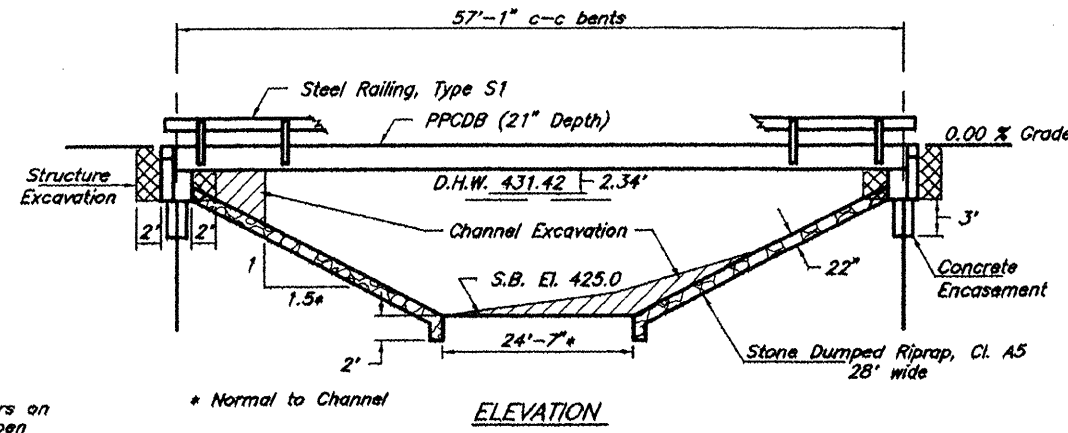


B.M. - RR Spike in Telephone Pole  
 16' Lt. Station 15+37  
 Assumed Elev. 435.00

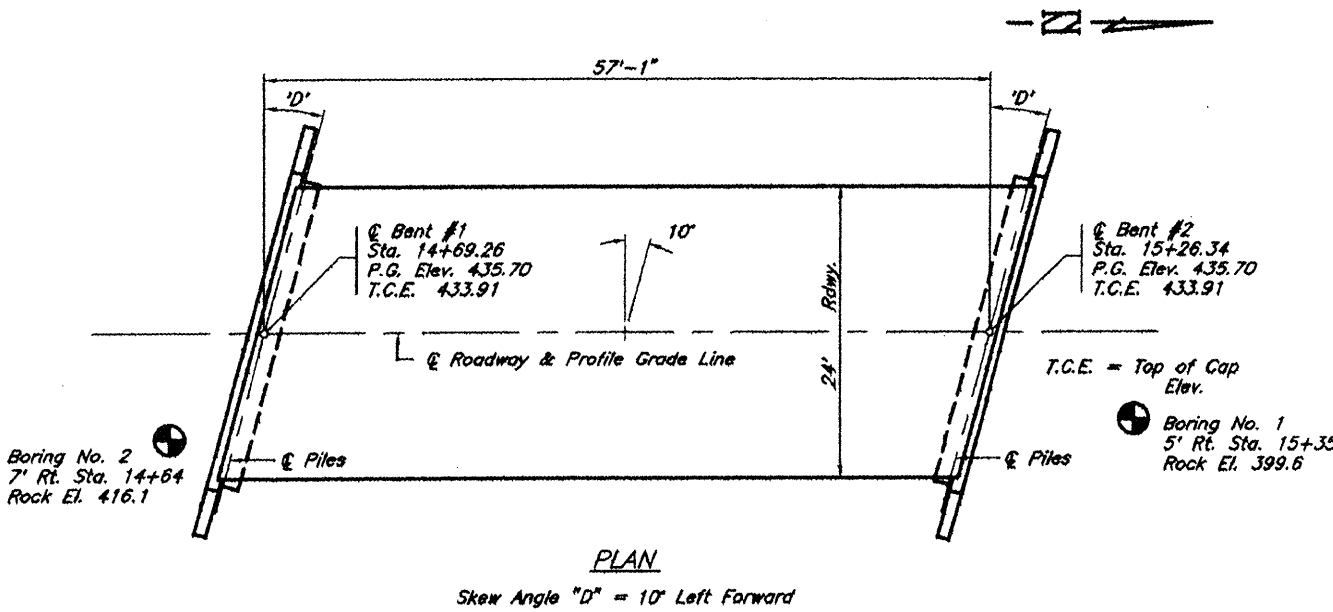
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 9901	06-01186-00-BR	UNION	10	3
PROJECT NO. ARA-BRS-0181(04B)			CONTRACT NO. 99352	



Existing Structure - Timber deck with steel stringers on closed timber pile bent abutments and an open timber pile bent pier. 20.1' W x 50.2' L.

