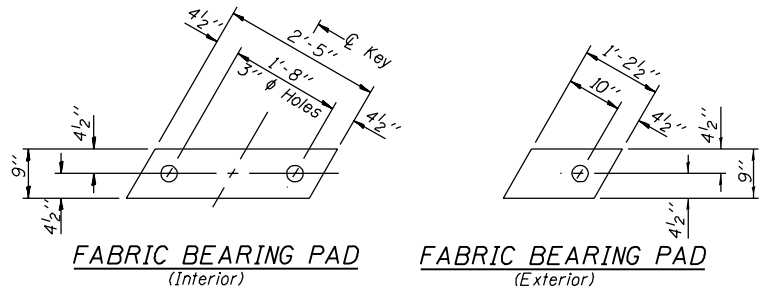


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

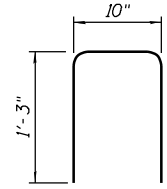
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1671	**	DOUGLAS	181	77
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
14 SHEETS

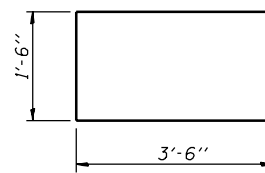
Contract #70258 **144SBR-2 & 22VBR-1



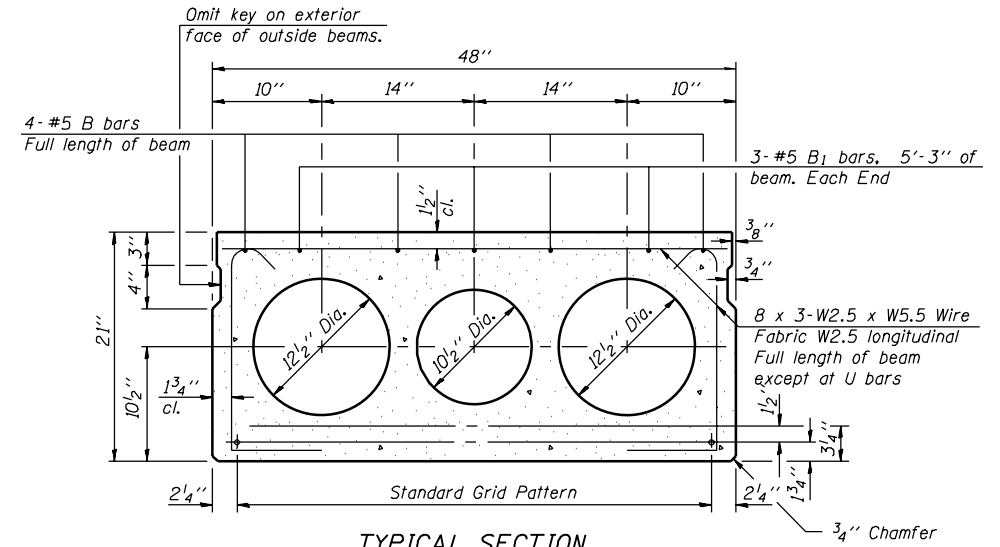
FIXED



BAR D₁(E)



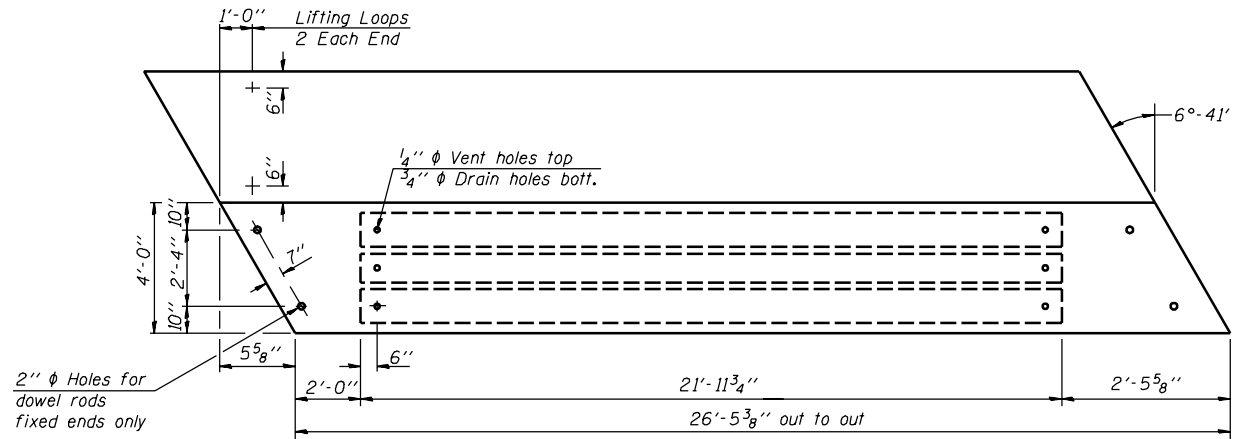
BAR U₁



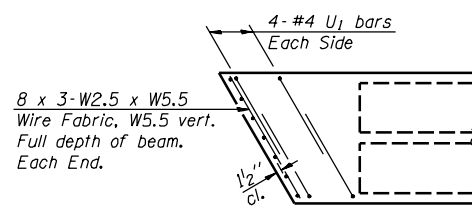
TYPICAL SECTION

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

Note:
Place strands symmetrically about ϕ of beam.

