

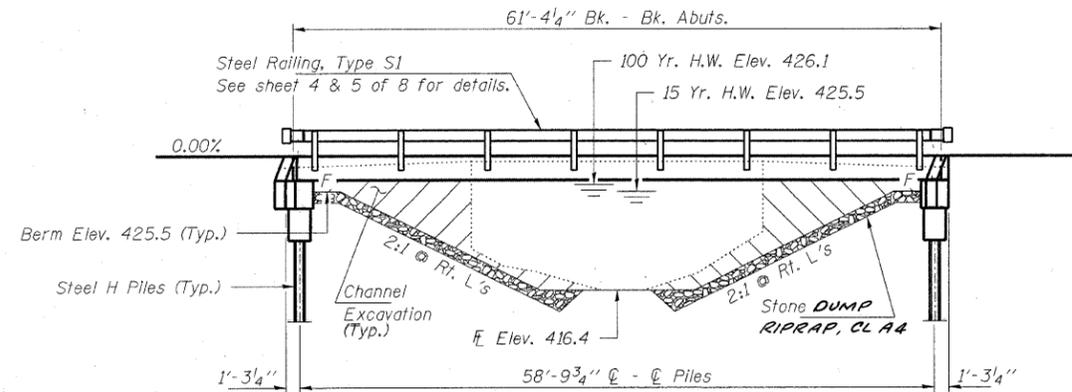
BENCHMARK: PK Nail in power pole. Sta. 3+84. 38.7' Rt., Elev. 424.83

EXISTING STRUCTURE: Precast deck beam bridge on timber piles & closed timber backed abutments. 1 span @ 30'-0", skew = 15°. Existing Structure No. 051-3109. Structure closed to traffic.

Salvage - SEE SPECIAL PROVISIONS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 249	07-05123-00-BR	LAWRENCE	11	4
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 95560	

