

Benchmark: Railroad spike in west side of power pole east of I-57, southeast corner of bridge over I-57. Elev. 759.80

Existing Structure: Structure Number 099-0200 was built in 1967 under Section 99-1-HB. It consists of a four span, reinforced concrete deck on steel wide flange beams supported on concrete pile bent abutments and hammerhead piers on creosoted timber piles. Bridge measures 225'-6" back to back abuts. and 29'-8" out to out of parapets. Structure to be removed and replaced. Stuenkel Road is currently closed with detour.

Salvage: None.

**APPROVED**  
For Structural Adequacy Only  
*[Signature]*  
Engineer of Bridges & Structures

**DESIGN SPECIFICATIONS**  
2010 AASHTO LRFD Bridge Design Specifications,  
5th Edition with 2010 Interims

**LOADING HL-93**  
Allow 50#/sq. ft. for future wearing surface.

**DESIGN STRESSES**

**FIELD UNITS**  
f'c = 3,500 psi  
fy = 80,000 psi (Reinforcement)  
fy = 50,000 psi (M270 Grade 50)

**SEISMIC DATA**

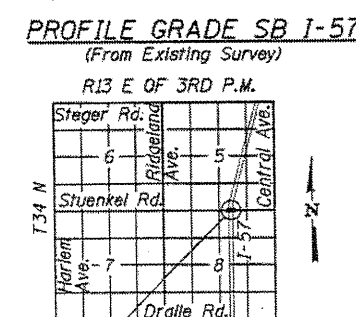
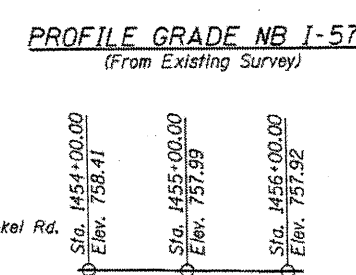
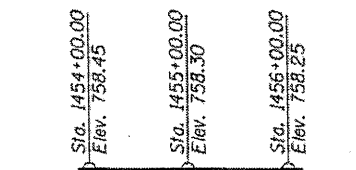
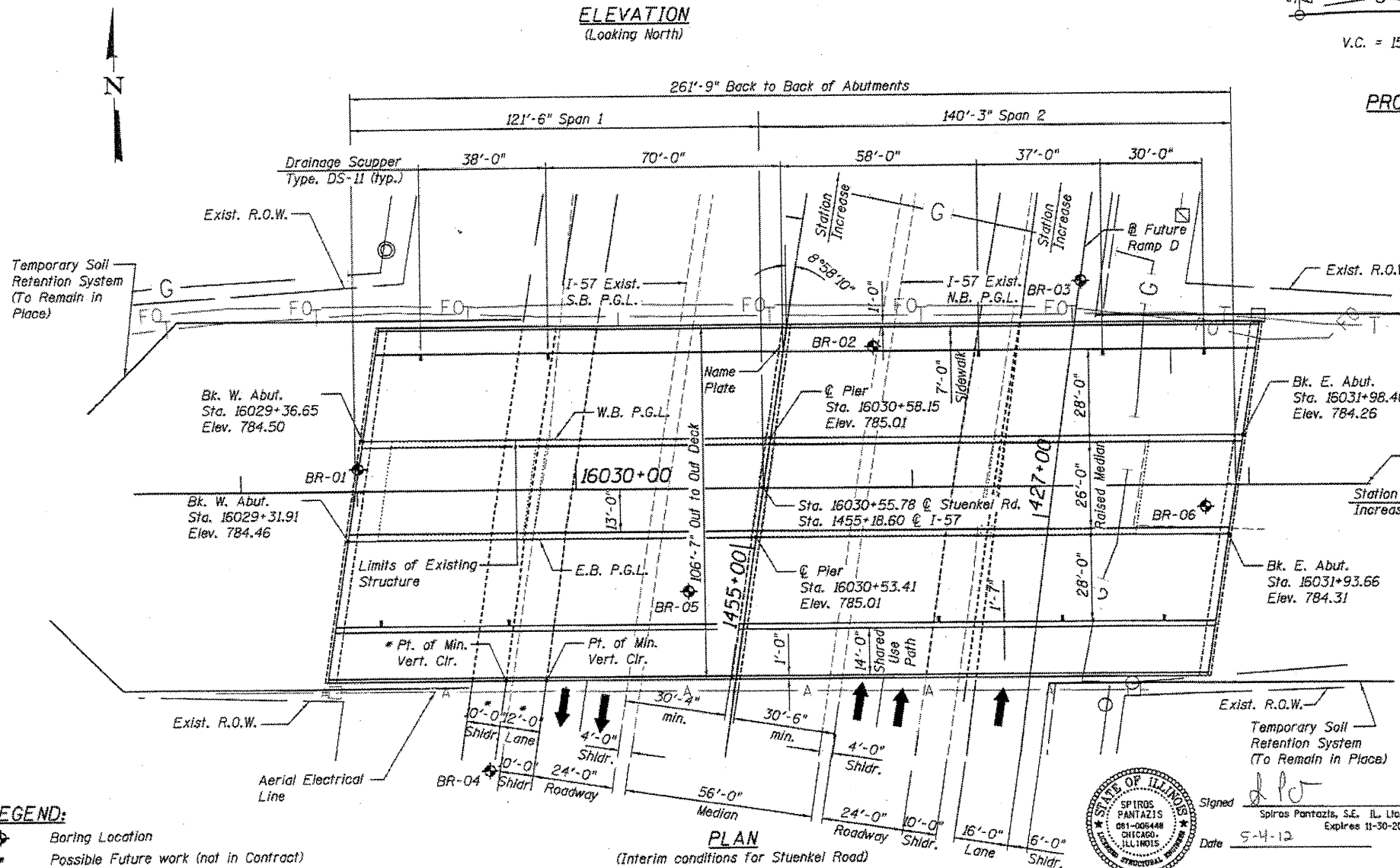
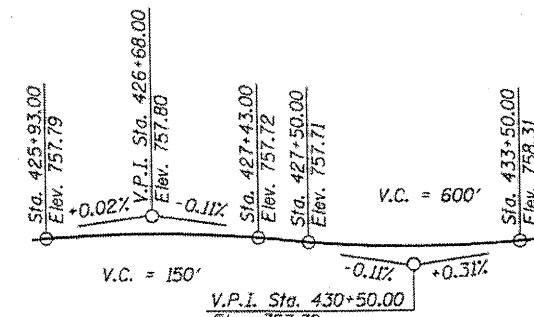
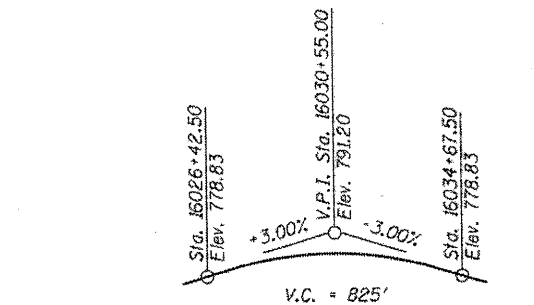
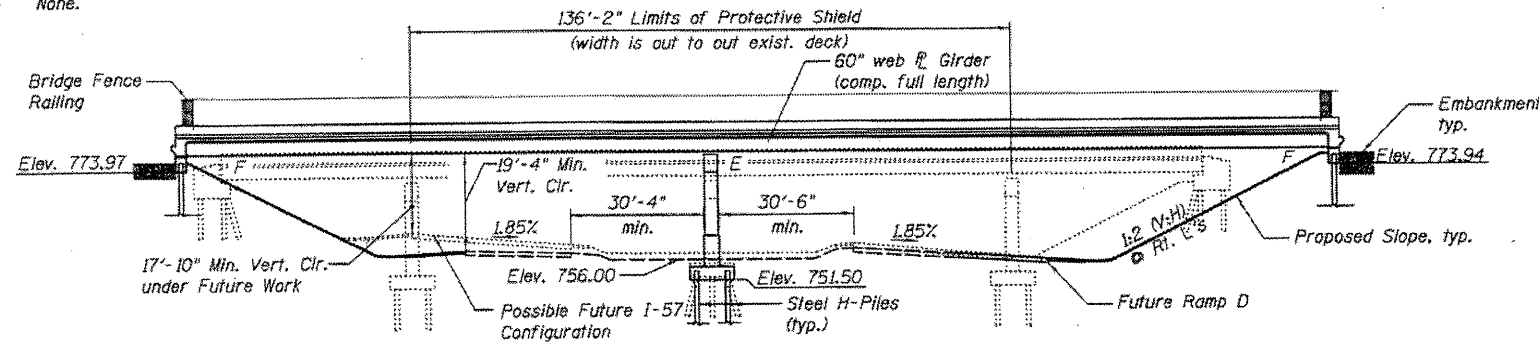
Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (S<sub>01</sub>) = 0.094  
Design Spectral Acceleration at 0.2 sec. (S<sub>s</sub>) = 0.160  
Soil Site Class = D

**CURVE DATA**

I-57 Exist. (MAIII-D)  
Δ = 14° 07' 38" (RT)  
D = 0° 29' 59"  
T = 1,420.98'  
L = 2,827.55'  
E = 87.70'  
R = 11,467.60'  
S.E. = 1.85%  
P.C. = Sta. 1443+88.41  
P.T. = Sta. 1472+15.95  
P.I. = Sta. 1458+09.39

**CURVE DATA**

Ramp D (RDIII-4)  
Δ = 8° 56' 47" (RT)  
D = 0° 30' 09"  
T = 891.84'  
L = 1,750.05'  
E = 34.83'  
R = 11,400.00'  
S.E. = 2.0%  
P.C. = Sta. 423+68.01  
P.T. = Sta. 441+18.05  
P.I. = Sta. 432+59.85



**NOTES:**  
1. Stuenkel approach roadway and Ramp D to be built under future contract.

**GENERAL PLAN & ELEVATION**  
**INTERIM CONDITION**  
**STUENKEL RD. OVER F.A.I. 57**  
**F.A.I. RTE. 57 - SEC. 99-IHB-R**  
**WILL COUNTY**  
**STATION 16030+55.78**  
**STRUCTURE NO. 099-0526**

**LEGEND:**  
• Boring Location  
\* Possible Future work (not in Contract)  
P.G.L. Denotes Profile Grade Line

TYLIN INTERNATIONAL	USER NAME	DESIGNED - PK	REVISED -
	PLOT SCALE	CHECKED - SP	REVISED -
	PLOT DATE	DRAWN - PK	REVISED -
		CHECKED - SP	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION (INTERIM CONDITION)  
STRUCTURE NO. 099-0526  
SHEET NO. 1 OF 35 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	99-IHB-R	WILL	63	23
ILLINOIS FED. AID PROJECT				CONTRACT NO. 60740