

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	3B-1	PIKE	51	30
STA. TO STA.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

**APPROVED**  
For Structural Adequacy Only

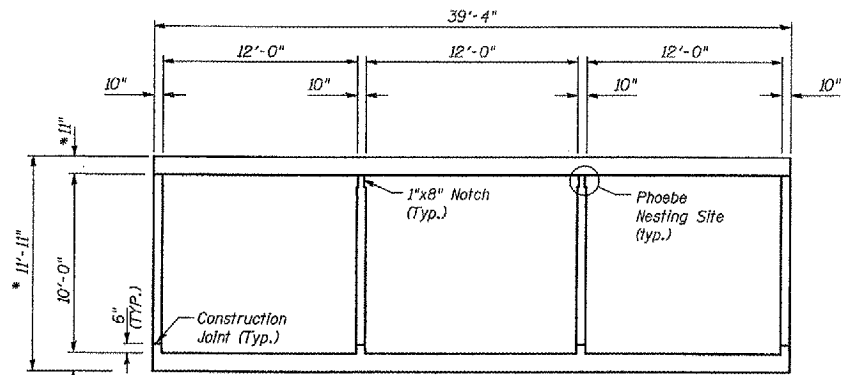
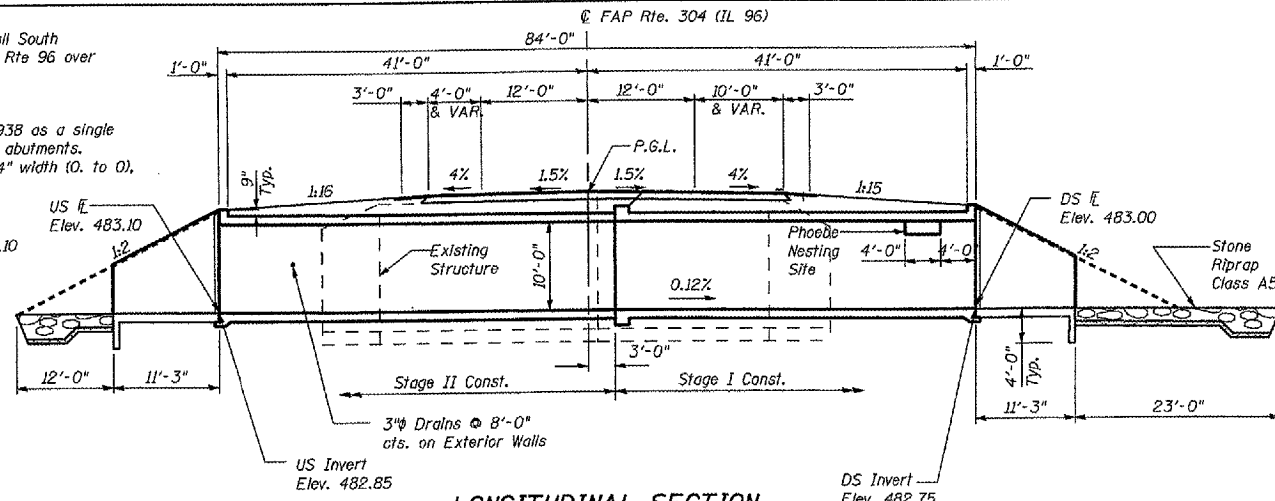
*Ralph E. Anderson (TSO)*  
Engineer of Bridges & Structures

Benchmark:  
BM#7WRM; Standard Tablet on top of Wingwall South  
East corner of Bridge No. 075-0043 on IL. Rte 96 over  
Jim Town Branch  
Elev: 496.21

Existing Structure: S.N. 075-0043 built in 1938 as a single  
span concrete deck on T-Beams with closed abutments.  
33'-0" long (Bk. to Bk. of Abutments), 39'-4" width (O. to O.).

Traffic to be maintained using Stage  
Construction. One Lane is to remain  
open at all times.

