

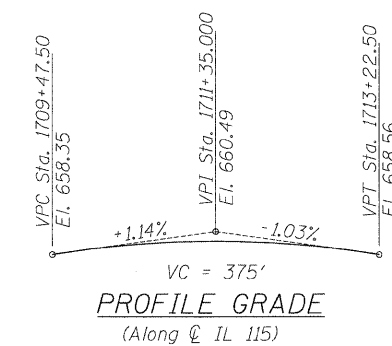
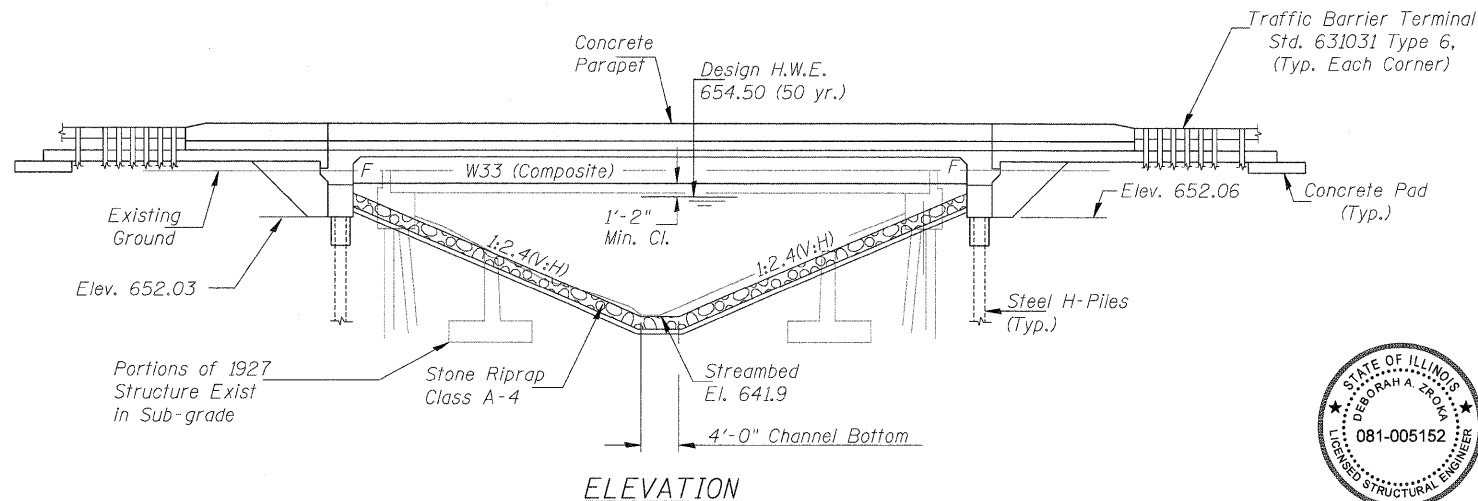
BM#3 - RR Spike in Power Pole W. Side of Road  
Sta. 1706+38, 40' Rt.  
Elev. 656.92

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Existing Structure:

S.N. 027-0075 was built in 1981 as F.A. Route 796, Section 106 BR-3. The existing structure is a single span PPC Deck Beam bridge supported on pile bent abutments, 59'-6" back to back abutments and 33'-0" out-to-out deck. In 2008, several PPC Deck Beams were replaced in kind. Existing bridge to be completely removed and replaced. One lane traffic shall be maintained at all times utilizing Stage Construction and Temporary Traffic Barrier.

No Salvage.



**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
*Robert E. Anderson* (TSP)  
ENGINEER OF BRIDGES AND STRUCTURES

**DESIGN SPECIFICATIONS**  
2007 AASHTO LRFD Bridge Design Specifications  
with 2008 & 2009 Interims

**DESIGN STRESSES**

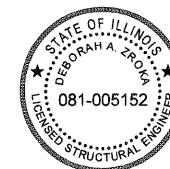
**FIELD UNITS**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
Fy = 50,000 psi (M270 Grade 50W)

