Rolesville
Genuine Community • Capital Connection
Est. 1837

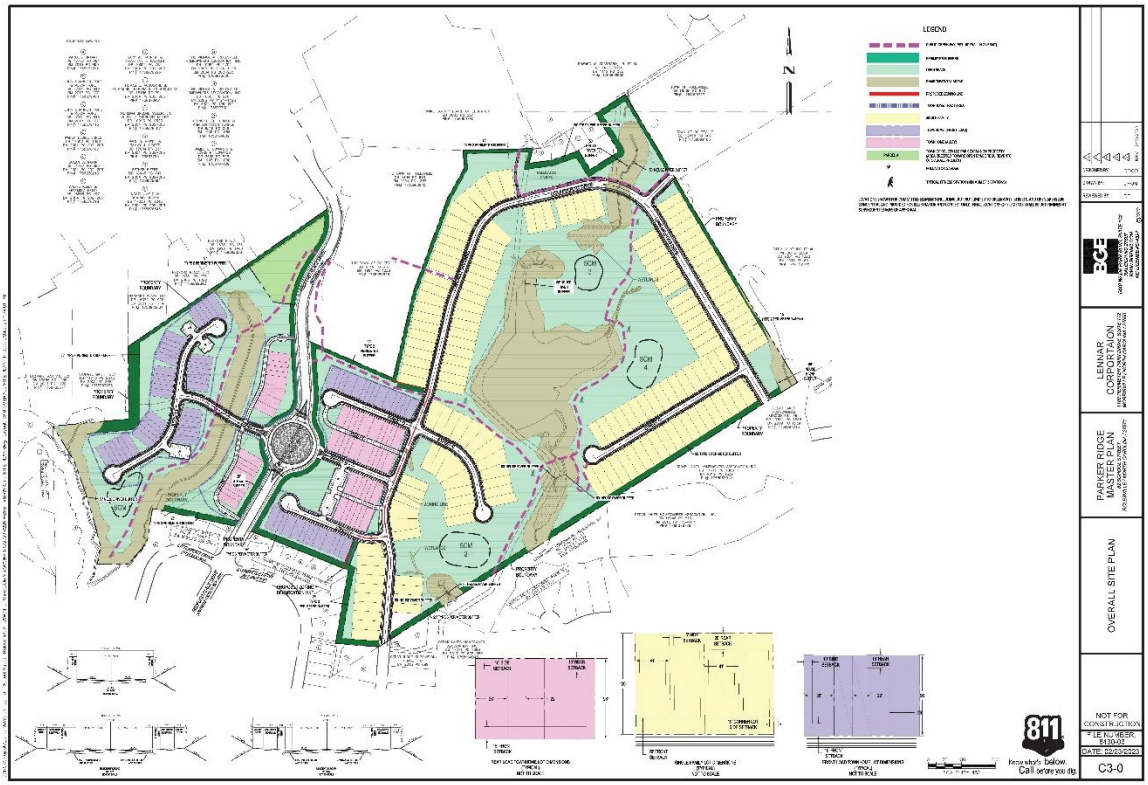
Memo

To: Mayor Currin and Town Board of Commissioners
From: Meredith Gruber, Planning Director
Date: March 7, 2023
Re: Parker Ridge Map Amendment MA 22-03 and Annexation Petition ANX 22-06

Background

Legislative Hearing Continued from February 7, 2023

The legislative hearing for the Parker Ridge Map Amendment (Rezoning) and Annexation Petition was opened on November 15, 2022 and continued to February 7, 2023. The hearing was closed on February 7, 2023, and the decision for the rezoning and annexation applications was continued to March 7, 2023. The purpose for the continuance to March 7 was to allow the applicant time to draft a condition for construction of a roadway connection from the Parker Ridge project to Young Street as well as hold a second neighborhood meeting.



Parker Ridge Rezoning Concept Plan

Map Amendment/Rezoning Application (MA 22-03)
The Town of Rolesville Planning Department received a Map Amendment (Rezoning) application in February 2022 for 88.50 acres located at 82 School Street, 120 School Street, and 201 Redford Place Drive with Wake County PINs 1758988411, 1758884270, 1768091558, and 1758983710. The applicant, Lennar Carolinas LLC, is requesting to change the zoning from Residential Low (RL) and Residential and Planned Unit Development (R&PUD) to Residential Medium Conditional Zoning District (RM-CZ) and Residential High Conditional Zoning District (RH-CZ). A concept plan showing 162 single family lots at a density of 2.80 units per acre, and 114 townhome lots at a density of 3.93 units per acre, is included as a condition of the rezoning request. The overall density of the entire neighborhood is 3.18 units per acre.

The applicant is proposing thirteen rezoning conditions, included as an attachment. Since the Town Board of Commissioners' meeting on February 7, the applicant has added two conditions—one about a greenway connection to School Street and the other about design and construction of a collector street connection to Young Street.

Annexation Petition (ANX 22-06)
The Town of Rolesville received a contiguous voluntary annexation petition for two parcels totalling 61.37 acres located at 82 and 120 School Street with Wake County PINs 1758988411 and 1758983710 into the Town of Rolesville Town Limits. These two parcels are two of four parcels that make up the Parker Ridge rezoning case, MA 22-03.

As provided by G.S. 160A-31, the petition was investigated by the Town Clerk as to its sufficiency of meeting G.S. 160A-31. The Town Board of Commissioners scheduled a legislative hearing for the Parker Ridge annexation petition, ANX 22-06, on November 15, 2022.

Neighborhood Meetings

The applicant held a neighborhood meeting on August 10, 2022 at the Rolesville Community Center. The fifteen neighbors in attendance asked about the development timeframe, open space, townhome height, buffers, traffic including School Street logistics, and construction logistics. Meeting minutes are included as an attachment.

The applicant held a second neighborhood meeting on February 28, 2023 at the Rolesville Community Center. An update will be provided at the March 7, 2023 Town Board of Commissioners' meeting.

Comprehensive Plan

Land Use
The Future Land Use Map shows the subject parcels as High Density Residential, which is described as a mixed use neighborhood of single family, duplex, condominium, townhouse, or multifamily residential. These are lots or tracts at a density range of six to twelve dwelling units per acre including preserved open space areas.

Single family and townhome dwellings are residential types listed in the High Density Residential land use category definition; however, the average density for the proposed development is 3.18 units per acre which falls in the Medium Density Residential range.

Community Transportation Plan
The Town of Rolesville's Community Transportation Plan includes recommendations for thoroughfares, collectors, and intersections.

Thoroughfare Recommendations
- The subject property has no frontage on any thoroughfare roadways.
- The closest throughfares the proposed development are Main Street and Young Street.

Collector Recommendations
- Redford Place Drive is an existing collector roadway that passes through the proposed Parker Ridge development.
- School Street is proposed to continue through the subject property and is shown on the Parker Ridge Concept Plan. (It was determined at the February 7 Town Board of Commissioners' meeting that it is preferred to remove this connection from the Parker Ridge rezoning concept plan. This case will be followed by a Community Transportation Plan amendment to remove School Street as a collector from Rolesville's roadway network.)
- Another collector is proposed to connect to Young Street, and a street stub is shown on the Parker Ridge Concept Plan.

Intersection Recommendations
- There are no intersection recommendations associated with the subject property.
- The closest intersection recommendations are located at Main Street and Redford Place Drive as well as at Main Street and Young Street.

Greenway Plan
As per the 2022 Greenway Plan, proposed greenways are shown in the following locations:
- Along the northwestern side of Redford Place Drive.
- Running north-south through the single family portion of the proposed development.
- In addition, a greenway connection is shown through the park between the proposed townhome portion and single family portion of the development.

Consistency
The applicant's request for 162 single family lots and 114 townhome lots at an average density of 3.18 units is consistent with the Town of Rolesville's Comprehensive Plan for the following reasons:
- The proposed housing types, single family detached and townhomes, are consistent with the High Density Residential land use category.
- Community Transportation Plan collector recommendations are illustrated in the rezoning concept plan.
- Greenways are shown as recommended in the 2022 Greenway Plan.

The applicant's request may not be consistent with the Town's Comprehensive Plan for the following reason:
- The proposed density for the single family portion of Parker Ridge is 2.80 units per acre and for the townhome portion is 3.93 units per acre. The average density of 3.18 units per acre is lower than the High Density Residential land use category's typical density of 6 – 12 units per acre.

Traffic

Traffic Impact Analysis

The consulting firm Stantec performed the Traffic Impact Analysis for this project on behalf of the Applicant and the Town; see the attached Traffic Impact Analysis Final Report dated August 15, 2022 and the updated Traffic Impact Analysis Report dated January 31, 2023. 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 South Main Street.

