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From: Erin Ferguson []
Sent: Thursday, February 22, 2007 11:53 AM
To: Jim Burnett
Cc: Ed Myers
Subject: Rt 250 @ McIntire Roundabout Operations Review

Hi Jim,

Below is a summary of the points we discussed via the phone this morning. I also added a couple of additional notes regarding the roundabout geometry based on the PDF files that you sent us; these are something to keep in mind as the design moves forward.

Operations Analysis:

- KAI's roundabout operations analysis results are consistent with RK&K's analysis results.
- At a minimum in 2010, double-lane entries are needed for the northbound approach at the north roundabout and for the westbound approach at the south roundabout. These are needed to prevent the northbound queue at the north roundabout from backing into the south roundabout and to prevent the westbound queue at the south roundabout from backing onto Rte 250. Right-turn by-passes and using an environmental factor of 1.0 does not change these results.
- In 2030, both the north and south roundabouts need to be double-lane roundabouts to prevent queues from backing from the north roundabout into the south roundabout and to prevent queues from backing onto Rte 250. The queues and v/c ratios cannot be managed by right-turn passes or by using an environmental factor 1.0.

Roundabout Geometry

- The entry geometry for north roundabout as a double-lane roundabout appears to have the potential for relatively high entry speeds on the northbound approach and for the southbound right-turn movement. The roadway alignment and relatively small ICD do not appear to create very much deflection that would require motorists to slow down. Increasing the ICD or modifying the approach alignment would help create more deflection.
- The entry geometry for south roundabout as a double-lane roundabout also appears to have the potential for relatively high entry speeds on the southbound approach and the northbound right-turn movement. Increasing the ICD or modifying the approach alignment would help create more deflection and create slower entry speeds.

Please let me know if any of our comments above need to be clarified.

Sincerely,
Erin

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