

Rezoning Transportation Analysis

Petition Number: 2020-112

General Location Identifier: 04711109

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Revision Log:

Date	Description
09-11-20	First Review (EL)
04-15-21	Second Review (EL)
8-25-21	Third Review (BB)
9-21-21	Fourth Review (BB)
10-15-21	Fifth Review (BB)
10-28-21	Sixth Review (BB)

General Review Information

The site is located on IBM Drive (minor thoroughfare, City-maintained), and is located within an activity center outside of Route 4. This petition is located within the limits of the University Research Park Area Plan.

Active Projects Near the Site:

- Approved Rezoning Petition 2020-035:
 - This petition completed a Traffic Impact Study that included turn lane roadway improvements on IBM Drive and Neal Road. A proposed access on IBM Drive is tying into the fourth leg of the existing signalized intersection at IBM Drive and University Oaks Drive.
- Approved Rezoning Petition 2020-102:
 - CDOT has requested this petitioner to commit to constructing left-turn lanes at the proposed access points on IBM Drive and Neal Road.

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 site is located on IBM Drive, a City-maintained minor thoroughfare road. The 57.2-acre site includes a multi-use development that could contain office, retail, multi-family and hotel uses. As the trip generation is higher than the 2,500 threshold, a Traffic Impact Study (TIS) was required for this site. The Revised TIS was submitted to CDOT and NCDOT for review on 9/8/2021. CDOT has approved all transportation

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improvements in the TIS as they related to city-maintained streets. NCDOT provided final TIS comments on 10/05/21 and the petitioner revised their site plan and conditional notes to reflect these comments.

The petitioner has agreed to construct a 12-foot multi-use path along the site's frontage of IBM Drive and an east-west roadway connection (Proposed Public Road "D"). Site plan revisions are needed to address the required 6-foot bike lane on Proposed Public Road "D". Further details are listed below.

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	Parking	-	-	-
Entitlement with Current Zoning	RE-2	Too many uses to determine		General Guidance from Planning
Proposed Zoning*	Apartments Retail Office Existing Uses to Remain	575 Units 40,000 SF 650,000 SF -	11,045	Innovation Park TIS & lease summary provided by petitioner
Proposed Zoning*	Apartments Retail Office Existing Uses to Remain	575 Units 30,000 SF 630,000 SF -	12,110	Site Plan: 8/16/2021

* in addition to existing

Please provide responses to our comments.

Outstanding Issues

~~Strikeout~~ = Not an outstanding issue

~~1. Curblines~~

~~a. IBM Drive: The future location of curb and gutter is at its existing location.~~

~~2. 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.~~

~~The public hearing will not be scheduled until the TIS is received and approved. This will allow for the minimum time necessary for CDOT to review and approve the study and reach agreement with the petitioner on the required transportation commitments, and have them 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 NCDOT.~~

~~a. The site plan and conditional note(s) need to include the TIS roadway improvement mitigations within (Section 5) of the conditional notes.~~

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- b. ~~The site plan and conditional note(s) (**Section 5.E**) need to be adjusted to the proposed phasing of transportation improvements to the phasing that is approved within the TIS.~~
3. ~~Confirm that a minimum of 35 feet of right-of-way is dedicated from the existing IBM Drive road centerline, labeled and dimensioned from the road centerline. Show and dimension the road centerline to the proposed right-of-way on the site plan sheets.~~
4. ~~The petitioner needs to revise the site plan's conditional note, under '2 Optional Provisions H G' and '7 Streetscape/Landscaping A' to include the construction of a 12-foot Multi-Use Path. CDOT requests construction of bicycle facilities by installing an 8-ft planting strip and 12-ft Multi-Use Path along IBM Drive to meet the City Charlotte BIKES Policy. The construction of the Multi-Use Path may be phased, according to the development of each proposed development area. Charlotte BIKES Policy supports a Multi-Use Path as an appropriate bike facility due to topography, connections to an emerging greenway network, and limited driveways. If the Multi-Use Path is difficult to implement with an 8-ft planting strip; a 14-ft back-of-curb multi-use path may be considered, due to site hardship. Show and call-out the multi-use path on the site plan sheets.~~
5. **Outstanding (Site plan dated 8/16/21):** Revise "Proposed Public Road D" cross-section to include a 6' bike lane. The site plan and conditional note(s) need to establish a street connection, as shown below, according to the proposed avenue cross-section that is recommended within the University Research Park Area Plan. Refer to pages 38 and 41.

