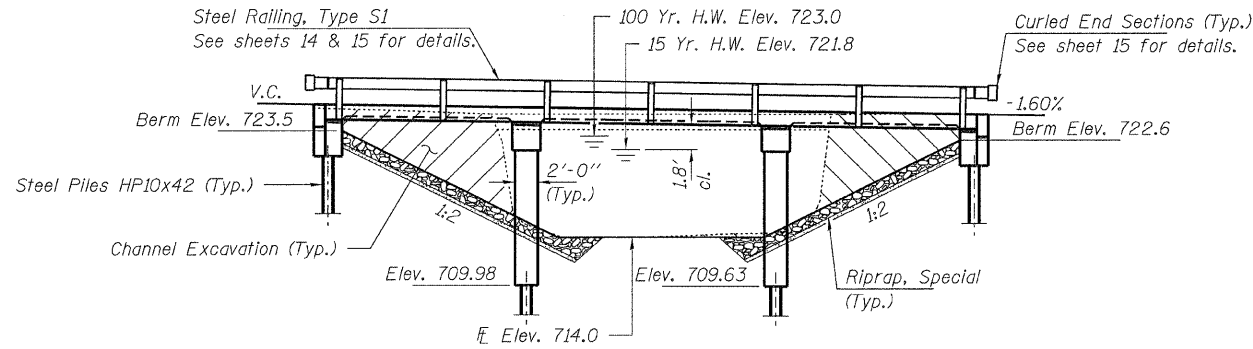


BENCHMARK: Chiseled "□" on Southeast corner of parapet. 11' Rt., Sta. 10+13, Elev. 725.47

EXISTING STRUCTURE: Single span cast in place concrete bridge with concrete curbs on closed timber abutments and wingwalls. 27.4' fc.-fc. abuts.; 28.3' o.-o. deck. Structure closed to traffic.

No Salvage



ELEVATION

GENERAL NOTES

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

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at South Abutment and Pier 1 or approved by the Engineer before ordering the remainder of piles.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Excavation required to construct the Abutments and Piers shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.

All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.

The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

The top surface of the deck shall be screeded with a straight edge and then finished with a wooden hand float. Further finishing shall be delayed until the water sheen appears, but not to the point of rendering further manipulation ineffective. The surface then shall be roughened with a suitable stiff-bristled broom or wire brush drawn in transverse direction removing any laitance present and breaking up the water sheen. The corrugations formed shall be uniform in appearance and in no case more than 1/4" in depth.

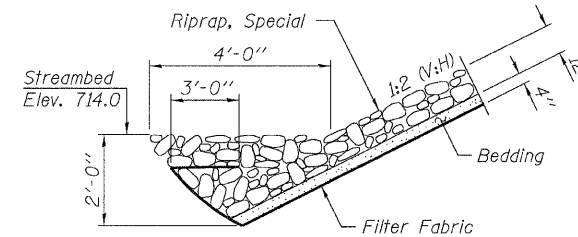
Protective Coat shall be applied to the top surface and the sides of the concrete deck.

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Slab Elevations
3. Superstructure
- 4.-5. Superstructure Details
6. Steel Railing, Type S-1
7. HP Pile Details
8. Borings

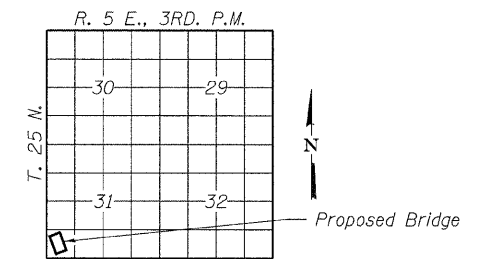
HAMMITT BRIDGE
BUILT 201_ BY
McLEAN COUNTY
SEC. 07-20124-00-BR
LAWDALE ROAD DISTRICT
STR. NO. 057-4814
LOADING HL-93

