

Commentary: Although not all decks are required to meet Ride Quality Control, grooving and the general deck smoothness requirements of GDOT Standard Specification 500.3.06.D could reduce the total deck thickness available for composite action. Therefore, removing 1/4" from the deck thickness shall be used for all cases.

#### **3.4.2.6.2 Composite Coping**

The coping thickness considered in composite section property calculations (i.e., "DF" in BRPSBM1) should be conservatively set as 0 inches. A maximum value of 1" may be used with adequate justification.

#### **3.4.2.7 Beam Spacing**

The maximum beam spacing is 9'-0".

For LRFD projects, PSC Beam Charts are provided in Appendix 3B to assist the designer in selecting preliminary PSC beam spacing.

For Standard Specification projects, PSC Beam Charts are provided in Appendix 3D to assist the designer in selecting preliminary PSC beam spacing.

#### **3.4.2.8 Beam Lengths**

The maximum beam lengths for the PSC beams are:

- 50 feet for AASHTO Type I Mod. beams
- 65 feet for AASHTO Type II beams
- 85 feet for AASHTO Type III beams
- 125 feet for 54" Bulb Tee beams
- 135 feet for 63" Bulb Tee beams
- 150 feet for 72" and 74" Bulb Tee beams

AASHTO Type II beams are preferred for span lengths between 40 to 50 feet.

If the above maximum beam lengths are exceeded under an alternate bidding process, the engineer of record is responsible for performing a beam stability analysis.

### **3.4.3 Detailing**

#### **3.4.3.1 Concrete Clearances**

All strands must be contained within stirrups. Provide 1" minimum concrete cover in PSC beams (see GDOT PSC Beam Sheets).

#### **3.4.3.2 Fascia Beams**

A fascia beam is an exterior beam that is selected for uniform appearance rather than structural efficiency. When a multi-span bridge is in a visible area and beams of different spans have different depths, a fascia beam shall be used on the exterior of the shorter spans to match the deeper beams of the longer span. Fascia beams are not required on bridges crossing water or railroads.