

Bench Mark: RR Spike in South Side of Power Pole on North Side of Route 15, approximately 18' West & 18' North of Northwest Corner of S.N. 095-0011 Bridge Deck, Elev. 489.84.

Existing Structure: S.N. 095-0011 was built in 1921 as S.B.I. Rte. 15 Sec. 8B at Sta. 36+25.00. In 1971 the superstructure was replaced, and the substructure widened. The existing single span structure consists of PPC deck beams on spread footing supported closed abutments. The bk. to bk. abts dimension measures 32'-0" while the O.-O. width measures 33'-0". The existing superstructure shall be replaced with PPC deck beams, and the substructure will be repaired with Structural Repair of concrete. Staging shall be used during construction.

No Salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 817	8BR-2, 8BR-3	WASHINGTON	52	41	9 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #76946

INDEX OF SHEETS

1. General Plan
2. Stage Construction Details
3. Temporary Concrete Barrier for Stage Construction
4. Type SM Steel Bridge Rail Side Mounted
5. Bridge Approach Pavement (Special)
- 6-7. Superstructure Details
8. Abutments
9. Abutment Repair Details

GENERAL NOTES

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.

Repair of the abutments shall be completed prior to placement of the new deck beams.

The minimum thickness of Bituminous overlay shall be 2" and varies as required to adjust for the new profile grade and beam camber.

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 for the work.

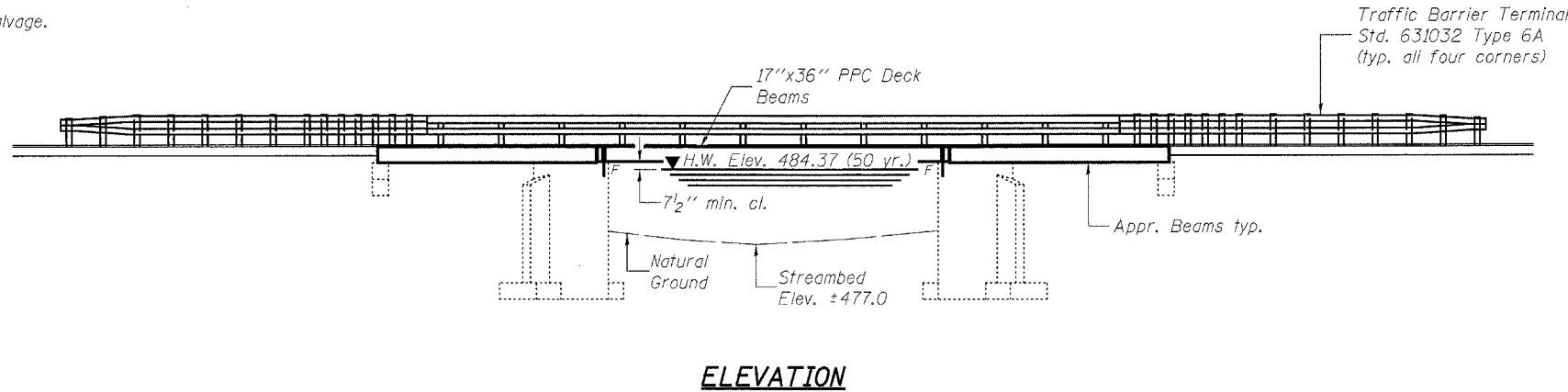
The top surface of the beams shall be finished according to Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".

All Construction joints shall be bonded. The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of 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.

