

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	10	3
VILLAGE OF ROYALTON		MAIN STREET		

CONTRACT NO. 99502

Solvaqe-- Existing steel beams shall be stockpiled on the jobsite for salvage by the Village of Royalton.

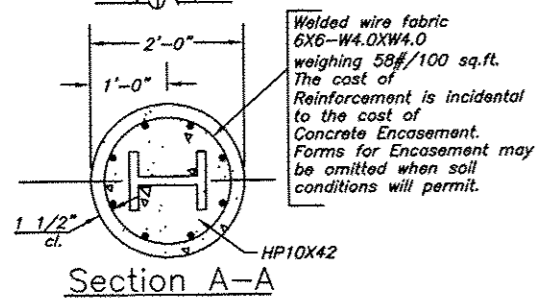
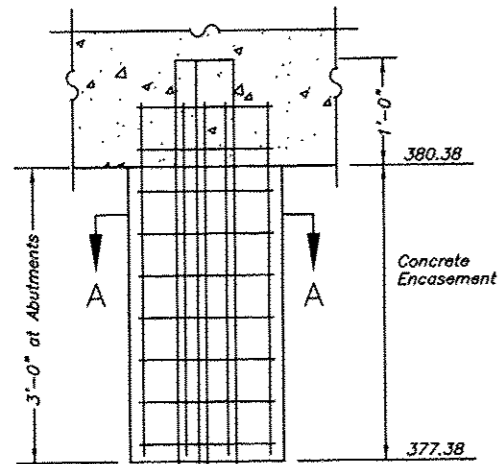
GENERAL NOTES

- The Contractor shall drive 0 test piles, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
- See Special Provisions for boring logs.
- A Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
- The Steel H-piles shall be according to AASHTO M270 Grade 50.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	L. Sum				1
Concrete Structures	Cu. Yd.			22.6	22.6
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	1560			1560
Steel Bridge Rail, Type S-1	Foot	130			130
Reinforcement Bars	Pound			2680	2680
Furnishing Steel Piles HP 10X42	Foot			550	550
Driving Piles	Foot			550	550
Name Plates	Each				1
Concrete Encasement	Cu. Yd.			3.5	3.5

DETAIL OF HP PILE ENCASEMENT



QUANTITIES/LIN. FT. OF ENCASEMENT (STEEL PILES)

PILE SIZE	ITEM	QUANTITY
HP 10	CONCRETE ENCASEMENT	0.086 C.Y.
HP 12	CONCRETE ENCASEMENT	0.112 C.Y.

DESIGN SPECIFICATIONS
2007 LRFD Specification - 4th ed.

