

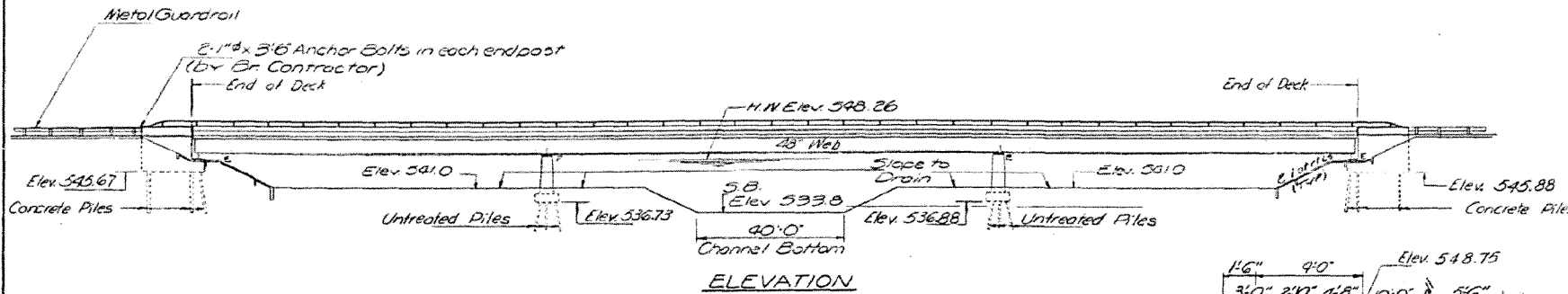
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------|---------|--------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 128 | 101 BR | SHELBY | 28 | 8 |
| | | | | 15 SHEETS |

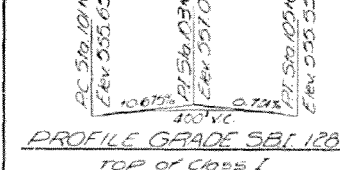
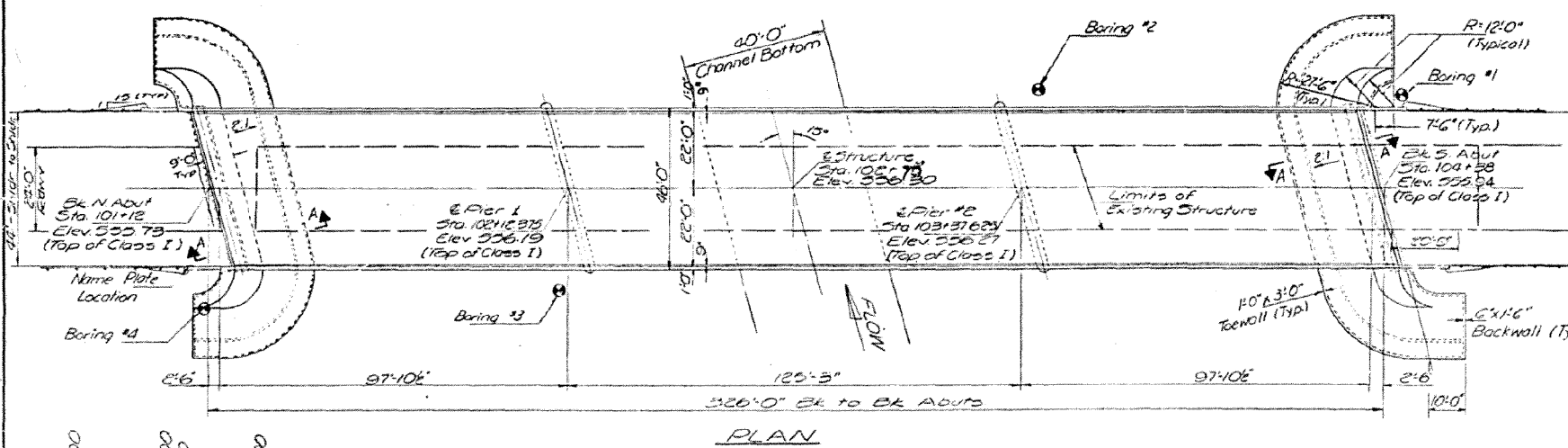
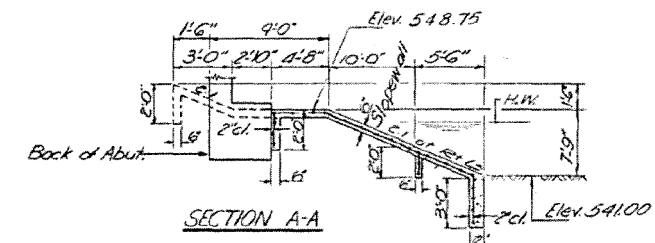
B.M. #1 Chiseled Square top north Pier #2 E. Side of exist bridge. Lt Sta 102+30 Elev 549.58
Exist Structure: Built as S.B.I. Rte 128 Sec. 101 B Sta 102+95 in 1928 Superstr. is a truss 125'0" span length and 4 spans RC Deck Girder 50'0" each span the width of Superstr. is 24'8" out to out of water table. Substr. 2 R.C. solid piers and 2 R.C. multiple-column piers abutts. The contractor shall remove the exist structure after detour completion. No Salvage.

