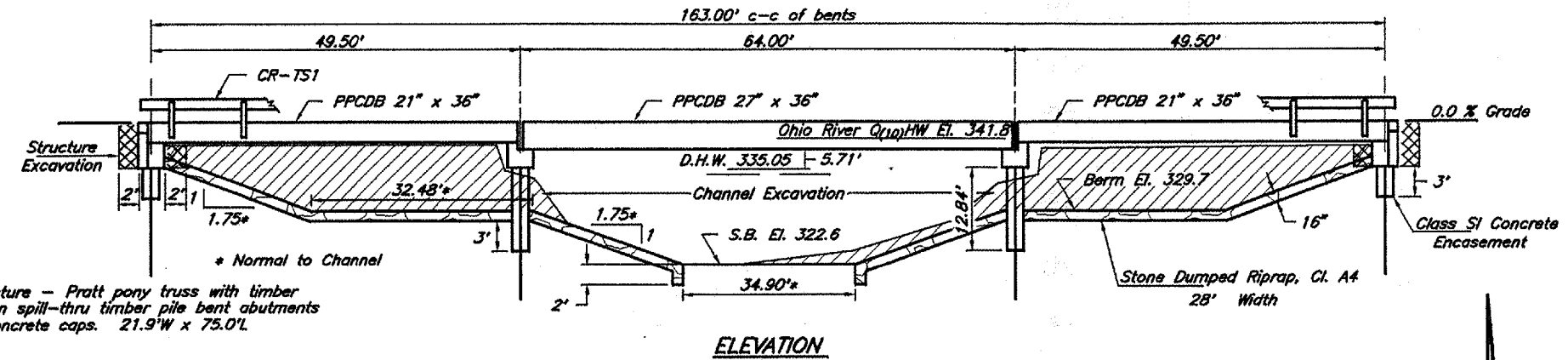


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 137	99-01146-00-BR	POPE	11	3
PROJECT NO. BROS-151(16)		CONTRACT NO. 99210		

B.M. - Top of backwall on northwest corner of east abutment. Elev. 341.20 (Approx. USGS)



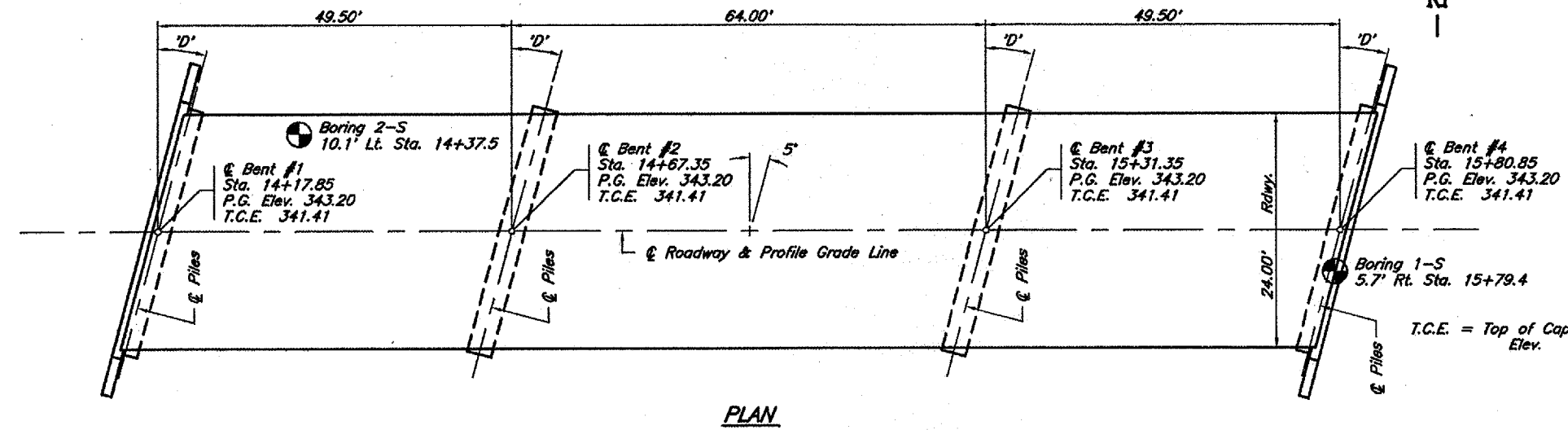
Existing Structure - Pratt pony truss with timber deck on spill-thru timber pile bent abutments with concrete caps. 21.9'W x 75.0'L

