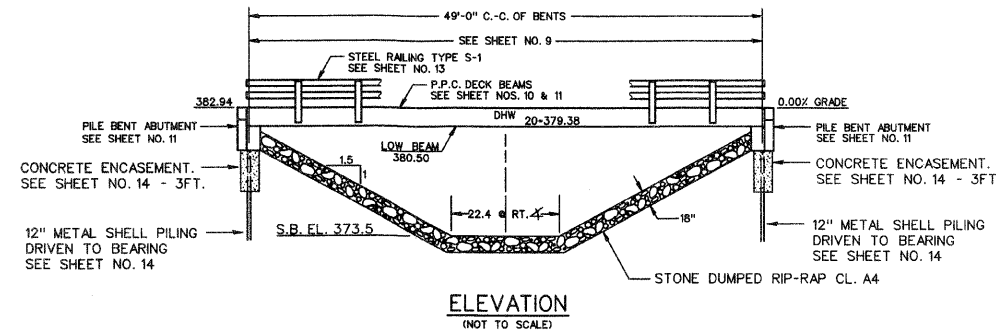


ROUTE	SECTION	COUNTY	TOWNSHIP	TOTAL SHEETS	SHEET NUMBER
T.R. 51	04-01182-00-BR	UNION	SEC. 31, T11S, R1W	15	7
JOB NO. C-99-049-04			PROJECT NO. BROS-181 (26)		
RHINE ROAD			CONTRACT NO. 99216		

B.M. - RAILROAD SPIKE SET IN SOUTH SIDE POWER POLE ON NORTH SIDE OF RHINE ROAD ± 300' SOUTHWEST OF MAIN BRIDGE. STA. 7+10, 25' RT. (ELEV. - 377.12)

EXISTING STRUCTURE - STA. 10+06, 6' LT., 26' SPAN, 15' WIDTH, SALVAGE - CONTRACTOR TO SALVAGE STEEL I-BEAM STRINGERS AND DELIVER TO UNION COUNTY HIGHWAY DEPARTMENT IN JONESBORO, ILLINOIS.

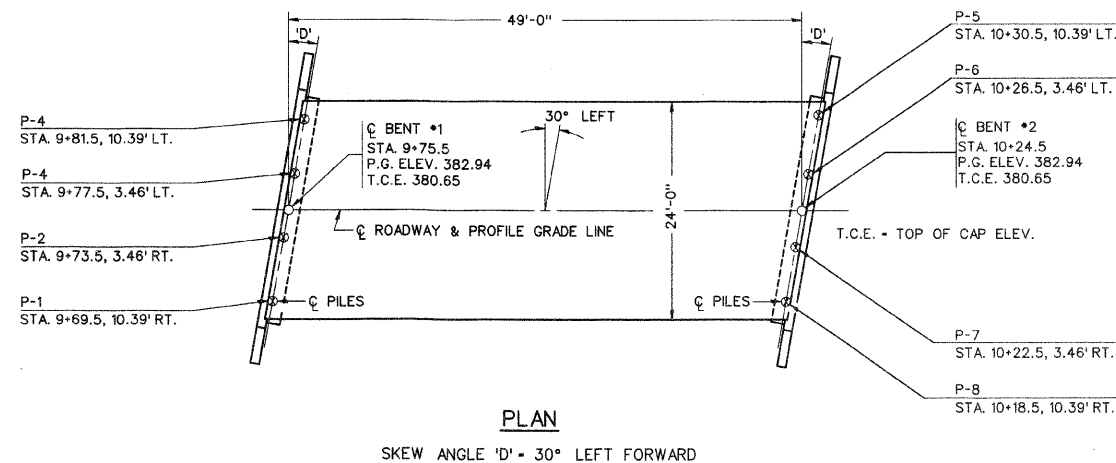


**GENERAL NOTES**

1. THE CONTRACTOR SHALL DRIVE 2 TEST PILES, AS SPECIFIED, IN A PERMANENT LOCATION AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINING PILES.
2. SEE SHEET 15 FOR BORING LOGS.
3. AFTER DECK BEAMS HAVE BEEN SET, THE DECK SURFACE SHALL BE INSPECTED. A WATERPROOFING MEMBRANE SYSTEM AND A BITUMINOUS CONCRETE WEARING SURFACE MAY BE REQUIRED TO PROVIDE A SMOOTH UNIFORM RIDING SURFACE. PAYMENT FOR THIS WORK, IF REQUIRED, WILL BE MADE BY A CHANGE ORDER TO THE CONTRACT.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB.		TOTAL
			PIERS	ABUTS	
REMOVAL OF EXISTING STRUCTURES	EACH				1
STONE DUMPED RIP-RAP, CLASS A-4	TON				300
CONCRETE STRUCTURES	CU. YD.			21.4	21.4
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ. FT.	1200			1200
STEEL RAILING, TYPE S-1	FOOT	100			100
REINFORCEMENT BARS	POUND			2,620	2,620
FURNISHING METAL PILE SHELLS 12"	FOOT			360	360
DRIVING AND FILLING SHELLS	FOOT			360	360
TEST PILE METAL SHELLS	EACH			2	2
NAME PLATES	EACH	1			1
CONCRETE ENCASUREMENT	CU. YD.			2.1	2.1



