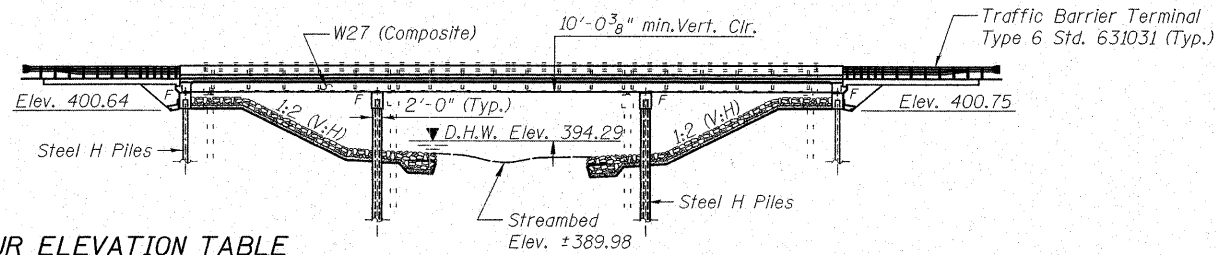


Bench Mark 14: Cut "□" on bridge curb (NOT WINGWALL) at NE corner of IL15/IL4 bridge over Kaskaskia River (SN 082-0077), Elev. 406.80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: S.N. 082-0079 was built in 1946 under F.A. Rte 68, Section 421B at Sta. 149+50.00 as 3 spans, using continuous WF beams and a reinforced concrete deck supported by pile bent piers with precast concrete piles and closed abutments with precast concrete piles. The deck was constructed with a 7" thickness. In 1983, 1.5" of the deck was removed and replaced with a 3" concrete wearing surface. The O.-O. width is 30'-0" and the total structure length is 134'-11" Bk. to Bk. Abutments. Traffic will be detoured.

