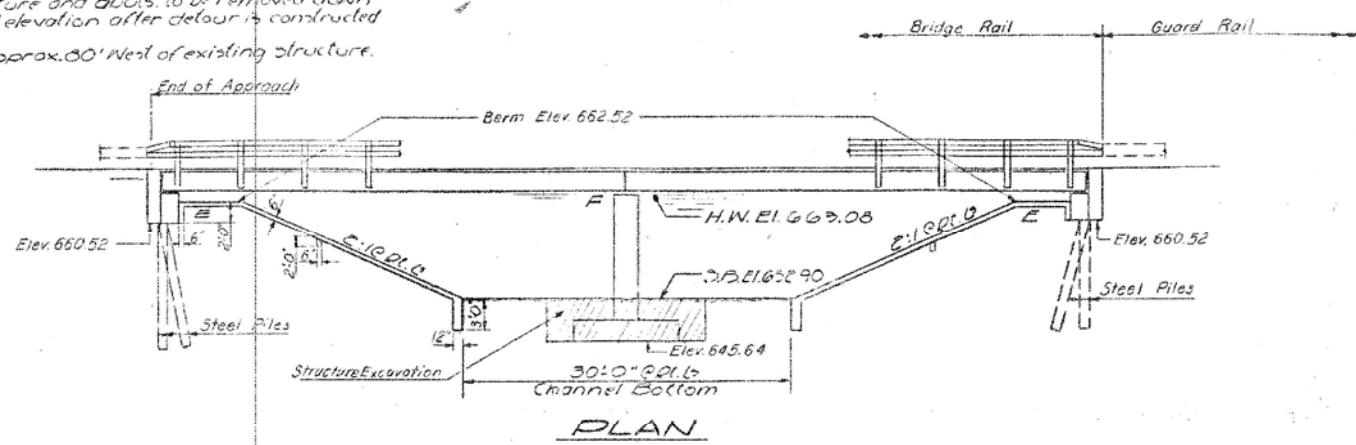


DM - Chiselled 12" N.W. wingwall of bridge  
 21.5' Dc Sta 213+17.7 El. 664.66  
 Exist. Structure Built in 1928 as SBI Dc. 49, Dec 1208  
 Sta. 211+11 Superstructure / Span PC Girder,  
 Substructure - PC Chiselled Abut. on Piles.  
 Superstructure and abut. to be removed down  
 to slope wall elevation after detour is constructed.  
 Traffic detour - Approx. 80' West of existing structure.

STATE OF ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	120BR	VERMILLION	18	8
SHEET NO. 1				
7 SHEETS				



**HORIZ. CURVE DATA**  
 Pt. Sta. 213+17.6  
 $\Delta = 1^\circ 04'$   
 $T = 700'$   
 $R = 75196.6'$   
 $E = 3.25'$   
 $D = 0^\circ 04' 35''$   
 $L = 1400'$

**GENERAL NOTES**

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

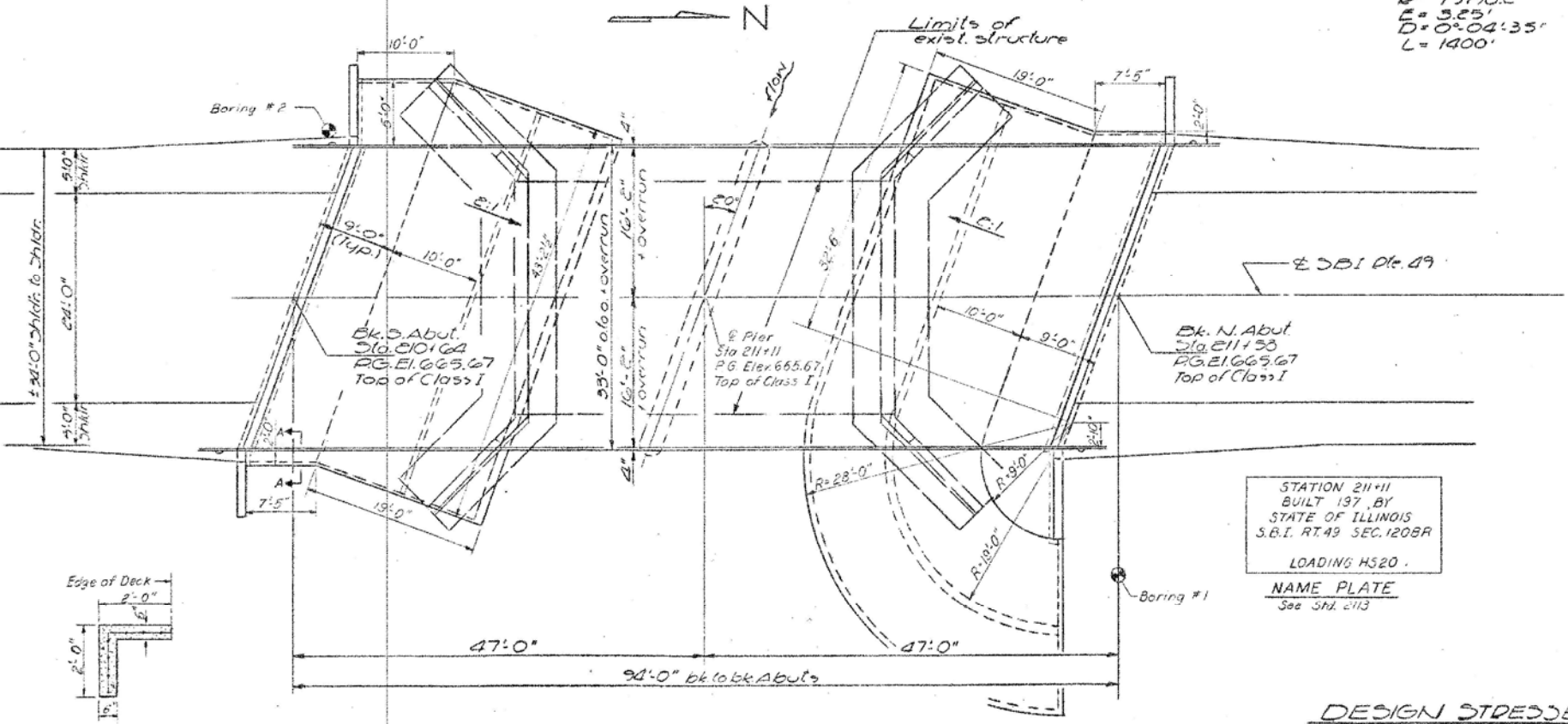
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.

Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.

An alternate strand pattern using Extra High Strength Prestressing strand (270 k.s.i.) is permitted.

The Contractor shall drive one Steel test piles in a permanent location at the N. Abutment as directed by the Engineer before ordering the remainder of piles.

The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specs, except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

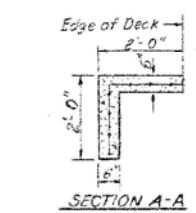


STATION 211+11  
 BUILT 1971 BY  
 STATE OF ILLINOIS  
 S.B.I. RT. 49 SEC. 1208R  
 LOADING H520  
 NAME PLATE  
 See Std. 2113

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course Class I	Tons	41		41
Structure Excavation	Cu. Yds.			293
Class X Concrete	Cu. Yds.	1.6	870	88.6
Precast Prestressed Concrete Deck Beams 21"	Sq. Ft.	2995		2995
Structural Steel	Lbs.	4990		4990
Steel Railing Type N	Lin. Ft.	182		182
Reinforcement Bars	Lbs.	220	8060	8280
Steel H Piles HP 36x36	Lin. Ft.		227	227
Test Piles Steel HP 36x36	Each		1	1
Name Plates	Each			1
Slope Wall 6"	Sq. Yds.			416
Waterproofing Membrane System	Sq. Yds.	334		334
Prefabricated Joint Sealer (2")	Lin. Ft.	72		72
Temporary Bridge Complete	Each			1
Removal of Existing Structures	Each			1

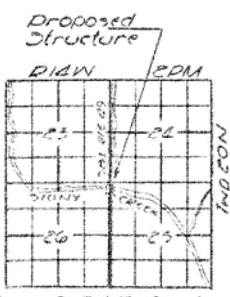
\* Includes removal of existing abutments down to slope wall and removal of existing pavement between new approach slabs.



**DESIGN STRESSES**

**FIELD UNITS**  
 $f_c = 1400 \text{ psi} - \text{Sub}$   
 $f_s = 20,000 \text{ psi} - \text{Reinf.}$   
 $n = 10$

**PRECAST PDESIGNED UNITS**  
 $f_c = 5000 \text{ psi}$   
 $f_s = 4000 \text{ psi}$   
 $f'_c = 600,000 \text{ psi} - 7/8" \text{ Strands}$   
 $f'_s = 175,000 \text{ psi} - 7/8" \text{ Strands}$   
 Allow 2% for future wearing surface  
 Design Specifications  
 1209 AASHO as applicable  
 LOADING H520/68



**GENERAL PLAN & ELEVATION**

SBI RTE 49 OVER  
 STONY CREEK  
 SBI ROUTE 49  
 SECTION 1208R  
 VERMILLION COUNTY  
 STATION 211+11

DESIGNED	R. Mathis	EXAMINED	August 4 1971
CHECKED	James Pence	PASSED	
DRAWN	JAS	APPROVED	
CHECKED	JP		

**WATERWAY INFORMATION**

Drainage Area --- 7150 Acres

Present Opening --- 272 Sq. Ft.  
 Draft Opening --- 487 Sq. Ft.  
 Prop. Opening --- 485 Sq. Ft.  
 Ordinary Water El. 634.0  
 Low Water El. 633.5  
 Q (max) - 2700 cfs  
 Created Head 0.06'

FILE NAME = s:\p1\6380--6395\6346\024\microso\finds\plans\structural\016-EGPE.dgn

For Information Only