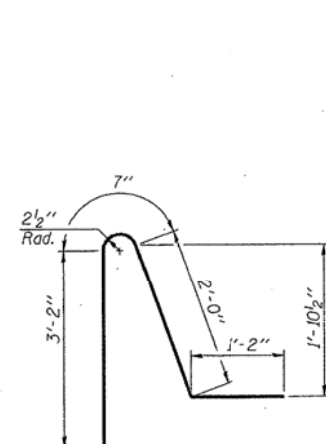
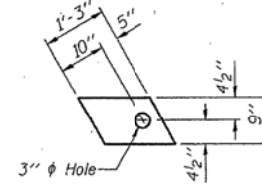


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

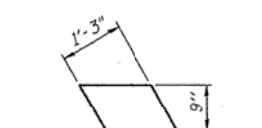
| | | | | |
|-----------------------|---------|---------|-----------|-----------|
| ROUTE NO. | SECTION | COUNTY | SHEET NO. | SHEET NO. |
| F.A.P. 17 | | CARROLL | 27 | 18 |
| FED. ROAD DIST. NO. 1 | | | | 6 SHEETS |



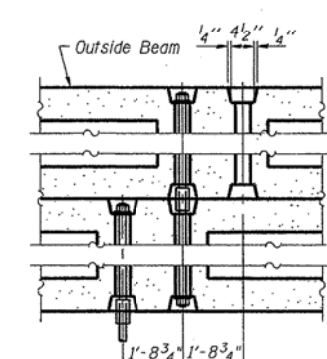
BAR D (E)



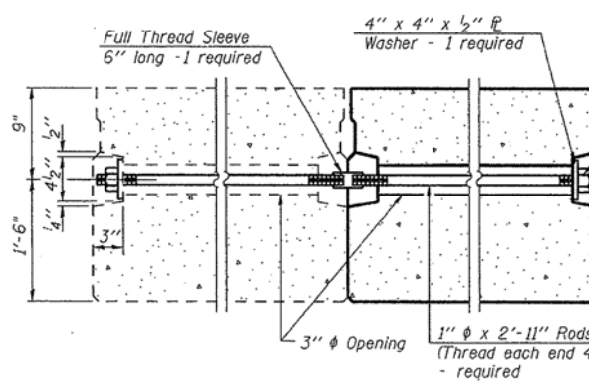
FABRIC BEARING PAD
(Exterior)
(2 Required)
FIXED



FABRIC BEARING PAD
(Exterior)
(2 Required)
EXPANSION



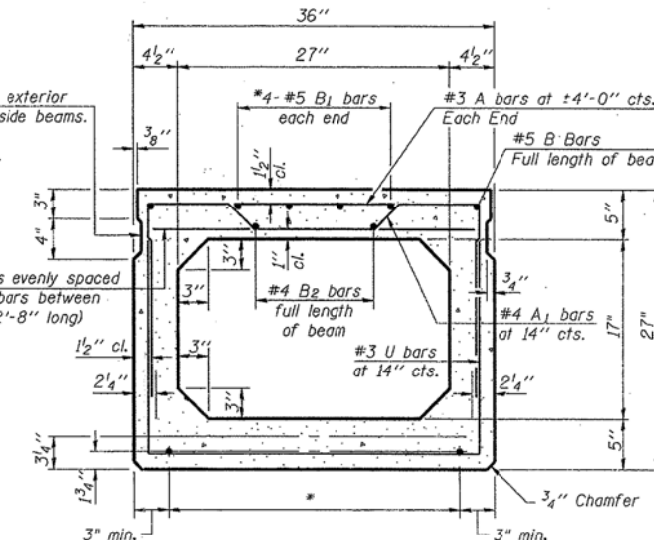
TYPICAL TRANSVERSE TIE ASSEMBLY - SPAN 2



Omit key on exterior face of outside beams.
Nut for 1" rod - 1 required

2-#3 A bars evenly spaced between A1 bars between end blocks (2'-8" long)

