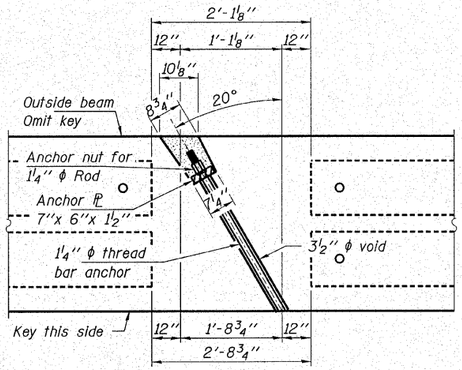
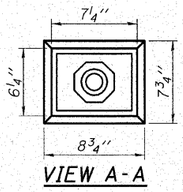
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 9713	99-02118 -00-FP	JACKSON	122	56
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

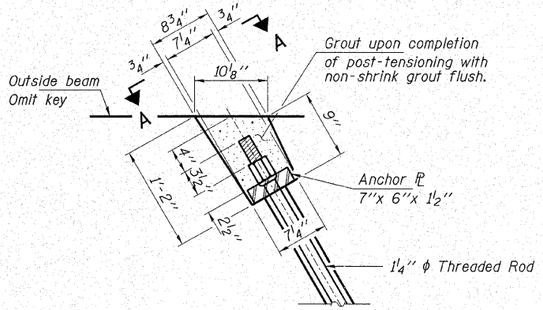
CONTRACT NO. 99219



PLAN AT POST-TENSIONED TRANSVERSE TIE ROD



VIEW A-A



PLAN AT POST-TENSIONED TRANSVERSE TIE ROD

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 7-wire stress relieved 2-1/2"ϕ-270 ksi strands, as shown.

Reinforcement bars shall conform to the requirements of 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.

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

POST-TENSIONING NOTES

Threaded bar post-tensioning tie rods to be 1 1/4"ϕ diameter, ultimate stress 150 ksi (Ultimate Strength 187.5 k). Conforming to ASTM A722 Steel hot rolled and proof stressed. The bar deformations shall conform to the requirements of ASTM A615.

Anchor plates, couplers and nuts shall exceed the requirements of ACI 318 and AASHTO Standard Specifications for Highway Bridges, 2002, Section 9, Article 9.27 Post Tensioning Anchorages and Couplers.

All threaded bars shall be stressed to not more than 40 kips (temporary) and not more than 120 kips at lockoff (transfer).

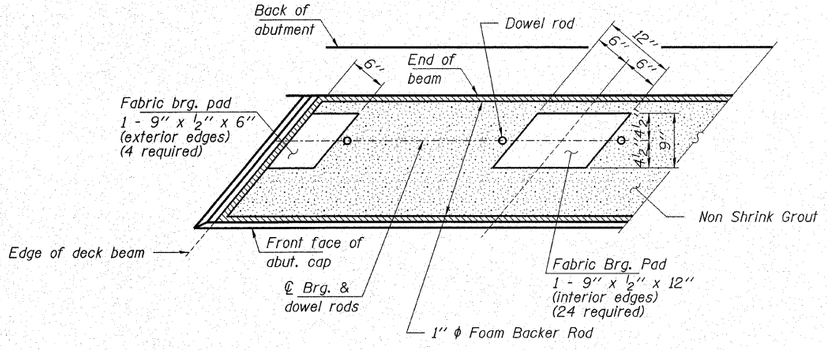
The Contractor must assure tie holes are free from obstructions as beams are set in place and before and after keyways are grouted.

The interior foam spacer/seal shall consist of a flexible, resilient material. The seal shall be anchored to one side of a deck beam before the beams are set in place. The shape shall be circular inorder to seal the transverse openings from leakage of grout during keyway grouting.

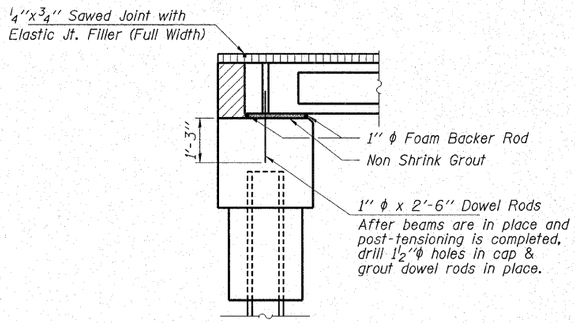
The Contractor may place a 1" to 2" depth of grout and allow to set up during keyway grouting. The remainder of the keyway height can then be filled with grout.

The Contractor shall have the option of post-tensioning using a 7-wire strand system. The system shall conform to the specified loading and must be approved by the Engineer. End anchor shall be detailed in shop drawings.

Voids around threaded bar to be grouted after post-tensioning is complete. See Special Provisions for grout and grouting pressures.



GROUTED BEARING SEAT AND BEARING PAD DETAIL



SECTION AT ABUTMENTS

℄ Rt. L's

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
ELGIN • SPRINGFIELD

PROJECT NUMBER: 03-47-0001-1	DATE: 02/05/07
DESIGNED: S.M.S.	CHECKED: S.W.M.	DRAWN: D.B.

SUPERSTRUCTURE DETAILS

SECTION 99-02118-00-FP

F.A.U. 9713 / EAST PLEASANT HILL ROAD

JACKSON COUNTY

STRUCTURE NO. 039-3254 / STATION 80+95