

Rezoning Transportation Analysis

Petition Number: 2021-092

General Location Identifier: 12520150, 12520154, 12520158, 12520105, 12520107, 12520110, 12520111, 12520155, 12520163

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Revision Log:

Date	Description
06-01-2021	First Review (KP)
08-23-2021	Second Review (KP)
10-22-2021	Third Review (KP)
11-22-2021	Fourth Review (KP)

General Review Information

This site is located at the southeast corner of McDowell Street and East Morehead Street, two major thoroughfare roads, extending along the south side of McDowell street, encompassing the city-maintained Baxter Street, to the I-277 overpass. Additionally, this site is located inside Route 4 and within the limits of the Midtown/Cherry Area Plan and the Center City 2020 Vision Plan.

Active Projects Near the Site:

- Uptown Cycle Link/Belk Greenway - This segment of the connector will link pedestrians and bicyclists between the Little Sugar Creek Greenway/Cross Charlotte Trail and Irwin Creek Greenway through uptown Charlotte. The project begins at the intersection of Pearl Park Way and Kenilworth Avenue and continues along Baxter Street, in tandem with the Pearl Street Park. The project continues up McDowell Street, under I-277 and ends at the intersection of East Stonewall Street and McDowell Street.
 - <https://charlottenc.gov/Projects/Pages/BelkConnectorBaxterStonewall.aspx>
- Pearl Parkway Extension – This project will extend Pearl Parkway northwest from the existing stub at Kenilworth Avenue to existing Baxter Street. This project will construct a portion of the Belk Greenway Connector along with on-street parking and additional pedestrian infrastructure.
 - Project is currently under construction with an anticipated completion date of late 2021.
- Pedestrian Safety Program/Caldwell Street and Morehead Street Traffic Signal - A new traffic signal has been approved by the North Carolina Department of Transportation for installation at the intersection of Caldwell Street and Morehead Street. The signal is being installed to accommodate existing and future traffic, to provide improved pedestrian and bicycle crossings of Morehead St. and to create better network traffic flow.
 - This project is currently in construction with project completion in 2021.
- CityLYNX Gold Line Phase II - This phase extends the current streetcar line from the Charlotte Transportation Center west to French Street in the Historic West End and east from Novant Hospital to Sunnyside Avenue in Elizabeth.
 - Phase 2 is currently under construction and is expected to open to revenue service in 2021.

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.

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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 Charlotte Innovation District is located on a 14-acre site that extends east along McDowell Street, encompassing the City-maintained Baxter Street, to the I-277 overpass, and at the southeast corner of McDowell Street and East Morehead Street (two major thoroughfare roads). This site is located approximately ½ mile from the Blue Line’s Stonewall and Carson Transit Stations and approximately ½ mile from the CityLYNX Gold Line’s McDowell Street Transit Station. This site is located approximately ½ mile from the Little Sugar Creek Greenway’s entrance in Midtown at Pearl Parkway.

The Transportation Impact Study (TIS) was approved on November 9, 2021. CDOT and NCDOT have completed the review of the TIS dated October 26, 2021 and approved it on November 9, 2021. The site is adjacent to a robust network of bus and transit lines, a comprehensive infrastructure for sidewalks and bike facilities and within close proximity to I-277 Expressway. The petitioner will implement and construct intersection upgrades and various multiple-modal transportation improvements for bicyclists, motorists, and transit that will incorporate Transportation Demand Management (TDM) strategies. The TDM strategies will coincide with the City’s BIKES, WALKS, and Vision Zero’s policies. These TDM strategies will include establishing additional bike/pedestrian connections and a bike/scooter share program, designation of a transportation coordinator, and construction of a mobility hub that will encourage commuters to use numerous methods of multi-modal transportation that seek to mitigate the number of single-occupancy vehicles commuting to/from the site. Lastly, as a means of traffic calming, the petitioner has committed to restripe Dilworth Road from Morehead Street to Romany Road. CDOT has no outstanding items.

Trip Generation

Scenario	Land Use	Intensity	Trip Generation (vehicle trips/day)	Source
Existing Use	General Office Medical Office	211,345 SF 21,604 SF	2102	Tax Record
Entitlement with Current Zoning	General Office General Office General Office (O-2 1.9 acres) Retail (B-2 4.6 acres) Retail (B-1 0.85 acres)	107,134 SF 83,200 SF 28,500 SF 69,000 SF 8,500 SF	8,135	RZ 2000-61, RZ 2005-090, and General Guidance from Planning
Proposed Zoning	General Office College (LUC 550) Mid-Rise (LUC 231) Hotel	393,000 SF Medical School 1,000 Units 600 Rooms	15,590	Site Plan: 10-12-21

Provide comments to the specified comments below.

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Outstanding Issues

Strikethrough = Resolved

1. **Curb line:** The proposed zoning district has a setback measured from back of the existing or proposed future curb line. Revise Sheet RZ-1.1 by adding the curb line dimensions to the cross sections provided. Please note: The following curb line dimensions proposed are conceptual and may be altered as coordination with CDOT throughout the rezoning process ensues.
 - a. ~~**Morehead Street:**~~ The location of curb and gutter will be moved and located 38 feet from the existing centerline to the back of curb. ~~(Revise Site Plan Dated: 10.12.21)~~ Update to comply with Chapter 20 sidewalk and planting strip requirements.
 - b. ~~**McDowell Street:**~~ The future location of curb and gutter is in the existing location.
 - c. ~~**Baxter Street (Section C-C)**~~ – The location of curb and gutter will be moved and located to 21.5 feet from the existing centerline to each back of curb.
 - d. ~~**Baxter Street (Section D-D)**~~ – The location of curb and gutter will be moved and located to 19 feet from the existing centerline to each back of curb.
 - e. ~~**Baxter Street Extension (Section E-E)**~~ – The location of curb and gutter will be moved and located to 21.5 feet from the existing centerline to each back of curb.
 - f. ~~**Proposed Public Street (Section F-F)**~~ – The location of curb and gutter will be located 18.5 feet from the proposed centerline to each back of curb.

Update to Comment as a Result of the 08-16-2021 Site Plan:

The proposed and existing back of curb location on Morehead Street must be labeled dimensioned from the existing centerline.

2. Traffic Study:

CDOT and NCDOT have completed the review of the Transportation Impact Study that was signed and sealed on 8/13/2021. All public roadway improvements will be subject to the standards and criteria of CDOT and NCDOT to the roadway improvements within their respective road system authority.

3. **Right of way and Other Infrastructure Dimensions:** Revise Rezoning Sheet RZ-1.1 to include detailed dimensions for each infrastructure item, and the total right of way for the cross sections shown. Refer to the USDG Cross sections and on street parking details, located within the Charlotte Land Development Standards Manual, to determine the appropriate widths associated with each infrastructure item and the cross sections' total widths. Revise the site plan sheets by clearly labeling each public and private street section as well as each access point. Labeling each street section and access point will allow for thorough comments throughout the rezoning and permitting process. CDOT prefers the separated cycle track and sidewalk for McDowell Street (cross sections A-A and B-B). Please note: The following right of way dimensions proposed are conceptual and may be altered as coordination with CDOT throughout the rezoning process ensues:

- a. ~~**Morehead Street: (10/21/2021 Site Plan)**~~ – 56 feet of right of way dedication measured from the existing road centerline.
- b. ~~**McDowell Street:**~~ 110 feet of total right of way dedication, 55 feet measured from the existing road centerline to each right of way line.
- c. ~~**Baxter Street (Section C-C)**~~ – 93 feet of total right of way dedication, 46.5 feet measured from the existing road centerline to each right of way line.
- d. ~~**Baxter Street (Section D-D)**~~ – 86 feet of total right of way dedication, 43 feet measured from the existing road centerline to each right of way line.
- e. ~~**Baxter Street Extension (Section E-E)**~~ – 93 feet of total right of way dedication, 46.5 feet measured from the existing road centerline to each right of way line.
- f. ~~**Proposed Public Street (Section F-F)**~~ – 73 feet of total right of way dedication, 36.5 feet measured from the existing road centerline to each right of way line.

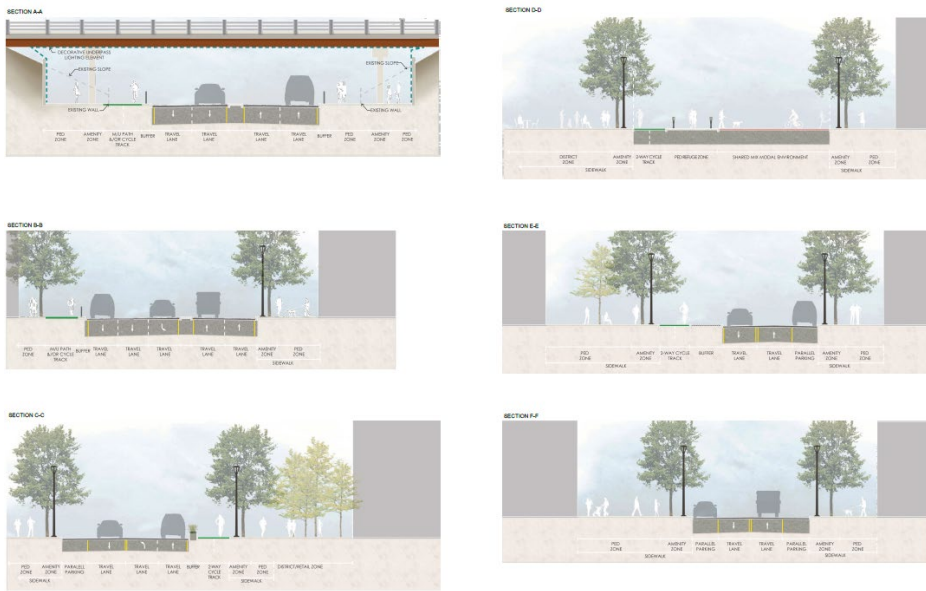
Update to Comment as a Result of the 08-16-2021 Site Plan:

The proposed and existing Morehead Street right of way dedication must be labeled dimensioned from the existing centerline. ~~**Outstanding comment (10/21/2021 Site Plan)**~~ – Revise the site plan conditional notes and legends that all new streets shall be determined as public or private during permitting. Revise cycle track along McDowell Street to include a sidewalk utility easement, where appropriate.

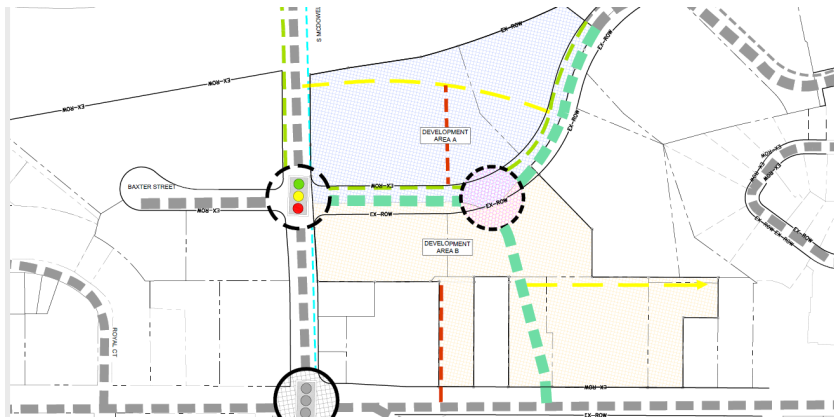
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Sheet RZ-1.1 – Typical Sections



Sheet RZ-1.3 – Ped and Bike Connectivity

4. ~~Revise the Rezoning Sheet RZ 1.0 and RZ 1.1 by establishing a cross section associated with the proposed private street connecting McDowell Street to Baxter Street Extension. Include the cross section on Rezoning Sheet RZ 1.1.~~

