

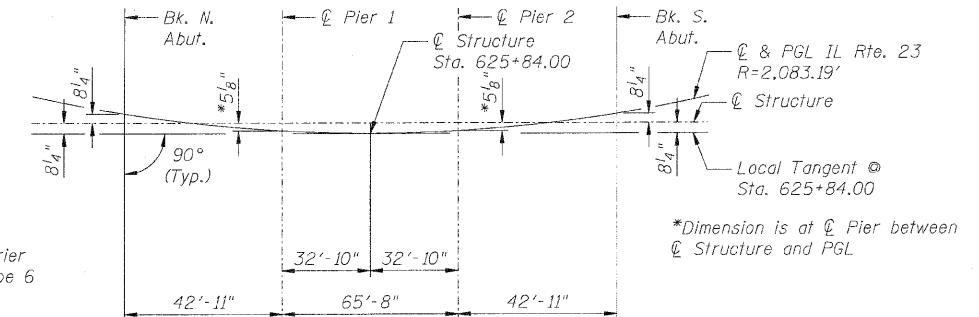
Bench Mark: Railroad Spike in Power Pole, Sta. 622+42.75, 52.9' Rt., Elev. 597.02

Existing Structure: S.N. 053-0161 originally constructed in 1987 as FAP 68 Section (102)B-1. Replacement of six PPC Deck Beams in 2009 as FAP 68 Section (102-B-1)I. Three simple span PPC Deck Beams superstructure supported on pile bent abutments and solid wall piers on footings. Bk. to Bk. abutments is 136'-4 1/2" and Out to Out width is 46'-2".

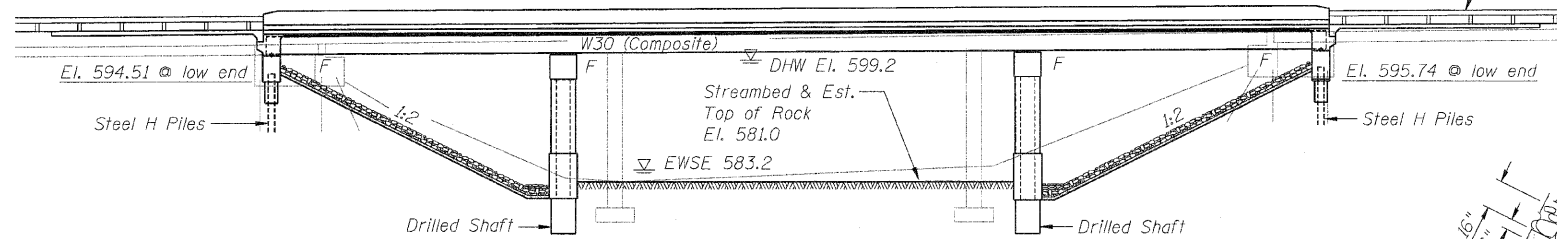
Existing structure shall be removed and replaced using stage construction to maintain one lane of traffic.

No Salvage.

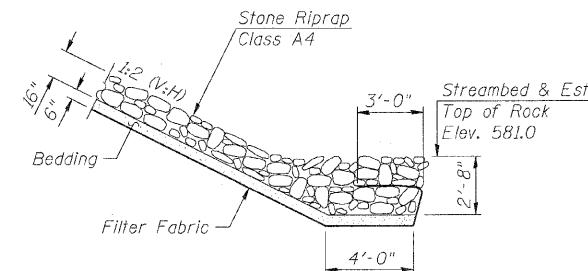
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



OFFSET SKETCH

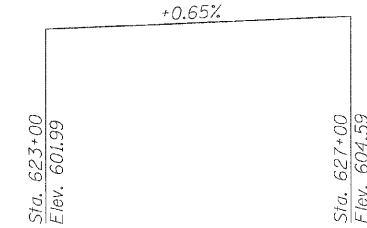


ELEVATION



SECTION A-A

Rock excavation required for installation of riprap is included in the cost of Stone Riprap Class A4.



PROFILE GRADE  
(along P&G IL Route 23)

