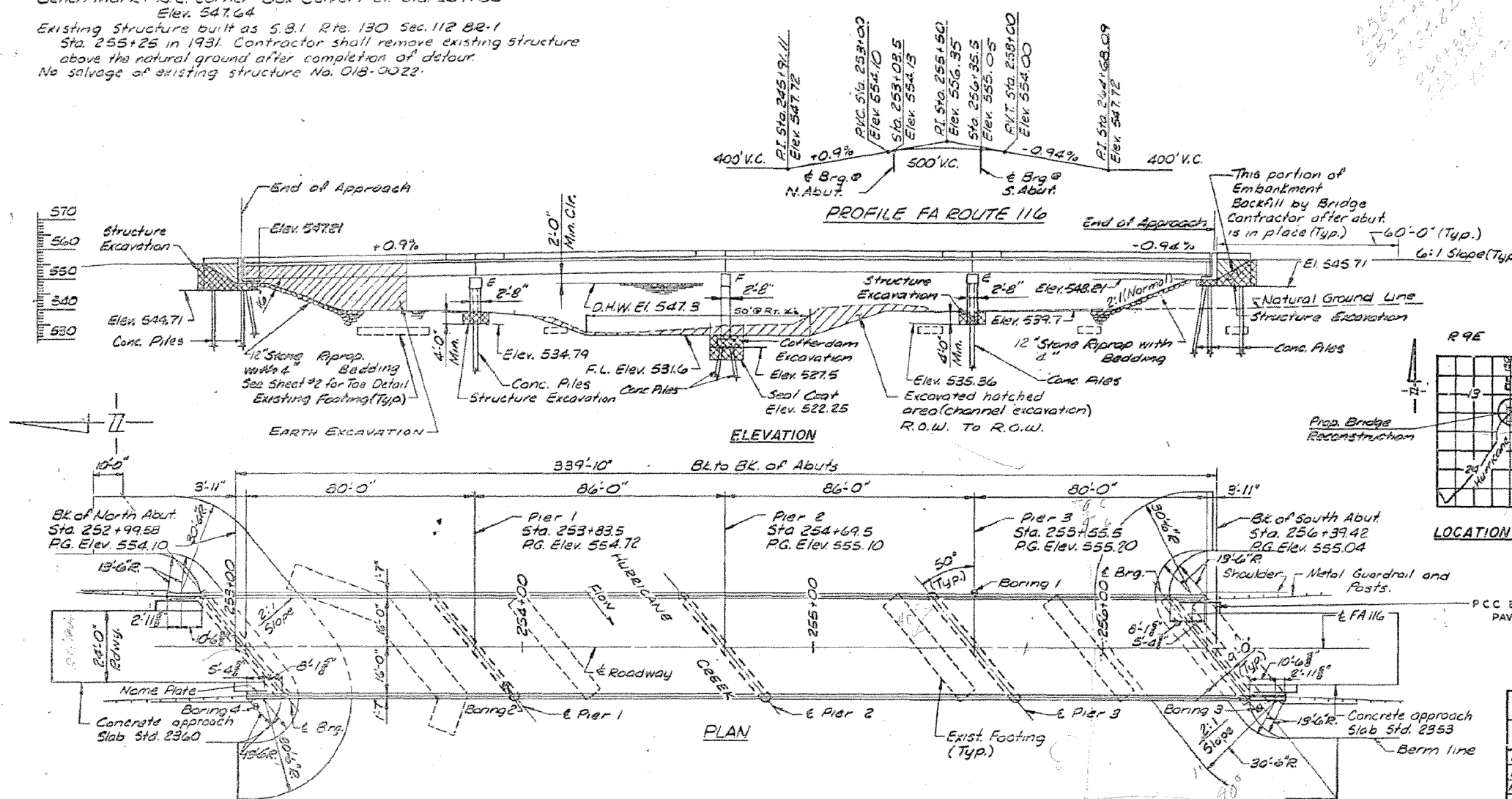


Bench Mark: N.E. corner Box Culvert Lt. Sta. 269+00
Elev. 547.64
Existing Structure built as S.B.1 Rte. 130 Sec. 112 BR-1
Sta. 255+25 in 1931. Contractor shall remove existing structure
above the natural ground after completion of detour.
No salvage of existing structure No. 018-0022.