No Salvage.

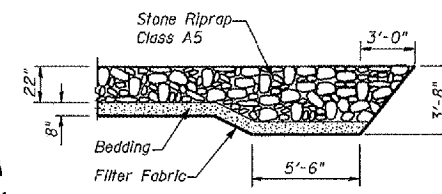


**SECTION THRU BARREL**

\* Slab thickness may be refined in final design.

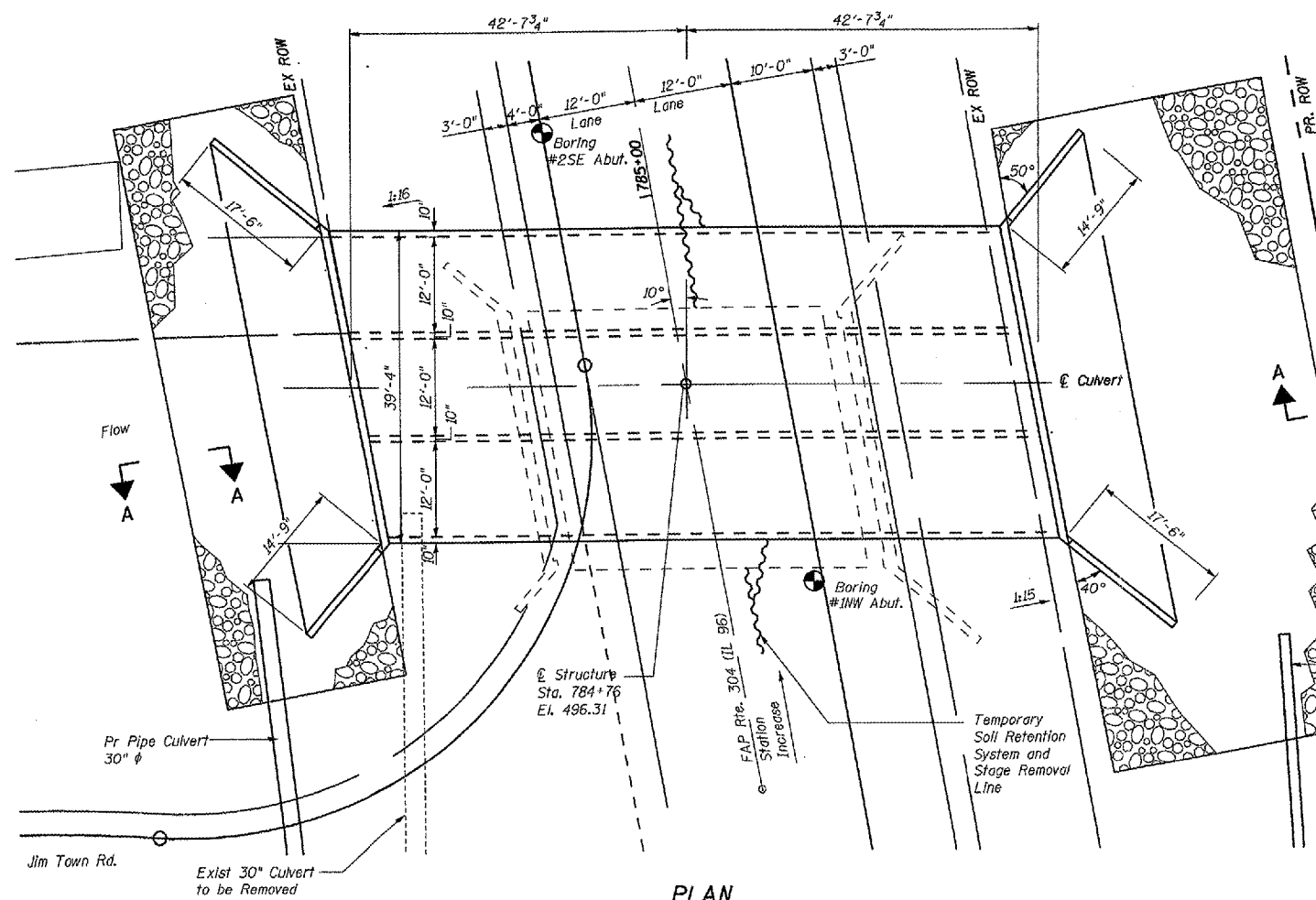
**GENERAL NOTES**

1. Precast Box Culvert alternate is not allowed.
2. Reinforcement Bars shall conform to the requirements of ASTM A706 GR 60 (IL Modified). See Special Provisions.
3. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing Superstructure. The Contractor shall saw cut the upper portion of the existing abutment of the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.



STATION 784+76  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 304 SEC. 3B-1  
LOADING HS20  
STR. NO. 075-2506

NAME PLATE  
See Std. 515001



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A5	Ton		329	329
Filter Fabric	Sq. Yd.		359	359
Removal of Existing Structures	Each		1	1
Bar Splacers	Each		179	179
Concrete Box Culverts	Cu. Yd.		419	419
Reinforcement Bars	Lb.	67480		67480
Reinforcement Bars, Epoxy Coated	Lb.	1430		1430
Name Plates	Each		1	1
Temporary Soil Retention System	Sq. Ft.		426	426
Rock Fill - Foundation	Ton		30	30
Granular Culvert Backfill	Cu. Yd.		930	930

**DESIGN SCOUR ELEV. TABLE**

Location	U.S.	D.S.
Elevation	478.85	478.75

