## **Rezoning Transportation Analysis**

Petition Number: 2019-064

General Location Identifier: 03304618

#### From: Felix Obregon, PE

**Reviewer:** 

### : Rick Grochoske, PE

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| Revision Log: | Date       | Description   |  |  |  |
|---------------|------------|---------------|--|--|--|
|               | 05-16-2019 | First Review  |  |  |  |
|               | 06-18-2019 | Second Review |  |  |  |

#### **General Review Information**

The site is on Mt Holly-Huntersville Road (major thoroughfare) near the signalized intersection with Brookshire Boulevard (Class 2 Expressway). Mt. Holly-Huntersville Road is a state maintained road. The site is in a center outside Route 4.

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 proposed site access is provided by existing private streets constructed by the master Riverbend Developer. The master developer is required to complete all Phase 1 transportation improvements as specified in Rezoning Petition 2016-128 prior to the subject rezoning's first building certificate of occupancy is issued. The proposed mixed-use Riverbend Development has a robust street and pedestrian sidewalk/path network and is considered a "walkable" community. Several required major transportation improvements are under construction, including a "continuous flow intersection" located at Brookshire Blvd. (NC 16) / Mt. Holly-Huntersville Rd. intersection.

The land-use is switching from apartments to hospital/medical office uses having an increase in vehicular trips; however, the additional trips fall within the allotted trips approved under Rezoning Petition 2016-128.

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Trip Generation

| Scenario  | Land Use                             | Intensity               | Trip Generation<br>(vehicle<br>trips/day) | Source              |
|---|--------------------------------------|-------------------------|---|---------------------|
| Existing Use  | Vacant                               | NA                      | 0   | Tax Record          |
| " <b>Parcel</b> "<br>Entitlement with<br>Current Zoning | Apartments                           | 234 dwellings           | 1,270                                     | RZ 2016-128         |
| " <b>Parcel</b> "<br>Proposed Zoning                    | Hospital<br>Medical-Dental<br>Office | 160,000 sf<br>50,000 sf | 5,410                                     | Site Plan: 06-10-19 |

The approved Riverbend development (petition 2016-128) allows 37,220 daily trips. This proposed development plus up-to-date permitted development fall under the total entitlement. If future development exceeds the entitled 2016-128 trips, a revised traffic study will need to be submitted.

#### 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 location of the current back of curb on Smith Farm Rd. and Sugar Magnolia Dr. can remain as is.
- 2. **Traffic Study:** A Traffic Impact Study is not necessary for the complete review of this petition. Rezoning petition 2016-128 submitted a TIS encompassing the additional traffic being generated by proposed petition 2019-064.
- 3. The petitioner should revise the site plan and conditional note(s) to specify state the proposed rezoning land-use entitlements as Hospital 160,000 sf and Medical Dental Office 50,000 sf. This revised entitlement information was received by the petitioner via email, dated May 16, 2019. The Trip Generation Table below represents the current Riverbend Development program to-date, the added proposed trip generation created by the subject rezoning request, and the overall daily trips entitlements as established and documented in the site's existing Rezoning Petition 2016-128. The existing/approved Riverbend development to-date plus the added proposed development totals 26,040 daily trips, is under the existing zoning's entitled 37,220 daily trips (see table below).

