

Planning Board Meeting August 22, 2022 7:00 p.m.

AGENDA

- A. Call to Order
 - 1. Pledge of Allegiance
 - 2. Invocation
 - 3. Approval of July 25, 2022 Planning Board meeting minutes
- B. Regular Agenda
 - 1. MA 22-03 Parker Ridge Rezoning
 - 2. Land Development Ordinance Round 3 Technical Amendments Landscape Section
- C. Communications
 - 1. Planning Director's Report
 - 2. Town Attorney's Report
 - 3. Other Business
 - 4. Adjournment

The Town of Rolesville is committed to providing accessible facilities, programs, and services for all people in compliance with the American with Disabilities Act. Should you need assistance or a particular accommodation for this meeting please contact the ADA Coordinator.



Planning Board Meeting July 25, 2022- 7:00 PM 502 Southtown Circle, Rolesville, NC 27571

MINUTES

PRESENT: Mark Powers, Chairman

Mike Moss, Vice-Chairman

Renorda Pryor, Board Member

Donnie Lawrence, Board Member

Steve Hill, Board Member

Meredith Gruber, Planning Director

Michael Elabarger, Senior Planner

Erin Catlett, Town Attorney

Shelly Raby, Planning Specialist

ABSENT: Jim Schwartz, Board Member, Davion Cross, Board Member, Michelle Medley,

Commissioner/Planning Board Liaison

A CALL TO ORDER

Chairman Powers called the meeting to order at 7:01 p.m.

A.1 PLEDGE OF ALLEGIANCE

The Board collectively recited the Pledge of Allegiance.

A.2 INVOCATION

Vice-Chairman Moss delivered the invocation.

A.3 APPROVAL OF MINUTES

Moved by Board Member Donnie Lawrence and Seconded by Board Member Steve Hill. The motion to approve the minutes of June 27, 2022, carried by unanimous vote.

B.1 PR 20-06- The Point North Phases 11,12,13 Preliminary Subdivision Plat

Senior Planner Mike Elabarger reviewed the previously approved project, noting this was being brought before the board again as a condition in SUP 18-09 from the Master Plan amendment approved in 2019.

Travis Fluitt, P.E., Kimley-Horn and Associates, Inc. gave a summary of the updated 2022 Traffic Impact Analysis study and answered questions.

Beth Trahos, Nelson Mullins Attorney, and Laura Holloman, McAdams Engineering spoke in favor of the project for the applicant.

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July 25. 2022

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Persons speaking in opposition, sighting traffic, safety, and connectivity concerns were

- 1. Maria Winn, 1018 Virginia Water Drive, Rolesville, NC
- 2. David Kodada, 516 Genovesa Drive, Rolesville, NC
- 3. Katherine Van Buren, 609 Vigo Court, Rolesville, NC
- 4. Heather Swisher, 521 Genovesa Drive, Rolesville, NC
- 5. Jeff Hester, 513 Genovesa Drive, Rolesville, NC
- 6. Barbara Mercer, 504 Genovesa Drive, Rolesville, NC
- 7. John Mercer, 504 Genovesa Drive, Rolesville, NC
- 8. Michael Elliot, 605 Vigo Court, Rolesville, NC
- 9. Kaitlyn Camacho, 508 Genovesa Drive, Rolesville, NC

Chairman Powers, Vice-Chairman Moss, Board Member Pryor, and Board Member Hill discussed the buffer, width of the streets, flood concerns, sidewalk placement, and speed reduction measures.

Vice-Chairman Mike Moss made a motion to recommend approval of moving The Point North Phases 11,12,13 Preliminary Subdivision Plat forward to the Board of Commissioners on September 6, 2022, for a Quasi-Judicial hearing; Seconded by Board Member Donnie Lawrence; The motion carried with a four in favor, one in opposition (4-1) vote. Board Member Pryor being in opposition.

B.2 Land Development Ordinance (LDO) Text Amendments – Round 3

Planning Director Meredith Gruber informed the Board that she needed more time to work on the amendments and will plan to present a draft at the next Planning Board Meeting on August 22, 2022.

There was no motion or action taken.

C.1 Planning Director's Report

Planning Director Meredith Gruber noted the number of permits processed.

C.2 Town Attorney's Report

Nothing to report.

C.3 Other Business

No other business was discussed.

C.4 Adjournment

Board member Donnie Lawrence made a motion to Adjourn, seconded by Member Steve Hill, and the motion was carried by a five to zero, (5-0), with two (2) absent votes. The meeting adjourned at 8:31 p.m.

Mark Powers, Planning Board Chairman

Shelly Raby, Planning Specialist

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July 25. 2022

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Memo

To: Town of Rolesville Planning Board **From:** Michael Elabarger, Senior Planner

Date: August 18, 2022

Re: Map Amendment (Rezoning) MA 22-03 / Parker Ridge

Application Request

Lennar of Carolinas, LLC, proposes a Map Amendment (Rezoning) for 86.89 acres – 57.89 acres as a Residential Medium Density – Conditional District, as a Cluster Development (subdivision), and 29.00 acres as a Residential Hight Density – Conditional District. The rezoning would facilitate development as shown in Attachment 5, Concept Plan, for maximums of 170 single-family detached residential lots and 120 townhome lots. The project proposes approximately 38 acres (~43%) of overall open spaces, being a combination of passive and active areas including public Greenway trails, an active amenity center, and areas of non-development spread across the entire development. The project centers on the existing Redford Place Drive and the distinctive large round-about, introducing two new streets to that circle, and providing several street connections both present and future. The proposed overall density of residential lots is 3.3 dwelling units per acre, with the single-family detached portion just under 3 dwelling units per acre (170/57.89 acres), and the townhome component just over 4 dwelling units per acre (120/29.00 acres). There is no phasing plan proposed at this time.

The site is located on both sides of Redford Place Drive, and is contiguous with the Wall Creek, Cedar Lakes, and Village of Rolesville subdivisions, all of which are fully (or nearing) build out. It is also proximate to the "Redford Place" shopping center (Food Lion anchor), the Town Community & Ballfield Park, Rolesville Elementary School, and two undeveloped tracts (one privately owner, the other Town-owned). The property is currently undeveloped, with some cleared areas along Redford Place Drive, but largely wooded across the remainder.

The property is currently zoned a mix of the RL (Residential Low Density under the LDO) and the R&PUD District under the Unified Development Ordinance (UDO); the R&PUD District was vacated as a zoning district with the adoption of the Land Development Ordinance in 2021, and there is no new, LDO District to capture it. See details on the existing zoning further in this Memo.

Background

Summary Information

Acreage: 86.89 acres

Current Zoning: Approximately 61 acres Residential Low Density per the Land

Development Ordinance (LDO); approximately 27 acres Residential and Planned Unit Development (R&PUD) zoning district per the Unified

Development Ordinance (UDO).

Property Owner: Rolesville Development, LLC - PIN 1758988411, 1758983710,

1758884271 (2 tracts)

Developer: Lennar of Carolinas, LLC / Charlie Yokley
Project Contacts: Parker Poe – Collier Marsh / Matt Carpenter

Applicant Justification

Please see Attachment 5 for the Applicant's written Statement of Justification for this Map Amendment request.

Concept Plan and Conditions of Approval

The application includes Exhibit C., a set of seven (7) plan sheets that detail existing conditions, the proposed Zoning Districts, and several images of a Concept Plan drawing of a potential layout of streets, lots, and open spaces. Details include the intended service of some townhome lots by rear-loaded alleys as opposed to front-loaded streets, and associated planned lot widths; single family detached lots show as being all front-loaded. Single family detached lots in the RM District are shown as utilizing the Cluster Development option of a minimum 40' lot width (non-Cluster minimum is 85'). These concept drawings include the disclaimer (see also Condition #1) that the locations of shown features are conceptual for illustrative and context purposes only, and not meant to be final; they will be determined at future stages of development (Preliminary Subdivision Plat and Construction Drawings).

A voluntary set of Conditions of Approval, dated 04-01-2022, accompany the Concept Plan as Exhibit D. These commit the ultimate development to the ceilings of 170 single-family detached lots and 120 townhome lots, and prohibits certain uses in each of the proposed Districts.

These are included as attachments to this Memo as Attachments 6 and 7, respectively.

Neighborhood Meeting

The applicant held a neighborhood meeting on August 10, 2022 at the Town of Rolesville Community Center; a summary memo is included as Attachment 9. The meeting lasted approximately 90 minutes, with approximately 15 members of the public attending.

Comprehensive Plan

Land Use

The Future Land Use Map (see Attachment 2), a component of the 2017 Comprehensive Plan, identifies the entire subject property as the High Density Residential land use category. This anticipates development of multiple types of residential dwellings. The proposal includes single-family detached and single-family attached townhome dwelling units.

2021 Community Transportation Plan (CTP)

There are no streets within the project area that are detailed in the 2021 CTP as existing or future thorougfares. Redford Place Drive is an existing collector level roadway with a 70' right-of-way width and 2 travel lanes; it is a driveway-loaded residential collector within the Villages at Rolesville subdivision, and then functions as a non-residential collector as it nears Main Street (and expands to five lanes). The project proposes all new residential level streets to serve the lots; right-of-way widths show as 50', with street surfaces of 27' from back of curbs, and sidewalks on both sides. Alleys are shown as 20'right-of-way and 16' of pavement.

Traffic Impact Analysis (TIA)

The consultant firm Stantec performed the Traffic Impact Analysis for this project on behalf of the Applicant and the Town; see Attachment 8 for the Final Report dated August 15, 2022. Traffic counts were obtained on Thursday, June 9, 2022 at four locations. The project inputs were 162 single-family (detached) homes and 114 townhomes, with build-out anticipated in 2028. Primary access is described as coming from the Redford Place roundabout, with an additional access (Concept Plan Street D) via extension of School Street from S. Main Street.

TIA SUMMARY-TRIP GENERATION	Entering	Existing	Total
AM Peak (7-9 am)	47	123	170
PM Peak (4-6 pm)	134	86	220
Weekday Daily Trips			2,391

Five (5) intersections were studied for capacity analysis and level of service impact of this development.

TIA SUMMARY – Intersection Impro	vements
South Main at Old Rogers /	No Improvements. * Southbound Old Rogers should
School St.	consider RI/RO.
South Main at Redford Place /	No Improvements - Intersection functions at LOS E
Roger Rd.	under (existing) No Build and Build scenarios at PM
	Peak.
School St at School driveway/	No Improvements
Scarboro driveway	
Redford Place at School driveway	No Improvements
Redford Place at (Development)	Construct new streets at opposite sides of
Access A / Access B	roundabout, with 100' minimal internal protective
	stems

Consistency

The applicant's request for 170 single family detached and 120 townhome dwelling units, at an overall density of 3.3. dwelling units per acre, is <u>generally</u> consistent with the Town of Rolesville's Comprehensive Plan, but could be more in compliance with a wider variety of dwelling unit options, a density magnification of two or three times, and non-residential components to serve the residential, both the nearby existing and the proposed.

Development Review

The Technical Review Committee (TRC) reviewed two submittals of this rezoning request, concept plan, and conditions of approval during 2022. Comments and topics were discussed, and revisions made to the Concept plan set accordingly.

Staff Recommendation

Staff finds that the proposed Rezoning and associated residential project is generally consistency with the Comprehensive Plan on many fronts, but could greater fulfill the High Density Residential vision with a more varied, more dense, and mixed use overall development. For these reasons, Staff offers no recommendation on the application.

Suggested Planning Board motions

- I move to Recommend Approval of MA 22-03 Parker Ridge to the Town Board of Commissioners.
- I move to Recommend Approval of MA 22-03 Parker Ridge to the Town Board of Commissioners, with additional conditions (*state them*).
- I move to Recommend Denial of MA 22-03 Parker Ridge to the Town Board of Commissioners, for the following reasons: (*state them*).

Attachments

#	Туре	Date
1	Vicinity Map	
2	Future Land Use Map (2017 Comprehensive Plan)	
3	Existing Zoning Map	
4	Application & Property Owners	02-01-22 / 08-12-22
5	Statement of Justification	08-12-22
6	Concept Plan set (7 sheets)	03-31-22
7	Conditions of Approval	04-01-22
8	Traffic Impact Analysis (TIA)	08-15-22
9	Neighborhood Meeting Minutes/notes	08-10-22

ATTACHMENT 1



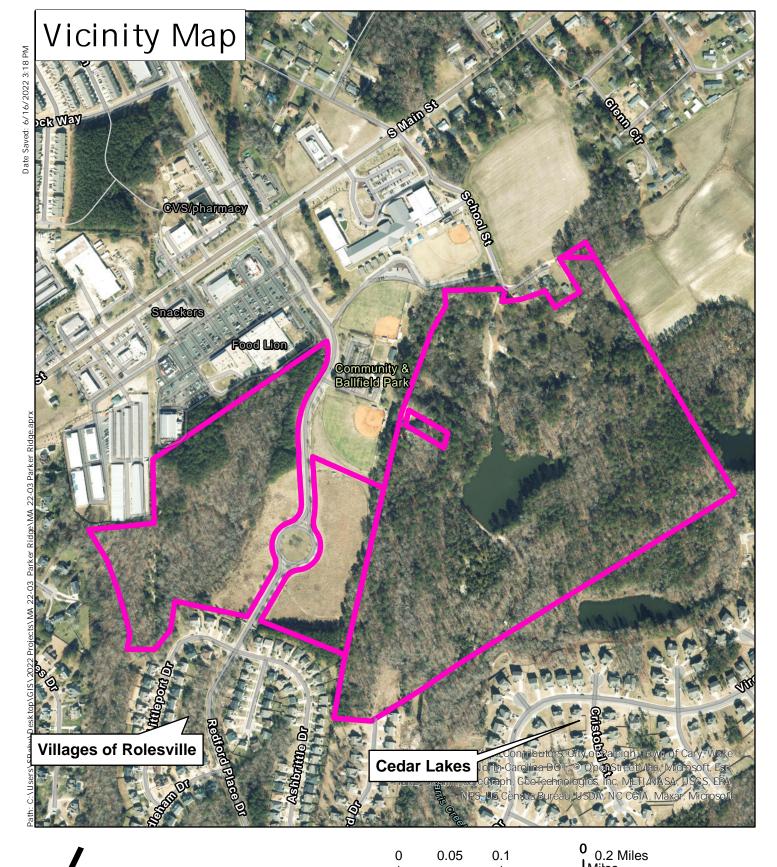
Case: MA 22-03 Parker Ridge

Address: 82 School St., O School St., 201 Redford Place Dr., 120 School St.

