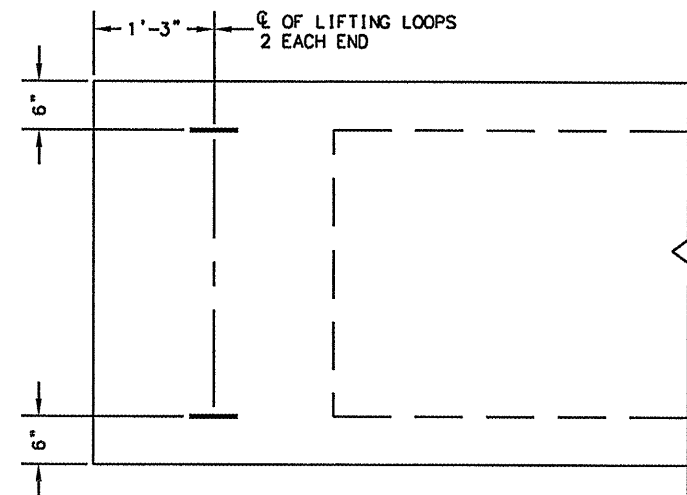
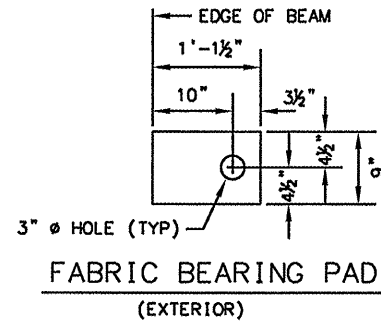
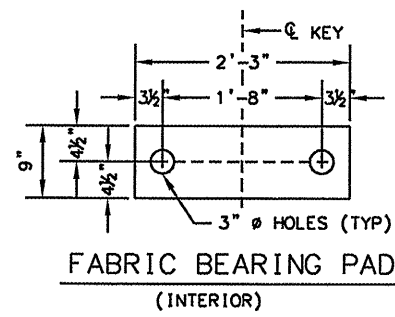
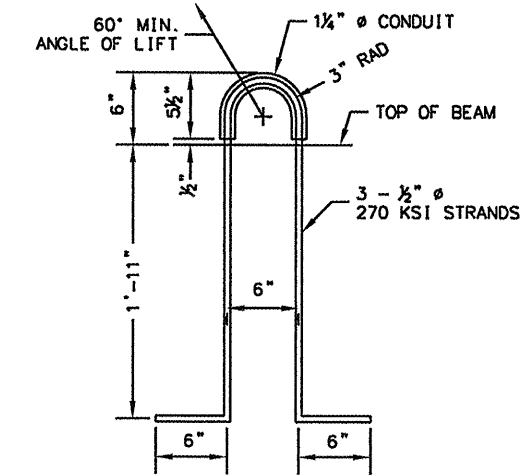


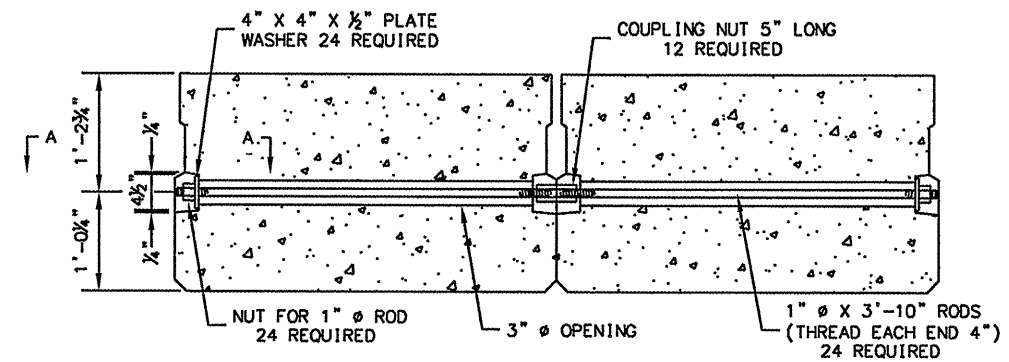
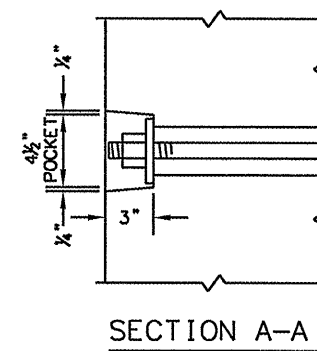
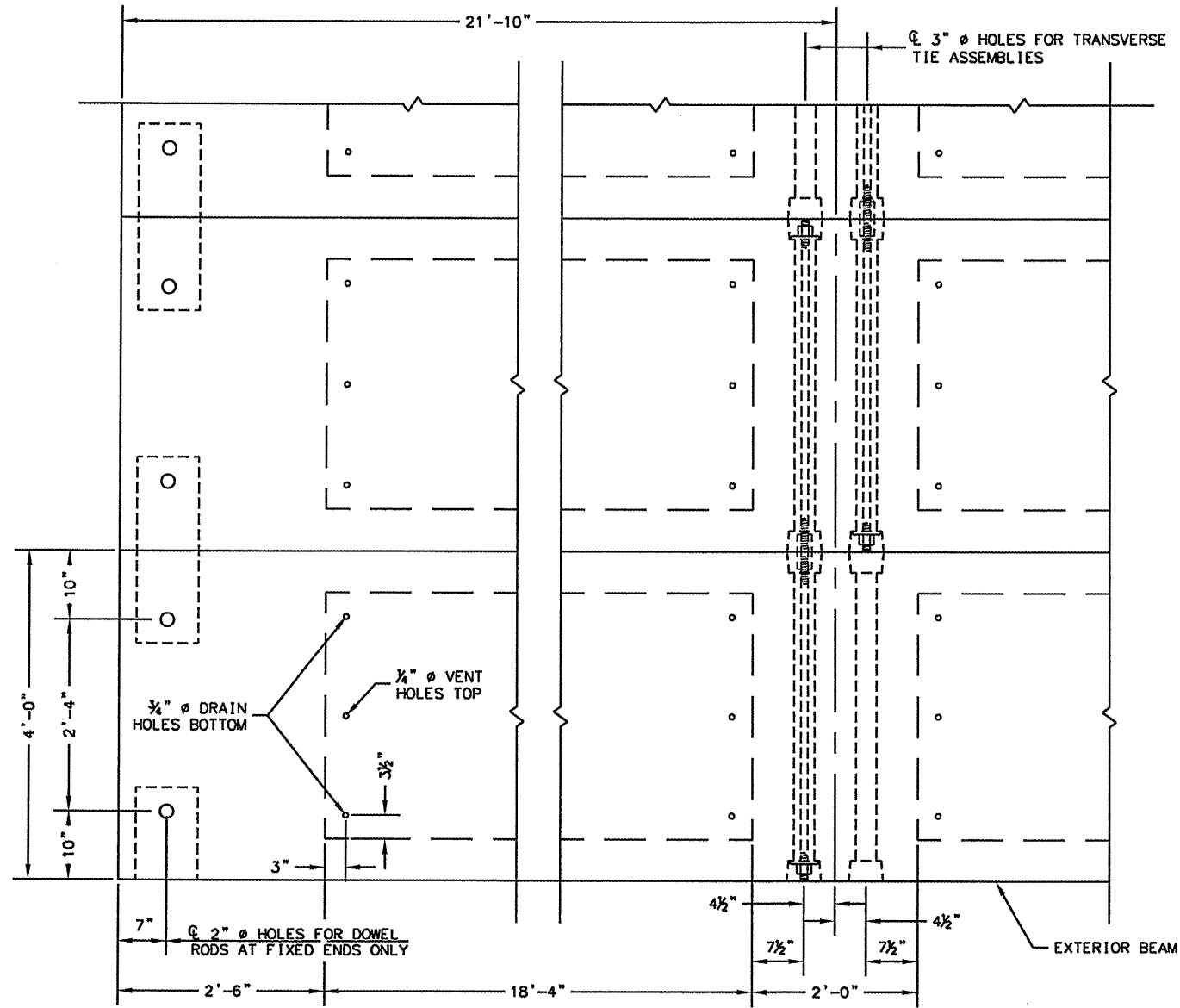
SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
06-00201-02-BR	CH 58	ST. CLAIR	7 OF 13
FHWA REG. NO. 7	ILLINOIS	PROJ: BRM-5011(309)	
DECK BEAM DETAILS		CONTRACT 97465	



EACH BEAM SHALL HAVE FOUR LIFTING LOOPS, TWO AT EACH END OF BEAM CAST IN LOCATIONS SHOWN ABOVE. LOOPS SHALL BE BURNED OFF AFTER BEAMS HAVE BEEN ERECTED.



LIFTING LOOPS SHALL BE 3 - 1/2" Ø - 270 ksi STRANDS, AS SHOWN. ALTERNATE APPROVED LIFTING DEVICES ARE ALSO ACCEPTABLE.



NOTES

1. 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 square inches.
2. The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
3. Reinforcement bars shall conform to ASTM A 706, grade 60.
4. Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
5. A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
6. Corrosion inhibitor, per article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
7. Rail post anchor devices shall be cast into outside beam as elsewhere specified.
8. 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 the top of the beam and the bottom edge of the key.
9. Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
10. Compressive strength of prestressed concrete at release, f'ci shall be 5000 psi.

DESIGN STRESSES

f'c = 6000 psi
 f'ci = 5000 psi
 f's = 270000 psi (1/2" Ø STRAND)
 fsi = 189000 psi (1/2" Ø STRAND)
 fy = 60000 psi

P.P.C. DECK BEAM DETAILS

27" x 48" BEAMS

32' ROADWAY

INITIALS	DATE
DESIGNED WES	11/10
CHECKED RAB	3/11
DRAWN WES	11/10
CHECKED RAB	3/11
PREPARED BY ST. CLAIR COUNTY	
CADD DRAWING FILE: superstr	

PLOT DATE: 3/11