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| Land Use [ITE Code]   |         |          | Weekday     | AM Peak Hour |      |       | PM Peak Hour |       |       |
|---|---------|----------|-------------|--------------|------|-------|--------------|-------|-------|
|   |         |          | Daily       | Enter        | Exit | Total | Enter        | Exit  | Total |
| Existing/Approved Development   |         |          |             |              |      |       |              |       |       |
| Mini-Warehouse [151]  | 127,000 | SF       | 192         | 8            | 6    | 14    | 11           | 12    | 23    |
| Multifamily Housing (Low Rise) [220]                                      | 100     | DU       | 716         | 11           | 37   | 48    | 38           | 22    | 60    |
| Multifamily Housing (Mid Rise) [221]                                      | 266     | DU       | 1,448       | 24           | 67   | 91    | 7            | 45    | 52    |
| Hotel [310]   | 200     | Rooms    | 1,831       | 56           | 39   | 95    | 64           | 61    | 125   |
| General Office Building [710]   | 365,000 | SF       | 3,726       | 457          | 63   | 520   | 84           | 383   | 467   |
| Medical Dental Office Building [720]                                      | 69,000  | SF       | 2,401       | 150          | 42   | 192   | 67           | 172   | 239   |
| Shopping Center [820]   | 221,328 | SF       | 10,319      | 163          | 100  | 263   | 470          | 509   | 979   |
| Existing/Approved Development Total                                       |         |          | 20,633      | 869          | 354  | 1,223 | 741          | 1,204 | 1,945 |
|   | Adde    | ed Propo | sed Develop | oment        |      |       |              |       |       |
| Hospital [610]  | 160,000 | GFA      | 3,665       | 167          | 79   | 246   | 76           | 160   | 236   |
| Medical Dental Office Building [720]                                      | 50,000  | SF       | 1,740       | 109          | 31   | 140   | 49           | 125   | 174   |
| Added Proposed D  | 5,405   | 276      | 110         | 386          | 125  | 285   | 410          |       |       |
| Existing and Added Development  |         |          | 26,038      | 1,145        | 464  | 1,609 | 866          | 1,489 | 2,355 |
| Maximum Trip Generation   |         |          | 37,218      | 1,116        | 444  | 1,560 | 804          | 1,208 | 2,012 |
| Added Proposed Development difference to<br>Existing/Approved Development |         |          | -11 180     | 29           | 20   | 49    | 62           | 281   | 343   |

3/5/2019 Novant- Riverbend Medical TES

References:

Trip Generation, 10th Edition, Institute of Transportation Engineers, Washington, DC. 2017.

- 4. The petitioner should revise the site plan and conditional note(s) to provide a detailed Existing and Proposed Development Land-use/Trip Generation Table for past, present and future projects within the Riverbend Development. This table needs to include all pervious development permitting projects submitted to EPM LD or City Planning. The purpose of this table is to provide City project reviewers an on-going account of the Riverbend Development Program so that the overall building square footage and maximum number of vehicle trips by development phase are not exceeded. This table needs to include the following information for existing and proposed development:
  - a. Name/type of development project, parcel and/or development area, land-use, and density (i.e. square footage, room count, seats, etc.)
  - b. Trip Generation of each development project
  - c. Maximum square footage per Rezoning Petition 2016-128
  - d. Identify all Phase 1 and 2 Transportation Improvements necessary to be substantially completed and approved by the City as documented in Rezoning Petition 2016-128.
  - e. The Maximum Overall Trip Generation per Rezoning Petition 2016-128 (see Transportation Conditional Note 4.II.2.i. attached below)

#### The below comment has been addressed in the revised site plan.

**i**. The transportation improvements described in this document adequately mitigate the traffic for land uses and intensities as described in Note 4 "Transportation Improvements and Access" Phase 1 and Phase 2 development allowances. The developer shall submit a supplemental traffic impact analysis, including trip generation and additional transportation mitigations for any entitlements, conversions, or other revisions to proposed land uses that may be recognized in this zoning document but that exceed any of the trip thresholds in the table below that informed the final traffic impact study (*trip generation for the uses to be determined based on Institute of Transportation Engineers (ITE) 9th Edition Trip Generation Manual*).

| Daily  | AM Peak<br>Entering |     | PM Peak<br>Entering | PM Peak Exiting |
|--------|---------------------|-----|---------------------|-----------------|
| 37,218 | 1,116               | 444 | 804                 | 1,208           |

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- 5. The petitioner should revise the site plan and conditional note(s) to provide a detail table identifying all Phase 1 Transportation Improvements necessary to be substantially completed and approved by the City as documented in Rezoning Petition 2016-128. This table needs to document if all required Phase 1 transportation improvements are completed and/or their status of completion, including expected construction completion dates.
- 6. The petitioner should revise the site plan and conditional Access and Transportation note 3.c. to read: All required Phase 1 Transportation Improvements as required and documented in Rezoning Petition 2016-128 shall be completed by the petitioner and/or master developer and approved by City prior to the issuance of the site's first building. The petitioner may phase and/or bond transportation improvements if said improvements and phasing are explicitly described in Rezoning Petition's 2016-128 site plan notes.
- 7. 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 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.