ESCA CONSULTANTS, INC.
CIVIL • STRUCTURAL • ENVIRONMENTAL
TRANSPORTATION

CONTRACT NO. 78031

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
869	105BR-2	SALINE	118	73
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

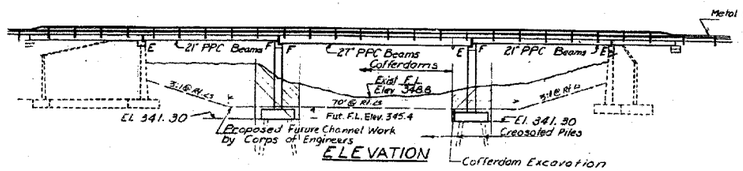
B.M. - Sq. cut in top S.W. Wingwall 15' Rt. Sta. 1562+36 Elev. 368.15
Exist. Structure: Built 1932 as S.B.I. Rt. 143 Sec. 105BC at Sta 1561+70 1 Span Penn. Truss on R.C. Closed Abuts.
Superstructure to be removed by Bridge Contractor.
Traffic detoured over Temporary Bridge.
Floor Stringers & Handrail Channels to be Salvaged (See Special Provisions)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 105 (B-DR, B-DR-1, B-DR-2, B-DR-3, B-DR-4)

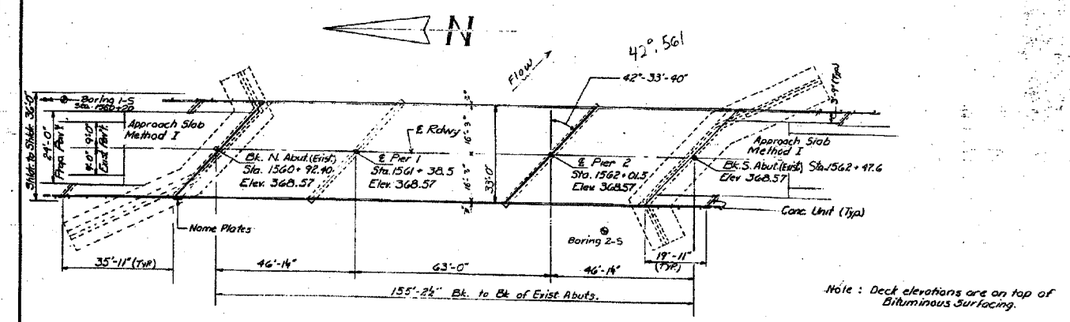
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
143 B	SALINE	68	23

SHEET NO. 1
10 SHEETS



ELEVATION

STATION 1561+70
REBUILT 19 BY
STATE OF ILLINOIS
FA RTE 126 SPUR SEC. 105B-DR-1
F.A. PROJ. RF-375 (10)
LOADING HS20
NAME PLATE
See Std. 2113



Note: Deck elevations are on top of Bituminous Surfacing.

PLAN

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

Expansion bolts shall consist of self drilling expansion anchors and ¾"ø x 12" hooked bolts.

The Contractor shall drive 1 timber test pile in a permanent location at Pier 1 or directed by the Engineer before ordering the remainder of piles. The Contractor is cautioned not to overdrive the piling.

Shoulder transition to wingwall shall be shall be shaped with broken concrete. Cost incidental.

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.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bit. Conc. Surf. Course Class I	Tons	62		62
Removal of Existing Superstructure	Ea.	1		1
Concrete Removal	Cu. Yds.		26	26
Cofferdams	Each		2	2
Cofferdam Excavation	Cu. Yds.		620	620
P.P.C. Deck Beams (27")	Sq. Ft.	2077		2077
P.P.C. Deck Beams (21")	Sq. Ft.	2848		2848
Steel Railing, Type N	Lin. Ft.	417		417
Reinforcement Bars	Lbs.	570	19370	19940
Name Plates	Ea.	1		1
Waterproofing Membrane System	Sq. Yds.	567		567
Neoprene Expansion Joint 8"	Lin. Ft.	134		134
Precast Concrete Bridge Slab	Sq. Ft.	418		418
Test Pile (Timber)	Ea.		1	1
Temporary Bridge Complete	Ea.	1		1
Class X Concrete	Cu. Yds.	6.2	335.2	361.4
Creosoted piles up to 20'	Lin. Ft.		1806	1806
Portland Cement Mortar Fairing Coat	Lin. Ft.	1492		1092

* See Special Provisions.

DESIGN STRESSES

FIELD UNITS
fc = 1400 p.s.i. sub
vc = 75 p.s.i. footings
fs = 20,000 p.s.i. reinf
n = 10

PRECAST UNITS
f'c = 4,500 p.s.i.
fc = 1,800 p.s.i.
fs = 20,000 p.s.i.
n = 8

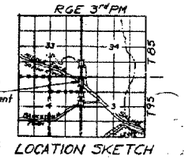
PRECAST PRESTRESSED UNITS
f'c = 5000 p.s.i.
f'ci = 4000 p.s.i.
f's = 270,000 p.s.i. - ⅜"ø Strands
fsi = 189,000 p.s.i. - ⅜"ø Strands
Allow 25#/sf for fut wearing surface

LOADING HS20-44

DESIGNED	J. J. Hauck
CHECKED	D A Ryan
DRAWN	J.R.B.
CHECKED	D A Ryan JPC

EXAMINED November 11 19 71
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

WATERWAY INFORMATION
Drainage Area: 103 Sq. Mi.
Character: Rolling, Clay, Wooded, Cultivated
Required Opening: 2220 Sq. Ft.
Present Opening: 2220 Sq. Ft.
Proposed Opening:
Overflow Struct. @ Sta. 1542+00: 577 Sq. Ft.
Saline River @ Sta. 1561+70: 1143 Sq. Ft.
Overflow Struct. @ Sta. 1579+00: 904 Sq. Ft.
12'-0"x11'-6" Box Culvert: 138 Sq. Ft.
Q100 8550 c.f.s.



FA Rt. 126 Spur OVER
MIDDLE FORK SALINE RIVER
SEC. 105B-DR-1
SALINE COUNTY
STA. 1561+70

Rev. 2-17-75 F.M.

ESCA CONSULTANTS, INC.

DESIGNED BY:	DAJ	02/08
DRAWN BY:	JPC	02/08
CHECKED BY:	MTD	02/08
APPROVED BY:	RDP	04/08

FOR INFORMATION ONLY

EXISTING STRUCTURE PLANS
FAP RTE 869 (IL 34)
SECTION 105BR-2
SALINE COUNTY