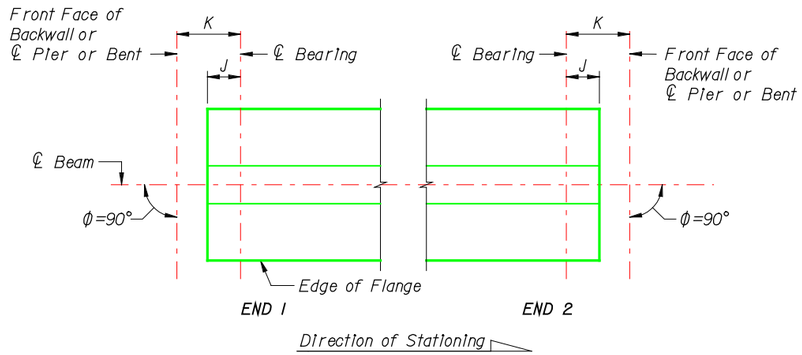
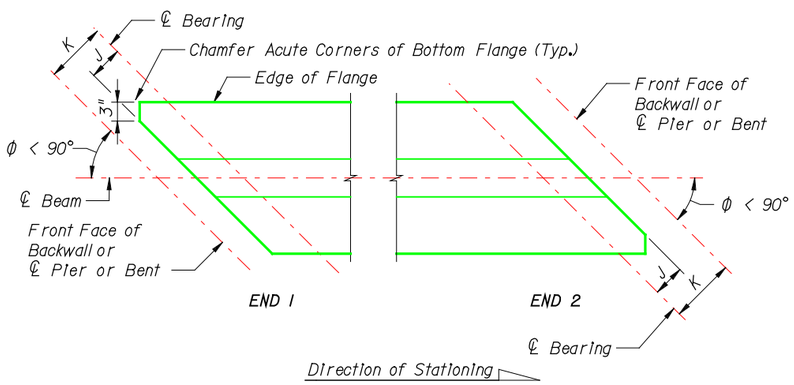
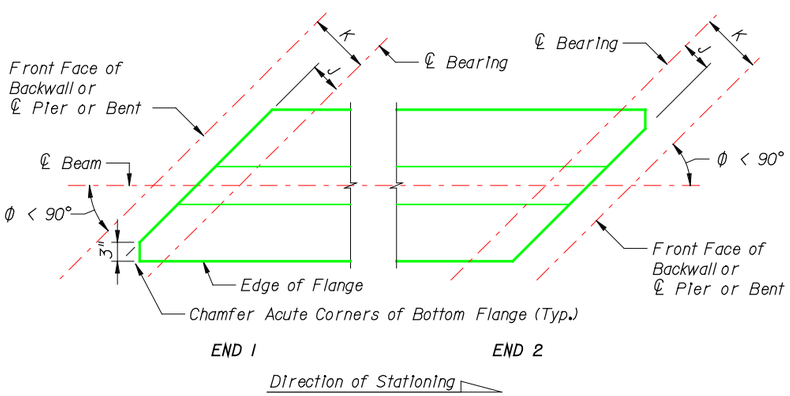


CASE 1



CASE 2



CASE 3

SCHEMATIC PLAN VIEWS AT BEAM ENDS

BEAM NOTES

1. All bar dimensions are out-to-out.
2. Place two (2) Bars 5Z at each end, and then one (1) Bar 4K each location as detailed alternating the direction of the ends for each bar (see "ELEVATION AT END OF BEAM").
3. Bars 4L shall be bent prior to the beam leaving the prestressing yard. Bars 4L shall be bent parallel to the ends of the beams.
4. Caution should be used with Bars 4L in the ends of exterior beams to assure the bent portion of the bar is properly oriented so that the bar will be embedded in the diaphragm concrete.
5. Strand N shall be either ASTM A416, Grade 250 or Grade 270, seven-wire strands 3/8" ϕ or larger, stressed to 10,000 lbs.
6. Unless otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".
7. At option of the Contractor, welded deformed wire fabric may be used in lieu of Bars 3D, 4K and 4L except as noted below for skewed end conditions. The wire sizes and spacing shall match those shown on the Standard Beam Details sheet for these bars. In this event, Bars 4K may be fabricated with the omission of the lower outstanding leg provided that two longitudinal wires are placed (welded) at the lower end of the bar. The first (lower) wire shall be located 1" from the end of Bars 4K and the second wire 2" minimum from the first wire, but no less than 1/4 of the beam depth from mid-depth of the beam. Welded wire fabric shall conform to ASTM A497. When welded deformed wire fabric is used, the end Bars 5Z shall remain conventional mild reinforcing.
8. For beams with skewed end conditions, welded deformed wire fabric shall not be used in the ends of beams within the limits of Bars 3D. The end reinforcement, defined as Bars 3D1, 3D2, 4K and 5Z placed within the limits of the spacing for Bars 3D (approximately 1.5 times the overall beam depth) in "ELEVATION AT END OF BEAM", shall be placed parallel to the skewed end of the beam. Bars 4K located beyond the limits of Bars 3D shall be placed perpendicular to the longitudinal axis of the beam. Placement of Bars 3D1 and 3D2 correspond to END 1 and END 2 respectively, as shown in the beam "ELEVATION". For Bars 3D1 and 3D2, Dimension B and the overall length shall be adjusted to fit the width of the bottom flange measured parallel to the skew.
9. Bars 4K and 5Z shall be placed and tied to the fully bonded strands (see "STRAND PATTERN").
10. Bars 3D shall be bent around a 1" diameter pin.
11. For Bearing and Framing Details, see Bridge Plans.
12. For Camber and Build-up Details, see Bridge Plans.

INSTRUCTIONS TO DESIGNER:

Bursting Forces in the ends of the beams shall be limited to the requirements of the AASHTO LRFD Bridge Design Specifications, Chapter 5 for both LFD and LRFD designs. If the Bursting Force from fully bonded strands exceeds the Bursting Resistance provided by the reinforcement shown on the Standard Drawings, then the designer shall redesign the vertical reinforcing steel in the ends of the beams. In this event, the affected Standard Drawings shall be modified in accordance with Index No. I-001, Method 1 or Method 2.

BRIDGE NO. XXXXXX

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2-14-01	SDO	Standard Drawing Issue Date			

	NAMES	DATES
DRAWN BY	LSM	6-00
CHECKED BY	MDM	6-00
DESIGNED BY	MES	6-00
CHECKED BY	CFD	6-00
APPROVED BY	REN	

ENGINEER OF RECORD:
STRUCTURES DESIGN OFFICE
CENTRAL OFFICE
605 Suwannee Street, MS 33
Tallahassee, Florida 32399-0450

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: TYPICAL INVERTED-T BEAM DETAILS AND NOTES
INDEX NO. 310

PROJECT NAME:

SHEET NO.

$$$$$$$$$DGNSPECIFICATION$$$$$$$$$
$$$$$$$$$SYTIME$$$$$$$$$