SEISMIC DATA

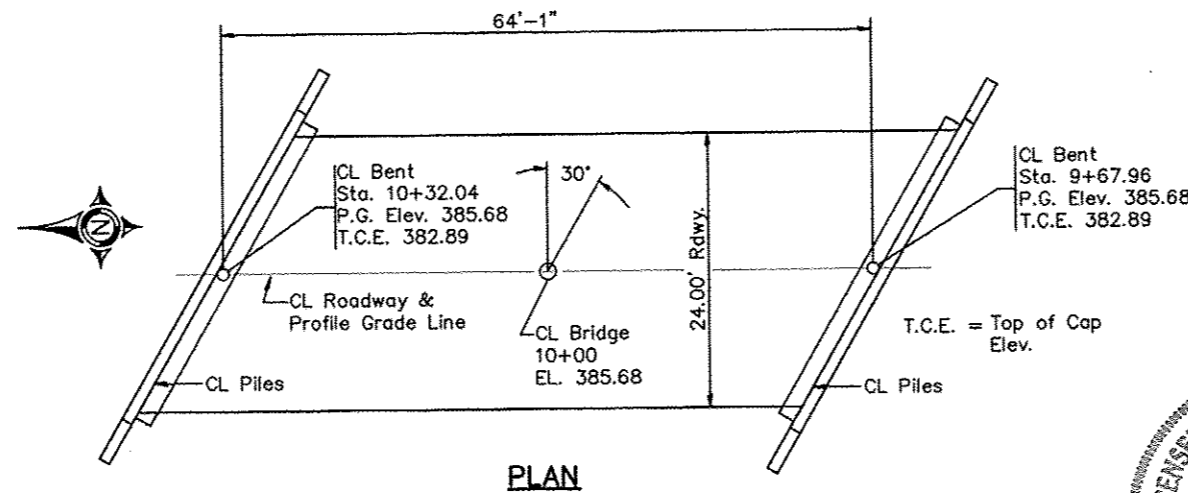
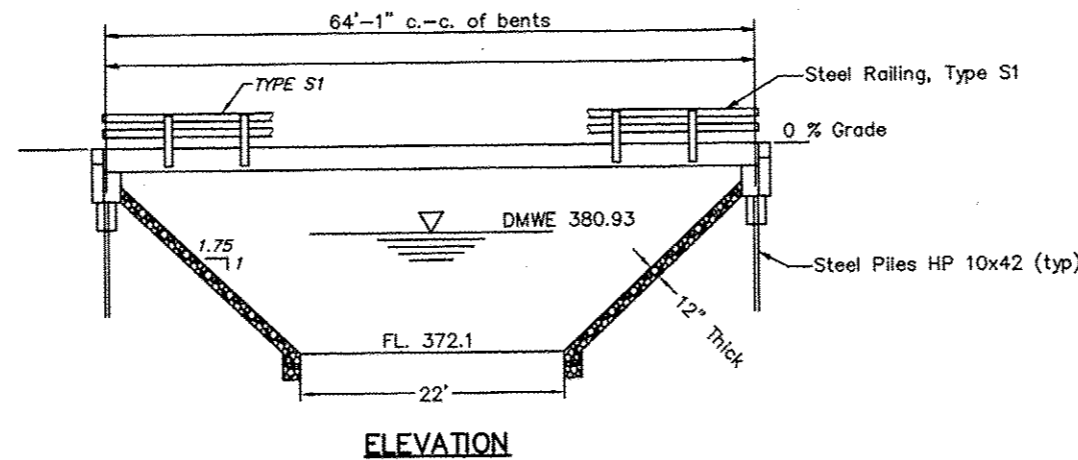
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{01}) = 0.253
Design Spectral Acceleration at 0.2 sec (S_{05}) = 0.690
Site Soil Class = C

PILE DATA (2-ABUTS.)

Type	STEEL HP 10X42
Estimated Length	55 Feet
Number Required	10
Nominal Required Bearing	335 KIPS
Allowable Resistance Available	111 KIPS

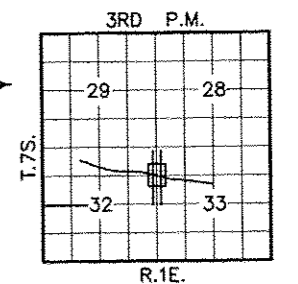
LOADING HL-93

ALLOW 50#/SQ.FT. FOR FUTURE WEARING SURFACE

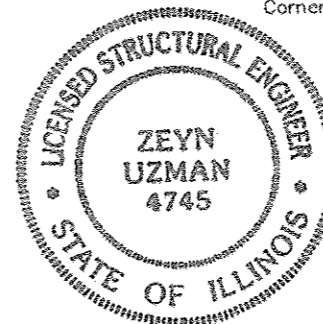


STATION 10+00
UNNAMED CREEK
SEC. 10-00009-00-BR BUILT 2013
VILLAGE OF ROYALTON
LOADING HL93
STR. NO. 028-6005

LETTERING FOR NAME PLATE
Locate Name Plate at SOUTHWEST Corner of Bridge



LOCATION SKETCH



I certify that to the best of knowledge, information and belief, this bridge/box 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 Standard Specifications for Highway Bridges.

[Signature] 2/27/13
Illinois Structural No. 4745
Expires 11/30/14

WATERWAY INFORMATION

Drainage Area = 3.67 S.M. Low Grade Elev. = 384.4 @ Sta. 7+50									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	1850	242	351	380.9	0.50	0.38	361.44	381.31
Base	100	2170	274	411	381.7	0.58	0.37	382.25	382.04
Overtopping									
Max. Calc.	500	3000	329	470	383.3	0.93	0.51	384.20	383.79

GENERAL PLAN & ELEVATION
MAIN STREET OVER TRIBUTARY TO BIG MUDDY RIVER
SECTION 10-00009-00-BR
VILLAGE OF ROYALTON
STATION 10+00