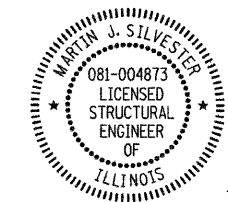


GENERAL NOTES

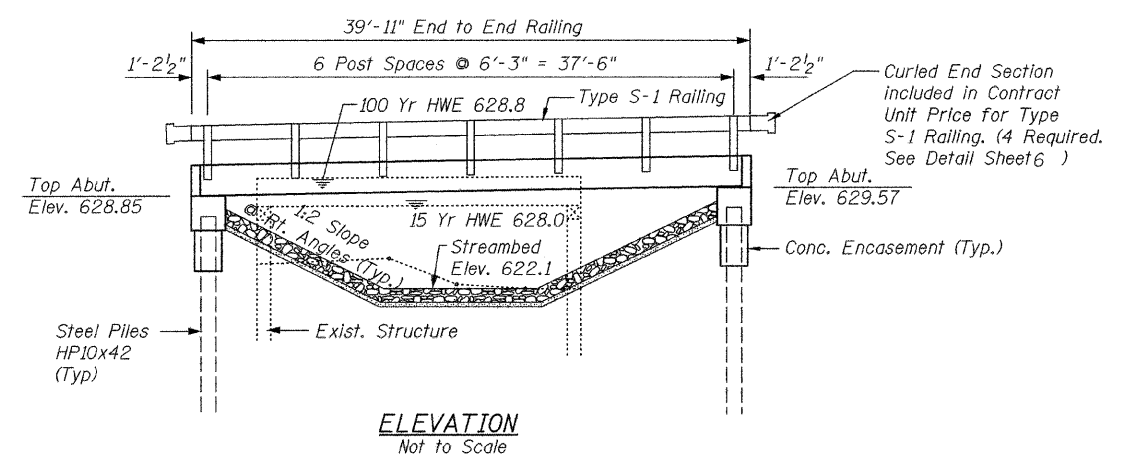
- The contractor shall drive (2) test piles of the nominal required bearing specified in production locations at substructures specified or approved by the engineer before ordering the remainder of the piles.
- Boring data is shown in the special provisions only as a guide to the bidders in estimating soil conditions that may be encountered.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See special provisions.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the engineer.
- Reinforcement bars designated (E) shall be epoxy coated.

This structure has been designed to be stable for scour conditions in accordance with the FHWA Technical Advisory - T 5140.23, "Evaluating scour at Bridges" and hydraulic engineering circular 18 - Evaluating Scour at Bridges.

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 the requirements of the current AASHTO - Standard Specifications for Highway Bridges.



Martin J. Silvester 02-15-10
MARTIN J. SILVESTER, S.E.
LICENSE EXP. DATE 11-30-10



DESIGN STRESSES:

SUBSTRUCTURE
f_y = 60,000 p.s.i. (Reinforcement)
f'_c = 3,500 p.s.i.

SUPERSTRUCTURE
f_y = 60,000 p.s.i. (Reinforcement)
f'_c = 4,500 p.s.i.

DESIGN LOADING
HL-93

DESIGN SPECIFICATIONS
2007 LRFD AASHTO 4th Edition

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		302	302
Removal of Existing Structures	L. Sum		1	1
Structure Excavation	Cu. Yd.		75	75
Concrete Structures	Cu. Yd.		19.7	19.7
Concrete Encasement	Cu. Yd.		3.4	3.4
Precast Concrete Bridge Slab	Sq. Ft.	1048		1048
Reinforcement Bars, Epoxy Coated	Pound		2770	2770
Steel Railing, Type S-1	Foot	80		80
Furnishing Steel Piles, HP10x42	Foot		160	160
Driving Piles	Foot		160	160
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1

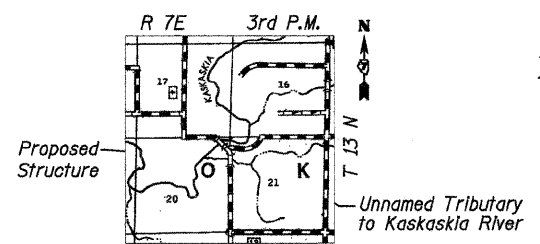
WATERWAY INFORMATION

Drainage Area = 3.5 Sq. Mi. - Pr. Low Grade Elev. = 629.19 @ Sta. 13+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	868	94	142	628.0	1.8	0.5	629.8	628.5
Base	100	1527	94	180	628.8	1.9	1.3	630.7	630.1
Overtopping									
Max. Calc.	500	2107	94	180	629.4	1.8	3.4	631.2	632.8

UNNAMED TRIBUTARY TO KASKASKIA RIVER
BUILT 20__ BY
COLES COUNTY
NORTH OKAW TOWNSHIP
SEC. 07-09123-00-BR
STATION 15+00 PROJECT NO. BR05-0029 (287)
STR. NO. 015-3424 LOADING HL-93

LETTERING FOR NAME PLATE
LOCATE ON THE SE WINGWALL



GENERAL PLAN & ELEVATION
TR 16A OVER UNNAMED TRIBUTARY TO KASKASKIA RIVER
SECTION 07-09123-00-BR
STATION 15+00
COLES COUNTY
STRUCTURE NO. 015-3424

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR16A	07-09123-00-BR	COLES	11	4
CONTRACT NO. 95624				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

THE UPCHURCH GROUP, INC.