GENERAL NOTES

1. Metal Shell piles shall meet ASTM A 252 Grade 3 specifications.
2. Test Piles shall be driven to 110% of the Nominal Required Bearing indicated in the pile data.
3. The Contractor shall drive one test pile, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
4. See special provisions for boring logs.
5. 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.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each				1
Concrete Structures	Cu. Yds.		13.2	16.8	30.0
P.P. Conc. Dk. Bm. 21" Dp.	Sq. Ft.	2396			2396
P.P. Conc. Dk. Bm. 27" Dp.	Sq. Ft.	1534			1534
Steel Railing, Type S1	Foot	328			328
Reinforcement Bars	Pound		1426	1840	3266
Furnishing Metal Pile Shells 12"	Foot		865	548	1413
Driving and Filling Shells	Foot		865	548	1413
Test Pile Metal Shells	Each		1		1
Concrete Encasement	Cu. Yds.		13.4	2.1	15.5
Name Plates	Each			1	1
Channel Excavation	Cu. Yds.				1765
Stone Dumped Riprap, Class A4	Tons				428
Structure Excavation	Cu. Yds.				21



Skew Angle "D" = 5' Left Forward

PILE DATA (2-PIERS)

Type & Size : Metal Shell - 12" x 0.179" walls
 Nominal Required Bearing : 252 kips
 Allowable Resistance Available : 84 kips
 Estimated Length : 70 Feet Bent #2, 89 Feet Bent #3
 Number Required : 12 (Includes 1 Test Pile located in Bent #3)

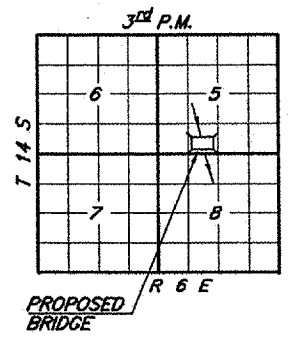
PILE DATA (2-ABUTS.)

Type & Size : Metal Shell - 12" x 0.179" walls
 Nominal Required Bearing : 216 kips
 Allowable Resistance Available : 72 kips
 Estimated Length : 56 Feet Bent #1, 81 Feet Bent #4
 Number Required : 8

BAY CREEK
 SEC. 99-01146-00-BR BUILT 20____
 ROAD DISTRICT NO. 1
 POPE COUNTY
 LOADING HS20
 STR. NO. 076-3092

LETTERING FOR NAME PLATE

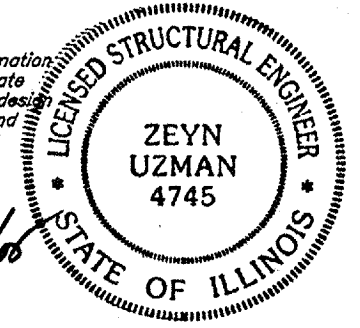
Locate Name Plate at southwest corner of Bridge (See Std. CN)



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 style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

Zeyn B. Uzman
 S.E. #81-4745
 Expires Nov. 30, 2008



DESIGN SPECIFICATIONS

2003 AASHTO Standard Specifications - 17th ed.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 13.0%
 Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Drainage Area = 215.06 Sq. Mi. Low Grade Elev. = 335.32		At Sta. 10+00				
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E.	Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	15	9,725	581.0* 1,052.0	335.05	1.18 0.32	336.23 335.37
Base	100	14,463	698.0* 1,312.5	336.85	0.15 0.89	337.00 337.74
Overtopping						
Max. Calc.	500					

*Over road flow area - Exist. Q(15) 1,602.0 Q(100) 3,009.0

GENERAL PLAN & ELEVATION
 TOWNSHIP ROUTE 1377
 BAY CREEK
 SECTION 99-01146-00-BR
 POPE COUNTY
 STATION 14+99.35