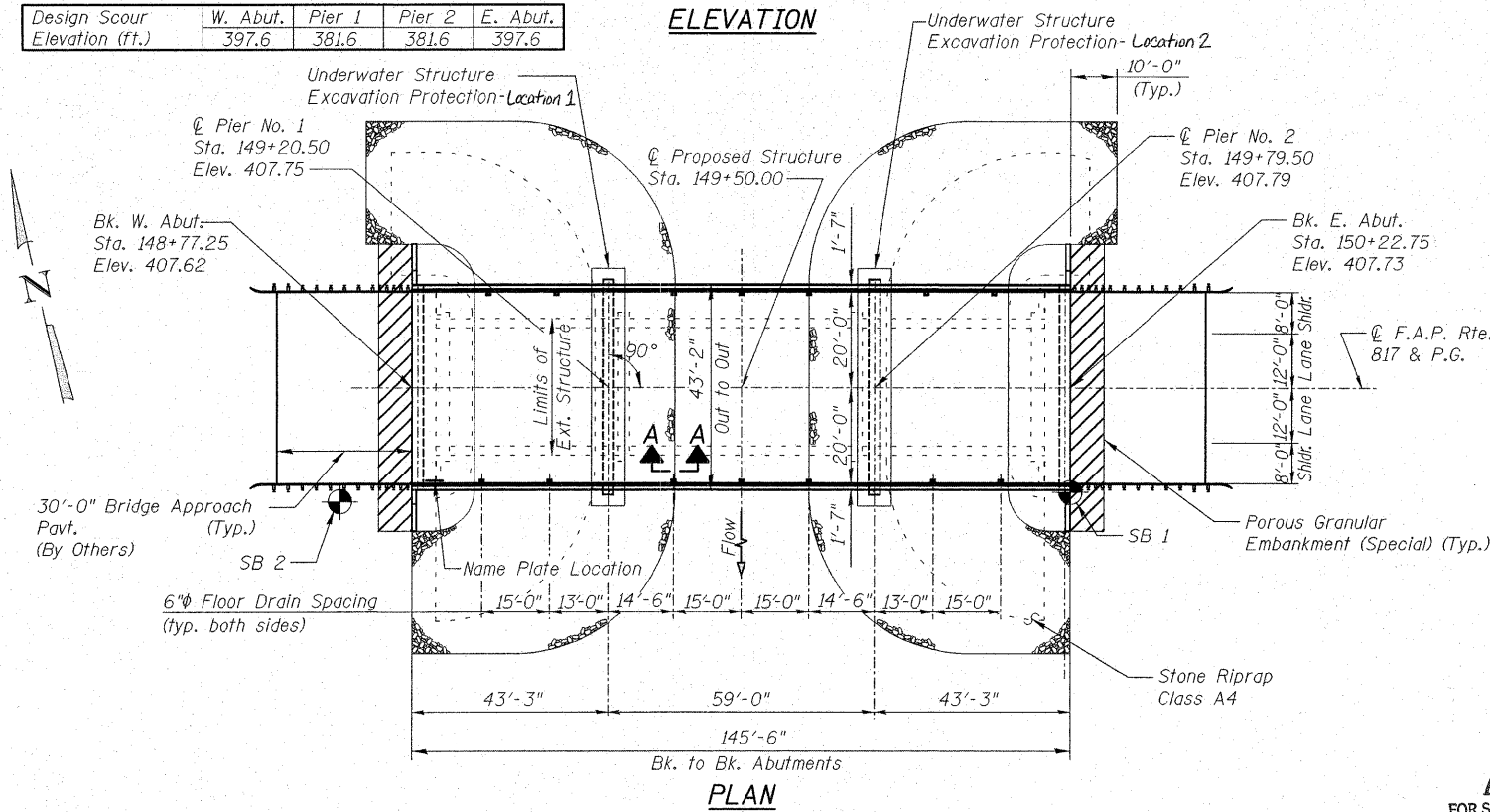
No salvage



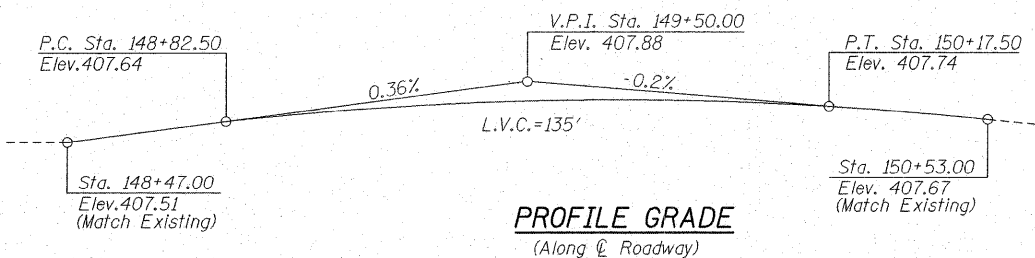
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	397.6	381.6	381.6	397.6

ELEVATION



PLAN



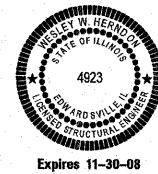
PROFILE GRADE
(Along Center Roadway)

DESIGNED	DB
CHECKED	RS
DRAWN	ER
CHECKED	WWH



Juneau Associates, Inc. P.C.
CONSULTING ENGINEERS AND LAND SURVEYORS
2100 State Street
Granite City, Illinois 62040
Phone: (618) 977-1400
Fax: (618) 452-9541
Registered Professional Service Corporation License No. 184-000380

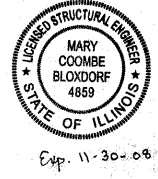
100 North Research Drive
Edwardsville, Illinois 62025
Phone: (618) 659-0000/(618) 659-0800
Fax: (618) 659-0841



APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Wesley W. Herndon (TS)
ENGINEER OF BRIDGES AND STRUCTURES

