

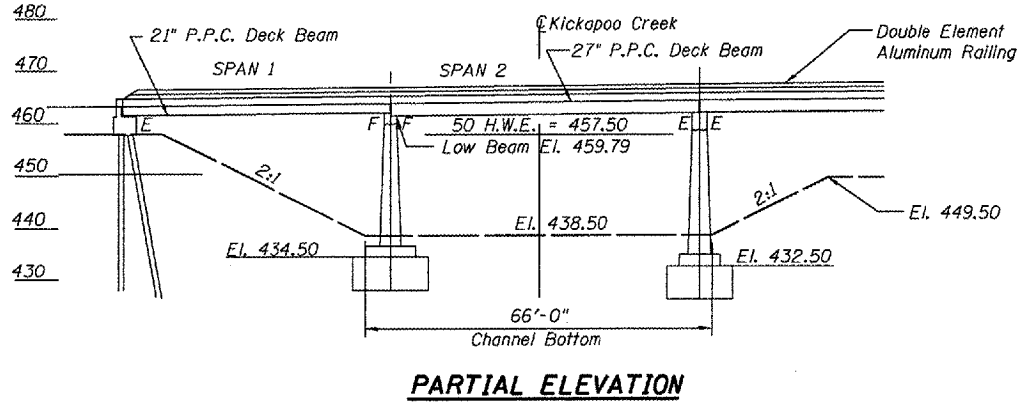
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 317	(48B)	PEORIA	29	13
SHEET NO. 1				
16 SHEETS				
D-94-062-05				

U.S.C. & G.S. B.M.-1: EL 461.910 Bartonville, on S. side of W end of State Hwy. Bridge over Kickapoo Creek, on top of parapet of concrete abutment chiseled square (Sanitary District B.M.)

Existing structure consists of 1 span 21" PCC deck, 1 span 27" PCC deck beam & 3 spans of cast in place deck on 36" beams.

Salvage existing aluminum railing & reinstall.

Staging: See sheets 2-5.



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 8. PARAPET AND RAILING LAYOUT
 9. 21" BEAM DETAILS SPAN 1
 10. 27" BEAM DETAILS SPAN 2
 11. BEAM TYPES
 12. MISCELLANEOUS DETAILS
 13. PREFORMED JOINT STRIP SEAL
 14. TYPE L ALUMINUM RAILING
 15. ANCHOR BOLT DETAILS
 16. TEMPORARY CONCRETE BARRIER

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures

GENERAL NOTES

- 1.) 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 superstructure.
- 2.) Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. (IL Modified).
- 3.) Expansion guards which are not cast in the precast unit shall be fabricated and erected according to Article 503.10(c) of the Standard specifications and are included in Preformed Joint Strip Seal.
- 4.) Plan dimensions and details relative to 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 or work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.
- 5.) Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
- 6.) No in-stream work will be allowed on this project.
- 7.) Existing name plate shall be cleaned and relocated adjacent to new name plate. Cost incidental to "Name Plates".
- 8.) Note Deleted.
- 9.) Note Deleted.
- 10.) After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a min. of 24 hrs. prior to grouting the shear keys.
- 11.) The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.
- 12.) If the Contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats the following shall be done: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.
- 13.) Expansion joint plates and attached bars shall be AASHTO M 270 Grade 50.
- 14.) Contractor shall provide the necessary support for the existing Telephone Duct Bank suspended from the existing median throughout the project. It shall be the Contractor's responsibility to call out additional inserts required in Beams 18 & 19 to accommodate this support.
- 15.) Reinforcement bars designated (E) shall be epoxy coated.
- 16.) The existing steel wide flange beams (2) used as temporary carrier beams under span 1 shall remain the property of the state. In addition, the steel "shear key clamping" plate and existing transverse ties shall remain the property of the state. All said materials shall be delivered by the contractor to the IDOT building maintenance yard located on Camp Street in East Peoria, Illinois. Phone #309-699-3822. Costs are included with removal of existing super structure.

LOADING HS20-44
(Existing structure designed for 25#/sq. ft. for Future Wearing Surface.)

SPECIFICATIONS
2002 AASHTO (2002 INTERIMS)

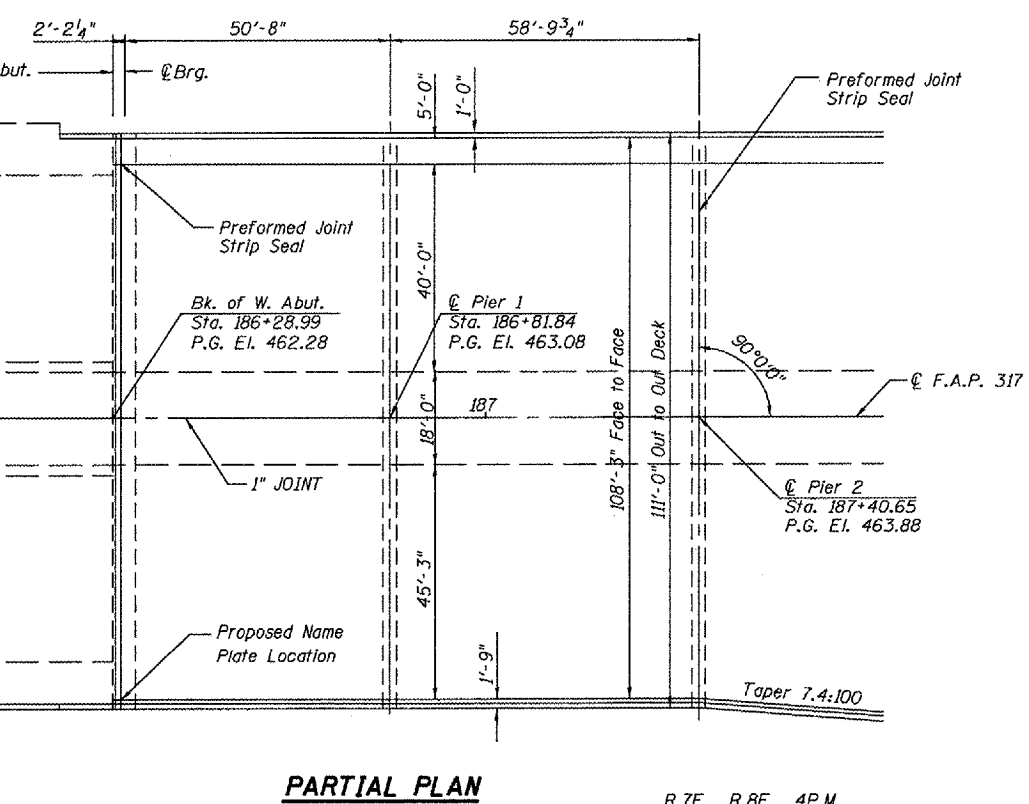
SPECIFICATIONS

f'c = 5,000 psi (precast)
f'ci = 4,000 psi (precast)
f'c = 3500 psi (cast-in-place)
f's = 270,000 psi (strands)
f'si = 201,960 psi (strands)
f'y = 60,000 psi (reinf. bars)

SEISMIC DATA 1990

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.048g
Site Coefficient (S) = 1.2

DESIGNED	- JRG
CHECKED	- JFS
DRAWN	- ACJ
CHECKED	- JRG/JFS



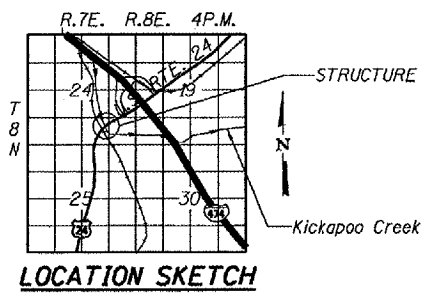
TOTAL BILL OF MATERIAL

PAY ITEM	DESCRIPTION	UNITS	TOTAL
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NTO	TON	88
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50300255	CONCRETE SUPERSTRUCTURE	CU YD	134
50300300	PROTECTIVE COAT	SQ YD	375
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	5530
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	6332
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9927
*50900905	REMOVING AND RE-ERECTING EXISTING RAILING	FOOT	220
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	224
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	1040
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	51
*20001900	ASBESTOS BEARING PAD REMOVAL	EACH	144
*	CONNECTOR FOR TYPE L ALUMINUM RAILING	EACH	22

* SPECIAL PROVISION REQUIRED

KICKAPOO CREEK
STATION 187+10.02
BUILT 200... BY
STATE OF ILLINOIS
F.A.P. 317 SEC. (48B)1
LOADING HS20
STR. NO. 072-0134

NAME PLATE
See Std. 515001



James F. Schmuide
JAMES F. SCHMUIDE
LICENSED STRUCTURAL ENGINEER
ILLINOIS NO. 4422 EXPIRES 11-30-08
PEORIA

5-10-07
DATE

GENERAL PLAN AND ELEVATION
F.A.P. 317 (U.S. RTE. 24)
STRUCTURE 072-0134
PEORIA COUNTY, ILLINOIS
STATION 187+10.02