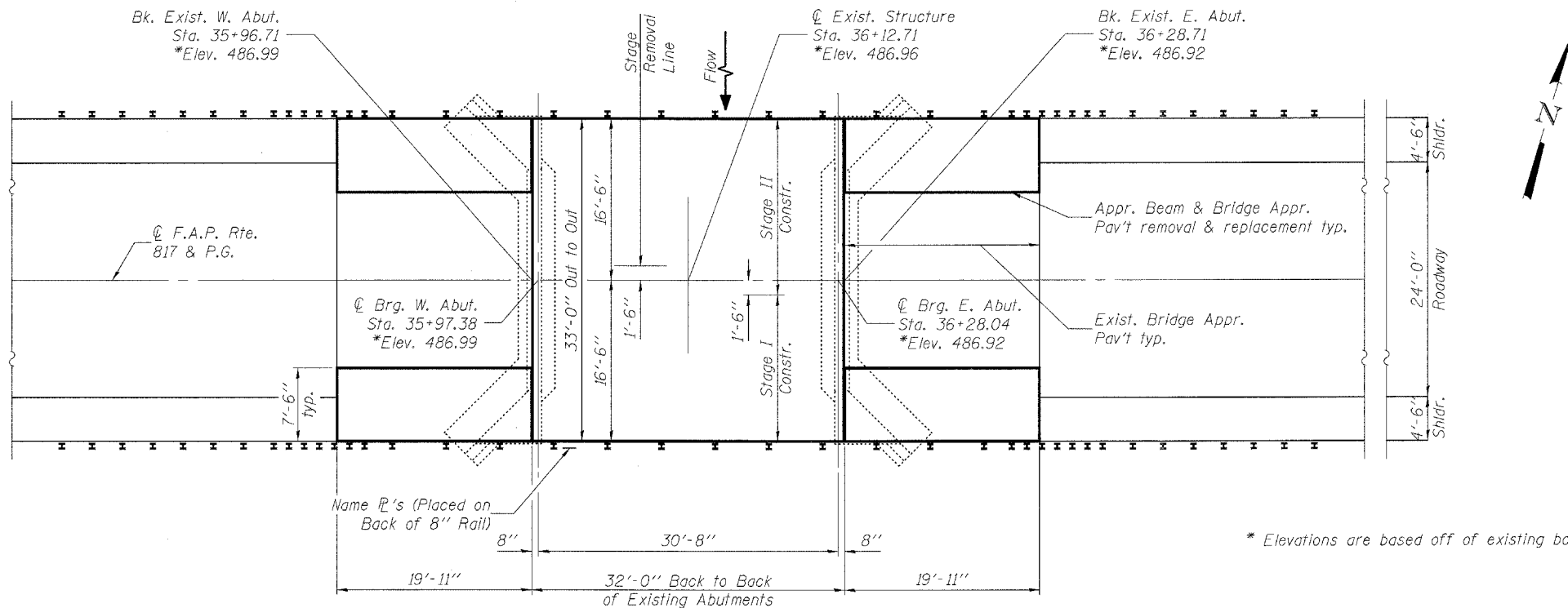
The contractor is advised that the existing Precast Prestressed Concrete Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bridge Approach Pavement (Special)	Sq. Yd.		66	66
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		9.2	9.2
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1051		1051
Steel Bridge Rail, Type SM	Foot	126		126
Name Plates	Each	1		1
Expansion Bolts 3/4 Inch	Each		112	112
Waterproofing Membrane System	Sq. Yd.	117		117
Portland Cement Mortar Fairing Course	Foot	318		318
Removal of Existing Precast Concrete Units	Sq. Ft.	299		299
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq. Ft.		6.5	6.5
Bituminous Concrete Surface Course Superpave, Mix "C", N70	Ton	16		16



ELEVATION



PLAN

LOADING HS20-44 (New Construction)

No Allowance for future wearing surface.

DESIGN SPECIFICATIONS (New Construction)

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

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

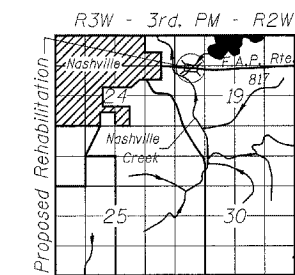
DESIGNED	EML
CHECKED	NJM
DRAWN	EML
CHECKED	NJM

HORNER & SHIFRIN, INC.
ENGINEERS ■ ARCHITECTS ■ PLANNERS

STATION 36+12.71
RE-BUILT 200 BY
STATE OF ILLINOIS
FAP RT 817 - SEC 8BR-3
LOADING HS20
STR. NO. 095-0011
NAME PLATE
See Std. 515001



Eric Lagemann 6/21/06
Expires 11/30/2006



LOCATION SKETCH

GENERAL PLAN
ILLINOIS ROUTE 15 OVER
NASHVILLE CREEK
F.A.P. ROUTE 817 - SECTION 8BR-3
WASHINGTON COUNTY
STATION 36+12.71
STRUCTURE NO. 095-0011