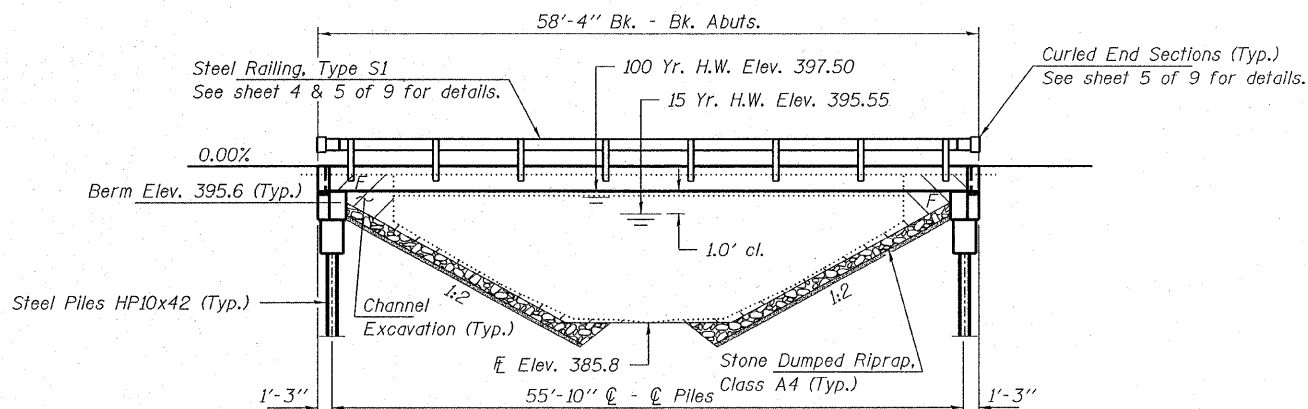


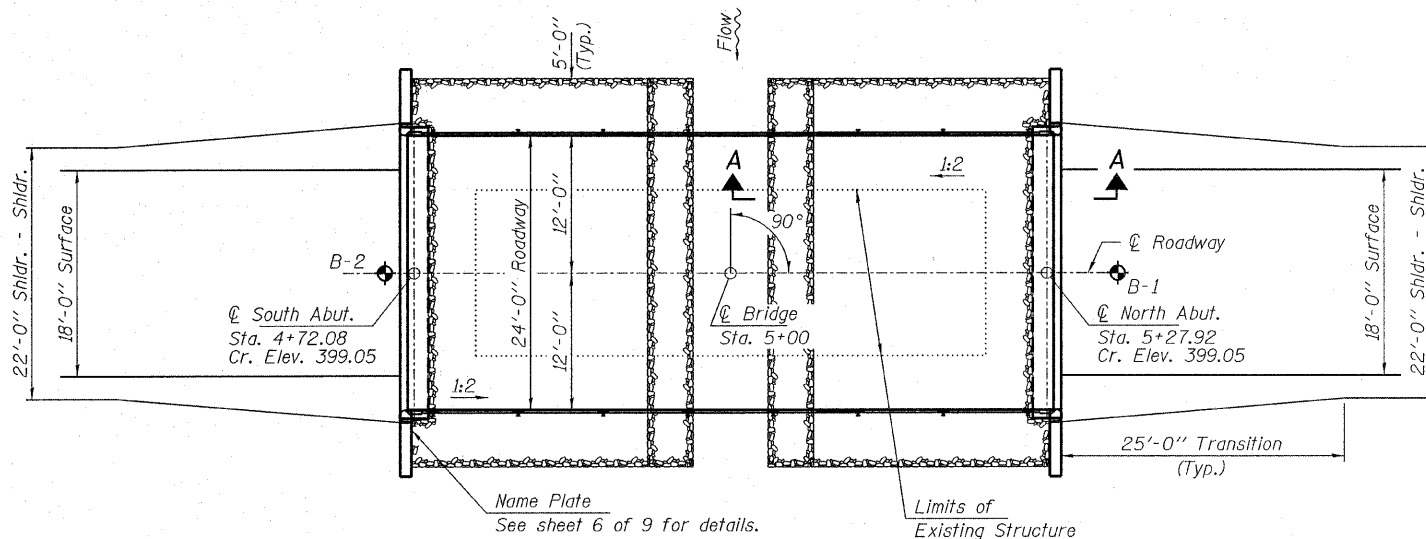
BENCHMARK: Iron Pin. Sta. ±9+90.80, 8.66' Rt., Elev. 404.86

EXISTING STRUCTURE: Sta. 5+00.7 - Single span steel I-beam bridge with concrete abutments & wingwalls. 40.0' bk. - bk. abuts.; 14.5' o.-o. deck Structure closed to traffic.

