

Bench Mark: Chiseled "□" on the northwest wingwall of culvert, Sta. 113+11.36, 24.38' Rt., Elev. 401.70

Existing Structure: S.N. 093-0016 was originally built in 1923 as Section (12A)B-1. Structure consists of a single span reinforced concrete thru girder and deck superstructure supported by closed abutments. The abutments are founded on timber pile supported footings. The back to back of approach bents measures 53'-0" while the out to out width measures 24'-2". Structure to be removed and replaced.

Traffic Control: The road will be closed during construction.

Salvage: None.

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

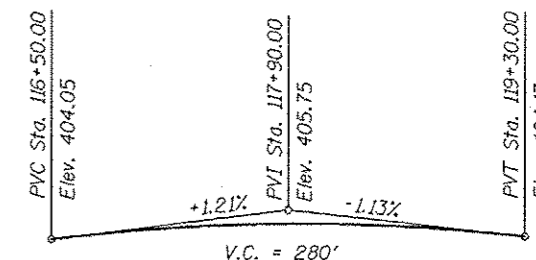
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M 270 Grade 50) struct. steel

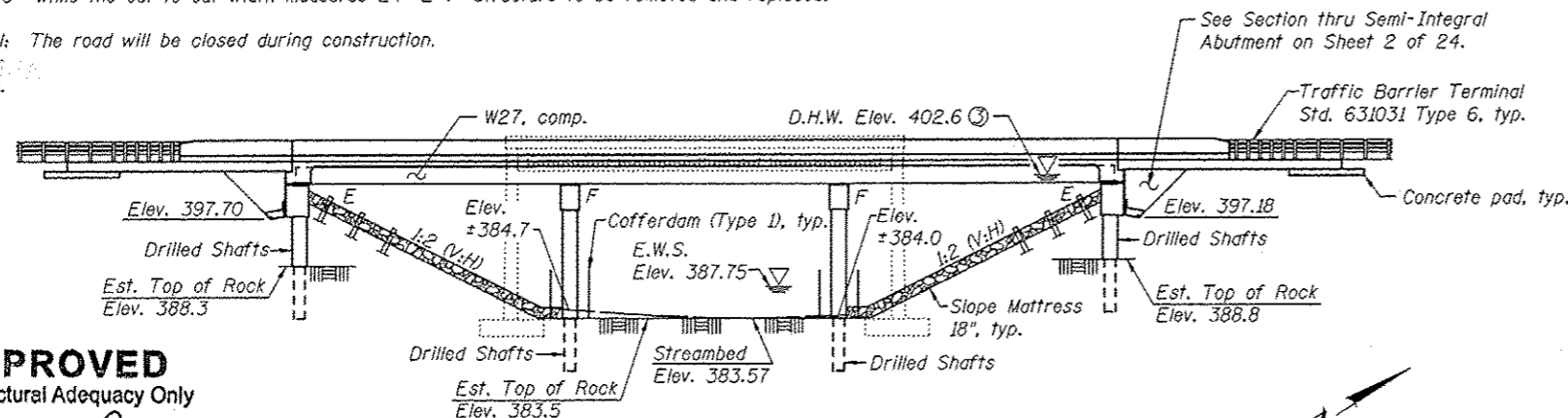
SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.20g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.50g
 Soil Site Class = C



PROFILE GRADE - OLD IL 1

(Along Centerline of Roadway)

