TYPICAL FLORIDA-U BEAM DETAILS AND NOTES

DESCRIPTION:

FDOT 2014 DESIGN STANDARDS

INDEX NO. 20210

SHEET NO. 1 of 2
BEAM NOTES

1. All bar dimensions are out-to-out.

2. Strands N (Dormant Strands) shall be ASTM A416, Grade 270, seven-wire strands Ø 0.8 or larger, stressed to 10,000 lbs. each.

3. Unless otherwise noted in Structures Plans, the minimum concrete cover for reinforcing steel shall be 2".

4. At the option of the Contractor and with the Engineer's Approval, deformed welded wire reinforcing (WWR) may be used in lieu of Bars 6A1, 4A2, 6C, 4C, 5D, 5E, 4F, 4G, 4H, 5K, 5L, and 5M except as noted below in note 1, provided the wire sizes and spacing match those shown on the Standard Beam Detail sheets for these bars. WWR must consist of Deformed wire meeting the requirements of Specification Section 931.

5. Safety Line Anchorage Devices or sleeves are required and permitted in the top flanges only to accommodate fall protection systems used during construction. See shop drawings for details and spacing of any required embedments.

6. For Beams with vertically beveled end conditions when "Dim. P" exceeds 1", Bars 5E and the first Bars 4F and 5K shall be placed parallel to the end of the beam. The remaining Bars 4F and 5K within the limits of "Dim. B" shall be fanned at equal spaces.

7. Welded deformed wire reinforcing shall not be used for the end reinforcement (Bars 5B, 4C, 3D, 4F, 4G, 5K, and 5L) for beams with skewed end conditions or vertically beveled end conditions when "Dim. P" exceeds 1".

8. Bars 5K shall be placed and tied to the fully bonded strands in the bottom row (see "STRAND PATTERN" in Structures Plans).

9. Strand Protection at beam ends shall consist of a 2" deep recess formed around all strands (including dormant) or strand groups. Extend recess to face of web and bottom of flange for bottom row of strands. After detensioning, cut strands Ø 0.8 from recessed surface and fill the recess with a Type T-2 or Q Epoxy Compound in accordance with Section 926 of the Specifications.

10. Use Size No. 67 maximum sized aggregate.

11. Use Stay-in-Place metal deck forms inside the beams.

12. Prior to deck placement, based on the deck forming system and deck placement sequence, evaluate and provide, if necessary, temporary bracing between the U Beams. Also, prior to deck placement, provide temporary blocking under each web at both ends of every beam. Ensure the temporary blocking is adequate to resist movements and rotations that occur during placement of the deck. Leave temporary blocking and bracing in place for a minimum of four days after the deck placement.

13. For referenced Dimensions, Angles and Case Numbers see Table of Beam Variables in Structures Plans.