

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATION	SHEET
F.A.P. 744	108B-1-2	TAZEWELL	29	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2

20 SHEETS

Contract # 68485

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Polymerized Hot Mix Asphalt Surface Course, Mix D, N50	Ton	151		151
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		2.1	2.1
Concrete Structures	Cu. Yd.		2.1	2.1
P.P.C. Deck Beams (21" Depth)	Sq. Ft.	8887		8887
P.P.C. Deck Beams (27" Depth)	Sq. Ft.	2921		2921
Furnishing and Erecting Structural Steel	Pound	615		615
Stud Shear Connectors	Each	48		48
Reinforcement Bars Epoxy Coated	Pound		220	220
Steel Railing, Type S-1	Foot	987		987
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	104		104
Waterproofing Membrane System	Sq. Yd.	1312		1312
Portland Cement Mortar Fairing Course	Foot	3386		3386
Epoxy Crack Injection	Foot		121.5	121.5
Silicone Joint Sealer, 1.5"	Foot	48		48
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.		688	688
Asbestos Bearing Pad Removal	Each	144		144

GENERAL NOTES

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 of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The minimum thickness of the hot mix asphalt overlay shall be 1 1/2" and varies as required to adjust for the new profile grade and beam camber.

Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). 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 conditions of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on new deck beams, a detailed procedure shall be submitted to the Engineer for approval.

The procedure shall include calculations sealed by an Illinois

Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with "Removal of Existing Superstructures".

Reinforcement bars designated (E) shall be epoxy coated.

Repair of pier caps and N. Abutment shall be completed prior to placement of the new deck beams.

No in-stream work will be allowed on this project.

LOADING HL-93

No Allowance for future wearing surface

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, 4th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 3500 psi

fy = 60000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6000 psi

f'cl = 5000 psi

fpu = 270000 psi (1/2" low lax strands)

fpbt = 201960 psi (1/2" low lax strands)

GENERAL NOTES &  
BILL OF MATERIAL  
F.A.S. ROUTE 744 (OLD IL 121)  
OVER MACKINAW RIVER  
SECTION 108B-1-2  
TAZEWELL COUNTY  
STATION 667+55.00  
STRUCTURE NO. 090-0087

DESIGNED -	
CHECKED -	
DRAWN -	
CHECKED -	

200  
EXAMINED  
ENGINEER OF BRIDGE DESIGN  
PASSED  
ENGINEER OF BRIDGES AND STRUCTURES