TIA Summary - Trip Generation	*Entering*	*Exiting*	*Total*
AM Peak (7-9 am)	47	123	170
PM Peak (4-6 pm)	134	86	220
Weekday Daily Trips	1,195	1,196	2,391

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

TIA Summary – Intersection Improvements	
Jonesville Road at Prides Crossing (updated January 2023)	No improvements.
South Main Street at Realigned Burlington Mills Road (updated January 2023)	No improvements.
Redford Place Drive/Rogers Road at South Main Street	No Improvements. Intersection functions at Level of Service E under No Build and Build scenarios at PM Peak.
Old Rogers Road/School Street at South Main Street	No Improvements. *Southbound Old Rogers should consider right-in/right-out.
School Street at School Driveway/ Scarboro Driveway/Access C (updated January 2023)	**If Access C is constructed, the driveway should be constructed with one ingress lane and one egress lane with 100 feet of internal protective stem.** **If Access C is not pursued, remove the connection from the Community Transportation Plan.**
Redford Place Drive at School Driveway	No improvements.
US 401 at Young Street (updated January 2023)	No improvements.
US 401 Westbound U-Turn (updated January 2023)	No improvements.
US 401 Eastbound U-Turn (updated January 2023)	No improvements.

South Main Street at Virginia Water Drive Extension (updated January 2023)	No improvements.
Redford Place Drive at (Development) Access A / Access B	**Construct new streets at opposite sides of roundabout, with 100' minimal internal protective stems.**
Young Street at Access D (updated January 2023)	**Construct Access D as a full-movement access point.** **Construct Access D with one ingress lane and one egress lane with 100 feet of internal protective stem.** **Provide northbound left turn lane with 75 feet of full-width storage and appropriate taper.**

Development Review

The Technical Review Committee (TRC) reviewed this rezoning request and concept plan. There are no outstanding comments to be addressed.

Planning Board Recommendation

At the September 26, 2022 meeting, Planning Board members heard presentations from Planning staff and the Applicant team on Map Amendment/Rezoning MA 22-03 Parker Ridge. Board members had questions about the park land dedication (if anything would be built) and if there had been any collaboration with the Wake County Public School System on the functionality of School Street. The applicant noted the park land dedication would not include the construction of any amenities, and collaboration would likely take place with the school system during the production of Construction Infrastructure Drawings.

The Planning Board unanimously recommended approval of rezoning request, MA 22-03 Parker Ridge. With that recommendation came an expectation of addressing concerns about traffic on School Street.

Staff Recommendation

Staff finds that the proposed rezoning request and associated residential project is generally consistent with the Comprehensive Plan on many fronts but could more greatly fulfill the High Density Residential vision with a varied, denser housing and an overall mixed use development. Staff agrees with the Planning Board's recommendation for approval and associated expectation of addressing traffic concerns on and around School Street.

Consistency and Reasonableness

As noted above under the Comprehensive Plan section of this report, the rezoning request for the subject parcels is somewhat consistent with the future land use designation, High Density Residential. The application is consistent with the Community Transportation Plan as well as the Greenway Plan. On balance, MA 22-03 is generally consistent with the Comprehensive Plan and other applicable Plans and is therefore reasonable.

Proposed Motions

1. Motion to (approve or deny) rezoning request MA 22-03 – Parker Ridge.
2. (Following Approval) Motion to adopt a Plan Consistency Statement and Statement of Reasonableness for MA 22-03.
3. Motion to (approve or deny) the annexation petition received under G.S. 160A-31 for ANX 22-06 – Parker Ridge.

   Or

4. Motion to continue the legislative hearing for MA 22-03 and ANX 22-06 to a future Town Board meeting to continue discussion and exchange of information.

Attachments

1	Application
2	Annexation Petition and Attachments
3	Vicinity Map
4	Future Land Use Map
5	Zoning Map
6	Neighborhood Meeting Minutes
7	Concept Plan
8	Proposed Conditions
9	Traffic Impact Analysis Reports
10	Applicant Presentation

Case No. MA 22-03

Date rcvd 2-1-2022

Map Amendment Application

Contact Information

Property Owner See attached addendum for all owner contact 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 School Street (See attached addendum for additional information by parcel)

Wake County PIN(s) 1758988411, 1758884270, 1768091558, and 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 is true and completed. I understand that if any item is found to be otherwise after evidentiary hearing before the Town Board of Commissioners, that the action of the Board may be invalidated.

Signature Lennar Carolinas, LLC Date 12-29-2021

STATE OF NORTH CAROLINA

COUNTY OF Cabarrus

I, a Notary Public, do hereby certify that William Arnold Parker Jr

personally appeared before me this day and acknowledged the due execution of the foregoing instrument. This the 29 *day of* December 20 21.

My commission expires 1-7-2022

Signature

THOMAS H. SMALL NOTARY PUBLIC DAVIDSON COUNTY, NC Seal

Case No. _____

Date _____

Map Amendment Application

Contact Information

Property Owner: See attached addendum for all owner contact 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 School Street (See attached addendum for additional information by parcel)

Wake County PIN(s): 1758988411, 1758884270, 1768091558, and 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 is true and completed. I understand that if any item is found to be otherwise after evidentiary hearing before the Town Board of Commissioners, that the action of the Board may be invalidated.

Signature _____ Date 12-29-2021

STATE OF NORTH CAROLINA

COUNTY OF Gaston

I, a Notary Public, do hereby certify that William Mark Parker Jr

personally appeared before me this day and acknowledged the due execution of the foregoing instrument. This the 29 *of* December *20* 21.

My commission expires 1.7.2022.

Signature _____ Seal

THOMAS A. SMALL NOTARY PUBLIC DAVIDSON COUNTY, NC

Case No. _____

Date _____

Map Amendment Application

Contact Information

Property Owner: See attached addendum for all owner contact 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 School Street (See attached addendum for additional information by parcel)

Wake County PIN(s): 1758988411, 1758884270, 1768091558, and 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 is true and completed. I understand that if any item is found to be otherwise after evidentiary hearing before the Town Board of Commissioners, that the action of the Board may be invalidated.

Signature: Catherine Faye Parker | Date: 12/29/2021

STATE OF NORTH CAROLINA

COUNTY OF Guilford

I, a Notary Public, do hereby certify that Catherine Faye Parker *personally appeared before me this day and acknowledged the due execution of the foregoing instrument. This the* 29 *day of* December *20* 21.

My commission expires 1.7.2027

Signature: _____ Seal

THOMAS R. SMALL NOTARY PUBLIC DAVIDSON COUNTY, NC

Rolesville
Genuine Community • Capital Connection
Est. 1837

Case No._____
Date _____

Map Amendment Application

Contact Information

Property Owner See attached addendum for all owner contact 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 School Street (See attached addendum for additional information by parcel)
Wake County PIN(s) 1758988411, 1758884270, and 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 is true and completed. I understand that if any item is found to be otherwise after evidentiary hearing before the Town Board of Commissioners, that the action of the Board may be invalidated.

Signature _____ Date 12/21/21

STATE OF NORTH CAROLINA
COUNTY OF Pitt

I, a Notary Public, do hereby certify that Thomas Colemon *personally appeared before me this day and acknowledged the due execution of the foregoing instrument. This the* 21st *day of* December *20* 21.

My commission expires 12/2025.

Signature _____ Seal

SARAH HUECEL NOTARY PUBLIC PITT COUNTY, NC

Rolesville
Genuine Community • Capital Connection
Est. 1837

Map Amendment Application

Metes and Bounds Description of Property

See attached Exhibit B

Rolesville
Genuine Community • Capital Connection
Est. 1837

Map Amendment Application

Rezoning Justification

See attached addendum

EXHIBIT A
to
School Street Rezoning Application
Property and Owner Contact Information

Wake County PIN:	**1758988411**
Address:	82 School Street, Rolesville, NC 27571
Current Zoning District:	RL
Requested Zoning District:	RM and RH
Total Acreage:	60.97 acres
Property Owner:	W. Harold Parker Jr and Catherine Faye Parker
Owner Mailing Address:	149 Stonebridge Drive
City/State/Zip:	New London, NC 28127
Phone:	N/A
Email:	N/A

Wake County PIN:	**1768091558**
Address:	0 School Street, Rolesville, NC 27571
Current Zoning District:	RL
Requested Zoning District:	RM
Total Acreage:	0.14 acres
Property Owner:	W. Harold Parker Jr and Catherine Faye Parker
Owner Mailing Address:	149 Stonebridge Drive
City/State/Zip:	New London, NC 28127
Phone:	N/A
Email:	N/A

Wake County PIN:	**1758884270**
Address:	201 Redford Place Drive, Rolesville, NC 27571
Current Zoning District:	R and PUD
Requested Zoning District:	RH
Total Acreage:	26.99 acres
Property Owner:	Rolesville Development LLC
Owner Mailing Address:	PO Box 30803
City/State/Zip:	Greenville, NC 27833
Phone:	N/A
Email:	N/A

Wake County PIN:	**1758983710**
Address:	120 School Street, Rolesville, NC 27571
Current Zoning District:	RL
Requested Zoning District:	RM
Total Acreage:	0.4 acres
Property Owner:	W. Harold Parker, Jr.
Owner Mailing Address:	149 Stonebridge Drive
City/State/Zip:	New London, NC 28127
Phone:	N/A
Email:	N/A

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.

