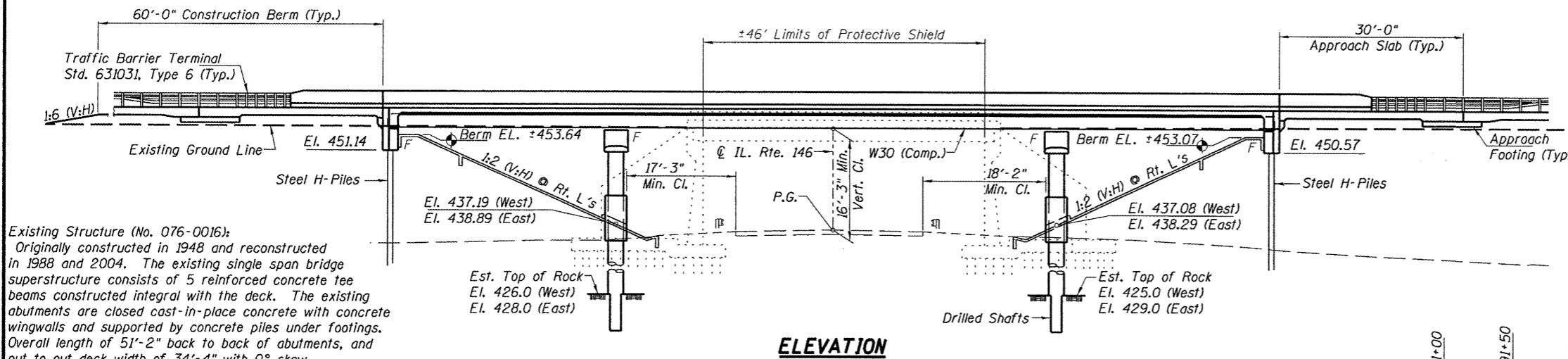
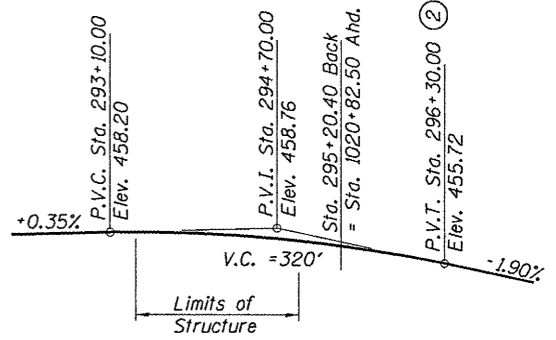


BM #10 (USGS): Disk on top of S.E. Wingwall of structure number 076-0016 on Route 145.  
NAVD 88 Elev. = 456.28

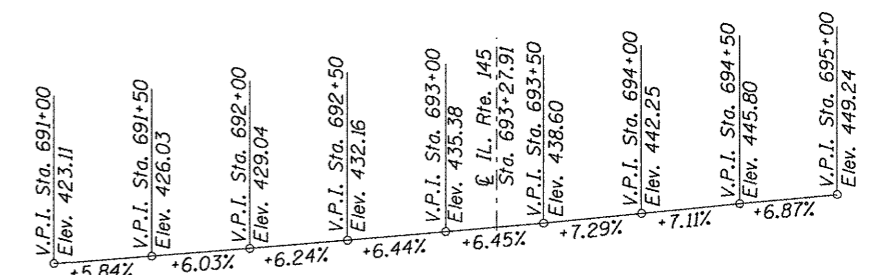


Existing Structure (No. 076-0016):  
Originally constructed in 1948 and reconstructed in 1988 and 2004. The existing single span bridge superstructure consists of 5 reinforced concrete tee beams constructed integral with the deck. The existing abutments are closed cast-in-place concrete with concrete wingwalls and supported by concrete piles under footings. Overall length of 51'-2" back to back of abutments, and out to out deck width of 34'-4" with 0° skew. Structure to be removed and replaced using stage construction.  
No Salvage.



PROFILE GRADE - IL. RTE. 145

(2) (Sta 296+30.00 = Sta 1019+72.90)



PROFILE GRADE - IL. RTE. 146

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2007 AASHTO LRFD Bridge Design Specifications with 2008 & 2009 Interims

