

**SEISMIC DATA**  
Seismic Performance Category (SPC) = B  
Bedrock Acceleration Coefficient (A) = 0.091g  
Site Coefficient (S) = 1.2

*Steven W. Meigs* 2/10/08  
ILLINOIS STRUCTURAL NO. 6064  
Expires 11-30-08  
Complies with 2002 AASHTO  
Specifications for Seismic Design  
of Bridges.

**PILE DATA (WEST PIER)**

Type: Steel Piles HP10X42  
Nominal Required Bearing: 335 Kips  
Allowable Resistance Available: 112 Kips  
Estimated Length: 62 Feet/Pile  
Number Required: 4

**PILE DATA (WEST ABUT)**

Type: Steel Piles HP10X42  
Nominal Required Bearing: 150 Kips  
Allowable Resistance Available: 50 Kips  
Estimated Length: 30 Feet/Pile  
Number Required: 4

**PILE DATA (EAST PIER)**

Type: Steel Piles HP10X42  
Nominal Required Bearing: 335 Kips  
Allowable Resistance Available: 112 Kips  
Estimated Length: 65 Feet/Pile  
Number Required: 4

**PILE DATA (EAST ABUT)**

Type: Steel Piles HP10X42  
Nominal Required Bearing: 150 Kips  
Allowable Resistance Available: 50 Kips  
Estimated Length: 45 Feet/Pile  
Number Required: 4

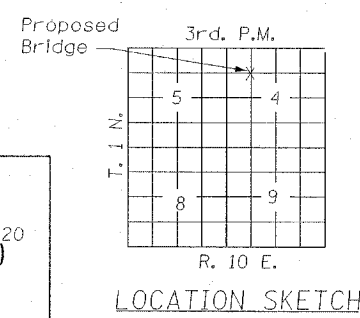
**NOTE:**  
The Article or Section Numbers Referencing the Standard Specifications for Road and Bridge Construction as shown on the Standard Bridge Plan Sheets included with the contract plans should be interpreted as referring to the current edition of the Standard Specification (Adopted January 1, 2007) as shown in the "Article/Section No. Reference Table."

**ARTICLE/SECTION NO. REFERENCE TABLE**

Previous No.	Current No.
504.06	504.06
505.04	505.04
1006.05	1006.05
1006.32	1006.32
1060.07	1060.07
STD 631026	STD 631026

STATION 5+00  
SUGAR CREEK  
SEC. 06-02116-00-BR BUILT 20  
PROJECT NO. BROS-047(030)  
EDWARDS COUNTY  
LOADING HS 20-44  
STR. NO. 024-3135

**LETTERING FOR NAME PLATE**  
Locate Name Plate at the Southwest  
Corner of the Bridge (See Sd. CN)



**WATERWAY INFORMATION**

Drainage Area = 26.9 Sq. Mi. Low Grade Elev. = 404.7 At Sta. 9+00

Flood	Freq. Yr.	0 C.F.S.	Opening Sq.Ft. Exist.	Opening Sq.Ft. Prop.	Natural H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	3413	373	443.7	406.85	0.62	0.49	407.47	407.34
Base	100	5394	387.5	459.8	407.1	1.30	0.98	408.4	408.08
Overtopping									
Max. Calc.	500	7009							

- GENERAL NOTES**
- 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 Special Provisions, shall be used in the concrete for Precast Prestressed Concrete Deck Beams.
  - The Hot-Mix Asphalt Surf. Cse. and the Waterproofing Membrane System shown in these Plans shall not be provided.

Item	Unit	Super	Sub. Piers	Abuts.	Total
Removal of Existing Structures	L. Sum				1
Hot Mix Asphalt Surf. Cse.	Tons				
Waterproofing Membrane System	Sq.Yds.				
Concrete Structures	Cu.Yds.		14.8	16.6	31.4
P.P. Conc. Dk. Bm. 17" Dp.	Sq.Ft.	1920			1920
Steel Railing, Type S1	Lin.Ft.	160			160
Reinforcement Bars	Lbs.		1860	2220	4080
Furnishing Steel Piles HP10X42	Lin.Ft.	508	300	808	808
Driving Piles	Lin.Ft.	508	300	808	808
Name Plates	Each		1	1	1
Concrete Encasement	Cu.Yds.		9.3	2.1	11.4
Stud Shear Connectors	Each		16	16	32

**NOTE:** Four (4) Each Curled End Sections required. Item to be included in Steel Railing SEE DETAILS SHEET 2

**GENERAL PLAN & ELEVATION**  
TOWNSHIP ROUTE 31  
OVER SUGAR CREEK  
SECTION 06-02116-00-BR  
EDWARDS COUNTY  
STATION 5+00