Rolesville
Genuine Community • Capital Connection Est. 1837

TOWN OF ROLESVILLE
PETITION FOR ANNEXATION

The items below are required in order to complete your application and shall be submitted when the application if filed.

1. A complete copy of the last deed of record for proof of ownership
2. An annexation boundary plat/map for recordation at the Wake County Register of Deeds Office (mylar plat) prepared by a professional land surveyor showing the boundaries of the area or property for annexation into the Town of Rolesville.
3. A complete copy of the written metes and bounds description based on the annexation boundary plat/map.

SECTION 1 – LOCATION

Is the area contiguous with the existing primary corporate limits? Satellite corporate limits is not primary. ☒ Yes or ☐ No

Note: If the land is contiguous to any existing corporate limits, the proposed annexation boundary will include all intervening right-of-ways for streets, easements, and other areas as stated in North Carolina General Statute §160A-31(1).

SECTION 2 – VESTED RIGHTS

NC General Statutes require petitioners of both contiguous and non-contiguous annexations to file a signed statement declaring whether vested rights have been established in accordance with G.S. 160A-385.1 or 153A-344.1 for properties subject to the petition. Do you declare vested rights for the property subject to this petition? ☐ Yes or ☒ No

SECTION 3 - PROPERTY DETAILS

PIN Number	Real Estate ID Number	Deed Book Number	Page Number	Acreage To Be Annexed	Wake County Assessed Value
1758988411	0051006	DB 005409	PG 00926	60.97	$ 1,585,220
1758983710	0009270	DB 018732	PG 01014	0.40	$ 172,956
		DB	PG		$

SECTION 4 - SIGNATURES AND VERIFICATION

We, the undersigned owners of the real properties contained in the metes and bounds description and plat/map attached hereto, respectfully request that the area described above be annexed and made part of the Town of Rolesville, North Carolina. By signing below, we acknowledge that all information is correct.

- **If property owned by INDIVIDUALS** (NOTE: All legal owners must sign including both husband and wife)

Signature of Owner #1 **W. Harold Parker, Jr.** — Date Signed

Catherine Faye Parker
Signature of Owner #2 **Catherine Faye Parker** — Date Signed 9/2/2022

- **If property owned by a COMPANY OR CORPORATION** (NOTE: The company or corporation must be legally registered with the State of North Carolina – Office of the Secretary of State)

Name of Corporation

Printed Name of Registered Agent — Signature of Registered Agent

Address, State, Zip of Registered Office

North Carolina, Guilford County

I, Mason S. Rogers, a Notary Public for said County and State, do hereby certify that the above signed individual(s) appeared before me this day and signed the foregoing instrument. Witness my hand and official seal, this 2nd day of September 20 22

Notary Public
My commission expires: 11/11/25

MASON S. ROGERS NOTARY PUBLIC GUILFORD COUNTY, NC

Rolesville

TOWN OF ROLESVILLE
PETITION FOR ANNEXATION

The items below are required in order to complete your application and shall be submitted when the application if filed.

1. A complete copy of the last deed of record for proof of ownership
2. An annexation boundary plat/map for recordation at the Wake County Register of Deeds Office (mylar plat) prepared by a professional land surveyor showing the boundaries of the area or property for annexation into the Town of Rolesville.
3. A complete copy of the written metes and bounds description based on the annexation boundary plat/map.

SECTION 1 – LOCATION

Is the area contiguous with the existing primary corporate limits? Satellite corporate limits is not primary. ☒ Yes or ☐ No

Note: If the land is contiguous to any existing corporate limits, the proposed annexation boundary will include all intervening right-of-ways for streets, easements, and other areas as stated in North Carolina General Statute §160-131(1).

SECTION 2 – VESTED RIGHTS

NC General Statues require petitioners of both contiguous and non-contiguous annexations to file a signed statement declaring whether vested rights have been established in accordance with G.S. 160A-385.1 or 153A-344.1 for properties subject to the petition. Do you declare vested rights for the property subject to this petition? ☐ Yes or ☒ No

SECTION 3 - PROPERTY DETAILS

PIN Number	Real Estate ID Number	Deed Book Number	Page Number	Acreage To Be Annexed	Wake County Assessed Value
1758988411	0053006	DB 005409	PG 00926	60.97	$ 1,585,220
1758983710	0009270	DB 018732	PG 01014	0.40	$ 172,956
		DB	PG		$

SECTION 4 - SIGNATURES AND VERIFICATION

We, the undersigned owners of the real properties contained in the metes and bounds description and plat/map attached hereto, respectfully request that the area described above be annexed and made part of the Town of Rolesville, North Carolina. By signing below, we acknowledge that all information is correct.

- **If property owned by INDIVIDUALS** (NOTE: All legal owners must sign including both husband and wife)

W. Harold P., Jr. — 8-30-2022

Signature of Owner #1 **W. Harold Parker, Jr.** — Date Signed

Signature of Owner #2 **Catherine Faye Parker** — Date Signed

- **If property owned by a COMPANY OR CORPORATION** (NOTE: The company or corporation must be legally registered with the State of North Carolina – Office of the Secretary of State)

Name of Corporation

Printed Name of Registered Agent — Signature of Registered Agent

Address, State, Zip of Registered Office:

North Carolina, Watauga *County*

I, Lindsay D. Miller *, a Notary Public for said County and State, do hereby certify that the above signed individual(s) appeared before me this day and signed the foregoing instrument.*

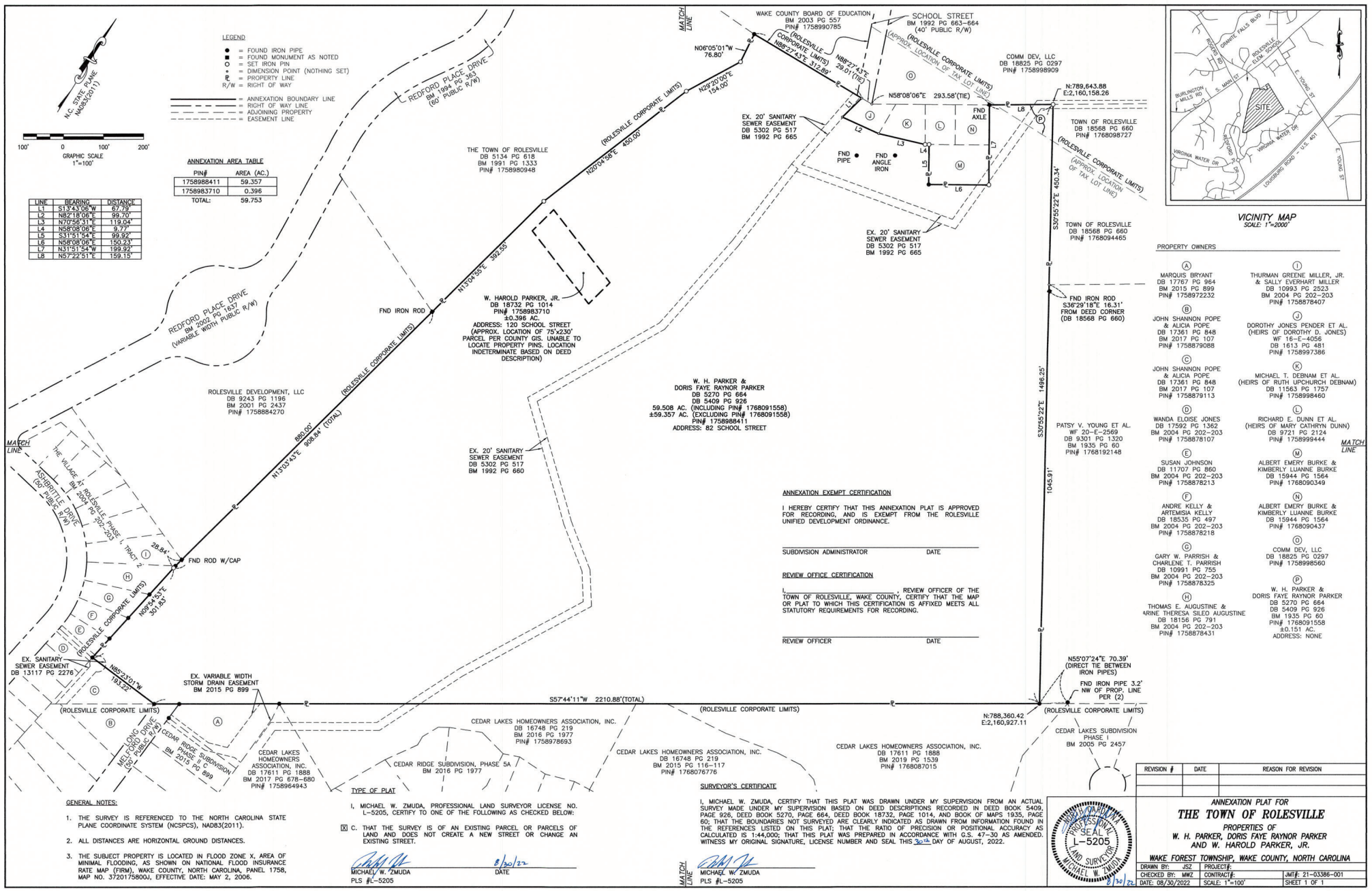
Witness my hand and official seal, this 30th *day of* August *,* 2022

