

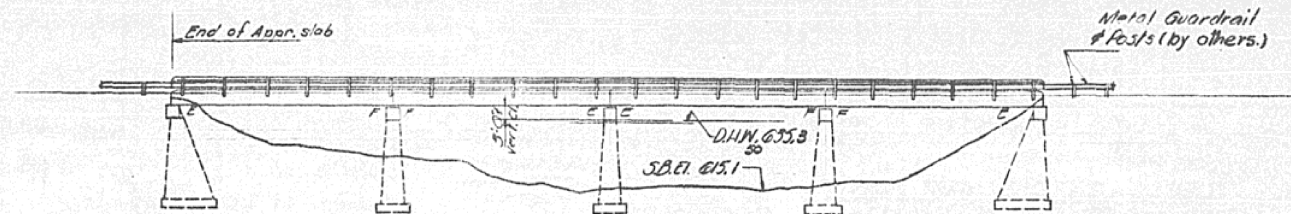
Benchmark: TBM (SE) Top 1st Bolt at S.E. Corner Bridge in curb holding handrail. Elev. 641.52.
 Existing Structure:
 Built as S.B.I. Rte 119, Sec. 116B at Sta. 730+96 in 1932.
 4 Span RCDG with Spill Thru Abutments and R.C. Piers.
 Superstructure to be removed and replaced utilizing stage construction so as to maintain traffic over the structure at all times.
 Existing Structure Number:
 092-0065

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
711	116BR	VERMILION	16	8	8
SHEETS					

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 shaped 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 503.07(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 silico 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 brooming. The finished surface shall be free of depressions or high spots with sharp corners.

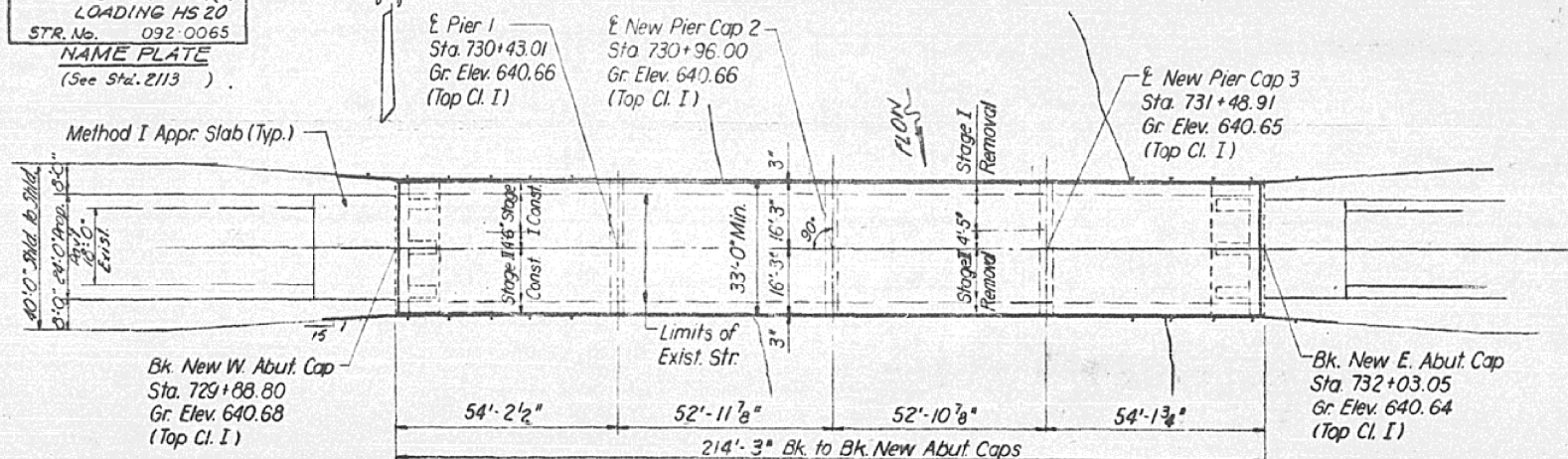


ELEVATION

WATERWAY INFORMATION

Drainage Area 223 sq.m.
 Character level, rolling, cultivated
 Required Opening (50 yd.) 2350 sq.ft.
 Present Opening 2350 sq.ft.
 Proposed Opening 2350 sq.ft.
 Q 50 = 10,445 c.f.s.
 Q 100 = 11,870 c.f.s.
 H.W.C. 100 = 636.3

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



PLAN

FOR INFORMATIONAL
 PURPOSES ONLY

TOTAL BILL OF MATERIAL

Item	Unit	Sub	Total
Bituminous Concrete Surface Course Class I	Tons	87	87
Concrete Removal	Cu. Yds	17	17
Removal of Existing Superstructures	Each	1	1
Expansion Bolts (3/4")	Each	158	158
Class X Concrete	Cu. Yds.	17.3	60.9
Precast Prestressed Concrete Deck Beams	Sq. Ft.	6962	6962
Steel Bailing, Type T	Lin. Ft.	423	423
Reinforcement Bars	Lbs.	1020	7290
Structural Steel	Lbs.	4690	4690
Waterproofing Membrane System	Sq. Yds.	70	70
Protective Coat	Sq. Yds.	70	70
Neoprene Expansion Joint (2')	Lin. Ft.	33	33
Name Plates	Each	1	1
Temporary Bridge Rail	Lin. Ft.	218	218
Preformed Joint Sealer (2')	Lin. Ft.	66	66
Portland Cement Mortar Finishing Course	Lin. Ft.	2110	2110
Furnishing Steel H Piles HP 8 x 36	Lin. Ft.	108	108

DESIGN STRESSES

FIELD UNITS

Rc = 1400 psi
 Fc = 40,000 psi (reinf.)
 Vc = .56 psi (AASHTO)

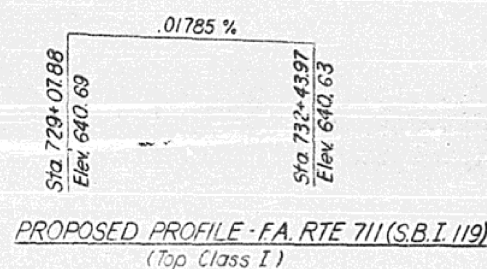
PRECAST PRESTR. UNITS

f'c = 5000 psi
 Fci = 4000 psi
 f's = 270,000 psi (1/2" Strands)
 Fsi = 180,000 psi (1/2" Strands)

Allow 25% for future N.S.
 Design Specifications, AASHTO 1977 and
 1978 Interim Specifications



LOCATION SKETCH



LOADING HS 20-44

DESIGNED	R.K.M.
CHECKED	Suresh T. Desai
DRAWN	S.D.
CHECKED	S.D.

REVISIONS
 1. 10/13/2014
 2. 10/13/2014
 3. 10/13/2014
 4. 10/13/2014
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Revised Feb. 28, 1975 S.T.O. & J.L.A.
 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.

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 Civil Engineering Design
 331 Salem Place, Suite 225
 Fairview Heights, IL 62208
 Phone 618-206-4250

USER NAME = detersbj	DESIGNED - CTW	REVISED -
PLOT SCALE = 0:2.0000 1' = 10'	CHECKED - CDL	REVISED -
PLOT DATE = 1/13/2014	DRAWN - CTW	REVISED -
	DATE - 1/13/2014	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (1 OF 5)
 STRUCTURE NO. 092-0065

SHEET NO. 1 OF 5 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
711	116BR-1	VERMILION	84	64
CONTRACT NO. 70614				

ILLINOIS FED. AID PROJECT

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