

# Rezoning Transportation Analysis

Petition Number: 2017-182

General Location Identifier: 02521198, 0251199, 0251193

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## Revision Log:

Date	Description
12-14-2017	First Review
02-19-2018	Second Review

## General Review Information

The site is on W WT Harris Blvd (major thoroughfare); with proposed access through the existing signal at W WT Harris Blvd & I-485 ramp. The site is located in a wedge outside Route 4 and is within the limits of the Northlake Area Plan.

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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.

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

## Transportation Summary

The site's only access is the fourth leg of the existing WT Harris Blvd./I-485 Outer exit ramp traffic signal. This singular site access point, proposed land uses and associated project trips will create significant traffic challenges associated with the proposed development. With that said, the petitioner has agreed to implement several traffic mitigation improvements in the area, including an additional NB WT Harris thru lane to Mt. Holly-Huntersville Rd. The petitioner is planning to submit a Technical Transportation Memoranda to CDOT before the scheduled public hearing focusing upon potential traffic impacts to the WT Harris/Lake Spring Av. intersection.

## 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 (12.14 acres of R-3)	36 dwellings	410	General Guidance from Planning
Proposed Zoning	Office Self-Storage Convenience Market w/ Gas Pumps Restaurant	18K sf 100K sf 20 fueling positions 5K sf	12,100	TIS: May 2017

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## Outstanding Issues

Strikeout = Not an outstanding issue

**Traffic Study:** A ~~Traffic Impact Study~~/Transportation Technical Memorandum is needed to complete review of this petition. A "Break in the Control of Access Study" has been submitted to CDOT and NCDOT and has been approved by NCDOT's Congestion Management Section. Comments were provided to the traffic consultant on 7/28/17. The following items remain outstanding:

- a. ~~Include Lake Spring, Treyburn, and Northcrest as study intersections along WT Harris because any operational decreases at the interchange ramp intersection will have impacts on the larger corridor.~~
- b. ~~Remove growth rate from analysis or use 2% applied once (not per year) if necessary.~~
- c. Recommend an extension of the NB right/outside lane on WT Harris at MHH to respond to increase queuing reported in PM peak
- d. The first driveway into the site is too close to the signalized intersection. Provide a minimum 250' internal protected stem with a three lane section at a traffic signal or two ingress lanes with a minimum 150' internal protected stem with a dedicated left lane into the first access drive. Clarify transportation note 2a.
- e. ~~Please provide more detail on the location of the other proposed uses within the site as the location of each use will determine the stem conditions at the signalized intersection.~~
- f. The petitioner should revise conditional transportation note C to include cumulative trip table on the cover sheet of any and all permitting submittal(s).

A TTM scope was approved by CDOT on 2/12/18. The petitioner has not yet submitted the TTM for CDOT review. Additional transportation comments and/or traffic mitigation requirements may be forthcoming once the TTM is reviewed by CDOT.

2. The petitioner should revise the site plan and conditional note(s) to revise the proposed southbound approach right turn lane. The large curb radii shown in the conceptual geometrics does not align with CDOT goals to provide a safe pedestrian crossing relative to the proposed 14' wide multi-use path and therefore should be reduced. Revise transportation note 2a.
3. The petitioner should revise the site plan and conditional note(s) to show a 44' planting strip (24' from edge of existing travel lane for the future third travel lane and associated grading, 2.5' curb and gutter, a 20' planting zone), 14' shared-use path (SUP), and 2' buffer along the site's WT Harris Blvd. frontage to accommodate the future widening of WT Harris and the streetscape envisioned by the area plan. This is consistent with recent cross section evaluation across the interchange on this side of WT Harris. ~~The MUP should extend to Lake Spring and to the 485 ramp, including proper accessible ramps.~~ Clarify site labels and add note.
4. ~~The petitioner should revise the site plan and conditional note(s) to commit entering into a Developer's Traffic Signal Agreement with CDOT, responsible for all costs to modify the existing traffic signal located at I-485 exit ramp/WT Harris Blvd associated with adding the fourth signal approach.~~
5. ~~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.~~
6. The petitioner should revise the site plan to add a note detailing each transportation improvement and specifying all transportation improvements, as identified in the rezoning document, the signed/sealed and approved by NCDOT TIA, and the forthcoming TTM as approved by CDOT, will be approved and constructed and that all items as specified in NCDOT's letter dated November 15, 2017 must be met 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.

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## 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 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.