LINDSAY D MILLER NOTARY PUBLIC WATAUGA COUNTY, NC

Lindsay D. Miller

Notary Public

My commission expires: 04/24/27


LEGEND
● = FOUND IRON PIPE
■ = FOUND MONUMENT AS NOTED
O = SET IRON PIN
• = DIMENSION POINT (NOTHING SET)
℄ = PROPERTY LINE
R/W = RIGHT OF WAY
= ANNEXATION BOUNDARY LINE
= RIGHT OF WAY LINE
= ADJOINING PROPERTY
= EASEMENT LINE
N.C. STATE PLANE NAD83(2011)
100' 0 100' 200'
GRAPHIC SCALE 1"=100'
ANNEXATION AREA TABLE
PIN# AREA (AC.)
1758988411 59.357
1758983710 0.396
TOTAL: 59.753
LINE BEARING DISTANCE
L1 S13°43'06"W 67.79'
L2 N82°18'06"E 99.70'
L3 N70°56'31"E 119.04'
L4 N58°08'06"E 9.77'
L5 S31°51'54"E 99.92'
L6 N58°08'06"E 150.23'
L7 N31°51'54"W 199.92'
L8 N57°22'51"E 159.15'
REDFORD PLACE DRIVE BM 2002 PG 1637 (VARIABLE WIDTH PUBLIC R/W)
REDFORD PLACE DRIVE BM 1994 PG 363 (60' PUBLIC R/W)
MATCH LINE
WAKE COUNTY BOARD OF EDUCATION BM 2003 PG 557 PIN# 1758990785
SCHOOL STREET BM 1992 PG 663-664 (40' PUBLIC R/W)
(ROLESVILLE CORPORATE LIMITS)
(APPROX. LOCATION OF TAX LOT LINE)
N06°05'01"W 76.80'
N89°27'43"E 312.89'
N89°27'43"E 29.01'(TIE)
N58°08'06"E 293.58'(TIE)
COMM DEV, LLC DB 18825 PG 0297 PIN# 1758998909
N:789,643.88 E:2,160,158.26
TOWN OF ROLESVILLE DB 18568 PG 660 PIN# 1768098727
FND AXLE
FND PIPE
FND ANGLE IRON
EX. 20' SANITARY SEWER EASEMENT DB 5302 PG 517 BM 1992 PG 665
THE TOWN OF ROLESVILLE DB 5134 PG 618 BM 1991 PG 1333 PIN# 1758980948
N20°04'58"E 450.00'
N29°20'00"E 154.00'
S30°55'22"E 450.34'
TOWN OF ROLESVILLE DB 18568 PG 660 PIN# 1768094465
FND IRON ROD
N13°04'55"E 392.55'
W. HAROLD PARKER, JR. DB 18732 PG 1014 PIN# 1758983710 ±0.396 AC.
ADDRESS: 120 SCHOOL STREET (APPROX. LOCATION OF 75'x230' PARCEL PER COUNTY GIS. UNABLE TO LOCATE PROPERTY PINS. LOCATION INDETERMINATE BASED ON DEED DESCRIPTION)
FND IRON ROD S36°29'18"E 16.31' FROM DEED CORNER (DB 18568 PG 660)
ROLESVILLE DEVELOPMENT, LLC DB 9243 PG 1196 BM 2001 PG 2437 PIN# 1758884270
W. H. PARKER & DORIS FAYE RAYNOR PARKER DB 5270 PG 664 DB 5409 PG 926 59.508 AC. (INCLUDING PIN# 1768091558) ±59.357 AC. (EXCLUDING PIN# 1768091558) PIN# 1758988411 ADDRESS: 82 SCHOOL STREET
S30°55'22"E 1496.25'
S30°55'22"E 1045.91'
PATSY V. YOUNG ET AL. WF 20-E-2569 DB 9301 PG 1320 BM 1935 PG 60 PIN# 1768192148
EX. 20' SANITARY SEWER EASEMENT DB 5302 PG 517 BM 1992 PG 660
N13°03'43"E 880.00'
N13°03'43"E 908.84' (TOTAL)
(ROLESVILLE CORPORATE LIMITS)
THE VILLAGE AT ROLESVILLE, PHASE I, TRACT 2 BM 2004 PG 202-203
ASHEVILLE DRIVE (60' PUBLIC R/W)
28.84'
FND ROD W/CAP
N09°54'43"E 301.83'
EX. SANITARY SEWER EASEMENT DB 13117 PG 2276
N85°23'01"W 193.22'
EX. VARIABLE WIDTH STORM DRAIN EASEMENT BM 2015 PG 899
S57°44'11"W 2210.88'(TOTAL)
N55°07'24"E 70.39' (DIRECT TIE BETWEEN IRON PIPES)
FND IRON PIPE 3.2' NW OF PROP. LINE PER (2)
N:788,360.42 E:2,160,927.11
CEDAR LAKES SUBDIVISION PHASE I BM 2005 PG 2457
LONG DRIVE MELFORD DRIVE (50' PUBLIC R/W)
CEDAR RIDGE SUBDIVISION PHASE II BM 2015 PG 899
CEDAR LAKES HOMEOWNERS ASSOCIATION, INC. DB 17611 PG 1888 BM 2017 PG 678-680 PIN# 1758964943
CEDAR LAKES HOMEOWNERS ASSOCIATION, INC. DB 16748 PG 219 BM 2016 PG 1977 PIN# 1758978693
CEDAR RIDGE SUBDIVISION, PHASE 5A BM 2016 PG 1977
CEDAR LAKES HOMEOWNERS ASSOCIATION, INC. DB 16748 PG 219 BM 2015 PG 116-117 PIN# 1768076776
CEDAR LAKES HOMEOWNERS ASSOCIATION, INC. DB 17611 PG 1888 BM 2019 PG 1539 PIN# 1768087015
VICINITY MAP
SCALE: 1"=2000'
SITE
ROGERS RD
GRANITE FALLS BLVD
ROLESVILLE ELEM. SCHOOL
BURLINGTON MILLS RD
S. MAIN ST
E. YOUNG ST
REDFORD PL
VIRGINIA WATER DR
LOUISBURG ROAD - U.S. 401
PROPERTY OWNERS
(A) MARQUIS BRYANT DB 17767 PG 964 BM 2015 PG 899 PIN# 1758972232
(B) JOHN SHANNON POPE & ALICIA POPE DB 17361 PG 848 BM 2017 PG 107 PIN# 1758879088
(C) JOHN SHANNON POPE & ALICIA POPE DB 17361 PG 848 BM 2017 PG 107 PIN# 1758879113
(D) WANDA ELOISE JONES DB 17592 PG 1362 BM 2004 PG 202-203 PIN# 1758878107
(E) SUSAN JOHNSON DB 11707 PG 860 BM 2004 PG 202-203 PIN# 1758878213
(F) ANDRE KELLY & ARTEMISIA KELLY DB 18535 PG 497 BM 2004 PG 202-203 PIN# 1758878218
(G) GARY W. PARRISH & CHARLENE T. PARRISH DB 10991 PG 755 BM 2004 PG 202-203 PIN# 1758878325
(H) THOMAS E. AUGUSTINE & ARINE THERESA SILEO AUGUSTINE DB 18156 PG 791 BM 2004 PG 202-203 PIN# 1758878431
(I) THURMAN GREENE MILLER, JR. & SALLY EVERHART MILLER DB 10993 PG 2523 BM 2004 PG 202-203 PIN# 1758878407
(J) DOROTHY JONES PENDER ET AL. (HEIRS OF DOROTHY D. JONES) WF 16-E-4056 DB 1613 PG 481 PIN# 1758997386
(K) MICHAEL T. DEBNAM ET AL. (HEIRS OF RUTH UPCHURCH DEBNAM) DB 11563 PG 1757 PIN# 1758998460
(L) RICHARD E. DUNN ET AL. (HEIRS OF MARY CATHRYN DUNN) DB 9721 PG 2124 PIN# 1758999444
(M) ALBERT EMERY BURKE & KIMBERLY LUANNE BURKE DB 15944 PG 1564 PIN# 1768090349
(N) ALBERT EMERY BURKE & KIMBERLY LUANNE BURKE DB 15944 PG 1564 PIN# 1768090437
(O) COMM DEV, LLC DB 18825 PG 0297 PIN# 1758998560
(P) W. H. PARKER & DORIS FAYE RAYNOR PARKER DB 5270 PG 664 DB 5409 PG 926 BM 1935 PG 60 PIN# 1768091558 ±0.151 AC. ADDRESS: NONE
GENERAL NOTES:
1. THE SURVEY IS REFERENCED TO THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM (NCSPCS), NAD83(2011).
2. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES.
3. THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X, AREA OF MINIMAL FLOODING, AS SHOWN ON NATIONAL FLOOD INSURANCE RATE MAP (FIRM), WAKE COUNTY, NORTH CAROLINA, PANEL 1758, MAP NO. 3720175800J, EFFECTIVE DATE: MAY 2, 2006.
TYPE OF PLAT
I, MICHAEL W. ZMUDA, PROFESSIONAL LAND SURVEYOR LICENSE NO. L-5205, CERTIFY TO ONE OF THE FOLLOWING AS CHECKED BELOW:
[X] C. THAT THE SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.
MICHAEL W. ZMUDA PLS #L-5205 8/30/22 DATE
ANNEXATION EXEMPT CERTIFICATION
I HEREBY CERTIFY THAT THIS ANNEXATION PLAT IS APPROVED FOR RECORDING, AND IS EXEMPT FROM THE ROLESVILLE UNIFIED DEVELOPMENT ORDINANCE.
SUBDIVISION ADMINISTRATOR DATE
REVIEW OFFICE CERTIFICATION
I, _____, REVIEW OFFICER OF THE TOWN OF ROLESVILLE, WAKE COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.
REVIEW OFFICER DATE
SURVEYOR'S CERTIFICATE
I, MICHAEL W. ZMUDA, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION BASED ON DEED DESCRIPTIONS RECORDED IN DEED BOOK 5409, PAGE 926, DEED BOOK 5270, PAGE 664, DEED BOOK 18732, PAGE 1014, AND BOOK OF MAPS 1935, PAGE 60; THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN THE REFERENCES LISTED ON THIS PLAT; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS 1:44,000; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 30TH DAY OF AUGUST, 2022.
MICHAEL W. ZMUDA PLS #L-5205
NORTH CAROLINA PROFESSIONAL SEAL L-5205 LAND SURVEYOR MICHAEL W. ZMUDA
8/30/22
REVISION # DATE REASON FOR REVISION
ANNEXATION PLAT FOR
THE TOWN OF ROLESVILLE
PROPERTIES OF
W. H. PARKER, DORIS FAYE RAYNOR PARKER AND W. HAROLD PARKER, JR.
WAKE FOREST TOWNSHIP, WAKE COUNTY, NORTH CAROLINA
DRAWN BY: JSZ PROJECT#:
CHECKED BY: MWZ CONTRACT#: JMT#: 21-03386-001
DATE: 08/30/2022 SCALE: 1"=100' SHEET 1 OF 1

