

FAP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	101BR	LIVINGSTON	47	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

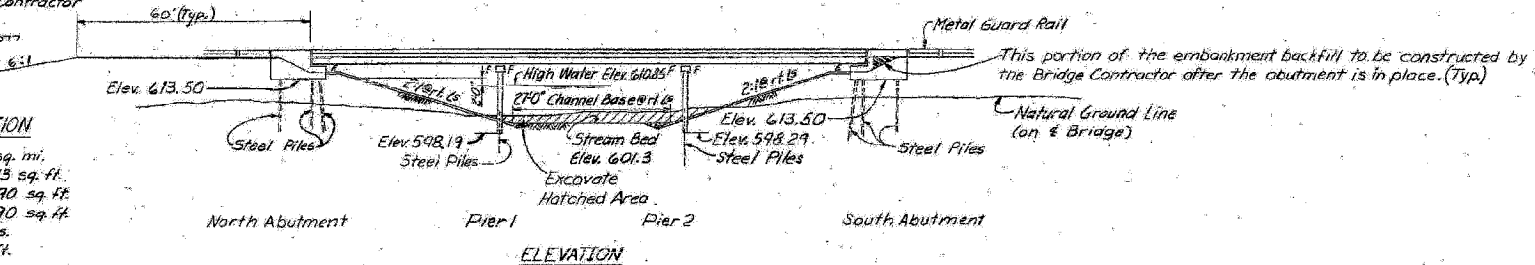
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	101B	LIVINGSTON	39	14
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

B.M. #37 RR Spike in Power Pole 50' Left  
Sta. 282+77 Elev. 620.21  
Existing Structure: Built in 1914. Reinf. Concrete Deck Girders and Closed Abutments. Bridge to be removed by Contractor during construction.  
Inventory Number: 053-0017  
Dimensions: 39'-1" x 19'-7"

WATERWAY INFORMATION

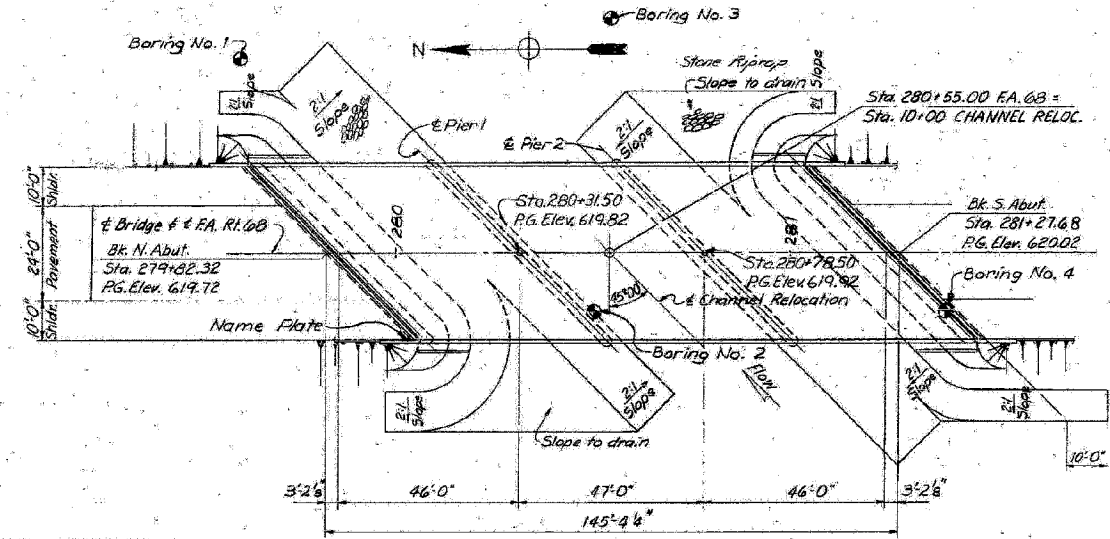
Drainage Area 25 sq. mi.  
Present Opening 213 sq. ft.  
Required Opening 390 sq. ft.  
Proposed Opening 390 sq. ft.  
Q(50) = 2,400 cfs.  
Created Head 0.6 ft.



