ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 116	*	RICHLAND	31	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

* D-7 Joint Repairs 2006-3

B.M. Chiseled"□"on N.E. wing of existing structure Sta. 897+00 Elev. 439.29
Existing Structure: built in 1929 as S.B.I. Rte. 130, Sec. 123B widened in 1959 as Sec. 123 BY.- 3 span deck girder on solid concrete piers and closed abutments - 30'-0" wide and 132'-9" Bk. Bk. of abutments.
The contractor shall remove existing superstructure utilizing Stage Construction.
Abutment and piers to be reused.
Str. No. 080-0009

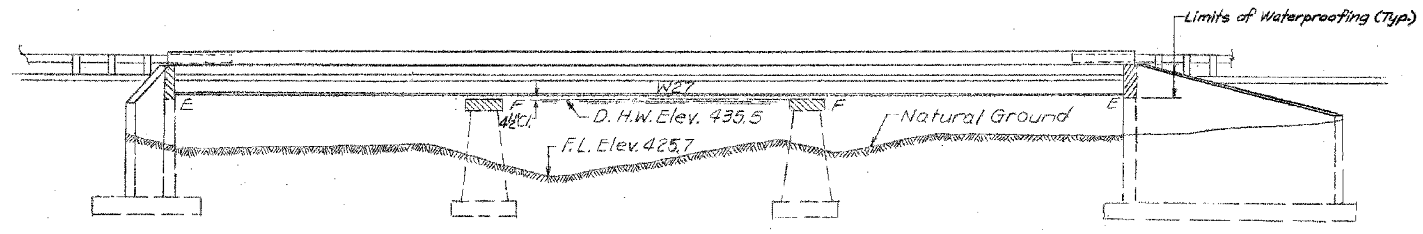
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 116	123-BR3	RICHLAND	18	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