BK5409PG0926

000363

PRESENTED FOR REGISTRATION
92 NOV 20 PM 2:16
KENNETH C. WILKINS
REGISTER OF DEEDS
WAKE COUNTY

Excise Tax

Recording Time, Book and Page

Tax Lot No. ..... Parcel Identifier No. 72-79

Verified by ..... County on the ..... day of ....., 19 .....

by .....

Mail after recording to Grantee

This instrument was prepared by Robert O. Belo, Atty., Durham, NC

Brief description for the Index

NORTH CAROLINA NON-WARRANTY DEED

THIS DEED made this 12TH day of October, 19 92, by and between

GRANTOR	GRANTEE
W. H. PARKER	DORIS FAYE RAYNOR PARKER P. O. Box 92 Rolesville, NC 27571

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that a 1/4 undivided* *interest certain lot or parcel of land situated in the City of ....., Wake Forest ..... Township, Wake ..... County, North Carolina and more particularly described as follows:

See Exhibit A attached hereto and incorporated herein by reference.

The property hereinabove described was acquired by Grantor by instrument recorded in Book 5270, Page 664

A map showing the above described property is recorded in Plat Book 1935 page 60

TO HAVE AND TO HOLD a one-fourth undivided interest in and to the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

The Grantor makes no warranty, express or implied, as to title to the property hereinabove described.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

(Corporate Name)

By: _____ President

ATTEST: _____ Secretary (Corporate Seal)

W. H. PARKER (SEAL)

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

USE BLACK INK ONLY

SEAL - STAMP

SUSAN S. CARTER NOTARY PUBLIC WAKE COUNTY, N.C.

NORTH CAROLINA, Wake County.

I, a Notary Public of the County and State aforesaid, certify that W. H. PARKER Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 12 day of October, 19 92

My commission expires: 10-1-94 Susan S. Carter Notary Public

Use Black Ink

SEAL - STAMP

NORTH CAROLINA, _____ County.

I, a Notary Public of the County and State aforesaid, certify that _____, personally came before me this day and acknowledged that he is _____ Secretary of _____ a North Carolina corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its _____ President, sealed with its corporate seal and attested by _____ as its _____ Secretary. Witness my hand and official stamp or seal, this _____ day of _____, 19_____.

My commission expires: _____ _____ Notary Public

The foregoing Certificate(s) of Susan S. Carter

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof. KENNETH C. WILKINS

REGISTER OF DEEDS FOR Wake COUNTY

By: Brigitte D. Pankeant Deputy/~~Assistant~~-Register of Deeds.

N.C. Bar Assoc. Form No. 7 © 1977

Printed by Agreement with the N.C. Bar Association — 1981

POOLE PRINTING CO., INC. P.O. BOX 17376 RALEIGH, N.C. 27619

EXHIBIT A

On the South side of the Raleigh-Rolesville paved Highway, and adjoining the lands of now or formerly, the Wake County School property and the Redford Estate on the West; H. J. Wall on the South; G. V. and C. D. Young, Mrs. J. W. Cash, Spencer Pulley and A. V. Gulley on the East, containing 67 acres, more or less, being Farm No. 13 of the Fleming Land as shown in Book of Maps 1935 at Page 60, Wake County Registry, except Church Property, now or formerly owned by the School, see Deed Book 23 at Page 103, and deed from J. W. Bunn, et al to County Board of Education, dated the 21st day of April, 1941, and duly recorded in the Wake County Registry, and being the identical tract conveyed by the said J. W. Bunn, et al to W. C. Roberts, now deceased, by deed dated the 9th day of October, 1941, and recorded in Book 874 at Page 255, Wake County Registry.

There is excepted from the above description and from the operation of the instant conveyance the following lots conveyed since the 9th day of October, 1941: lots conveyed to John Perkinson, June A. Jones, Ollie Harris, Richard Freeman, Bertha Horton and Johnnie Brown.

The tract conveyed by the instance conveyance was devised to Lessie H. Roberts by the said W. C. Roberts by will duly probated and of record in the office of the Clerk of the Superior Court of Wake County, North Carolina.

BK018732PG01014

WAKE COUNTY, NC
TAMMY L. BRUNNER
REGISTER OF DEEDS
PRESENTED & RECORDED ON
10-05-2021 AT 11:01:40
STATE OF NC REAL ESTATE
EXCISE TAX: $662.00
BOOK: 018732 PAGE: 01014 - 01015

NORTH CAROLINA GENERAL WARRANTY DEED

Excise Tax: $662.00

Parcel Identifier No. 0009270 Verified by _____ County on the ____ day of_____, 20_____
By:_____

Mail/Box to: Grantee

This instrument was prepared by: Kennon Craver, PLLC

Brief description for the Index: 120 School Street, Rolesville, NC 27571

THIS DEED made this 30th day of September, 2021 by and between

GRANTOR	GRANTEE
Kashina Jones (a/k/a Kashina Moore) and husband, Ivory Moore	W. Harold Parker, Jr.
ADDRESS: 120 School Street Rolesville, NC 27571	ADDRESS: 149 Stonebridge Drive New London, NC 28127

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in Wake County, North Carolina and more particularly described as follows:

BEGINNING at a stake at the southwest corner of the intersection of the Public Road and a plantation road leading to the pond of W.C. Roberts; thence along the western edge of said plantation road in a southerly direction, 230 feet to an iron stake; thence in a westerly direction 75 feet to an iron stake; thence in a northerly direction 230 feet to an iron stake in the southern margin of the Public Road; thence in an easterly direction, along the southern margin of said Public Road, 75 feet to the point of BEGINNING, being the same lot conveyed by W.C. Roberts and wife Lessie C. Roberts, to J.W. Brown and wife, Helen Brown by deed dated 24th day of June, 1957.

The property hereinabove described was acquired by Grantor by instrument recorded in Book 16799, Page 660; and Book 16965, Page 935, Wake County Registry.

A map showing the above described property is recorded in Plat Book ____, Page ____, Wake County Registry.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, other than the following exceptions:

1. 2021 ad valorem taxes;
2. Zoning ordinances affecting the property; and
3. Utility easements and unviolated covenants, conditions or restrictions that do not materially affect the value of the property

IN WITNESS WHEREOF, the Grantor has duly executed the foregoing as of the day and year first above written.

Kashina Jones (SEAL)
Kashina Jones

Ivory Moore (SEAL)
Ivory Moore

State of North Carolina - County of Wake

I, the undersigned Notary Public of the County of Wake and State aforesaid, certify that the following persons personally appeared before me this day, acknowledging to me that (s)he sign the foregoing document: **Kashina Jones and Ivory Moore**

Witness my hand and Notarial stamp or seal this 30 day of September, 2021.

My Commission Expires: 8/27/23

(Affix Seal)

Rachel E. Morris
Rachel E. Morris Notary Public
Notary's Printed or Typed Name

RACHEL E. MORRIS
Notary Public, North Carolina
Wake County
My Commission Expires
August 27, 2023

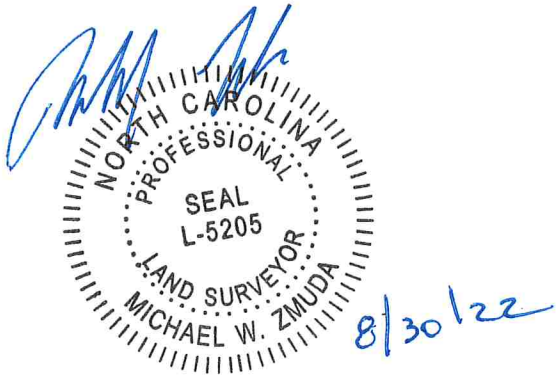
Annexation Area

All that certain real property situated in the Town of Rolesville, Wake Forest Township, Wake County, North Carolina, described as follows:

Beginning at a found iron pipe on the western right of way line of Long Melford Drive at the northern terminus of said drive as depicted on that certain plat entitled "Subdivision Plat, Cedar Ridge Subdivision, Phase II A, Property of Cedar Lakes II LLC" and recorded in Book of Maps 2015, Page 350, Wake County Registry, said point also being the northeastern corner of New Lot 112 as said lot is shown and so designated on that certain plat entitled "Recombination Survey for Lot 112, Cedar Ridge Subdivision" and recorded in Book of Maps 2017, Page 107, Wake County Registry; thence from the point of beginning, along the northern boundary of said New Lot 112, North 85°23'01" West 193.22 feet to a found iron pipe at the northwestern corner thereof and the eastern boundary of that certain plat entitled "Plat of Revision, The Village at Rolesville, Phase I, Tract 2" recorded in Book of Maps 2004, Pages 202 to 203, Wake County Registry; thence along the eastern boundary of said Plat of Revision the following two courses: (1) North 09°54'53" East 301.83 feet to a set iron rod; and (2) North 13°03'43" East 28.84 feet to a found iron rod with cap at the southeastern corner of that certain parcel conveyed to Rolesville Development, LLC in Deed Book 9243, Page 1196, Wake County Registry; thence along the eastern boundary of said Rolesville Development parcel North 13°03'43" East 880.00 feet to a found iron rod at the southeastern corner of that certain parcel conveyed to The Town of Rolesville in Deed Book 5134, Page 618, Wake County Registry; thence along the eastern boundary of said Town of Rolesville parcel the following four courses: (1) North 13°04'55" East 392.55 feet to a set iron rod; (2) North 20°04'58" East 450.00 feet to a set iron rod; (3) North 29°20'00" East 154.00 feet to a set iron rod; and (4) North 06°05'01" West 76.80 feet to a found iron pipe in the southern boundary of Lot 1 as said lot is shown and so designated on that certain plat entitled "Boundary Survey Prepared for Wake County Board of Education, Rolesville Elementary School" and recorded in Book of Maps 2003, Page 557, Wake County Registry; thence along the southern boundary of said Lot 1, North 88°27'43" East 312.89 feet to the northwestern corner of that certain parcel conveyed to June Albert Jones and wife in Deed Book 1613 Page 481, Wake County Registry; thence along the western and southern boundary of said Jones parcel the following two courses: (1) South 13°43'06" West 67.79 feet to a point; and (2) North 82°18'06" East 99.70 feet to the southwestern corner of that certain parcel conveyed to Michael T. Debnam in Deed Book 11563, Page 1757, Wake County Registry; thence along the southern boundary of said Debnam parcel North 70°56'31" East 119.04 feet (record South 84°35' East 99 feet) to a set iron rod at the most southern corner of that certain parcel conveyed to Richard E. Dunn et al. in Deed Book 9721, Page 2124, Wake County Registry; thence along the southeastern boundary of said Dunn parcel North 58°08'06" East 9.77 feet to a set iron rod at the most western corner of the second parcel described in the conveyance to Albert Emery Burke and wife in Deed Book 15944, Page 1564, Wake County Registry; thence along the southwestern and southeastern boundaries of said Burke parcel the following two courses: (1) South 31°51'54" East 99.92 feet to a found iron pipe; and (2) North 58°08'06" East 150.23 feet to a set iron rod; thence along the northeastern boundary of the two parcels described in said Burke conveyance North 31°51'54" West 199.92 feet to a found axle in the southeastern boundary of that certain parcel conveyed to Spencer Pulley and wife in Deed Book 1112, Page 65, Wake County Registry; thence along the southeastern boundary of said Pulley parcel North 57°22'51" East 159.15 feet to a set iron rod at the most western corner of Tract 3 as said tract is described in that certain

conveyance to The Town of Rolesville in Deed Book 18568, Page 660, Wake County Registry; thence along the southwestern boundary of said Tract 3, South 30°55'22" East 450.34 feet to the most western corner of that certain parcel conveyed to C. Douglas Young et al. in Deed Book 9301, Page 1320, Wake County Registry; thence along the southwestern boundary of said Young parcel South 30°55'22" East 1045.91 feet to a set iron rod on the northwestern boundary of that certain 4.874 acre parcel depicted on a plat entitled "Cedar Lakes Boundary Survey, 526 Irina Dr" and recorded in Book of Maps 2019, Page 1539, Wake County Registry (said parcel being part of the phased Cedar Ridge development); thence along the northwestern boundary of the complete Cedar Ridge development recorded in Book of Maps 2019, Page 1539, Book of Maps 2015, Pages 116 and 117, Book of Maps 2016, Page 1977, Book of Maps 2017, Pages 678 to 680, and Book of Maps 2015, Page 899, Wake County Registry, South 57°44'11" West 2210.88 feet to the point of beginning, containing 59.904 acres, more or less.

