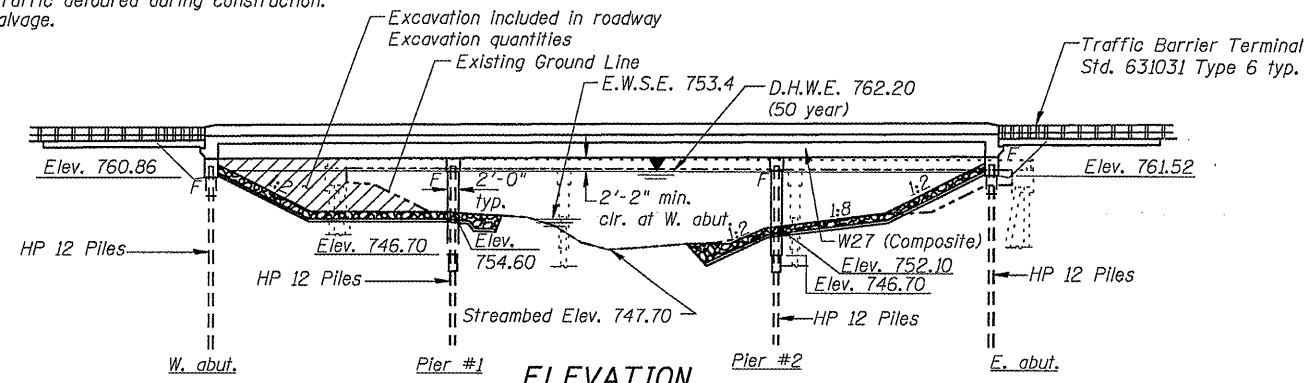


Benchmark: Chisled "□" on S.W. Wingwall on S.N. 057-0181 Elev. 764.42

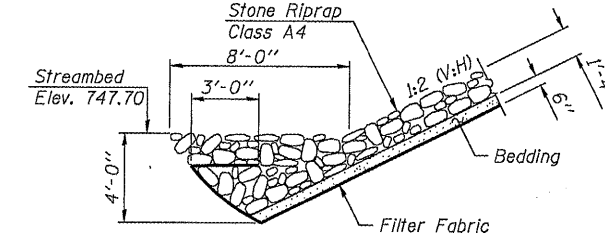
Existing structure: S.N. #057-0181 was built in 1974 as FA-39 Section 1-BR. The structure is a no skew three span deck beam bridge which measures 41'-0" Out to Out and 131'-6" Bk. to Bk. Abutments. The substructure consists of open abutments and solid shaft piers, all founded on concrete piles. Road to be closed and traffic detoured during construction. No Salvage.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 1
F.A.U. 6406	(KBR-2)	MCLEAN	74	25	22 SHEETS
FED. ROAD DIST. NO. 9		ILLINOIS	FED. AID PROJECT-		

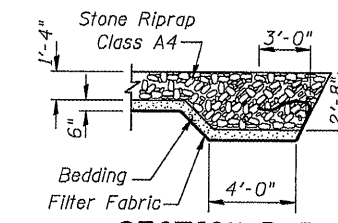
Contract #70517



ELEVATION



SECTION A-A



SECTION B-B

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50#/sq. ft. for Future Wearing Surface.

