Rezoning Transportation Analysis

Petition Number: 2018-051 General Location Identifier: 02919108

From: Felix Obregon, PE Reviewer: Rick Grochoske

<u>fobregon@charlottenc.gov</u> rgrochoske@charlottenc.gov

704-432-5729 704-432-1556

Revision Log:

Date	Description	
05-24-2018	First Review	
11-19-2018	Second Review	

General Review Information

The site is on Mallard Creek Road (major thoroughfare) and is in a corridor outside Route 4. This section of Mallard Creek Road is a funded widening project by NCDOT. Mallard Creek Road is planned as a 6-lane divided facility with 12' shared pathways on each side.

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

Two site access points are planned to serve the site. One on Mallard Creek Rd. as a right-in/right-out driveway and one full-access intersection on Carolina Lily Lane. The petitioner is working with CDOT/NCDOT to provide a necessary east-west collector road along the west side of the site (i.e. the continuation of Aspire Street) and needed right-of-way on the site's east side associated with the funded Mallard Creek Rd. widening project. CDOT is asking for a 12' multi-use path along the site's Mallard Creek Rd. frontage.

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Vacant	N/A	0	Tax Record
Entitlement with Current Zoning	Retail	25,910 sf	2,820	RZ 1998-046(C)
Proposed Zoning	Car Wash Gasoline / Service Station	4,200 sf 12 fueling positions	2,020	Site Plan: 11-08-18

Commented [MJ1]: Calculation: 100K sf of retail/ 11 acres = 9.090sf per acre x 2.85 acres.

Commented [MJ3]: Trip gen did not have numbers for car wash generated trips.

Commented [MJ2]: The site plan did not specify the number of fueling positions. However, it appears that they

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Outstanding Issues

Strikeout = Not an outstanding issue

Curbline: The proposed zoning district has a setback measured from back of the existing or proposed future curbline. The location of the future back of curb on Mallard Creek Rd. will be determined by NCDOT's funded Mallard Creek Rd. roadway widening project (#U-6032--currently under design, see NCDOT's October 2018 Public Meeting Preliminary Widening Plans).

- 1. Traffic Study: A Traffic Impact Study/Transportation Technical Memorandum is not necessary for the complete review of this petition.
- 2. The petitioner should revise the site plan and conditional note(s) to provide and specify a minimum 80' site driveway stem length as measured from the future back of curb on Mallard Creek Rd. The proposed site driveway needs to be designated as a "joint-use" driveway shared with tax parcel no. 02919106.
- The petitioner should revise the site plan and conditional note(s) to dedicate 68' of right-of-way in fee simple along the site's Mallard Creek Rd. frontage as measure from Mallard Creek Rd.'s existing northern right-of-way line. This area will accommodate NCDOT's future Mallard Creek Rd. widening project #U-6032.
- 4. The petitioner should revise the site plan and conditional note(s) to provide a 100' long raised concreate median at the proposed Mallard Creek Rd. site driveway to restrict this driveway to right-in/right-out movements, before NCDOT's widening project is implemented.
- The petitioner should revise the site plan and conditional note(s) to provide for a 100' westbound left turn storage lane with an appropriate bay taper on Carolina Lily Lane at Aspire St.
- 6. The petitioner should revise the site plan and conditional note(s) to provide an 8' planting strip and a 12' wide multi-use path along its frontage. The multi-use path is in lieu of an on-street bicycle facility. The petitioner may be able to contribution to NCDOT's Mallard Creek Rd. Widening Project #U-6032 for the implementation of a 12' wide multi-use path along the site's Mallard Creek Rd. frontage. This contribution will waive the petitioner's zoning requirement from installing sidewalk along Mallard Creek Rd.
- 7. The petitioner should revise the site plan and conditional note(s) to provide and implement a local office/commercial narrow street section (see CLDSM U-04) on the site's west side. The 55' wide right-of-way needs to be measured "east" from the existing 40' Piedmont Natural Gas Easement. This local office/commercial narrow street should be designed and implemented between the site's southern property line to Carolina Lily Lane. This street will provide a continuous collector street (i.e. Aspire St.) paralleling Mallard Creek Rd. between Odell School Rd. and Carolina Lily Lane (see the future collector road's conceptual alignment below).

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- 8. 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.
- 9. The petitioner should revise the site plan to add a note specifying all transportation improvements will be approved and constructed before the site's first building certificate of occupancy is issued. The petitioner may phase transportation improvements if said improvements and phasing are explicitly described in site plan notes.

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.

- 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 on the site plan are subject to change to align with driveway(s) on the opposite side of the street and comply with City Driveway Regulations and the City Tree Ordinance.
- All proposed commercial driveway connections to a future public street will require a driveway permit
 to be submitted to CDOT for review and approval.

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- 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.