Miles

PIN 1758988411; 1768091558; 1758884270; 1758983710

Date: 04.18.2022



ATTACHMENT 2

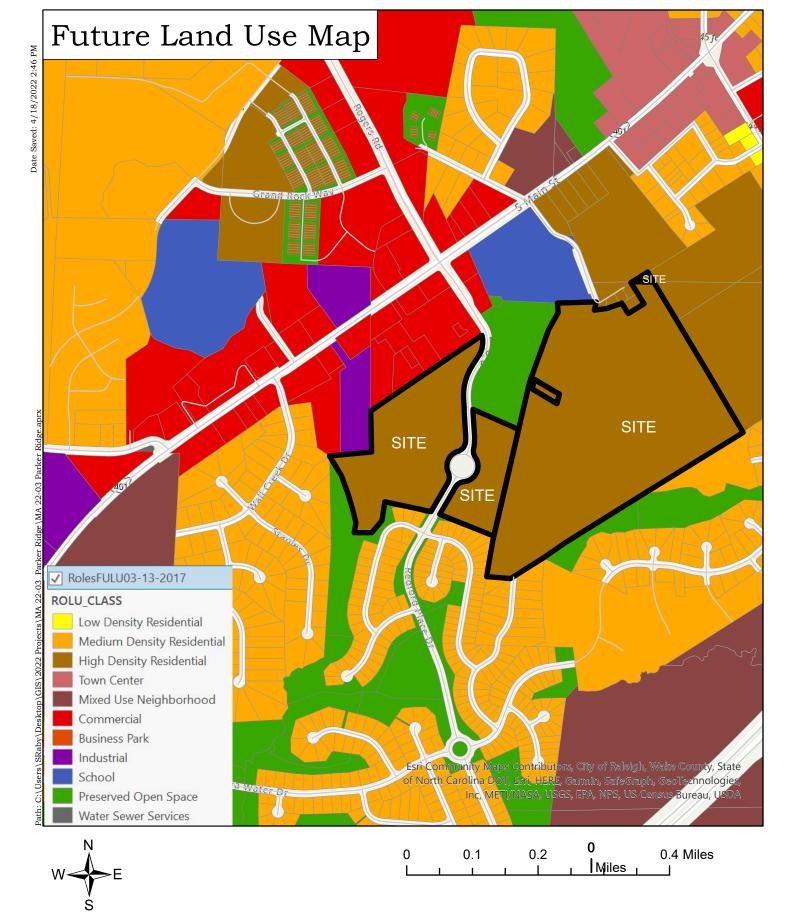


Case: MA 22-03 Parker Ridge

Address: 82 School St., 0 School St., 201 Redford Place Dr., 120 School St.

PIN 1758988411; 1768091558; 1758884270; 1758983710

Date: 04.18.2022



ATTACHMENT 3

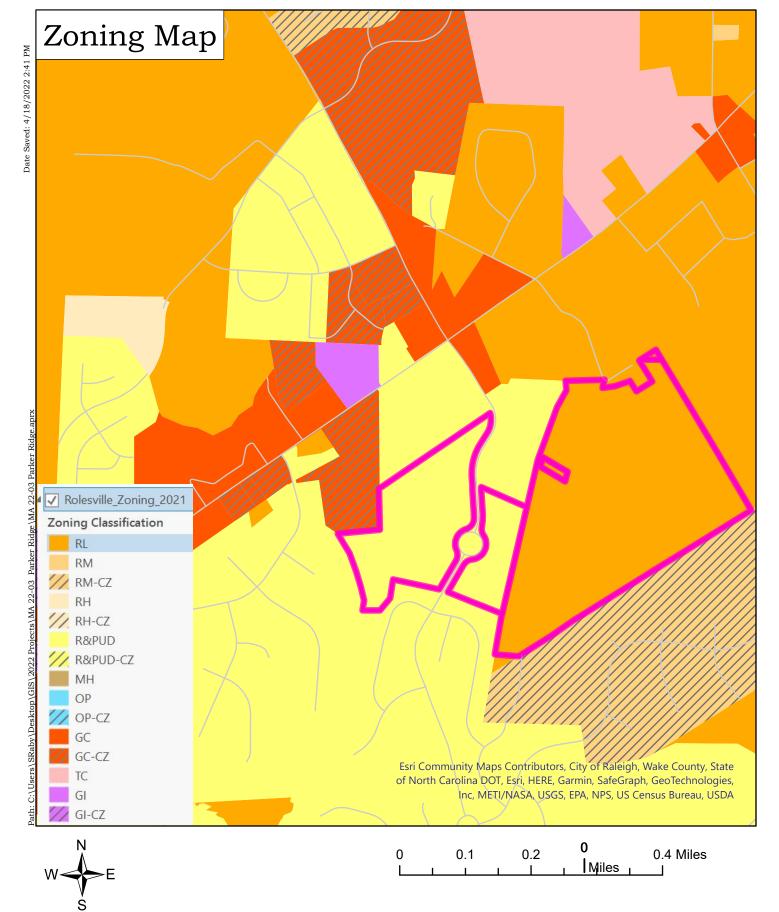


Case: MA 22-03 Parker Ridge

Address: 82 School St., 0 School St., 201 Redford Place Dr., 120 School St.

PIN 1758988411; 1768091558; 1758884270; 1758983710

Date: 04.18.2022





Contact Information

MA 22-03
Case No.____
Date rcvd 2-1-2022

Property Owner See attached addendum for all owner contact	ct information
Address See attached addendum	City/State/Zip See attached addendum
Phone See attached addendum	Email See attached addendum
Developer Lennar Carolinas LLC c/o Collier Marsh	
Contact Name Collier Marsh	
Address 301 Fayetteville Street	City/State/Zip Raleigh, NC 27601
Phone 919-835-4663	Email colliermarsh@parkerpoe.com
Property Information	
Address 82 School Street, 201 Redford Place Drive, and 120 S	School Street (See attached addendum for additional information by parcel)
Wake County PIN(s) 1758988411, 1758884270, 1768091558, and	1 1758983710
Current Zoning District RL, R and PUD	Requested Zoning District RM and RH
Total Acreage 88.36	
Owner Signature	
I hereby certify that the information contained herein	n is true and completed. I understand that if any item is
found to be otherwise after evidentiary hearing before	ore the Town Board of Commissioners, that the action of the
Board may be invalidated.	
Signature av. 7 the P.L.	Date <u>۱۲- ع۹ - ۵</u> ۷ ع
/	
STATE OF NORTH CAROLINA	
COUNTY OF 6011 Too	11
ا, a Notary Public, do hereby certify thatا	Clam Merold Perer
personally appeared before me this day and acknow	wledged the due execution of the foregoing instrument. This
the 23	day RASA SIGNOV 20 21
My commission expires	2 THE NOTARY PARTY
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Signature / //////////////////////////////////	- 180a August 190
Town of R	COLOR WITH BUT COUNTY TO THE PROPERTY OF THE P
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Case	No	
Date		

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Current Zoning District RL, R and PUD	Requested Zoning District RM and RH
Total Acreage 88.36	***
Owner Signature	
I hereby certify that the information contained herein is	true and completed. I understand that if any item is
	the Town Board of Commissioners, that the action of the
Board may be invalidated.	
Signature	Date 12-29-202
\	
STATE OF NORTH CAROLINA	
COUNTY OF Sallow	
I, a Notary Public, do hereby certify that ().	ion Mrsy Parle St
personally appeared before me this day and acknowle	dged the due execution of the foregoing instrument. This
the	of of all only 20 21
My commission expires / (-) 2011	NOTANO
Signature / / / / / / / / / / / / / / / / / / /	39-al
Town of Role	assille CUATION
TOALLO LYON	S. Willillilling

PO Box 250 / Rolesville, North Carolina 27571 / RolesvilleNC.gov / 919.554.6517



Case	No.	
Date		

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Phone See attached addendum	Email See attached addendum
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Contact Name Collier Marsh	
Address 301 Fayetteville Street	City/State/Zip Raleigh, NC 27601
Phone 919-835-4663	Email colliermarsh@parkerpoe.com
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Wake County PIN(s) _1758988411, 1758884270, 1768091558, and 1	758983710
Current Zoning District RL, R and PUD	Requested Zoning District RM and RH
Total Acreage 88.36	
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Signature Catherine Fage Orale	Date 12/29/202
STATE OF NORTH CAROLINA COUNTY OF	Verne Fey Parke
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My commission expires 1.1.2027	ONOTAR
Signature Town of Ro	plesville Planning



Case No.	 	
Date		

Contact Information	
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Phone See attached addendum	Email See attached addendum
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Contact Name Collier Marsh	
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Total Acreage 88.36	
	perein is true and completed. I understand that if any item is before the Town Board of Commissioners, that the action of the Date 12/21/2.1
STATE OF NORTH CAROLINA COUNTY OF DIH	
I, a Notary Public, do hereby certify that	mas allarm
personally appeared before me this day and active	cknowledged the due execution of the foregoing instrument. This day of 20 20
My commission expires 12 2025 Signature	Seal NOTARL
Town	n of Rolesville Planning UBLIC
PO Box 250 / Rolesville, North	Carolina 27571+RolesvilleNC.goy (919.554.6517



Metes and Bounds Description of Property See attached Exhibit B

Parker Ridge Map Amendment Application Addendum

Amended August 12, 2022

Property and Owner Contact Information

Parcel No. 1

Property Information

Address: 82 School Street, Rolesville, NC 27571

Wake County PIN: 1758988411

Current Zoning District: RL

Requested Zoning District: RM and RH Total Acreage: 60.97 acres

Owner Contact Information

Property Owner: W. Harold Parker Jr and Catherine Faye Parker

Address: 149 Stonebridge Drive City/State/Zip: New London, NC 28127

Phone: Email:

Parcel No. 2

Property Information

Address: 201 Redford Place Drive, Rolesville, NC 27571

Wake County PIN: 1758884270
Current Zoning District: R and PUD
Requested Zoning District: RM and RH
Total Acreage: 26.99 acres

Owner Contact Information

Property Owner: Rolesville Development LLC

Address: PO Box 30803

City/State/Zip: Greenville, NC 27833

Phone: Email:

Parcel No. 3

Property Information

Address: 0 School Street, Rolesville, NC 27571

Wake County PIN: 1768091558

Current Zoning District: RL

Requested Zoning District: RM and RH Total Acreage: 0.14 acres

Owner Contact Information

Property Owner: W. Harold Parker Jr and Catherine Faye Parker

Address: 149 Stonebridge Drive City/State/Zip: New London, NC 28127

Phone: Email:

Parcel No. 4

Property Information

Address: 120 School Street, Rolesville, NC 27571

Wake County PIN: 1758983710

Current Zoning District: RL

Requested Zoning District: RM and RH Total Acreage: 0.4 acres

Owner Contact Information

Property Owner: W. Harold Parker, Jr. Address: 149 Stonebridge Drive City/State/Zip: New London, NC 28127

Phone: Email:

PPAB 7811120v1 2

Rezoning Justification

Parker Ridge is a proposed residential development with a combination of single family detached and single family attached (townhouse) uses. Parker Ridge will benefit the public by creating more housing choices and needed housing supply in a key location near downtown Rolesville. The request will allow for development that is consistent with nearby neighborhoods and will complement the established character of the surrounding area. Parker Ridge includes a significant amount of open space, offsetting any impacts of the development and preserving the natural features of the site. Parker Ridge is consistent with the Town of Rolesville's long range plans and will further the Town's goals outlines in the Rolesville Comprehensive Plan.

Parker Ridge is consistent with the Future Land Use Map. The subject property is designated as High Density Residential on the Future Land Use Map. (Comprehensive Plan p. 39) This category contemplates mixed use neighborhoods consisting of single family, duplex, condominium, townhouse or multifamily residential uses. (Comprehensive Plan p. 37) Parker Ridge will include the desired mixture of uses, with a combination of single family detached and single family attached uses, accompanied by substantial open space.

