

Bench Mark: Chiseled square in the top of the southwest wingwall of the South Abutment Elev. 442.25

Existing Structure: S.N. 080-001; Built in 1928 as S.B.I. Route, Sec. 124. Existing structure is a single span R.C. deck girder bridge on closed abutments. It was widened in 1962; out-to-out width 46'-4", bk.-to-bk. abuts. length 43'-0". The existing structure is to be removed and replaced with a double three sided precast concrete structure utilizing stage construction.

No salvage

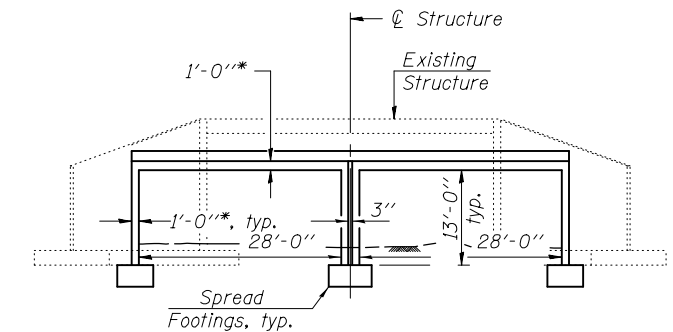
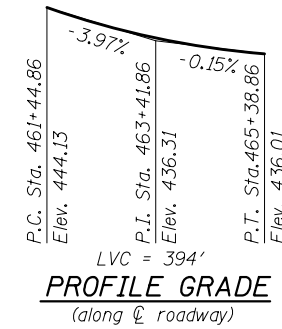
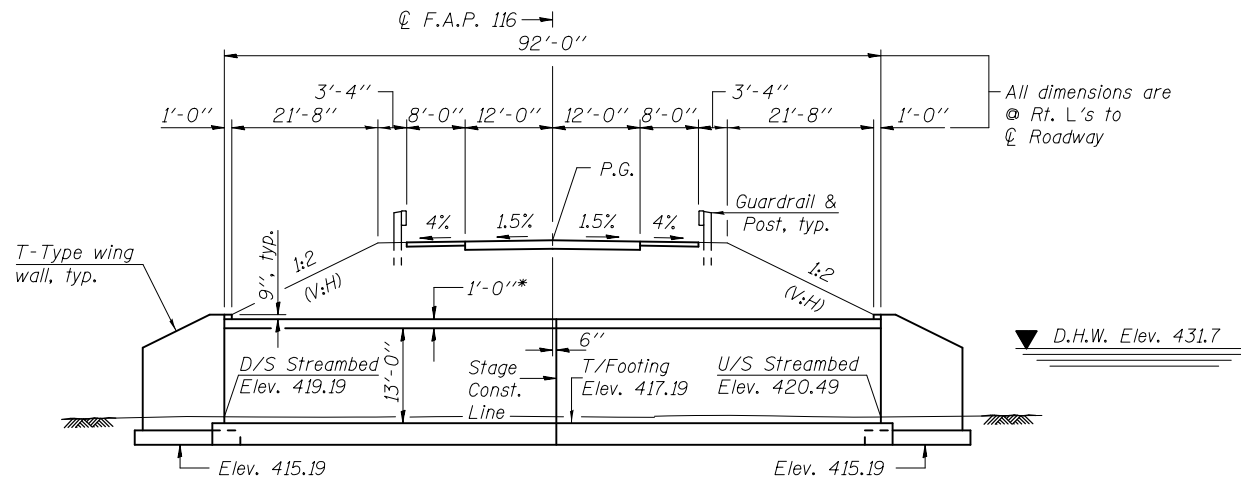
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	D.S.	U.S.
	419.19	420.49

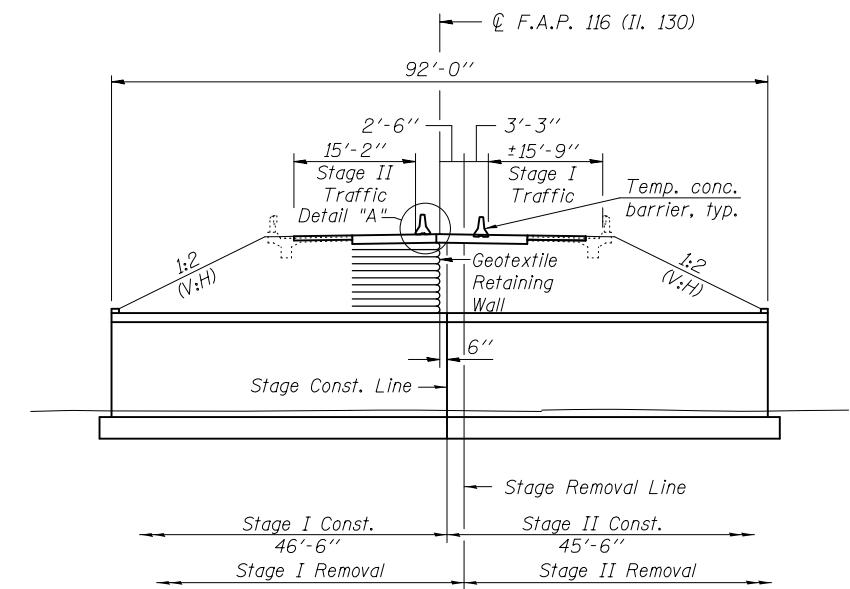
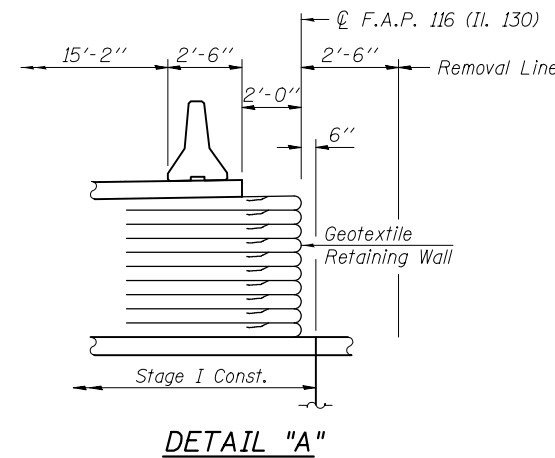
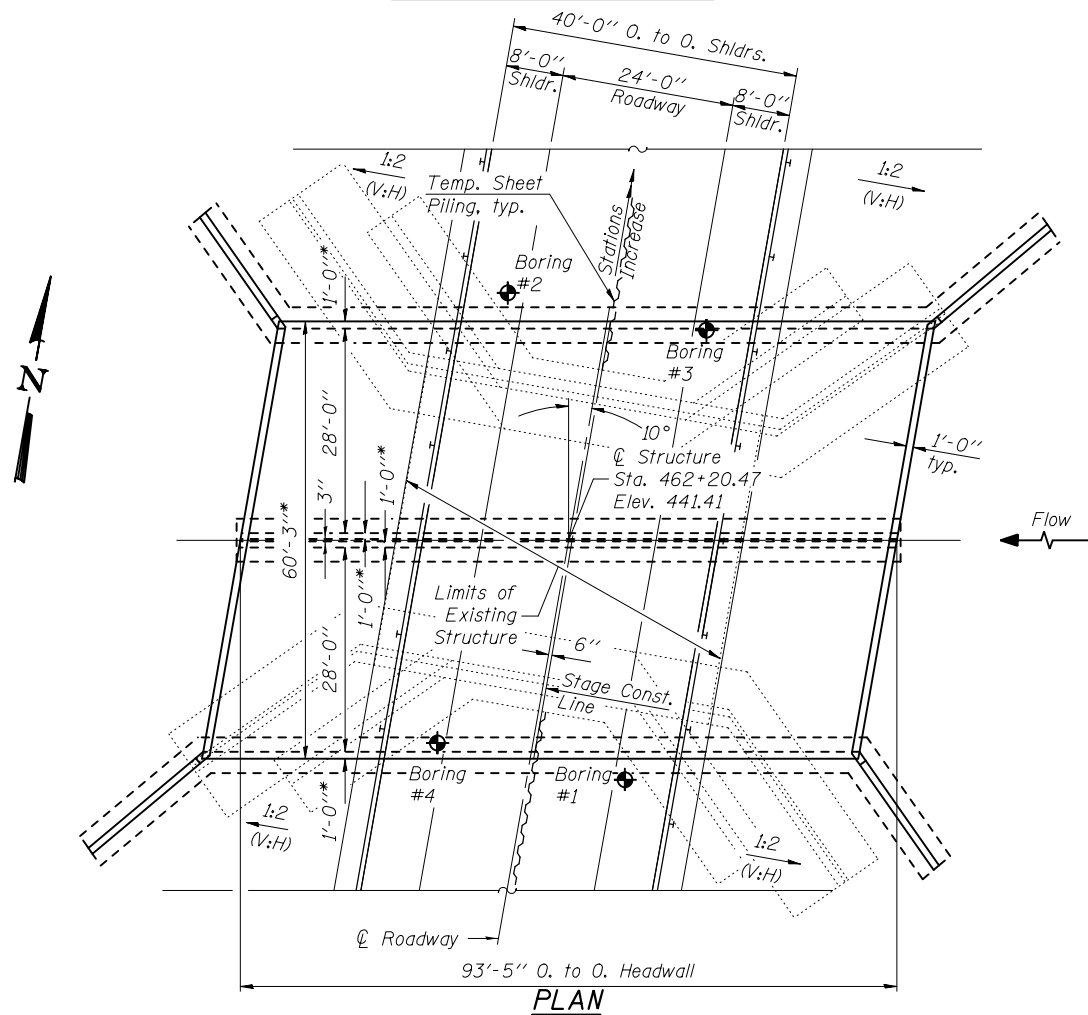
WATERWAY INFORMATION

