

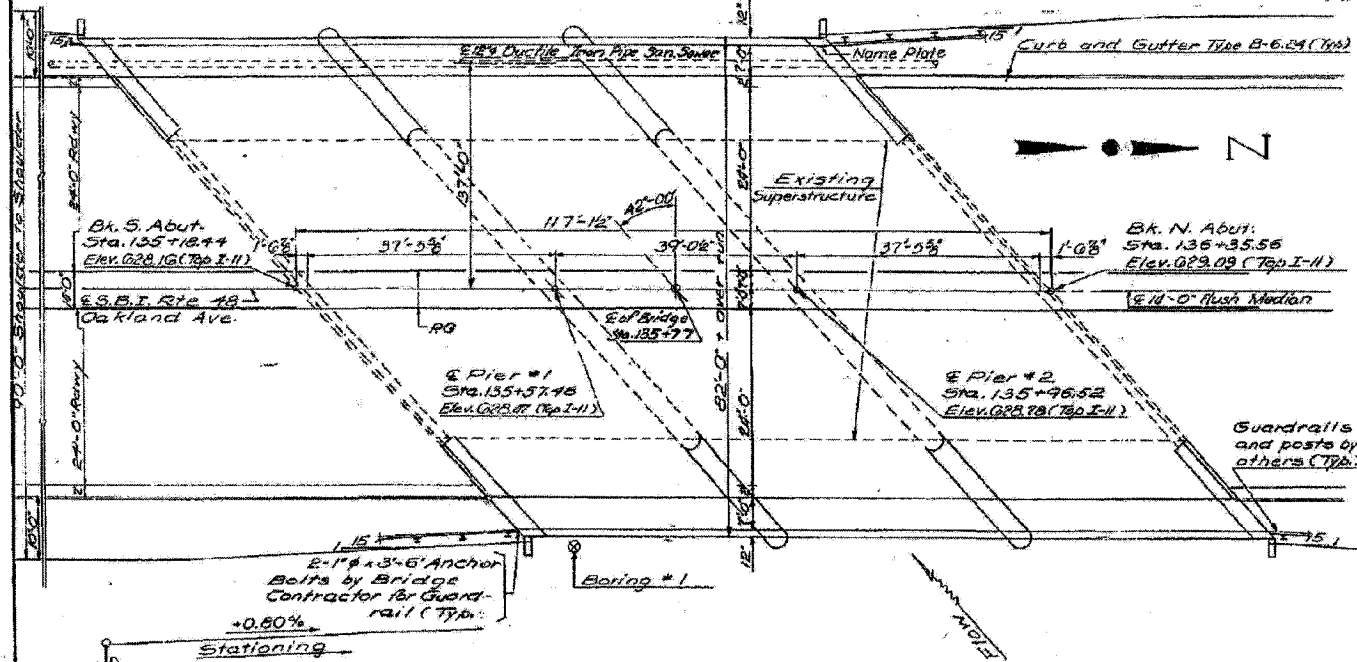
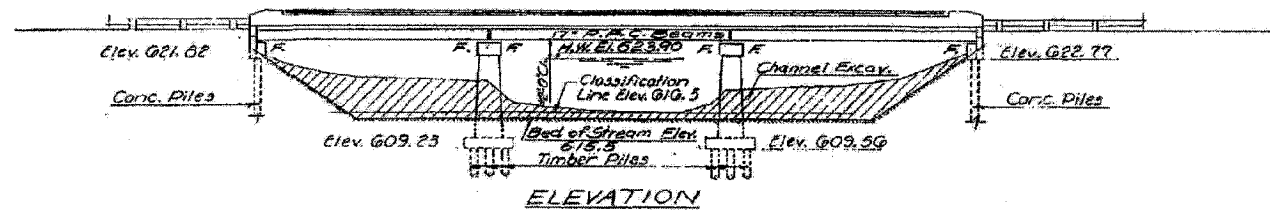
FOR INFORMATION ONLY

CONTRACT NO. 74166				
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
716	(130BR-1)B-1	MACON	95	66
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