NAME PLATE
See Std. 515001

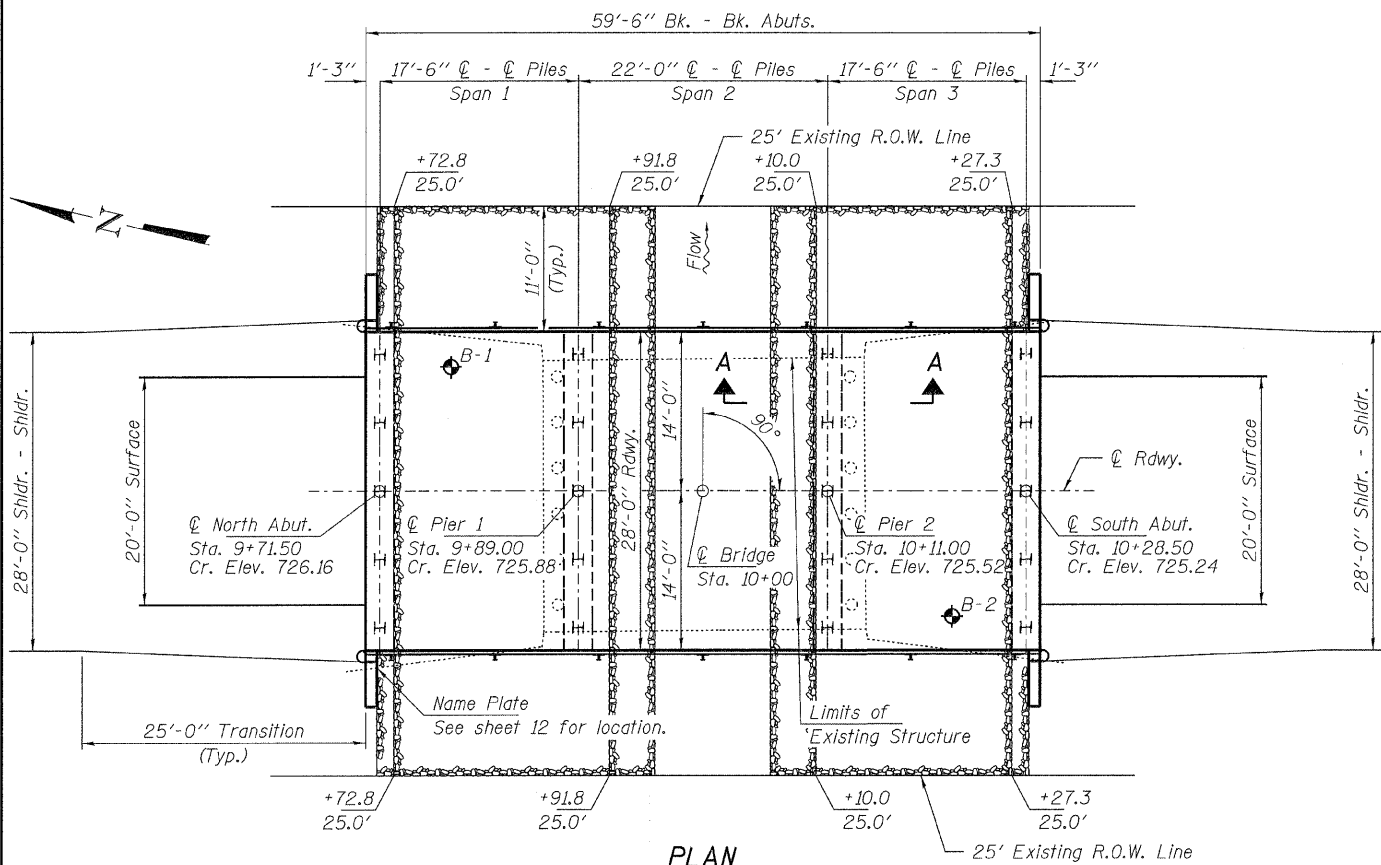


SECTION A-A

Note: See Special Provisions for Riprap, Special.



LOCATION SKETCH



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			250
Porous Granular Embankment	Ton		74	74
Riprap, Special	Sq. Yd.			277
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		28.6	28.6
Concrete Superstructure	Cu. Yd.	72.8		72.8
Concrete Encasement	Cu. Yd.		13.6	13.6
Protective Coat	Sq. Yd.	203		203
Reinforcement Bars, Epoxy Coated	Pound		24,130	24,130
Steel Railing, Type S1	Foot	114		114
Furnishing Steel Piles HP10x42	Foot		540	540
Driving Piles	Foot		540	540
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1
Geocomposite Wall Drain	Sq. Yd.			28
Pipe Underdrains for Structures, 4"	Foot			100

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi Load Resistance
fy = 60,000 psi (Reinf.) Factor Design

LOADING HL-93

Design Specifications: 2007 AASHTO LRFD with all applicable interims.
50#/Sq. Ft. Included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.084g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.145g
Soil Site Class = C

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1140	190	220	721.5	0.5	0.0	722.0	721.5
Base	100	2170	230	290	723.0	1.7	0.2	724.7	723.2
Max. Calc.	500	2960	240	320	723.9	1.7	1.6	725.6	725.5
Overtopping Ex. 100		2170	230		723.0	1.7		724.7	
Overtopping Pr. 100		2960	320		723.9		1.6		725.5

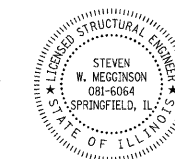
Existing Low Grade Elev. 723.8 @ Sta. 11+00
Proposed Low Grade Elev. 724.2 @ Sta. 11+50

Drainage Area = 8.2 Sq. Mi.

10 Year Velocity through Existing Bridge = 6.4 fps
10 Year Velocity through Proposed Bridge = 5.2 fps

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Steven W. McGinnison 4/12/2010
ILLINOIS STRUCTURAL NO. 081-6064



GENERAL PLAN AND ELEVATION
STRUCTURE NO. 057-4814

DESIGNED - A.S.L.
CHECKED - M.G.B.
DRAWN - D.A.B.
CHECKED - M.G.B.

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154 000569
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 07.0445.130 DATE: 03/22/10

SHEET NO. 1	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	155	07-20124-00-BR	McLEAN	17	10
8 SHEETS	LAWDALE ROAD DISTRICT		CONTRACT NO. 91442		
	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT BROS-0113031		