

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

4-#5 B bars Full length of beam

TOTAL SHEET NO. SHEET NO. 3 FAP 716 MACON

*(13088 - DRS

3-#5 Bi bars, .2 x length of beam, Each End

x 3-W2.5 x W5.5 Wire

3₄ " Chamfer

Fabric W2.5 longitudinal

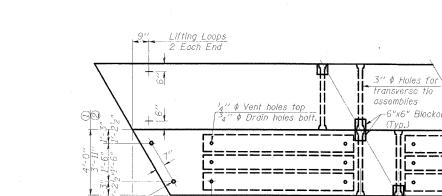
^cull length of beam except at U bars

CONTRACT NO. 74239

* TRANSVERSE PLACEMENT GUIDELINES

- Place strands symmetrically about centerline of beam. 2. The minimum distance from center to center of strands in all
- directions shall be 2". 3. The minimum clearance from strand to dowel hole shall be $\frac{1}{2}$ ".
- 4. The minimum clearance from strand to void shall be 1^{l_2} ".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



90

2" \$ Holes for

TYPICAL SECTION 14- $^{l}_{2}^{\prime\prime}$ ϕ Strands, Each Strand Stressed to 30,900 Lbs. 6-Strands $^{13}_{4}$ up. 8-Strands $^{3}_{4}$ up

Standard Grid Pattern*

** Limits of HMA Surface Removal: at existing concrete repair locations Sawcut for this dimension is 0, and the sawcut removal (Typ.) will be made at the edge of beam. - Existing deck Existing deck Bearing pad beam to remain. - Replace existing with 17" Precast Prestressed Concrete

Deck Beam -

PARTIAL CROSS SECTION

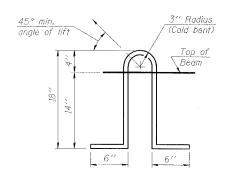
(2)

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① Beam 16, Spans I & II ② Beam 13, Span I; Ream 17, Spans I, II, and III

3-#4 U₁ bars Each Side 8 x 3-W2.5 x W5.5 Wire Fabric, W5.5 vert. Full depth of beam. Each Énd.

BAR U1



13'-11⁵₁₆" (Span II) 13'-6¹⁵₁₆" (Spans I & III)

PLAN

4'-514"

 $38' - 11_8''$ 0. to 0. (Span II) $38' - 2_8''$ 0. to 0. (Spans I & III)

LIFTING LOOP DETAIL

NOTES
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 2'' and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be $2 - l_2'' \phi$ -270 ksi strands, as shown.

The \tilde{l}'' ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

The bearing seaf surfaces shall be adjusted by shimming to assure firm and even bearing. Two $^{l}8^{\prime\prime}$ fabric adjusting shims of the dimensions shown shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

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. This work shall be performed by the producer and included with the cost of the beam.

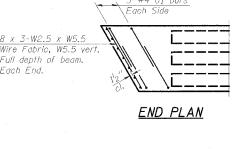
Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used

In the concrete for precast prestressed concrete deck beams.

BILL OF MATERIAL

UIII	Total
Sq. Ft.	910
	Sq. Ft.

DECK BEAMS FAP ROUTE 716 (IL 48) OAKLAND AVENUE SECTION (130BR-1)BR MACON COUNTY SN 058-0056



DESIGNED BY: ELH 02/07
 DRAWN BY:
 JPC
 02/07

 CHECKED BY:
 ELH
 03/07

 APPROVED BY:
 RDP
 03/07