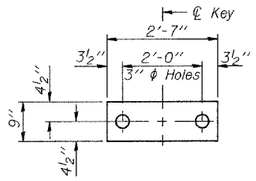
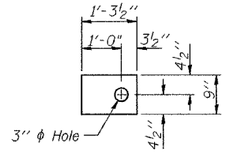
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| FAS 819 | 101BR-3 | WASHINGTON | | 16 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT- | | |

SHEET NO. 7
15 SHEETS

CONTRACT NO. 76964

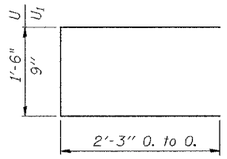



FABRIC BEARING PAD
(Interior-14 required)

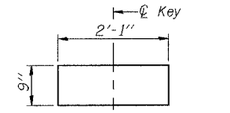



FABRIC BEARING PAD
(Exterior-6 required)

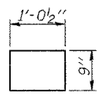
FIXED




BARS U and U1

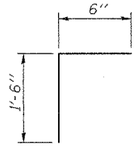



FABRIC BEARING PAD
(Interior-14 required)

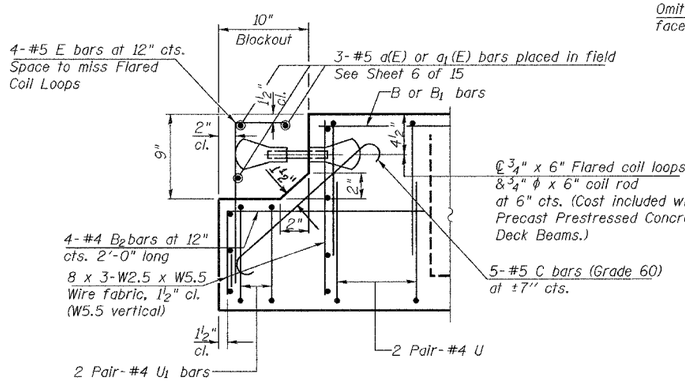



FABRIC BEARING PAD
(Exterior-6 required)

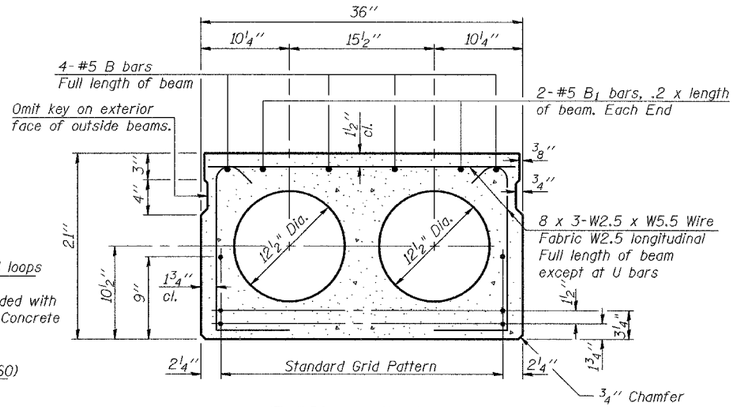
EXPANSION




BAR E



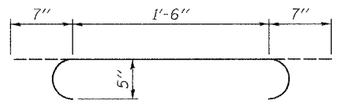

END ELEVATION AT WEST ABUTMENT



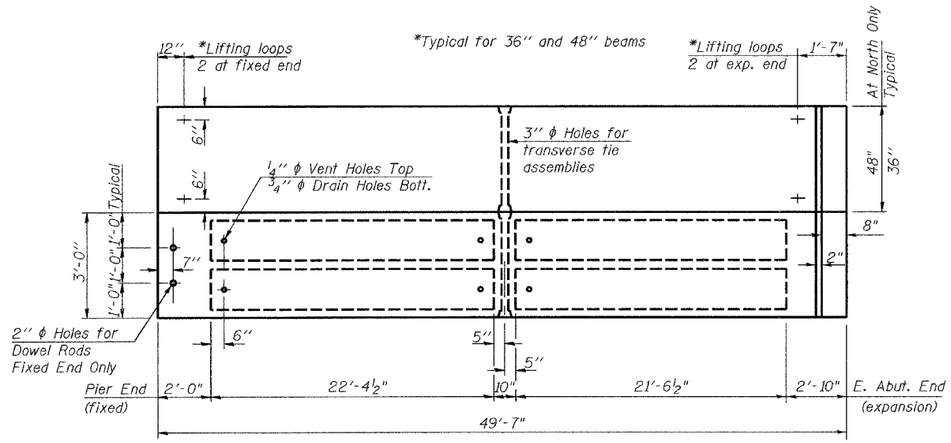

TYPICAL SECTION

½"ϕ Strands. Each Strand Stressed to 30,900 Lbs.
6-Strands 1¾" up, 8-Strands 3¼" up, 2-Strands 9" up

Note:
Place strands symmetrically about ℄ of beam.

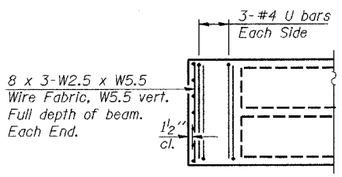



BAR C

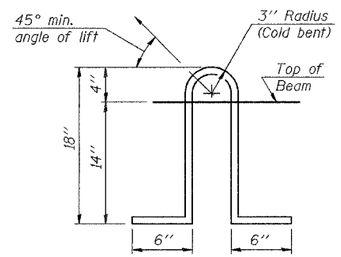



PLAN-SPAN 2

Span 1 similar by opposite hand




END PLAN AT PIER




LIFTING LOOP DETAIL

## BILL OF MATERIAL

| | Item | Unit | Total |
|---|---|---|---|
| * | Precast Prestressed Conc. Deck Bms. 21" | Sq. Ft. | 2677 |
| | | | |
| | | | |

*Width = 36"

## NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
Lifting loops shall be 2-½" ϕ-270 ksi strands, as shown.
The 1" ϕ 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.
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" 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, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
Required Release Strength, f'ci, shall be 4000 p.s.i.
See Sheet 8 of 15 for 21" x 48" PPC Deck Beam details and Transverse Tie Assembly Detail.
See Sheet 5 of 15 for Cross Section.
Bridge Rail inserts shall be cast into precast beams. See sheet 5 of 15 for spacing and sheet 9 of 15 for rail details. Cost included with Precast Prestressed Concrete Deck Beams, (21" Depth).

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
21"x36" PPC DECK BEAM DETAILS

PROJECT
IL RTE 177 OVER GRAND POINT CRK
FAS ROUTE 819 SECTION 101BR-3
WASHINGTON COUNTY
STATION 160+70.00
STRUCTURE NUMBER 095-0021

PROJECT NO. 05028-4
SCALE
DATE 06/01/06
DRAWN BY TFG
CHECKED BY CME/MCB
DRAWING NO. 7

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703

OF 15 SHTS

PD-3-S 10-22-04

PLOT DATE = 06/01/2006
FILE NAME = ...\bm-095-0021-sh1-07-36-beam-details.dgn
PLOT SCALE = 2.0000 '/ IN.
USER NAME = TFG