

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

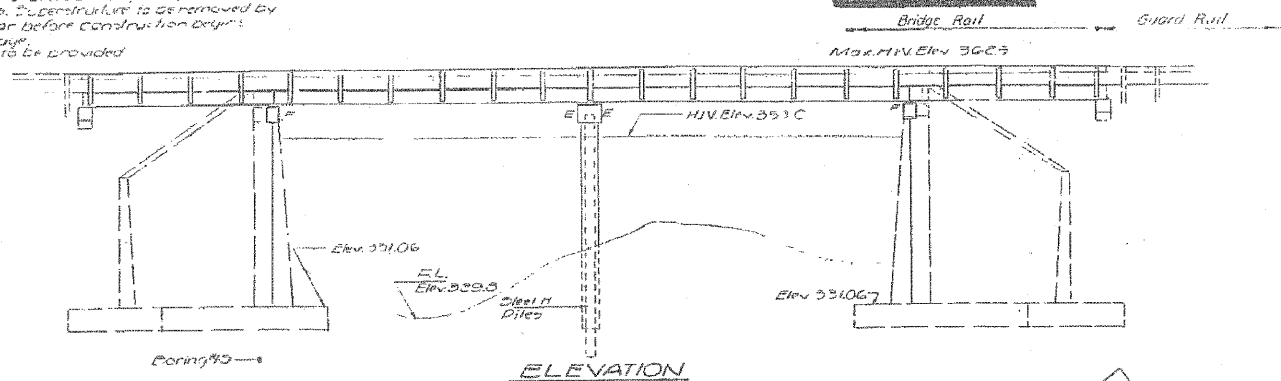
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 782	115BR-1	Hardin	83	36
FED. ROAD DIST. NO. 7	ILL. PROJ. NO.	FED. AID PROJECT		

