

B.M. 1st Pk. Hgt. 20 Pk. Sta. 598+70 Elev. 100.00

Existing structure 110' S.B.I. 115, built by S.B.I. Pk. 115, Section 2 B in 1927. Single Span P.C. Arch structure of reinforced closed spout Bk to Bk - 52'-0" Superstructure with C. to C. 26'-0".

Structure shall be demolished.

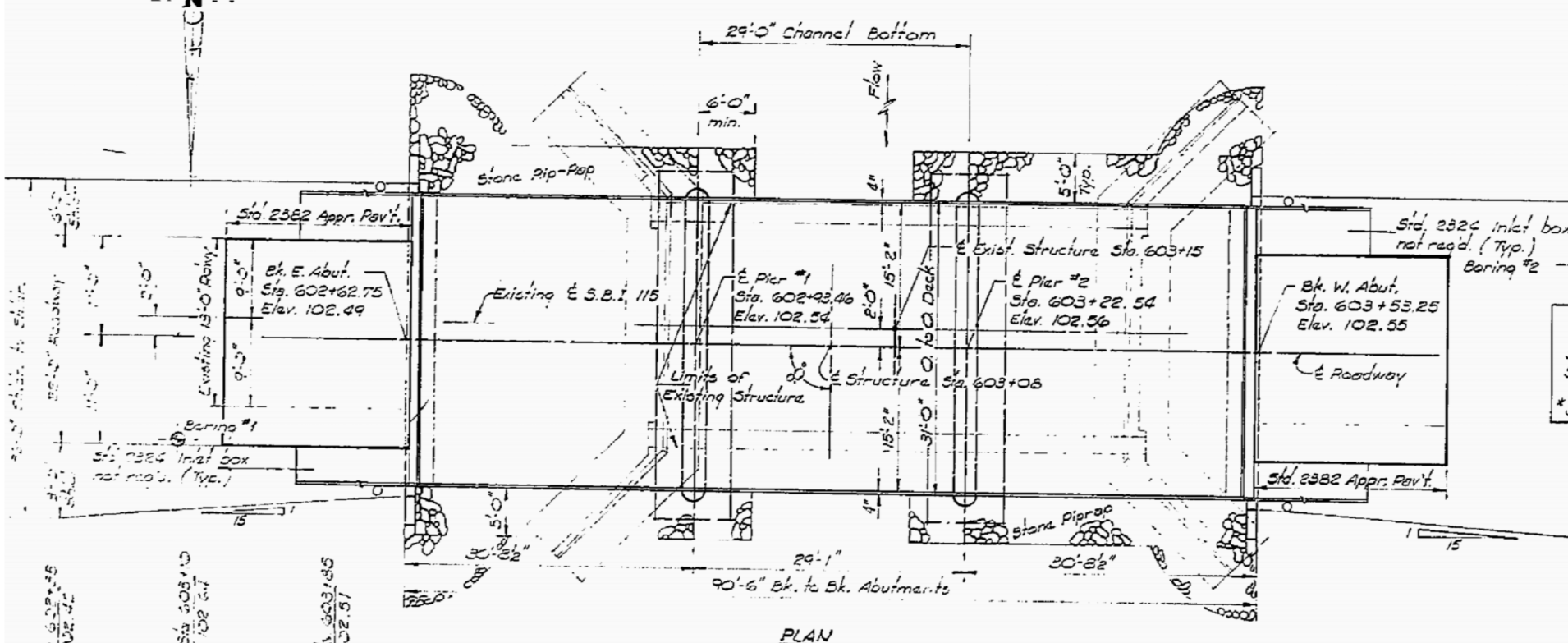
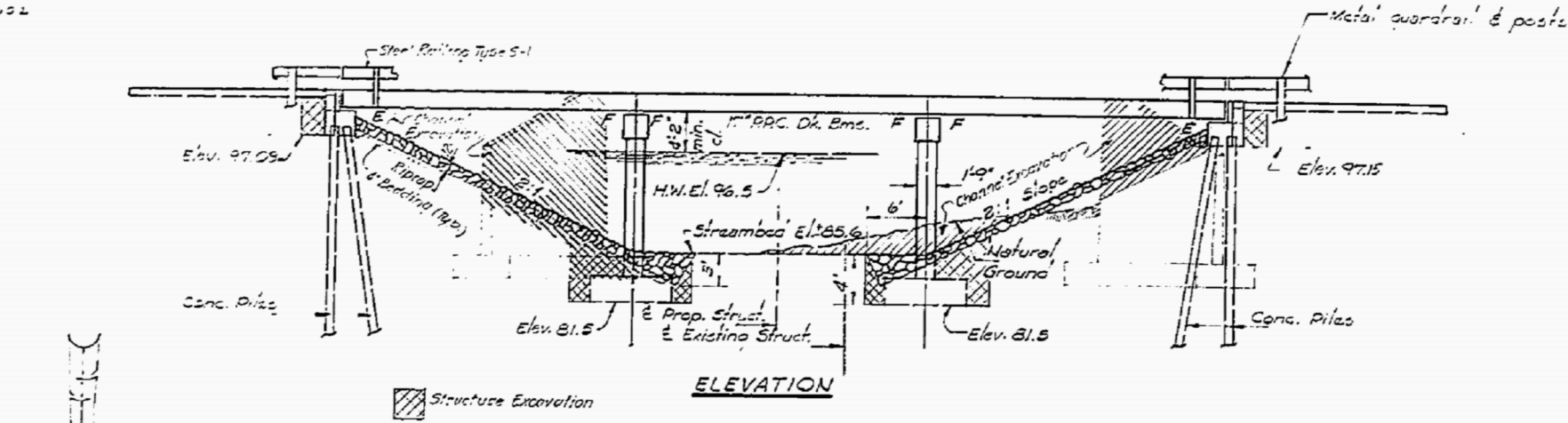
Us. 22/102

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
102BR	KANKAKEE	25	11	7

GENERAL NOTES

See Proposal for Boring Data  
All structural steel shall be shop painted with the coat of base lead silico chromate paint.  
The contractor shall drive (one) concrete test pile in a permanent location at East Abutment as directed by the Engineer before ordering the remainder of piles.  
The top surface of the beams shall be finished in accordance with Article 511.6 of the Standard Specification except that the surface shall not be prepared by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to the construction of the abutments.  
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.  
Expansion guards which are not part of the precast unit shall be fabricated and erected in accordance with Article 503.07(a) of the Standard Specifications and are included in quantity of structural steel.  
A Chromium Nitrate Corrosion Inhibitor, as covered in the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Channel Excavation	Cu.Yd.		650	650
Bituminous Conc. Surf. Cse. Cl. I	Ton	24		24
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu.Yd.	160		160
Class X Concrete	Cu.Yd.	14	145.4	146.8
R.P.C. Deck Beams (17')	Sq.Ft.	2697		2697
Structural Steel	Pound	4,390		4,390
Steel Railing Type S-1	Lin.Ft.	174		174
Reinforcement Bars	Pound	190	10,570	10,760
Concrete Piles	Lin.Ft.		367	367
Test Piles (Concrete)	Each		1	1
Name Plates	Each		1	1
Stone Riprap	Sq.Yd.		370	370
Preformed Joint Seal (2 1/2")	Lin.Ft.	63		63
Portland Cement Mortar Facing Course	Lin.Ft.	683		683
Waterproofing Membrane System	Sq.Yd.	303		303

STATION 603+08  
BUILT 198 BY  
STATE OF ILLINOIS  
S.B.I. RT. 115 SEC. 102 BR  
LOADING HS 20  
\*STR. NO.

NAME PLATE  
(See Std. 2113)  
to be supplied by District

DESIGN STRESSES

FIELD UNITS  
f<sub>c</sub> = 3,500 psi (f<sub>s</sub> = 20,000 psi (Struct.))  
f<sub>y</sub> = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f<sub>c</sub> = 5,000 psi f<sub>ci</sub> = 4,000 psi  
f<sub>s</sub> = 270,000 psi (1/2" Strands)  
f<sub>si</sub> = 189,000 psi (1/2" Strands)

LOADING HS 20-44

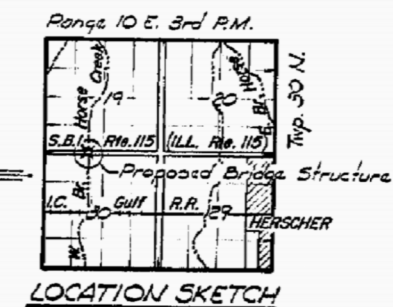
Allow 25 lb/sq. Ft. future wearing surface.  
Design Specifications; 1977 AASHTO, 1978, 1979 and 1980 Interim Specifications.

WATERWAY INFORMATION

Drainage Area 180 sq. mi. Low Grade Elev. 101.5' @ Sta.

Flood	Frag. G	Yr. C.F.S.	Opening Sq. Ft.		Nat. M.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	2023	408	514	96.5'	0.14	0.08	96.64	96.58
Base	100	2316	428	542	96.9'	0.22	0.12	97.12	97.02
Max. Calc.	500	2991	463	593	97.6'	0.35	0.20	97.95	97.8

DESIGNED	E. Thorne	EXAMINED	JULY 22 1980
CHECKED	Walter J. Schaub	PASSED	
DRAWN	J.P.S.	APPROVED	
CHECKED	J.F.S.		



GENERAL PLAN  
S.B.I. Pk. 115 Over West Branch of Horse Cr.  
S.B.I. Pk. 115 SECTION 102 BR  
KANKAKEE COUNTY  
Sta. 603+08