Flood		Freq. Yr.	Q c.f.s.	Opening sq. ft.	Nat. H.W.E.	Head - ft.	Headwater El.
Design	Base	100	4210	417	432.1	2.2	434.3
Overtopping	-	-	-	-	-	-	-
Max. Calc.	500	5490	434	602	432.6	8.8	441.4

Drainage Area = 16 sq. mi. Low Grade Elev. 435.30 @ Sta. 468+50.39



* Slab and wall thickness and shape may vary as per manufacturer's design.



HIGHWAY CLASSIFICATION

F.A.P. Rte. 116 - Il. Rte. 130
Functional Class: Rural Minor Arterial
ADT: 5500 (1995); 6100 (2000)
DHW: 732
Design Speed: 55 mph
Posted Speed: 55 mph

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.085g
Site Coefficient (S) = 1.0

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

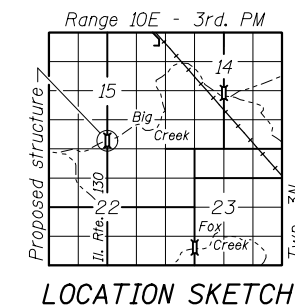
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi (welded wire fabric)



GENERAL PLAN & ELEVATION

**ILLINOIS ROUTE 130 OVER
BIG CREEK
F.A.P. RTE. 116 - SEC. 124B
RICHLAND COUNTY
STATION 462+20.47
STRUCTURE NO. 080-2004**

FILE NAME =	USER NAME =	DESIGNED -	REVISD -
		CHECKED -	REVISD -
		DRAWN -	REVISD -
		CHECKED -	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SHEET NO. 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	124B	RICHLAND		
				CONTRACT NO. 12345

ILLINOIS FED. AID PROJECT