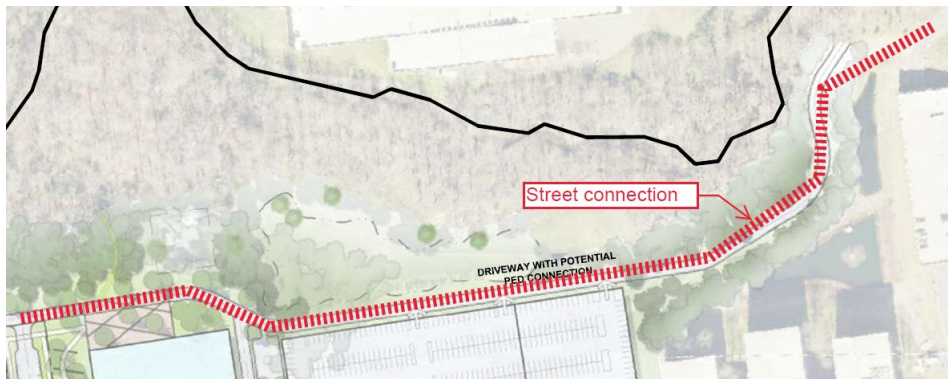


FIGURE 1 & 2: Recommended Street cross-sections

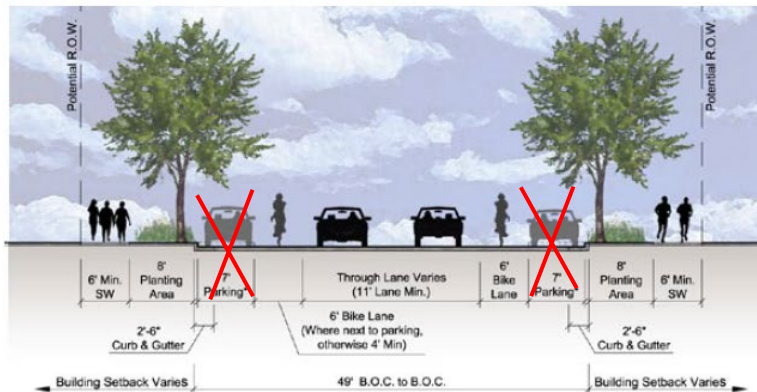


Figure 1: Avenue

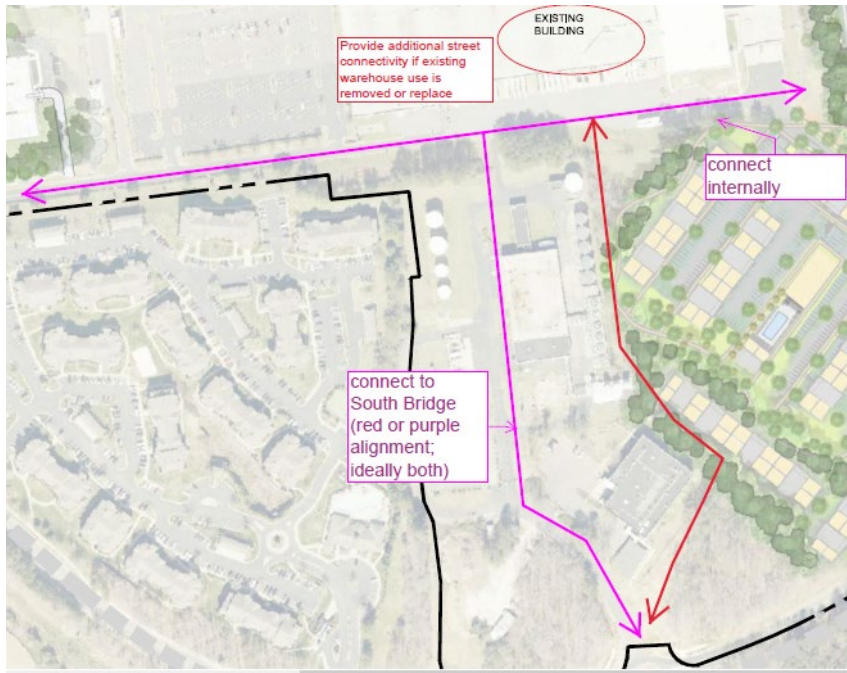
- 49-foot Back of Curb to Back of Curb
Min. 77-foot right-of-way
- 6-foot Sidewalk: Improved pedestrian realm, compliant with ADA (Americans with Disabilities Act)
- Bike Lane: 4-foot Min, 6-foot where on street parking is present - safer bicyclists realm, improved truck turning radius, additional buffer for pedestrians
- Planting area: Buffer for pedestrians; beautification
- On street parking: additional buffer for pedestrians, shared parking, active streetscape

