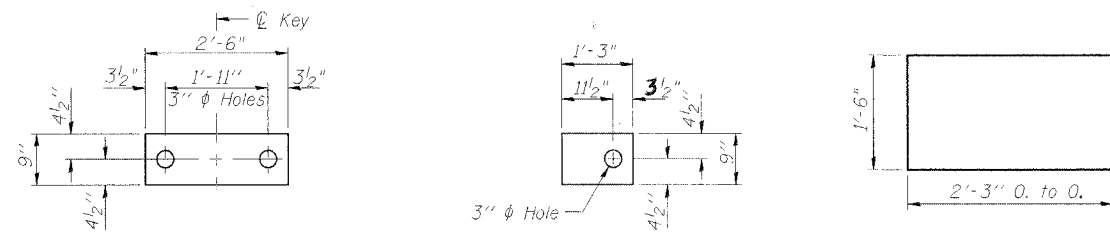


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|---------------------|----------|----------|------------------|-----------|
| ROUTE NO. | SECTION | COUNTY | SHEET NO. | SHEET NO. |
| FAP 840 | 136 BR-1 | IROQUOIS | 45 | 15 |
| FED. ROAD DIST. NO. | | ILLINOIS | FED. AID PROJECT | |

SHEET NO. 5
9 SHEETS

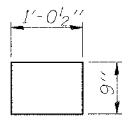
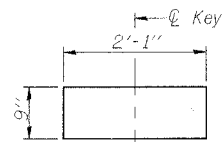


FABRIC BEARING PAD
(Interior)

FABRIC BEARING PAD
(Exterior)

BAR U

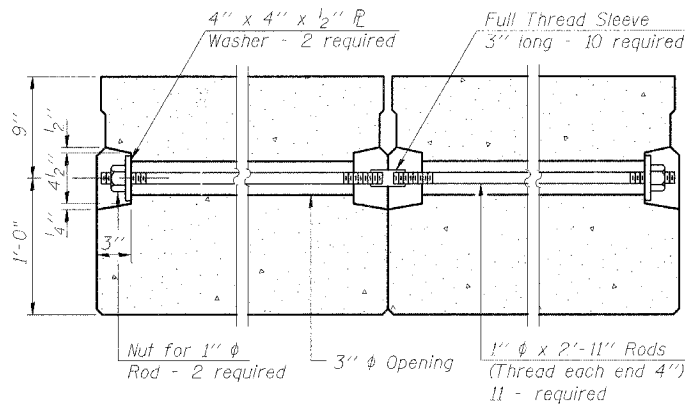
FIXED



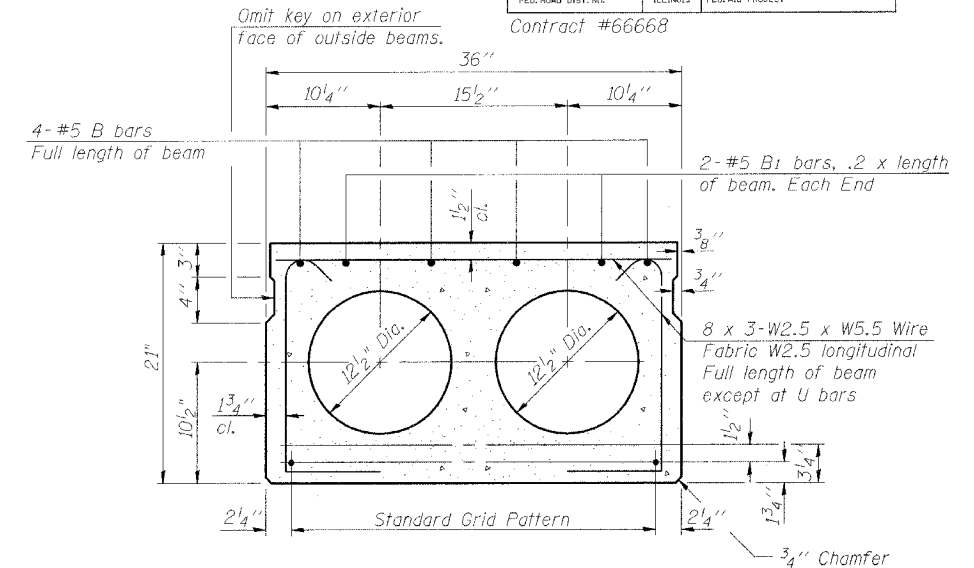
FABRIC BEARING PAD
(Interior)

FABRIC BEARING PAD
(Exterior)

