


Charlotte Department of Transportation

Memorandum

Date: April 30, 2008

To: Tammie Keplinger & Tom Drake
Charlotte-Mecklenburg Planning Department

From: 
Scott L. Putnam
Development Services Division

Subject: Rezoning Petition 08-053: Located on the south side of West Arrowood Road between I-485 and Whitehall Executive Center Drive (Revised 3/20/08)

We previously commented on this petition in our March 4, 2008 memorandum to you.

Consistency with Transportation Action Plan (TAP): The two goals of the TAP that most directly affected the staff's review of this petition define the integration of land use and transportation, and the provision of transportation choices.

- Goal 1 of the TAP relies on the Centers, Corridors and Wedges land use strategy to be implemented. This project site is located in a Center and does not appear to support the Centers, Corridors, and Wedges land use strategy. However, if significant changes including increased infrastructure supportive of large-scale development and/or reduced land use intensity are made, this project could support the Centers, Corridors and Wedges land use strategy as an appropriately-scaled activity Center.
- Goal 2 of the TAP describes various connectivity and design features that are important for motorists, pedestrians and bicyclists. Specific comments are identified below that need to be addressed for CDOT's support of the petition and to bring the site plan into compliance with the TAP and best practices for multimodal transportation.

Vehicle Trip Generation

This site could generate approximately 9,300 trips per day as currently zoned. Under the proposed zoning the site could generate approximately 18,300 trips per day (reduced from ~20,000 trips per day on the previous plan due to a change in land use intensities). This will have a significant impact on the surrounding thoroughfare system.

Therefore, we request that the developer submit a Traffic Impact Study (TIS) in order to evaluate the effect that site generated traffic will have on the thoroughfare system in the vicinity.

The preparer of the TIS must contact Rick Grochoske (704.432.1556) of the Charlotte Department of Transportation (CDOT) prior to beginning the TIS to determine the study requirements. Since access is proposed to an NCDOT-maintained roadway, they may also require a TIS as part of their driveway permit approval process. They may have additional or different requirements for their approval than what is identified in this rezoning process. The

developer/petitioner is recommended to meet with NCDOT early in the development process to identify any issues that they may have.

We have the following specific comments that are critical to CDOT's support of the rezoning petition:

Note: The street names have changed on the site plan from the first submittal.

1. The proposed land use development plan and site plan do not adequately integrate land use and transportation. The proposed access/street network in the area is insufficient to support the proposed development scale. The site plan proposes that all of the site traffic access Arrowood Road by using two very closely-spaced intersections that are unlikely to adequately accommodate the expected traffic demand, even after signalization and the addition of multiple left- and right-turn lanes. Other connections to nearby public and private streets (not just stubs to parcels), including but not limited to Arrowood Road via Moody Lake Drive as well as the main circulating roadway in the Whitehall Commons Shopping Center, are necessary. This additional road network is necessary to accommodate this site's traffic and allow it to access complementary land uses, primarily the retail in Whitehall Commons. CDOT can support the provision of additional connectivity (not just stubs) as mitigation in lieu of over-widening intersections. This additional connectivity is consistent with the Transportation Action Plan objective #2.9 and the Urban Street Design Guidelines. The appropriate amount of connectivity that could be considered in lieu of some intersection modifications will be determined through the TIS process and is subject to NCDOT approval. *(Previous review comment)*
2. Using typical suburban parking ratios (1 space per 300 ft² for office, 1 space per 250 ft² for retail, 1.5 spaces per multifamily unit), this site will require approximately 6,500 parking spaces. While some reduction in that number may result with consideration of shared parking between land uses, internal trip capture, transit use, etc., a significant number of parking spaces will still be needed. It is unclear if the site plan provides enough street network to adequately serve the parking decks. It appears that each parking deck would need to provide an average of 1,000 parking spaces each. The site plan needs to clearly show the approximate number of parking spaces provided for each deck and each deck's driveway(s).
3. The western half of Road A needs be constructed across Moody Lake to connect to Moody Lake Drive as part of the initial site development. *(Previous review comment)*
4. Two streets (which can be public or private) need to connect Road B and Road C, one on each side of Parcel 3. *(Previous review comment)*
5. Given the intensity of the proposed land uses, the sidewalk along Arrowood Road needs to be increased in width to 8 feet instead of the minimum 6-foot width required by MUDD. *(Previous review comment)*
6. Cross-section C-C' must show a minimum of a 6-foot sidewalk to comply with MUDD requirements and needs to have an 8-foot sidewalk given the intensity of the site.

7. Bike lanes need to be provided on all internal public streets and on any widened portion(s) of Arrowood Road in both directions. The second A-A' cross-section and cross-section C-C' need to be revised accordingly. Alternatively, internal public streets can use the Local Office/Commercial Wide cross-section of two 13-foot lanes with parallel parking. (*Previous review comment*)
8. The first (divided) cross-section A-A' needs to show 15 feet of pavement instead of 14 feet. The allocation can be an 11-foot travel lane plus 4-foot bike lane, or a 10-foot travel lane with a 5-foot bike lane. The 10+5 combination is preferred.
9. Cross-sections D-D' and E-E' need to be provided.
10. Once the site's traffic impacts have been identified, the design of affected intersections will need to be determined through the Six-Step Process identified in the Urban Street Design Guidelines (USDG). This process can occur at any time before subdivision plan submittal. It is recommended that the developer and the developer's consultant(s) meet with CDOT staff early in the rezoning process to discuss/become familiar with USDG's Six-Step Process.
11. It appears that the current site plan may need two traffic signals on Arrowood Road at the proposed public street intersections (Roads B and E). Because of the short distance between these intersections, both CDOT and NCDOT would only support one signalized intersection provided minimum requirements could be met. This intersection needs to be designed as the main entrance and located at the Whitehall Executive Center Drive/Road E intersection and not at the location shown on the site plan (Road B). Therefore, the site needs to be redesigned so that Road E becomes a more major street serving the development and connecting with Roads A and C. (*Previous review comment*)
12. Additional comments will follow our review of the TIS.

If we can be of further assistance, please advise.

SLP

- c: R. H. Grochoske (via email)
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Rezoning File