

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
229	01-06128-00-BR	HAMILTON	14	5
ILLINOIS FED. ROAD DIST. NO. 9		PROJECT	BROS-065(37)	
L.E.C. JOB # H041010M		SULLIVAN BRANCH		

323 W. 3RD ST.  
P.O. BOX 160  
MT. CARMEL, IL  
62863  
PHONE:  
(618)-262-8651  
FAX:  
(618)-263-3327

405 W. STATE ST.  
SUITE 1  
PRINCETON, IN  
47170  
PHONE:  
(812)-386-7611  
FAX:  
(812)-385-2812



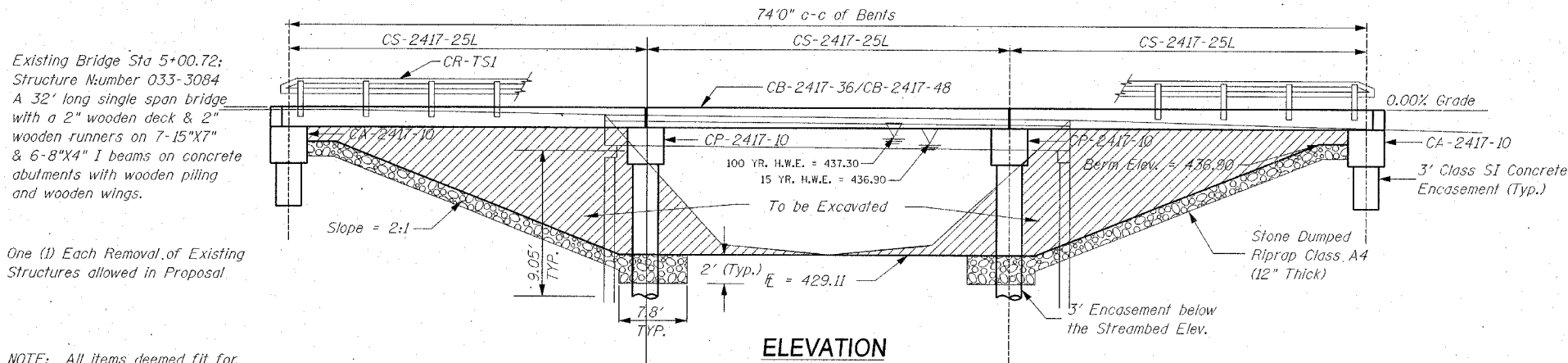
PROFESSIONAL  
LAND SURVEYING  
FIRM  
048-00082  
PROFESSIONAL  
ENGINEERING  
CORPORATION  
184-00087



AARON M. MEFFORD  
NAME  
SIGNATURE  
DATE  
11-30-07  
EXPIRES

TOWNSHIP ROUTE 229  
SULLIVAN BRANCH  
HAMILTON COUNTY, ILLINOIS

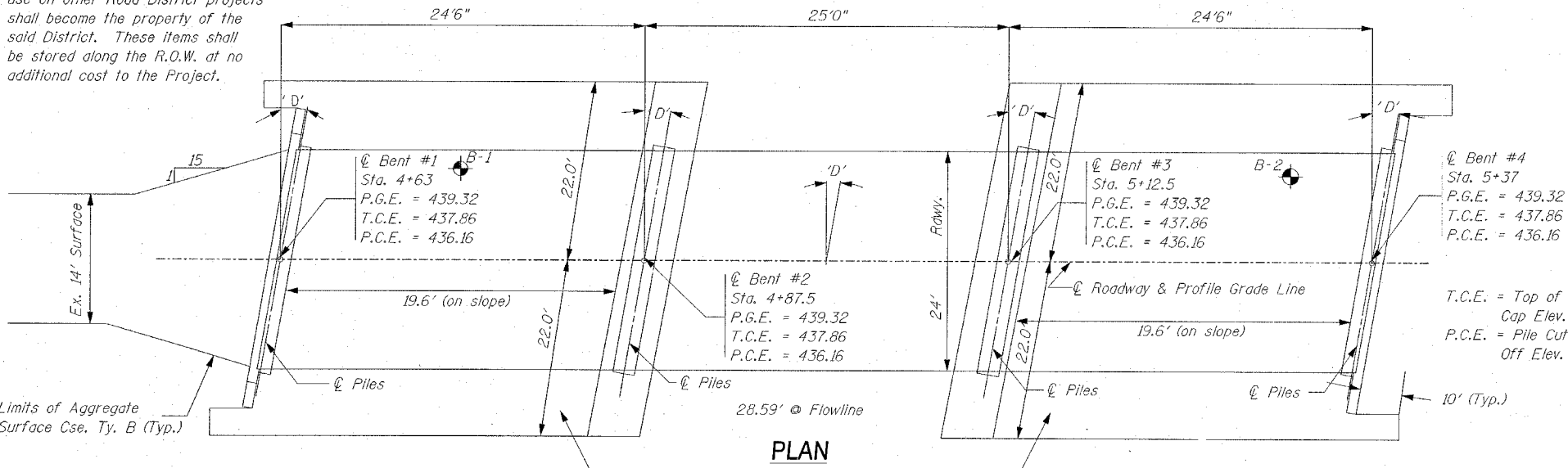
B.M.- I.P. +4+23.09, 12.67' LT = 438.22



Existing Bridge Sta 5+00.72:  
Structure Number 033-3084  
A 32' long single span bridge  
with a 2" wooden deck & 2"  
wooden runners on 7-15"x7"  
& 6-8"x4" I beams on concrete  
abutments with wooden piling  
and wooden wings.

One (1) Each Removal of Existing  
Structures allowed in Proposal

NOTE: All items deemed fit for  
use on other Road District projects  
shall become the property of the  
said District. These items shall  
be stored along the R.O.W. at no  
additional cost to the Project.



**GENERAL NOTES**

- Class SI Concrete shall be used throughout except in the deck beams.
- The Contractor shall drive 1 test pile, as specified, in permanent locations as directed by the Engineer before ordering the remaining piles.
- See Special Provisions for boring logs.
- A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for Precast Prestressed Concrete Deck Beams.
- The Bit. Conc. Surf. Cse. Class I and the waterproofing membrane system shown in these plans shall not be provided.
- 2-3/4"φ shear studs will be required per pile which will be encased within the concrete cap.
- The HP piles shall be oriented with the strong axis bending in the longitudinal direction

Item	Super	Sub. Piers	Abuts.	Total
Removal of Existing Structures	Each			1
Bit. Conc. Surf. Cse. Class I	Ton			
Waterproofing Membrane System	Cu.Yd.			
Concrete Structures	Cu.Yd.	14.8	16.6	30.80
P.P. Conc. Dk. Bm. 17" Dp.	Sq.Ft.	1800		1800
Steel Railing, Type SI	Foot	150		150
Reinforcement Bars	Pound	1860	2220	4080
Furnishing Steel Piles HP12X53	Foot	264	264	528
Driving Steel Piles	Foot	264	264	528
Test Pile Steel HP12X53	Each	1	1	2
Name Plates	Each	1	1	2
Concrete Encasement	Cu.Yd.	6.2	2.1	8.3
Shear Studs	Each	16	16	32

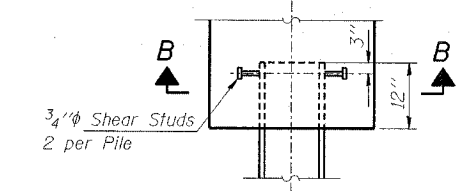
NOTE: Four (4) Each Curled End Sections required. Item to be incidental to the Steel Railing.

**INDEX OF SHEETS**

- General Plan & Elevation
- Standard CS-2417-25L
- Standard CB-2417-36
- Standard CB-2417-48
- Standard CA-2417-10
- Standard CP-2417-10
- Standard CR-TS1
- Standard CN
- Standard CX-1

**PILE DATA (2-PIERS)**

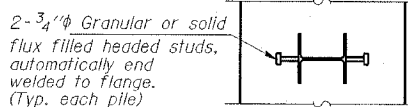
Type: Steel Piles HP10X42  
Capacity: Drive to Refusal  
Estimated Length: 33 Feet/Pile  
Number Required: 8



PILE DETAIL  
Typ. Each Pile

**PILE DATA (2-ABUTS)**

Type: Steel Piles HP10X42  
Capacity: Drive to Refusal  
Estimated Length: 33 Feet/Pile  
Number Required: 8

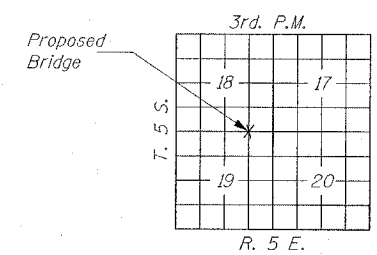


SECTION B-B

STATION 5+00  
SULLIVAN BRANCH  
SEC. 01-06128-00-BR BUILT 20  
PROJECT BROS-065(37)  
HAMILTON COUNTY  
LOADING HS 20-44  
STR. NO. 033-3299

**LETTERING FOR NAME PLATE**

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



LOCATION SKETCH

**WATERWAY INFORMATION**

Drainage Area = 5.1 sq.mi. Low Grade Elev. = 436.32 at Sta. X+XX

Flood	Freq. Yr.	Opening Sq Ft		Natural H.W.E.	Head-Ft		Headwater EL.		
		Exist.	Prop.		Exist.	Prop.	Exist.	Prop.	
Design	15	1240	*143	**369	436.90	2.51	0.43	439.41	437.33
Base	100	1910	**143	**397	437.30	7.03	0.92	444.33	438.22
Overtopping									
Max. Calc.	500	2440							

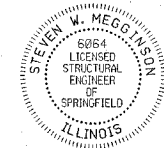
- \* Area Over Road = 336 Sq Ft
- \*\* Area Over Road = 641 Sq Ft
- \*\* Area Over Road = 216 Sq Ft
- \*\* Area Over Road = 451 Sq Ft

**ARTICLE/SECTION NO. REFERENCE TABLE**

Previous No.	Current No.
504.06	504.06
505.04	505.04
706.05	1006.05
706.32	1006.32
760.07	1060.07
STD 2340	STD 631026

**SEISMIC DATA**

Seismic Performance Category (SPC) = B  
Bedrock Acceleration Coefficient (A) = 0.10g  
Site Coefficient (S) = 1.0



Steven W. Mefford 1-6-06  
ILLINOIS STRUCTURAL NO. 6064  
Complies with 2002 AASHTO  
Specifications for Seismic Design  
of Bridges.

Expires 11-30-06

**DESIGN SPECIFICATIONS**

2002 AASHTO  
HS 20-44 Loading. Load Factor Design.