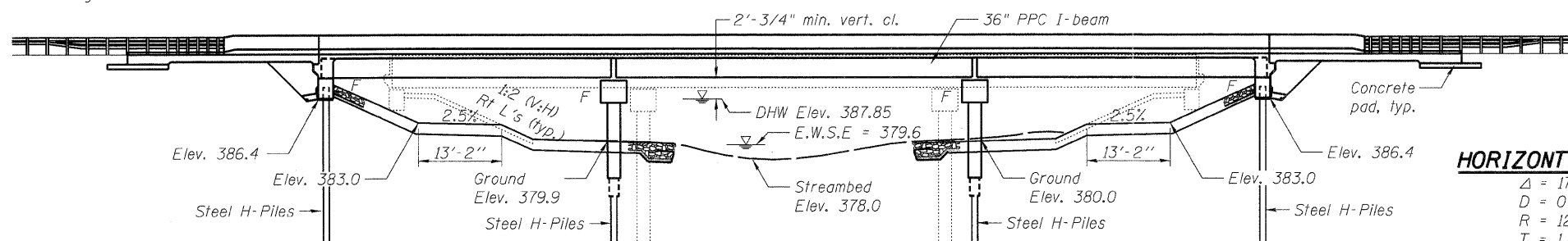


B.M. - Cut square on northeast corner of structure 096-0012, elev. 393.162.
 Existing Structure - Structure 096-0012, originally constructed in 1955 as SBI 15, section (22, BR)B-1, consists of a three span continuous 7" concrete slab supported by 6 steel beams on precast concrete pile supported abutments and piers skewed 30° left forward. The bk. to bk. of abutments length is 136'-6" and the out-to-out width is 34'-4". The existing structure shall be completely replaced. One lane of traffic is to be maintained using stage construction.
 No Salvage.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
 Reinforcement bars designated (E) shall be epoxy coated.
 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 Removal of existing sloped wall is included with Removal of Existing Structures No. 1
 For sections A-A and B-B see sheet 2 of 24.
 Slipforming of Parapets is not allowed.

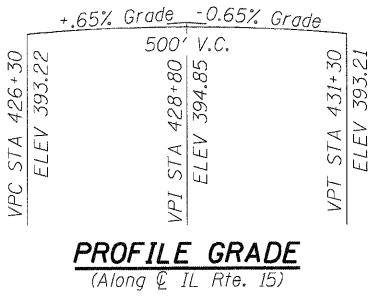
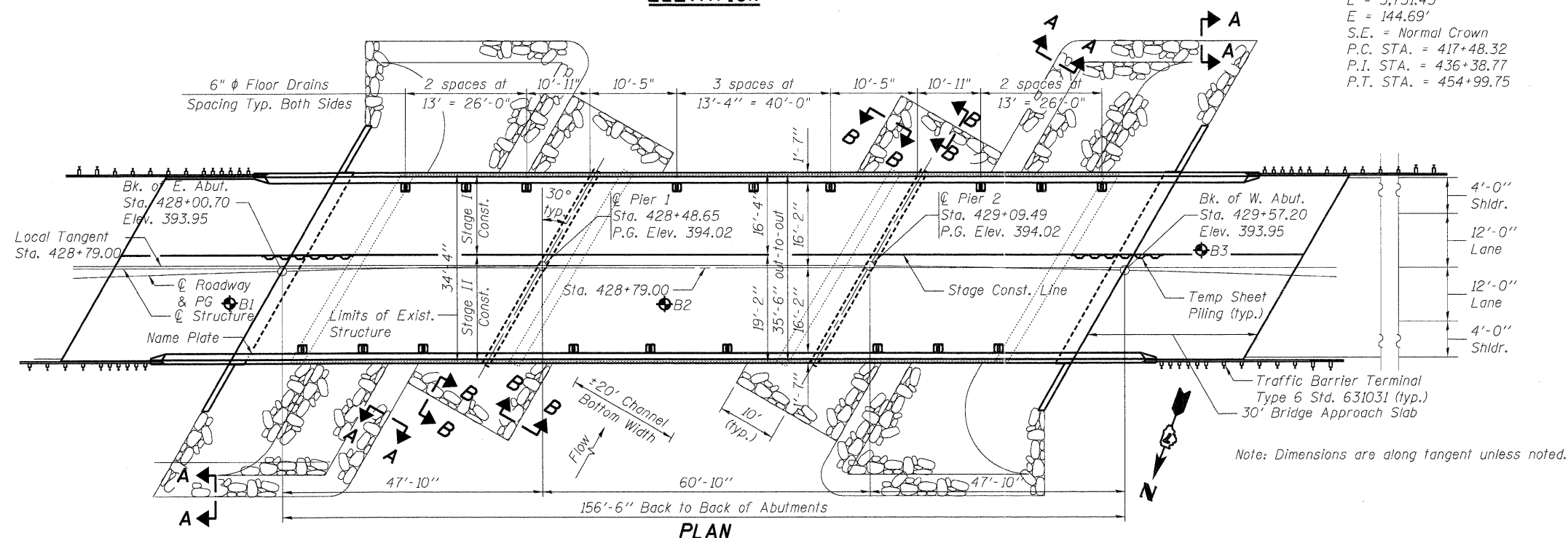


HORIZONTAL CURVE DATA

$\Delta = 17^\circ 30' 25''$ (RT)
 $D = 0^\circ 28' 00''$
 $R = 12,277.41'$
 $T = 1,890.45'$
 $L = 3,751.43'$
 $E = 144.69'$
 S.E. = Normal Crown
 P.C. STA. = 417+48.32
 P.I. STA. = 436+38.77
 P.T. STA. = 454+99.75

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.		104.8	104.8
Floor Drains	Each	18		18
Concrete Structures	Cu. Yd.		188.4	188.4
Concrete Superstructure	Cu. Yd.	183.6		183.6
Bridge Deck Grooving	Sq. Yd.	527		527
Porous Granular Embankment, Special	Cu. Yd.		111	111
Concrete Encasement	Cu. Yd.		18.6	18.6
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36 in.	Foot		916	916
Stone Riprap, Class A4	Sq. Yd.		1020	1020
Reinforcement Bars, Epoxy Coated	Pound	70960	20790	91750
Bar Splicers	Each	781	78	859
Filter Fabric	Sq. Yd.		1020	1020
Furnishing Steel Piles HP 14x117	Foot		2665	2665
Driving Piles	Foot		2665	2665
Test Pile Steel HP 14x117	Each		4	4
Temporary Sheet Piling	Sq. Ft.		540	540
Name Plates	Each	1		1
Removal of Existing Structures No. 1	Each			1
Geocomposite Wall Drain	Sq. Yd.		71	71
Pipe Underdrains for Structures 4"	Foot		143	143
Cofferdam (Type I), Location 1	Each		1	1
Cofferdam (Type I), Location 2	Each		1	1
Mechanical Splicers	Each		96	96
Protective Coat	Sq. Yd.		982	982
Cofferdam Excavation	Cu. Yd.		118.6	118.6
Bridge Deck (Shrinkage-Compensating Concrete)	Cu. Yd.	141.6		141.6



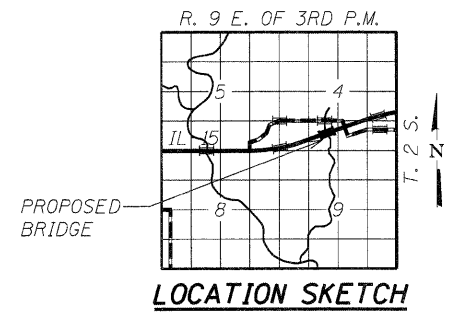
LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " low relax. strands)
 $f_{si} = 201,960$ psi ($\frac{1}{2}$ " low relax. strands)

STATION 428+79
 BUILT 20... BY
 STATE OF ILLINOIS
 F.A.P. RT. 823 SEC.
 (22,B2A)B-1 (22,B2B)B-1
 LOADING HL-93
 STRUCTURE NO. 096-0073



DESIGN SPECIFICATIONS
 2007 AASHTO LRFD Bridge Design Specifications, with 2008 Interims

SEISMIC DATA
 Seismic Performance Zone (SPZ) = 3
 Design Spectral Acceleration at 1.0 sec (SD1) = .410
 Design Spectral Acceleration at 0.2 sec (SDS) = .846
 Soil Site Class (S) = E

NAME PLATE
 See Std. 515001

WATERWAY INFORMATION

Drainage Area = 1802.67 sq.mi. Low Grade Elev. 390.58 @ Sta. 378+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater El.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	10	1682	581	610	386.30	0.27	0.27	386.57	386.57
Base	50	2555	749	806	387.85	0.35	0.35	388.20	388.20
Overtopping	100	2915	811	877	388.42	0.36	0.36	388.78	388.78
Max. Calc.	500	3512	946	1035	389.67	0.44	0.43	390.11	390.10

INDEX OF SHEETS

- General Plan & Elevation
- General Data & Details
- Temporary Concrete Barrier
- Top of Slab Elevations
- Approach Slab Elevations
- Superstructure
- Superstructure Details
- Diaphragm Details
- Approach Slab Details
- Framing Plan
- PPC I-Beam
- Beam Details
- West Abutment
- East Abutment
- Piers
- Pile Details
- Bar & Mechanical Splicers
- Boring Logs

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 Daniel Feuerborn
 ENGINEER OF BRIDGES AND STRUCTURES



Daniel Feuerborn
 License Expires 11-30-2012
 Date 12/6/2011

GENERAL PLAN & ELEVATION
IL RTE 15 OVER UNNAMED STREAM
F.A.P. RTE. 823, SEC. (22,B2A)B-1 (22,B2B)B-1
WAYNE COUNTY
STATION 428+79
STRUCTURE NO. 096-0073

DESIGNED	-	ADG
CHECKED	-	DF
DRAWN	-	ADG
CHECKED	-	DF

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 096-0073
 SHEET NO. 1 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
823	(22,B2A)B-1 & (22,B2B)B-1	Wayne	85	56
			CONTRACT NO 74216	
ILLINOIS FEDERAL AID PROJECT				

PRINTED DATE: 12/05/2011
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