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 & 2009 Interims

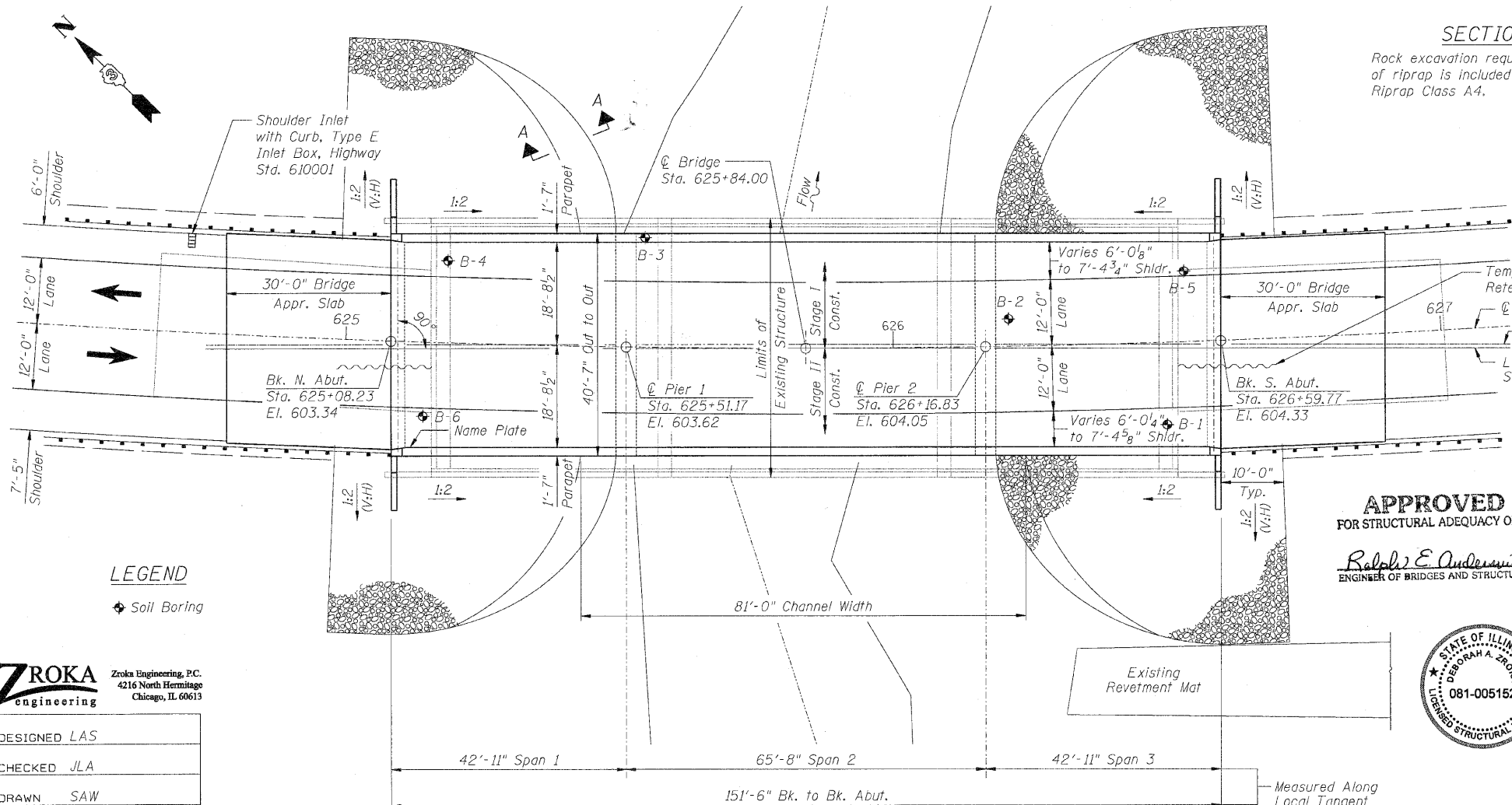
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)  
 $F_y = 50,000$  psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration @ 1.0 sec (SD1) = 0.077g  
Design Spectral Acceleration @ 0.2 sec (SDS) = 0.136g  
Soil Site Class = C



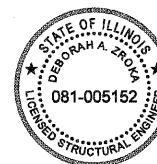
PLAN

CURVE DATA

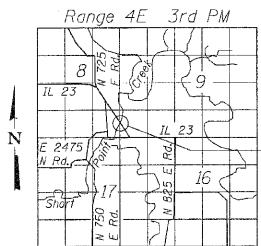
$\Delta = 60^\circ 11' 31''$  (Lt)  
 $D = 2^\circ 45' 01''$   
 $T = 1,207.39'$   
 $L = 2,188.49'$   
 $E = 324.60'$   
 $R = 2,083.19'$   
 $S.E. = 6.0\%$   
 $P.C. = Sta. 620+23.24$   
 $P.T. = Sta. 642+11.74$   
 $P.I. = Sta. 632+30.63$

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson (SE)  
ENGINEER OF BRIDGES AND STRUCTURES



Signature: [Signature]  
Date: July 29, 2010  
November 30, 2010  
Expires



LOCATION SKETCH

GENERAL PLAN AND ELEVATION  
IL RTE 23 OVER SHORT POINT CREEK

F.A.P. RTE. 68

SECTION (102)BR-1

LIVINGSTON COUNTY

STATION 625+84.00

STRUCTURE NO. 053-0189

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

DESIGNED	LAS
CHECKED	JLA
DRAWN	SAW
CHECKED	LAS

SHEET NO. 1 OF 26 SHEETS	F.A.P. RTE. 68	SECTION (102)BR-1	COUNTY LIVINGSTON	TOTAL SHEETS 58	SHEET NO. 12
	SN 053-0189		CONTRACT NO. 66822		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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