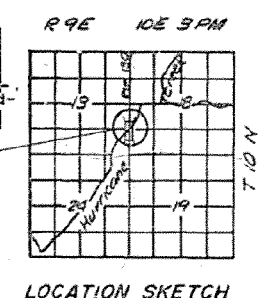
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	112 BR	CUMBERLAND	30	8
ILLINOIS FED. AID PROJECT				

SHEET 1
16 SHEETS



Station 254+69.5
Built 1931 By
State of Illinois
FA. Rt 116 Sec. 112 BR
FA. Proj. BR-F-116(12)
LOADING HS20
Str. No. 018-0058

LETTERING FOR NAME PLATE
See Std. 2113



INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 Footing Layout
- 3 Slab Elevation
- 4 Slab Elevation
- 5 Slab Elevation
- 6 Superstructure
- 7 Parapets & Drainage Details
- 8 Expansion Joint Details
- 9 Framing Plan
- 10 Girder Tables
- 11 Steel Details
- 12 Bearings
- 13 Abutments
- 14 Pier 1 & 3
- 15 Pier 2
- 15 Pile Details

PCC BRIDGE APPROACH SHOULDER
PAVEMENT STD. 2324 (TYP.)

GENERAL NOTES:

See proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts 3/4", open holes 5/8", unless otherwise noted.
Calculated weight of Structural Steel M183 = 157,671 lbs, M223 = 97,349 lbs.
The basic lead silica chromate paint system shall be used for shop and field painting of Structural Steel. All contact surfaces of joints for the Diaphragms and Cross Frames shall be free of paint or lacquer.
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.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments. The contractor shall drive 3 concrete test piles in permanent locations as directed by the Engineer before ordering the remainder of piles. One concrete test pile shall be driven at each abutment and pier 2. Reinforcement bars shall conform to the requirements of AASHTO M31 or M53 grade 60.
A calcium nitrate corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for Class X Concrete for Parapets.

GENERAL NOTES CONTINUED

Layout of rip rap may be varied in the field to suit ground conditions as directed by the Engineer.
All structural steel shall conform to AASHTO M183 except as noted.
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8". Adjustment shall be made either by grinding the surfaces or by shimming the bearing. Two of adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

DESIGN SPECIFICATION
1977 AASHTO and 1978 & 1979 Interim Specification - Load Factor Design

DESIGN LOADING
HS20-44 with 25 psf Future Wearing Surface Allowance.

DESIGN STRESSES
Concrete $f_c = 3500$ psi
Reinforcing Steel (Grade 60) $f_y = 60,000$ psi
Structural Steel (AASHTO M183) $f_y = 36,000$ psi
Structural Steel (AASHTO M223 Grade 50) $f_y = 50,000$ psi
M 29

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete	Cu Yd	390.4	366.8	757.2
Reinforcement Bars	Pound	1536.0	2287.0	6223.0
Rein. Bars (Epoxy Coated)	Pound	6276.0		6276.0
Steel Shear Connectors	Each	2544		2544
Structural Steel	L.S.	1		1
Concrete Piles	Lin Ft		3475	3475
Test Piles Concrete	Each		3	3
Name Plates	Each	1		1
Floor Drains	Each	20		20
Neoprene Expansion Joints	Lin Ft	105		105
Structure Excavation	Cu Yd		360	360
Cofferdam Excavation	Cu Yd		215	215
Cofferdam	Each		1	1
Stone Riprap	Sq Yd		806	806
Removal of Ext. Structs	Each		1	1
Seal Coat Concrete	Cu Yd		118.3	118.3
Channel Excavation	Cu Yd		1115	1115

WATERWAY INFORMATION

Drainage Area 55 Sq. Miles Low Grade Elev. 548.02 @ Sta. 243+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. HWE	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	8100	1801	1870	547.3	0.85		548.15	
Base	100	9280	1986	2080	548.4	0.89		549.27	
Overlapping									
Max. Calc.	500								

HURRICANE CREEK

GENERAL PLAN & ELEVATION
FA. RT 116 SECTION 112 BR
CUMBERLAND COUNTY
STA. 254 + 69.5

DESIGNED: MCH
DRAWN: M.C.T.
CHECKED: MGB
DATE: 4-15-80

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ronald A. Williams
REGISTERED STRUCTURAL ENGINEER
ILLINOIS NO. 315



NOT TO SCALE