**PILE NOTES**

1. THE METAL SHELL PILES SHALL BE ACCORDING TO ASTM A 252 GRADE 3.
2. THE TEST PILES SHALL BE DRIVEN TO 110 PERCENT OF THE NOMINAL REQUIRED BEARING INDICATED IN THE PILE DATA INFORMATION.

**PILE DATA (2-ABUTS.)**

TYPE & SIZE: METAL SHELL - 12IN. DIA. X 0.25 IN. WALLS.  
NOMINAL REQUIRED BEARING: 240 KIPS.  
ALLOWABLE RESISTANCE AVAILABLE: 80 KIPS.  
ESTIMATED LENGTH: 60 FEET EACH.  
NUMBER REQUIRED: 8 (INCLUDES 1 TEST PILE IN EACH BENT)

**SEISMIC DATA**

SEISMIC PERFORMANCE CATEGORY (SPC) = 0.15  
BEDROCK ACCELERATION COEFFICIENT (A) = B  
SITE COEFFICIENT (S) = 1.5

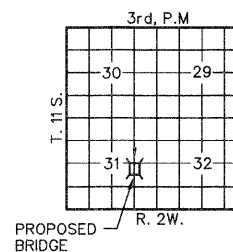
**LOADING HS20 - 44**

ALLOW 25\*/SQ. FT. FOR FUTURE WEARING SURFACE.

**DESIGN SPECIFICATIONS**

2002 AASHTO STANDARD SPECIFICATIONS - 17th ED.

A TRIBUTARY TO CLEAR CREEK  
SEC.04-01184-00-BR BUILT 200...  
TR-51-RHINE ROAD  
UNION COUNTY  
LOADING HS20  
STR. NO. 091-3227



**LETTERING FOR NAME PLATE**

LOCATE NAME PLATE AT SOUTHWEST CORNER OF BRIDGE (SEE SHEET NO. 13)

**LOCATION SKETCH**

**WATERWAY INFORMATION**

DRAINAGE AREA = 2.62 SQ. MI. LOW GRADE ELEV. = 375.8 @ STA. 6+00										
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.	NAT. EXIST.	PROP. H.W.E.	NAT. EXIST.	PROP. EXIST.	PROP.	HEAD - FT.	HEADWATER EL.
DESIGN	20	1741	165	181.4	378.25	3.32	1.08	381.57	379.33	
BASE	100	2601	165	201.5	378.72	2.64	1.11	381.36	379.83	
OVERTOPPING										
MAX. CALC.	500	3432								

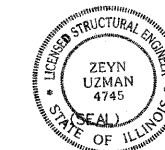
**INDEX OF SHEETS**

- 1 GENERAL PLAN AND ELEVATION
- 2 P.P.C. DECK BEAM SUPERSTRUCTURE  
24' ROADWAY - 27" BEAMS - 50' SPAN - 30° SKEW LEFT
- 3 P.P.C. DECK BEAM DETAILS  
24' ROADWAY - 27" X 36" BEAMS
- 4 P.P.C. DECK BEAM DETAILS  
24' ROADWAY - 27" X 48" BEAMS
- 5 P.P.C. DECK BEAM - PILE BENT ABUTMENT  
24' ROADWAY - 27" BEAMS - 30° SKEW LEFT
- 6 STEEL RAILING, TYPE S1
- 7 NAME PLATE
- 8 PILE DETAILS

**STRUCTURAL CERTIFICATION**

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE REVISED STANDARD DETAIL SHEETS AND/OR SPECIAL COMPONENT SHEETS INCLUDED WITH THE STANDARD BRIDGE DETAIL SHEETS ARE STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS AND COMPLY WITH THE REQUIREMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

DATE  
ZEYN B. UZMAN  
S.E. #81-4745  
EXPIRES NOV. 30, 2010



**GENERAL PLAN & ELEVATION**

TR 51-RHINE ROAD  
OVER TRIBUTARY TO CLEAR CREEK  
SECTION 04-01182-00-BR  
UNION COUNTY  
STATION 10+00