\* Normal to Channel

ELEVATION



PLAN

Skew Angle "D" = 10° Left Forward

GENERAL NOTES

- Steel H piles shall meet AASHTO M270 Grade 50 specifications.
- Test Piles shall be driven to 110% of the Nominal Required Bearing indicated in the pile data.
- The Contractor shall drive one test pile, 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 Standard Specifications, shall be used in the precast prestressed concrete deck beams.

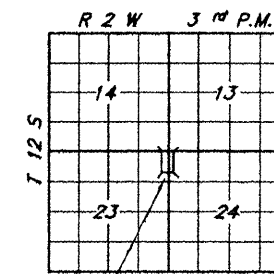
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Channel Excavation	Cu. Yds.			56	56
Stone Dumped Riprap, Class A5	Tons			142	142
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.			64	64
Concrete Structures	Cu. Yds.			16.8	16.8
Concrete Encasement	Cu. Yds.			2.7	2.7
P.P. Conc. Dk. Bm. 21" Dp.	Sq. Ft.	1,392			1,392
Reinforcement Bars	Pound			2,252	2,252
Steel Railing, Type S1	Foot	118			118
Furnishing Steel Piles HP10X42	Foot			172	172
Driving Piles	Foot			172	172
Test Pile Steel HP10X42	Each			1	1
Pile Shoes	Each			8	8
Name Plates	Each			1	1

GREEN CREEK  
 SEC. 06-01186-00-BR BUILT 20  
 COUNTY UNIT ROAD DISTRICT  
 UNION COUNTY  
 LOADING HL-93  
 STR. NO. 091-3229

LETTERING FOR NAME PLATE

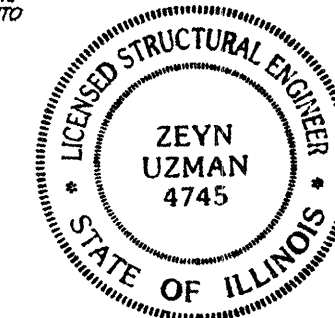
Locate Name Plate at Southeast Corner of Bridge (See Std. CN)



LOCATION SKETCH

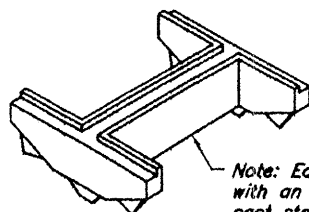
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the type of structure and comply with the requirements of the current AASHTO LRFD Specifications.

Zeyn B. Uzman  
 S.E. #81-4745  
 Expires Nov. 30, 2010



PILE DATA (2-ABUTS.)

Type & Size : HP10X42  
 Nominal Required Bearing : 335 kips  
 Factored Resistance Available : 167 kips  
 Estimated Length : 19 Feet Bent #1, 32 Feet Bent #2  
 Number Required : 8 (Includes 1 Test Pile located in Bent #2)



Note: Each pile shall be provided with an "APF HardBite" point or cast steel alternate, of the proper size, subject to approval of the Engineer.

PILE SHOES

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

Seismic Performance Category (SPC) = B  
 Bedrock Acceleration Coefficient (A) = 15.1%  
 Site Coefficient (S) = 1.5

WATERWAY INFORMATION

		Drainage Area = 2.311 Sq. Mi.		Low Grade Elev. = 435.70		At Sta. 15+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	30	2,030	227.2 221.6	431.42	0.62 0.45	432.04	431.87
Base	100	2,680	278.2 268.9	432.49	0.79 0.74	433.28	433.23
Overtopping	±472	3,616		318.8		2.22	435.70
Max. Calc.	500						

GENERAL PLAN & ELEVATION  
 FAU ROUTE 9901 (KRATZINGER HOLLOW RD)  
 GREEN CREEK  
 SECTION 06-01186-00-BR  
 UNION COUNTY  
 STRUCTURE NO. 091-3229