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
Fasteners shall be high strength bolts. Bolts #2; open holes 3/8", unless otherwise noted.
Calculated weight of Structural Steel - 46,965.0 pounds.
The best lead silica chromate paint system shall be used for shop and field painting of Structural Steel.
Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports.
Slope walls shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 Sq. ft.
Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall drive two concrete test piles, one each at North and South Abut. and also shall drive two timber test piles, one each at Pier #1 and #2, all in a permanent location as directed by the Engineer before ordering the remainder of piles.
The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Standard Concrete.
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
Limits of Waterproofing Membrane System shall be from North end of slab to South end of slab.
The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the Hanges, webs and splice plates of the steel girders.



STATION 102+75
BUILT 197 BY
STATE OF ILLINOIS
S.B.I. RT. 128 SEC. 101 BR
LOADING HS20
NAME PLATE
(See SBI 2113)



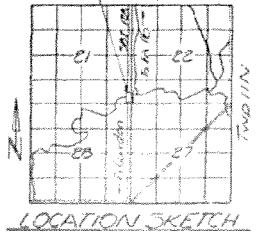
DESIGN STRESSES
fc: 1800 psi Slab
fc: 1400 psi Curb, Parapet & Sub
fc: 2000 psi Rein & Struct.
vs: 75 psi Footings
n=10
Allow Future HS 20 150 ft
Design Specifications 1989 ASDHO
as applicable
LOADING HS20-44

WATERWAY INFORMATION
Drainage Area: 124.5a MI
Present Opening: 2030.5a FT
Required Opening: 2900.5a FT
Proposed Opening: 2900.5a FT
Q100: 12000 cfs
Created Head: 0.66'

TOTAL BILL OF MATERIAL

| Item | Unit | Super | Sub | Total |
|---|----------|--------|-------|--------|
| Biluminous Concrete Surface Course, Class I | Tons | 130 | | 130 |
| Removal of Existing Structures | Each | 1 | | 1 |
| Structure Excavation | Cu Yd. | | 250 | 250 |
| Protective Coat | Sq. Yd. | 260 | | 260 |
| Class A Concrete | Cu Yd. | | 1471 | 1471 |
| Class X Concrete | Cu Yd. | 4490 | 1078 | 5568 |
| Structural Steel | L. Sum | | L.S. | L.S. |
| Stud Shear Connectors | Each | 2862 | | 2862 |
| Aluminum Rolling | Lin. Ft. | 696 | | 696 |
| Reinforcement Bars | Pound | 114010 | 18720 | 132730 |
| Untreated Piles (30" to 45") | Lin. Ft. | | 2660 | 2660 |
| Concrete Piles | Lin. Ft. | | 1176 | 1176 |
| Test Pile Timber | Each | | 2 | 2 |
| Test Pile Concrete | Each | | 2 | 2 |
| Name Plates | Each | 1 | | 1 |
| Slope Wall (6") | Sq. Yd. | | 900 | 900 |
| Waterproofing Membrane System* | Sq. Yd. | 1550 | | 1550 |
| Preformed Joint Sealer (2 1/2") | Lin. Ft. | 48 | | 48 |
| Neoprene Expansion Joint (4") | Lin. Ft. | 47 | | 47 |

*See Special Provisions.
R3E 3rd PM
Prop Reconst



GENERAL PLAN AND ELEVATION
SBI 128 over ROBINSON CREEK
SBI RIE 128 SECTION 101 BR
SHELBY COUNTY
STATION 102+75

DESIGNED: *Staley S. Liu*
CHECKED: *B.R. Fisher*
DRAWN: *R. Guly*
EXAMINED: *July 2, 2011*
PASSED: *W. R. ...*
APPROVED: *R. ...*