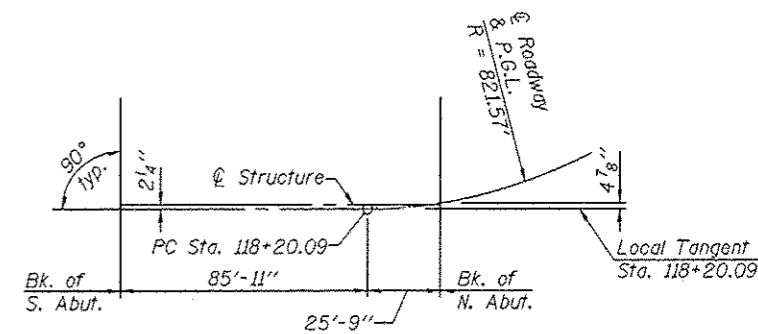


ELEVATION

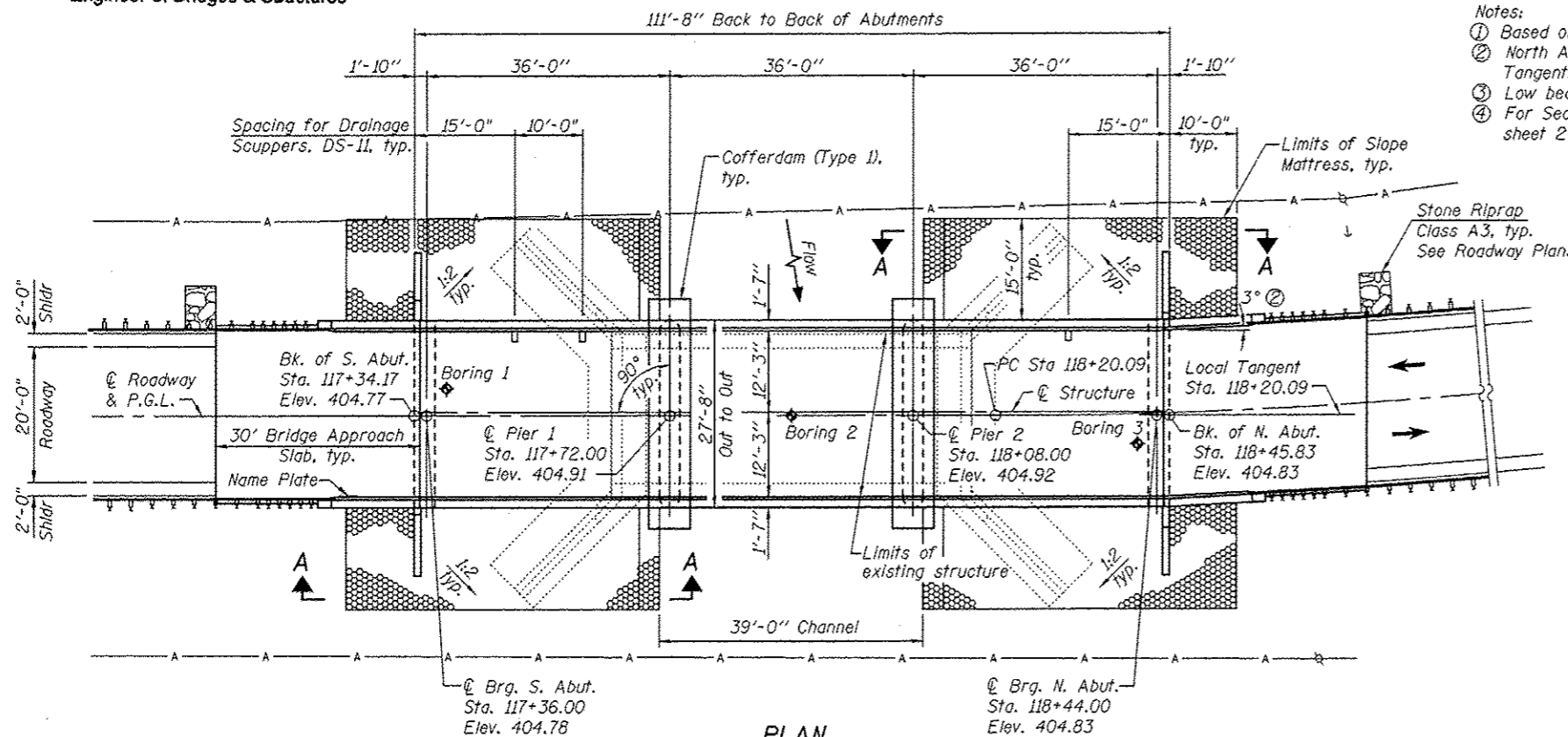
APPROVED
For Structural Adequacy Only

D. Carl Perry
Engineer of Bridges & Structures

- Notes:
 ① Based on Wabash River 10-year tall water effects.
 ② North Approach Slab and wingwall skew to Local Tangent.
 ③ Low beam elevation = 401.2.
 ④ For Section A-A and Slope Mattress Detail, see sheet 2 of 24.



OFFSET SKETCH



PLAN

INDEX OF SHEETS

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CURVE DATA

$\Delta = 40^\circ 44' 02''$ (LT)
 $D = 6^\circ 58' 26''$
 $T = 305.00'$
 $L = 584.09'$
 $E = 54.79'$
 $R = 821.57'$
 $S.E. = 6.00\%$
 $P.C. = \text{Sta. } 118+20.09$
 $P.T. = \text{Sta. } 124+04.18$
 $P.I. = \text{Sta. } 121+25.09$
 Superelevation transition =
 Sta. 116+59.33 to 118+30.33
 Superelevation transitions:
 2.0% at 117+34.31 to 6.0% at 118+30.33
 (Full width of deck)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	394.93	377.67	377.67	394.58

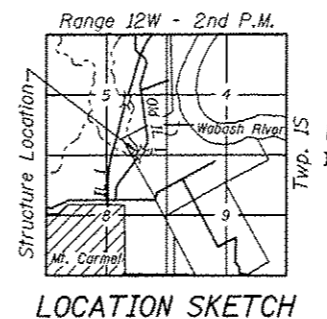
WATERWAY INFORMATION

Drainage Area = 34.9 Sq. Mi. Low Grade Elev. 403.10 @ Sta. 114+50

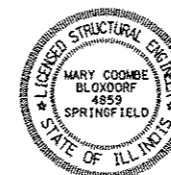
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exlst.	Prop.	Exlst.	Prop.	Exlst.	Prop.	Exlst.	Prop.
Design	10	3465	854	1263	402.4	0.4	0.2	402.8	402.6	
Base	50	5427	854	1263	402.6	0.7	0.2	403.3	402.8	
Ex. Overtop	100	6291	854	1263	402.8	0.7	0.3	403.5	403.1	
Pr. Overtop	50	5427	854	-	402.6	0.7	-	403.3	-	
	100	6291	-	1263	402.8	-	0.3	-	403.1	

STATION 117+90
 BUILT BY
 STATE OF ILLINOIS
 S.B.I. RT. 1B SEC. (12A)B-1
 LOADING HL-93
 STRUCTURE NO. 093-0024

NAME PLATE
See Std. 515001



LOCATION SKETCH



Mary Coombe Bloxdorf
 ILLINOIS STRUCTURAL NO. 4899
 EXPIRES 11/30/2014
 DATE: 01/23/2013

GENERAL PLAN & ELEVATION
OLD IL 1 OVER CRAWFISH CREEK
SBI 1B - SECTION (12A)B-1
WABASH COUNTY
STATION 117+90.00
STRUCTURE NO. 093-0024

FILE NAME = N:\p0930024-74217-001.dgn
 PROJECT NO. 88853-5

Coombe-Bloxdorf P.C.
 -CIVIL ENGINEERS-
 -STRUCTURAL ENGINEERS-
 -LAND SURVEYORS-
 Design Firm License No. 184-002703

USER NAME	DESIGNED	REVISIONS
.CFC.	GB/MCB	
	MCB	
	TFC	
	MCB	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 24 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1B	(12A)B-1	WABASH	52	23
CONTRACT NO. 74217				

ILLINOIS FED. AID PROJECT