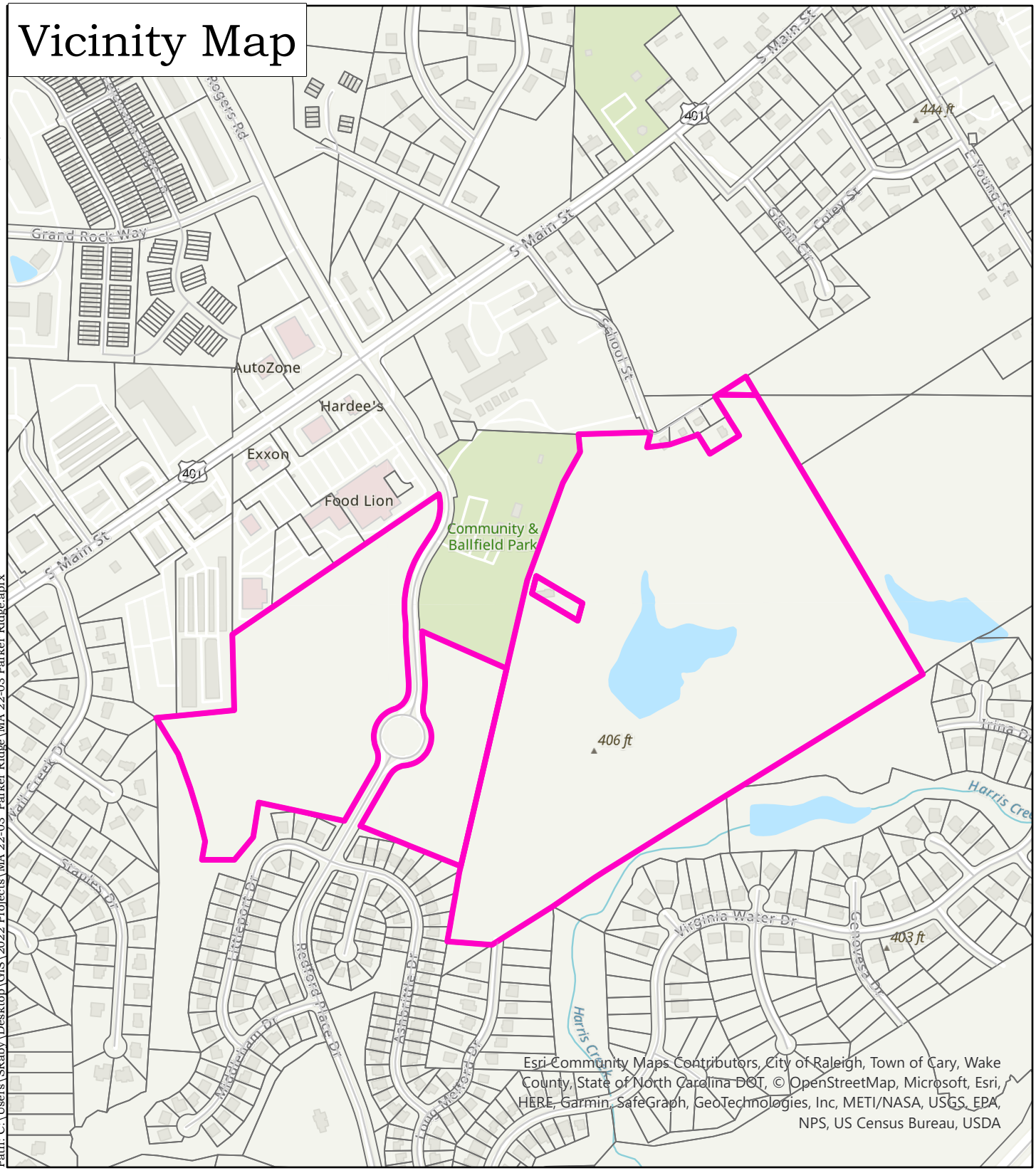
LESS AND EXCEPT the triangular area encompassed within tax PIN # 1768091558, containing approximately 0.151 acres and lying within the existing Rolesville corporate limits.



8/30/22

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

Vicinity Map



N
W E
S

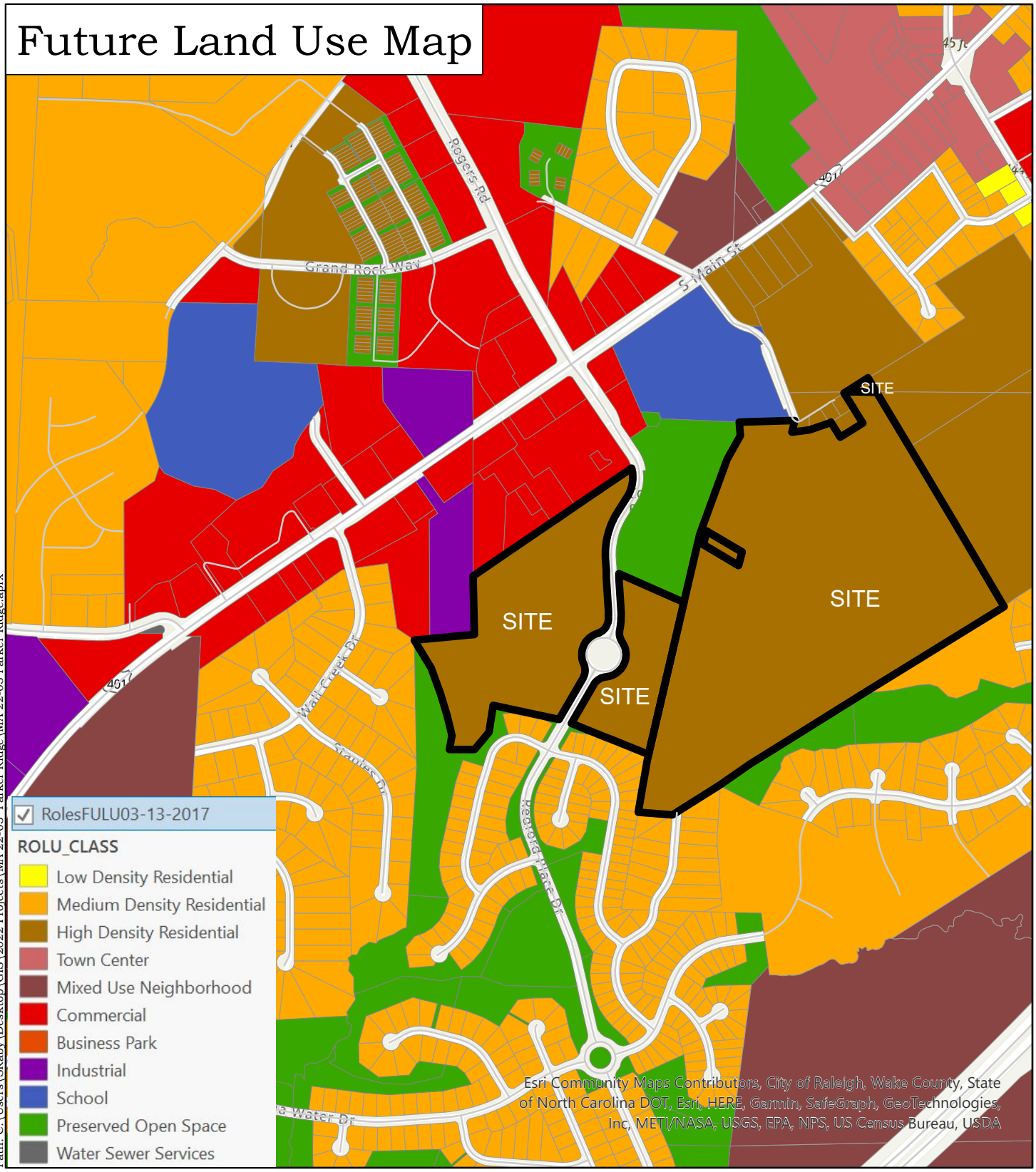
0 0.07 0.15 0.3 Miles

Date Saved: 4/18/2022 2:27 PM

Path: C:\Users\SRaby\Desktop\GIS\2022 Projects\MA 22-03 Parker Ridge\MA 22-03 Parker Ridge.aprx

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

Future Land Use Map



Date Saved: 4/18/2022 2:46 PM

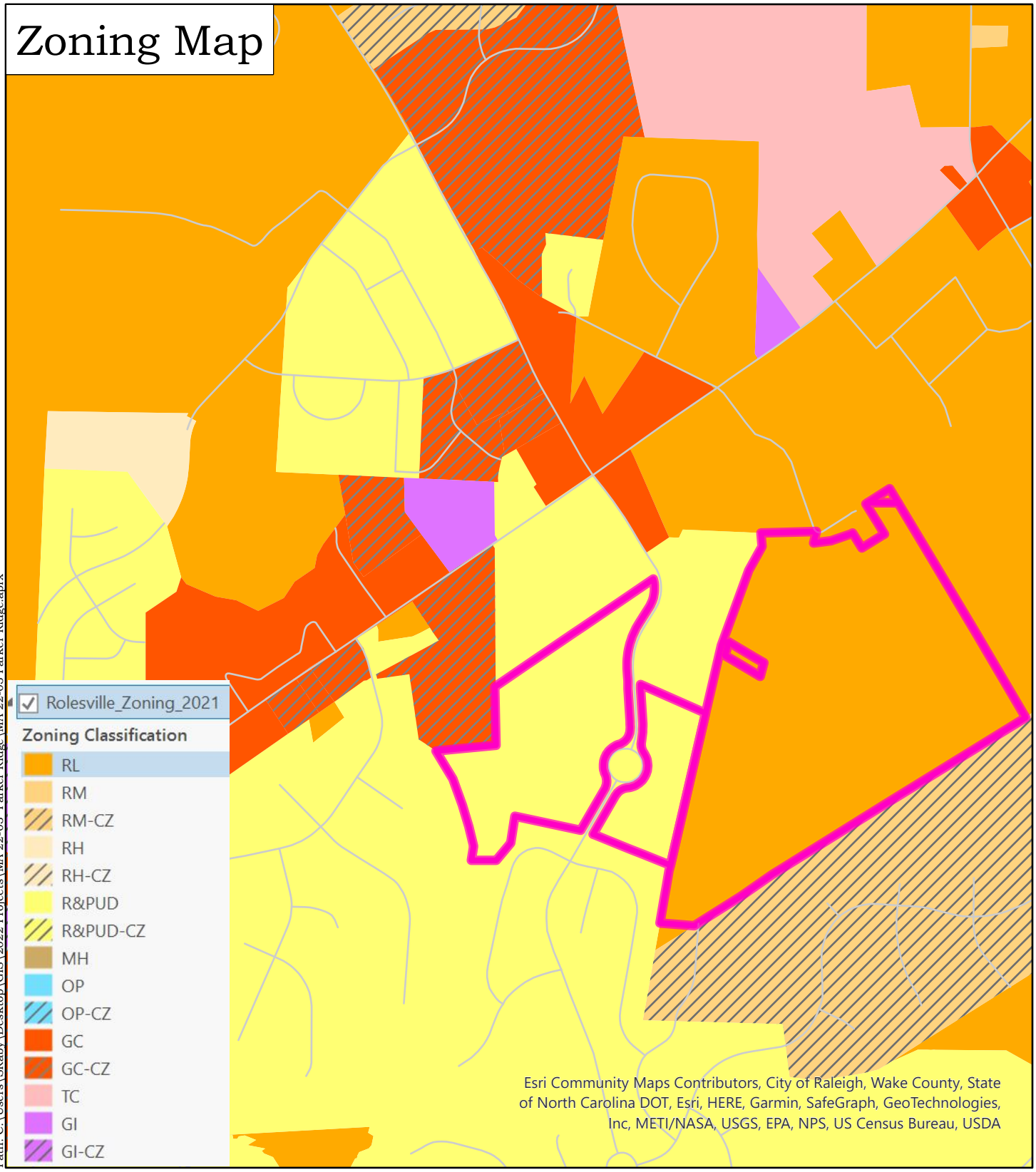
Path: C:\Users\SRaby\Desktop\GIS\2022 Projects\MA 22-03 Parker Ridge\MA 22-03 Parker Ridge.aprx

