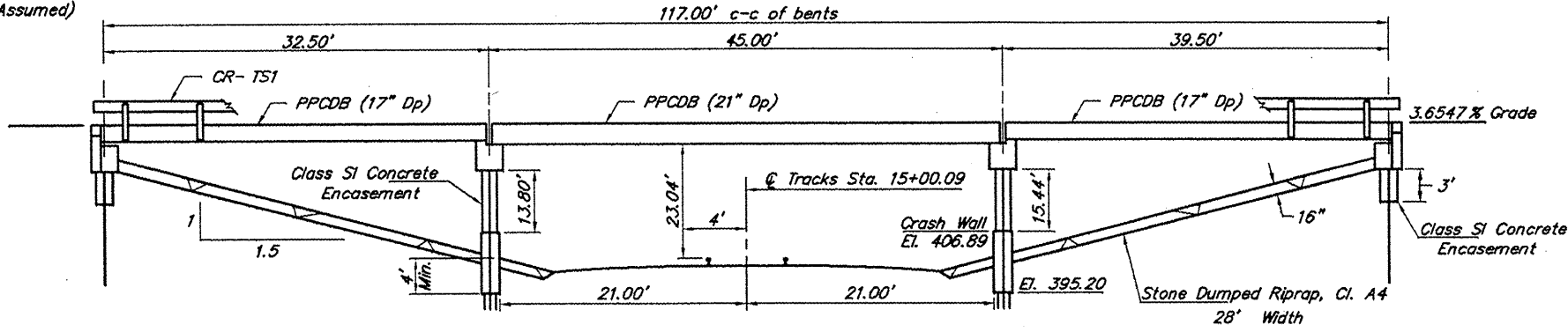


B.M. - RR Spike in fence post  
41' Lt. Sta. 13+96  
Elev. 420.00 (Assumed)

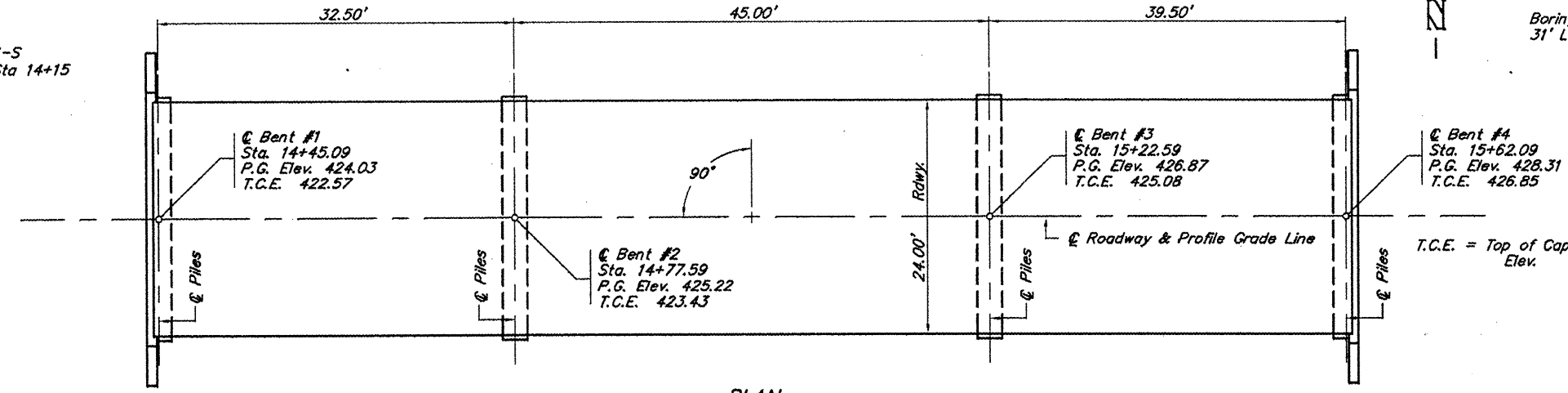
| ROUTE                    | SECTION        | COUNTY | TOTAL SHEETS       | SHEET NO. |
|--------------------------|----------------|--------|--------------------|-----------|
| TR 80                    | 00-01198-00-BR | MASSAC | 13                 | 3         |
| PROJECT NO. BROS-127(19) |                |        | CONTRACT NO. 99354 |           |



