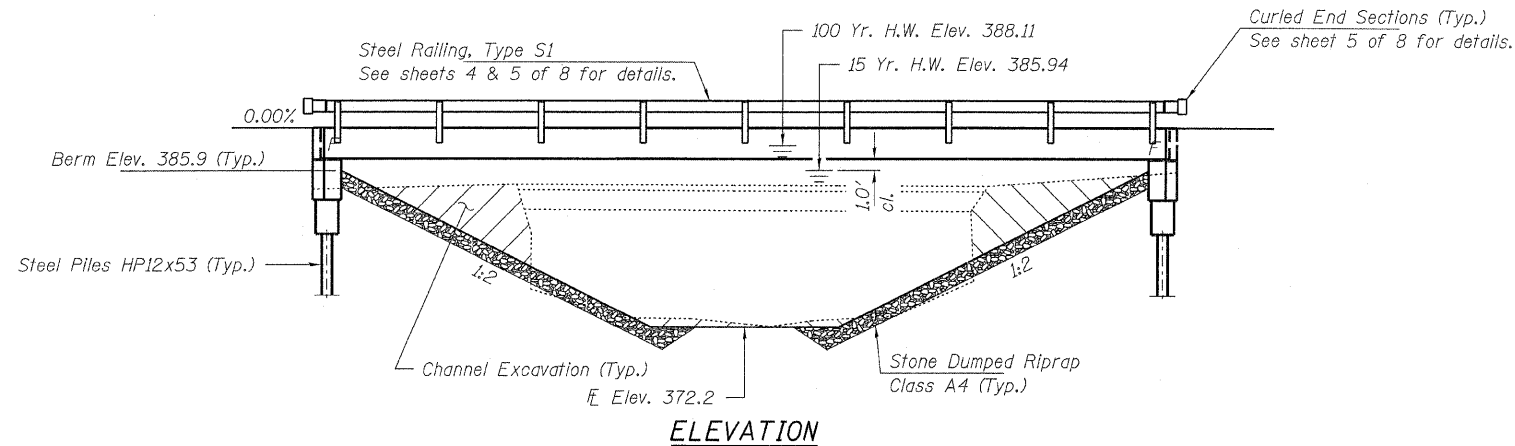
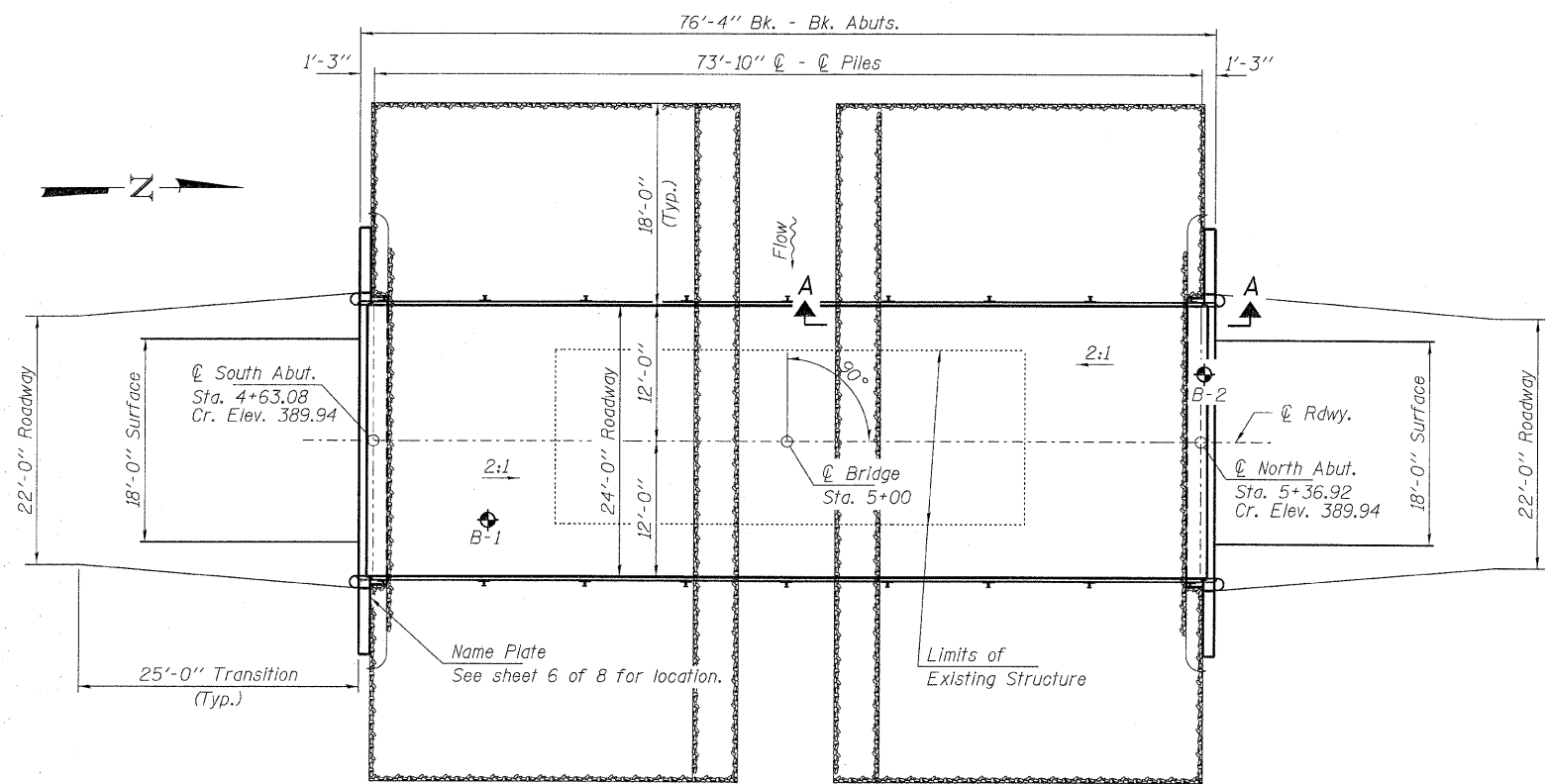