*0.2 x Length of beam



TYPICAL SECTION

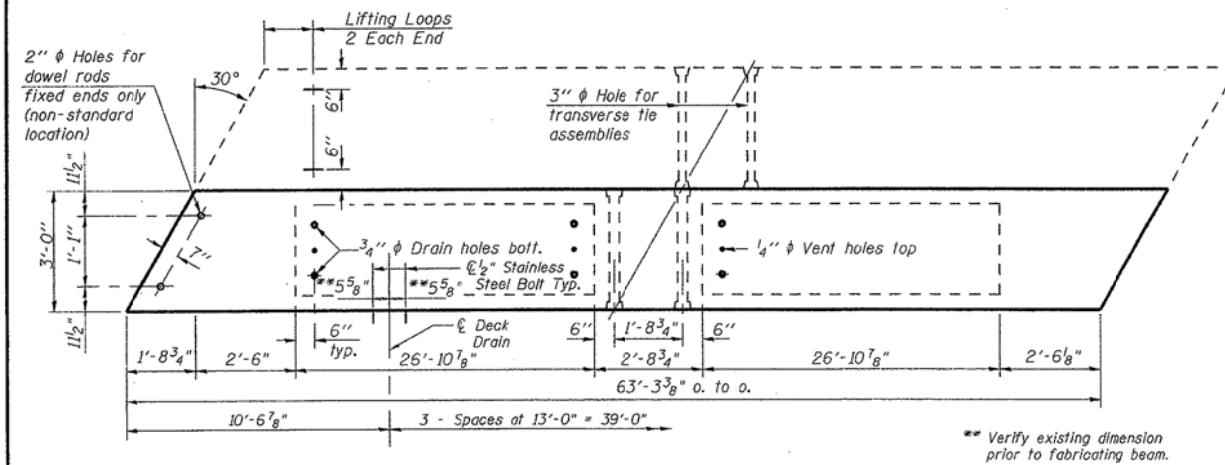
1/2" Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 6-Strands 3/4" up, 2-Strands 7/2" up, 2-Strands 10 1/2" up, 2-Strands 13 1/2" up

Note: Place strands symmetrically about centerline of beam.

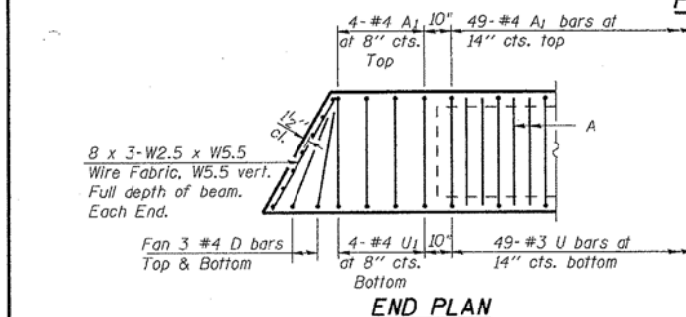
***TRANSVERSE PLACEMENT GUIDELINES**

1. 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 1/2".
4. The minimum clearance from strand to void shall be 1/2".

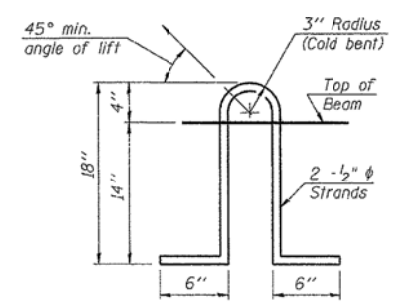
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



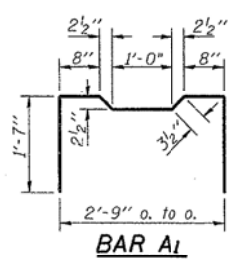
PLAN



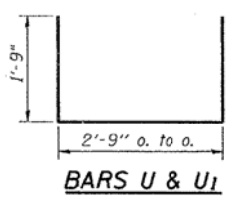
END PLAN



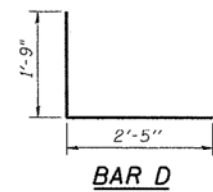
LIFTING LOOP DETAIL



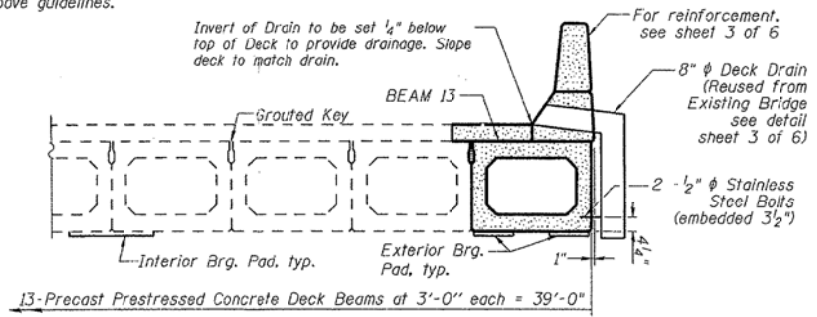
BAR A1



BARS U & U1



BAR D



PARTIAL CROSS SECTION

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" phi-270 ksi strands, as shown. The 1" phi rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad 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. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'cl, shall be 4000 p.s.i. See sheet 3 of 6 for Parapet Reinforcement and Deck Drain details.

BILL OF MATERIAL

| | | |
|------------------------------------------------|---------|-----|
| Precast Prestressed Conc. Deck Bms. (27" Deep) | Sq. Ft. | 190 |
|------------------------------------------------|---------|-----|

DECK BEAM DETAILS

SPAN 2
F.A.P. 17 (US RTE 52 & IL RTE 64)
CARROLL COUNTY
STRUCTURE NO. 008-0030

| |
|----------------|
| DESIGNED - DFM |
| CHECKED - RB |
| DRAWN - EBS |
| CHECKED - DFM |

PD-5-L 11-1-06