

Charlotte Department of Transportation

Memorandum

Date: November 22, 2011

To: Tammie Keplinger
Charlotte-Mecklenburg Planning Department

From: Michael A. Davis, PE *Mike Davis*
Development Services Division

Subject: Rezoning Petition 2011-82 & 83: Approximately 33.0 acres located on the southwest & southeast corners of the intersection of South Tryon Street and Steele Creek Road

CDOT has previously commented on petitions 2011-082 & 2011-083 in our October 24, 2011 memoranda to you which indicated that additional comments would be provided after our review of the Transportation Impact Analysis (TIA). Since then, CDOT has been in discussions with the petitioner's traffic consultant (Design Resources Group) about the recommended transportation improvements identified in the TIA, and in a subsequent memorandum from DRG to CDOT (dated November 16, 2011).

On November 22, 2011, CDOT met with the petitioner and NCDOT regarding the proposed transportation improvements outlined in the TIA, and subsequent memorandum. As such, the remaining portion of this memorandum identifies the recommended improvements that CDOT feels reasonably support the petitioner's current land-use proposal. As of the date of this memo, the petitioner has not committed to these recommended improvements. The petitioner has agreed to evaluate the feasibility of including these improvements in their conditional plan.

CDOT recommends the following transportation improvements be added to the conditional zoning plan to mitigate the impacts of the proposed development:

1. Convert the intersection of NC 49 and Steelescote Pkwy from a directional crossover to a full-movement, signal-controlled intersection. This will require modifying the access to the existing volunteer fire station to include a mountable median and signal preemption for emergency response. This improvement should provide significant relief to the existing NC 160 / NC 49 intersection.
2. The existing NC 49 / Rivergate Pkwy intersection experiences queuing problems in the southbound direction; at a minimum the storage should be extended to the 500' recommended by the TIA. It would be preferred to modify the intersection to allow dual southbound left turn lanes onto Rivergate Pkwy.
3. Based on CDOT's analysis of the projected traffic at the intersection of NC 160 and Walker Branch Drive it appears queues from the intersection will back across the existing and

proposed driveways closest to NC 160. These queues could create a left-turn crash pattern. In order to prevent this condition we recommend any of the following treatments:

- a. add a southbound left turn lane to increase the available storage; or
 - b. add a monolithic median to restrict the turns to right-in / right-out only; or
 - c. evaluate and possibly implement a southbound lane configuration consisting of dual left turn lanes and a shared through-right lane.
4. Increase the storage for the southbound NC 49 left-turn lanes at Steele Creek from 275' to 350' as per the TIA.

Based on our November 22 meeting, we are reasonably confident NCDOT will support these recommendations. There are numerous right-turn lanes recommended by the TIA to the development driveways. CDOT supports omitting these lanes from the conditional zoning; however they may be required by NCDOT as condition of access to the State-maintained roads.

If we can be of further assistance, please advise.

c: R. Grochoske
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