

Rezoning Transportation Analysis

Petition Number: 2018-121

General Location Identifier: 20105108, 20105106

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Revision Log:

Date	Description
10-17-18	First Review
11-16-18	Second Review
1-23-19	Third Review
2-12-19	Fourth Review
2-18-19	Fifth Review

General Review Information

The site is on Arrowood Road (major thoroughfare) adjacent to Interstate 485. It is located in a center outside Route 4 and is within the limits of the Steele Creek Area Plan.

CDOT's review of this rezoning petition is intended to ensure consistency with the Transportation Action Plan (TAP) which seeks to ensure that the City'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.

This document is primarily for communication to Planning Department staff as part of the overall City staff analysis of the rezoning petition and includes an overall summary of the case from a transportation perspective, information on trip generation, and resolved or outstanding site plan concerns. Additional advisory information about the driveway permit process is provided for information only.

Based on our review of the petition, we offer the following information for your consideration.

Transportation Summary

The site has frontage on a major thoroughfare, minor thoroughfare, and a freeway. The site has committed to improvements on Sandy Porter Road in the form of curb and gutter and a multi-use path. CDOT continues to request the petitioner address the outstanding comment including submitting an updated traffic impact study, the commitment to building the correct cross-section for the future Shopton Road-Arrowood Connector and the dedication of right-of-way for said road.

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Vacant	N/A	0	Tax Record
Entitlement with Current Zoning	Single Family (157.5 ac of R-3) Office Warehouse	472 dwellings 120K sf 135K sf	6,370	General Guidance from Planning and RZ 2013-002
Proposed Zoning	Warehouse	2M sf	16,030	Traffic Impact Study: 08-31-18

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	Apartments	270 dwellings	
	Hotel	140 rooms	
	Convenience w/Gas	6K sf	
	Medical Office	25K sf	
	Retail	24K sf	
	Bank w/Drive Thru	5K sf	
	Hi-Turn Restaurant	5K sf	
	Fast Food w/DT	8K sf	

Outstanding Issues

Strikeout = Not an outstanding issue

1. ~~**Curbline** The proposed zoning district has a setback measured from back of the existing or proposed future curbline. The existing back of curb for West Arrowood Road is in the correct future location.~~

2. **Traffic Study** A Traffic Impact Study/Transportation Technical Memorandum is necessary for the complete review of this petition. CDOT approved the traffic study scope on 10/1/18. The traffic impact study was received on 11/26/18. CDOT and NCDOT reviewed and provided comments on 1/3/19. The petitioner has not resubmitted an updated traffic impact study addressing the outstanding comments. CDOT may have further comments once the updated study is received and reviewed in conjunction with NCDOT.

3. ~~The petitioner should revise the site plan and conditional note(s) to show the network required streets per the Subdivision ordinance. A future collector was shown as part of the Steele Creek Area Plan from the proposed Public Street "A" to Shopton Road. This collector needs to be shown on the plans.~~
 - a. **The petitioner should revise the site plan and conditional note to show Public Road D as the primary through road connecting to West Arrowood Road. Public Road A and Public Road C should connect to proposed Public Road D.**

4. **The petitioner should revise the site plan and conditional notes to show the dedication of right of way, fee simple, of 86 feet for the future Shopton Road–Arrowood Connector as identified in the Steele Creek Area Plan, the adopted Comprehensive Transportation Plan, and discussed in previous meetings.**

5. **The cross-sections for Public Road D and Public Road A (between West Arrowood Road and proposed roundabout) shown in the site plan do not support the future Shopton Road-Arrowood thoroughfare cross section. As stated in comment #4, the future right-of-way for the Shopton Road-Arrowood Road Connector is 86 feet to accommodate a cross-section of:**
 - a. 3-11’ travel lanes
 - b. 2-8’ buffer bike lanes
 - c. 2.5’ curb and gutter
 - d. 8’ planting strip
 - e. 6’ sidewalk.

