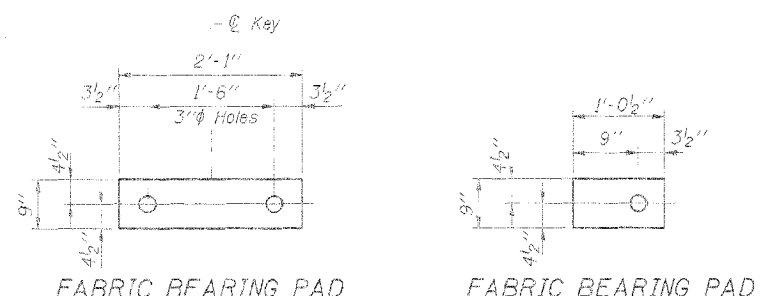


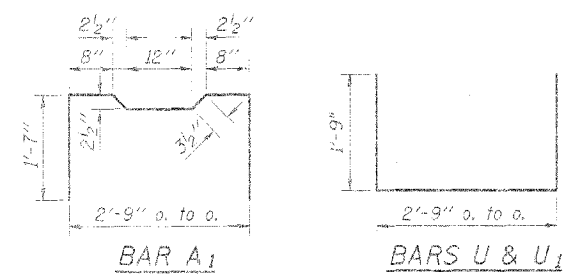
ROUTE NO.	DISTRICT	TOWNSHIP	SHEET	TOTAL
FAS 507	Vermilion	54	49	

*05-00154-00-R



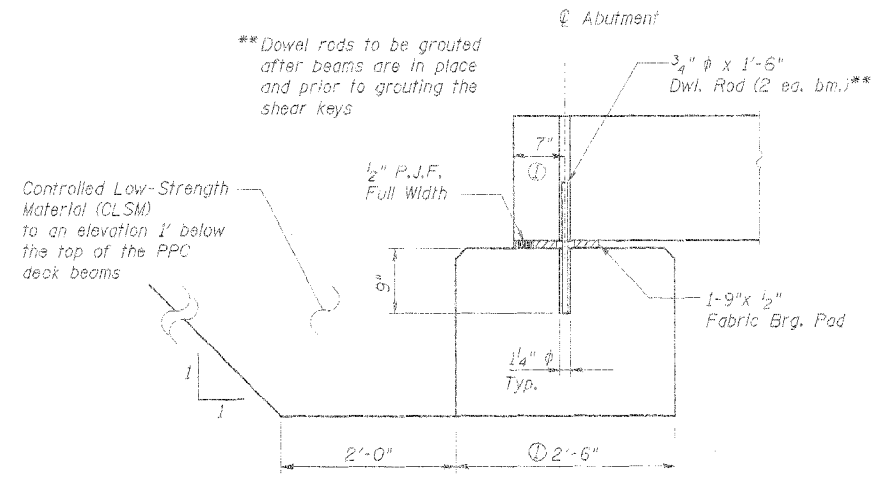
FABRIC BEARING PAD

FABRIC BEARING PAD



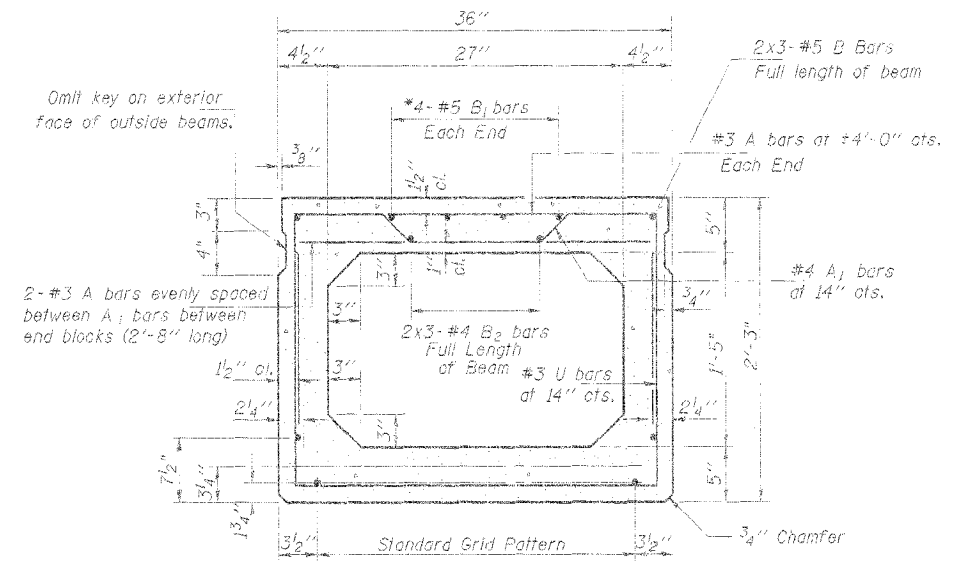
BAR A1

BARS U & U1



SECTION AT ABUTMENT

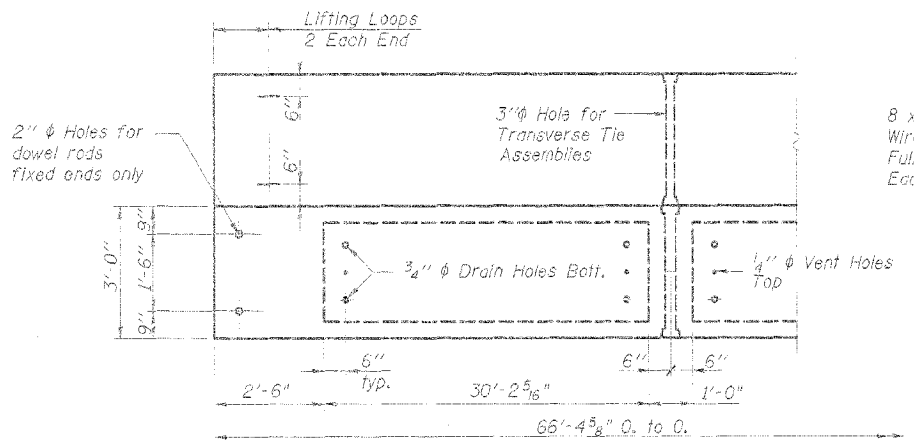
⊙ Perpendicular to C of abutment.



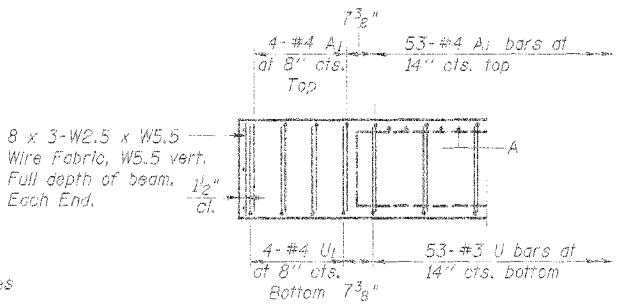
TYPICAL SECTION

17-1/2" φ Strands Each Strand Stressed to 30,900 Lbs.
8-Strands 1 3/4" up, 5-Strands 3 1/4" up, 2-Strands 7 1/2" up, 2-Strands 10 1/2" up

Note: Place strands symmetrically about C of beam.

