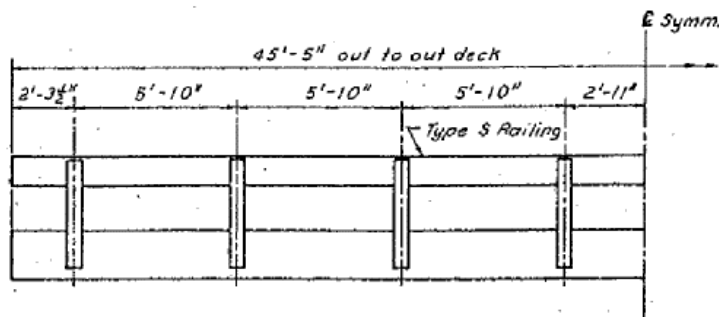
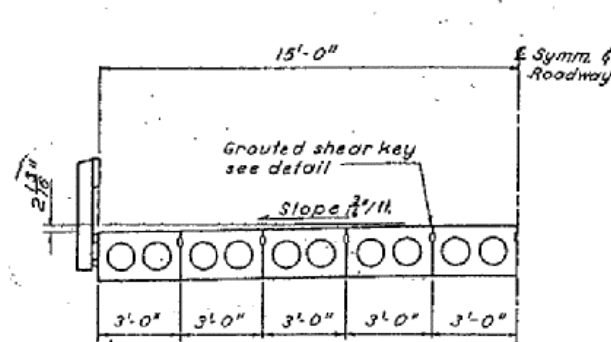


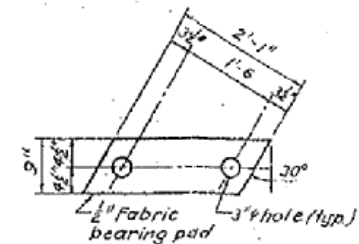
DATE	REVISION	BY	NO.
FAS 331	2-1-BB	VERMILION	19
PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS
	(79-10212009BBR)	VERMILION	16
			8



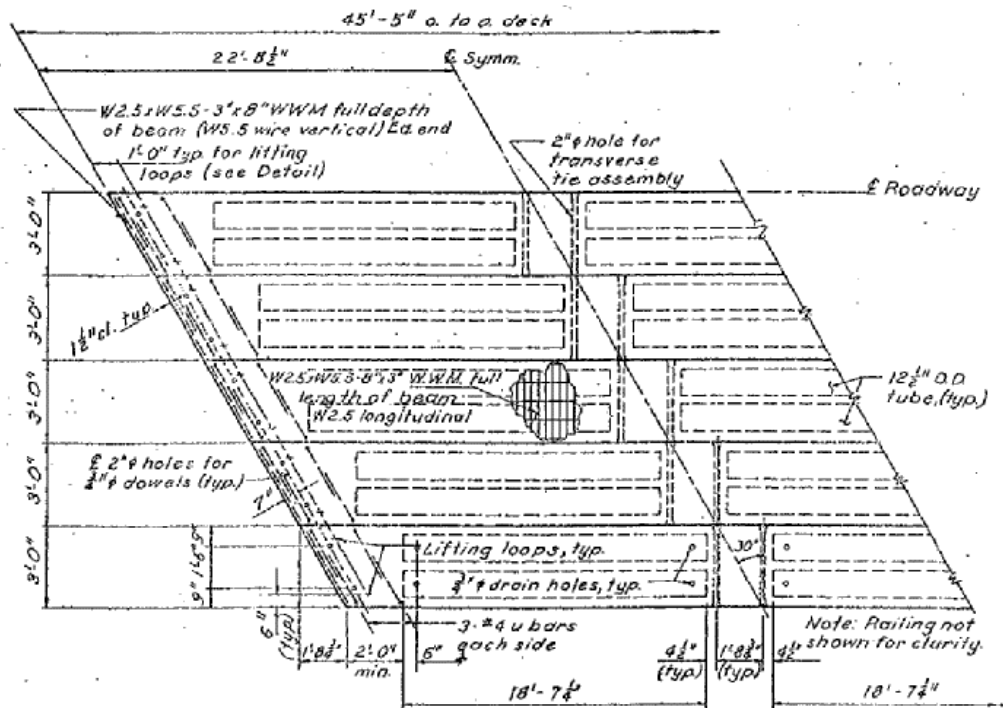
**PARTIAL ELEVATION**



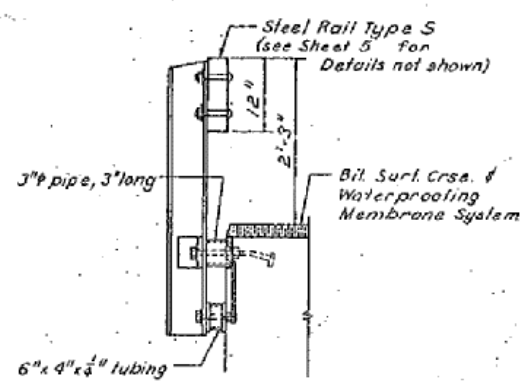
**TYPICAL HALF SECTION**



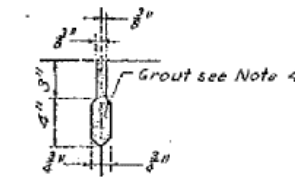
**FABRIC BEARING PAD DETAIL**



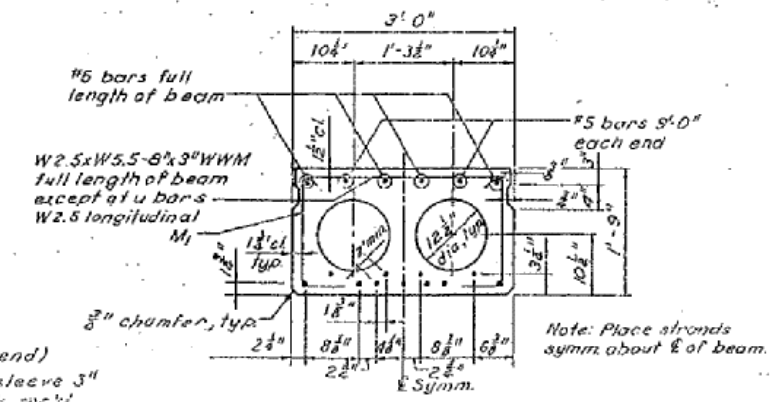
**PARTIAL PLAN**



**SECTION AT RAIL POST**



**SHEAR KEY DETAIL**



**TYPICAL BEAM SECTION**  
7 wire 3/8" strands. Each strand stressed to 28,900 lbs. 7 strands 1 1/4" up, 4 strands 3/4" up.

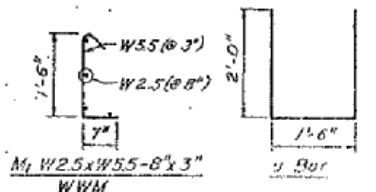
**NOTES:**

1. Prestressing steel shall be non-galvanized, extra high strength, stress relieved 7 wire strand. The nominal diameter shall be 3/8" and nominal cross section shall be 0.153 sq. in.
2. Pockets that receive the transverse tie bars on the outside beams shall be filled with grout after transverse tie assembly is in place.
3. After beams are in place, the contractor shall drill 2" holes into bridge seat and grout dowels into beam and seat.
4. Longitudinal shear keys shall be packed with very dry mix of 2:1 sand and P.C. mortar.
5. Cost of reinforcement and accessories (cost in beams, bearing pads, furnishing, drilling, and grouting dowel holes, and of grouting longitudinal shear key) is included in the Contract Unit Price for Precast Prestressed Concrete Deck Beams.
6. All transverse tie assemblies shall be hot dipped galvanized in accordance with AASHTO M-232. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set.
7. Reinforcement bars shall conform to AASHTO: M-31 or M-53 Grade 60.
8. The top surface of the beams shall be finished in accordance with Article 505.02 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

**BILL OF MATERIAL**

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (21")	Sq. Ft.	1,363

**BAR BENDS**



**DESIGN STRESSES**

For Precast Prestressed Deck Beams (Loading HS-20)  
 $f'_c = 5000$  p.s.i.  
 $f_{ps} = 189,000$  p.s.i. prestressing steel  
 $f_y = 60,000$  p.s.i. non-prestressed reinf.  
 $f'_t = 4000$  p.s.i.

FILE NAME =	USER NAME = shererjm	DESIGNED - JMS	REVISED -
ca:\p\projects\d570749\cad\sheet\d570749-sh1-details.dgn		DRAWN - JMS	REVISED -
PLOT SCALE = 100.0000' / IN.		CHECKED - JMS	REVISED -
PLOT DATE = 10/10/2008		DATE - 090308	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EXISTING STRUCTURE (INFORMATION ONLY)**  
SCALE: N/A SHEET NO. 2 OF 2 SHEETS STA. 69+38.43 TO STA. 69+84.83

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(79-10212009BBR)	VERMILION	16	8
CONTRACT NO. 70749			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	