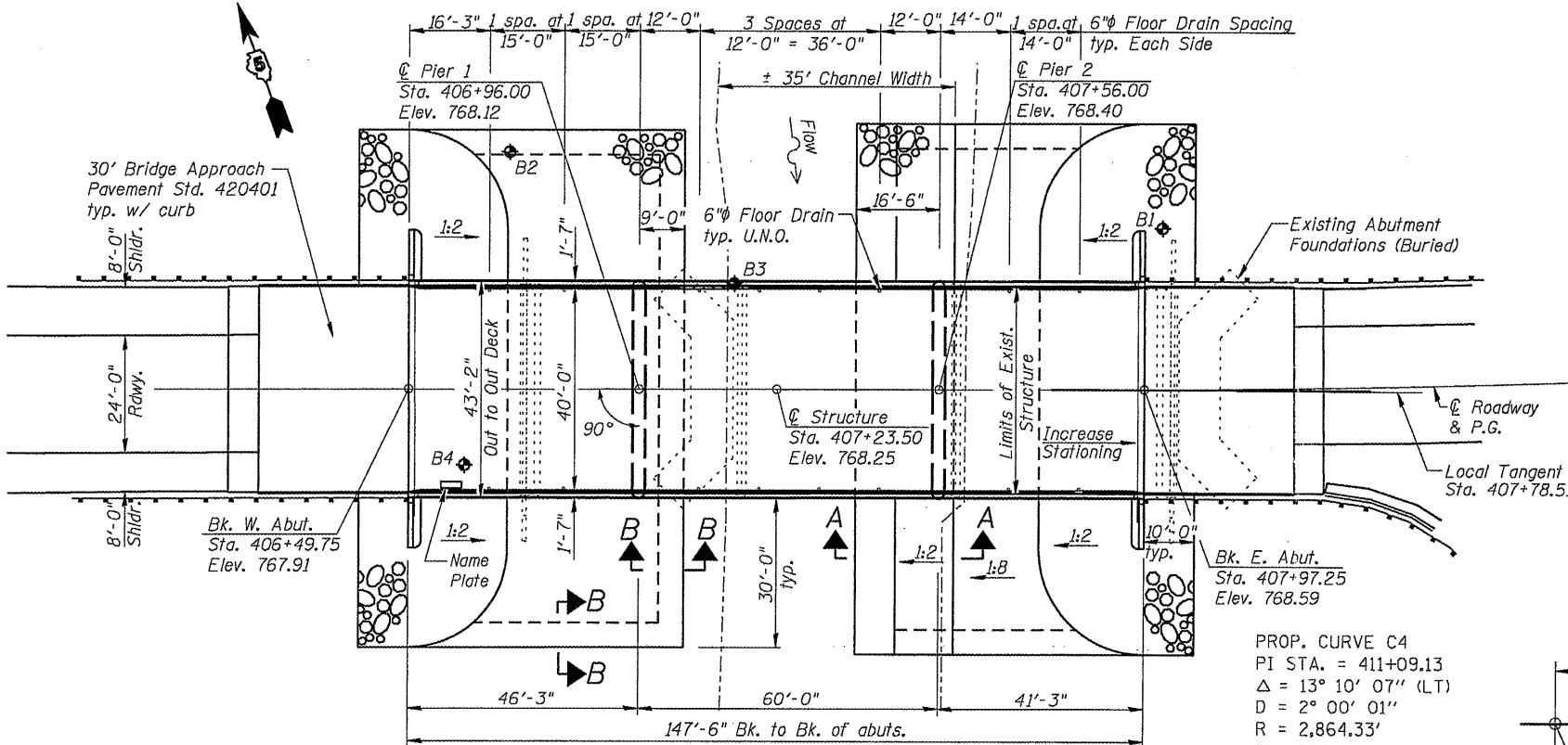
DESIGN STRESSES

FIELD UNITS

- $f'_c = 3,500$ psi
- $f_y = 60,000$ psi (Reinf.)
- $f_y = 50,000$ (M-270, Grade 50W Structural Steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.044g
Site Coefficient (S) = 1.0

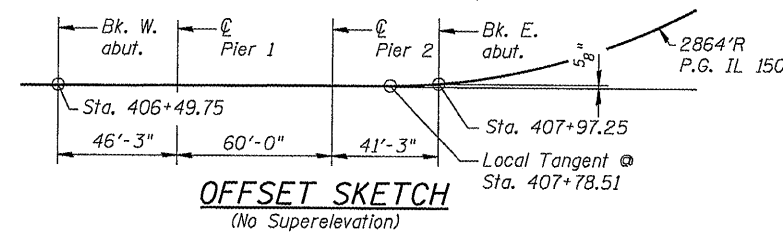


PLAN

STATION 407+23.50
BUILT 20__ BY
STATE OF ILLINOIS
F.A.U. RT. 6406 SEC. (KBR-2)
LOADING HS20
STR. NO. 057-0246

NAME PLATE
See Std. 515001

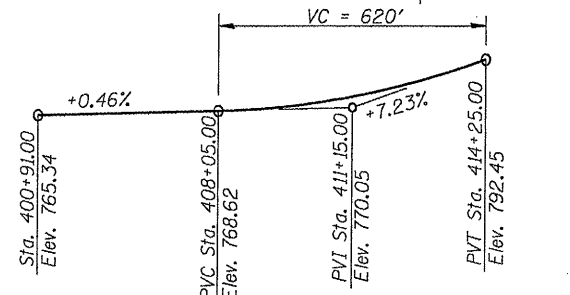
PROP. CURVE C4
PI STA. = 411+09.13
 $\Delta = 13^\circ 10' 07''$ (LT)
D = 2° 00' 01"
R = 2,864.33'
T = 330.62'
L = 658.33'
E = 19.02'
P.C. STA = 407+78.51
P.T. STA = 414+36.84



OFFSET SKETCH
(No Superelevation)

INDEX OF SHEETS

- 1 General Plan
- 2 General Notes and Bill of Material
- 3-4 Top of Slab Elevations
- 5 Top of West Approach Slab Elevations
- 6 Top of East Approach Slab Elevations
- 7 Superstructure
- 8 Superstructure Details
- 9 Abutment Diaphragm Details
- 10 Framing Plan
- 11 Structural Steel Details
- 12-13 Abutments
- 14-15 Piers
- 16 Bar Splicer Assembly Details
- 17 H-Pile & Encasement Details
- 18 Cantilever Forming Brackets
- 19-22 Soil Boring Logs



PROFILE GRADE
F.A.U. Rte. 6406 (US 150)
(Along \bar{C} Roadway)

Design Scour Elevation Table

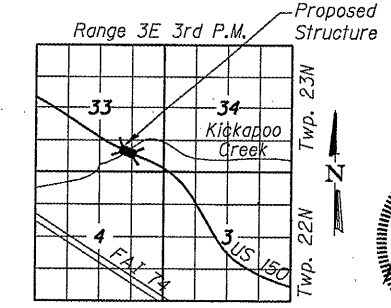
	*W. Abut.	Pier 1	Pier 2	*E. Abut.
Design Scour Elevation	760.86	746.70	746.70	761.52

*Bottom of Abutment Elevations

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E. Ft.	Head-Ft.		Headwater Elev. - Ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	3651	835	923	760.6	0.1	0.0	760.7	760.6
Base	100	6837	1009	1197	762.2	0.6	0.1	762.8	762.3
Overtopping	-	-	-	-	762.7	0.7	0.3	763.4	763.0
Max. Calc.	500	9229	1009	1305	763.5	1.5	0.6	765.0	764.1

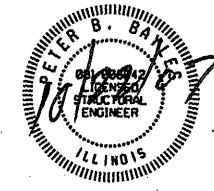
10yr Velocity thru existing bridge = 4.5fps, 10yr velocity thru proposed bridge = 4.0fps



LOCATION SKETCH

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures



Peter B. Bayles, P.E., S.E.
Structural Engineer License No. 081-006042
Expiration Date: 11/30/2008

GENERAL PLAN
US. ROUTE 150
OVER KICKAPOO CREEK
FAU ROUTE 6406 SECTION (KBR-2)
MCLEAN COUNTY
STATION 407+23.50
STRUCTURE NO. 057-0246