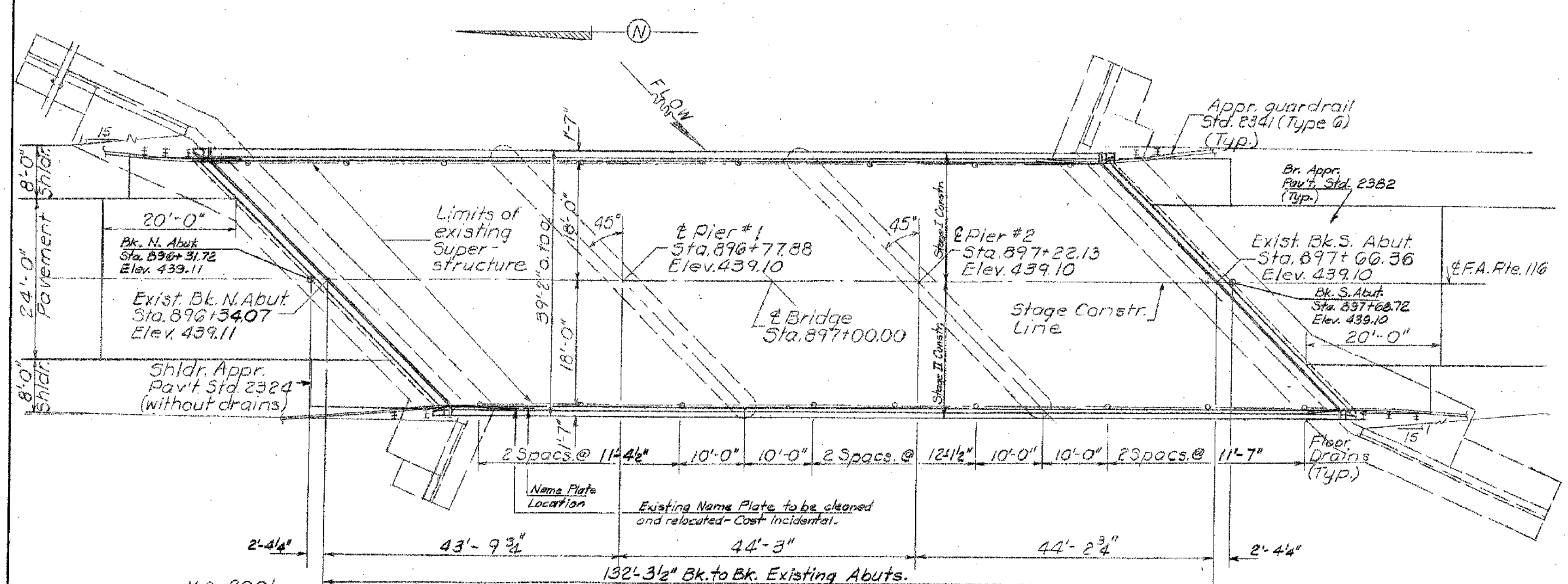
SHEET NO. 1
13 SHEETS

STATION 897+00.00
REBUILT 198_ BY
STATE OF ILLINOIS
F.A. RT. 116 SEC. 123 BR-3
F.A. PROJ. BRF-116(23)
LOADING HS-20
STR. NO. 080-0009

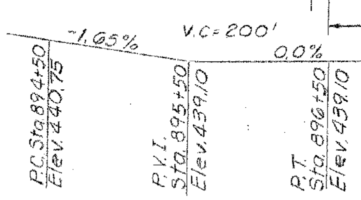
NAME PLATE
See Std. 2113



ELEVATION



PLAN



PROFILE GRADE

DESIGNED	[illegible]
CHECKED	David Burdick
DRAWN	E. V. Taylor F.M.
CHECKED	SKD D.B.

January 25 1983
EXAMINED [signature]
ENGINEER OF BRIDGE DESIGN
PASSED [signature]
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

Design Specifications: 1977 AASHTO, 1978, 1979, 1980, 1981 and 1982 Interim Specifications.

LOADING HS 20-44 (New Construction)
Allow 25#/sq.ft. for future wearing surface.

WATERWAY INFORMATION

Drainage Area 16.00 Sq. Mi. Low Grade Elev. 438.9'± Sta. 898+00										
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	3366	486	513	435.5	1.16	1.05	436.66	436.55
Base	100	3857	486	522	435.8	0.71	1.33	436.51	437.13
Max. Calc.	500	4996	486	522	436.5	1.40	1.40	437.9	437.9

DESIGN STRESSES

NEW CONSTRUCTION

f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinf.)
fy = 50,000 p.s.i. (M223, Grade 50) (Struct.)
fy = 36,000 psi (M183) (Struct.)
fy = 50,000 psi (M222)

EXIST. CONSTRUCTION

fc = 1,400 p.s.i.
fs = 20,000 p.s.i. (Reinf.)
fs = 18,000 p.s.i. (Struct.)

GENERAL NOTES

The Structural Steel Bearing Plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 222.

Fasteners shall be high strength bolts. Bolts ⅞"φ, open holes 15/16"φ, unless otherwise noted.

Calculated weight of Structural Steel = 16,800 Lbs. (M-183)
69,900 Lbs. (M-223)

The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.

Field welding of construction accessories will not be permitted to the bottom flange of beams 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.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and ¾"φ x 12" hooked bolts.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two ⅛" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.

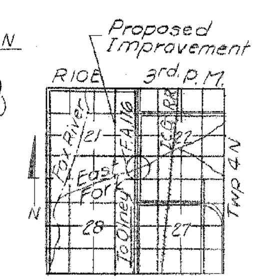
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the wide flange beams and all splice plate material.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.

The back face of Closed Abutments shall be waterproofed according to Article 503.11 of the Standard Specifications.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Protective Coat	Sq. Yds.	638		638
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yds.		43.6	43.6
Expansion Bolts (¾"φ)	Each		260	260
Structure Excavation	Cu. Yds.		102	102
Floor Drains	Each	18		18
Class X Concrete	Cu. Yds.	164.3	78.6	242.9
Structural Steel	L. Sum	L.S.		L.S.
Reinforcement Bars	Lbs.	14,860	8,480	23,340
Reinforcement Bars (Epoxy Coated)	Lbs.	22,420		22,420
Name Plates	Each	1		1
Neoprene Expansion Joint (2")	Lin. Ft.	106		106
Elastomeric Bearing Assembly, Type I	Each	12		12
Epoxy Crack Sealing	Lin. Ft.		54	54



LOCATION PLAN

GENERAL PLAN
ILL. RTE. 130
OVER EAST FORK CREEK
F.A. RTE. 116 SEC. 123 BR-3
RICHLAND COUNTY
STA. 897+00.00

FOR INFORMATION ONLY

EXISTING BRIDGE PLANS