**LOADING HL-93**

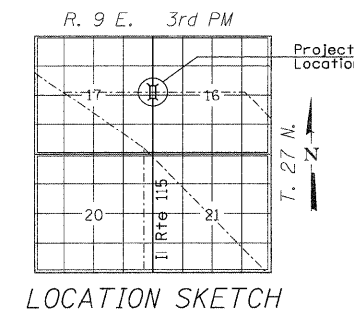
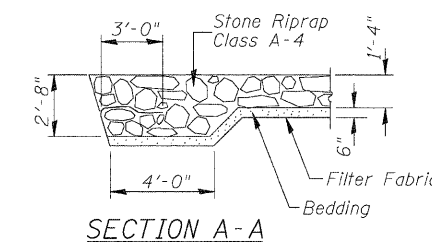
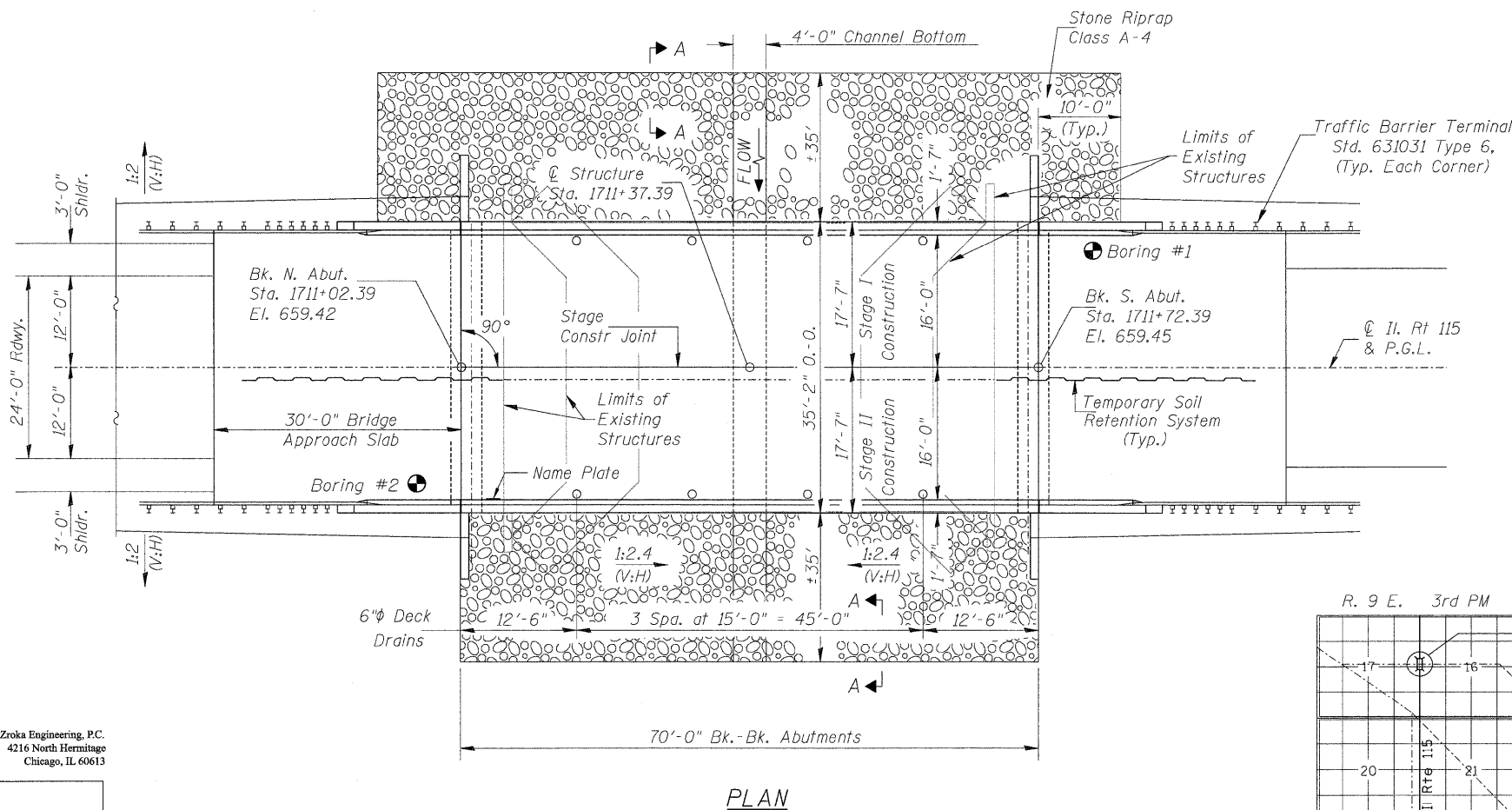
Allow 50#/sq. ft. for future wearing surface.

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.078g  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.134g  
Soil Site Class = C



*Deborah A. Zroka* Oct. 4, 2010  
Signature Date  
November 30, 2010  
Expires



**GENERAL PLAN & ELEVATION**  
**IL ROUTE 115 OVER**  
**TRIB. N. FORK OF VERMILION RIVER**  
**F.A.P. ROUTE 796 SECTION (106)BR-3**  
**FORD COUNTY**  
**STATION 1711+37.39**  
**STRUCTURE NO. 027-0099**

**ZROKA** engineering  
Zroka Engineering, P.C.  
4216 North Hermitage  
Chicago, IL 60613

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

SHEET NO. 1 OF 21 SHEETS	F.A.P. RTE. 796	SECTION (106)BR-3	COUNTY FORD	TOTAL SHEETS 48	SHEET NO. 12
	SN 027-0099		CONTRACT NO. 66916		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

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