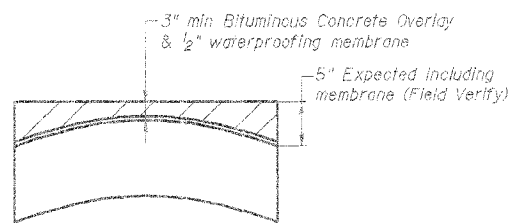


PLAN



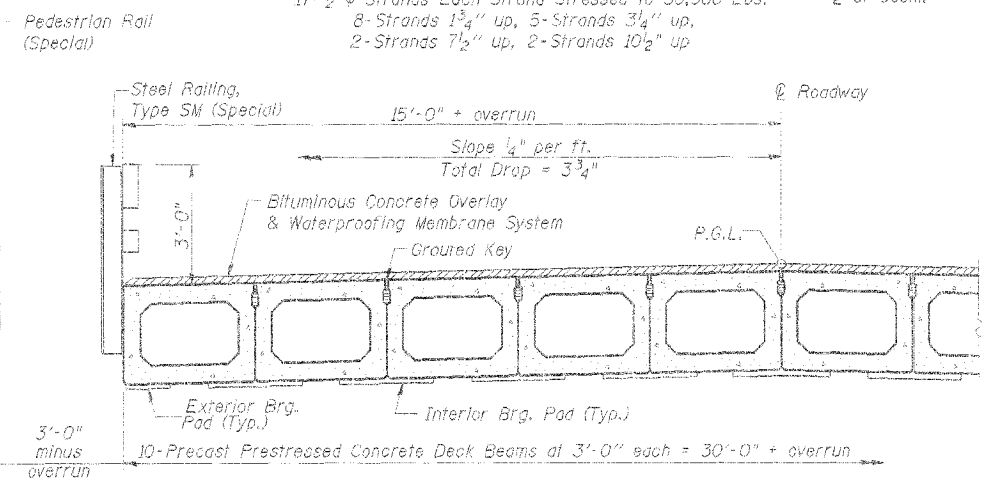
END ELEVATION

8 x 3-W2.5 x W5.5 Wire Fabric, W5.5 vert. Full depth of beam. 1/2" c/c.



CAMBER DIAGRAM

Along Center of Beams on Roadway Bridge Only



PARTIAL CROSS SECTION

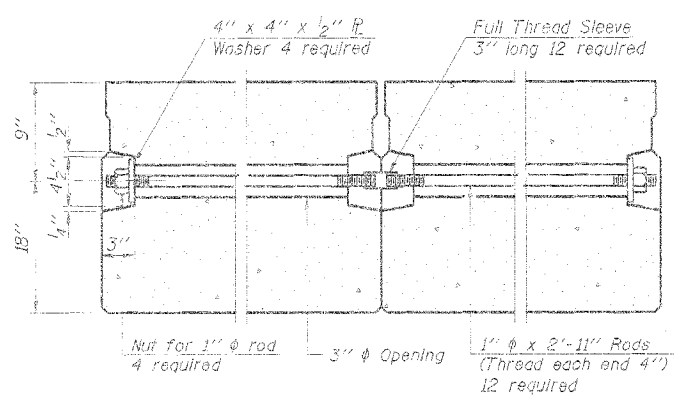
NOTES

Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand, Grade 270. Lifting loops shall be 3/4" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 46,000 lbs. or 3-1/2" φ-270 ksi strands, as shown. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. 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. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 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. A Calcium Nitrite 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. An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted.

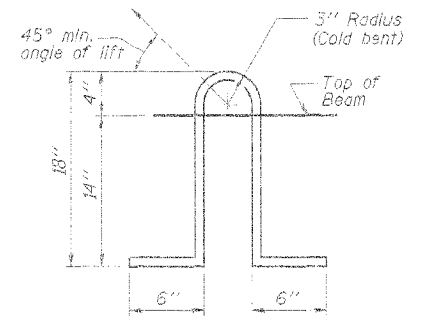
BILL OF MATERIAL (One Beam)

Bar	No.	Size	Length	Shape
A	108	#3	2'-8"	—
A1	61	#4	6'-1"	—
B	6	#5	24'-0"	—
B1	8	#5	13'-4"	—
B2	6	#4	23'-6"	—
U	53	#3	6'-3"	—
U1	8	#4	6'-3"	—
Precast Prestressed Conc. Deck Bms.			Sq. Ft.	2,390*

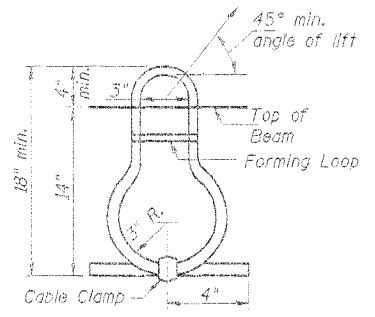
*Total Quantity of Beams



TYPICAL TRANSVERSE TIE ASSEMBLY



LIFTING LOOP DETAIL



LIFTING LOOP ALTERNATE

PD-5-R 1-16-04

DESIGN	K.J. Hoffmann				
DR	K.J. Hoffmann				
CHKD	A. Fraunhoffer				
APVD	A. Fraunhoffer	NO.	DATE	REVISION	BY

FRAUENHOFFER

Fraunhoffer and Associates, P.C. Consulting Engineers
3002 Crossing Court Champaign, IL 61822 217-351-6258

SUPERSTRUCTURE DETAILS

VILLAGE OF CATLIN
SECTION 05-00154-00-R
VERMILION COUNTY

SHEET	49
DWG NO.	522-SUP-006
DATE	FEB 2006
PROJ NO.	5022