SHEET NO. TOTAL SHEET NO. 1STATE OF ILLINOIS 12 SHEETS Bond 26 10 DEPARTMENT OF TRANSPORTATION Contract Number: 76860 ₩. Abut. ⊢ € Pier 1 -- € Pier 2 Pier 3 ├-- € Pier 4 ⊢ € Pier 5 Pier 6 € Brg.- E. Abut. Pier 7 Bk. of Bk. of -W. Abut. E. Abut. N ELEVATION ├- @ Pier 1 Pier 2 **⊢**- € Pier 3 Pier 4 ├**-** £ Pier 5 -- € Pier 6 Pier 7 366'-9'2" Back to Back of Abutments Bk. of ---Bk, of 43'-4³8" Span 2 43′-6³8" Span 3 44'-2'2" Span 4 50'-57₈" Span 5 50'-5⁷8" Span 6 44'-4³4" Span 7 45'-2'2" Span 8 45'-1'₄" Span 1 F. Abut. W. Abut. 2'-03₈" 2'-2" € Brg.— **-** € Brg. E. Abut. W. Abut. 11 PPC Deck Beams at 3'-0" = 33'-0" (S) GENERAL NOTES PLAN Plan dimensions and details relative to existing structure have been taken - Attach new name plate to from existing plans and are subject to nominal construction variations. It backside of 8" rail element. shall be the Contractor's responsibility to verify such dimensions and details TOTAL BILL OF MATERIAL 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 Con-LOADING HS20-44 tractor will be paid for the quantity actually furnished at the unit price bid No allowance for future wearing surface. for the work. The minimum thickness of the Concrete overlay shall be 5" and DESIGN SPECIFICATIONS varies as required to adjust for the new profile grade and beam camber. 2002 AASHTO Standard Specifications Reinforcement bars shall conform to AASHTO M31 or M322, Grade 60. Concrete sealer shall be applied to the exterior vertical face of each DESIGN STRESSES fascia beam. Cost included with PPC Deck Beams (21"). FIELD UNITS All construction joints shall be bonded. No instream work will be allowed on this project. f'c = 3,500 psi Repair of the pier caps shall be completed prior to placement of the fy = 60,000 psi (Reinforcement) new deck beams. PRECAST PRESTRESSED UNITS The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the $f'c = 5,000 \ psi$ contractors responsibility to account for the condition of the beams when f'ci = 4,000 psi

developing construction procedures for removal and replacement of the

If the contractors 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

be used at all times under crane tracks or wheels and any outriggers in the

and protect the concrete, in all cases a double layer mat of heavy timbers shall

down position. If necessary, shims shall be used under the crane mat to ensure

will be placed on new beams prior to placement of the concrete wearing surface.

it shall be done after the dowel rods are grouted and cured for 24 hours minimum

and prior to grouting the shear keys. A temporary means of lateral restraint will

be required for fascia beams at expansion ends of beams to prevent movement

uniform contact with the underlying beams. If cranes or other heavy equipment

superstructure.

of the beams.

VHV CHECKED PSJ

May 10, 2005 EXAMINED John a. Morris PASSED Ralah E. Aderson



STATION 1770+46.50 BUILT 20 BY STATE OF ILLINOIS F.A.P. RT. 785 SEC. 138BR-2 LOADING HS20 STR. NO. 003-0024

 $f's = 270,000 \text{ psi } (\frac{1}{2}\text{"} \phi \text{ low lax strands})$ $f'si = 201,960 \text{ psi } (\frac{1}{2}\text{"} \phi \text{ low lax strands})$

NAME PLATE (See Std. 515001)

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
PPC Deck Beams (21" Depth)	Sq. Ft.	11,969
Concrete Structures	Cu. Yd.	4.7
Asbestos Bearing Pad Removal	Each	88
Reinforcement Bars, Epoxy Coated	Pound	<i>1</i> 6, <i>3</i> 50
Steel Bridge Rail, Type SM	Foot	734
Polymer Concrete	Cu. Ft.	7.2
Silicone Joint Sealer, 1 ^l 2"	Foot	33
Silicone Joint Sealer, 2 ¹ ₂ "	Foot	33
Silicone Joint Sealer, 3"	Foot	33
Concrete Wearing Surface, 5"	Sq. Yd.	1,264
Bridge Deck Grooving	Sq. Yd.	1,246
Formed Concrete Repair (≤5")	Sq. Ft.	420
Name Plates	Each	1

PLAN AND ELEVATION IL 140 / BIG SHOAL CR. F.A.P. RT. 785 SEC. 138BR-2 BOND COUNTY STA. 1770+46.50 SN 003-0024