In-Place Recycling International and Western States Conference

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PATRICK OVERTON, P.E
PAVEMENT MANAGEMENT ENGINEER
(850) 414-4348
FLORIDA DEPARTMENT OF TRANSPORTATION
Demographics of Florida

- Over 43,500 Lane Miles on the SHS.
- Lets 450-475 Construction projects every year.
- Currently, no set budget allocation for pavement preservation.
- Florida Panther.
Experiences with In-Place Recycling

• In-Place Recycling has been utilized on County and City Roads since 1978.

• In 2012, FDOT published Developmental Specifications for In-Place recycling (DEV 324 and DEV 325.)

• If a project is identified as a good candidate, the project is let with the Developmental Specification as an option.

http://www.dot.state.fl.us/specificationsoffice/OtherFDOTLinks/Developmental/
324-1 Description
Construct a repaved asphalt concrete pavement consisting of a binder course layer and a friction course layer, by one of the following two options:

1. placement of a binder course layer and friction course layer using a paving machine capable of simultaneously recycling the existing asphalt using the hot-in-place process for the binder course layer and placing plant-produced hot-mix asphalt for the friction course layer, or by

2. placement of plant-produced hot-mix asphalt binder course and friction course layers placed as two separate paving operations. Regardless of which process is used, use an approved FDOT dense-graded friction course mix design (meeting the requirements of Section 337) for the friction course layer. For all work, the applicable requirements of Sections 300, 327, 330, 334, 337, 901, 902, and 916 only apply as noted herein.

324-2 Hot Mix Asphalt
324-2.1 General
The reworked layer shall meet the requirements of the Florida Department of Transportation (FDOT) Developmental Specification 337 for the binder course layer and FDOT Developmental Specification 324 for the friction course layer.

324-2.2 Plant-produced hot mix asphalt shall be used as the reworked layer. The section of the pavement to be reworked shall be defined by the Engineer.

324-2.3 Asphalt binder shall be used as the reworked layer. The section of the pavement to be reworked shall be defined by the Engineer.

324-2.4 Reworked asphalt concrete pavement shall be designed and placed in accordance with FDOT Developmental Specification 324.

324-2.5 Mix design shall be based on the specifications and requirements of FDOT Developmental Specification 324.

324-3 General Considerations
Obtain an RAP sample from the reworked asphalt concrete pavement and perform the necessary laboratory tests to determine the suitability of the RAP for use as the reworked layer.

325-1 Description.
325-1.1 A repaved asphalt concrete pavement consisting of a binder course layer and a friction course layer, shall be constructed by the following two options:

1. placement of a binder course layer and friction course layer using a paving machine capable of simultaneously recycling the existing asphalt using the hot-in-place process for the binder course layer and placing plant-produced hot-mix asphalt for the friction course layer, or by

2. placement of plant-produced hot-mix asphalt binder course and friction course layers placed as two separate paving operations. Regardless of which process is used, use an approved FDOT dense-graded friction course mix design (meeting the requirements of Section 337) for the friction course layer. For all work, the applicable requirements of Sections 300, 327, 330, 334, 337, 901, 902, and 916 only apply as noted herein.

325-2 Hot Mix Asphalt Materials.
325-2.1 General Requirements: The following materials shall be used only to the plant-produced hot-mix asphalt binder course layer, if used, and is designed for the friction course layer specified in Section 337.

325-2.2 Asphalt Binder: Meet the requirements of Section 916. Select the asphalt binder grade in accordance with Table 334-2.

325-2.3 Aggregate: Meet the requirements of Section 901 for coarse aggregate and Section 902 for fine aggregate.

325-2.4 Reclaimed Asphalt Pavement (RAP) Material: RAP may be used as a component of the asphalt mixture with no limit.

325-3 General Composition of Mixture.
The following mix design requirements apply only to the plant-produced hot-mix asphalt binder course layer, if used. Compact the mixture using a Superpave gyratory compactor in accordance with AASHTO T 312-12. Utilize a design number of gyrations of either, 50, 65, or 75. The design air void content shall be within the range of 3.5 to 4.5%. The minimum voids in the mineral aggregate shall be 12.0%. The minimum effective binder content shall be 4.5%. Furnish a copy of the mix design to the Engineer prior to any paving work. During production,
The Florida Pavement Preservation Council is a partnership of agency, industry and academia professionals in Florida focused on the promotion of Pavement Preservation Principles through Education.

These specifications were not developed by and are not owned by the Florida Department of Transportation. NOTE: These files MAY NOT BE USED on any FDOT projects.

Note: The links on this page are Word Documents and will require Microsoft Word 2003 or higher to view or Word Viewer 2003 (Opens in new Window)

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