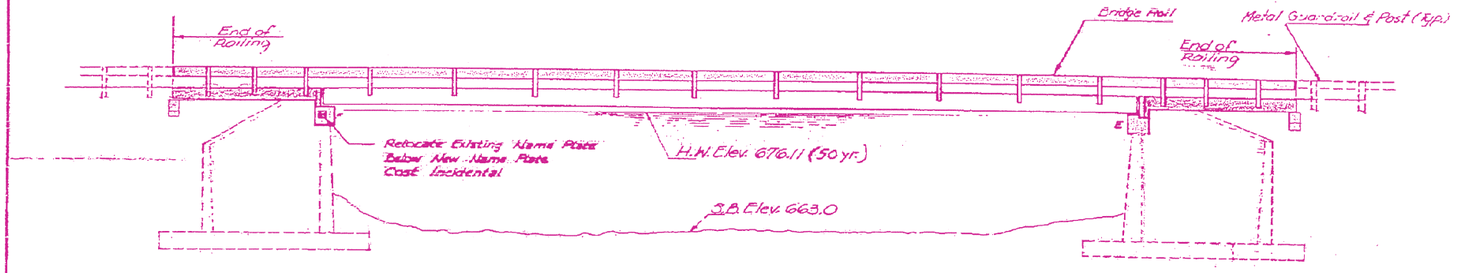
B.M. Sq. in top S.E. wall 15' Rt Sta. 688+42 Elev. 678.25
Exist. Structure Built 1928 as SBI 49 Sec. 118B
Sta. 688+85 R.C. thru Girder, Closed Conc. Abuts.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEETS NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D. E. 1	118BR	CHAMPAIGN	24	14
F. A. 199	118BR-1			
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT		