No Salvage



ELEVATION



PLAN

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  
fpu = 270,000 psi (1/2" low lax. strands)  
fpbt = 201,960 psi (3/8" low lax. strands)  
fy = 60,000 psi (Reinf.)

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.226g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.633g  
Soil Site Class = C

WATERWAY DATA

Drainage Area----- 5.3 Sq. Mi.  
Existing Opening (15 yr)----- 247 Sq. Ft.  
Req'd Opening (15 yr)----- 292 Sq. Ft.  
Proposed Opening (15 yr)----- 292 Sq. Ft.  
Design Discharge (15 yr)----- 1,693 C.F.S.  
Created Head (15 yr)----- 0.0 Ft.  
100 Yr. Discharge----- 2,900 C.F.S.  
100 Yr. Created Head----- 0.1 Ft.

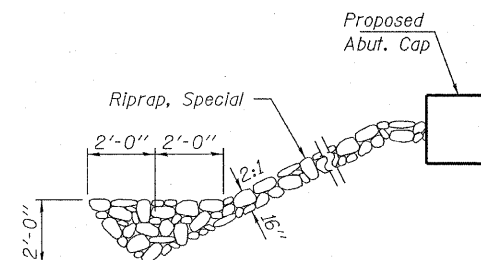
GENERAL NOTES

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 100% of the nominal required bearing specified in production location at North 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. 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 Sheets 8 & 9 of 9 for Borings.

WHITE OAK CREEK  
BUILT 200\_ BY  
HAMILTON COUNTY  
SEC. 08-09113-00-BR  
SOUTH CROUCH ROAD DISTRICT  
STR. NO. 033-3310  
LOADING HL-93

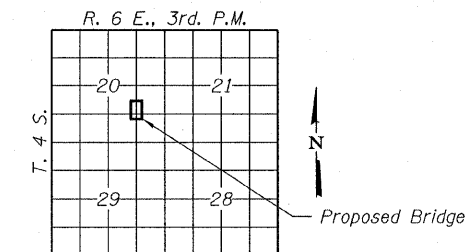
NAME PLATE

See Std. 515001



SECTION A-A

Note: See Special Provisions for Riprap, Special.



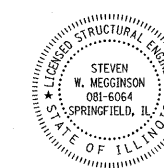
LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A4	Ton			150
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		23.6	23.6
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,368		1,368
Reinforcement Bars	Pound		2,740	2,740
Steel Railing, Type S1	Foot	109		109
Furnishing Steel Piles HP10x42	Foot		428	428
Driving Piles	Foot		428	428
Name Plates	Each		1	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 LRFD Specifications."

Steven W. Meggison 8-25-08  
ILLINOIS STRUCTURAL NO. 081-6064



Expires 11-30-08

GENERAL PLAN AND ELEVATION  
STRUCTURE NO. 033-3310

DESIGNED - S.M.S.
CHECKED - S.W.M.
DRAWN - D.A.B.
CHECKED - D.T.M.

<b>HAMPTON, LENZINI &amp; RENWICK, INC.</b> CIVIL & STRUCTURAL ENGINEERS LAND SURVEYORS 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 (217) 546-3400 PROJECT NUMBER: 08.0102.130 DATE: 08/25/08	SHEET NO. 1  9 SHEETS	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		234	08-09113-00-BR	HAMILTON	13	5
		SOUTH CROUCH ROAD DISTRICT		CONTRACT NO. 99343		
		FED. ROAD DIST. NO. 9 ILLINOIS FED. AID PROJECT				