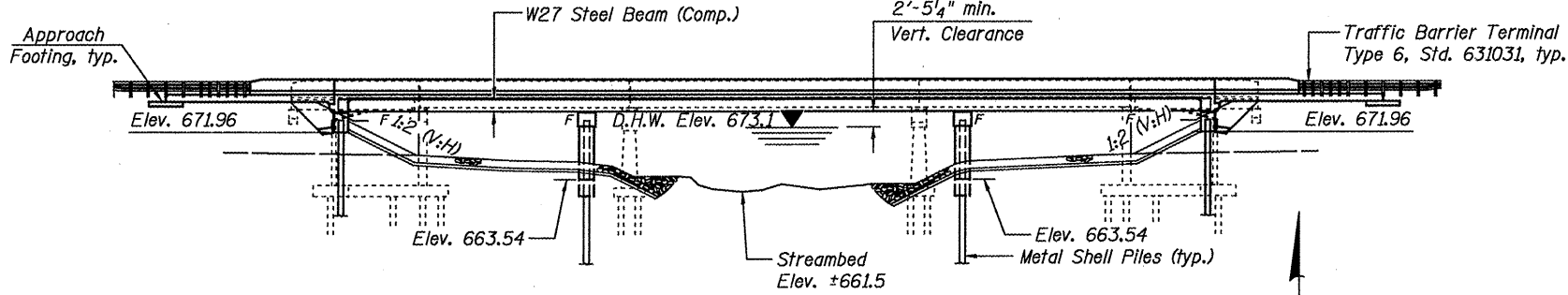


Bench Mark: Railroad spike in first power pole, located west of east field entrance, Elevation 679.83

Existing Structure: S.N. 057-0091 was built in 1936 as F.A. 119 Section 120 B. at Station 126+95.70. In 1982, the R.C. Deck Girder Bridge superstructure was removed and widened with PPC Deck Beams as F.A. 53, Section 120 BR, Station 126+95.70. In 2008, five (5) PPC Deck Beams were removed and replaced as FAP 315 (US 136), Section D5 Beam Replacement 2008-1, Contract 70669. The substructure consists of closed abutments and solid wall concrete piers. The Bk. to Bk. dimension measures 126'-11" while the O.-O. width measures 42'-0". The structure is to be removed and replaced. Traffic is to be diverted south of the structure using a one lane runaround with temporary signals and temporary culvert structure.

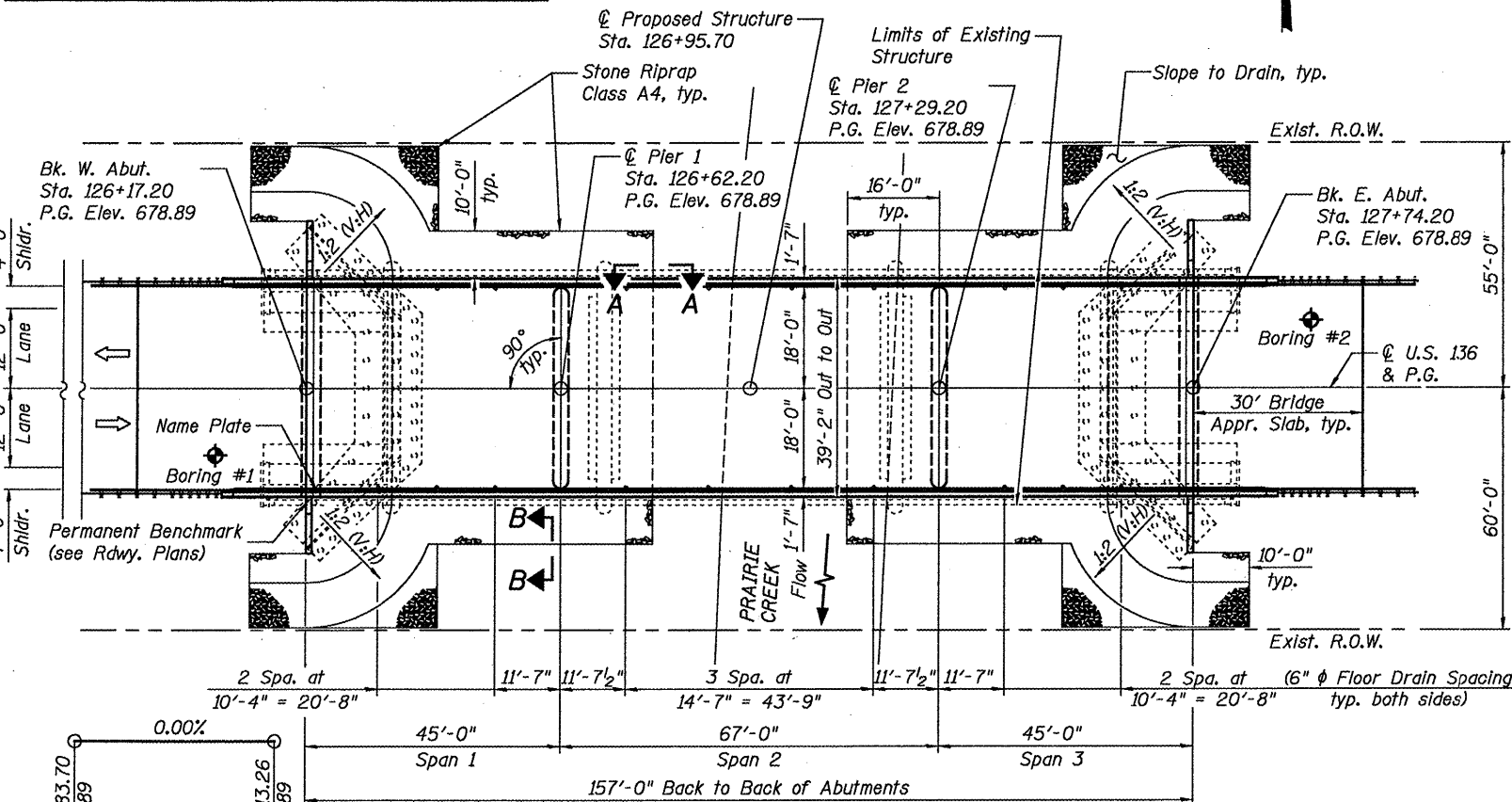
No Salvage



DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
671.9	671.9	653.5	653.5	671.9

ELEVATION



APPROVED PLAN
For Structural Adequacy Only

Ralph E. Anderson (PE)
Engineer of Bridges & Structures

WATERWAY INFORMATION

Flood	Freq. Yr.	Q	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	2393	780	967	673.1	0.2	0.2	673.3	673.3	673.3
Base	100	2805	989	1024	673.5	0.3	0.2	673.8	673.7	673.7
Overtopping										
Max. Calc.	500	3816	1116	1155	674.4	0.4	0.3	674.8	674.7	674.7

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

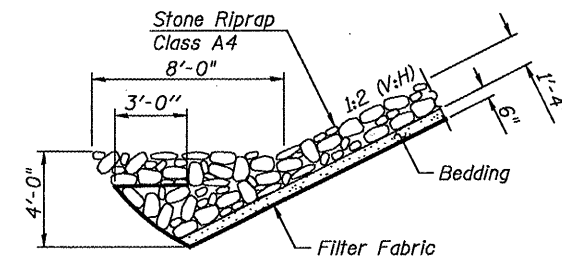
INDEX OF SHEETS

Sheet No.	Description
1	General Plan, General Notes, Bill of Material
2-4	Top of Slab Elevations
5-7	Superstructure Details
8-9	Bridge Approach Slab Details
10	Structural Steel & Framing Plan
11	Bearings & Diaphragm Details
12	Abutments
13	Piers
14	Pile Details
15	Bar Splicer Assembly Details
16	Cantilever Forming Brackets
17	Soil Borings

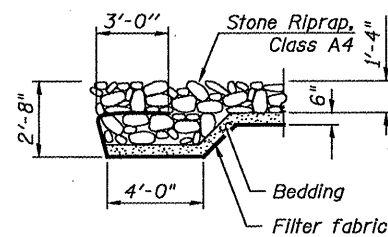
STATION 126+95.70
BUILT BY
STATE OF ILLINOIS
F.A.P. RTE. 315 SEC. 120BR-1
LOADING HL-93
STR. NO. 057-0245

NAME PLATE

See Std. 515001



SECTION A-A



SECTION B-B

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{d1}) = 0.13g
Design Spectral Acceleration at 0.2 sec. ($S_{d0.2}$) = 0.22g
Soil Site Class = D

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless otherwise noted.

All structural steel shall be AASHTO M 270 Grade 50W.

Calculated weight of Structural Steel = 107,700 lbs.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions. Reinforcement bars designated (E) shall be epoxy coated. Slipforming of the parapets is not allowed.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

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

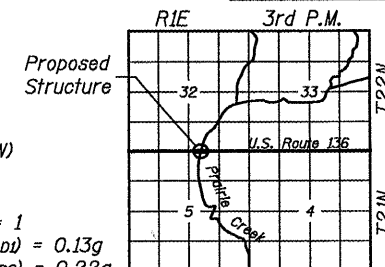
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

The existing bearing pads at Pier 1 and both Abutments contain asbestos. The Contractor shall take appropriate precautions to deal with the presence and disposal of asbestos on this project. See Special Provisions.

The Contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the structure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd	--	108	108
Stone Riprap, Class A4	Sq Yd	--	1186	1186
Filter Fabric	Sq Yd	--	1186	1186
Removal Of Existing Structures	Each	1	--	1
Structure Excavation	Cu Yd	--	238	238
Floor Drains	Each	20	--	20
Concrete Structures	Cu Yd	23.3	115.0	138.3
Concrete Superstructure	Cu Yd	337.5	--	337.5
Bridge Deck Grooving	Sq Yd	820	--	820
Concrete Encasement	Cu Yd	--	6.8	6.8
Protective Coat	Sq Yd	1033	--	1033
Furnishing And Erecting Structural Steel	L. Sum	1	--	1
Stud Shear Connectors	Each	3744	--	3744
Reinforcement Bars, Epoxy Coated	Pound	81370	9240	90610
Bar Splicers	Each	80	--	80
Furnishing Metal Shell Piles 14" x 0.312"	Foot	--	1039	1039
Driving Piles	Foot	--	1039	1039
Test Pile Metal Shells	Each	--	2	2
Pile Shoes	Each	--	28	28
Name Plates	Each	1	--	1
Anchor Bolts, 1"	Each	--	48	48
Geocomposite Wall Drain	Sq Yd	--	68	68
Pipe Underdrains For Structures 4"	Foot	--	144	144
Underwater Struct. Excav. Protection - Loc. 1	Each	--	1	1
Underwater Struct. Excav. Protection - Loc. 2	Each	--	1	1
Diamond Grinding (Bridge Section)	Sq Yd	772	--	772
Asbestos Bearing Pad Removal	Each	--	84	84



LOCATION SKETCH

GENERAL PLAN & ELEVATION

U.S. 136 OVER
PRAIRIE CREEK
STRUCTURE NO. 057-0245

SHEET	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1 OF 17	315	120BR-1	MCLEAN	49	12
STA. 126+95.70		CONTRACT NO. 70524			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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