CONTRACT NO. 74107

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(6BR-1)B-1	CLAY	109	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark: #4 Chiseled "a" Top S.E. wing Grove Creek Bridge Sta. 1414+01 Elev. 464.29

Existing Structure built in 1920 as SBI 25, Section 6A, Station 1414+01. Superstructure - RC Slab, Substructure - RC Closed Abuts

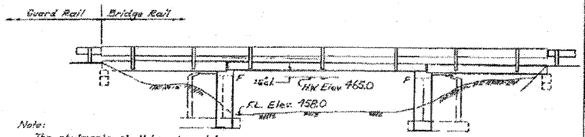
Contractor shall remove existing superstructure using stage construction, so as to maintain one way traffic at all times.

Bridge railing and posts to be stored on the Right-of-way for salvage by the State.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

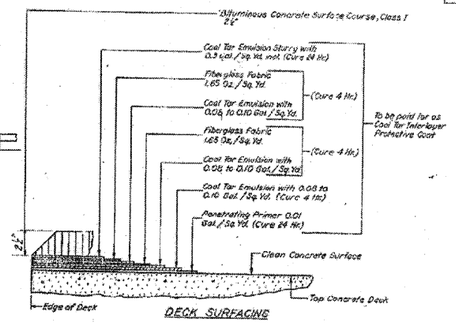
FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
328	(6BR-1)B-1	CLAY	8	4

SHEET NO. 1 OF 5 SHEETS



Note:
The abutments shall be adequately braced to prevent forward rotation from unrestrained earth pressure before existing superstructure is removed.

ELEVATION



DECK SURFACING

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.

An alternate strand pattern using Extra High Strength Prestressing strand (270 KSI.) is permitted.

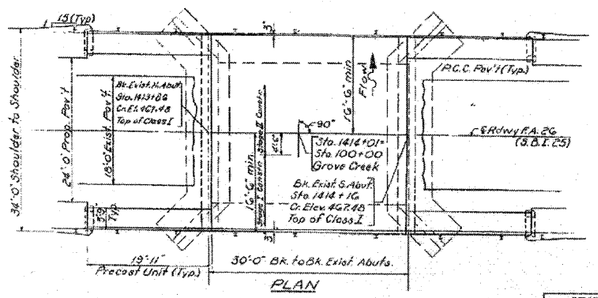
Expansion bolts shall consist of self drilling expansion anchors and ¾" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete, unless otherwise shown.

Shoulder transition to wingwall shall be shaped with broken concrete.

Cost Incidental

WATERWAY INFORMATION

Drainage Area	3.83 Sq. Miles
Character	flat
Present Opening	172 Sq. Ft.
Required Opening	172 Sq. Ft.
Proposed Opening	172 Sq. Ft.
Q(50)	1590 cfs



PLAN

PROFILE GRADE
(Top Class I)

STATION 1414+01
REBUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 26 SEC. 6BR-1
LOADING HS 20

NAME PLATE
See Std. 2113

DESIGN STRESSES

FIELD UNITS
Fc = 1900 p.s.i. Sub.
Fs = 20000 p.s.i. Reinf.
n = 10

PRECAST PRESTR. UNITS
Fc = 5000 p.s.i.
Fci = 4000 p.s.i.
Fs = 248,000 p.s.i. ½" ø Strands
Fsi = 173,600 p.s.i. ½" ø Strands

PRECAST UNITS
Fc = 4500 p.s.i.
Fc = 1800 p.s.i.
Fs = 20000 p.s.i.
n = 8

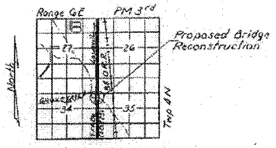
Design Specifications 1969 AASHTO (as applicable)

Allow 25 lb per sq. ft. for future wearing surface

HS 20-44 LOADING (New Constr.)

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Bituminous Concrete Surface Course, Class I	Tons	12		12
Portland Cement Concrete Pavement (10")	Sq. Yds.	33		33
Pavement Fabric	Sq. Yds.	33		33
Concrete Removal	Cu. Yds.		1	1
Expansion Bolts (¾"ø)	Each	52	70	122
Class X Concrete	Cu. Yds.	1.6	19.9	21.5
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (17")	Sq. Ft.	998		998
Steel Railing, Type S	Lin. Ft.	141		141
Reinforcement Bars	Lbs.		1030	1030
Pavement Removal & R.C.C. Replacement, Type I (10")	Sq. Yds.	8		8
Removal of Existing Superstructures	Each			1
Coal Tar Interlayer Protective Coat	Sq. Yds.	115		115
Name Plates	Each	1		1
Temporary Guard Rail	Lin. Ft.	30		30



LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A. ROUTE 26 (S.B.I. 25)
OVER GROVE CREEK
SECTION 6BR-1
CLAY COUNTY
STATION 1414+01

DESIGNED		
CHECKED		
DRAWN		
CHECKED	JP	

EXAMINED March 5, 1972
PASSED
APPROVED

ESCA CONSULTANTS, INC.

DESIGNED BY:	DAJ	04/08
DRAWN BY:	HAS	04/08
CHECKED BY:	MTD	05/08
APPROVED BY:	RDP	08/08

FOR INFORMATION ONLY

EXISTING STRUCTURE PLANS
US 45 OVER GROVE CREEK
FAP ROUTE 328 - SECTION (6BR-1)B-1
CLAY COUNTY