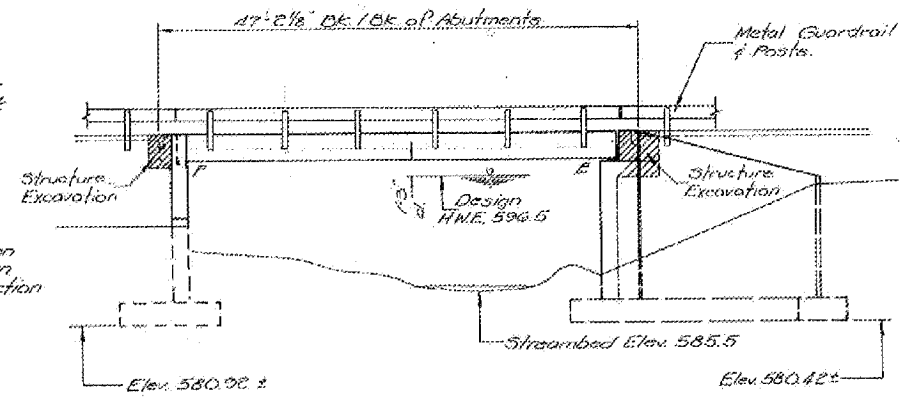


ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 18	104-BY-IBR	CARROLL	40	32
SHEET 1 OF 9				

EXISTING STRUCTURE: Structure No 008-0016; Original Structure built in 1927 as S.B.I. Rt 80, Section 104 B, consisted of one span concrete tee beams superstructure on closed concrete abutments, measuring 24'-8" out/foot of deck and 13'-11" back/back of abutments. Improved in 1959 as S.B.I. Rt 80, Section 104 BY-1. The 1959 Improvements consisted of partial removal of existing superstructure deck and widening with 27" deep precast prestressed concrete deck beams to 48'-8" out/foot and the construction of new cantilevered wingwalls. Work under this section will consist of the complete removal and disposal of the existing superstructure and partial removal and disposal of portions of the existing abutment backwalls all in accordance with Section 501 of the Standard Specifications and as shown in the Detail Plans. Removal and reconstruction will be done in two stages. Stage I removal and reconstruction of the North portion of the structure to the limits shown on the Detail Plans and Stage II removal and reconstruction of the remaining portion of the structure.
No Salvage.

BENCHMARK: U.S.G.S. Brass Disc in top of Northwest Wingwall of Exist Struct. Elev. 599.72



ELEVATION

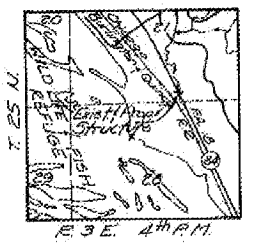
GENERAL NOTES:

- Name Plate to be located as directed by the Engineer.
- Reinforcement Bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-53, Grade 60, unless otherwise noted.
- 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, and the top edges of keys shall be rounded or chamfered a minimum of 1/4".
- 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 = 4,000 lbs., and 3/4" x 12" hooked bolts.
- A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

WATERWAY INFORMATION

Drainage Area = 2.3 Sq. Mi.		Low Grade Elev. 598.4' at Sta. 573 + 00								
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. ° H.W.E.	Head-FT.		Headwater El.		Mississippi River Backwater
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.	
Design	50	1909	226	226	594.5	1.26	1.26	595.76	595.76	596.5
Base	100	2207	238	238	594.9	2.08	2.08	596.98	596.98	597.6
Overtopping	200	2518	282	282	596.4	2.14	2.14	598.54	598.54	599.6
Max. Calc.	500									

