

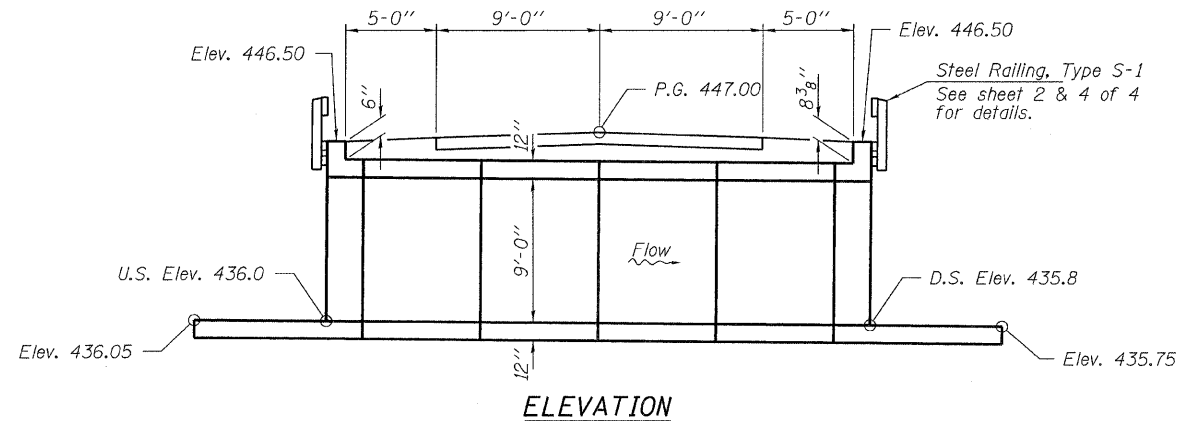
BENCHMARK: Square bolt on top of west pipe culvert. 15.0' Rt., Sta. 13+37, Elev. 445.97

EXISTING STRUCTURE: Sta. 13+52 - 3-9" boiler plate culverts. 30.0' long.  
Structure closed to traffic during construction.

Saivaged culverts shall become property of the Township.

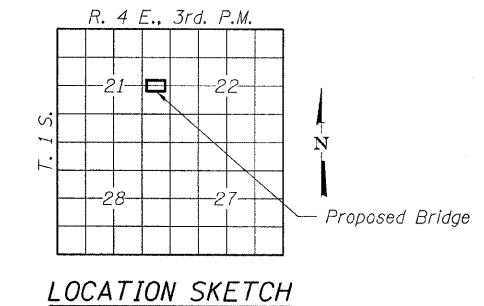
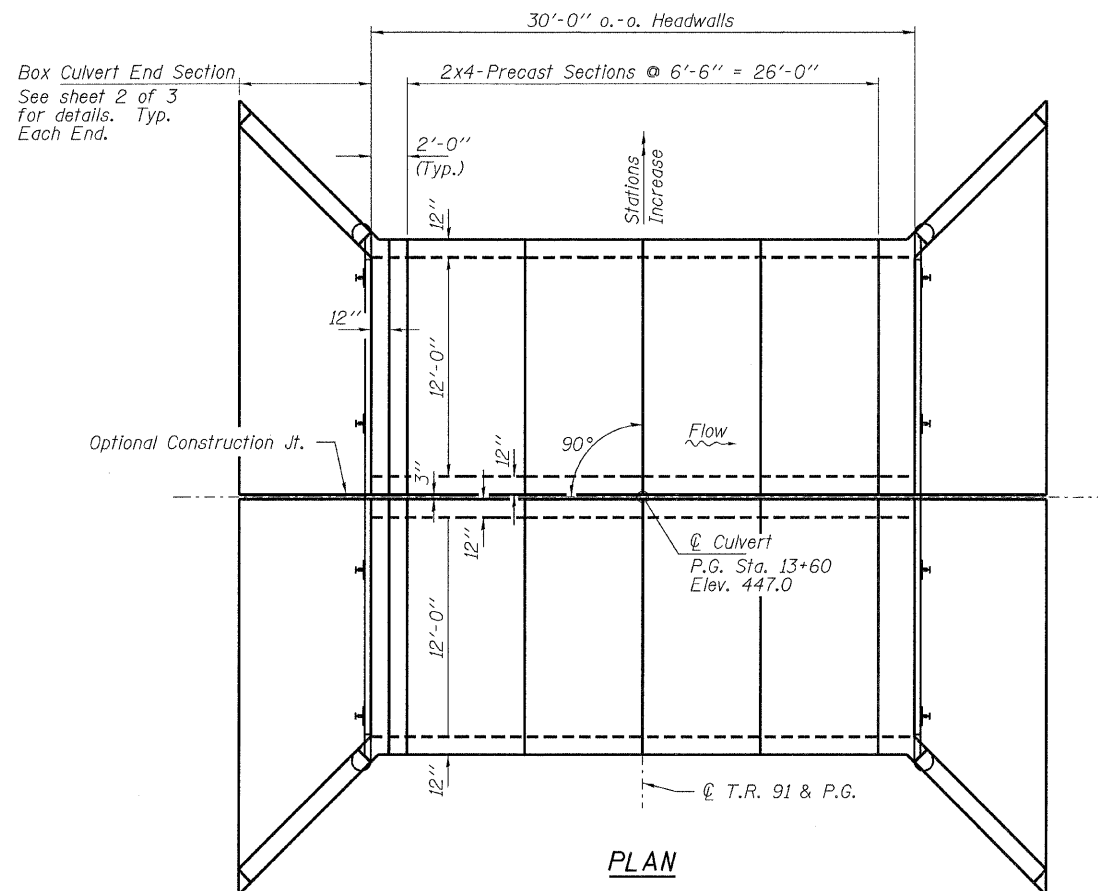
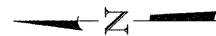
**GENERAL NOTES**