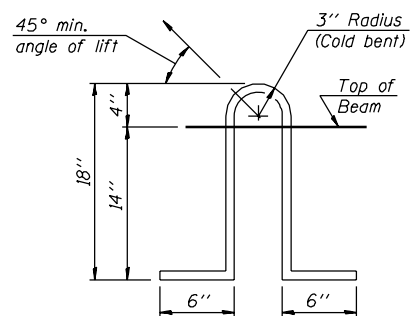


PLAN

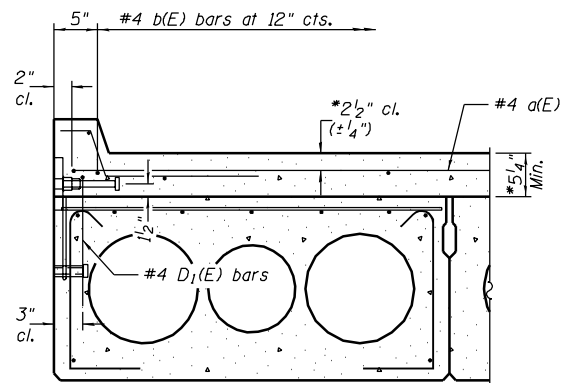


END PLAN

*Prior to grinding

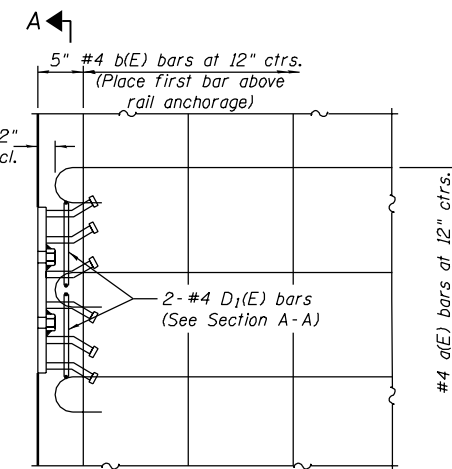


LIFTING LOOP DETAIL

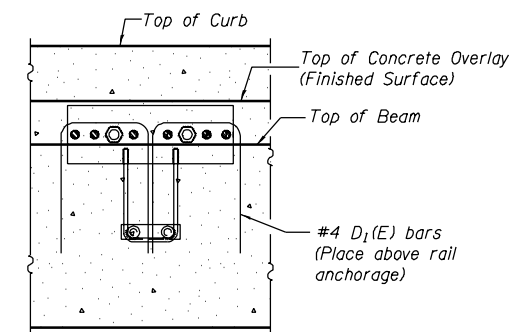


FASCIA BEAM

Rail anchorage shall be cast in precast beams. See typical section for dimensions, strand pattern, and bar callouts not shown.
Formwork necessary for the wearing surface may be secured utilizing the bottom rail inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.



PARTIAL DECK PLAN AT RAIL ANCHORAGE
(curb not shown)



SECTION A-A

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.
Non prestressing steel shall conform to AASHTO M-31 or M322 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.
D₁(E) bars only in reinforcement of anchorage of SM Railing on exterior beams. See Section A-A.

BAR LIST (ONE BEAM)

Bar	No.	Size	Length	Shape
B	4	#5	26'-0"	—
B ₁	5	#5	5'-3"	—
D ₁	10	#4	3'-4"	U
U ₁	16	#4	8'-6"	U

***Exterior beams only

BILL OF MATERIAL

Precast Prestressed Conc. Deck Beams (21" Depth)	Sq. Ft.	1904.5
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BEAM DETAILS - SPANS 1 & 3
F.A.S. ROUTE 1671 - SECTION 144SBR-2
DOUGLAS COUNTY
STATION 1130+72.93
STRUCTURE NO. 021-0062

DESIGNED	SMR
CHECKED	PRL
DRAWN	BECKY M. LEACH
CHECKED	SMR/PRL

August 4, 2006
EXAMINED *Thomas J. Domagala*
DRAWN *Ralph E. Anderson*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES