Benchmark: TBM (SE) Top 1st Bolt at S.E. Carrier Bridge in curb holding handrail. Elev. 641.52.

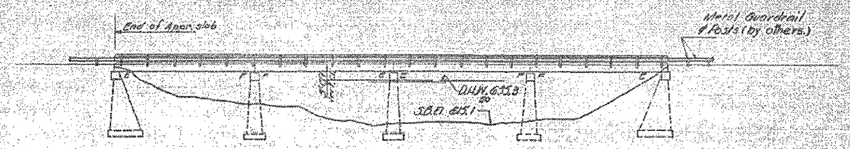
Existing Structure:
Built as S.B.I. Rte. 119, Sec. 115B at Sta. 730+96 in 1932.
4 Span RCDG with Spill Thru Abutments and R.C. Piers.
Superstructure to be removed and replaced utilizing stage construction so as to maintain traffic over the structure at all times.

Existing Structure Number:
092-0065

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 711	116BR	VERMILION	16	6

SHEET NO. / OF SHEETS



ELEVATION

GENERAL NOTES

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.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane Sys. is applied.

Expansion bolts shall consist of self drilling expansion anchors and 3/4" x 12" hooked bolts.

Shoulder transition to wingwall shall be placed with broken concrete.

Stage construction shall be utilized so as to maintain traffic over the structure at all times.

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 507.07(c) of the Standard Specifications and are included in quantity of structural steel.

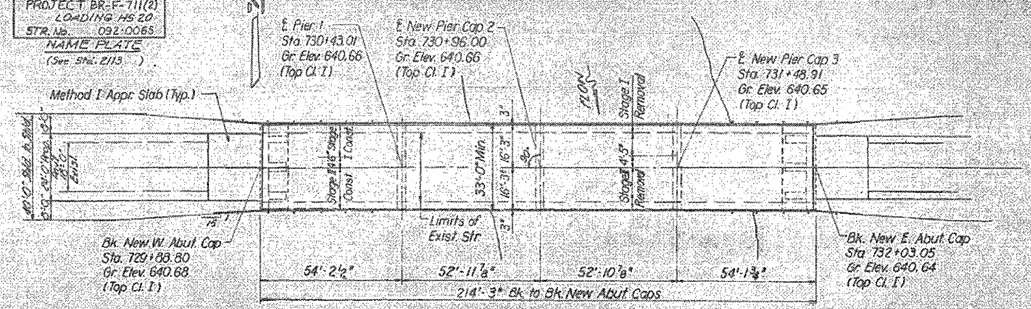
All structural steel shall be shop painted with two coats of basic lead silica chromate paint.

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 broooming. The finished surface shall be free of depressions or high spots with sharp corners.

WATERWAY INFORMATION

Drainage Area 2.85 sq. mi.
Character level, rolling, cultivated
Required Opening (50 yr.) 2350 sq. ft.
Present Opening 2350 sq. ft.
Proposed Opening 2350 sq. ft.
Q_{50} = 10,485 c.f.s.
Q_{100} = 11,870 c.f.s.
$H.W.E._{100}$ = 636.8

STATION 730+96
REBUILT 19 BY
STATE OF ILLINOIS
F.A.R.T. 119 SEC. 116 BR
PROJECT BR-F-711(2)
LOADING HS 20
STR. No. 092-0065
NAME PLATE
(See Std. 2113)



PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course Class I	Tons	87		87
Concrete Removal	Cu. Yds.		17	17
Removal of Existing Superstructures	Each			1
Expansion Bolts (3/4")	Each		158	158
Class A Concrete	Cu. Yds.	17.3	60.9	78.2
Precast Prestressed Concrete Deck Beams	Sq. Ft.	6962		6962
Steel Railing, Type T	Lin. Ft.	223		223
Reinforcement Bars	Lbs.	1020	7290	8310
Structural Steel	Lbs.	4690		4690
Waterproofing Membrane System	Sq. Yds.	130		130
Protective Coat	Sq. Yds.	70		70
Neoprene Expansion Joint (2")	Lin. Ft.	35		35
Name Plates	Each	1		1
Temporary Bridge Rail	Lin. Ft.	218		218
Preformed Joint Sealer (1/2")	Lin. Ft.	66		66
Portland Cement Mortar Fairing Course	Lin. Ft.	210		210
Furnishing Steel H Piles HP 8 x 36	Lin. Ft.		108	108

DESIGN STRESSES

FIELD UNITS

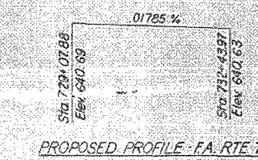
f'_c = 2,400 psi
f_s = 20,000 psi (reinf.)
V_c = 56 psi (dg 1 m. sm.)
n = 9

PRECAST PRESTR. UNITS

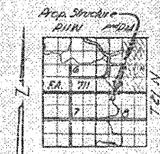
f'_c = 5000 psi
f'_{ci} = 4,000 psi
f_s = 270,000 psi (1/2" Strands)
f_{si} = 189,000 psi (1/2" Strands)

Allow 25 3/4" for Future W.S.
Design Specifications, AASHTO 1977 and 1978 Interim Specifications

LOADING HS 20-44



PROPOSED PROFILE - F.A. RTE. 711 (S.B.I. 119)
(Top Class I)



LOCATION SKETCH

F.A. RT. 711 (SBI 119) OVER
NO. FORK VERMILION RIVER
F.A. RT. 711 SEC. 116 BR
VERMILION COUNTY
STATION 730+96

DESIGNED R. E. Martin
CHECKED Steel T. Desai
DRAWN Shawn Murphy
CHECKED S.J.
RECOMMENDED March 19 1973
PASSED
APPROVED

Revised Feb. 28, 1975 - S.T.D., J.L.P.
Revised Feb. 28, 1979 - R.K.M. & S.A.M. & P.W.S.
Rev. Apr. 17, 1979 R.K.M., S.A.M. & J.A.P.

•POSTING MITIGATION FY2011-3

FILE NAME = c:\pw_work\pwidot\cearlock.jd\d0254134\D70920-sht-plan.dgn	USER NAME = cearlock.jd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	AS-BUILT PLANS (FOR INFORMATION ONLY)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			711	•	VERMILION	10	6
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. 6 OF 10 SHEETS STA. TO STA.			CONTRACT NO. 70920		
	PLOT DATE = 2/28/2011	DATE -	REVISED -					ILLINOIS FED. AID PROJECT		