



Charlotte Department of Transportation

Memorandum

Date: August 22, 2012

To: Tammie Keplinger
Charlotte-Mecklenburg Planning Department

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

Subject: Rezoning Petition 12-085: Approximately 18.8 acres located on the southeast corner at the intersection of Johnston Rd and Marvin Rd

CDOT has completed a review of the subject petition in order to ensure consistency with the Transportation Action Plan (TAP). The TAP seeks to ensure that Charlotte's transportation network supports current and future land uses and includes streets that provide safe and comfortable mobility for motorists, pedestrians, bicyclists, and transit users. Based on our review of the petition, we offer the following comments.

Vehicle Trip Generation

This site could generate approximately 375 trips per day as currently zoned if developed as 39 single-family residential units. Under the proposed multi-family zoning the site could generate approximately 1,830 trips per day. This will have a minor impact on the surrounding thoroughfare system.

We have the following comments regarding apparent conflicts between the proposed rezoning and existing ordinances or policies:

1. The current site plan shows a 14' setback measured from the back of existing curb, near the proposed public street. Johnston Road (US 521) is a Limited Controlled Access Facility by the North Carolina Department of Transportation and curb and gutter is not permitted on these types of transportation facilities. The State may also require that the sidewalk be located outside of the right-of-way. We recommend the plan provide the flexibility to locate the sidewalk out of the right-of-way if necessary.
2. The future back of curb on Marvin Road along the site's frontage to must accommodate a future five-foot bike lane. The new right-of-way line should accommodate an 8' planting strip and 6' sidewalk. We request the petitioner dedicate in fee simple this new public right-of-way.

In addition to the comments above, CDOT requests the following changes to the rezoning plan:

1. We request an approximate 150' long median on Marvin Road between the site's proposed private street connection and Donnington Drive to provide a pedestrian refuge. This would occupy the space that would otherwise be unused pavement.

2. We request the petitioner propose a more linear sidewalk design along Johnston Road instead of the ribbon – style design provided on the current site plan.
3. We request the petitioner provide a typical cross-section for both Johnston Road and Marvin Road on subsequent submissions. The revised site plan should depict this information including: future right-of-way, Johnston Road's edge of shoulder, Marvin Road's proposed back-of-curb and future bike lane, proposed building setback lines, proposed medians and turning lanes.
4. We understand that NCDOT's grant of a break in the control-of-access of Johnston Road requires the signalization of the northbound movement at Marvin Road. This condition will enable only half of the crossing of Johnston Road for pedestrians and bicyclists. We request the petitioner agree to fund the signalization of the southbound movement as well, with accommodations for pedestrians and bicyclist, should NCDOT allow it. We therefore request note B be modified as follows: "The petitioner shall pay the full cost to install a traffic signal at the intersection of Johnston Road and Marvin Road which provides phasing to allow turning movements for southbound left turns from Johnston Road and westbound right turns from Marvin Road. Subject to NCDOT approval, the petitioner shall fund the installation of a traffic signal and related median modifications as necessary to allow pedestrian and bicycle crossings of Johnston Road."
5. Change Transportation note C to read: "The petitioner shall extend the storage of the existing southbound left turn lane on Johnston Road to 425 feet."
6. Change Transportation note D to read: "The petitioner shall construct a southbound directional crossover with a minimum of 150 feet of storage on Johnston Road into the proposed site access."
7. Change Transportation note E to read: "The petitioner shall construct a northbound right-turn lane with a minimum of 100' of storage on Johnston Road to serve the petitioner's site access on Johnston Road"
8. The petitioner needs to a prefix to the Transportation Section (Section 2) of the conditional notes that states: "All described transportation improvements below shall be implemented prior to the issuance of the site's first building certificate of occupancy. "

The following are requirements of the developer that must be satisfied prior to driveway permit approval. We recommend that the petitioner reflect these on the rezoning plan as-appropriate.

1. According to the City of Charlotte's Driveway Regulations, CDOT has the authority to regulate/approve all private street/driveway and public street connections to the right-of-way of a street under the regulatory jurisdiction of the City of Charlotte. CDOT has determined that a left-turn lane is necessary to serve the traffic using the proposed private street connections for this site. The engineering design and construction of the left-turn lane is the responsibility of the owner, and shall be performed by a professional engineer registered in the State of North Carolina who has roadway-design experience. CDOT will only approve

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the proposed private street connection provided that a left-turn lane is constructed on Marvin Road. We recommend the rezoning plan reflect the design of this required left-turn lane prior to submittal/approval of the private street connection. The left-turn lane needs to be designed using NCDOT standards with a minimum 150 feet of storage. This roadway improvement is required to meet the traffic demands of the proposed development.

2. Adequate sight triangles must be reserved at the existing/proposed street entrances. Two 35' x 35' and two 10' x 70' sight triangles are required for the entrances to meet requirements. All proposed trees, berms, walls, fences, and/or identification signs must not interfere with sight distance at the entrances. Such items should be identified on the site plan.
3. The proposed driveway connections to Johnston Road and Marvin Road will require driveway permits to be submitted to CDOT and the North Carolina Department of Transportation for review and approval. The exact driveway locations and type/width of the driveways will be determined by CDOT during the driveway permit process. The locations of the driveways shown on the site plan are subject to change in order to align with driveways on the opposite side of the street and comply with City Driveway Regulations and the City Tree Ordinance.
4. All proposed commercial driveway connections to a future public street will require a driveway permit to be submitted to CDOT for review and approval.
5. Any fence or wall constructed along or adjacent to any sidewalk or street right-of-way requires a certificate issued by CDOT.
6. A Right-of-Way Encroachment Agreement is required for the installation of any non-standard item(s) (irrigation systems, decorative concrete pavement, brick pavers, etc.) within a proposed/existing City maintained street right-of-way by a private individual, group, business, or homeowner's/business association. An encroachment agreement must be approved by CDOT prior to the construction/installation of the non-standard item(s). Contact CDOT for additional information concerning cost, submittal, and liability insurance coverage requirements.

If we can be of further assistance, please advise.

D. Rorie

cc: R. H. Grochoske
B. D. Horton
S. Cole (NCDOT)
Rezoning File