

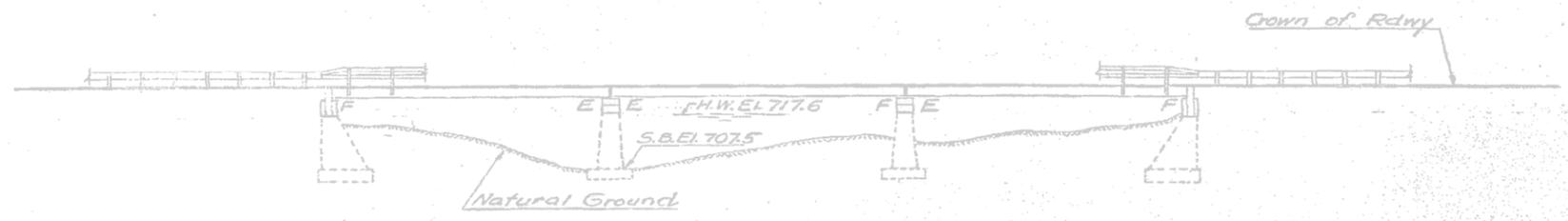
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	121BR	DEWITT	19	12
SHEET NO. 1 6 SHEETS				

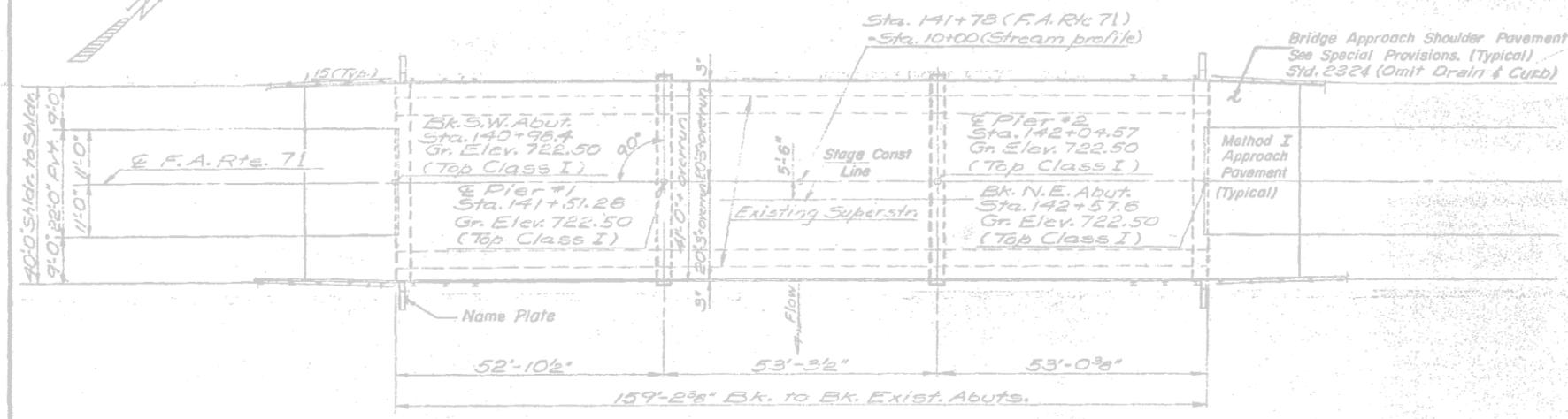
B.M.: T.B.M. #2 chiseled square south west corner Bridge on Hubguard 15.0' Rt. Sta. 140+96.5 Elev. 722.27.
Existing Structure: @ Sta. 141+76 Built in 1928 as S.B.I. Rte. 48 Sec. 121R-B, Widened in 1951. Existing superstructure to be removed and replaced a portion at a time by contractor utilizing stage construction. Existing Abuts. and Piers to be widened to accommodate the new portion of the superstructure. No Salvage.

GENERAL NOTES

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07 (c) of the Standard Specifications and are included in quantity of structural steel.
The basic lead silico chromate paint system shall be used for shop painting of Structural Steel.
Expansion bolts shall consist of self drilling expansion anchors and 3/4" # x 12" hooked bolts.
It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.



ELEVATION



PLAN

STATION 141+76
REBUILT 197 BY
STATE OF ILLINOIS
F.A. RTE. 71 - SEC. 121 BR
PROJECT BR-T-71(18)
LOADING HS20
STR. NO.

Structure Number to be Supplied by District.

NAME PLATE
See Standard 2113
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each			1
Concrete Removal	Cu. Yds.		10	10
Bituminous Concrete Surface Course, C.I.	Tons	71		71
Waterproofing Membrane System	Sq. Yds.	722		722
Expansion Bolts 3/4"	Each		148	148
Class X Concrete	Cu. Yds.	3.7	58.4	62.1
P.P.C. Deck Beams (21")	Sq. Ft.	6476		6476
Steel Railing (Type N)	Lin. Ft.	316		316
Reinforcement Bars	Lbs.	560	6090	6650
Name Plates	Each			1
Portland Cement Mortar Fairing Course	Lin. Ft.	1895		1895
Preformed Joint Sealer (2 1/2")	Lin. Ft.	82		82
Temporary Guard Rail	Lin. Ft.	160		160
Structural Steel	Lbs.	4590		4590

PRESTRESSED UNITS

$f_c = 5000 \text{ psi}$
 $f_{ci} = 4100 \text{ psi (36" Beam), } 4200 \text{ psi (48" Beam)}$
 $f_s = 27000 \text{ psi (8 Strands)}$
 $f_{si} = 189,000 \text{ psi (8 Strands)}$

FIELD UNITS

$f_c = 1400 \text{ psi (sub)}$
 $f_s = 20000 \text{ psi (Reinf.)}$
 $n = 10$

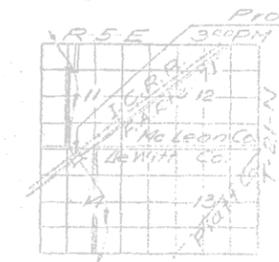
New Constr. Loading HS20-44
Design Specifications 1969 A.A.S.H.T.O. and 1970 & 1971 Interim Specifications.
Allow 25% S.F. for future W.S.

WATERWAY INFORMATION

Drainage Area 71.75 sq. mi.
Character: level, cultivated
Required Clearing (Reinforced) 960 Sq. Ft.
Present Clearing 915 Sq. Ft.
Proposed Opening 960 Sq. Ft.
Ordinary Water El. 706.7
(50 Yr.) Design Water El. 717.2
(100 Yr.) W. El. 717.5
Q_{max} = 3427 cfs

PROPOSED PROFILE F.A. RTE 71

DESIGNED	Sub. F. Adams	EXAMINED	10/11
CHECKED	Jim. J. Adams	PASSED	
DRAWN	P. Barnett	APPROVED	
CHECKED	Jim. J. Adams	DIRECTOR OF HIGHWAYS	



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A. RTE. 71 (S.B.I. RTE. 48) OVER
SALT CREEK
F.A. RTE. 71 SECTION 121 BR
DE WITT COUNTY
STA. 141+78.00