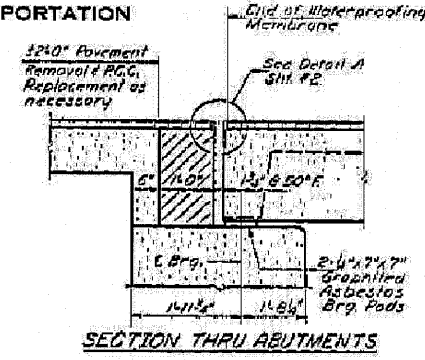
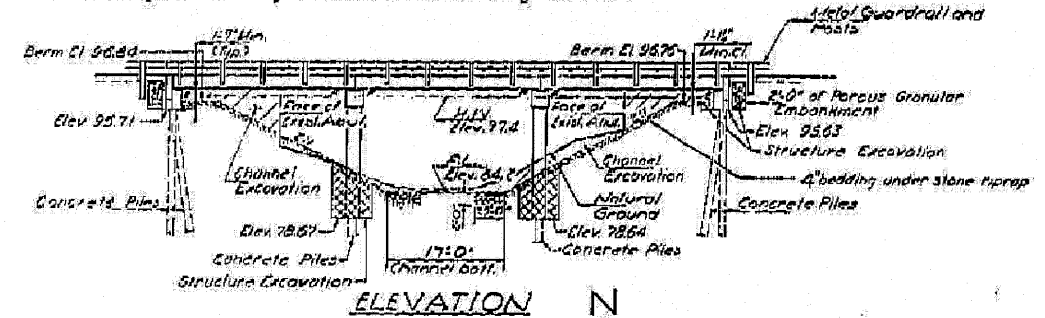


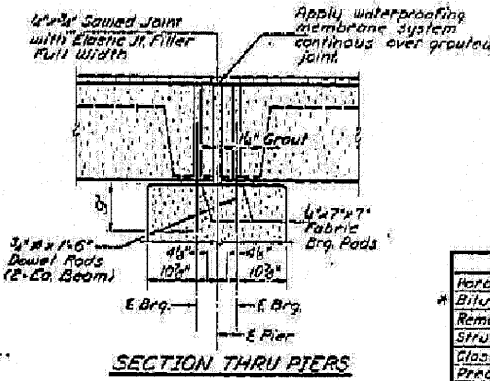
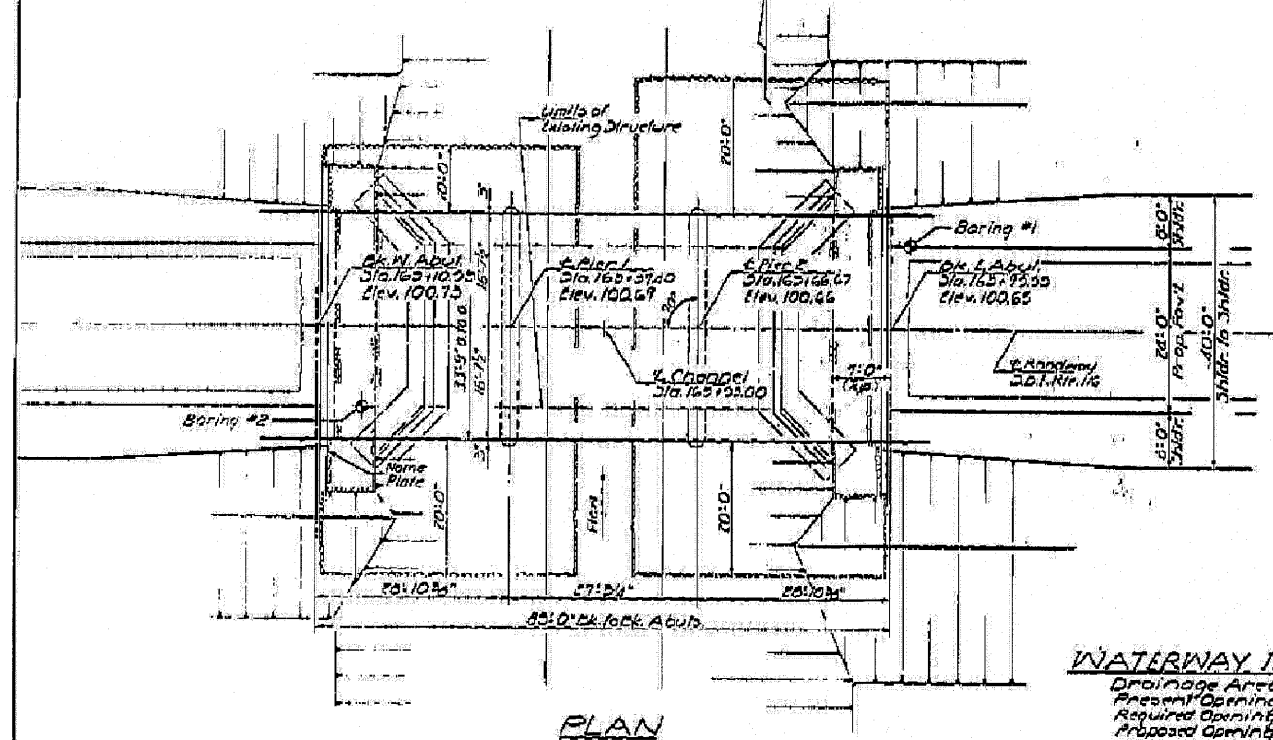
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
159-89	118 BR	IROQUOIS	42	30

Design Mark: S.B.I. 116 on NW corner of N.W. wingwall
14.5' L, Sta. 163+26.5, Elev. 100.00
Existing Structure: No. 035-0102 Built in 1922 as a State Aid Route
Structure, 31'10" of Spans, 18'0" Over All Through Spans from 1921
Face to face of R.C. Abutments. Superstructure and portions
of Substructure to be removed by cutting concrete. Before new
construction begins. No salvage. Road to be closed during construction.



GENERAL NOTES
All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
All Structural Steel shall be shop primed with two coats of basic lead silico chromate paint.
The Contractor shall drive 1 Concrete test pile in a permanent location of Pier 1 before ordering the remainder of piles.
See Special Provisions for Waterproofing Membrane System.
For Boring Data see the Proposal.
Expansion guards which are not cast in the precast units shall be fabricated and erected in accordance with Article 50307 (a) of the Standard Specifications and are included in quantity of structural steel.



TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Porous Granular Embankment	Cu Yd		20	20
Bituminous Concrete Surface Course, Class 2	Tons	25		25
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu Yd		170	170
Class X Concrete	Cu Yd		123.3	123.3
Precast Concrete Bridge Slab	Sq. Ft.	2701		2701
Structural Steel	Lbs.	2620		2620
Steel Rolling, Type S	Lin. Ft.	168		168
Reinforcement Bars	Lbs.	10230		10230
Concrete Piles	Lin. Ft.		1039	1039
Test Pile Concrete	Each		1	1
Portland Cement Mortar Facing Course	Lin. Ft.	652		652
Channel Excavation	Cu Yd		270	270
Stone Riprap	Sq. Yd		620	620
Pavement Removal & R.C.C. Replacement, Type III 10% S.W.	Sq. Yd	9		9
Name Plates	Each		1	1
Waterproofing Membrane System	Sq. Yd.	306		306
Preformed Joint Sealer (2 1/2")	Lin. Ft.	68		68

*Quantity is from end to end of precast concrete bridge slab.

WATERWAY INFORMATION

Drainage Area ---- 70 Sq. Miles
Present Opening ---- 475 Sq. Ft.
Required Opening ---- 212 Sq. Ft.
Proposed Opening ---- 224 Sq. Ft.
Clear: 12.70 cfs
Crested Head: 0.15
All-time H.W. Elev. 97.7

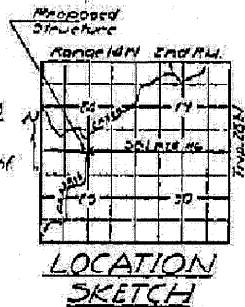
DESIGN STRESSES

FIELD UNITS
F = 118000 psi-Sub
F = 20,000 psi-Reinf.
F = 20,000 psi-Struc.
n = 10

PRECAST UNITS
F = 2500 psi
F = 18000 psi
F = 20,000 psi-Reinf.
n = 8

Allow 25% for full mount.
Design Specifications
AASHTO 1975 (as applicable)

DESIGN LOADING H200/44



GENERAL PLAN AND ELEVATION
S.B.I. RTE. 116 OVER PRAIRIE CREEK
S.B.I. ROUTE 116
SECTION 118X-BR
IROQUOIS COUNTY
STATION 163+5200

DESIGNED: RAC
CHECKED: [Signature]
DRAWN: [Signature]
CHECKED: [Signature]

EXAMINED: [Signature]
PAIRED: [Signature]
APPROVED: [Signature]

STATION 163+5200
BUILT BY
STATE OF ILLINOIS
S.B.I. RT. 116 - SEC. 118X-BR
LOADING H200
NAME PLATE
S&P 514, 213