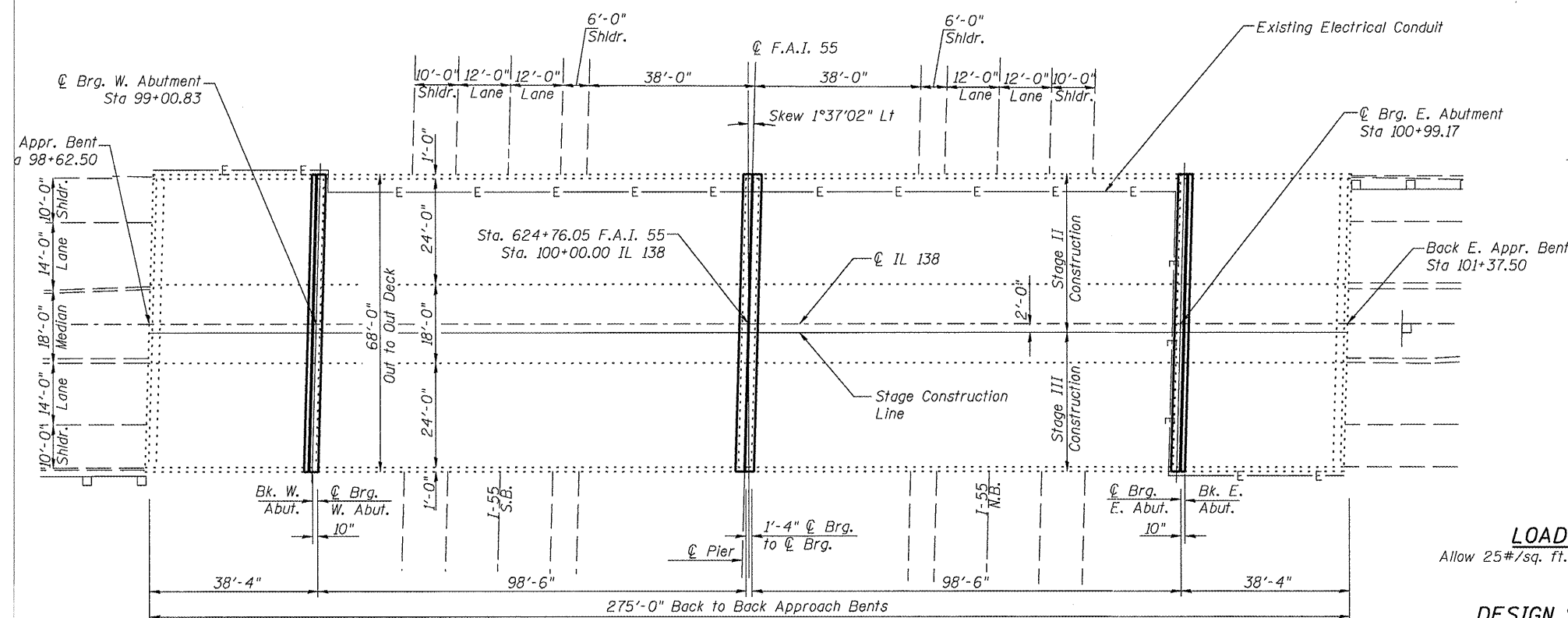
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type I. Cost included with Furnishing and Erecting Structural Steel.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The deck surface shall have its final finish lined according to Article 420.09 (e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
HMA Surface Course, Mix "C", N50	Ton	138.8
HMA Surface Removal (Deck)	Sq. Yd.	1454
Concrete Removal	Cu. Yd.	27.0
Concrete Superstructure	Cu. Yd.	26.7
Protective Coat	Sq. Yd.	66
Jack and Remove Existing Bearings	Each	18
Reinforcement Bars, Epoxy Coated	Pound	5780
Bar Splicers	Each	56
Preformed Joint Strip Seal	Foot	201
Elastomeric Bearing Assembly, Type I	Each	18
Waterproofing Membrane System	Sq. Yd.	1417
Concrete Sealer	Sq. Ft.	5136
Structural Repair of Concrete		
Depth equal to or less than 5 inches	Sq. Ft.	215
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	20
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	20
Deck Slab Repair (Partial)	Sq. Yd.	93
Protective Shield	Sq. Yd.	420
Furnishing & Erecting Structural Steel	Pound	4480
Anchor Bolts, 1"	Each	36

*Apply on new concrete only.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (structural steel)

GENERAL PLAN

IL 138 OVER I-55

F.A.S. RTE. 728 OVER F.A.I. 55

SECTION (59,68) RS-3, BR

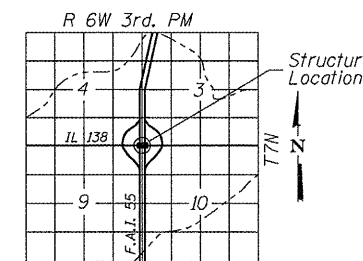
MACOUPIN COUNTY

STATION 100+00.00

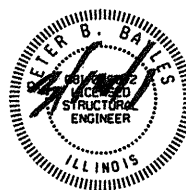
STRUCTURE NO. 059-0039

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- 7 Bearing Details
- 8 Deck Patching Plan
- 9 Abutment Patching Plan
- 10 Bar Splicer Assembly and Mechanical Splicer Details



LOCATION SKETCH



Peter B. Bayles, P.E., S.E.
Structural Engineer License No. 081-006042
Expiration Date: 11/30/2012

SHEET NO. 1	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	728	(59,68) RS-3, BR	Macoupin	137	97
10 SHEETS					
CONTRACT NO. 72921					
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT					