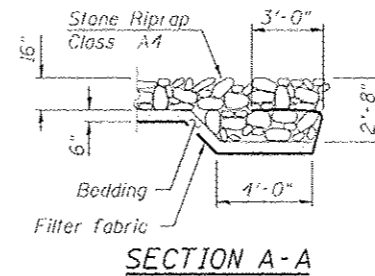


Bench Mark: Cut "C" top NW wingwall Sta. 1740+69.68, 18.8' RI., Elev. 659.79

Existing Structure: S.N. 027-0072 originally constructed in 1961 as FA Route 796, Section 106 BR-4. Three simple span bridge constructed of 17" PPC Deck Beams supported on pile bent abutments and solid wall enclosed pile piers. Bk. to Bk. of abutment is 106'-9 3/8" and out to out width is 36'-0".

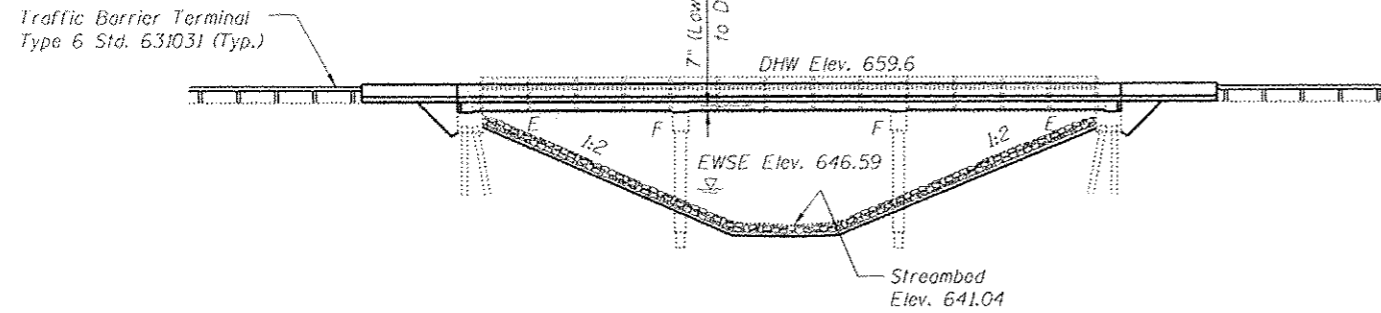
Existing superstructure shall be removed and replaced. Traffic shall be detoured during construction.

The Structural Steel Supports under SN 027-0072 (as shown in the roadway plans) shall be the only items that shall be salvaged. These supports shall be brought to the Astikum maintenance yard-see Special Provisions.



SCOPE OF WORK

1. Remove existing PPC Deck Beams and replace with a continuous, three-span reinforced concrete slab.
2. Remove and replace approach slabs.
3. Remove and replace each abutment backwall.
4. Repair abutment stems and pier pile encasements.
5. Replace rip rap.
6. Replace embankment and wall drains behind abutment stems.



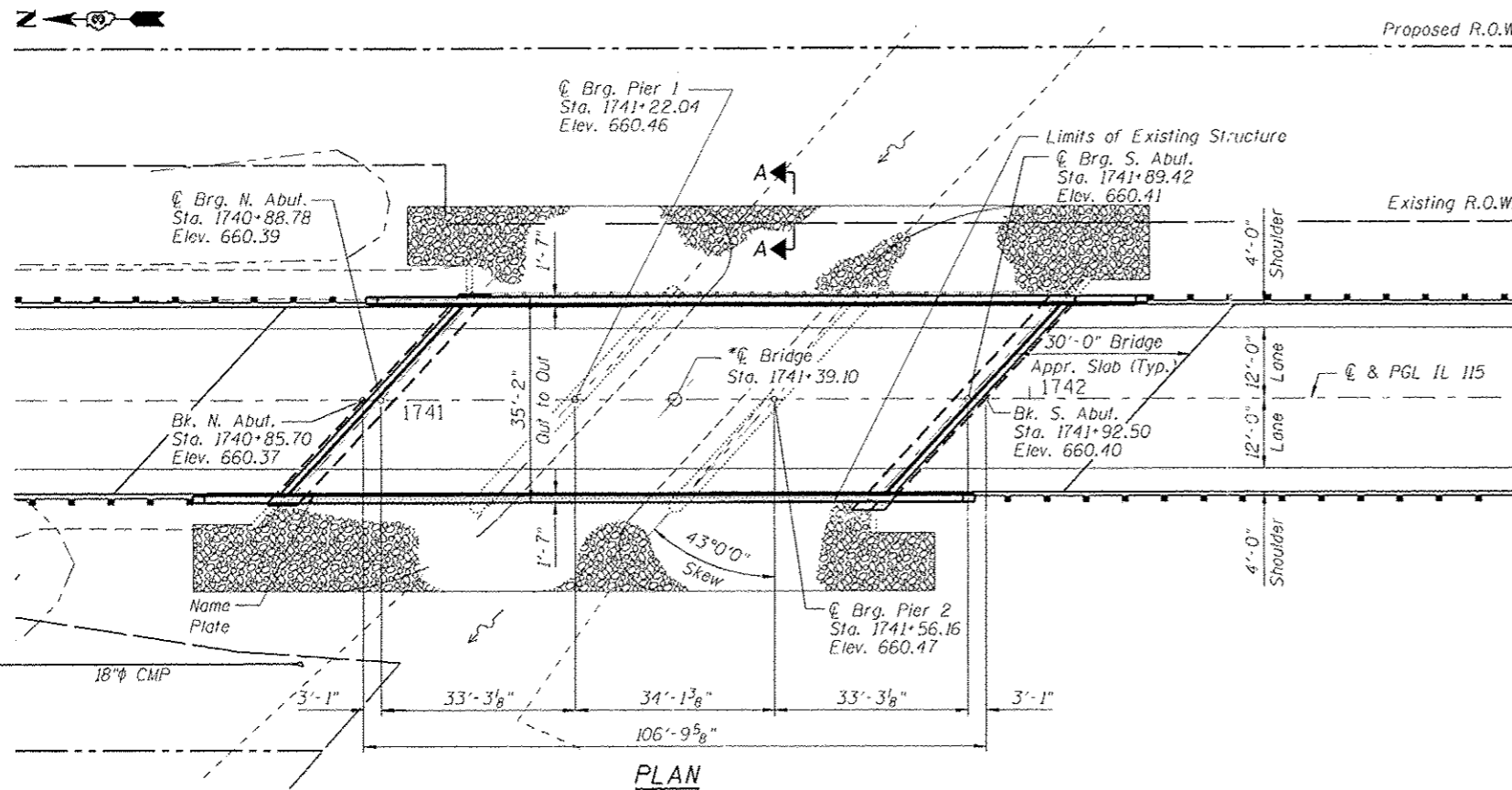
ELEVATION

* Bridge based on field survey dated May 2009



Signature: *[Signature]* Date: 10-31-12
 Expires: November 30, 2014

APPROVED
 For Structural Adequacy Only
[Signature]
 Engineer of Bridges & Structures



PLAN

WATERWAY INFORMATION

Drainage Area = 35.6 sq. mi.		Exist. Low Grade Elev. = 656.86 @ Sta. 1734+00							
		Prop. Low Grade Elev. = 656.86 @ Sta. 1734+00							
Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Not. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	4710	644	672	659.6	0.7	0.6	660.3	660.3
Base	100	5490	642	670	660.2	0.5	0.4	660.6	660.6
Overtopping	5	2210	N/A	N/A	657.1	0.2	0.1	657.3	657.2
Max. Calc.	500	7370	640	669	660.5	0.5	0.5	661.0	661.0

10-Year Velocity through Existing Bridge = 5.0 fps
 10-Year Velocity through Proposed Bridge = 5.0 fps

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications With 2010 Interims

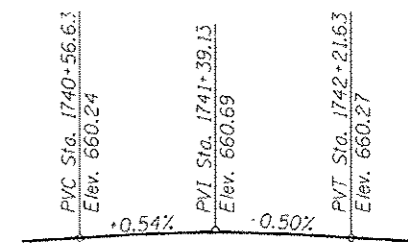
DESIGN STRESSES

FIELD UNITS

$f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

SEISMIC DATA

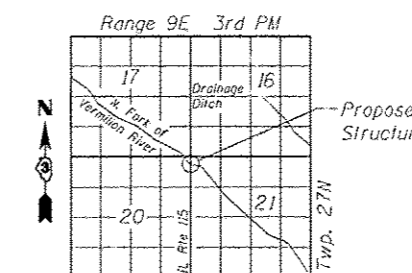
SPC = A
 $A = 0.0439$
 $S = 1.2$



PROFILE GRADE
 (along C. IL Route 115)

DESIGN SCOUR ELEVATION TABLE

	N. Abut.	Pier 1	Pier 2	S. Abut.
0100	655.5	635.0	635.0	655.4
0500	655.5	635.6	635.6	655.4



LOCATION SKETCH

GENERAL PLAN
 IL 115 OVER N. FORK OF VERMILION RIVER
 FAP 796
 SEC. (106 BR-1 & BR-4)BR
 FORD COUNTY
 STA. 1741+39.10
 STRUCTURE NO. 027-0072



USER NAME = SAW	DESIGNED = LAS	REVISED =
	CHECKED = DAZ	REVISED =
PLOT SCALE = 0:2.0000" = 1" IN.	DRAWN = SAW	REVISED =
PLOT DATE = 10/30/2012	CHECKED = LAS	REVISED =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
S.N. 027-0072

SHEET NO. SA-01 OF SA-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	(106 BR-1 & BR-4)BR	FORD	78	33
CONTRACT NO. 66980				
ILLINOIS FED. AID PROJECT				