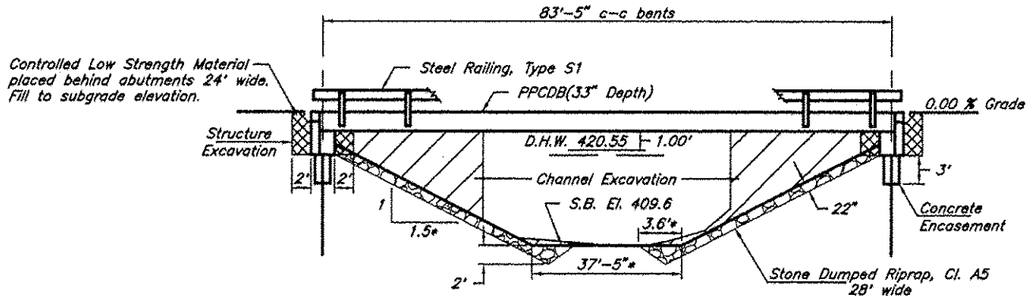
B.M.– Nail in Power Pole
23' Rt Station 15+67
Assumed Elev. 425.00

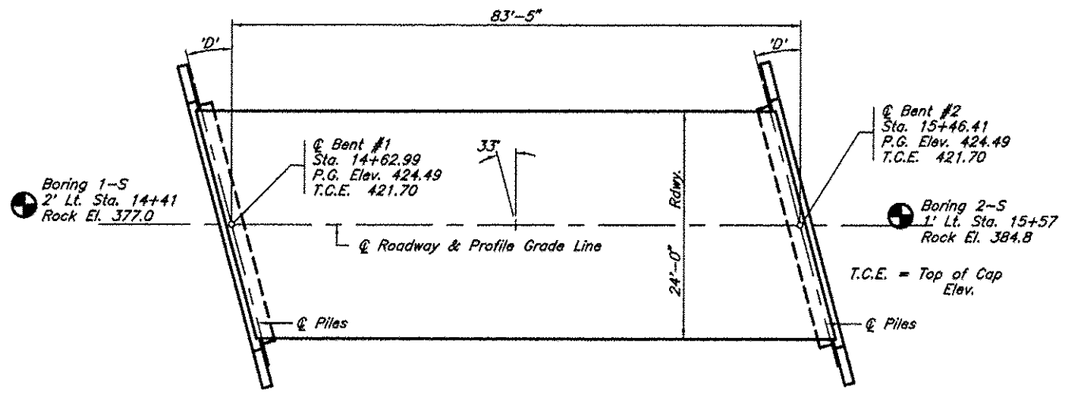
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 308	06-04122-00-BR	FRANKLIN	12	3
PROJECT NO. BROS-055(53)		CONTRACT NO. 99307		



* Normal to Channel

ELEVATION

Existing Structure – Precast reinforced concrete deck beams on closed concrete pile bent abutments. 22.8' wide x 58.8' long



PLAN

Skew Angle "D" = 33° Right Forward

GENERAL NOTES

1. Steel H piles shall meet AASHTO M270 Grade 50 specifications.
2. See special provisions for boring logs.
3. A Corrosion inhibitor, as covered in the Standard Specifications, shall be used in the precast prestressed concrete deck beams.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub. Piers	Sub. Abuts.	Total
Channel Excavation	Cu. Yds.			244	244
Stone Dumped Riprap, Cl. A5	Tons			186	186
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.			138	138
Concrete Structures	Cu. Yds.			29.6	29.6
Concrete Encasement	Cu. Yds.			3.4	3.4
P.P. Conc. Dk. Bm. 33" Dp.	Sq. Ft.	2,026			2,026
Reinforcement Bars	Pound			3,304	3,304
Steel Railing, Type S1	Foot	172			172
Furnishing Steel Piles HP10X57	Foot			440	440
Driving Piles	Foot			440	440
Name Plates	Each			1	1
Controlled Low-Strength Material	Cu. Yds.			24.3	24.3

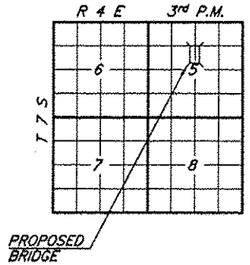
PILE DATA (2-ABUTS.)

Type & Size : HP10X57
Nominal Required Bearing : 313 kips
Factored Resistance Available : 172 kips
Estimated Length : 47 Feet Bent #1, 41 Feet Bent #2
Number Required : 10

EWING CREEK
SEC. 06-04122-00-BR BUILT 20__
CAVE TOWNSHIP
FRANKLIN COUNTY
LOADING HL-93
STR. NO. 028-3407

LETTERING FOR NAME PLATE

Locate Name Plate at Southeast Corner of Bridge (See Sheet 8)



LOCATION SKETCH

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 type of structure and comply with the requirements of the current AASHTO LRFD Specifications.

Zeyn B. Uzman
S.E. 081-4745
Expires Nov. 30, 2012

LICENSED STRUCTURAL ENGINEER
ZEYN UZMAN 4745
STATE OF ILLINOIS

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications and all applicable interims.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface

SEISMIC DATA

Soil Site Class = D
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.777
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.328
Seismic Performance Zone (SPZ) = 3

WATERWAY INFORMATION

Drainage Area = 17.84 Sq. Mi. Low Grade Elev. = 422.4 At Sta. 20+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	3,700	508.9	588.6	420.55	0.97	0.00	421.52	420.55
Base	100	6,040	555.4	654.7	421.53	2.21	0.92	423.74	422.45
Overtopping	±190	6,920		656.1	421.79		2.70		424.49
Max. Calc.	500								

$Q_{(100)}$
Over Road Flow (Sq Ft): Exist. 620.1
Note: Deck elevation used for overtopping to allow for future raising of the approaches

GENERAL PLAN & ELEVATION
TOWNSHIP ROUTE 308 (HANAGAN ROAD)
EWING CREEK
SECTION 06-04122-00-BR
FRANKLIN COUNTY
STRUCTURE NO. 028-3407