Sheet 1 of 8



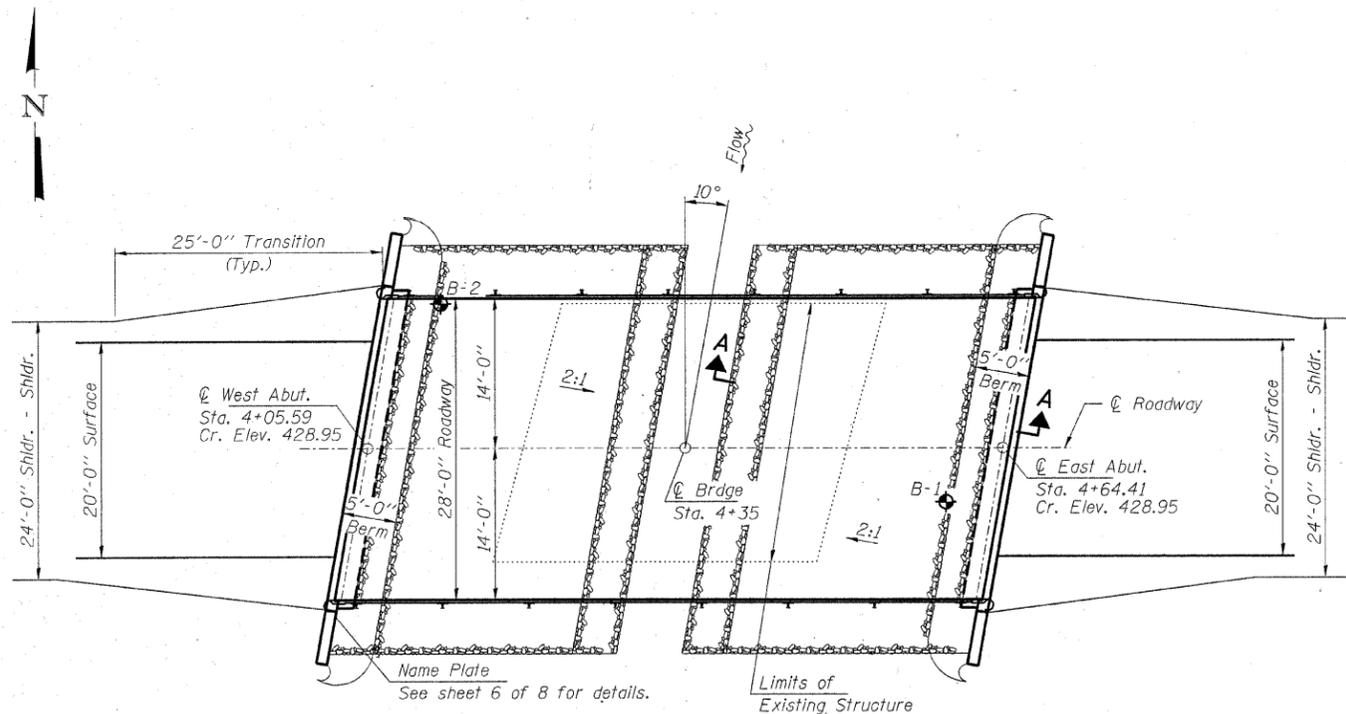
ELEVATION

GENERAL NOTES

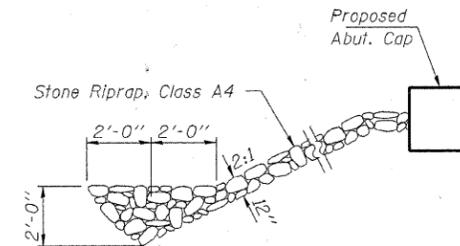
Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment or approved by the Engineer before ordering the remainder 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 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.
See Sheet 8 of 8 for Borings.

BUILT 200_ BY
LAWRENCE COUNTY
SEC. 07-05123-00-BR
DENISON ROAD DISTRICT
STR. NO. 051-3282
PROJECT NO. 8K05-101 (28)
LOADING HL - 93

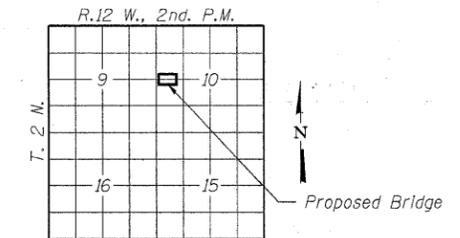
NAME PLATE
See Std. 515001



PLAN



SECTION A-A



LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" low lax. strands)
f'si = 201,960 psi (1/2" low lax. strands)
fy = 60,000 psi (Reinf.)

Loading HL-93
Design Specifications: 2004 AASHTO LRFD with all applicable interims.
25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.09g
Site Coefficient (S) = 1.0

WATERWAY DATA

Drainage Area..... 8.36 Sq. Mi.
Existing Opening (15 yr.)..... 195 Sq. Ft.
Req'd Opening (15 yr.)..... 296 Sq. Ft.
Proposed Opening (15 yr.)..... 296 Sq. Ft.
Design Discharge (15 yr.)..... 1,428 C.F.S.
Created Head (15 yr.)..... 0.2 Ft.
100 Yr. Discharge..... 2,268 C.F.S.
100 Yr. Created Head..... 0.2 Ft.
DESIGN (15 YR.) H.W. E. 425.5
100 YR. H.W. E. 426.1

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 Standard Specifications for Highway Bridges".

Steven W. Megginson 4-18-08
ILLINOIS STRUCTURAL NO. 081-6064



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone DUMPED RIPRAP, CL. A4	Ton			140
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		21.0	21.0
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,680		1,680
Reinforcement Bars	Pound		3,490	3,490
Steel Railing, Type S1	Foot	116		116
Furnishing Steel Piles HP12x53	Foot		234	234
Driving Piles	Foot		234	234
Test Pile Steel HP12x53	Each		1	1
Name Plates	Each		1	1

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 08.0075.130 DATE: 04/18/08
DESIGNED: S.M.S. CHECKED: S.W.M. DRAWN: D.A.B.

GENERAL PLAN AND ELEVATION
SECTION 07-05123-00-BR
DENISON ROAD DISTRICT
LAWRENCE COUNTY
STRUCTURE NO. 051-3282 / STATION 4+35