

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1
		Tazewell	29	12	10 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

Contract Number: 68484

LOADING HS20-44
No allowance for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f_y = 60,000$ psi (Reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax strands)
 $f'_{si} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax strands)

PRECAST NON-PRESTRESSED UNITS

$f'_c = 4,500$ psi

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to 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 each fascia beam. 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.

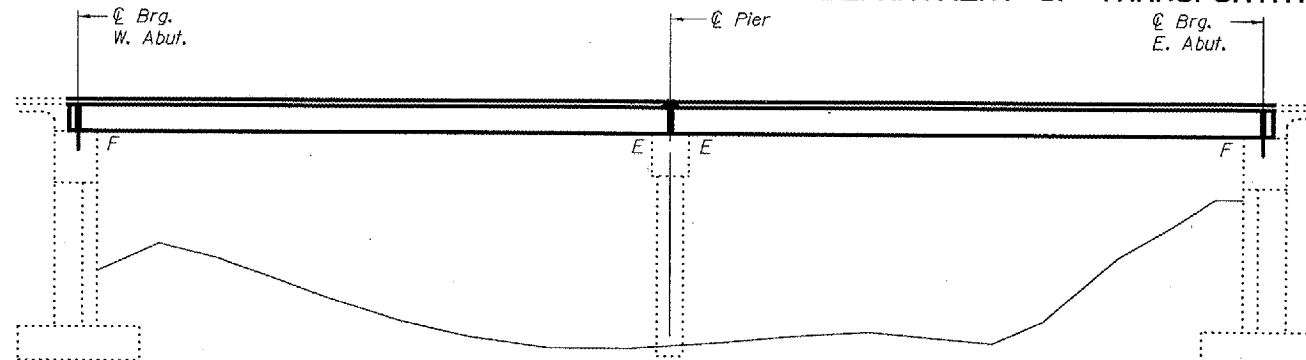
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

Attach new Name plate to the backside of 8" Rail element. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.

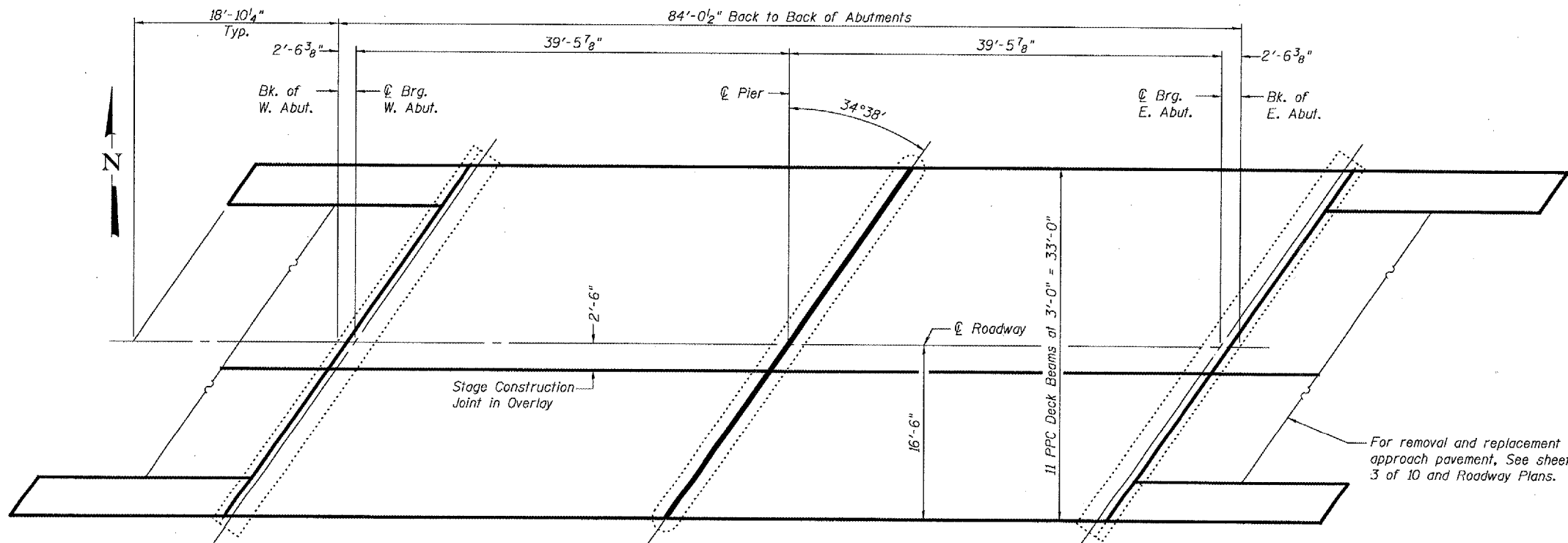
If the contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed 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.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.



ELEVATION



PLAN

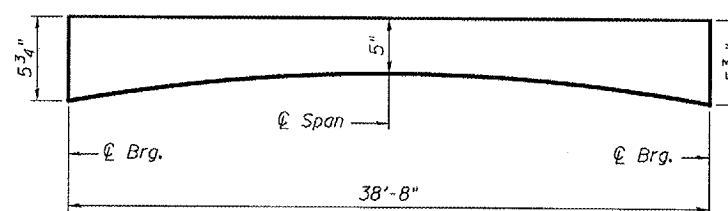
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Preformed Joint Strip Seal	Foot	40
Protective Coat	Sq. Yd.	294
Removal of Existing Superstructures	Each	1
PPC Deck Beams (21" Depth)	Sq. Ft.	2646
Reinforcement Bars, Epoxy Coated	Pound	4,640
Steel Rolling, Type SM	Foot	244
Concrete Wearing Surface, 5"	Sq. Yd.	294
Bridge Deck Grooving	Sq. Yd.	273
Name Plates	Each	1
Bar Splicers	Each	88
Removal of Existing Precast Unit	Sq. Ft.	299
Concrete Structures	Cu. Yd.	6.0
Precast Concrete Bridge Slab	Sq. Ft.	299

STATION 78+06
REBUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 701 SEC. (128BR)I
LOADING HS20
STR. NO. 090-0058

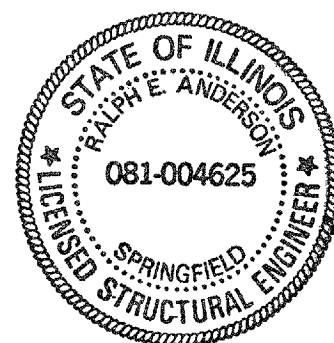
NAME PLATE
(See Std. 515001)

PLAN AND ELEVATION
IL 122 / SUGAR CREEK
TAZEWELL COUNTY
SN 090-0058



CONCRETE WEARING SURFACE PROFILE

(Additional 1/4" thickness at Brg. to account for crown of Roadway.)



Expires: November 30, 2008

DESIGNED	<i>Paul H. John</i>	December 8, 2006
CHECKED	<i>John A. Morris</i>	EXAMINED
DRAWN	<i>John A. Morris</i>	PASSED
CHECKED	<i>PSS SJB</i>	