**BEAM NOTES**

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

2. Place one (1) Bar SK or SZ at each location as detailed, alternating the direction of the ends for each bar (see "ELEVATION AT END OF BEAM"; Index Nos. 20036, 20045, 20054, 20063, 20072 and 20078).

3. Bars SK shall be bent prior to the beam leaving the prestressing yard. Bars SK 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. Strands N shall be either ASTM A416, Grade 250 or Grade 270, seven-wire strands 3/8" or larger, stressing to 10,000 lbs each.

6. Bars 1B or 2A shall be bent parallel to the ends of the beams.

7. At the Contractor's option, welded deformed wire reinforcement may be used in lieu of Bars 3B, 5B, 4M, and 5Z as shown on the Standard Details for each beam size. Welded deformed wire reinforcement shall be a minimum yield strength of 75 ksi and be used in lieu of Bar B when specified in the "SHEAVE DIAGRAM" for skewed end conditions.

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### SCHEMATIC PLAN VIEWS AT BEAM ENDS

**CONDITION 1**

- **CASE 1**
  - Chamfer Acute Corners of Top & Bottom Flange for \( \theta < 75^\circ \) (Typ.)

- **CASE 2**
  - Chamfer Acute Corners of Top & Bottom Flange for \( \theta < 75^\circ \) (Typ.)

### SCHEMATIC END ELEVATIONS OF BEAMS

(Showing Vertical Devel of Beam End)

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### INSTRUCTIONS TO DESIGNER:

To limit vertical splitting forces in the webs of beams, the maximum pretress force at the beam ends from fully bonded strands must be limited to the following:

<table>
<thead>
<tr>
<th>Beam Type</th>
<th>Max. Bonded Prestress Force</th>
<th>Index No.</th>
<th>Last Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida-1 36</td>
<td>1450 Kips</td>
<td>20036</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 38</td>
<td>1470 Kips</td>
<td>20034</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 37</td>
<td>1470 Kips</td>
<td>20045</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 54</td>
<td>1740 Kips</td>
<td>20054</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 55</td>
<td>1740 Kips</td>
<td>20063</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 72</td>
<td>1980 Kips</td>
<td>20072</td>
<td>07/01/09 or later</td>
</tr>
<tr>
<td>Florida-1 78</td>
<td>2230 Kips</td>
<td>20078</td>
<td>07/01/09 or later</td>
</tr>
</tbody>
</table>

No losses shall be applied when calculating the Bonded Prestress Force. The reinforcing in the ends of the beams must not be modified without the approval of the State Structures Design Engineer.
**INSERT NOTES**

1. Provide 1" $\phi$, zinc-electroplated, ferrule wing nut or coil inserts, UNC threads, 1/6 minimum gage wire, not more than 4" in depth with a minimum ultimate tensile strength of 11,400 lbs. in 4,000 p.s.i. concrete.

2. When Intermediate Diaphragms are Required by Design, the connecting struts shall have a minimum ultimate tensile strength of 11,400 lbs.

3. Inserts for diaphragm reinforcing are required at each end of each intermediate diaphragm shown on the Beam Framing Plan. See Superstructure and Beam Framing Plans for longitudinal location of inserts for each face of beam.

**INSERT DETAIL**

**PARTIAL PLAN VIEW (SHOWING TOP FLANGE)**

(End 1 Shown, End 2 Similar)

(Bars 5A, 4L, 5Y & Strands N not shown for clarity)

**PARTIAL SECTION THRU WEB (SHOWING BOTTOM FLANGE)**

(End 1 Shown, End 2 Similar)

(Bars 4L, Bars 5Y & Strands not shown for clarity)