

ROUTE NO.	SECTION	SHEET	TOTAL SHEETS	SHEET NO. 1
778	38-DR	Hardin	17	6
9 SHEETS				

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

B.M.: R.R. Spike in power pole 36' Rt. Sta. 779+00
 Elev. 396.90
 Existing Structure: No. 035-0004, built as S.B.T. Rte. 34, Sec. 3B in 1924, 2 spans R.C. thru girder on R.C. closed abutments & pier. The contractor shall remove the existing superstructure in stages and provide a new wider superstructure with 27" I-Beams. Widen the substructure. Repair the pier as required. Traffic shall be maintained at all times using stage construction.
 No Salvage.

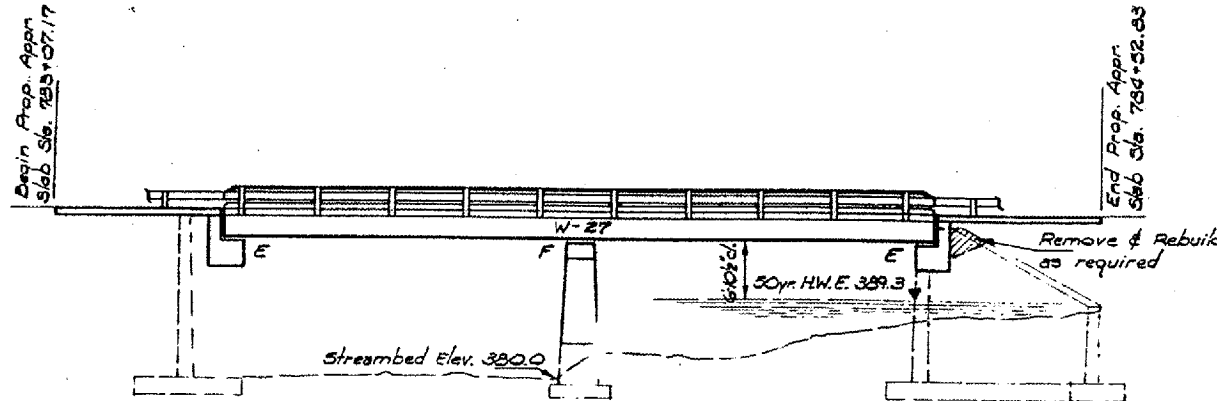
GENERAL NOTES

Fasteners shall be high strength bolts. Bolts 3/4", open holes 13/16", unless otherwise noted.
 Calculated weight of Structural Steel = 49,980 Lbs.
 All structural steel shall be AASHTO: M 222 unpainted except expansion joint angles and attached bars which shall be AASHTO: M 183 and shop painted with two coats of basic lead silica chromate paint.
 Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
 Anchor bolts shall be set before bolting diaphragms over supports.
 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 concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
 Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
 The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material of the steel girders or wide flange beams.
 All Reinforcement Bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
 See Proposal for Boring Data.

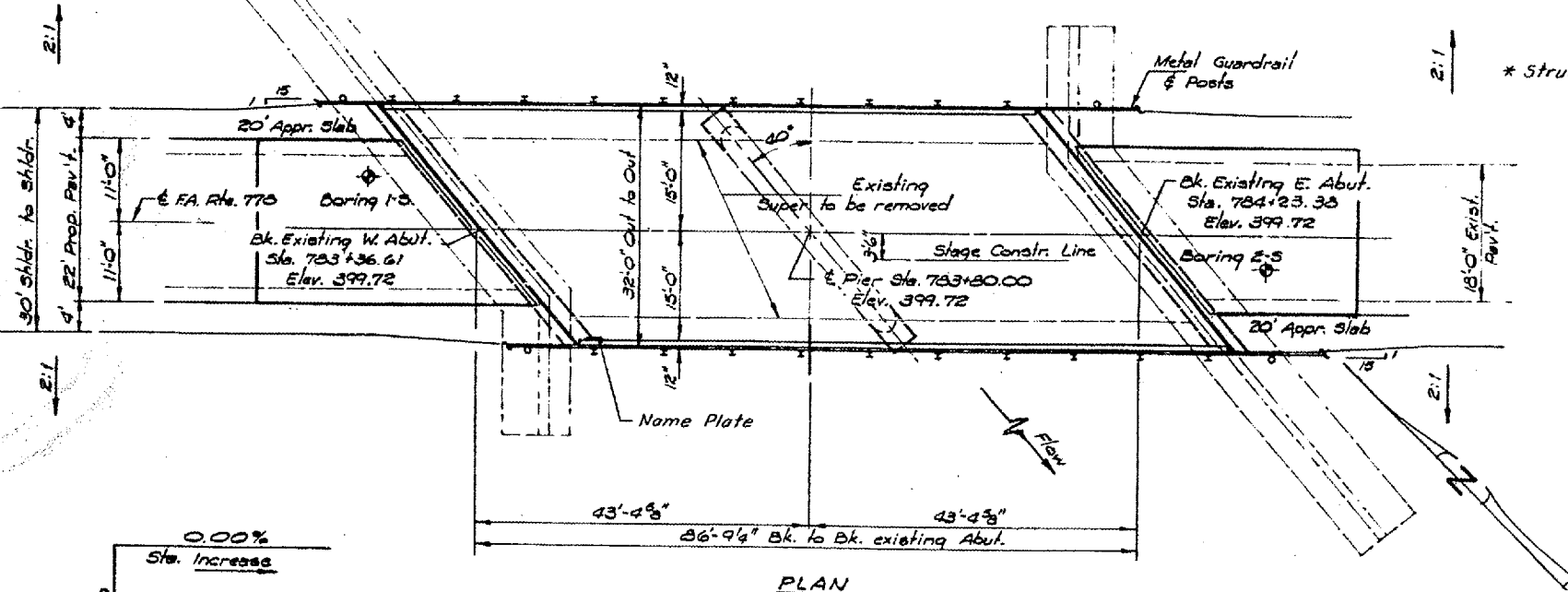
STATION 783+80.00
 REBUILT 197 BY
 STATE OF ILLINOIS
 F.A. RT. 778 SEC. 38-DR
 LOADING HS20-44
 * STR. NO. 035-0004

NAME PLATE

See Std. 2113
 * Structure Number to be supplied by District.



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yds.		74	74
Protective Coat	Sq. Yds.	325		325
Class X Concrete	Cu. Yds.	74.3	102.9	177.2
Structural Steel	L.S.		0.74	0.74
Steel Railing (Type T)	Lin. Ft.	177		177
Reinforcement Bars	Lbs.	7,140	11,900	19,040
Reinforcement Bars (Epoxy Coated)	Lbs.	13,130		13,130
Name Plates	Each	1		1
Temporary Guardrail	Lin. Ft.	89		89
Preformed Joint Sealer (2 1/2")	Lin. Ft.	83		83
Temporary Support System	L.S.			1

FOR INFORMATION ONLY:

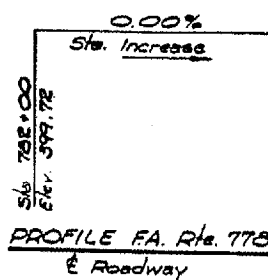
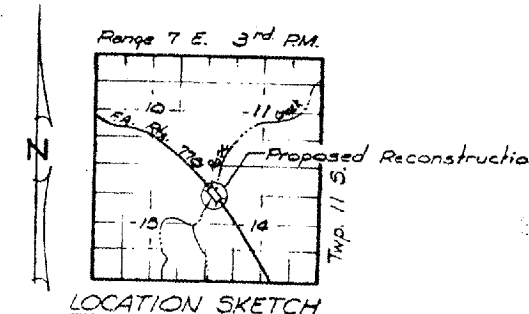
BRIDGE NO. 1 STRUCTURE 035-0004

DESIGN STRESSES

f'c = 3,500 psi
 * fy = 60,000 psi (Reinf.)
 fs = 20,000 to 27,000 psi (Structure)

LOADING HS 20-44

Allow 2 1/2" for future wearing surface.
 Design Specification: 1973 AASHTO, 1974, 1975, 1976 and 1977 Interim Specifications. * Epoxy coated reinforcement bars shall be used in the top layer of the slab.



WATERWAY INFORMATION

Drainage Area	9.6 sq. mi.
Existing Opening	430 sq. ft.
Required Opening	430 sq. ft.
Proposed Opening	430 sq. ft.
H.W. Elev. 50 yr.	389.3 Elev.
50 yr. Created Head	2.960 c.f.s.
H.W. Elev. 100 yr.	0.43'
100 yr. Created Head	389.8 Elev.
	3100 c.f.s.
	0.68'

DESIGNED	Lee Sheng Hwang
CHECKED	D. Kern
R.P.S.	
DRAWN	
CHECKED	AKA

EXAMINED	March 15, 2008
PASSED	
APPROVED	

GENERAL PLAN & ELEVATION
 FA. Rte. 778 Over ROSE CREEK
 FA. Rte. 778 SECTION 38-DR
 HARDIN COUNTY
 Sta. 783+80.00