

**From:** Watson, Ben  
**Sent:** Thursday, June 03, 2010 6:13 PM  
**To:** Schmitt, Roger  
**Cc:** FDOT-ECI Committee; FDOT-DMRE; Toole, Deborah; Powell, Jr., Rudy  
**Attachments:** SS160 Rap draft 4-20-10.pdf

Roger,

Thank you for sharing some questions during our discussion, Hopefully the following will suffice until we meet to discuss at the June 17 DMRE meeting.

1. Was this sent out for review prior to submittal?
  - a. My apologies to all, I realized today that this was not sent for review.
  - b. In addition there is proposed Reclaimed Asphalt Pavement (RAP) language in Section 120-8.4 and proposed borrow pit language in Section 120-6. Section 120 should go out for industry review on or about Friday June 3. I have requested that the ECI committee receive a direct notice of the proposed language from the Specifications Office for their review and comments.
    - i. Comments to both specifications can be submitted through the specifications office.
2. How does this proposal work with the entire 160 specification with regard to meeting LBR requirements?
  - a. The attachment shows the entire Section 160 with proposed changes.
  - b. The LBR requirements remain the same for subgrade with RAP.
3. Why 25% max RAP?
  - a. We are concerned with both bearing capacity and long term deformation (creep). Bearing capacity is addressed with through the LBR requirements. The proposed language addresses creep. The intent was to limit the potential for creep in the subgrade due to excessive "relative asphalt content". The proposed 25% limit for RAP material was developed from research report BDB09 [http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_SMO/FDOT\\_BDB09\\_rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_SMO/FDOT_BDB09_rpt.pdf) :
    - i. Long term deformation because of RAP content is minimal or negligent when relative asphalt content (**rac**) less than or equal to 2.3%. – (Fig 4.9 page 93)
    - ii. Statewide variability study – Section 5.1.4 states that typical milled RAP had a range of AC of 5.5% to **8.0%** - (page 190)
    - iii. 2.3% max rac / 8% rac yields a .29 (RAP to Soil ratio). We settled on 25% maximum RAP for subgrade.

Best regards

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