Wesley W. Herndon 9/30/08
WESLEY W. HERNDON, S.E. DATE
THIS SEAL IS FOR SHEETS 1-9 AND 15-28 OF 28

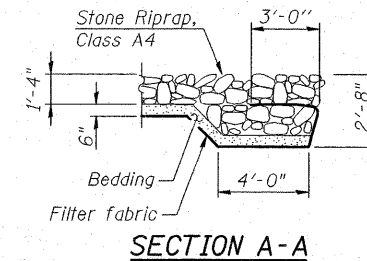


Mary Coombe Bloxdorf 9/25/08
MARY COOMBE BLOXDORF, P.E., S.E. DATE
THIS SEAL IS FOR SHEETS 10-14 OF 28

WATERWAY INFORMATION

		Drainage Area = 4,542 mi ²		Low Grade Elev. 405.37		Sta. 192+27.88					
Flood	Freq. Yr.	Existing SN	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.				
			Exst. Prop.	Exst. Prop.		Exst. Prop.	Exst. Prop.				
Design	50	082-0077	56,548.93	56,498.17	12,483.10	12,483.10	394.29	0.36	0.36	394.65	394.65
		082-0078	4,107.07	4,099.66	2,069.39	2,069.39					
		082-0079	444.00	502.17	246.86	295.75					
		Total	61,100.00	61,100.00	14,799.35	14,848.24					
Base	100	082-0077	62,070.63	61,990.04	14,116.27	14,116.27	396.27	0.43	0.43	396.70	396.70
		082-0078	6,839.80	6,829.43	2,954.77	2,954.77					
		082-0079	889.57	980.53	401.69	456.53					
		Total	69,800.00	69,800.00	17,472.73	17,527.57					
Overtopping	N/A										
Max. Calc.	500	082-0077	83,325.14	83,158.48	18,330.75	18,330.75	401.29	0.81	0.81	402.10	402.10
		082-0078	17,283.78	17,244.13	5,265.36	5,265.36					
		082-0079	2,691.08	2,897.39	870.34	934.43					
		Total	103,300.00	103,300.00	24,466.45	24,530.54					
Scour	10	082-0077	41,485.46	41,485.45	8,443.08	8,443.08	389.30	0.21	0.21	389.51	389.51
		082-0078	114.54	114.55	88.91	88.91					
		082-0079	0.00	0.00	0.00	0.00					
		Total	41,600.00	41,600.00	8,531.99	8,531.99					

Note: Existing Velocity (ft/s) / Frequency (yr) for SN 082-0079: 0.00/10; 1.46/50; 1.90/100; 2.74/500
Proposed Velocity (ft/s) / Frequency (yr) for SN 082-0079: 0.00/10; 1.41/50; 1.86/100; 2.76/500
Note: Existing Low Beam Elevation (ft) for SN 082-0079: 404.69 US / 404.75 DS
Proposed Low Beam Elevation (ft) for SN 082-0079: 404.20 US / 404.20 DS
Note: SN 082-0077 carries IL4/IL15 over Kaskaskia River
SN 082-0078 carries IL4/IL15 over Kaskaskia River Overflow
SN 082-0079 carries IL4/IL15 over Kaskaskia River Overflow



SECTION A-A

STATION 149+50.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE 817 SEC. 421B-1
LOADING HL93
STRUCTURE NO. 082-0275

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications

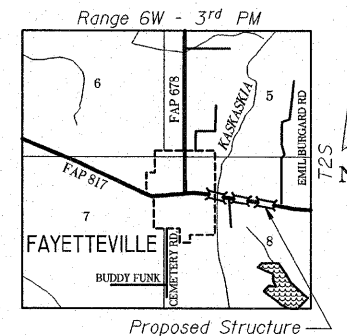
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Bedrock Acceleration Coefficient (A) = 11.5%
Site Coefficient (S) = 1.5

INDEX OF DRAWINGS

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Proposed Structure
LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 4/15 OVER
KASKASKIA OVERFLOW
F.A.P. ROUTE 817 SEC 421B-1
ST. CLAIR COUNTY
STATION 149+50.00
STRUCTURE NO. 082-0275

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1	817	421B-1	ST. CLAIR	56	20
28 SHEETS		STRUCTURE NO. 082-0275		CONTRACT NO. 76885	
		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	