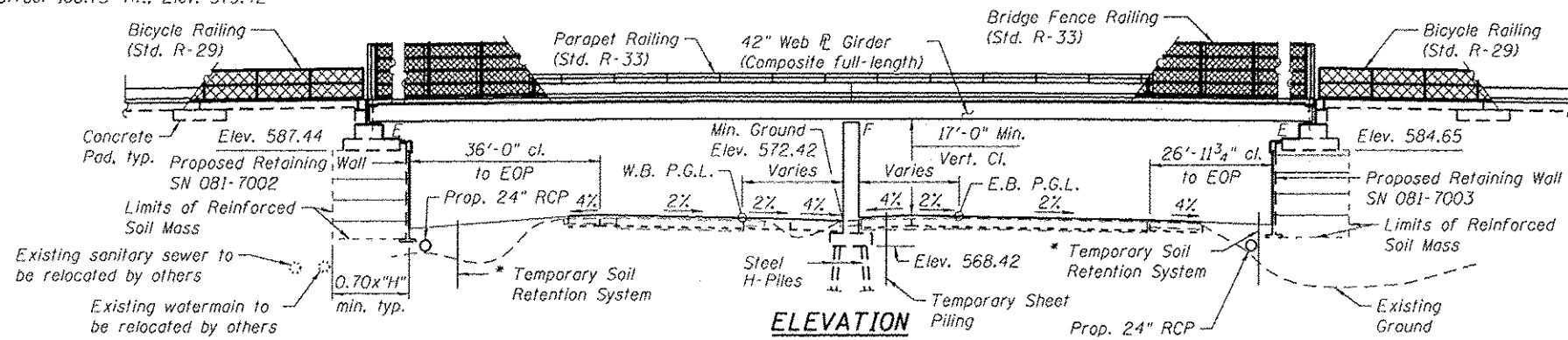


Benchmark: "0" in the word "Open" on Fire Hydrant  
Sta. 294+65.77, Offset 108.75' Rt., Elev. 579.42

