

Rezoning Transportation Analysis

Petition Number: #2022-105

General Location Identifier: 05549113, 05549114, 05549115, 05549128

From: Jake Carpenter, PE

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Reviewer:

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Revision Log:

Date	Description
11-28-22	First Review (PM)
12-22-22	Second Review (DR)
2-22-23	Third Review (JP)
12-19-23	Fourth Review (IW)
04-09-24	Fifth Review (IW)

General Review Information

The petition is located on the north side of Moores Chapel Road, a State-maintained minor thoroughfare and along Rhyne Road, a State-maintained minor thoroughfare street. The petition is located in a west wedge outside of Route 4, and within the I-485 Interchange Analysis Study.

Active Projects Near the Site:

- N/A

CDOT's review of this rezoning petition is intended to provide consistency with council adopted policies, plans, standards and guidelines including, but not limited to, the [Transportation Action Plan \(TAP\)](#), [Vision Zero](#), [Urban Street Design Guidelines \(USDG\)](#), [Center, Corridor and Wedges](#), [Charlotte BIKES](#), [Traffic Impact Study Guidelines](#) and [Charlotte WALKS](#). With a commitment to design complete streets, this review is 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 petition is located on the north side of Moores Chapel Road, a State-maintained minor thoroughfare and along Rhyne Road, a State-maintained minor thoroughfare street. A Traffic Impact Study (TIS) was submitted and approved by CDOT on 3/8/2024. Site plan revisions are needed to meet ordinance requirements and/or the outstanding items including, providing 12-foot multi-use path along all public road frontages, revising TIS improvements in the conditional notes, and revising CDOT standard rezoning notes. Further details are listed below.

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Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Vacant	-	-	Tax Record
Entitlement with Current Zoning	Single Family (R-3, 3.99 acres)	11 Dwelling Units	135	General Guidance from Planning
Proposed Zoning	Super Convenience Market Retail (B-1, 3.99 acres)	6,600 SF 3,400 SF	5,910	Site Plan: 6/07/2022
Proposed Zoning	Fast-Food w/Drive-Thru Convenience Store/Gas Station (B-1, 3.99 acres)	2,700 SF 16 Fueling Positions	5,505	Site Plan: 12/01/2023

Provide comments to the specified comments below.

Outstanding Issues

Strikethrough = Resolved

1. Traffic Study:

~~A Traffic Impact Study is necessary for the complete review of this petition due to the site generating more than 2,500 daily trips. A TIS was previously approved by CDOT for this site in September 2019. The TIS will need to be updated prior to the permitting of the future development area established on the rezoning plan. See Transportation Note F.~~

~~**Comment Rescinded 12/22/22:** Petitioner has agreed to update TIS prior to any future development exceeding the proposed 6,600 s.f., as per the original TIS. Recent traffic counts and studies in the area have identified the need for transportation improvements proposed as a part of the original 2019 TIS and proposed as a part of this petition.~~

~~**Updated Comment from 2/23/22:** An updated TIS will be required with this rezoning petition. Staff will receive the petition and begin review, but the public hearing will not be scheduled until the TIS is approved to allow for the minimum time necessary for CDOT to review the study and reach agreement with the petitioner on the required transportation commitments. Any agreed upon commitments shall be included on the last site plan submitted no fewer than 4 weeks prior to the public hearing. Therefore, additional traffic mitigation comments may be forthcoming once the TIS is approved by CDOT (and NGDOT).~~

~~2. **Outstanding Comment** Revise site plan conditional note in the transportation section letter e. for Southbound I-485 Off Ramp to say, "Extend existing southbound right turn lane to provide 400' of storage and appropriate taper."~~

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in only driveway as generally depicted on the site plan subject to approval by NCDOT or CDOT, whichever has jurisdiction.

REWORD:

Extend SBR to provide 400' of storage and appropriate taper.

Existing SBR is 200'.

ing areas are generally depicted on the concept plan for the site.

alk will be constructed on the site from the building main entrances to the Rhyne Road right of way, to be ected to public sidewalks on Rhyne Road if approved by NCDOT or CDOT, whichever has jurisdiction on the uction of such sidewalks.

d. If current right-of-way is inadequate to meet city standards, all dedication and fee simple conveyance of all rights of way will be made to the City before the site's first building certificate of occupancy is issued.

e. Transportation mitigation improvements will consist of the following:

- Southbound I-485 Off Ramp - An addition to the southbound I-485 off ramp to provide 300' full storage plus taper (an extension of 100').

Clarifying Comment from 12/22/2022: Reword improvement at Southbound I-485 Off Ramp to what is shown in the picture above.