**WATERWAY INFORMATION**

Drainage Area = 1.67 mi<sup>2</sup> Low Grade Elev. 488.75 ft. @ Sta. 789+50

Flood	Freq. Yr.	Q cfs	Opening Sq. Ft.		Nat. H.W.E.	Head - ft.		Headwater Elev. - ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Overtopping	10	1316	119.5	200.2	488.58	0.64	0.05	489.22	488.63
Design	50	2168	165.1	254.9	490.10	1.19	0.00	491.29	490.10
Base	100	2548	182.2	275.4	490.67	0.76	0.03	491.43	490.70
Max. Calc.	500	3489	232.9	336.2	492.36	1.34	0.87	493.70	493.23

**LOADING HS 20-44**

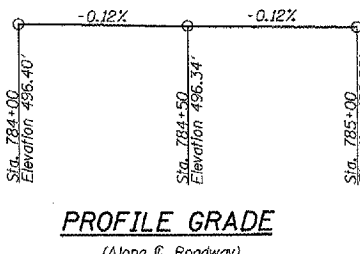
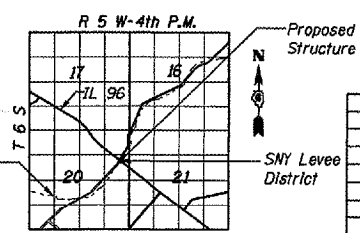
Allow 50 Lb/Sq. Ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

AASHTO 2002

**DESIGN STRESSES**

FIELD UNITS  
f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinf.)



**The Upchurch Group**  
HILLSIDE, IL. (708) 449-2321  
MATTOON, IL. (217) 286-3177



*M. Silvester 8-24-07*  
MARTIN J. SILVESTER  
STRUCTURAL ENGINEER  
LICENSE EXP. DATE 11-30-08

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN**  
IL 96 OVER JIMTOWN BRANCH  
FAP 304 SECTION 3B-1  
STA. 784+76  
PIKE COUNTY STR. 075-2506  
SCALE: N.T.S. DRAWN BY LP  
DATE: AUG 2007 CHECKED BY MJS

THE PROJ. NO. 075-0043-12  
 PLOT DATE = 8/17/2007  
 FILE NAME = F:\PROJECTS\STRUCTURE\GENERAL\PLAN.LWT