SHEET NO. 1  
11 SHEETS

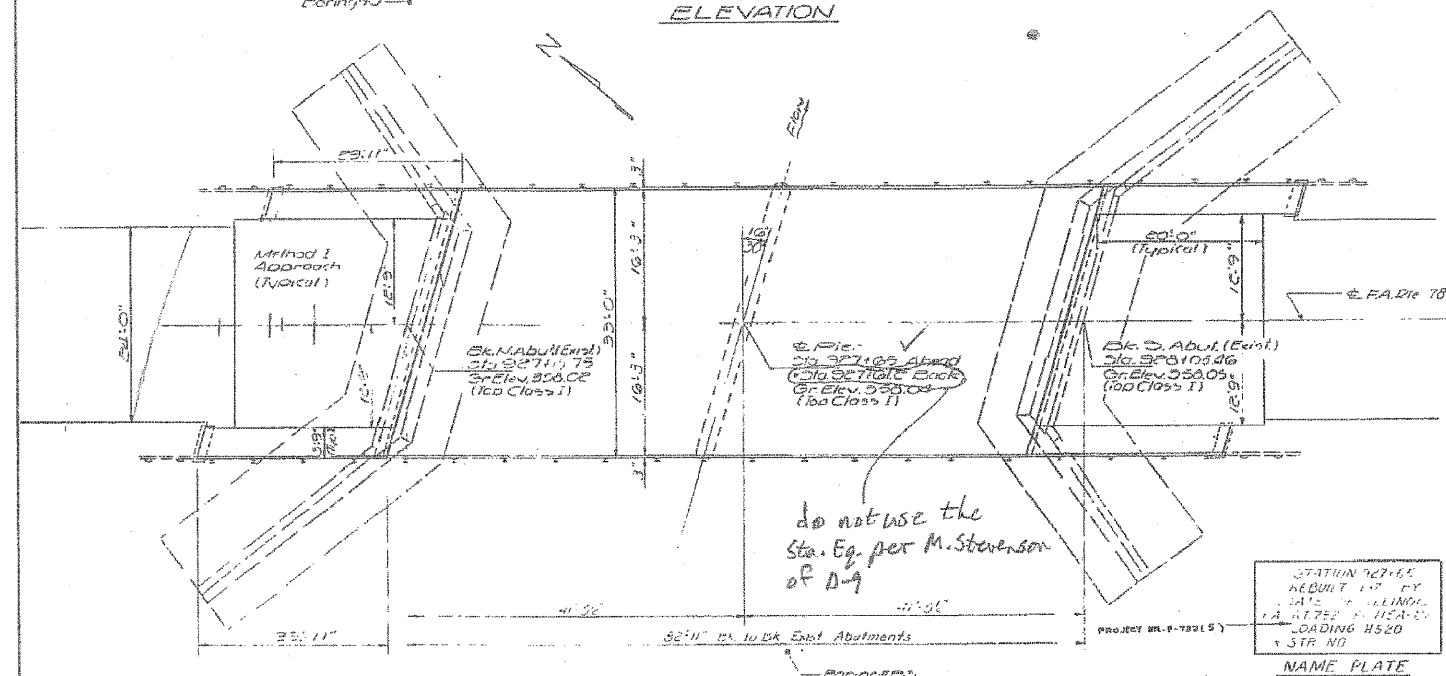
Contract #78026

Chg. 115BR-1 in 115BR-1  
Elev. 331.06  
Existing Structure built 1955 on 20' x 14' MO  
Sec. 115A-C Sta. 927163, Pier & Truss Chg.  
20' Abut. Superstructure to be removed by  
Contractor before construction begins.  
No Salvage  
Colour to be provided

STATE OF ILLINOIS  
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ELEVATION



PLAN



PROFILE  
EA ROUTE 782

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	PROFES
CHECKED	

DESIGN STRESSES

PRECAST PRESTRESSED UNITS	FIELD UNITS
f <sub>c</sub> = 6000 psi	f <sub>c</sub> = 3500 psi (Super. Pier)
f <sub>s</sub> = 40000 psi	f <sub>s</sub> = 60,000 psi (Reinf.)
f <sub>s</sub> = 270,000 psi (27 Strands)	f <sub>s</sub> = 200,000 psi (Structural)
f <sub>s</sub> = 180,000 psi (27 Strands)	
PRECAST UNITS	
f <sub>c</sub> = 4500 psi	Allowable f <sub>t</sub> = 125 psi
f <sub>s</sub> = 18000 psi	Design Specifications
f <sub>s</sub> = 60,000 psi	1377 AASHTO 1978 Interim.
D-8	

LOADING HCO-44

GENERAL NOTES

All reinforcement bar shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.

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.

Shoulder transition to wingwall shall be shaped with broken concrete.

Cost Incentive:

The Contractor shall drive one steel test pile in a permanent location of the Pier 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 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.

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

WATERWAY INFORMATION

Drainage Area	12.2 Sq. Mi.
Present Opening	352 Sq. Ft.
Required Opening	352 Sq. Ft.
Proposed Opening	352 Sq. Ft.
Design Discharge (50 yr.)	3214 cfs
Created Head for 1 yr Flood	0.7 ft.
100-year Discharge	3690 cfs
Created Head for 100-yr Flood	0.97 ft.
100-yr. H.W.E.	350.6

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Bituminous Concrete Surface Course Class I	Tons	28		45
Concrete Removal	Cu Yds.		17	17
Sub. 1.5" (Typical)	Cu Yds.	16	931	947
Break Concrete Bridge Deck	Sq. Ft.	493		493
Break Precast Concrete Columns (PI)	Sq. Ft.	2590		2590
Steel Piling Type	Lin. Ft.	290		290
Removal of Existing Sl. Structures	Each	210	2280	2490
Waterproofing Membrane System	Sq. Yds.	305		305
Name Plate	Each			1
Prestressed Joint Sealer (2 1/2")	Lin. Ft.	35		35
Steel Piles (HPD-42)	Lin. Ft.		513	513
Test Piles (Str. I)	Each		1	1
Structural Steel	Cs	2440		2440
Portland Cement Mortar Facing Course	Lin. Ft.	787		787

\*\* Br. to Br. Existing Abutments



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
OVER HARRIS CREEK  
F.A. ROUTE 782  
SECTION 115A-DP  
HARDIN COUNTY  
STATION 927163

**HAMPTON, LENZINI & RENWICK, INC.**  
CIVIL & STRUCTURAL ENGINEERS  
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-98-0016-1 DATE: 01/18/08  
DESIGNED: M.D.C. CHECKED: S.M.S. DRAWN: D.T.M.

EXISTING STRUCTURE PLANS

IL. ROUTE 1 OVER HARRIS CREEK  
F.A.P. ROUTE 782 / SECTION 115BR-1  
HARDIN COUNTY  
STATION 927-65  
STRUCTURE NO. 035-0001