Existing Structure: None

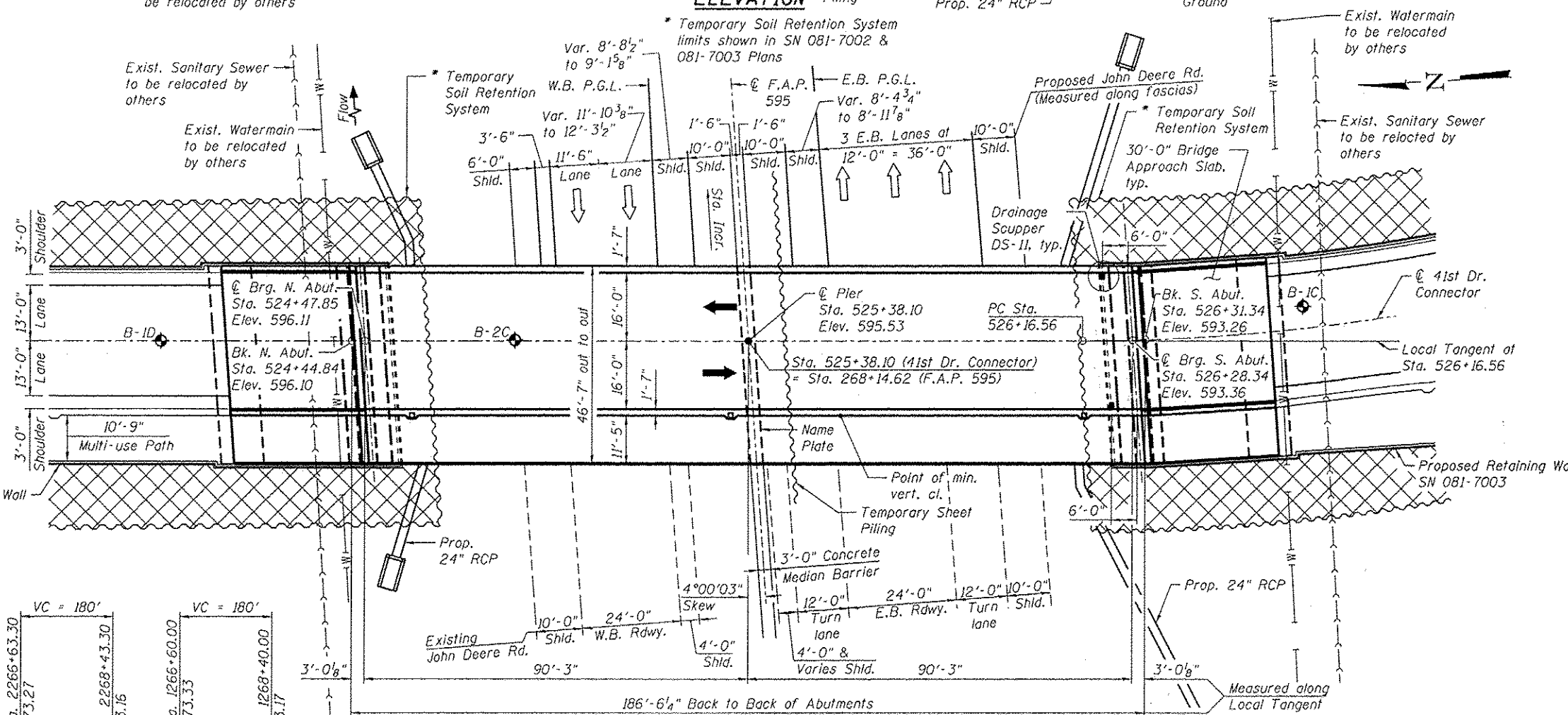


**APPROVED**  
For Structural Adequacy Only

*De Carl Kuyper*  
Engineer of Bridges & Structures

**CURVE DATA**

41st Drive Connector	@ FAP 595
P.I. STA. 531+37.60	P.I. STA. 271+73.85
$\Delta = 96^\circ 59' 51''$ (LT)	$\Delta = 17^\circ 25' 51''$ (RT)
$D = 12^\circ 25' 43''$	$D = 0^\circ 36' 00''$
$R = 461.00'$	$R = 9,549.34'$
$L = 780.44'$	$L = 2,905.15'$
$T = 521.04'$	$T = 1,463.88'$
$E = 234.71'$	$E = 111.55'$
P.C. STA. 526+16.56	P.C. STA. 257+09.97
P.T. STA. 533+97.00	P.T. STA. 286+15.12



STATION 525+38.10  
BUILT 20... BY  
STATE OF ILLINOIS  
F.A.P. RT. 595 SEC. (142-1HB)  
LOADING HL-93  
STR. NO. 081-0176

**NAME PLATE**

See Std. 515001

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2012 AASHTO LRFD Bridge Design Specifications  
with 2012 Interims

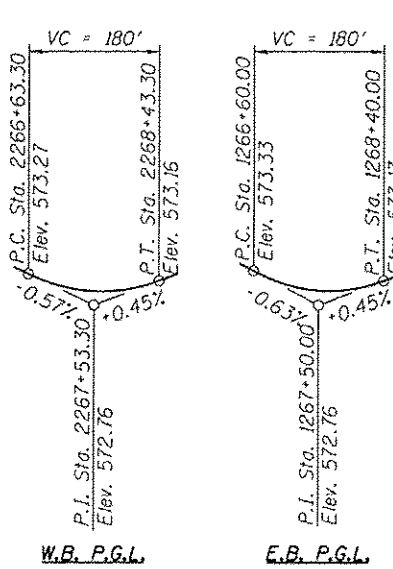
**DESIGN STRESSES**

**FIELD UNITS**

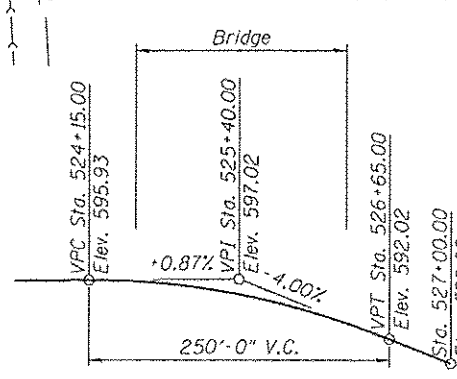
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50 Structural Steel)

**SEISMIC DATA**

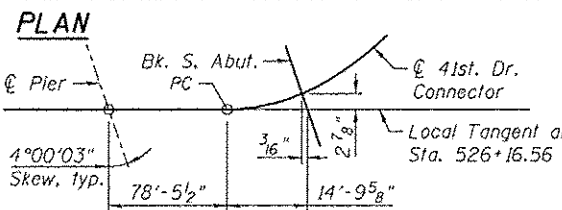
Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{01}$ ) = 0.087g  
Design Spectral Acceleration at 0.2 sec. ( $S_{05}$ ) = 0.128g  
Soil Site Class = D



**PROFILE GRADE**  
F.A.P. 595



**PROFILE GRADE**  
41ST DRIVE CONNECTOR  
(Along P.G.)



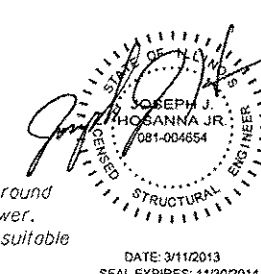
**OFFSET SKETCH**

**LEGEND:**

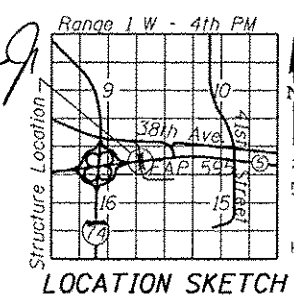
Removal and Disposal of Unsuitable Material.  
Rockfill is to be placed up to the top of existing ground or bottom of MSE Wall leveling pad, whichever is lower.  
See Roadway plans for Removal and Disposal of Unsuitable Materials and Rock Fill quantities.  
\* Cross hatching not shown under roadway and path for clarity.

**LEGEND**

Indicates Soil Boring Location



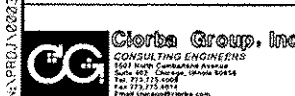
DATE: 3/11/2013  
SEAL EXPIRES: 11/30/2014



**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**  
**41ST DRIVE CONNECTOR OVER**  
**JOHN DEERE ROAD (IL 5)**  
**F.A.P. RTE. 595 - SECTION (142-1HB)**  
**ROCK ISLAND COUNTY**  
**STATION 525+38.10**  
**STRUCTURE NO. 081-0176**

N:\PROJECTS\2012\3131\_88A\CONTRACT\1\Design\Structure\1\CAD\081-0176-D264884-01-DPE.dgn



USER NAME: rdanley	DESIGNED: BWS	REVISIONS:
DESIGNED: BWS	CHECKED: JWH	REVISIONS:
CHECKED: JWH	DRAWN: RD	REVISIONS:
DRAWN: RD	CHECKED: BWS	REVISIONS:
CHECKED: BWS		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1HR & 142-1HB)	ROCK ISLAND	507	300
			CONTRACT NO. 64B84	
ILLINOIS FED. AID PROJECT				