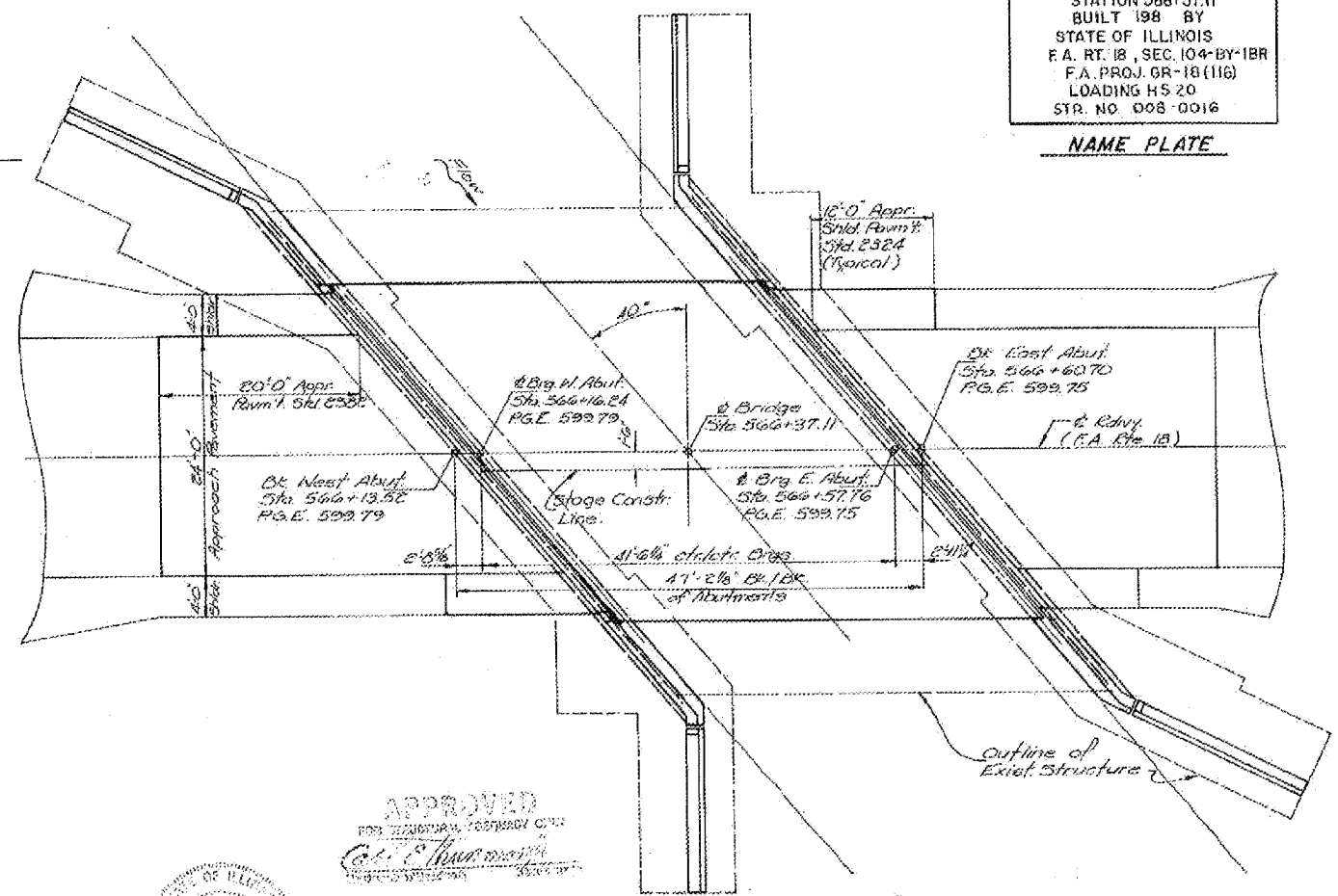
* Controlled by Stage Elevation of Mississippi River



LOCATION SKETCH

STATION 566+37.11
BUILT 198 BY
STATE OF ILLINOIS
F.A. RT. 18, SEC. 104-BY-IBR
F.A. PROJ. GR-18 (116)
LOADING HS 20
STR. NO 008-0016

NAME PLATE



PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Structure Excavation	C.Y.	---	96	96
Removal of Exist Super.	Each	---	---	1
Concrete Removal	C.Y.	---	31.0	31.0
Prec. Press. Conc. Deck Slabs (C/S)	S.F.	1400	---	1400
Class X Concrete	C.Y.	13.0	42.9	55.3
Reinforcement Bars	Lbs.	650	2630	3280
Steel Rolling, Type 5-1	L.F.	86	---	86
Name Plates	Each	---	---	1
Portland Cem. Mortar for Proj. Crs.	L.F.	430	---	430
Waterproof Membrane Sys.	S.Y.	155	---	155
Temporary Bridge Rail	L.F.	43	---	43
Mooprene Exp. Joints (2")	L.F.	47	---	47
Bit Conc. Surf. Crse. Mix D, C.I.	Ton	15	---	15
Expn. Bolts 3/4"	Each	---	56	56

FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION

F.A. RTE. 18, SEC. 104-BY-IBR
CARROLL COUNTY
STATION 566+37.11

DESIGN STRESSES
PRECAST PRESTRESSED UNITS
 f_c = 5,000 p.s.i.
 f_t = 4,000 p.s.i.
 f_s = 270,000 p.s.i. (1/8" strands)
 f_s = 189,000 p.s.i. (1/2" strands)
CAST IN PLACE CONCRETE
 f_c = 3,500 p.s.i.
 f_y = 60,000 p.s.i. (reinf.)
 n = 9

LOADING HS 20-44

Design Specifications: 1977 A.A.S.H.T.O. 1978:1979:1980 Interim Specifications (Allow 85 p.s.i. for future wearing surface)

DESIGNED:	D.H.C.
CHECKED:	K.L.F.
DRAWN:	R.A.W. #10
CHECKED:	K.L.F.

APPROVED
FOR TECHNICAL PURPOSES ONLY
C. E. HANCOCK
REGISTERED PROFESSIONAL ENGINEER
NO. 2992
DATE 3/11/83
KENNETH E. FIDDES
REGISTERED STRUCTURAL ENGINEER IN ILLINOIS
NO. 2992