EXISTING STRUCTURE: Sta. 5+00.50, Str. No. 033-3100. 40' Single span I beam bridge on concrete abutments with concrete wingwalls. Structure closed to traffic.

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'cl = 5,000 psi  
fpu = 270,000 psi (1/2" low lax. strands)  
fpbt = 201,960 psi (1/2" low lax. strands)  
fy = 60,000 psi (Reinf.)

LOADING HL-93

Design Specifications: 2010 AASHTO LRFD with all applicable Interims.  
50#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

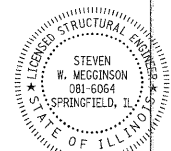
Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.225g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.629g  
Soil Site Class = C

WATERWAY INFORMATION

Drainage Area = 7.24 Sq. Mi.		Existing Low Grade Elev. 328.8 @ Sta. 10+00		Proposed Low Grade Elev. 328.8 @ Sta. 10+00	
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E. Exist. Prop.	Headwater El. Exist. Prop.
Design/Overtop	15	2210	352 602	385.94 -	0.00 - 385.94
Base	100	3800	352 674	388.11 0.56	0.29 388.67 388.40
Max. Calc.	500	-	-	-	-

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. Megginson 2/16/2011  
ILLINOIS STRUCTURAL ENGINEERING NO. 081-6064

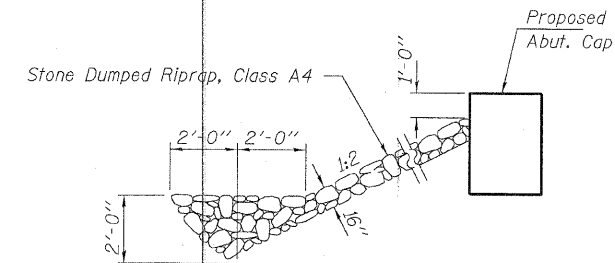


GENERAL NOTES

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

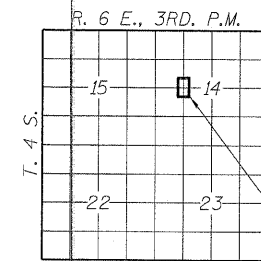
INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. 33"x36" PPC Deck Beam
3. 33"x36" PPC Deck Beam Details
4. Superstructure Details
5. Steel Railing, Type S-1
6. Abutments
7. HP Pile Details
8. Borings



SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4.



LOCATION SKETCH

SOUTHERN OUTLET  
BUILT 2011 BY  
SOUTH CROUCH ROAD DISTRICT  
HAMILTON COUNTY  
SEC. 08-09114-00-BR  
STR. NO. 033-3314  
LOADING HL-93

NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			144
Stone Dumped Riprap, Class A4	Ton			360
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		25.4	25.4
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	1,800		1,800
Reinforcement Bars	Pound		2,540	2,540
Steel Railing, Type S1	Foot	148		148
Furnishing Steel Piles HP12x53	Foot		160	160
Driving Piles	Foot		160	160
Name Plates	Each		1	1

FILE NAME = 090262-ah-bridge.dgn  
USER NAME =  
DESIGNED - A.S.L.  
CHECKED - S.W.M.  
DRAWN - D.A.B.  
CHECKED - S.W.M.  
PLOT SCALE =  
PLOT DATE = 2/16/2011

DESIGNED - A.S.L.  
CHECKED - S.W.M.  
DRAWN - D.A.B.  
CHECKED - S.W.M.  
PLOT SCALE =  
PLOT DATE = 2/16/2011

STATE OF ILLINOIS  
HAMILTON COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN & ELEVATION  
STRUCTURE NO. 033-3314

SHEET NO. 1 OF 8 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
296B	08-09114-00-BR	HAMILTON	12	5

SOUTH CROUCH ROAD DISTRICT CONTRACT NO. 99454  
[ILLINOIS] FED. AID PROJECT BROS-0105(049)