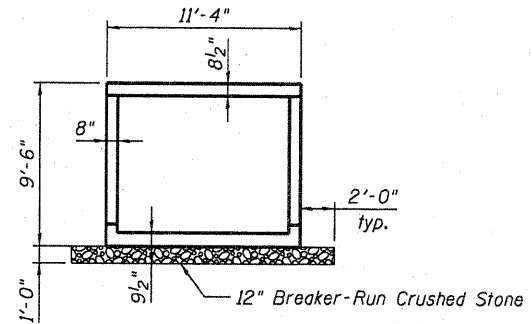


Bench Mark: Point #907199, Pin with Cap GPS Control; North: 1,868,129.76, East: 2,370,182.96  
Sta. 1279+54.12, 33.43' Lt, Elev. 682.10

Existing Structure: S.N. 098-1019, built in 1952 as Section 15, 16, 29R, is a 12' x 6' R.C. box culvert 94'-0" face to face of headwall with culvert length of 95'-4".  
Traffic to be maintained utilizing staged construction.

No Salvage

© F.A.P. 309 (US 30),  
Stage Const. Line & P.G.



SECTION THRU BARREL

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications

**DESIGN STRESSES**

**FIELD UNITS**

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

**LOADING HS20-44**

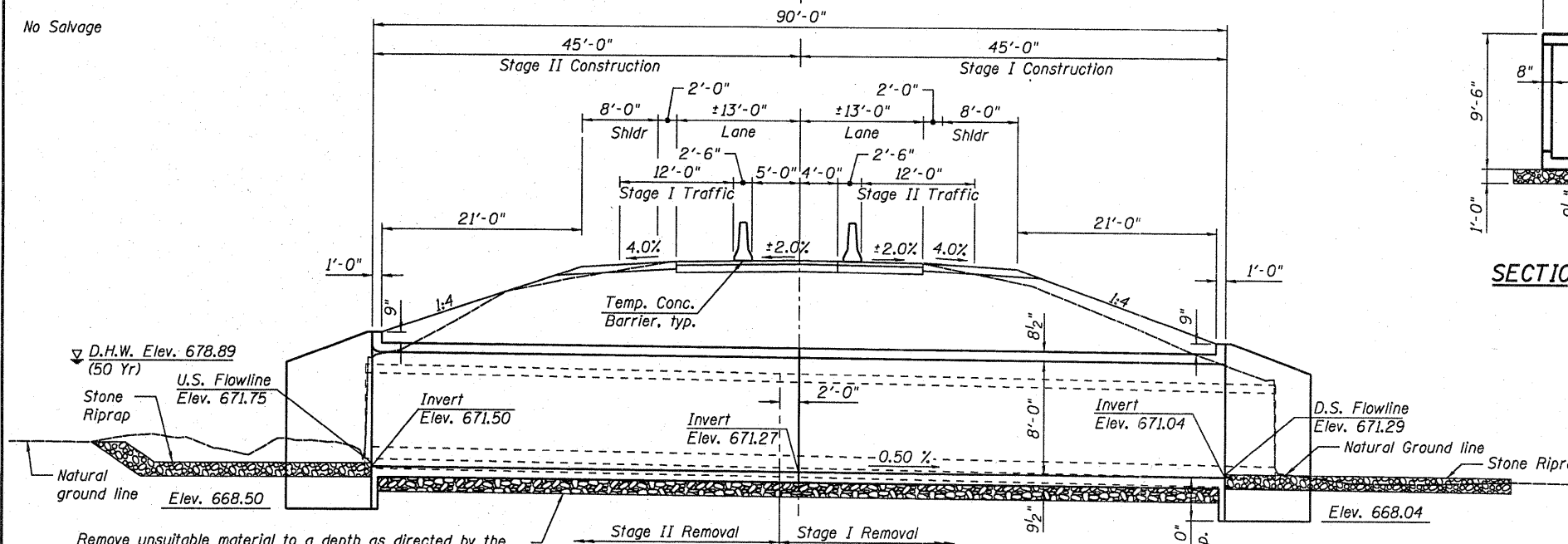
Allow 50#/sq. ft. for future wearing surface.

**WATERWAY INFORMATION**

Drainage Area = 395.0 acres				
Existing Low Grade Elevation: 684.56 ft. @ 1276+91				
Proposed Low Grade Elevation: 684.56 ft. @ 1276+91				
Flood	Frequency Year	Discharge cfs	Headwater Elev. (ft)	
			Existing	Proposed
Ten-Year	10	243	678.05	676.18
Design	50	497	683.56	678.89
Base	100	655	-	680.56
Overtop-Exist.	62	531	684.56	-
Overtop-Prop.	269	975	-	684.56

**DESIGN SCOUR ELEVATION TABLE**

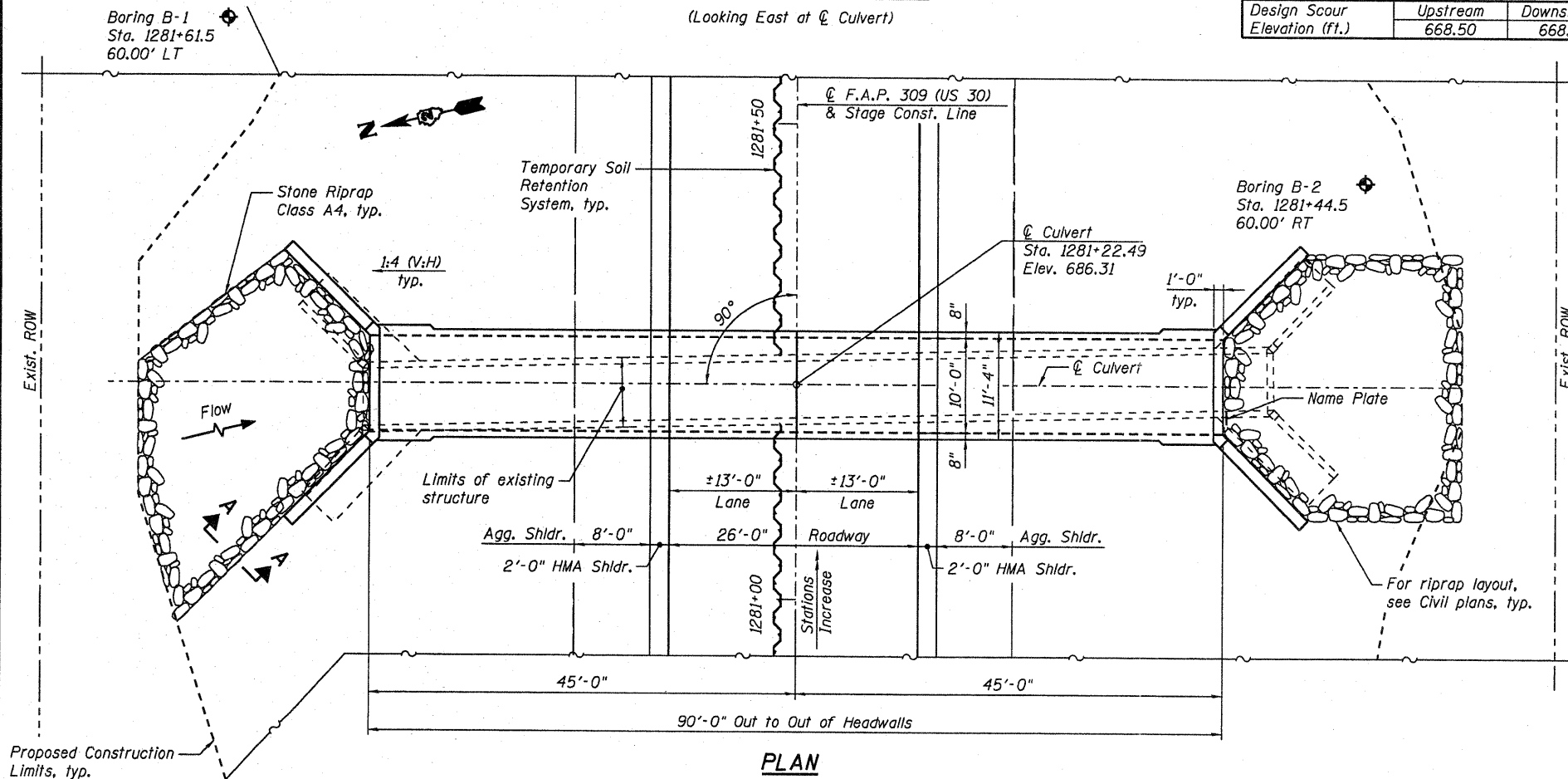
Design Scour Elevation (ft.)	Upstream	Downstream
	668.50	668.04



**LONGITUDINAL SECTION**

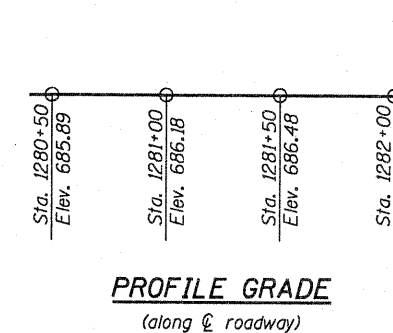
(Looking East at © Culvert)

Remove unsuitable material to a depth as directed by the Engineer and replace with Breaker-Run Crushed Stone. A depth of 1'-0" has been assumed to determine quantities.



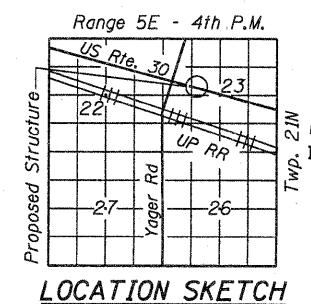
**PLAN**

Proposed Construction Limits, typ.

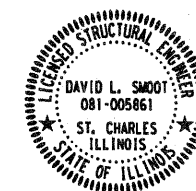


**PROFILE GRADE**

(along © roadway)



**LOCATION SKETCH**



David L. Smoot

David L. Smoot  
Date: 06/24/2011  
License Expires: 11/30/2012

**GENERAL PLAN & ELEVATION**  
**US ROUTE 30 OVER UNNAMED**  
**TRIBUTARY TO THE ROCK RIVER**  
**F.A.P. RTE 309 - SEC. 15T-1**  
**WHITESIDE COUNTY**  
**STATION 1281+22.49**  
**STRUCTURE NO. 098-1067**

FILE NAME = P:\CIBBEL WEST Projects\2009\121008 1007 Various Versions\Structural\Drawings\12 11 20 Culvert\SN 098-1067\098-1067-64F23-001-098E.dgn

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
116 West Main Street, Suite 201  
St. Charles, Illinois 60174  
(630) 413-7750

USER NAME =	DESIGNED - DLS	REVISED -
FILE NAME =	CHECKED - AEU	REVISED -
PLOT SCALE =	DRAWN - AWH	REVISED -
PLOT DATE = 06/24/2011	CHECKED - DLS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. 1 OF 9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
309	15T-1	WHITESIDE	74	33
CONTRACT NO. 64F23			ILLINOIS FED. AID PROJECT	