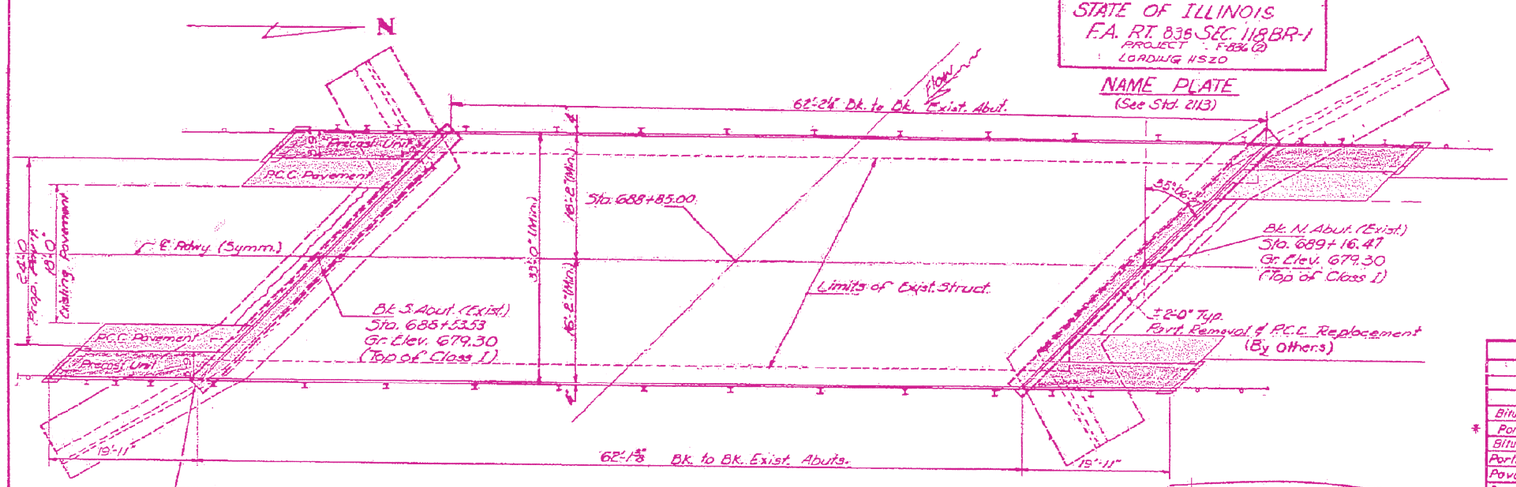
SHEET NO. 1
6 SHEETS



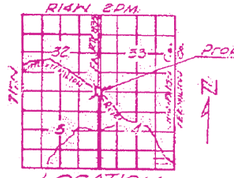
ELEVATION

STATION 688+85.00
REBUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 836 SEC. 118BR-1
PROJECT F-836 (2)
LOADING HS20

NAME PLATE
(See Std. 2113)



PLAN



LOCATION SKETCH

Sta. 687+00 Elev. 679.95
Sta. 689+00 Elev. 679.00
Sta. 690+00 Elev. 678.93

PROP. PROFILE GRADE
E.A. RTE. 836
(Top of Class I)

DESIGNED Kumar / Mahr, P.E.
CHECKED Stanley Sobczynski
DRAWN A. Barbozo
CHECKED Stanley Sobczynski

EXAMINED August 9, 1971
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

DESIGN STRESSES

FIELD UNITS	PRECAST PRESTR. UNITS	PRECAST UNITS
f_c = 1400 psi (Super)	f_c = 5000 psi	f'_c = 4500 psi
f_c = 1000 psi (Sub)	f_{ci} = 4000 psi	f_c = 1800 psi
f_s = 20,000 psi (rein.)	f_s = 270,000 psi	f_s = 20,000 psi
v_c = 75 psi (footing)	f_{si} = 189,700 psi	n = 8
n = 10		

Design - AASHTO 1969

LOADING HS 20-44

TOTAL BILL OF MATERIAL

Items	Unit	Super	Sub.	Total
Bituminous Concrete Binder Course	Tons	24		24
Portland Cement Mortar Fairing Course	Lin. Ft.	618		618
Bituminous Concrete Surface Course Class I	Tons	16		16
Portland Cement Concrete Pavement (10")	Sq. Yds.	33		33
Pavement Fabric	Sq. Yds.	33		33
Concrete Removal	Cu. Yds.		10	10
Expansion Bolts (¾"ø)	Each	48	42	90
Class X Concrete	Cu. Yds.	0.9	27.5	28.4
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (27"D)	Sq. Ft.	2040		2040
Steel Railing, Type S	Lin. Ft.	206		206
Reinforcement Bars	Lbs.	120	5190	5310
Removal of Existing Superstructures	Each	1		1
Waterproofing Membrane System	Sq. Yds.	245		245
Preformed Joint Sealer (2½")	Lin. Ft.	40		40
Temporary Bridge - Complete	Ea.	1		1
Structural Steel	Lbs.	2820		2820
Name Plate	Ea.	1		1

* See Special Provisions

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.

All structural steel shall be shop painted with two coats of basic lead silica chromate paint.

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

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.

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

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

Limits of Waterproofing Membrane System shall be back to back of abutments and out to out of deck, except as shown.

Hooked bolts shall extend a minimum of 12" into new concrete as shown on sheet No. 5.

PROJECT F-836 (2)
GENERAL PLAN & ELEVATION
LITTLE VERMILION RIVER
E.A. RTE. 836 SEC. 118BR-1
CHAMPAIGN COUNTY
STA. 688+85.00

Rev. 2-12-77

G.E.

FOR INFORMATION ONLY

FILE NAME = ...\roadway\lvr_xstrl.dgn	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
THE UPCHURCH GROUP, INC.	PLOT DATE = 8/20/2008 1:32:06 PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE SHT 1 OF 2
ILLINOIS ROUTE 49 OVER LITTLE VERMILION RIVER

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	118BR-2	CHAMPAIGN	45	33
		CONTRACT NO. 70600		
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT		