

9010000 – Coarse Aggregate

Response to Comments from Industry Review

Cliff Kirkmyer

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Comments

Review of Florida Department of Transportation proposed specification revision: 9010000

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The proposed specification revision is in our opinion appropriate. The NRMCA report on Crushed Returned Concrete as Aggregate for New Concrete and our experience using the same sourced from west Fort Pierce and Orlando operations at 10% by weight replacement of total aggregate indicate no detrimental effect to performance.

We believe the specifications limits as presented in this specification are sufficient and tightening of the requirements is not needed at this time. This revision also requires these recycling operations be treated as a mine and subjected to the same requirements which will preclude operations which do not have approved quality control programs (QCP) from supplying materials for use in Department projects.

There is a point of clarification which we have asked the Departments Aggregate department to address:

Does 901-5 require the reclaimed concrete to be sourced from a FDOT project?

An item of consideration is whether at some point the Department will require a percentage of all non structural concrete to utilize a percentage (10%) of reclaimed Portland cement concrete. If this is a possibility it would be a distinct advantage for us to be in the business and produce a quality product.

Generation and control of -#200 fines in the finished aggregate may be a concern. Can we process by dry screening and or utilize the fines for road base? Our own experience and research conducted by the Department indicates a satisfactory road base product can be produced with the fine portion of the reclaimed concrete; some of the coarse material shall have to remain in the base product to produce a product meeting the Minimum Limerock Bearing Ratio (LBR) value and the gradation requirement developed by the Department. There is also the possibility the demand for reclaimed concrete aggregate may fluctuate or be well below our production rates and the ability to produce a road base would allows us an outlet for this excess material.

There is also the possibility that these processing facilities process recycled asphalt pavement (RAP).

Jim Cox

Mike Epifano

Response:

The Reclaimed Portland Cement Concrete does not necessarily have to come from an FDOT project, but as the 901-5 of the Specifications states (no change from previous wording), it “shall be from a source which was produced and placed in accordance with applicable Specifications”. In application, the location would have to be approved as a Source under the aggregate Rule.

At this point in time it is not the intent to require the use of Reclaimed Portland Cement Concrete in any PCC or HMA products.

Processing of Reclaimed Portland Cement Concrete can be handled as deemed appropriate to meet FDOT Specifications. This needs to be identified in the QCP which requires Department approval.