Parker Ridge also fulfills the following additional goals of the Comprehensive Plan:

Major Recommendation: Create a Diversity of New Houses, but Ensure High Quality and Limited Locations for Multi-Family Units. The Comprehensive Plan calls for more dense residential uses in limited, appropriate locations including locations closer to Main Street and areas closer to downtown. Parker Ridge is in close proximity to Main Street and Downtown. The site is a short walking distance from the many services and business currently located along Main Street and is an appropriate location for the proposed mix of residential uses.

Major Recommendation: *Celebrate Downtown*. The Comprehensive Plan seeks mixed use development, including diverse housing options, near downtown to activate the downtown core. Parker Ridge will offer a mix of residential uses in the vicinity of the downtown core, in a location walkable to existing commercial development and will help to activate the downtown core.

Finally, Parker Ridge is consistent with the existing zoning and entitlement for the subject property. The subject property is zone RL and R&PUD with approved special use permits SUP 01-02 and SUP 02-04 (collectively the "Permits"). The Permits cover the subject property as well as the approximately 202 acres to the south that is now the Village at Rolesville subdivision. The Permits only reference residential uses and allow residential uses for the portions of the property that are included in this rezoning. While specific plan details for the subject property are unknown, Parker Ridge fulfills the Permit's original vision with (1) substantial open space and greenway commitments throughout the development and (2) single family residential uses that were called for by the Permits and that complement the Villages at Rolesville subdivision.

3

PPAB 7811120v1

ENGINEER:
BGE, INC
\$400 WADE PARK BOULEVARD
RALEIGH, NORTH CAROLINA 27607
(919) 276-0111

ATTACHMENT 6 - CONCEPT PLAN

ARKER RIDGE

CONCEPT PLAN FOR

82 SCHOOL STREET

ROLESVILLE, NORTH CAROLINA 27571

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	0-70	
-one	SITE	
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SITE LOCATION MAP NOT TO SCALE

SHEET NUMBER SHEET TITLE
0-00 CO-00
SNOTHONO OMESKE 0-10
C1-1 EXISTING CONDITIONS
C2-0 PROPOSED ZOMING DISTRICT
C3-0 OVERALL CONCEPT PLAN
C3-1 ENLARGED CONCEPT PLAN
C3-2 ENLARGED CONCEPT PLAN

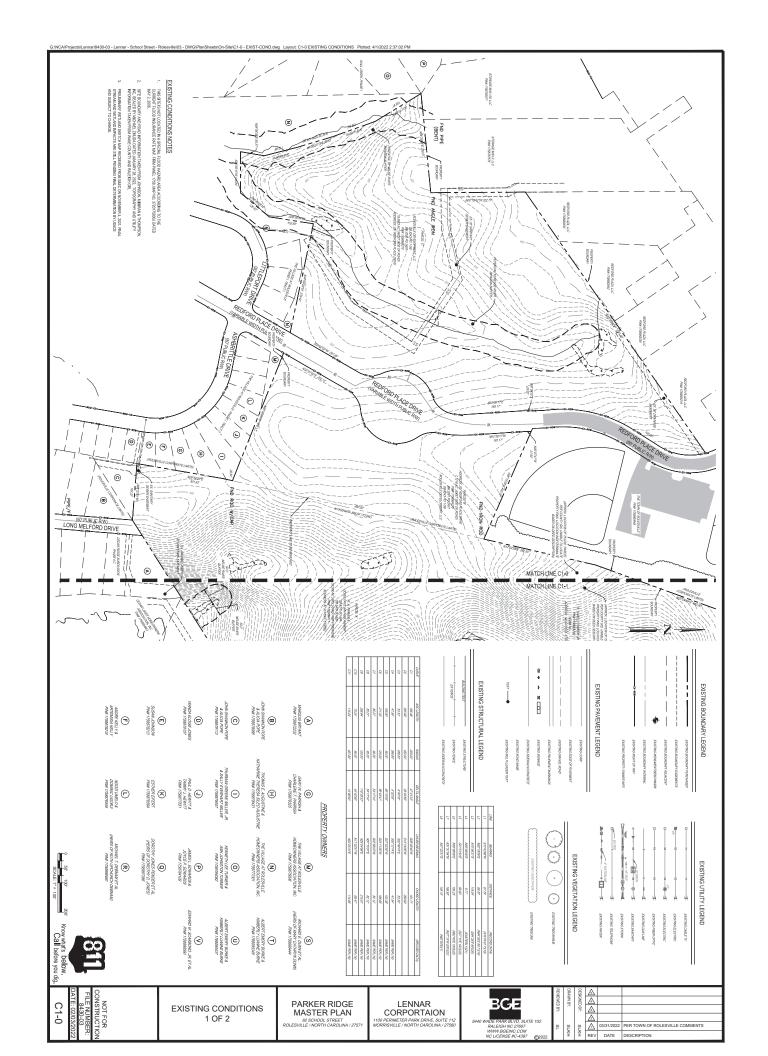
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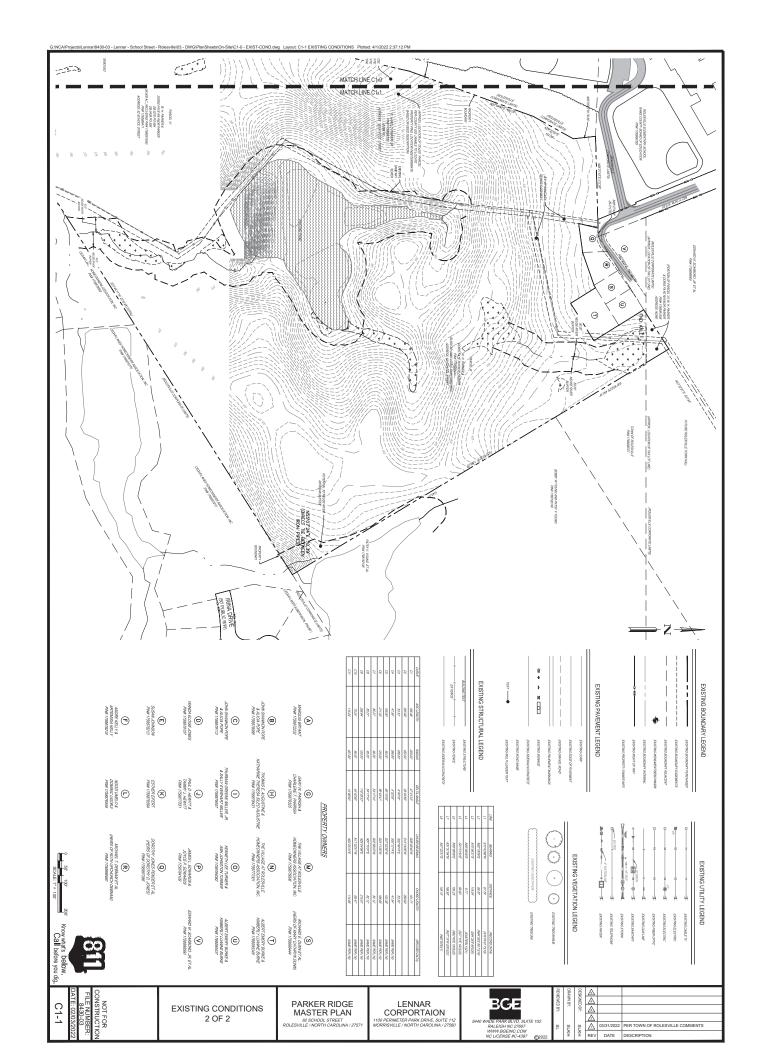
COVER SHEET

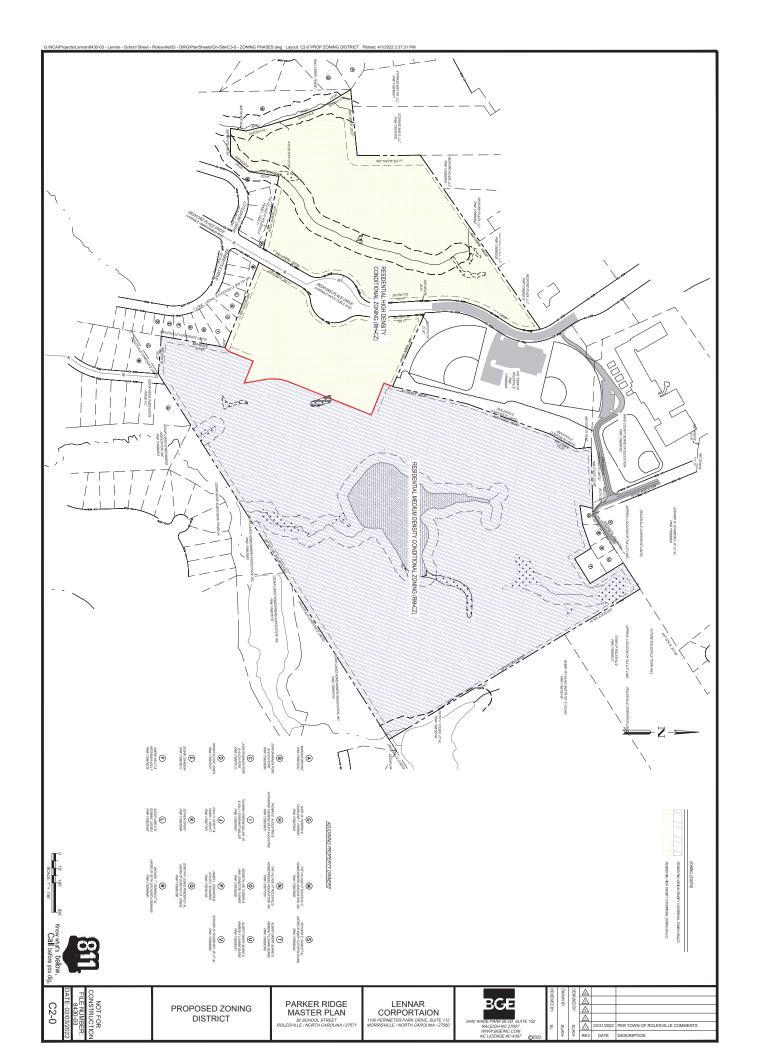
PARKER RIDGE MASTER PLAN 82 SCHOOL STREET LESVILLE / NORTH CAROLINA / 27

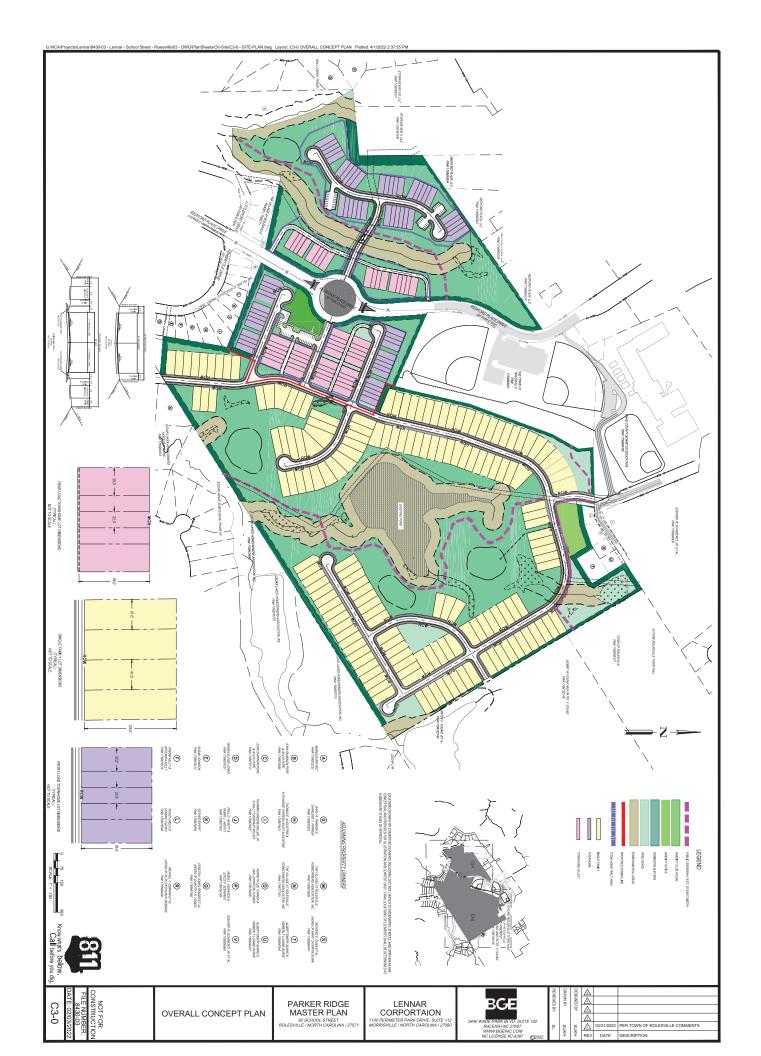
LENNAR CORPORTAION PERIMETER PARK DRIVE, SUITE PRISVILLE / NORTH CAROLINA / 2.

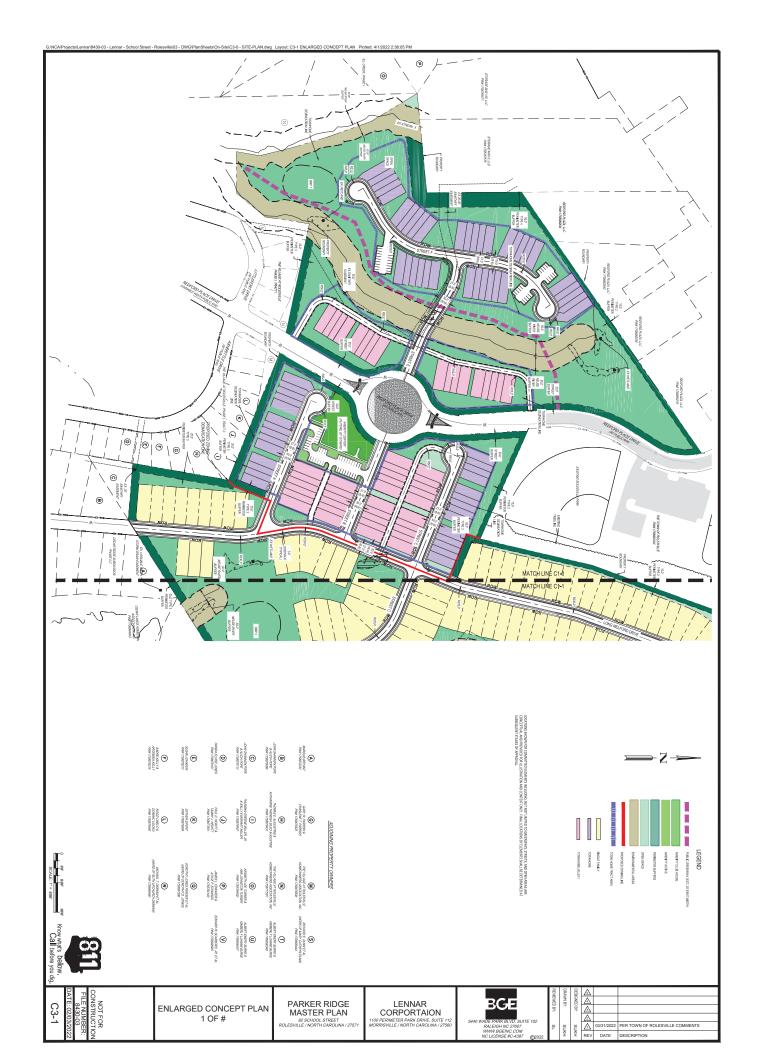
BGE













ATTACHMENT 7 - Proposed Conditions of Approval dated 4/1/22

EXHIBIT D

to Parker Ridge Rezoning Application Proposed Conditions Rev. 2 - April 1 2022

- 1. Development of the property shall be in substantial conformance with the accompanying **Exhibit C** Concept Plan. Locations shown for committed elements including, but not limited to greenways, streets, and open areas shown on the Concept Plan are conceptual and provided for illustration and context only. Final locations of elements shall be determined at subsequent stages of approval.
- 2. The following uses shall be prohibited on the portion of the property zoned Residential High Density (the "RH Parcel"):
 - a. Family Care Facility
 - b. Live-Work Unit
 - c. Residential Care (ALF, ILF, CCF)
 - d. Telecommunications Tower
- 3. The RH Parcel shall have a maximum of 120 townhouse dwellings.
- 4. The following uses shall be prohibited on the portion of the property zoned Residential Medium Density (the "RM Parcel"):
 - a. Family Care Facility
 - b. Telecommunications Tower
- 5. The RM Parcel shall have a maximum of 170 single-family detached dwellings.



Parker Ridge Traffic Impact Analysis

Rolesville, North Carolina

August 15, 2022

Prepared for:

Town of Rolesville 502 Southtown Circle Rolesville, NC 27571

Applicant:

Lennar Carolinas LLC 301 Fayetteville Street Raleigh, NC 27601

Prepared by:

Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606

Sign-off Sheet

This document entitled Parker Ridge Traffic Impact Analysis was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Town of Rolesville (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____

(signature)

Maggie Rogers

Reviewed by Pierre Tong

(signature)

Pierre Tong, PE

Approved by _____

(signature)

Matt Peach, PE, PTOE

SEAL 039265

NG INE EXPERIMENTAL DISTRIBUTION DISTRIBUTIO

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PARKER RIDGE TRAFFIC IMPACT ANALYSIS

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Executive Summary

The proposed Parker Ridge Development is located on both sides of Redford Place Drive south of US 401 Business (South Main Street) in Rolesville, NC. The proposed development will consist of 162 single-family homes and 114 townhomes. The development is anticipated to be completed in 2028.

The development is expected to generate 2,391 new trips per average weekday. In the AM and PM peak hours, the development is expected to generate 170 AM peak hour trips (47 entering and 123 exiting) and 220 PM peak hour trips (134 entering and 86 exiting).

Access to the site is envisioned to be provided by adding an eastbound and westbound approach to the existing roundabout on Redford Place Drive, located approximately 1,100 feet south of the school driveway. Additional access will be located on School Street just south of the Rolesville Elementary School and future Scarboro development driveways.

The purpose of this report is to evaluate the proposed development in terms of traffic conditions, evaluate the ability of the adjacent roadways to accommodate the additional traffic volumes, and recommend transportation improvements needed to mitigate congestion that may result from the additional site traffic. This report presents trip generation, trip distribution, traffic analysis, and recommendations for transportation improvements needed to meet anticipated traffic demands. This report examines the following scenarios for the AM and PM peak hours:

- 2022 Existing;
- 2028 No-Build:
- 2028 Build; and
- 2028 Build with Improvements.

Capacity analysis for the AM and PM peak hours in each scenario were performed for the following intersections:

- Old Rogers Road / School Street at South Main Street (US 401 Business);
- Redford Place Drive / Rogers Road at South Main Street (US 401 Business);
- School Street at School Driveway / Scarboro Driveway;
- Redford Place Drive at School Driveway; and
- Redford Place Drive at Access A / Access B.

Table ES-1 shows a summary of the capacity analysis results included in this Traffic Impact Analysis (TIA).

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Table ES-1: Level of Service Summary Table

Level of Service (Delay, sec/veh)	2022 Existing		2028 No-Build		2028 Build	
	AM	PM	AM	PM	АМ	PM
Old Rogers Road / School Street at South Main Street (US 401 Business)	C (22.5)	D (28.7)	F (70.7)	E (47.7)	F (63.5)	F (580.5)
Redford Place Drive / Rogers Road at South Main Street (US 401 Business)	D (35.2)	D (36.2)	D (51.8)	E (58.5)	D (55.0)	E (62.7)
School Street at School Driveway / Scarboro Driveway	-	-	A (8.9)	A (8.6)	A (9.0)	A (8.8)
Redford Place Drive at School Driveway	B (10.5)	A (9.7)	B (11.2)	B (10.3)	B (12.8)	B (11.1)
Redford Place Drive at Access A / Access B	-		-		A (4.1)	A (4.4)

With the addition of traffic generated by the proposed development, the northbound School Street approach of the South Main Street at Old Rogers Road / School Street intersection increases in delay such that LOS degrades from E to F. It is not uncommon for unsignalized side-street approaches to operate with high delays during peak periods. As traffic on Main Street does not stop, the overall delay at the intersection is relatively low at 2.3 seconds per vehicle in the AM peak hour and 18.9 seconds in the PM peak hour. If high delays are experienced on the stop-controlled approaches, drivers may opt for alternative routes. Even so, the intersection was evaluated for potential improvements due to meet the requirements of the LDO:

- The installation of a traffic signal would improve the LOS of the side streets significantly. This, however, is not anticipated to be permitted by NCDOT due to the proximity of the intersection to the adjacent signalized intersection of South Main Street at Redford Place Drive/Rogers Road, as well as the low traffic volumes on the side-street approaches of Old Rogers Road and School Street which are not anticipated to meet the warrants for installation of a traffic signal included in the Manual on Uniform Traffic Control Devices (MUTCD).
- The construction of dedicated left-turn turn-lanes on Old Rogers Road and School Street reduces delay but
 does not mitigate the impact of the proposed development. This is attributed to low volumes of traffic on the
 side-street approaches and high through volumes on South Main Street. The installation of turn lanes may
 also impact adjacent property owners. As a result, the installation of turn lanes on Old Rogers Road and
 School Street is not recommended.
- Converting the southbound approach of Old Rogers Road to right-in / right-out access by installing
 channelization was shown to reduce delays on the side streets such that School Street is anticipated to
 operate at LOS C and Old Rogers Road is anticipated to operate at LOS B during the PM peak hour. This
 would require left turns from Old Rogers Road to be redirected to Rogers Road and use the traffic signal at
 the intersection of South Main Street at Redford Place Drive / Rogers Road; increasing travel time for
 existing vehicles on the Old Rogers Road approach. Furthermore, the restriction of access without the



PARKER RIDGE TRAFFIC IMPACT ANALYSIS

installation of a median has only limited effectiveness. As a result, the restriction of access is not recommended.

Therefore, no improvements are recommended at the South Main Street at Old Rogers Road / School Street intersection in conjunction with this development. Consideration should be made for limiting the southbound Old Rogers Road approach to right-in / right-out-only access in the future.

The signalized intersection of South Main Street at Redford Place Drive / Rogers Road operates at LOS E during the PM peak hour in both the no-build and build scenarios. In this instance, the LDO requires mitigation if the proposed development causes the LOS to fall to the next lower letter grade. As the intersection operates at LOS E during both the no-build and build scenarios, no improvements are recommended at this intersection.

The following improvements are recommended to be constructed as part of the Parker Ridge Development:

Old Rogers Road / School Street at South Main Street

No improvements are recommended at this intersection.

Redford Place Drive / Rogers Road at South Main Street

• No improvements are recommended at this intersection

School Street at School Driveway / Scarboro Driveway

• No improvements are recommended at this intersection

Redford Place Drive at School Driveway

No improvements are recommended at this intersection

Redford Place Drive at Access A / Access B

 Construct Access A and Access B at the existing roundabout along Redford Place Drive south of the School Driveway intersection. Both intersections should have a minimum internal protective stem of 100 feet.

These recommendations are illustrated in Figure ES-1.



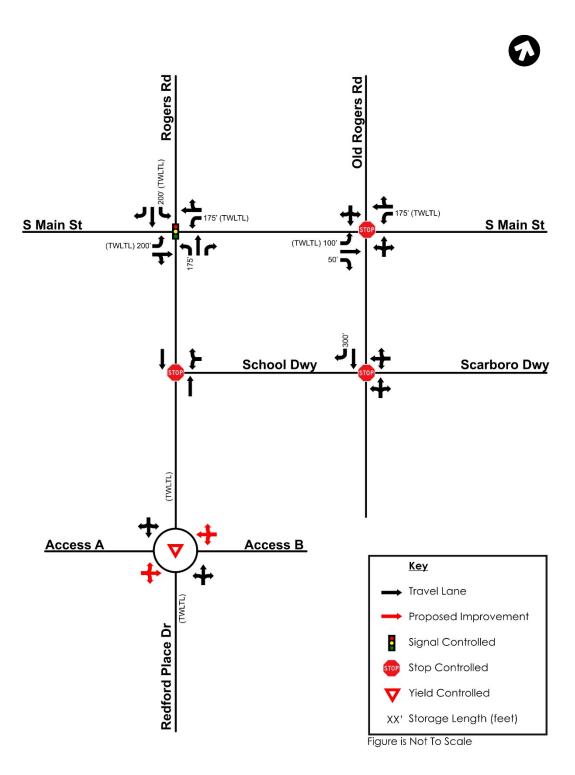


Figure ES-1: Recommended Improvements



PARKER RIDGE TRAFFIC IMPACT ANALYSIS

Introduction August 15, 2022

1.0 INTRODUCTION

The purpose of this report is to evaluate the transportation impacts of the proposed Parker Ridge development located on the east and west sides of Redford Place Drive, south of Main Street in Rolesville, NC. The project location is shown below in Figure 1.

This report evaluates the feasibility of the adjacent transportation system to accommodate the total Build traffic demands of the proposed development for the Build year of 2028. The proposed development will consist of 162 single-family homes and 114 townhouses.

Trip generation, trip distribution, and traffic analysis for the following AM and PM peak hour scenarios are included in this study:

- 2022 Existing;
- 2028 No-Build;
- 2028 Build; and
- 2028 Build Improved.

Figure 2 shows the conceptual site plan prepared by BGE. An electronic copy of the site plan is provided in the appendix.



Introduction August 15, 2022

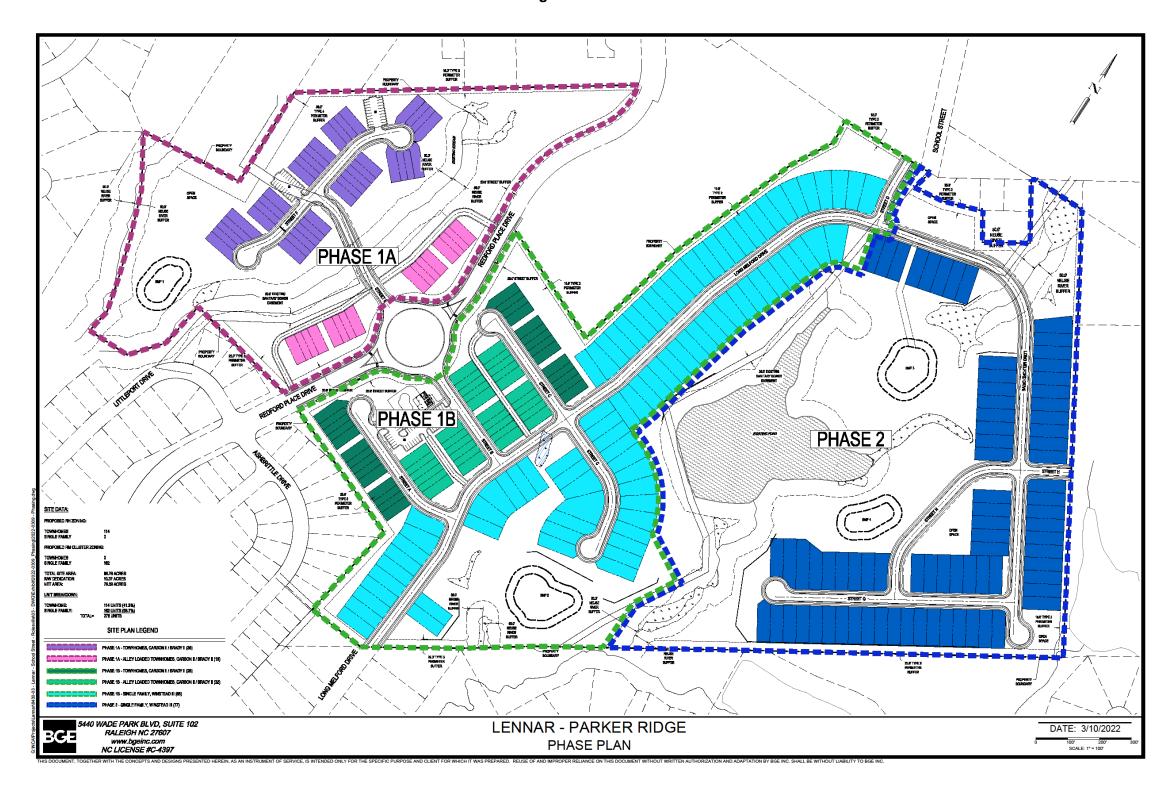
Old Rogers Road LEGEND Study Intersections Study Roads Site Driveways US 401 Business Redford Place Drive School Street Access C **Parker** Ridge Parker Ridge Access A Access B

Figure 1: Site Location



Introduction August 15, 2022

Figure 2: Site Plan



Inventory of Traffic Conditions August 15, 2022

2.0 INVENTORY OF TRAFFIC CONDITIONS

2.1 STUDY AREA

Stantec coordinated with the Town of Rolesville to determine the appropriate study area and assumptions. The following intersections were agreed upon to be analyzed to determine the impacts associated with this development.

- Old Rogers Road / School Street at South Main Street (US 401 Business);
- Redford Place Drive / Rogers Road at South Main Street (US 401 Business);
- School Street at School Driveway / Scarboro Driveway;
- Redford Place Drive at School Driveway; and
- Redford Place Drive at Access A / Access B.

2.2 PROPOSED ACCESS

Access to the site is envisioned to be provided by adding eastbound and westbound approaches to the existing roundabout on Redford Place Drive, located approximately 1,100 feet south of the school driveway. Additional access will be located on School Street just south of the Rolesville Elementary School and future Scarboro development driveways.

2.3 EXISTING CONDITIONS

Table 1 provides a detailed description of the existing study area roadway network. All functional classification and average annual daily traffic (AADT) information were obtained from the North Carolina Department of Transportation (NCDOT).



Inventory of Traffic Conditions August 15, 2022

Table 1: Existing Conditions

Road Name	Road Number	Primary Cross- Section	Functional Classification ¹	2020 AADT ² (vpd)	Speed Limit (mph)	Maintenance Agency
Main Street	US 401 Business	Two-Lane W/ TWLTL*	Principal Arterial	9,400 (east of Rogers) 12,000 (west of Rogers)	35	NCDOT
Old Rogers Road	-	Two-Lane Undivided	Local Road	•	35	Town of Rolesville
Redford Place Drive	-	Two-Lane Undivided	Local Road	•	25	Town of Rolesville
Rogers Road	SR 2052	Four-Lane w/TWLTL	Major Collector	7,600	35	NCDOT
School Driveway	-	Two-Lane One-Way	Private Driveway	-	-	WCPSS
School Street	-	Two-Lane Undivided	Local Road	-	35	WCPSS

^{*}TWLTL = Continuous Two-Way Left-Turn Lane

The existing lane configuration and traffic control for the study area intersections are illustrated in Figure 3.

2.4 FUTURE CONDITIONS

The NCDOT U-6241 project proposes to realign Burlington Mills Road and construct a new intersection with South Main Street (US 401 Business). U-6241 is also expected to provide improvements to the pedestrian and bike facilities along Main Street and add a concrete median along Main Street west of Rogers Road. As part of the project, geometric improvements will be made to Main Street in the study area, notably, removing the dedicated westbound right turn lane at the Main Street & Rogers Road/Redford Place Drive intersection and re-striping the existing westbound through lane to a shared thru-right turn lane. The construction year of this project is 2022.

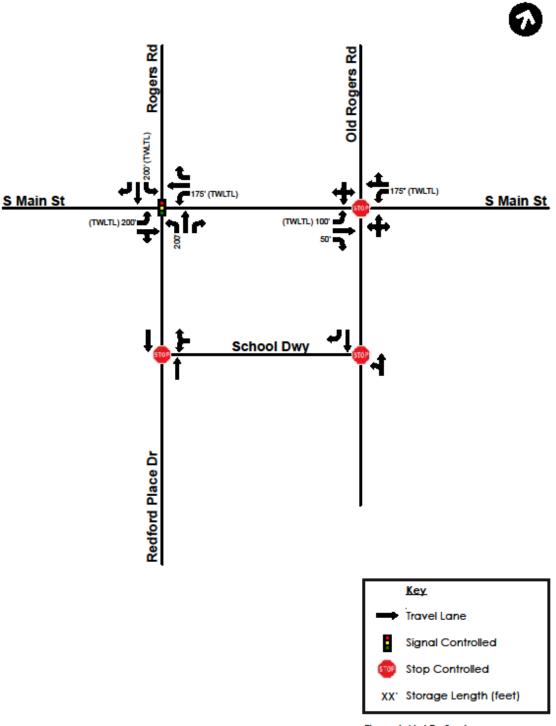
In addition, the Scarboro development will construct a new driveway along School Street, at the existing School Street & School Driveway intersection. The Scarboro development is discussed in more detail in Section 4.3

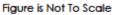
The future year lane configuration and traffic control for the study area intersections are illustrated in Figure 5.



Inventory of Traffic Conditions August 15, 2022

Figure 3: 2022 Existing Lanes and Traffic Control







Inventory of Traffic Conditions August 15, 2022

Figure 4: 2028 No-Build Lanes and Traffic Control

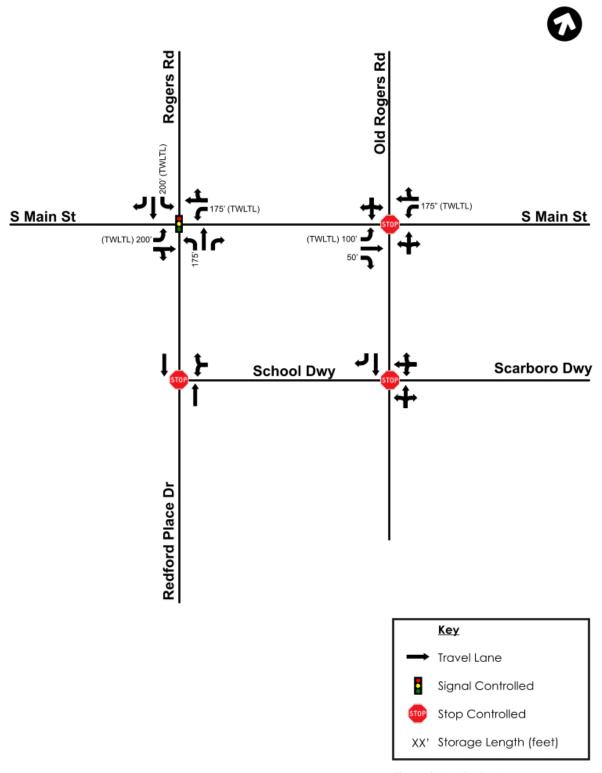


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Trip Generation and Distribution August 15, 2022

3.0 TRIP GENERATION AND DISTRIBUTION

3.1 TRIP GENERATION

Table 2 below shows the number of anticipated trips that will be generated by the proposed development. These values are calculated using the 11th Edition of the Institute of Transportation Engineers Trip Generation Manual³. No internal capture or pass-by reductions are expected with these land uses.

Table 2: Trip Generation

		Daily		AM Peak			PM Peak			
Land Use	Size	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Single-Family Detached Housing (LUC 210)	162 Units	1573	786	787	116	30	86	156	98	58
Single-Family Attached Housing (LUC 215)	114 Units	818	409	409	54	17	37	64	36	28
Total Trips Generated		2391	1195	1196	170	47	123	220	134	86

3.2 SITE TRIP DISTRIBUTION

To accurately determine the effect of the proposed development on the surrounding roadway network, an estimate of the expected distribution of traffic entering and exiting the site is needed. The following percentages were used in both the AM and PM peak hours:

- 50% to/from the west on Main Street;
- 25% to/from the east on Main Street; and
- 25% to/from the north on Rogers Road.

These percentages were developed using a combination of existing traffic volume counts, historic average annual daily traffic (AADT) recordings provided by NCDOT, and engineering judgment. Figure 5 shows the distribution described above as well as the turning movement percentages at each intersection. Figure 6 shows the actual trips that are expected to be generated through the study area intersections.



Trip Generation and Distribution August 15, 2022

Rogers Rd Old Rogers Rd ← 0% [20%] ← 0% [5%] **—** 0% [5%] **~** 0% [5%] **~** 0% [20%] S Main St S Main St 50% [0%] **L** 25% [0%] **L** 15% [0%] **L** 0% [10%] ----15% [0%] — 10% [0%] 0% [40%] 0% [15%] **─** 0% [65%] **←** 0% [35%] School Dwy **Scarboro Dwy** 10% [0%] **1** [%0] %06 School St **↑** 0% [15%] **↑** 0% [50%] **1** 75% [0%] **Access A** Access B 15% [0%] Redford Place Dr **Parker Ridge Development** Key Permitted Movement Exiting Percentage XX [XX] Entering Percentage

Figure 5: Site Trip Distribution



Figure is Not to Scale

Trip Generation and Distribution August 15, 2022

Figure 6: Site Trip Assignment Rogers Rd Old Rogers Rd 2 [7] 9 [27] **~** 2 [7] S Main St S Main St 60 [42] **↓** 31 [22] **↓** 20 [14] **↓** 12 [8] 20 [14] 7 [20] 31 [87] **1**6 [47] **Scarboro Dwy** 111 [78] 12 [8] School St **L** 7 [20] **T** 24 [67] **4** 93 [65] Access A Access B 18 [13] 🚅 Redford Place Dr **Parker Ridge Development** Key Permitted Movement AM Volumes XX [XX] PM Volumes



Figure is Not to Scale

Traffic Volumes August 15, 2022

4.0 TRAFFIC VOLUMES

4.1 DATA COLLECTION

AM (7:00 - 9:45 AM) and PM (4:00 - 6:00 PM) turning movement counts were collected on Thursday, June 9, 2022, at the following intersections:

- Old Rogers Road / School Street at South Main Street (US 401 Business);
- Redford Place Drive / Rogers Road at South Main Street (US 401 Business);
- School Street at School Driveway / Scarboro Driveway; and
- · Redford Place Drive at School Driveway.

Raw count data for these locations are included in the appendix.

Traffic volumes were not balanced due to the high-volume driveways between study intersections. Notably, the school entrance located on Main Street as well as the shopping center driveway along Redford Place Drive. The Existing (2022) traffic volumes are shown in Figure 7.

4.2 NO-BUILD TRAFFIC VOLUMES

The count data was grown by two percent (2%) per year to estimate traffic growth from 2022 to 2028. The historical growth traffic volumes were added to the existing volumes to determine the 2028 No-Build traffic volumes. Three approved developments in the vicinity of the study area were accounted for in this traffic analysis as discussed in the following sections. The 2028 No-Build traffic volumes are shown in Figure 11.

4.2.1 Cobblestone

Cobblestone is a mixed-use development proposed in the northwest quadrant of the intersection of Main Street & Young Street. The proposed development is expected to consist of 180 apartments, 18,200 square feet of municipal flex space, and 50,000 square feet of retail space. It is estimated to be built by 2023. The trips attributed to the Cobblestone approved development are shown in Figure 8. A copy of the *Traffic Impact Analysis for Cobblestone Crossing Mixed-Use* (Ramey Kemp & Associates, March 2021) is provided in the appendix.

4.2.2 Redford Place

Redford Place is a proposed 3-story, 19,500 square foot, mixed-use building with the top two stories being a medical/dental office and the ground-floor consisting of retail uses. The development is located on the east side of Redford Place Drive south of Main Street. The trips attributed to the Redford Place development are shown in Figure 9. A copy of the *Redford Place Traffic Impact Analysis* (Stantec, October 2019) is provided in the appendix.

As part of the Redford Place development, the storage of the northbound left-turn lane at the Main Street & Rogers Road development will be reduced from 200 feet to 175 feet of full-width storage, to accommodate the installation of a southbound left-turn lane on Redford Place Drive at the Site Driveway.



Traffic Volumes August 15, 2022

4.2.3 Scarboro Property

Scarboro Property is a proposed development expected to consist of 240 units of senior adult housing. The trips attributed to the Scarboro Property development are shown in Figure 10. A copy of the *Site Analysis – Scarboro Property* (Ramey Kemp Associates, May 2021) is provided in the appendix. A new site driveway will be built on School Street at the existing School Street & School Driveway intersection.

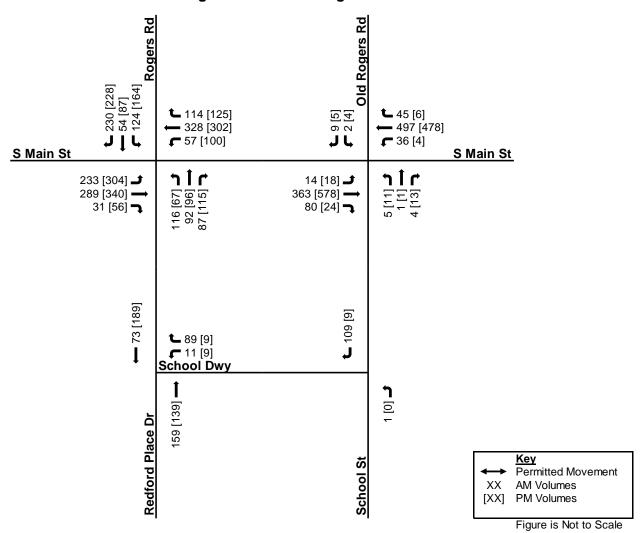
4.3 BUILD TRAFFIC VOLUMES

The 2028 Build traffic volumes include the 2028 No-Build traffic, approved development traffic, and the proposed development traffic discussed in section 3.0. The 2028 Build traffic volumes are shown in Figure 12.



Traffic Volumes August 15, 2022

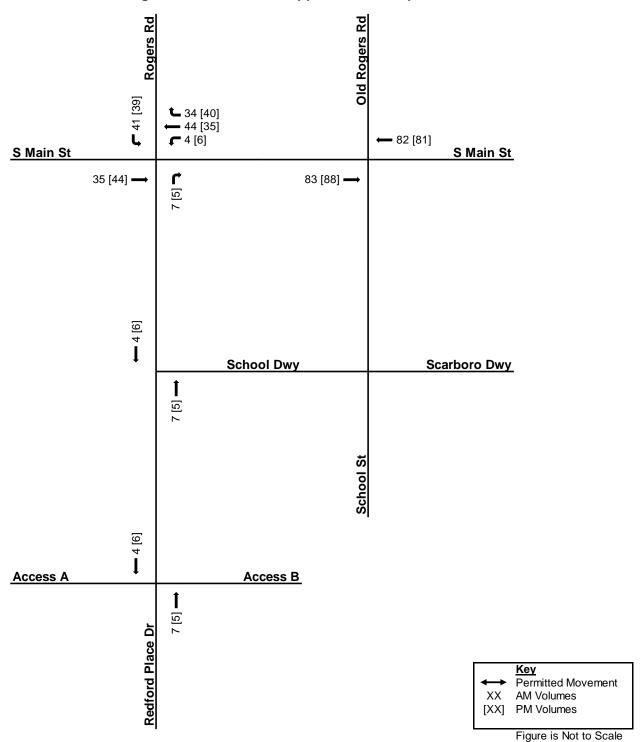
Figure 7: 2022 Existing Traffic Volumes





Traffic Volumes August 15, 2022

Figure 8: Cobblestone Approved Development Volumes





Traffic Volumes August 15, 2022

Figure 9: Redford Approved Development Volumes Rogers Rd 24 [6] I **~** 42 [12] **←** 42 [12] S Main St S Main St 26 [21] **L** 13 [10] **L** 22 [19] **L** 49 [13] 22 [19] ---**School Dwy Scarboro Dwy** 6 [2] **1** 3 [3] Access A Access B 6 [2] Redford Place Dr Key Permitted Movement



AM Volumes

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[XX] PM Volumes

XX

Traffic Volumes August 15, 2022

Figure 10: Scarboro Approved Development Volumes

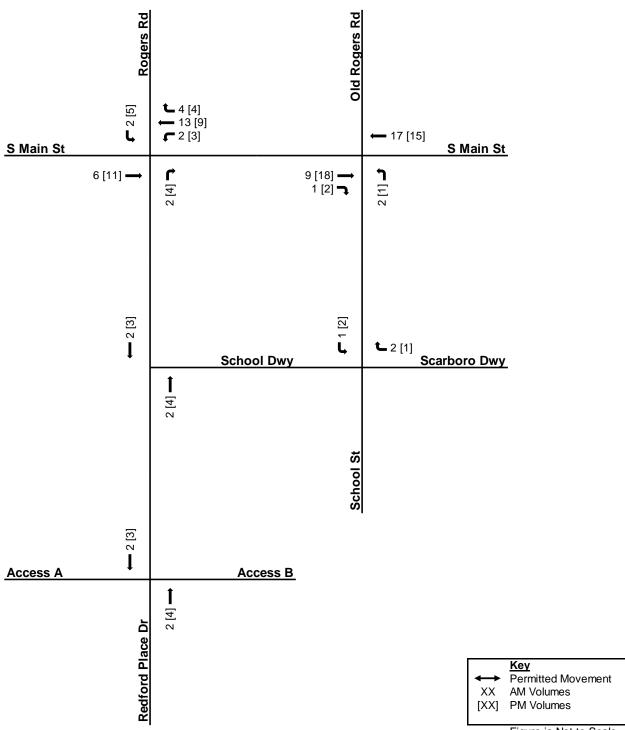
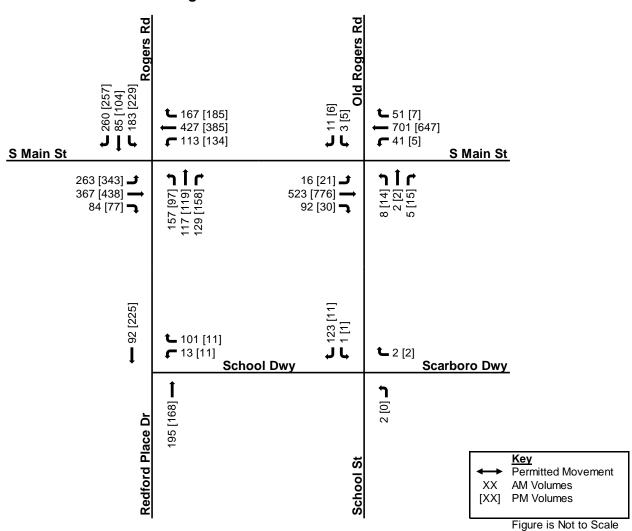


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Traffic Volumes August 15, 2022

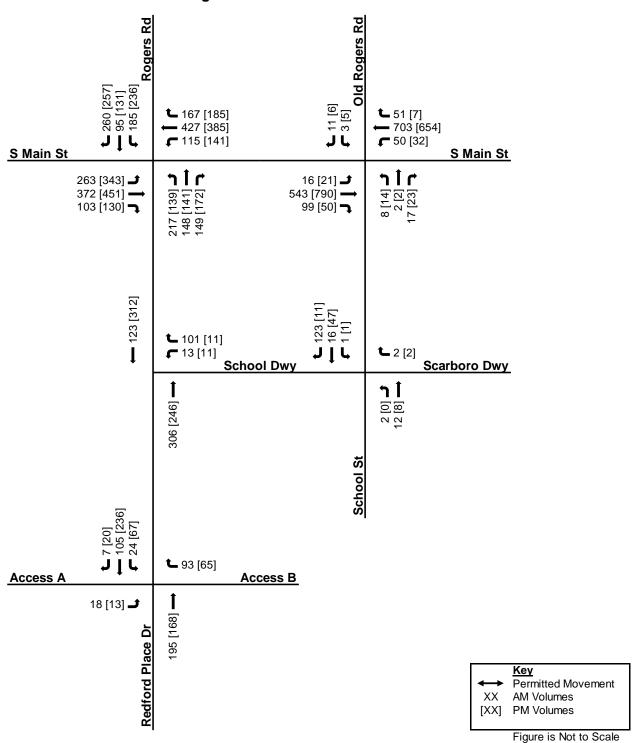
Figure 11: 2028 No-Build Traffic Volumes





Traffic Volumes August 15, 2022

Figure 12: 2028 Build Traffic Volumes





Traffic Analysis August 15, 2022

5.0 TRAFFIC ANALYSIS

Capacity analyses were performed for the roadway network in the study area. The traffic analysis program Synchro Version 10 and SIDRA Intersection 9 was used to analyze all signalized and stop-controlled intersections according to methods put forth by the Transportation Research Board's Highway Capacity Manual⁴ (HCM). The HCM defines capacity as the "maximum rate or flow at which persons or vehicles can be reasonably expected to traverse a point or uniform section of a line or roadway during a specified period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per lane per hour."

Level of service (LOS) is a term used to describe different traffic conditions and is defined as a "qualitative measure describing operational conditions within a traffic stream, and their perception by motorists or passengers." LOS varies from Level A, representing free flow, to Level F where traffic breakdown conditions are evident. At an unsignalized intersection, the primary traffic on the main roadway is virtually uninterrupted. Therefore, the overall delay for the intersection is usually less than what is calculated for the minor street movements. The overall intersection delay and the delay for the intersections' minor movement(s) are reported in the summary tables of this report. LOS D is acceptable for signalized intersections in suburban areas during peak periods. For unsignalized intersections, it is common for some of the minor street movements or approaches to be operating at LOS F during peak hour conditions and that is not necessarily indicative of an area that requires improvements.

Capacity analyses were completed following NCDOT Capacity Analysis Guidelines⁵ as well as the Draft NCDOT Capacity Analysis Guidelines Best Practices⁶. Table 3 presents the criteria of each LOS as indicated in the HCM.

Signalized Intersection **Unsignalized Intersection Level of Service Control Delay Control Delay** (LOS) (seconds / vehicle) (seconds / vehicle) Α ≤ 10 ≤ 10 В >10 and ≤ 20 >10 and ≤ 15 С >20 and ≤ 35 >15 and ≤ 25 D >35 and ≤ 55 >25 and ≤ 35 Ε >55 and ≤ 80 >35 and ≤ 50 F >80 >50

Table 3: Level of Service Criteria

The Town of Rolesville's Land Development Ordinance⁷, section 8.E, establishes the following Level of Service Standards:

1. The traffic impact analysis must demonstrate that the proposed development would not cause build-out-year, peak-hour levels of service on any arterial or collector road or intersection within the study area to fall below Level of Service (LOS) "D," as defined by the latest edition of the Highway Capacity Manual, or, where the existing level of service is already LOS "E" that the proposed development would not cause the LOS to fall to the next lower letter grade.



Traffic Analysis August 15, 2022

2. If the road segment or intersection is already LOS "F," the traffic impact analysis must demonstrate that the proposed development, with any proposed improvements, would not cause build-out year peak-hour operation to degrade more than five (5) percent of the total delay on any intersection approach.

Capacity analyses were performed for the following conditions:

- 2022 Existing;
- 2028 No-Build;
- 2028 Build: and
- 2028 Build with Improvements.

Peak hour factors for all analysis scenarios were set to 0.9 with one exception. That is, all movements into and out of Rolesville Elementary School utilize a peak hour factor of 0.5 per NCDOT Municipal School Transportation Assistance.

All Synchro and SIDRA files and detailed printouts can be found in the appendix. A summary of the results of the analyses is provided in the following sub-sections.



Traffic Analysis August 15, 2022

5.1 2022 EXISTING

In the base year of 2022 under the existing geometric conditions, all study intersections and approaches operate at an acceptable LOS. Synchro LOS and delay results for the 2022 Existing analysis scenario are listed in Table 4.

Table 4: 2022 Existing Level of Service and Delay

Intersection		Approach	pproach Lane Group		Delay (sec. / veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM	
	Old Rogers	EB	L	8.8	8.6	Α	Α	0	3	18	19	
	Road / School	WB	L	8.5	9.0	Α	Α	3	0	32	26	
STOP	Street at South Main Street (US	NB	LTR	22.5	27.8	C	D	5	15	30	43	
	401 Business)	SB	LTR	21.1	28.7	С	D	8	8	43	33	
		Overa	all	35.2	36.2	D	D					
	Redford Place	EB	L	21.0	28.4	С	С	188	291	180	280	
			TR	18.4	24.7	В	С	262	392	206	309	
		WB	L	25.7	30.8	C	С	71	119	116	177	
			Т	29.2	31.3	С	С	350	341	288	289	
3 Q £	Drive / Rogers		R	8.7	8.6	Α	Α	55	59	112	101	
狠	Road at South Main Street (US		L	52.9	47.3	D	D	152	93	185	128	
	401 Business)	NB	Т	70.5	70.9	Е	E	133	137	169	184	
	,		R	42.1	41.6	D	D	108	131	170	200	
			L	75.8	71.5	Е	Е	170	207	185	221	
		SB	Т	66.0	59.4	Е	Е	90	127	101	197	
			R	42.4	35.5	D	D	224	212	255	282	
STOP	Redford Place Drive at School Driveway	WB	LR	10.5	9.7	В	А	23	3	81	29	



Traffic Analysis August 15, 2022

5.2 2028 NO-BUILD

In the 2028 No-Build conditions, the analysis assumes the improvements associated with the approved developments and NCDOT projects are constructed. These improvements were discussed in Sections 2.4 and 4.2, but are also listed below:

South Main Street at Redford Place Drive/Rogers Road

- Remove existing westbound dedicated right-turn lane.
- Reduce the storage of the northbound left-turn lane from 200 feet to 175 feet of full-width storage.

School Street at School Driveway/Scarboro Driveway.

 Construct a stop-controlled westbound approach at the intersection for access to the Scarboro Property development.

In the future year 2028, the following intersections and movements operate at a LOS E or F:

The Main Street & Redford Place Drive/Rogers Road intersection operates at LOS E in the PM peak hours. The minor northbound and southbound approaches at the Main Street & Old Rogers Road/School Street intersection operate at LOS F in the AM peak hour and LOS E in the PM peak hour.

The northbound through and southbound left movements at the Main Street & Redford Place Drive/Rogers Road intersection operate at LOS F in both peak hours and the eastbound left movement operates at LOS F in the PM peak hour.

Synchro LOS and delay results for the 2028 No-Build analysis scenario are listed in Table 5.



Traffic Analysis August 15, 2022

Table 5: 2028 No-Build Level of Service and Delay

Intersection		Approach	Approach Lane Group		Delay (sec. / veh.)		Level of Service (LOS)		95th % Queue (feet)		Obs. eue et)
				AM	PM	AM	PM	AM	PM	AM	PM
	Old Rogers Road /	EB	L	9.6	9.2	Α	Α	3	3	32	33
STOP	School Street at	WB	L	9.4	9.8	Α	Α	5	0	45	24
STOP	South Main Street	NB	LTR	70.7	47.7	F	E	23	30	40	60
	(US 401 Business)	SB	LTR	51.5	41.9	F	E	20	13	38	42
		Overa	all	51.8	58.5	D	Е				
	Redford Place Drive / Rogers	EB	L	72.0	80.1	Е	F	385	498	298	300
		EB	TR	24.9	29.3	С	С	393	477	506	837
		WB	L	61.6	61.4	Е	Е	157	179	275	275
			TR	45.4	59.3	D	Е	637	690	672	745
1	Road at South	NB	L	69.7	60.2	E	E	247	142	245	198
	Main Street (US		Т	96.8	119.6	F	F	226	229	231	266
	401 Business)		R	40.9	41.5	D	D	154	182	189	243
			L	80.0	96.0	F	F	290	363	258	298
		SB	Т	69.2	62.6	Е	Е	138	149	244	518
			R	39.8	31.9	D	С	284	251	287	267
	School Street at	WB	LTR	8.9	8.6	Α	Α	3	3	30	29
STOP	School Driveway /	NB	LTR	7.8	7.3	Α	Α	0	0	0	0
	Scarboro Driveway	SB	LT	7.2	7.2	Α	Α	0	0	0	0
STOP	Redford Place Drive at School Driveway	WB	LR	11.2	10.3	В	В	30	5	80	50



Traffic Analysis August 15, 2022

5.3 2028 BUILD

This analysis scenario evaluates traffic operations under the increased traffic demands associated with the proposed Parker Ridge development. Similar to the 2028 No-Build scenario, the Main Street & Redford Place Drive/Rogers Road intersection operates at LOS E in the PM peak hour. The northbound through movement operates at LOS F in both peak hours, the northbound left movement operates at LOS F in the AM peak hour, and the eastbound left and southbound left movements operate at LOS F in the PM peak hour.

The westbound queue along Main Street from the Redford Place Drive/Rogers Road intersection extends into the Main Street & Old Rogers Road/School Street intersection during the PM peak hour, preventing lefts and throughs from being made from the northbound School Street and southbound Old Rogers Road intersection. As a result, delays from these approaches exceed 400 seconds in the PM peak hour.

The roundabout at the Redford Place Drive & Access A/Access B intersection operates at LOS A in both peak hours.

Capacity analysis results for the 2028 Build analysis scenario are listed in Table 6.



Traffic Analysis August 15, 2022

Table 6: 2028 Build Level of Service and Delay

Intersection		Annroach		Lane (sec. / veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
	Old Rogers	EB	L	9.6	9.3	Α	Α	3	3	27	71
STOP	Road / School Street at South	WB	L	9.6	11.3	Α	В	5	5	48	127
STOP	Main Street (US	NB	LTR	58.8	580.5	F	F	33	133	47	182
	401 Business)	SB	LTR	63.5	410	F	F	23	58	47	100
	,	Overa	all	55.0	62.7	D	E				
		EB	L	79.8	86.9	Е	F	385	498	300	300
		ED	TR	28.4	32.4	С	С	428	553	544	1000*
	Redford Place	WB	L	61.9	77.0	Е	Е	160	225	275	275
	Drive / Rogers Road at South Main Street (US 401 Business)	WD	TR	52.0	65.3	D	Е	705	714	782	1262*
1		NB	L	82.9	68.9	F	Е	339	219	268	264
			Т	86.2	105.9	F	F	254	254	368	344
			R	28.3	43.5	С	D	124	202	186	248
		SB	L	78.3	103.8	E	F	285	378	259	298
			T	69.3	65.9	Е	Е	151	180	250	512
			R	34.4	31.3	С	С	196	248	244	252
	School Street at School	WB	LTR	9.0	8.8	Α	Α	3	3	34	27
STOP	Driveway / Scarboro	NB	LTR	7.8	7.4	Α	Α	0	0	0	0
	Driveway	SB	LT	7.3	7.2	Α	Α	0	0	0	0
STOP	Redford Place Drive at School Driveway	WB	LR	12.8	11.1	В	В	35	5	86	39
		Overa	all	4.1	4.4	Α	Α				
	Redford Place	EB	LTR	3.6	4.2	Α	Α	3	3	27	26
ا ا ا	Drive at Access	WB	LTR	4.7	4.3	Α	Α	16	11	40	38
131	A / Access B	NB	LTR	4.3	4.5	Α	Α	26	24	34	48
		SB	LTR	3.4	4.3	Α	Α	15	39	17	61
	*	Queue Exter	nds Off Si	mTraffic	Network	or Into I	Next Inte	ersection			



Traffic Analysis August 15, 2022

5.4 2028 BUILD IMPROVED

5.4.1 South Main Street at Old Rogers Road / School Street

With the addition of traffic generated by the proposed development, the northbound approach of School Street at South Main Street increases in delay such that LOS degrades from E to F. It is not uncommon for unsignalized side-street approaches to operate with high delays during peak periods. As traffic on Main Street does not stop, the overall delay at the intersection is relatively low at 2.3 seconds per vehicle in the AM peak hour and 18.9 seconds in the PM peak hour. If high delays are experienced on the stop-controlled approaches, drivers may opt for alternative routes. Even so, the intersection was evaluated for potential improvements due to meet the requirements of the LDO⁷. What follows is a discussion of each possible improvement at the intersection:

5.4.1.1 Installation of a Traffic Signal

The installation of a traffic signal would improve the LOS of the side streets significantly. This, however, is not anticipated to be permitted by NCDOT due to the following:

- The proximity of the intersection to the adjacent signalized intersection of South Main Street at Redford Place Drive / Rogers Road
- Traffic volumes on the side-street approaches of Old Rogers Road and School Street are low and are not anticipated to meet the warrants for installation of a traffic signal included in the Manual on Uniform Traffic Control Devices (MUTCD)⁸.

5.4.1.2 Installation of Turn Lanes

The construction of dedicated left-turn turn-lanes on Old Rogers Road and School Street reduces delay but does not mitigate the impact of the proposed development. This is attributed to low volumes of traffic on the side-street approaches and high through volumes on South Main Street. The installation of turn lanes may also impact adjacent property owners. As a result, the installation of turn lanes on Old Rogers Road and School Street is not recommended.

5.4.1.3 Restriction of Access

Converting the southbound approach of Old Rogers Road to right-in / right-out access by installing channelization was shown to reduce delays on the side streets such that School Street is anticipated to operate at LOS C and Old Rogers Road is anticipated to operate at LOS B during the PM peak hour.

This would require left turns from Old Rogers Road to be redirected to Rogers Road and use the traffic signal at the intersection of South Main Street at Redford Place Drive / Rogers Road; increasing travel time for existing vehicles on the Old Rogers Road approach. Furthermore, the restriction of access without the installation of a median has only limited effectiveness. As a result, the restriction of access is not recommended.

Therefore, no improvements are recommended at this intersection in conjunction with this development. Consideration should be made for limiting the southbound Old Rogers Road approach to right-in / right-out-only access in the future.



Traffic Analysis August 15, 2022

5.4.2 South Main Street at Redford Place Drive / Rogers Road

The signalized intersection of South Main Street at Redford Place Drive / Rogers Road operates at LOS E during the PM peak hour in both the no-build and build scenarios. In this instance, the LDO requires mitigation if the proposed development causes the LOS to fall to the next lower letter grade. As the intersection operates at LOS E during both the no-build and build scenarios, no improvements are recommended at this intersection.



Recommendations August 15, 2022

6.0 RECOMMENDATIONS

The following improvements are recommended as part of the Parker Ridge development.

Old Rogers Road / School Street at South Main Street

No improvements are recommended at this intersection

Redford Place Drive / Rogers Road at South Main Street

• No improvements are recommended at this intersection

School Street at School Driveway / Scarboro Driveway

· No improvements are recommended at this intersection

Redford Place Drive at School Driveway

No improvements are recommended at this intersection

Redford Place Drive at Access A / Access B

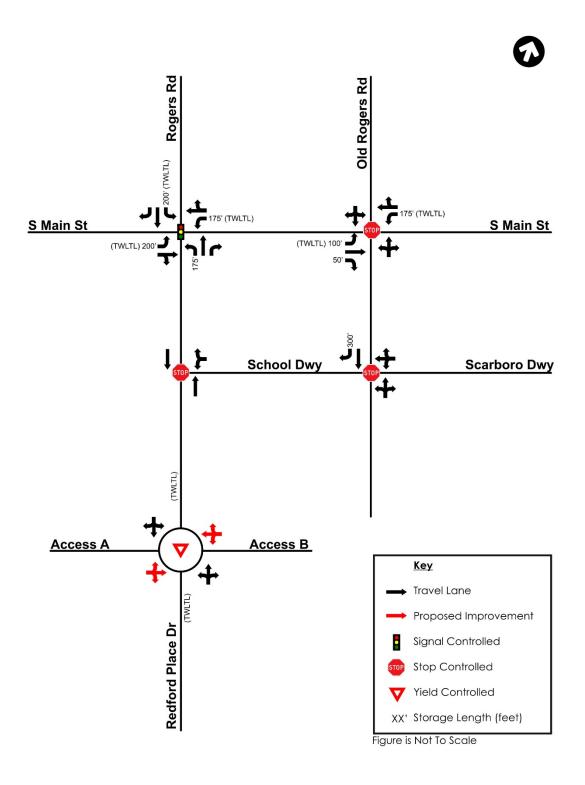
 Construct Access A and Access B at the existing roundabout along Redford Place Drive south of the School Driveway intersection. Both intersections should have a minimum internal protective stem of 100 feet.

The recommended improvements are illustrated in Figure 13.



Recommendations August 15, 2022

Figure 13: Recommended Improvements





References August 15, 2022

7.0 REFERENCES

¹ NCDOT Functional Classification Map,

http://ncdot.maps.arcgis.com/home/webmap/viewer.html?layers=029a9a9fe26e43d687d30cd3c08b1792

² 2020 NCDOT Average Daily Traffic Volumes,

https://ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=964881960f0549de8c3583bf46ef5ed4

- ³ Trip Generation (11th Edition), Institute of Transportation Engineers (ITE), September 2021.
- ⁴ *Highway Capacity Manual 6th Edition: A Guide for Multimodal Mobility Analysis*. Washington D.C.: Transportation Research Board, 2016.
- ⁵ NCDOT Capacity Analysis Guidelines. North Carolina Department of Transportation (NCDOT), March 2022, https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/Standards%20-%20Capacity%20Analysis%20Guidelines.pdf
- ⁶ **Draft NCDOT Capacity Analysis Guidelines: Best Practices.** North Carolina Department of Transportation (NCDOT), March 2022,

https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/Best%20Practices%20%20Capacity%20Analysis%20Guidelines.pdf

⁷ **Land Development Ordinance**. Town of Rolesville, June 1, 2021, https://www.rolesvillenc.gov/code-ordinances

⁸ Manual on Uniform Traffic Control Devices (MUTCD). Federal Highway Administration, May 2012, https://mutcd.fhwa.dot.gov/kno_2009r1r2.htm

8.0 APPENDIX

- Scoping Correspondence
- Site Plan
- Raw Traffic Count Data
- Approved Development Information
- Traffic Volume Calculations
- Synchro Files
- Synchro & SimTraffic Reports
- SIDRA files



ATTACHMENT 9 -

PARKER RIDGE NEIGHBORHOOD MEETING MINUTES

Parker Ridge

August 10, 2022 Neighborhood Meeting Minutes

The Applicant held a neighborhood meeting for the Parker Ridge rezoning at the Town of Rolesville Community Center on August 10th, 2022. The following members of the project team were in attendance to present and answer questions: Charlie Yokley from Lennar, Michael Taylor from Lennar, Kelly Race from BGE, and Collier Marsh from Parker Poe. Approximately 15 neighbors were in attendance. Collier Marsh began by introducing the project team, gave an overview of the rezoning process, and then described the proposed rezoning. The floor was then opened to questions from the attending neighbors. The following is a summary of the questions asked by neighbors and the applicant's responses.

Question: What is the timeframe for development.

Applicant Response: There are several steps to go in the process. We are currently in the rezoning process, which is followed by the site plan process. We are targeting early 2024 for the start of construction.

Question: How tall will the Townhomes be?

Applicant Response: Two stories.

Question: What is the project's open space?

Applicant Response: Open space includes all of the open land outside of individual lots and street rights of way. In this project, the open space includes environmentally sensitive areas, greenways, buffers, and other open areas.

Question: Will there be buffers provided at the perimeter of the development adjacent to Villages of Rolesville?

Applicant Response: Yes, we are proposing buffers along our perimeter. Along the Villages of Rolesville Boundary, we are proposing a 25' Type 3 perimeter buffer.

Question: How does the project address traffic in the area?

Applicant Response: The Town has completed its Traffic Impact Analysis and did not recommend any offsite traffic improvements. We have engaged our own traffic engineer to review the Town's Traffic Impact Analysis.

PARKER RIDGE NEIGHBORHOOD MEETING MINUTES

Question: Have you evaluated the School Street access and backups related to student drop offs?

Applicant Response: Yes, we are working with Wake County Schools to see what can be done.

Question: Where will construction traffic go?

Applicant Response: Construction traffic will be directed to use main roads where possible and avoid neighborhood streets. Lennar has onsite construction managers to ensure rules are followed.

Question: Will the project require blasting? What procedures are followed?

Applicant Response: We do expect some blasting due to existing rock. There are extensive requirements for blasting, including permitting and notice requirements that must be followed.

Question: What will happen to environmentally sensitive areas?

Applicant Response: Environmentally sensitive areas are being preserved and, where possible, activated with greenway trails for the public to enjoy.

Question: Will greenways run through neighboring properties?

Applicant Response: No. The greenways we are proposing are entirely on our property and have been coordinated with the Town.

Question: Can fences be added in buffers?

Applicant Response: We can look into adding fences where they are not already being provided.

After the question and answer session, the applicant team had informal discussions with several neighbors and the meeting concluded at 7:30 pm



Memo

To: Town of Rolesville Planning Board **From:** Meredith Gruber, Planning Director

Date: August 18, 2022

Re: Land Development Ordinance (LDO) Amendments – Round 3 Continued

Discussion

Schedule

Following is the schedule of meetings for the LDO Technical Amendments Round 3:

- Town Board Work Session Feedback and Discussion, June 21, 2022
- Planning Board Meeting Report from Town Board Work Session, June 27, 2022
- Planning Board Meeting Discuss Proposed Landscape Ordinance Amendments, August 22, 2022
- Town Board Work Session Feedback and Discussion, September 20, 2022
- Planning Board Meeting Presentation and Recommendation, September 26, 2022
- Town Board Meeting Presentation, Public Hearing, and Decision, October 4, 2022

Background

Development regulations are designed to foster the creation of vibrant neighborhoods and a strong business community, while preserving the community's character. Amendments are necessary to continue the effective administration of the LDO. Such amendments are brought forward for public hearing and Town Board consideration for a variety of reasons; some amendments will result in updates to development regulations while others address technical details or procedures. The Town Board of Commissioners can expect to consider technical amendments to the LDO approximately twice a year; the first and second rounds of LDO amendments were approved in December 2021.

Proposed Land Development Ordinance Amendments for Discussion

The following table includes a summary of the proposed third round of LDO technical amendments. Discussion at the August 22, 2022 Planning Board Meeting will be focused on LDO Section 6.2, or items 6 through 10 noted below.

	LDO Section	Amendment Discussion Topic	Recommendation
Disc	cussed at Joint Work	Session on March 15, 2022	
1	Chapter 8. Traffic Impact	Traffic Impact Analysis threshold is 100 or more peak hour trips and/or 1,000 daily trips.	Reduce threshold by half (50 peak hour trips and/or 500 daily trips); access location and design review for projects that do meet threshold
2	9.2.5.A. Subdivision Access Standards - Connectivity	Streets shall be interconnected and connect with adjacent streets external to the subdivision to provide multiple routes for pedestrian and vehicle trips.	Implement access points as recommended by TIA. Must connect to existing and planned street stubs.
3	6.6.G. Lighting – General Design Standards	Street Light Poles	Add a general design standard that prohibits wood poles in residential subdivisions.
4	Appendix A – LDO Handbook	Review evidentiary processes and their workflow	Town Board focuses on setting policy (rezonings, LDO amendments). Board of Adjustment acts as judicial body reviewing findings for decision making.
Oth	er Proposed LDO Am	nendments	
5	5.1. Principal Uses	Single family attached dwellings (townhomes) are allowed in the RH District and Activity Center Districts.	Allow single family attached dwellings (townhomes) in the RM district in addition to the RH district. Sync up dwelling terminology throughout LDO.
6	6.2.2.1. Perimeter Buffers	Perimeter Buffer Type 1 is a 10' buffer with landscaping and a 6' tall fence. This type of buffer is required between two parcels with the same zoning district except RH and BT.	Remove requirement for buffers between parcels of the same zoning district, especially non-residential uses.
7	6.2.2.2. Street Buffers	30' streetscape buffer only required for thoroughfares as per LDO	Add an 8 – 10' streetscape buffer for local and private streets.
8	6.2.4.4. Parking Landscaping	Terminal islands are required at the end of each parking bay. Interior islands and divider medians appear to be optional as defined in the LDO.	To supplement terminal, interior island standards, and divider medians, require every parking space to be within 60' of a tree trunk (requirement was in UDO).

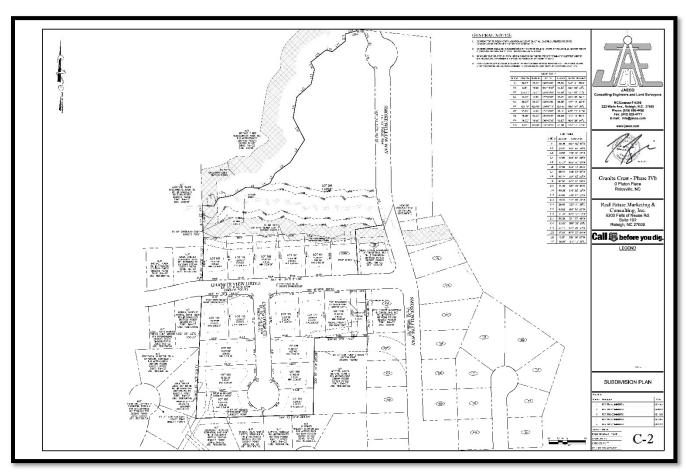
	LDO Section	Amendment Discussion Topic	Recommendation		
9	6.2.4.5.B.3. Vegetation Preservation – Preservation Standards	Removal of qualifying evergreen or deciduous tree shall be replaced on-site with at least four or more trees of similar species and size.	Recommend replacing qualifying deciduous removed trees at a two-to-one ratio and a minimum of 3-inch caliper.		
10	6.2.4.7.B. Landscape/Planting Guidelines – Plant Palette	LDO states all plants shall be of native and locally adaptive species.	Recommend requiring at least four different plant species with no one being greater than 35% of the palette.		
11	6.8.5. Single Family Design Guidelines	Foundation types	Define acceptable foundation types such as stem walls and crawlspaces. Recommend minimum height of 18 inches.		
12	11.2 Interpretation	Only interpretation authority for the Land Development Administrator listed in LDO is for Use Interpretation.	Add item about general interpretation. (It is standard to have a person who interprets a development ordinance and makes determinations.)		
Inqu	uiries from Developm	ent Community			
13	Chapter 3 Zoning, RM and/or RH Districts	Interest in requesting "Charleston Homes" with a 0' setback on one side.	Recommended to interested developers that they include		
14	Chapter 3 Zoning, RH and/or NC District	Interest in requesting Senior Housing with a la cart services at a density of 16 units per acre and a height of 50'	proposed text amendments with their potential rezoning cases.		

RecommendationRecommend staff continue drafting the third round of LDO amendments.



JULY 2022 DEVELOPMENT REPORT

HIGHLIGHTS



The Granite Crest Phase IV Preliminary Subdivision Plat was approved by the Town Board of Commissioners on July 6, 2022.

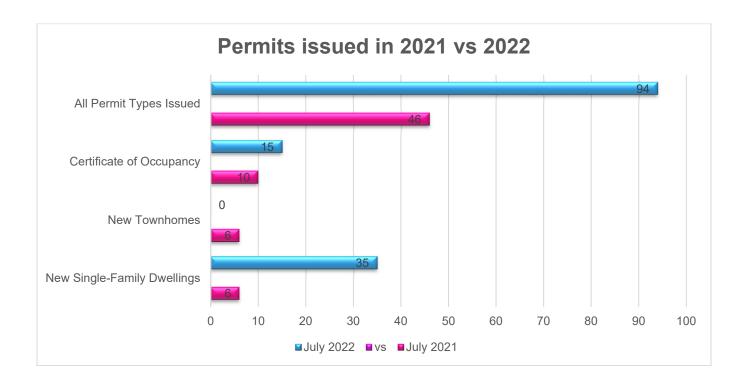
The Town of Rolesville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act. Should you need assistance or a particular accommodation please contact the ADA Coordinator.

Developments

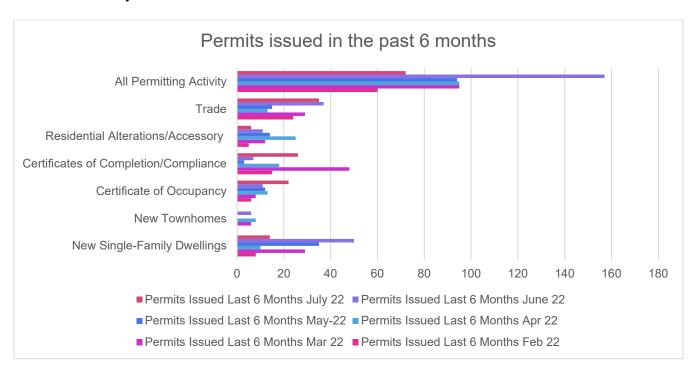
CURRENT RESIDENTIAL PERMITS ISSUED Summary of Activity

Subdivision	Total Buildable Lots	Total Permits Issued Per Development	Un-permitted Lots Remaining	Permits Issued in July	Permits Issued YTD
Carlton Pointe	301	297	4		7
Chandler's Ridge	74	57	17	01	29
Elizabeth Springs	87	43	28	05	16
Perry Farms	113	89	25	02	28
Preserve at Jones Dairy South	122	48	49	06	48
Stonewater	208	206	2		1
TOTAL	905	725	141	14	129
	I				
Elizabeth Springs Townhomes	54	35	13	0	28
TOTAL	54	35	13	0	28
ETJ/ Non-Sub					
TOTAL				0	03
					_
TOTAL Residential Permits Issued	959	760	154	14	157

Permitting Activity



The Town of Rolesville has experienced an overall **increase** in permitting activity compared to this time last year.



Detailed information regarding these projects can be found by clicking on the link provided https://www.rolesvillenc.gov/planning/development-projects

Development Projects Summary

Commercial/ Mixed-Use

Triangle Medical Group Carolina Legacy Volleyball Cobblestone
Hampton Lake Drive Dental Office Public Works Facility Wallbrook

Residential

A-Master Team- 47 New Townhomes

Chandlers Ridge- 90 New Single-Family Homes

Cobblestone- 176 New Apartments

Elizabeth Springs- 89 New Single-Family Homes & 98 New Townhomes

Granite Crest Phase 3- 19 New Single-Family Homes

Kalas Falls- 484 New Single-Family Homes & 108 New Townhomes

Perry Farms Phase 2- 33 New Single-Family Homes

Preserve at Jones Dairy Road Central- 261 New Single-Family Homes & 173 New THs

Preserve at Jones Dairy Road North- 141 New Single-Family Homes & 65 New Townhomes

Preserve at Jones Dairy Road South- 221 New Single-Family Homes

Preserve at Moody Farm- 82 New Single-Family Homes

Regency at Heritage- 27 New Single-Family Homes

Rolesville Crossing – 177 New Single-Family Homes & 120 New Townhomes

The Point- 483 New Single-Family Homes & 324 New Townhomes

The Townes at Carlton Pointe- 53 New Townhomes

Wallbrook- 140 New Townhomes

