

B.M.:  
 RR Spike in Power Pole  
 Sta. 111±55, 35' Rt.  
 Elev. 594.46

Chiseled "□" on top  
 of NE Wingwall  
 Elev. 588.76

RR Spike in Power Pole  
 Sta. 117±35, 35' Rt.  
 Elev. 587.38

**LITTLE INDIAN CREEK  
 REBUILT 200. BY  
 MORGAN COUNTY  
 SEC. 07-00097-00-BR  
 C.H. 19 STATION 113+79.00  
 F.A. PROJ. BRS-611(108)  
 STR. NO. 069-3006 LOADING HS20-44**

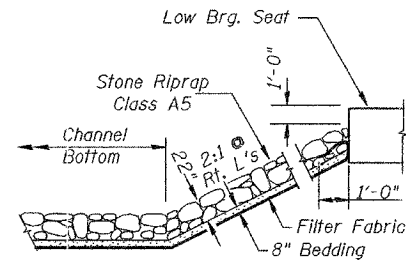
**EXISTING STRUCTURE:**

Existing Two Span PPC Deck Beam Bridge with HMA wearing surface and concrete parapets capped with aluminum rail on pile bent concrete abutments and a pile bent concrete solid wall pier, 101'-4" Bk. to Bk Abut., 31'-6" O. to O. Deck, with a 28'-0" driving surface and a 20° Lt. Ahd. Skew. Str. No. 069-3006

The existing superstructure is to be replaced with PPC Deck Beams and a HMA wearing surface.

Road to be closed to traffic during construction.

No Salvage



**STONE RIPRAP DETAIL**

**NAME PLATE**

Attach new name plate to back side of 8" rail element at West end of South rail. Clean and re-locate existing name plate adjacent to new name plate. Cost included in the cost of Name Plates. See Std. 515001

**GENERAL NOTES**

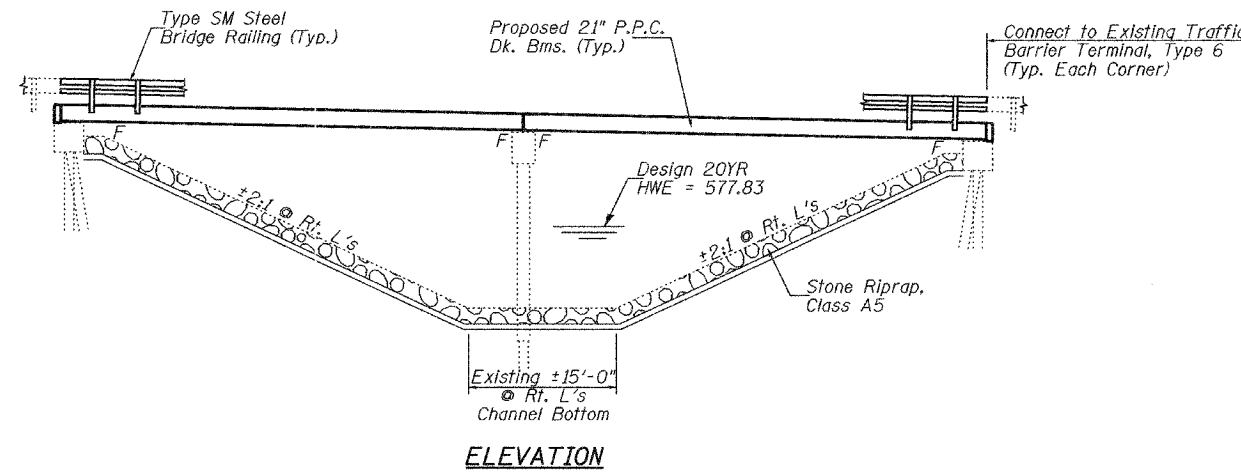
A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(12) of the Standard Specifications.

Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.

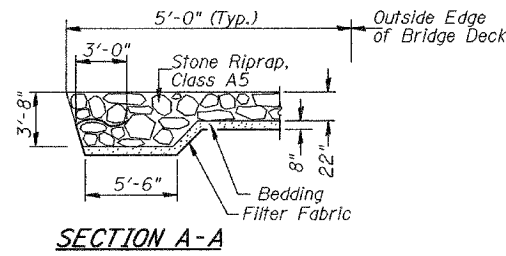
Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

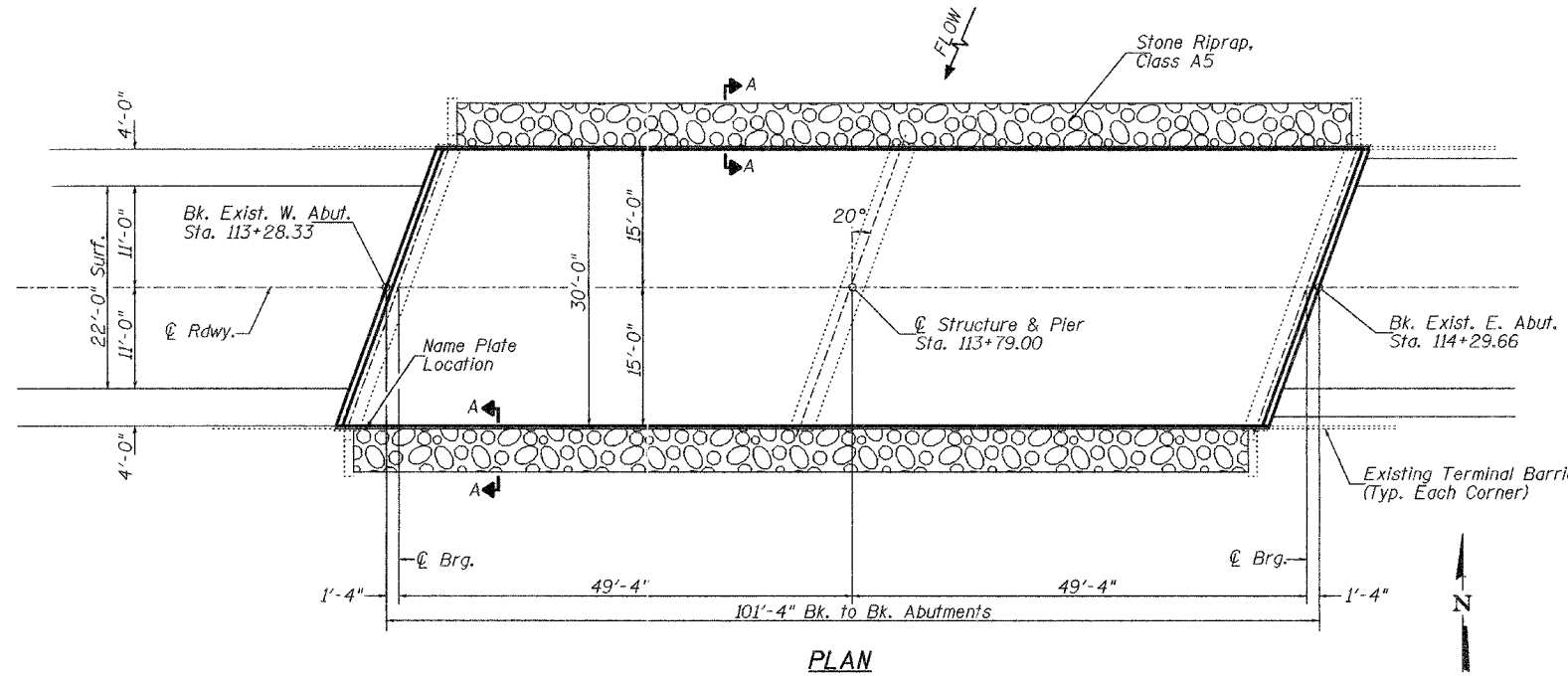
The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.



**ELEVATION**



**SECTION A-A**

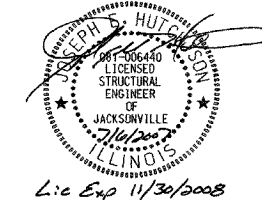


**PLAN**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	TON	—	570	570
Filter Fabric	SQ YD	—	545	545
① Removal of Existing Superstructures	EACH	1	—	1
Concrete Structures	CU YD	—	3.1	3.1
Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	2,995	—	2,995
① Reinforcement Bars	POUND	—	230	230
Steel Railing, Type SM	FOOT	203	—	203
Name Plates	EACH	—	—	1
Waterproofing Membrane System	SQ YD	338	—	338
Portland Cement Mortar Fairing Course	FOOT	225	—	225
Hot-Mix Asphalt Surface Course, Mix "C", N50	TON	37	—	37

① See Special Provisions



I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges. This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

*Joseph S. Hutcheon*  
 Illinois Structural No. 6440  
 Expires 11/30/2008

**WATERWAY INFORMATION**

Drainage Area = 17.30 Sq. Mi.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. ft.		Nat. H.W.E. ft.	Head - ft.		Headwater Elev. - ft.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	2,145	355	355	577.83	0.23	0.23	578.06	578.06
Base	100	3,217	419	419	578.89	0.52	0.52	579.41	579.41

Construction of this project complies with IDNR, Office of Water Resources Statewide Permit No. 2

**DESIGN SPECIFICATIONS**

2002 AASHTO & Interims

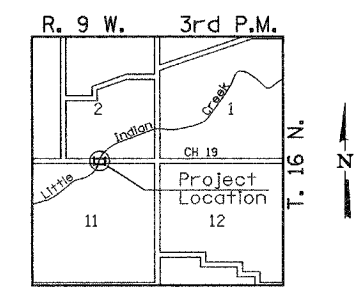
**DESIGN STRESSES**

(FIELD UNITS)  $f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i. (Rein.)

(PRECAST PRESTRESSED UNITS)  $f'_c = 5,000$  p.s.i.  
 $f'_{ci} = 4,000$  p.s.i.  
 $f'_s = 270,000$  p.s.i. ( $\frac{1}{2}$ " Strands)  
 $f'_{si} = 201,960$  p.s.i. ( $\frac{1}{2}$ " Strands)

**LOADING HS20-44**

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



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION  
 COUNTY HIGHWAY 19 OVER  
 LITTLE INDIAN CREEK  
 SECTION 07-00097-00-BR  
 MORGAN COUNTY  
 STATION 113+79.00  
 STR. NO. 069-3006**

DESIGNED	J.E.H.
CHECKED	B.A.N.
DRAWN	C.E.T.
CHECKED	J.E.H.