



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 3 - 1/2" ϕ - 270 ksi strands, as shown.
 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 3/8" 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 5000 p.s.i. (minimum).
 Low-relaxation strands are required.

21 - 1/2" ϕ Strands Each Strand Stressed to 31,000 Lbs.
 9-Strands 1 3/4" up, 8-Strands 3/4" up
 2-Strands 6" up, 2-Strands 15" up
 Note:
 Place strands symmetrically about ϕ of beam.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
A	138	#3	2'-8"	—
A ₁	73	#4	6'-1"	U
B	6	#5	29'-0"	—
B ₁	8	#5	16'-3"	—
B ₂	6	#4	29'-0"	—
D	8	#4	4'-9"	U
U	65	#3	7'-3"	U
U ₁	8	#4	7'-3"	U
Precast Prestressed Conc. Deck Beams		Sq. Ft.	244	
Reinforcement Bars		Pound	1110	
Total Weight Ea. Beam		Pound	54550	

SPAN 2 OR 3
PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
PROPOSED BRIDGE OVER UNION PACIFIC RAILROAD AND CASEY FORK TR 227 (GREEN ROAD) SECTION 98-11120-00-BR JEFFERSON COUNTY, ILLINOIS

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