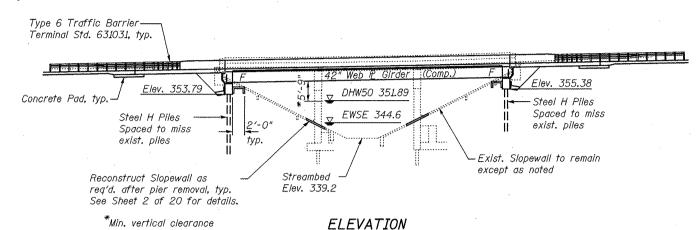
Bench Mark: Chiseled square on SW wingwall of existing structure SN 076-0026, Elev. 363.58

Existing Structure: SN 076-0026 built in 1979 as part of F.A. Rte. 885. Section (6B-1)BR. The existing superstructure consists of three simply supported spans of 17" PPC Deck Beams with a bituminous overlay. The existing structure is supported by open abutments and pile bent piers which incorporate part of the closed abutments from the original 1925 structure. The existing concrete slopewalls are to remain below the proposed berm elevations. The existing structure is 101'-11" back to back of abutments and 35'-2" out to out of deck. The structure is to be removed and replaced with one lane of traffic to be maintained using staged construction.

No Salvage



Remove and replace exist. slopewall within limits shown. - Level. tvp. Cost of slopewall removal is -Existing Slopewall included in Removal of Existing Bk. of N. Abut. -±4'-6". Structures. Sta. 1372+78.50 to remain except typ. as noted Elev. 362.14 Stone Riprap Class A4-±3'-0" See Sheet 2 of 20-Typ. Ea. Side N. Appr. tvn. for Slopewall See Roadway Plans Replacement -Bk. of S. Abut. details Sta. 1373+73.50 Elev. 363.78 30'-0" Bridge • r-€ IL Rte. 146, PG & Appr. Slab. typ. Stage Const. Line Plate Limits of -Stage Removal Line Exist. Structure, typ. € Bridge Omit Curb on Ea, Side-APPROVED Sta. 1373+26.00 North Approach Slab For Structural Adequacy Only Temporary Sheet Piling, typ.

PLAN

95-0" Back to Back Abutments

16'-0"

Channel

WATERWAY INFORMATION

Drainage Area = 3.05 Sq. Mi. Low Grade Elev. 362.08 © Sta. 1372+50									
Flood	Freq. Q		Opening Sq. Ft.		Nat.	Head - Ft.		Headwater El.	
	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Min. Calc.	10	1675	387	417	351.34	0.15	0.06	351.49	351.40
Design	50	2612	419	452	351.89	0.31	0.13	352.20	352.02
Base	100	3026	437	470	352.18	0.39	0.17	352.57	352.35
Overtopping	1								
Max. Calc.	500	4109	487	524	352.98	0.65	0.31	353.63	<i>353.29</i>

10 year velocity through existing structure = 4.59 fps 10 year velocity through proposed structure = 4.31 fps

DESIGN SCOUR ELEVATION TABLE

Design Scour	N. Abut.	S. Abut.
Elevation (ft.)	353.8	355.4

STATION 1373+26.00 BUILT 20___ BY STATE OF ILLINOIS F.A.P. RTE. 885 SEC. 6B-3 LOADING HL 93 STRUCTURE NO. 076-0030

NAME PLATE See Std. 515001

149.4' V.C +3.56% -0.11%

PROFILE GRADE (along © IL Rte 146)

See Sheet 2 of 20 for Section A-A and additional sionewall details.

R 7 E 3rd P.M. Proposed -Structure Engineer of Bridges & Structures



-Little Grand Pierre Creek LOCATION SKETCH

SHEET NO. 1 OF 20 SHEETS

INDEX OF SHEETS

- General Plan and Elevation
- General Data
- Stage Construction Details
- Temporary Concrete Barrier for Stage Construction
- Top of Slab Elevations
- Top of North Approach Slab Elevations
- Top of South Approach Slab Elevations
- Superstructure
- Superstructure Details
- Integral Abutment Diaphragm Details
- 12-13 Bridge Approach Slab Details
- Framina Plan
- Structural Steel Details
- North Abutment Details
- South Abutment Details
- HP Pile Details
- Bar Splicer Assembly and Mechanical Splicer Details 19
- Soil Borina Loas

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications

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 Design Spectral Acceleration at 1.0 sec. (Sp1) = 0.28g Design Spectral Acceleration at 0.2 sec. (Sps) = 0.77g Soil Site Class = C

LOADING HL 93

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

GENERAL PLAN AND ELEVATION IL 146 OVER LITTLE GRAND PIERRE CREEK F.A.P. RTE. 885 SECTION 6B-3 POPE COUNTY STATION 1373+26.00

STRUCTURE NUMBER 076-0030

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

COUNTY TOTAL SHEET NO. SECTION POPE 41 22 CONTRACT NO. 78165

FILE NAME =	USER NAME = _CFC_	DESIGNED -	-	CME	REVISED -
\0760030-78165-001-gpe.dgn		CHECKED -	-	MCB	REVISED -
	PLOT SCALE = 32:0.0000000 ':" / IN.	DRAWN ~	-	CFC/MML	REVISED ~
CB PROJECT NO 08056-14	PLOT DATE = 1/5/2012	CHECKED -	-	CME	REVISED ~

Undermined area of Slopewall to be Filled

Section 1020 of the Standard Specifications,

with Class SI Concrete according to

approximate depth = 2'-0".

Cost included in Slopewall 6".

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**