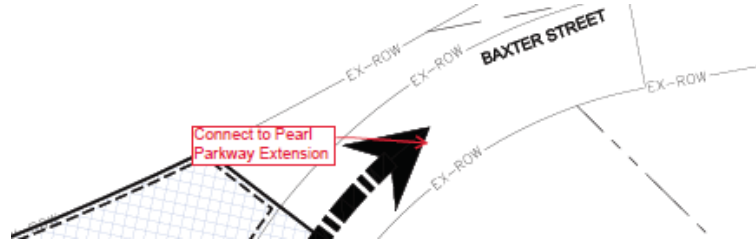


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5. ~~Revise the site plan sheets and conditional notes by committing to connect the roadway improvements, pedestrian improvements, and the proposed cycle track associated with the Baxter Street Extension, Cross Section E-E, to the relative infrastructure associated with the Pearl Parkway Extension, SDRMUR 2020-00026.~~



6. ~~Revise the conditional notes by including a note stating: Any improvements within NCDOT right of way, i.e. I-277 Underpass Improvements and Morehead Street Signalized Pedestrian Crossing, will be subject to NCDOT approval during the permitting process.~~
7. ~~Revise the site plan and conditional notes to include Advisory Information, Notes 7 and 9, in regards to Encroachment Agreement requirements for non-standard item(s) proposed within the public right-of-way and the street and pedestrian lighting process.~~
8. ~~Site plan note(s) specifying dedication and fee simple conveyance of all rights-of-way to the City and NCDOT before the site's first building certificate of occupancy is issued is needed. CDOT requests rights-of-way set at 2' behind back of sidewalk where feasible.~~
9. ~~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 is needed. The petitioner may phase transportation improvements if said improvements and phasing are explicitly described in site plan notes.~~

10. Outstanding comment (10/21/2021 Site Plan):

~~Technical Correction: Revise site plan conditional notes for all TDM Strategies to align with phased improvements Phase 1A or Phase 1B.~~

- (5) ~~SOUTH MCDOWELL STREET AND ACCESS #1~~
- (a) ~~CONSTRUCT THE WESTBOUND APPROACH WITH A SINGLE INGRESS LANE AND A SINGLE EGRESS LANE.~~
- (b) ~~CONSTRUCT A SOUTHBOUND LEFT-TURN LANE FROM SOUTH MCDOWELL STREET INTO ACCESS #1 WITH A MINIMUM OF 100 FEET OF STORAGE.~~
- (c) ~~PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR A NEW BUILDING CONSTRUCTED IN PHASE 1B OF THE DEVELOPMENT, PETITIONER MUST SUBSTANTIALLY COMPLETE THE TRANSPORTATION IMPROVEMENTS SET OUT BELOW IN THIS PARAGRAPH 5.U (THE "PHASE 1B TRANSPORTATION IMPROVEMENTS"). A NEW BUILDING IN PHASE 1B THAT WILL TRIGGER THE COMMITMENT TO CONSTRUCT THE PHASE 1B TRANSPORTATION IMPROVEMENTS SHALL MEAN A NEW BUILDING CONSTRUCTED ON THE SITE THAT IS NOT DEVOTED TO THE PHASE 1A USES DESCRIBED ABOVE IN PARAGRAPH 5.R.~~
- (1) ~~THE RELEVANT TDM STRATEGY COMMITMENTS SHALL BE IMPLEMENTED AS MORE PARTICULARLY DISCUSSED IN PARAGRAPH 5.X.~~
- (2) ~~EAST MOREHEAD STREET AND SOUTH MCDOWELL STREET (ON NORTH ROAD)~~
- (a) ~~CONSTRUCT A SECOND EASTBOUND LEFT-TURN (CREATING DUAL LEFT-TURN LANES) FROM EAST MOREHEAD STREET ONTO SOUTH MCDOWELL STREET WITH STORAGE, OR~~
- (b) ~~REALIGNMENT OF DILWORTH ROAD TO CREATE THE FOURTH LEG OF THE EAST MOREHEAD STREET AND STREET INTERSECTION WAS ALSO IDENTIFIED AS AN ALTERNATIVE FOR THIS INTERSECTION. THIS NEW INTERSECTION WOULD BE SIGNALIZED AND A THREE-LANE CROSS-SECTION WOULD BE PROVIDED ON THE EAST AND SOUTHBOUND APPROACHES.~~
- (c) ~~ADDITIONAL COORDINATION WITH NCDOT AND CDOT IS REQUIRED TO DETERMINE THE FEASIBILITY AND DESIRABILITY OF THESE IMPROVEMENTS.~~
- (3) ~~EAST MOREHEAD STREET AND KENLWORTH AVENUE~~
- (a) ~~EXTEND THE NORTHBOUND DUAL LEFT-TURN LANES FROM KENLWORTH AVENUE ONTO E MOREHEAD STREET TO PROVIDE 350 FEET OF STORAGE. ADDITIONAL COORDINATION WITH NCDOT AND CDOT IS REQUIRED TO DETERMINE THE FEASIBILITY AND DESIRABILITY OF THESE IMPROVEMENTS.~~
- (4) ~~EAST STONEWALL STREET AND SOUTH MCDOWELL STREET~~
- (a) ~~INSTALL A LPH WITH BLANK-OUT SIGNS AND A RIGHT-TURN FLASHING YELLOW ARROW FOR THE WESTBOUND EAST STONEWALL STREET APPROACH.~~
- (b) ~~COORDINATE WITH CDOT AND BROOKLYN VILLAGE ON THE EXTENSION OF THE PROPOSED CYCLE TRACK TO EAST STONEWALL STREET.~~
- (5) ~~SOUTH MCDOWELL STREET AND ACCESS #2~~
- (a) ~~CONSTRUCT THE WESTBOUND APPROACH WITH A SINGLE INGRESS LANE AND A SINGLE EGRESS LANE.~~
- (b) ~~CONSTRUCT THE SOUTHBOUND APPROACH OF STREET A WITH ONE INGRESS LANE AND ONE EGRESS LANE.~~
- (c) ~~INSTALL A HAWK SIGNAL, AND~~
- (d) ~~CONSTRUCT AN EASTBOUND LEFT-TURN LANE FROM EAST MOREHEAD STREET INTO STREET A WITH A MINIMUM OF 100 FEET OF STORAGE, OR~~
- (e) ~~REALIGNMENT OF DILWORTH ROAD TO CREATE THE FOURTH LEG OF THE EAST MOREHEAD STREET AND STREET INTERSECTION WAS ALSO IDENTIFIED AS AN ALTERNATIVE FOR THIS INTERSECTION. THIS INTERSECTION WOULD BE SIGNALIZED AND CONSIST OF THE FOLLOWING LANES:~~
- (i) ~~EASTBOUND LEFT-TURN LANE WITH 175 FEET OF STORAGE.~~
- (ii) ~~WESTBOUND LEFT-TURN LANE WITH 100 FEET OF STORAGE.~~
- (iii) ~~NORTHBOUND LEFT-TURN LANE AND THROUGH RIGHT LANE WITH 50 FEET OF STORAGE.~~
- (iv) ~~SOUTHBOUND LEFT-TURN LANE AND THROUGH RIGHT LANE WITH 100 FEET OF STORAGE.~~
- (7) ~~EAST MOREHEAD STREET AND ACCESS #1~~
- (a) ~~CONSTRUCT THE SOUTHBOUND APPROACH WITH A SINGLE INGRESS LANE AND A SINGLE EGRESS LANE AND AN INTERNAL PROTECTED STEM OF 100 FEET.~~

11. ~~New Comment as a Result of the 08-16-2021 Site Plan: Revise the conditional notes by incorporating the following note: "Prior to Phase 1A permitting approval, the Petitioner will evaluate traffic calming measures on Dilworth Road, between Morehead Street and Romany Road. Additionally, the Petitioner will coordinate the traffic calming measures with CDOT and implement accordingly."~~

12. ~~New Comment as a Result of the 08-16-2021 Site Plan: Revise the conditional notes by incorporating the following note: "All public roadway improvements will be subject to the standards and criteria of~~

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~~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. 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 35' x 35' 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>