B.M. #17 Chis. 3' End E. Par. Wall on Existing Bridge over Spring Creek. Elev. 628.80  
Existing Structure @ Sta. 135+77 Built in 1932 as S.B.I. Rte. 48 Sec. 130 B. Existing superstructure to be removed utilizing stage construction so as to maintain traffic over the bridge at all times. Existing Piers and Abutments to be widened.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	SHEET NO. 1
100R	MACON	57	22	11	6 SHEETS



PROFILE SBI RTE 48  
(Inside Edge Part)

DESIGNED Smith, T. Desai	EXAMINED [Signature]
CHECKED [Signature]	DATE 10/10/70
DRAWN [Signature]	PROJECT 11-100(23)
CHECKED [Signature]	SECTION S.B.I. RTE 48 OVER SPRING CREEK

WATERWAY INFORMATION

Drainage Area 26.3 sq. mi.  
Character: Suburban & Farm, level to rolling.  
Over one half in Grass and woods. Rest  
Farm Land & some parking lots & streets.  
Required Opening (50 Years Reg.) 659 sq. ft.  
Present Opening 4087 sq. ft.  
Proposed Opening 659 sq. ft.

Ordinary Water Elev. 617.7  
Low Water Elev. 616.0  
Design H.W. Elev. 623.9  
(2) +410 acfs

PRECAST PRESTRESSED UNITS

$f_c = 5000$  p.s.i.  
 $f_{ci} = 4000$  p.s.i.  
 $f_s = 248,000$  p.s.i. Strands (7/16")  
 $f_{sf} = 175,600$  p.s.i. Strands (7/16")

DESIGN STRESSES FIELD UNITS

$f_c = 4400$  p.s.i.  
 $f_s = 20000$  p.s.i. (Reinf.)  
 $f_s = 20000$  p.s.i. (Struct.)  
 $f_c = 75$  p.s.i. (Footings)  
 $n = 10$

Allow 25% for additional future wearing surface  
Loading H.S. 20-44

Design Specifications: AASHTO 1969 as  
amended.

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 3/4" hooked bolts. Hooked bolts shall extend a minimum of 12" into new concrete, unless otherwise shown.

Limits of Cast-In-Place Protective Coat shall be back to back of abutments and out to out of deck.

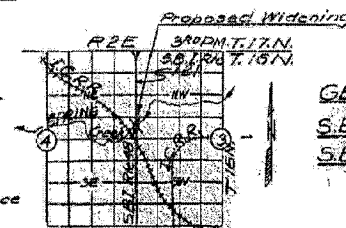
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The parapet and sidewalk shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

The Contractor shall drive 2 test piles in a permanent location, one timber test pile at Pier #1 and one conc. test pile at North Abut., as directed by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Conc. Surface Cse, Class I	Tons	86		86
Concrete Removal	Cu. Yds.		24	24
Expansion Bolts (3/4")	Each		390	390
Structure Excavation	Cu. Yds.		363	363
Protective Coat	Sq. Yds.	827		827
Class A Concrete	Cu. Yds.		3127	3127
Class X Concrete	Cu. Yds.	623	510	1133
Precast Prestressed Conc. Deck Slab (17')	Sq. Ft.	9226		9226
Aluminum Railing, Type L	Lin. Ft.	195		195
Steel Railing, Type M	Lin. Ft.	195		195
Reinforcement Bars	Lbs.	9790	10060	20050
Untreated Piles (Up to 30 Ft.)	Lin. Ft.		1075	1075
Test Pile (Timber)	Each		1	1
Concrete Piles	Lin. Ft.		722	722
Test Pile (Concrete)	Each		1	1
Name Plates	Each	1		1
Temporary Guardrail	Lin. Ft.		115	115
Waterproofing Membrane System	Sq. Yds.	640		640
Removal of Existing Superstructures	Each		1	1
Preformed Joint Sealer 1/2"	Lin. Ft.		40	40



PROJECT 11-100(23)  
GENERAL PLAN & ELEVATION  
S.B.I. RTE 48 OVER SPRING CREEK  
S.B.I. RTE 48 SECTION 130 BR  
MACON COUNTY  
STA 135+77.00

LOCATION SKETCH