

3200303 HOT MIX ASPHALT – PLANT METHODS AND EQUIPEMENT
INTERNAL/INDUSTRY REVIEW COMMENTS

Howie Moseley
386-961-7853
howard.moseley@dot.state.fl.us

Comments: (2-29-16)

The additional language in Section 320-6.1 indicates that it is okay to increase the percentage of RAP and sand by up to 5%. This could have a significant impact to the performance of the asphalt mixture. My understanding over the years is that it has always been acceptable to run the crushed aggregate percentages within +/- 5% of the JMF, but the RAP and sand percentages shouldn't exceed their JMF target percentages.

Response: The current specification only addressed the percentage change allowed before a mix would have to be redesigned (see Table 334-4 located in subarticle 334-3.3). This included all components, including RAP and sand. In addition, the specifications did not address the allowable changes during production, though one could argue that Table 334-4 applied during production. The specification change proposed here is based on that line of thought.

It is believed that the major components that are critical to large changes are RAP and sand. The quantity of the RAP affects the grade of the virgin binder to be used in the mix. The amount of sand (especially excess amounts) can make the mix tender, difficult to achieve density, and sensitive to rutting. If the percentages of crushed virgin aggregate are adjusted, it is believed to be less of an issue because typically those components all originate from the same parent rock and have similar properties. Furthermore, JMF gradation controls during production will limit how much those components can be changed. If excluding these crushed virgin aggregate components from the 5.0% rule during production causes problems in the future, then they will also be limited to 5.0% change in a future specification change.

No changes made.

Jim Warren
850-222-7300
jwarren@acaf.org

Comments: (3-1-16)

The specification to establish a tolerance for sand and RAP should be expanded to 8%, 5% is too tight. In addition, any component (including virgin aggregate) needs a tolerance to allow for incoming aggregate gradation variations. The way its written now, it could be interpreted that the other mix components are not allowed any variation from the target. That is not reasonable or achievable. The key is still the final gradation of the mix and the QC folks need the flexibility to keep the mix in specification.

Response: The Department does not agree that the 5.0% is too restrictive for a RAP or sand change. However, the Department does agree with the reviewer's second comment and added additional wording to the specification to further clarify the intent.

Change made.

D5 Contruction
386-943-5347

Comments: (3-17-16)

320-6.1 Mixing: Do not alter by more than 5%. In Spec 334, table 334-4 shows you can vary by +/-5%. Should the 320-6.1 language say do not alter by more than +/- 5% to be consistent with the table in 334? or Is the lower side limit removed due to new specification revision?

Response: This is a good comment and the specification will be modified to indicate +/- 5.0%.

Change made.
