Bench Mark: Chiseled "□" on NE WW Sta. 51+17.71 23.35 Lt. Elevation 645.40.

Existing Structure: S.N. 050-0037. Originally Built in 1939 as Route 118A, Section 107B. The Existing Structure is a 39'-0" Back-to-Back Abutments, 43'-10" Out-to-Out Deck, Reinf. Conc. Slab Deck on Closed Abutments. The existing Structure is to be Removed and Replaced. One Lane of Traffic to be Maintained Utilizing Stage Construction.

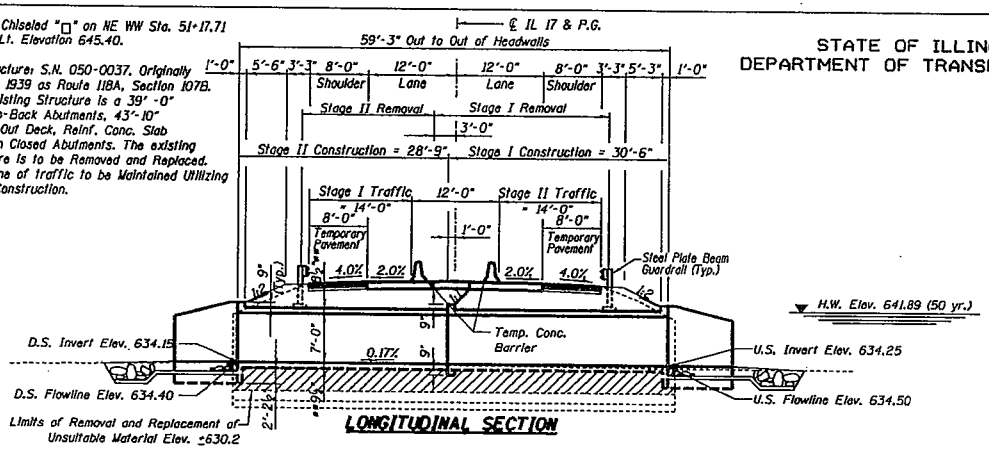
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

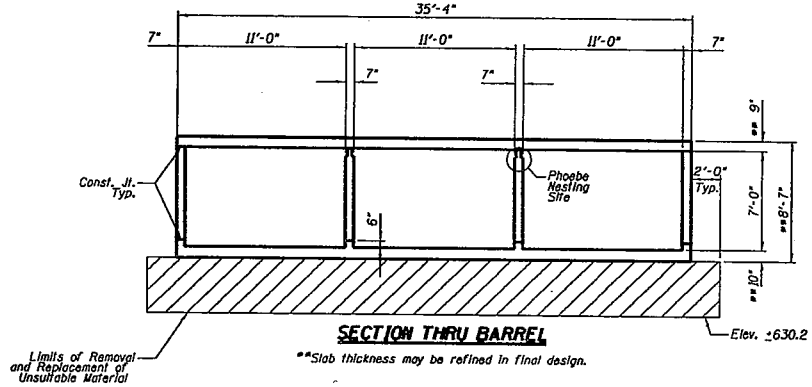
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 651	*	LASALLE	2	1
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1 of 2 SHEETS

*SECT: 107BR



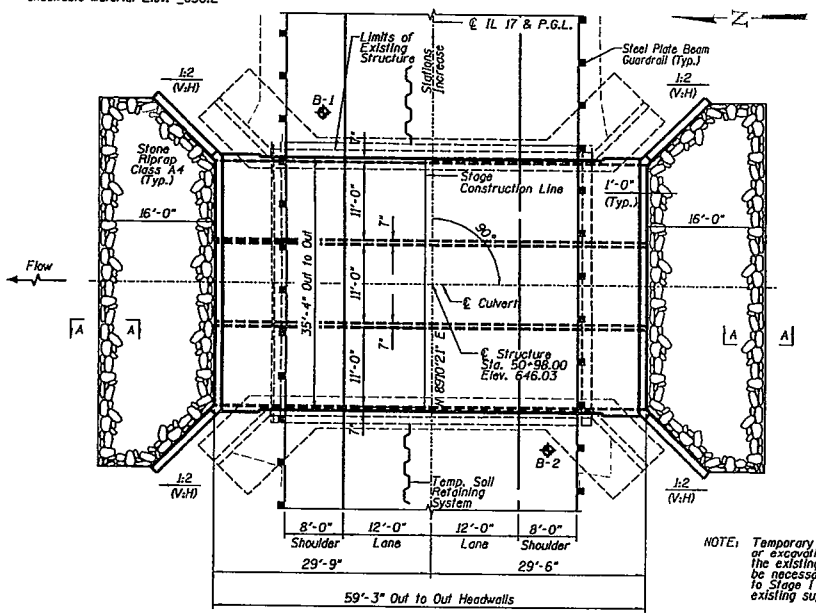
LONGITUDINAL SECTION



SECTION THRU BARREL

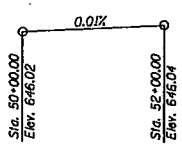
**Slab thickness may be refined in final design.

The limits and quantities of removal and replacement are based on the Structure Geotechnical Report and may be modified by the District Geotechnical Engineer and Field Engineers for variable subsurface encountered in the field.

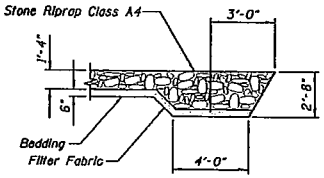


PLAN

NOTE: Temporary bracing of, or excavation behind, the existing abutment may be necessary prior to Stage I removal of the existing superstructure.



PROFILE GRADE
(along ℄ roadway)



SECTION A-A

APPROVED

MAY 18 2006

AS A BASIS FOR
PREPARATION OF DETAILED PLAN

HIGHWAY CLASSIFICATION
F.A.P. Rte. 651 - IL. Rte. 17
Functional Class: Minor Arterial
ADT: 1,800 (2003); 1,990 (2023)
DHV: 100 (2023)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO 17th Edition

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

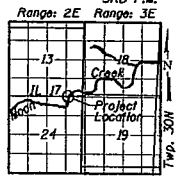
WATERWAY INFORMATION - DISTRICT APPROVED

Drainage Area = 7.5 mi² (P) & (E) Low Grade Elev. 645.69 ft. @ Sta. 56+00.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10								
Design	50	866.0	228.0	231.0	641.89	0.12	0.15	642.01	642.04
Base	100	975.0	237.0	231.0	642.07	0.18	0.24	642.25	642.31
Overtopping									
Max. Calc.	500	1227.0	256.0	231.0	642.44	0.34	0.47	642.78	642.91

DESIGN SCOUR ELEV.	US	DS
	631.2	631.1

DESIGNED	AWE
CHECKED	WAT
DRAWN	CJS
CHECKED	AWE



LOCATION SKETCH

GENERAL PLAN
ILLINOIS 17 OVER SOUTH BRANCH
OF MOON CREEK
F.A.P. ROUTE 651 - SEC. NO. 107 BR
LASALLE COUNTY
STATION 50+98.00
STRUCTURE NO. 050-2044