

ROUTE	SECTION	COUNTY	TOT. SHTS.	SHT.
T.R. 259	04-03114-00-BR	JEFFERSON	14	3

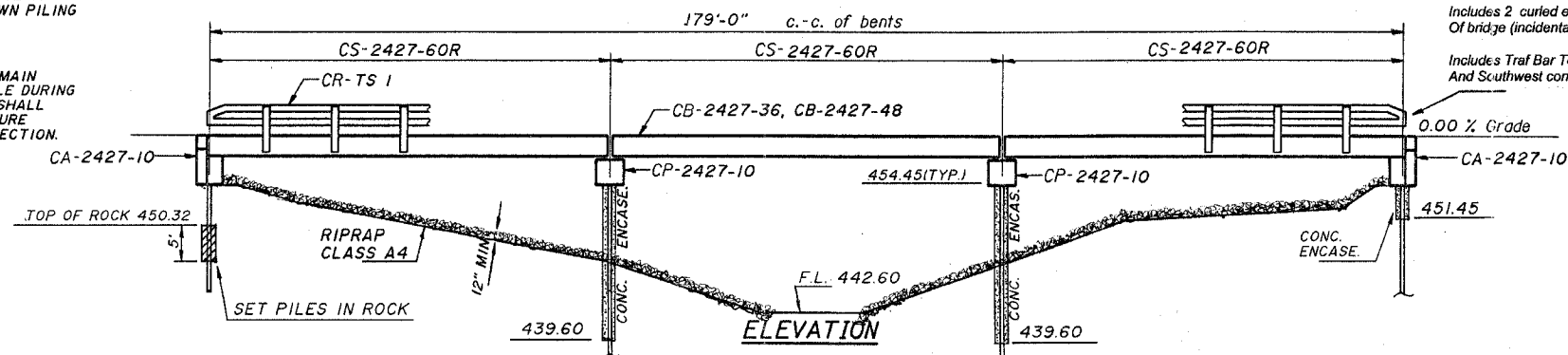
CASNER TOWNSHIP ROAD DISTRICT

CONTRACT 95470

B.M. SPIKE IN 18" LEANING TREE 50'  
S.E. OF EXIST. TRUSS BRIDGE EL. 455.28

Existing Structure-  
62' LONG STEEL TRUSS BRIDGE ON  
CONCRETE ABUTMENTS, UNKNOWN PILING

Salvage-  
EXISTING BRIDGE SHALL REMAIN  
IN PLACE AS LONG AS POSSIBLE DURING  
CONSTRUCTION. CONTRACTOR SHALL  
THEN REMOVE ENTIRE STRUCTURE  
FROM SITE AT ENGINEER'S DIRECTION.



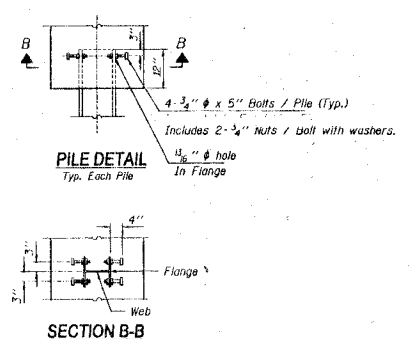
Includes 2 curled end sections at Northwest and Southeast corners  
Of bridge (incidental to contract, see detail below)

Includes Traf Bar Term Ty 5A and Traf Bar Term Ty 1 at Northeast  
And Southwest corners of bridge (2 each)

**GENERAL NOTES**

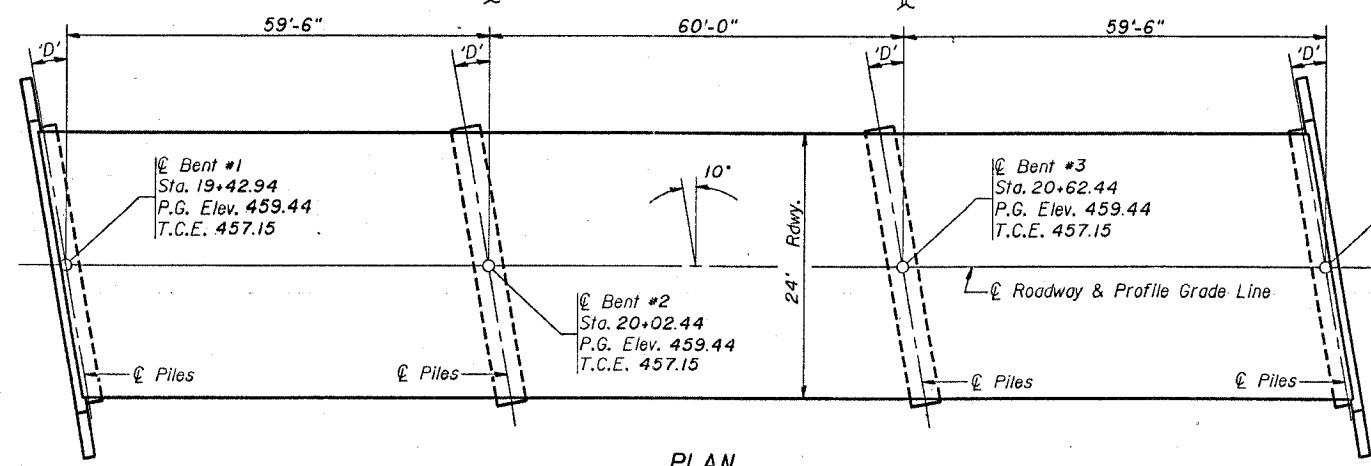
- The Contractor shall drive 1 test piles, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
- See Special Provisions for boring logs.
- Waterproofing membrane shall not be applied.
- Layout of slope protection systems may be varied in the field to suit ground conditions as directed by the Engineer.