New Comment from 04/09/2024: Remove improvement below. "Convert the southbound right turn lane to a free flow right" is mentioned twice. Then add the following to the first sentence for the Moores Chapel at I-485 SB Off-Ramp intersection "Convert the southbound right turn lane to a free-flow right with channelization island."

with channelization island

- Transportation mitigation improvements will consist of the following:
- Moores Chapel a I-485 Southbound Off-Ramp: Convert the southbound right turn lane to a free-flow right and construct an additional westbound receiving lane by extending the westbound right turn lane on Moores Chapel Road between the two roundabouts. ~~Convert the southbound right turn lane to a free flow right.~~ **Remove**
 - Rhyne Rd at Belmeade Rd - Construction of an eastbound left turn lane on Belmeade with 150' of storage plus taper.
 - Construct a soughbound right turn lane with 100' of storage on Rhyne Road.
 - Rhyne Rd at Driveway 1: Construct one ingress and one egress lane and construct a southbound left turn lane with 100' storage plus taper
 - Moore's Chapel Rd at Rhyne Rd: Construction of a southbound right turn lane under yield control with 100' of storage and appropriate taper length.
 - Rhyne Road at Driveway 2: Construction of a northbound right in only lane with 100' of storage on Rhyne Road.
 - In addition, the Petitioner will construct up to 4 pedestrian ramps, as generally depicted on the site plan, subject to the approval of NCDOT or CDOT, which ever has jurisdiction if not already constructed by others

3. **New Comment from 04/09/2024:** Remove improvement below. This has already been constructed. Only improvement at Rhyne Road and Belmeade Road intersection should be what is circled below.

- Remove**
- e. Transportation mitigation improvements will consist of the following:
- Moores Chapel a I-485 Southbound Off-Ramp: Convert the southbound right turn lane to a free-flow right and construct an additional westbound receiving lane by extending the westbound right turn lane on Moores Chapel Road between the two roundabouts. Convert the southbound right turn lane to a free flow right.
 - Rhyne Rd at Belmeade Rd - Construction of an eastbound left turn lane on Belmeade with 150' of storage plus taper.
 - Construct a soughbound right turn lane with 100' of storage on Rhyne Road.
 - Rhyne Rd at Driveway 1: Construct one ingress and one egress lane and construct a southbound left turn lane with 100' storage plus taper
 - Moore's Chapel Rd at Rhyne Rd: Construction of a southbound right turn lane under yield control with 100' of storage and appropriate taper length.
 - Rhyne Road at Driveway 2: Construction of a northbound right in only lane with 100' of storage on Rhyne Road.
 - In addition, the Petitioner will construct up to 4 pedestrian ramps, as generally depicted on the site plan, subject to the approval of NCDOT or CDOT, which ever has jurisdiction if not already constructed by others

4. **Outstanding Comment** Revise site plan and conditional note(s) to provide 12-foot multi-use path and 8-foot planting strip along all public road frontages (Moores Chapel Road, Rhyne Road, Belmeade

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~~Clarifying Comment from 12/22/2022: Add conditional note.~~

7. **Outstanding Comment:** A site plan note specifying that all transportation improvements will be approved and constructed before the site's first building certificate of occupancy is issued as needed. The petitioner may phase transportation improvements if said improvements and phasing are explicitly described in site plan notes.

Clarifying Comment from 12/22/2022: Add conditional note.

8. **Outstanding Comment:** Add conditional note "All public roadway improvements will be subject to the standards and criteria of CDOT and NCDOT, as applicable, to the roadway improvements within their respective road system authority. It is understood that such improvements may be undertaken by the Petitioner on its own or in conjunction with other development or roadway projects taking place within the broad western Mecklenburg area, by way of a private/public partnership effort or other public sector project support."

Clarifying Comment from 12/22/2022: Add conditional note as shown above.

Advisory Information

The following are requirements of the developer that must be satisfied prior to driveway permit approval. These requirements shall be reflected on the rezoning plan, as appropriate.

1. The setback for this district is measured from the back of the existing or future curblines as determined by CDOT and Planning during the permitting process.
2. 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, per the City of Charlotte's Driveway Regulations.
3. Adequate sight triangles must be reserved at the existing/proposed street entrance(s). Two 50' x 50' sight triangles (and two 10' x 70' sight triangles on NCDOT-maintained streets) are required for the entrance(s) to meet requirements. All proposed trees, berms, walls, fences, and/or identification signs shall not interfere with sight distance at the entrance(s) and shall be identified on the site plan.
4. The proposed driveway connection(s) to public streets will require a driveway permit(s) to be submitted to CDOT (and NCDOT 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.
5. All proposed commercial driveway connections to a future public street will require a driveway permit submitted to CDOT for review and approval.
6. Any fence or wall constructed along or adjacent to any sidewalk or street right-of-way requires a certificate issued by CDOT.
7. 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 construction/installation. Contact CDOT for additional information concerning cost, submittal, and liability insurance coverage requirements.
8. The petitioner needs to complete and submit the [Right of way Abandonment Petition form](#) to CDOT for review. The decision of this rezoning petition does not correlate with the decision of the possible abandonment, as this decision is issued within the separate Right of Way Abandonment process that is controlled by North Carolina General Statutes.
9. To attain a street and pedestrian lighting recommendation, the petitioner should coordinate with Anthony Mendez, CDOT. Please visit the following link:
<https://charlottenc.gov/Transportation/Programs/Pages/StreetLighting.aspx>

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