**ELEVATION**

Existing Structure - Six span timber deck on timber stringers and timber pile bent piers and abutments - 17.4'W x 113.5'L

Boring 1-S  
17' Lt Sta 14+15



**PLAN**

**GENERAL NOTES**

1. Metal Shell piles shall meet ASTM A 252 Grade 3 specifications.
2. Test Piles shall be driven to 110% of the Nominal Required Bearing indicated in the pile data.
3. The Contractor shall drive one test pile, as specified, in a permanent location as directed by the Engineer.
4. See Special Provisions for boring logs.
5. 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. |       |
| Removal of Existing Structures   | Each            |       |       |        | 1     |
| <b>Concrete Structures</b>       | <b>Cu. Yds.</b> |       | 69.4  | 16.2   | 85.6  |
| P.P. Conc. Dk. Bm. 17" Dp.       | Sq. Ft.         | 1748  |       |        | 1748  |
| P.P. Conc. Dk. Bm. 21" Dp.       | Sq. Ft.         | 1078  |       |        | 1078  |
| Steel Railing, Type S1           | Foot            | 236   |       |        | 236   |
| Reinforcement Bars               | Pound           |       | 4824  | 1720   | 6544  |
| Furnishing Metal Pile Shells 12" | Foot            |       | 369   | 248    | 617   |
| Driving Piles                    | Foot            |       | 369   | 248    | 617   |
| Test Pile Metal Shells           | Each            |       | 1     |        | 1     |
| Concrete Encasement              | Cu. Yds.        |       | 12.7  | 2.1    | 14.8  |
| Name Plates                      | Each            |       |       | 1      | 1     |
| Stone Dumped Riprap, Class A4    | Tons            |       |       | 250    | 250   |

**PILE DATA (2-PIERS)**

Type & Size: Metal Shell 12" dia. x 0.25" walls  
Nominal Required Bearing: 306 kips  
Allowable Resistance Available: 102 kips  
Estimated Length: 41 Feet  
Number Required: 10 (Includes 1 Test Pile located in Bent #3)

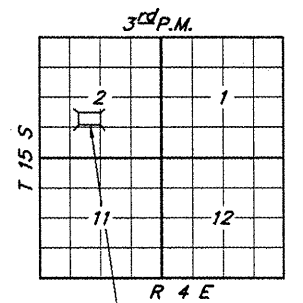
**PILE DATA (2-ABUTS.)**

Type & Size: Metal Shell 12" dia. x 0.25" walls  
Nominal Required Bearing: 186 kips  
Allowable Resistance Available: 62 kips  
Estimated Length: 31 Feet  
Number Required: 8

CN/IC RAILROAD  
SEC. 00-01198-00-BR BUILT 20  
COUNTY UNIT ROAD DISTRICT  
MASSAC COUNTY  
LOADING HS20  
STR. NO. 064-3138

**LETTERING FOR NAME PLATE**

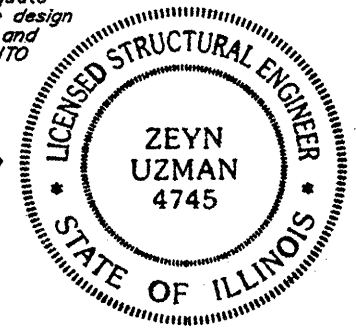
Locate Name Plate at Southwest Corner of Bridge (See Std. CN)



**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 style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

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



**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications - 17<sup>th</sup> ed.

**LOADING HS20-44**

Allow 25#/sq. ft. for future wearing surface.

**SEISMIC DATA**

Seismic Performance Category (SPC) = B  
Bedrock Acceleration Coefficient (A) = 17.0%  
Site Coefficient (S) = 1.5

GENERAL PLAN & ELEVATION  
TOWNSHIP ROUTE 80  
CN/IC RAILROAD  
SECTION 00-01198-00-BR  
MASSAC COUNTY  
STATION 15+03.59