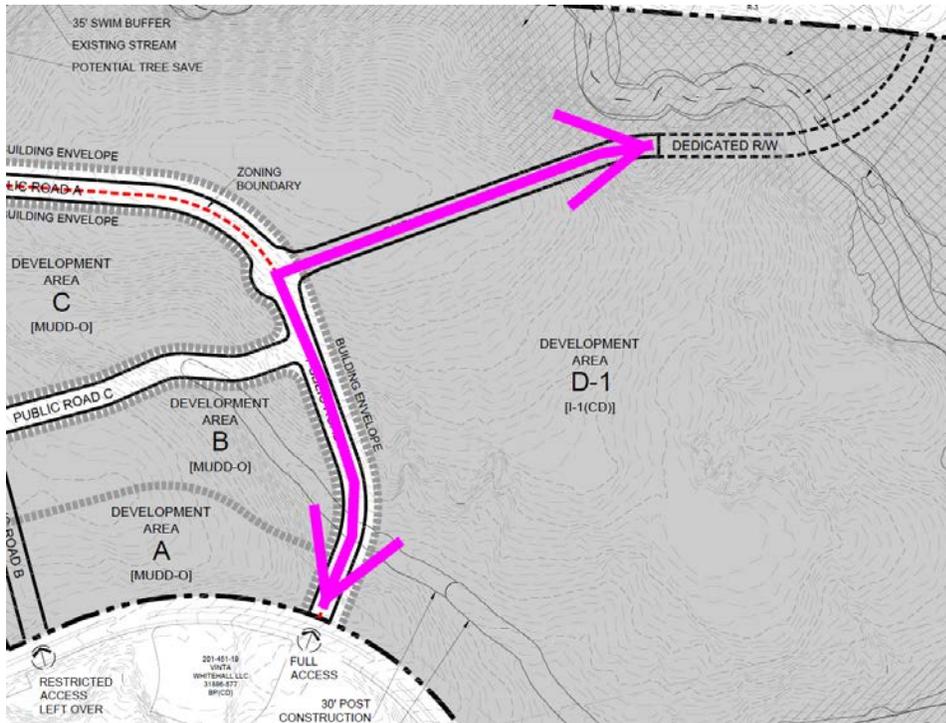
This cross-section would meet the City of Charlotte ordinance, policy and design standards including the Council adopted Bike Plan and the Comprehensive Transportation Plan.

In addition, the three-lane section will provide space for left-turn lanes requirements into the future access points along the minor thoroughfare alignment. The need for the left-turn lanes is based on the future vehicular volume on this segment of road.

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6. ~~The petitioner should revise the site plan and conditional notes to show a 12 foot multi use path on Sandy Porter Road. The front of the multi use path is located 27 feet from centerline of the road.~~
7. ~~The petitioner should revise the site plan and conditional notes to show 2'-6" curb and gutter on Sandy Porter Road. The back-of-curb is located 19 feet from centerline of the road.~~
8. ~~The petitioner should revise the site plan and conditional notes by removing note "d. Angled Parking" under item III. Access and Pedestrian Circulation.~~
9. ~~The petitioner should revise the site plan to add a note specifying dedication and fee simple conveyance of all rights of way to the City before the site's first building certificate of occupancy is issued. CDOT requests right of way set at 2' behind back of sidewalk where feasible.~~

Advisory Information

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.
2. Adequate sight triangles must be reserved at the existing/proposed street entrance(s). Two 35' x 35' sight triangles (and two 10' x 70' sight triangles on North Carolina Department of Transportation on NCDOT maintained streets) are required for the entrance(s) to meet requirements. All proposed trees, berms, walls, fences, and/or identification signs must not interfere with sight distance at the entrance(s). Such items should be identified on the site plan.
3. The proposed driveway connection(s) to public streets will require a driveway permit(s) to be submitted to CDOT (and the North Carolina Department of Transportation on NCDOT maintained streets) for review and approval. The exact driveway location(s) and type/width of the driveway(s) will be determined by CDOT during the driveway permit process. The locations of the driveway(s) shown

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on the site plan are subject to change in order to align with driveway(s) 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.