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- ~~6. Add a note to the site plan 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.~~
- ~~7. Provide additional street connectivity to the north leg of the existing roundabout at the intersection of IBM Drive and University Pointe Boulevard, in the event the existing warehouse use circled below is removed or replaced. These street connections are important to redistribute traffic to multiple access points along IBM Drive.~~

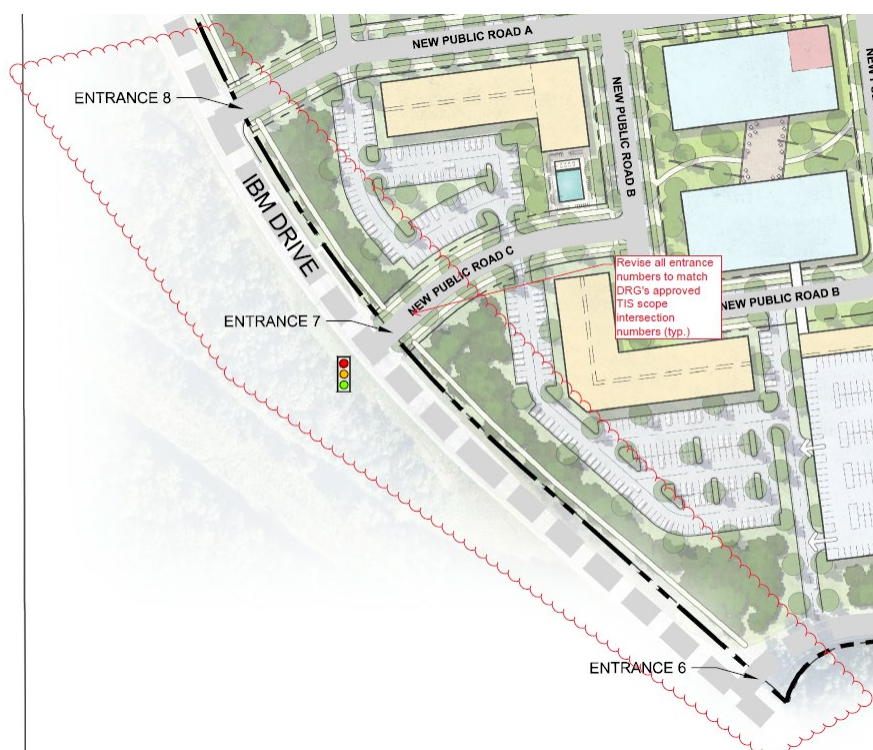


- ~~8. **Resolved** (site plan dated 2021.04.15): The site plan and conditional note(s) need to be revised to renumber the intersections to match the TIS scope that was approved 3/9/2021.~~

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9. **Resolved** Sample format for comment that is resolved

10. **Resolved** (Site plan dated 8/16/21): ~~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 north central Mecklenburg area, by way of a private/public partnership effort or other public sector project support."~~

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.

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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.