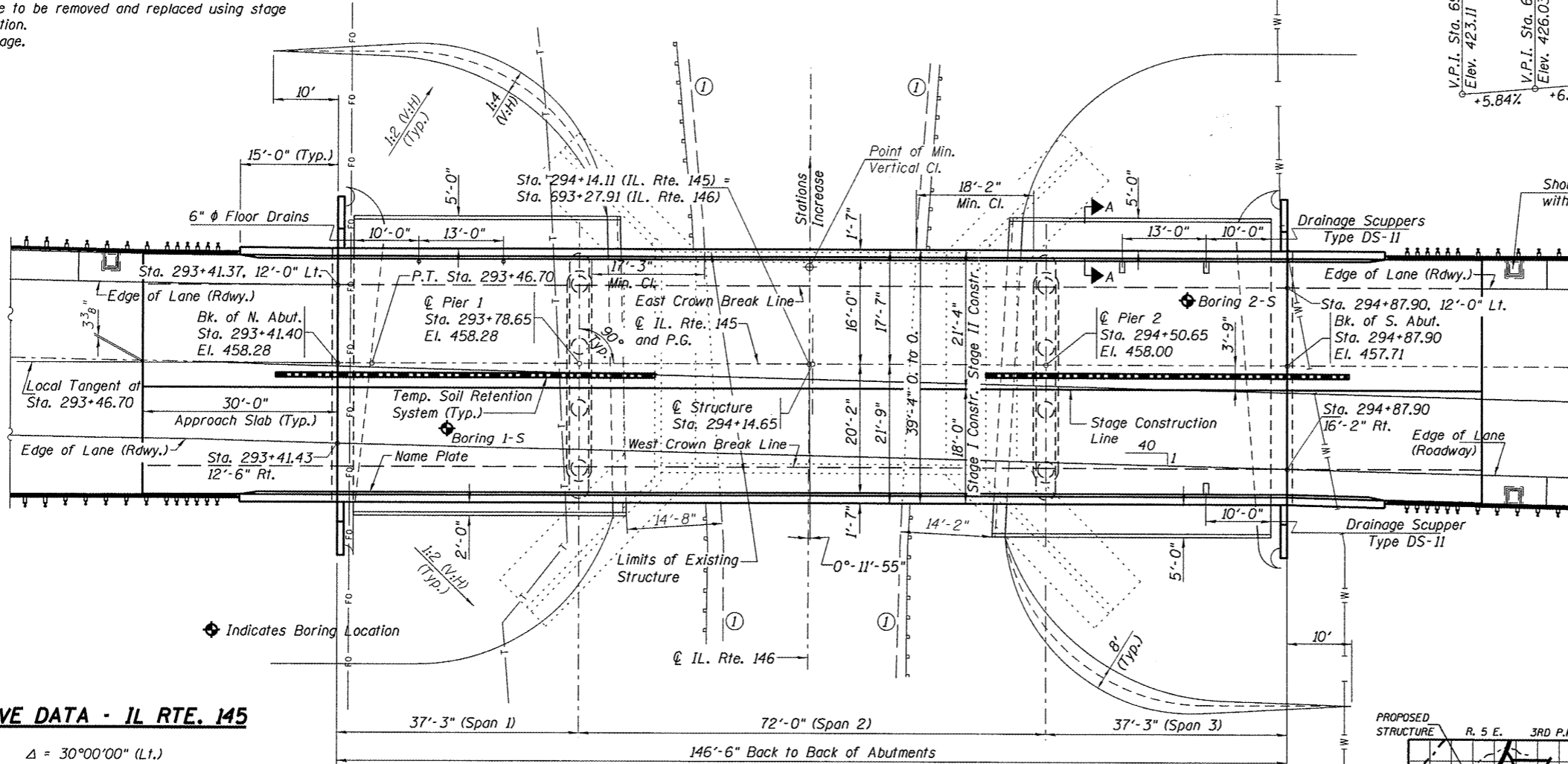
**DESIGN STRESSES**

**FIELD UNITS**

- $f'_c = 3,500$  psi
- $f_y = 60,000$  psi (Reinforcement)
- $f_y = 50,000$  psi (M270 Grade 50)
- $f_y = 36,000$  psi (M270 Grade 36)

**SEISMIC DATA**

- Seismic Performance Zone (SPZ) = 3
- Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.34
- Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.90
- Soil Site Class = C



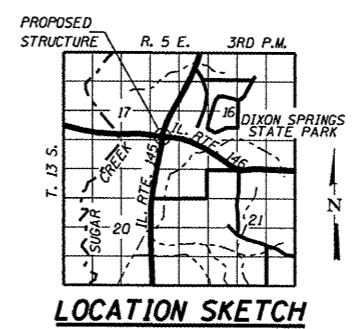
**CURVE DATA - IL RTE. 145**

- $\Delta = 30^{\circ}00'00''$  (Lt.)
- $D = 2^{\circ}36'00''$
- $T = 590.45'$
- $L = 1,153.80'$
- $E = 77.73'$
- $R = 2,203.60$
- S.E. = 0.026'/ft.
- P.C. = Sta. 281+92.90
- P.T. = Sta. 293+46.70
- P.I. = Sta. 287+83.35
- S.E. Attn. = Sta. 293+24.70 (2.60%) to Sta. 294+28.70 (-1.50%)

**PLAN**

**ILL. 146 - EXIST. EDGE OF PAVEMENT**

Stations	Offsets	
	Left	Right
692+50	12.98'	12.85'
693+00	13.09'	14.11'
693+50	16.64'	16.67'
694+00	21.10'	20.43'



**LOCATION SKETCH**

*Michael M. Madenball*  
MICHAEL MADENBALL  
LICENSED PROFESSIONAL ENGINEER  
STATE OF ILLINOIS  
01-006657

**APPROVED**  
For Structural Adequacy Only

*Debra R. Pope*  
Engineer of Bridges & Structures

SIGNATURE  
02-22-2012  
DATE  
LIC. EXP. DATE: 11-30-2012

**GENERAL PLAN**  
IL. ROUTE 145 OVER IL. ROUTE 146  
F.A.P. ROUTE 132 - SECTION 103B-1  
POPE COUNTY  
STATION 294+14.65  
STRUCTURE NO. 076-0028

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FILE NAME = 0760028-78134.dgn	USER NAME = huffm00028	DESIGNED - BDC	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.P. RTE. = 132	SECTION = 103B-1	COUNTY = Pope	TOTAL SHEETS = 52	SHEET NO. = 25
PLOT SCALE =	CHECKED - MNM	REVISIONS -			CONTRACT NO. 78134				
PLOT DATE = 02/23/2012	DRAWN - DAB	REVISIONS -			ILLINOIS FED. AID PROJECT				
	CHECKED - TEH	REVISIONS -			SHEET NO. 1 OF 28 SHEETS				