EXPANSION



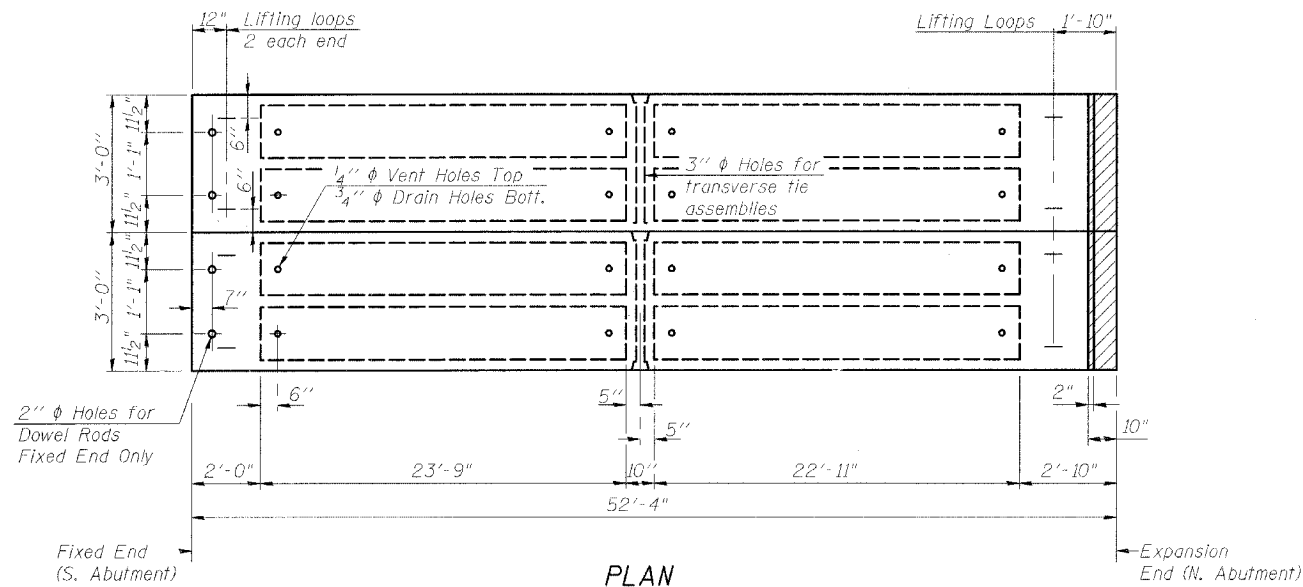
TYPICAL TRANSVERSE TIE ASSEMBLY



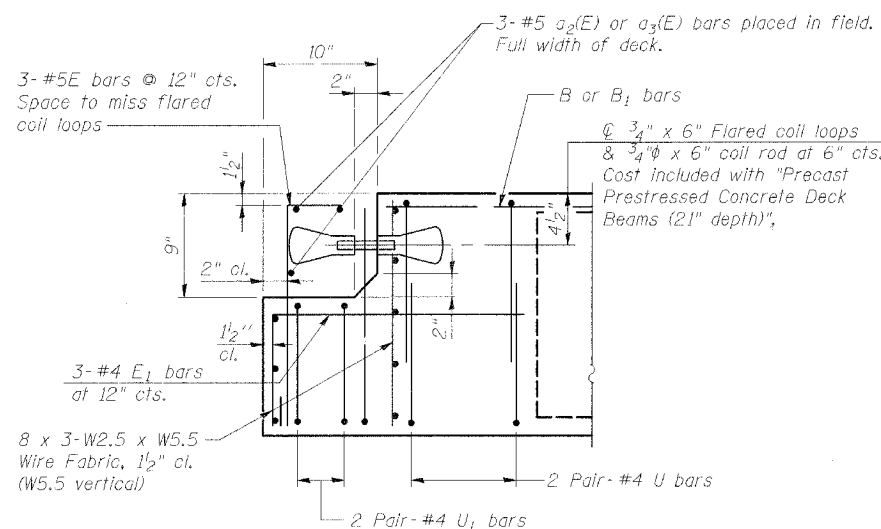
TYPICAL SECTION

1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 8-Strands 3/4" up and 2-Strands 9" up.

Note:
Place strands symmetrically about ϕ of beam.



PLAN



EXPANSION END OF BEAMS

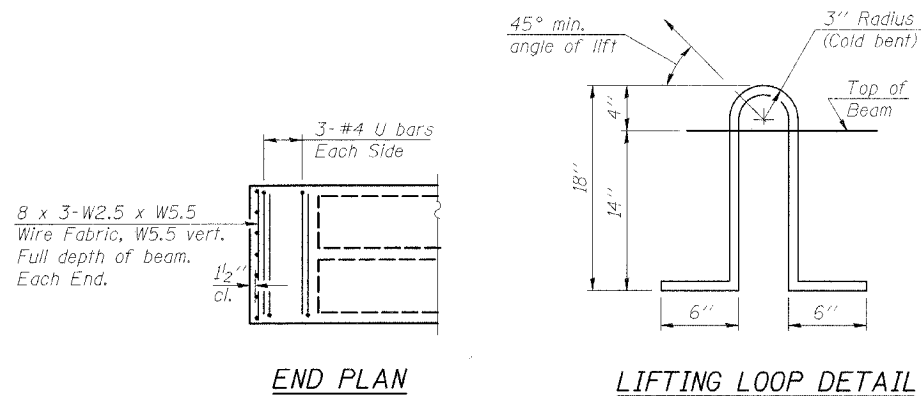
(Dimensions are at Rt. L's)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-------------------------------------|-----|---------|--------|-------|
| a(E) | 3 | #5 | 14'-9" | — |
| a1(E) | 3 | #5 | 17'-9" | — |
| Precast Prestressed Conc. Deck Bms. | | Sq. Ft. | 1727 | |
| Reinforcement Bars Epoxy Coated | | Lbs. | 100 | |

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" 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.
Non prestressing steel shall conform to AASHTO M-31 or M-322 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, 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 4,000 p.s.i.



END PLAN

LIFTING LOOP DETAIL

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |

SCALE: VERT.
HORIZ.
DATE: 9/27/05

DRAWN BY: HEBERLING
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE DETAILS
FAP ROUTE 840 (IL 49) OVER SHAVETAILE CREEK
SECTION 136 BR-1 IROQUOIS COUNTY
STA. 616+84.00
S.N. 038-0093

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
SPECIALTY IN PRECAST/PRESTRESSED CONCRETE
PROFESSIONAL ENGINEERS
10175-48th, 10175-48th, P.O. Box 10175, Chicago, Illinois 60680-0175

COMPUTER FILE NO.
SN038-0093_SS2.dgn
PROJECT 03236 W012
11/3/05-MML

FILE NAME = J:\03236\w012\drawings\sn038-0093\SN038-0093-SS2.dgn
PLOT SCALE = 1/4" = 1'-0"
PLOT DATE = 12/22/05
PLOT OPERATOR = mrcapaldi