GENERAL NOTES

Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied.  
All reinforcement bars shall be lapped 24 diameters unless otherwise shown.  
The concrete curb and parapet section above the top of precast prestressed concrete deck beams shall be constructed of Class X concrete except the aggregate shall conform to the requirement of Handrail Concrete.  
Concrete in notched ends of deck beams, piers & abutments shall be Class X.  
See Proposal for Boring Logs.  
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, top edges to be rounded or chamfered 1/8" min.  
Elevations are based on surface course thickness of 3" at centerline of bearings to provide for residual beam camber.  
The embankment configuration shown shall be the minimum embankment that must be constructed prior to the construction of the abutments.  
The Contractor shall drive two steel HP10x42 test piles in permanent locations, one at the N. Abut. and one at Pier 2, as directed by the Engineer prior to ordering the remainder of the piles.  
A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the conc. for P.C.C. deck beams.

STATION 280+55  
BUILT BY  
STATE OF ILLINOIS  
F.A. RT. 68 SEC. 101B  
F.A. PROJ. BR-F-68(40)  
LOADING HS20  
Str. No. 053-0153  
NAME PLATE  
(See Std. 2113)



PLAN

Note: Piers and abutment parallel to channel relocation.  
For Slope Wall see Sht. 2.

DESIGN STRESSES

FIELD UNITS  
fc = 4,000 psi (Parapet, Curb & Sub)  
fc = 20,000 psi (Reinf.)  
vc = 50 psi (Footings)  
n = 9

PRESTRESSED UNITS

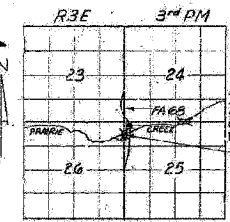
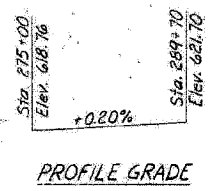
fc = 5,000 psi  
fc1 = 4,000 psi  
fs = 270,000 psi (1/8" Strands)  
fs1 = 188,700 psi (1/8" Strands)

Allow 1/4" to 1/2" for bearing surf.

Design Specifications: AASHTO 1973 plus inferences as applicable.

LOADING HS-20-44

DESIGNED H.A. Rehagen  
CHECKED W.O. Walden  
DRAWN J. De Wille  
H.A. Rehagen



LOCATION SKETCH

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Removal of Existing Structure	Each	—	—	1
Structure Excavation	Cu. Yd.	—	132	132
Test Piles HP 10x42	Each	—	2	2
Steel Piles (HP 10x42)	Lin. Ft.	—	1495	1495
Class X Concrete	Cu. Yd.	34.3	258.6	322.8
Neoprene Expansion Joint-2"	Lin. Ft.	127	—	127
Reinforcement Bars	Lbs.	4,500	20,250	24,750
Precast Prestressed Concrete Deck Beams (21" depth)	Sq. Ft.	6458	—	6458
Waterproofing Membrane System	Sq. Yd.	664	—	664
Name Plate	Each	1	—	1
Stone Riprap	Sq. Yd.	—	1032	1032
Protective Coat	Sq. Yd.	123	—	123
*Bituminous Concrete Surface Course Class 1	Tons	72	—	72
Portland Cement Mortar Finishing Course	Lin. Ft.	1522	—	1522

\* Concrete Surface Course to be Mature D.

GENERAL PLAN & ELEVATION  
F.A. ROUTE 68 (ILL. 23) OVER  
PRAIRIE CREEK  
F.A. RT. 68 SEC. 101 B  
LIVINGSTON COUNTY  
STATION 280+55

APPROVED  
[Signature]  
[Stamp]