**STUD SHEAR CONNECTORS DETAIL**



**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each	1			1
Bituminous Concrete Surface Course, Class I	Ton				
Waterproofing Membrane System	Sq. Yd.				
Concrete Structures	Cu. Yd.		12.00	18.20	30.20
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	4,320			4,320
Steel Bridge Rail, Type SM	Foot				
Steel Railing, Type S-1	Foot	360			360
Reinforcement Bars	Pound		1,120	1,980	3,100
Furnishing Steel Piles HP 10x42	Foot			192	192
Driving Steel Piles	Foot				423
Furnishing Steel Piles HP 12x53	Foot		275		275
Test Piles Steel HP 12x53	Each		1		1
Name Plates	Each			1	1
Concrete Encasement	Cu. Yd.		20.2	2.0	22.2
Stone Dumped Riprap, Class A4	Ton				674
Setting Piles in Rock	Each			4	4
Stud Shear Connectors	Each		48		48



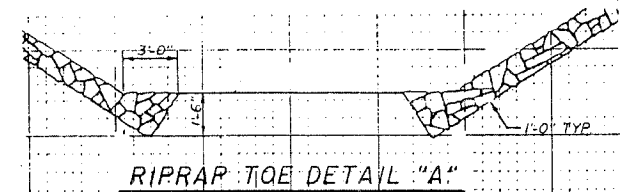
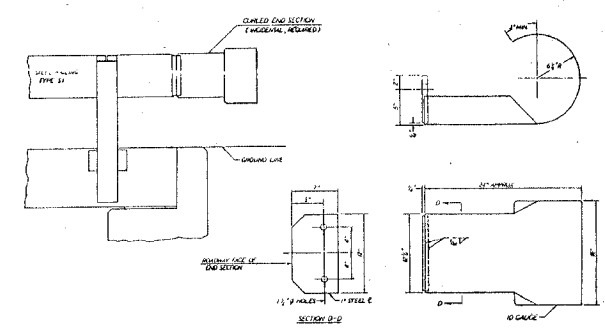
**PLAN**

Skew Angle 'D' = 10° Right Forward

**BORING LOCATIONS**

- EAST END PROPOSED BRIDGE
- 19' WEST EXISTING BRIDGE & EXIST. ROAD
- 18' EAST EXISTING BRIDGE & EXIST. ROAD

**CURLED END SECTION DETAIL**



**PILE DATA (2-PIERS)**

Type HP 12x53  
Capacity-Refusal  
Estimated Length Bent 2-21.5'; Bent 3-29.2'  
Number Required-12 (Includes 1 Test Pile located in Bent #3)

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

Type HP 10x42  
Capacity-Refusal  
Estimated Length Bent 1-11'; Bent 4-37'  
Number Required-8

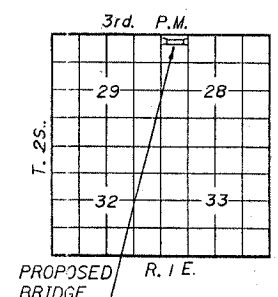
**DESIGN SPECIFICATIONS**

1996 AASHTO, 1997 and 1998 Interims  
HS-20-44 Loading  
Load Factor Design

JEFFERSON COUNTY  
RAYSE CREEK  
SEC. 04-03114-00-BR BUILT 2006  
PROJECT NO. BROS-081(54)  
LOADING HS20-44  
STRUCTURE NO. 041-3735

**LETTERING FOR NAME PLATE**

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



**LOCATION SKETCH**

**SEISMIC DATA**

SEISMIC PERFORMANCE CATEGORY(S) PC1 B  
BEDROCK ACCELERATION COEFF. (A) 0.098g  
SITE COEFFICIENT(S) 1.5

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 "A.A.S.H.T.O. Standard Specifications For Highway Bridges".

Steven W. Magness 2-27-06  
Illinois Structural Eng. NO. 6064  
Exp. 11-30-06

Complies with 2002 AASHTO  
Specifications for Seismic Design  
of Bridges

**WATERWAY INFORMATION**

Drainage Area = 45.9 sq. mi.		Low Grade Elev. = 451.42 @ Sta. 25+00				
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	15	4473	392	1136	455.56	
Base	100	6720	392	1266	456.52	0.05 0.16
Overtopping						
Max. Calc.	500					

**CONSTRUCTION PERMITS**

THE REQUIREMENTS OF THE  
DIVISION OF WATER RESOURCES  
HAVE BEEN FULFILLED IN ACCOR-  
DANCE WITH STATEWIDE  
PERMIT NO. 2.

**GENERAL PLAN & ELEVATION**

TWP. ROUTE 259  
OVER RAYSE CREEK  
SECTION 04-03114-00-BR  
JEFFERSON COUNTY  
STATION 20+32.44

**NOTE**  
THE ARTICLE OR SECTION NUMBERS REFERENCING THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS SHOWN ON THE STANDARD BRIDGE PLAN SHEETS INCLUDED WITH THE CONTRACT PLANS SHOULD BE INTERPRETED AS REFERRING TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS (ADOPTED JANUARY 1, 2002) AS SHOWN IN THE "ARTICLE/SECTION NUMBER TABLE" BELOW.

PREVIOUS NO.	CURRENT NO.
504.06	504.06
505.04	505.04
706.05	1006.05
706.32	1006.32
760.07	1060.07