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
Precast Concrete Box Culvert Sections and Box Culvert End Sections shall conform to the requirements of ASTM C1577 and design loading shown.  
Alternate Cast-in-place headwalls to be approved by Engineer.  
It shall be the responsibility of the Contractor to divert flow during construction in order to keep construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and shall be considered included in the cost of Precast Concrete Box Culverts 12'x9' (Special).



**INDEX OF STRUCTURE SHEETS**

1. Culvert Plans
2. Culvert Plan Details
3. Riprap Layout
4. Steel Railing, Type S-1



**LOADING HL93**

Allow 50#/Sq. Ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2010 AASHTO LRFD Standard Specifications

**DESIGN STRESSES**

PRECAST UNITS

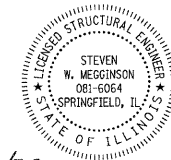
$f'_c = 5,000 \text{ psi}$   
 $f_y = 65,000 \text{ psi}$  (Welded Wire Fabric)

**WATERWAY INFORMATION**

See bridge plans, sheet 27 of 37.

I certify that to the best of my knowledge, information and belief, this culvert 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 LFD Specifications."

*Steven W. Megginson* 2/23/2012  
ILLINOIS STRUCTURAL No. 081-6064 Expires 11-30-2012



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Channel Excavation	Cu. Yd.	200
Porous Granular Embankment	Ton	450
Stone Dumped Riprap, Class A4	Ton	500
Removal of Existing Structures No. 1	Each	1
Structure Excavation	Cu. Yd.	300
Steel Railing, Type S1	Foot	52
Name Plates	Each	1
Box Culvert End Sections, Culvert No. 1	Each	4
Precast Concrete Box Culverts 12'x9' (Special)	Foot	52

FILE NAME = 110266-shr-culvert.dgn	USER NAME =	DESIGNED - A.S.L.	REVISED -	<b>STATE OF ILLINOIS</b> <b>JEFFERSON COUNTY HIGHWAY DEPARTMENT</b>	<b>CULVERT PLANS</b> <b>STRUCTURE NO. 041-5077</b> SHEET NO. 1 OF 4 SHEETS	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3005 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62765	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			91	09-06122-00-BR	JEFFERSON	37	22
ILLINOIS PROFESSIONAL DESIGN FIRM L81 PE / SE CORP. 184 000999	PLOT DATE = 2/20/2012	DRAWN - D.A.B.	REVISED -			FARRINGTON ROAD DISTRICT		CONTRACT NO. 99471		
		CHECKED - S.W.M.	REVISED -			[ILLINOIS] FED. AID PROJECT BR05-00810631				