N
W E
S

0 0.1 0.2 0 0.4 Miles
Miles

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

Zoning Map



Date Saved: 4/18/2022 2:41 PM

Path: C:\Users\SRaby\Desktop\GIS\2022 Projects\MA 22-03 Parker Ridge\MA 22-03 Parker Ridge.aprx

N
W E
S

0 0.1 0.2 0 0.4 Miles
Miles

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.

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

PRELIMINARY PLAN FOR

PARKER RIDGE

82 SCHOOL STREET

ROLESVILLE, NORTH CAROLINA 27571

SITE DATA TABLE		
OWNER	W. HARLOD PARKER JR. / ROELSVILLE DEVELOPMENT, LLC	
DEVELOPER	LENNAR OF CAROLINAS, LLC	
PIN#	AREA (AC)	AREA (SF)
1758988411	59.51	2,592,300
1758983710	0.39	17,121
1758884270 E	7.12	310,215
1758884270 W	19.86	865,243
GROSS AREA	86.89	3,784,879
PARCEL A - PARK EXPANSION AREA	1.50	65,340
NET AREA	85.39	3,719,539
EXISTING ZONING	RL	
EXISTING USE	VACANT/AG	
FUTURE LAND USE	HDR	
PROPOSED ZONING	RH/RM CLUSTER	
PROPOSED USE	RESIDENTIAL	
SETBACKS MINIMUM		
RM (CLUSTER) SINGLE-FAMILY DETACHED)		
FRONT	20'	
SIDE	5'	
CORNER SIDE	10'	
REAR	20'	
MIN FRONT LOT WIDTH	40'	
MIN AREA	5000 SF	
	AREA (SF)	AREA (AC)
RM-CZ CLUSTER (SINGLE-FAMILY DETACHED)		
FINAL TRACT AREA	936,667	21.50
TOTAL UNITS	160	
PROPOSED DENSITY (DU/AC)	7.4	
MAXIMUM DENSITY (DU/AC)	5	
PUBLIC GREENWAY (EST. 30' ESTM WIDTH)	150,754	3.46
CLUSTER OPEN SPACE REQUIRED 40%	374,667	8.60
PROVIDED OPEN SPACE	374,667	23.16
RH-CZ (TOWNHOMES)		
FRONT	15'	
PARKING SETBACK FOR TOWNHOMES	18'	
BUILDING SEPARATION	30'	
SIDE	10'	
CORNER SIDE	15'	
REAR	15'	
MIN FRONT LOT WIDTH	20'	
RH-CZ (TOWNHOMES) - FRONT LOADED	AREA (SF)	AREA (AC)
FINAL TRACT AREA	184,665	4.24
TOTAL UNITS	65	
PROPOSED DENSITY (DU/AC)	4.14	
MAXIMUM DENSITY (DU/AC)	9	
RH-CZ (TOWNHOMES) - REAR LOADED	AREA (SF)	AREA (AC)
FINAL TRACT AREA	145,059	3.33
TOTAL UNITS	49	
PROPOSED DENSITY (DU/AC)	4.14	
MAXIMUM DENSITY (DU/AC)	9	

OPEN SPACE

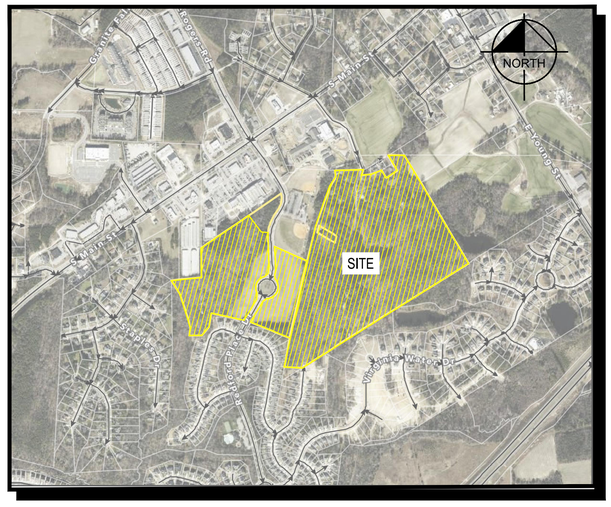
REQUIRED
RM ZONING DISTRICT (SINGLE-FAMILY DETACHED)
MINIMUM REQUIRED OPEN SPACE (10%) - 252,169 SF (5.78 AC)
REQUIRED ACTIVE OPEN SPACE (50%) - 126,084 (2.89 AC)
REQUIRED PASSIVE OPEN SPACE - 126,084 SF (2.89 AC)

RH ZONING DISTRICT (TOWNHOMES)
MINIMUM REQUIRED OPEN SPACE (15%) - 179,677 SF (4.12 AC)
REQUIRED ACTIVE OPEN SPACE (50%) - 89,838 SF (2.06 AC)
REQUIRED PASSIVE OPEN SPACE - 89,838 SF (2.06 AC)

TOTAL OPEN SPACE (BOTH DISTRICTS)
TOTAL OPEN SPACE - 431,244 SF (9.9 AC)
ACTIVE OPEN SPACE - 215,922 SF (4.95 AC)
PASSIVE OPEN SPACE - 215,922 SF (4.95 AC)

PROVIDED
TOTAL OPEN SPACE (BOTH DISTRICTS)
TOTAL OPEN SPACE - 2,007,900 SF (46.09 AC)
ACTIVE OPEN SPACE - 218,000 SF (5.0 AC)
PASSIVE OPEN SPACE - 1,789,900 SF (41.09 AC)*

*NOTE: PASSIVE OPEN SPACE INCLUDES ALL LAND OUTSIDE OF LOTS AND ROADS OTHER THAN ACTIVE OPEN SPACE



SITE LOCATION MAP
NOT TO SCALE

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C0-0	COVER SHEET
C3-0	OVERALL SITE PLAN
C3-1	ENLARGED SITE PLAN (1 OF 2)
C3-2	ENLARGED SITE PLAN (2 OF 2)

PROJECT OWNER AND CONSULTANT INFORMATION		
DEVELOPER: LENNAR CORPORATION 1100 PERIMETER PARK DRIVE, SUITE 112 MORRISVILLE, NC 27560 (919) 236-3052 CONTACT: CHARLIE YOKLEY, AICP	ENGINEER: BGE, INC 5400 WADE PARK BOULEVARD RALEIGH, NORTH CAROLINA 27607 (919) 276-0111 CONTACT: DEBRA FERM, P.E.	SURVEYOR: BATEMAN CIVIL SURVEY COMPANY THROUGH THE SPAULDING GROUP 2524 RELIANCE AVENUE APEX, NORTH CAROLINA 27539 (919) 577-1080 EXT. 115 CONTACT: STEVEN CARSON

811 Know what's below. Call before you dig.

REV	2/23/2023
DESIGNED BY:	DF/CD
DRAWN BY:	DF/JM
REVIEWED BY:	DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397

LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE MASTER PLAN
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

COVER SHEET

NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03

DATE: 02/23/2023

C0-0

LEGEND

- PUBLIC GREENWAY (EST. 10' TRAIL IN 20' ESMT)
- PERIMETER BUFFERS
- OPEN SPACE
- ENVIRONMENTAL AREAS
- PROPOSED ZONING LINE
- TOWNHOME TRACT AREA
- SINGLE FAMILY
- TOWNHOME (FRONT LOAD)
- TOWNHOME (ALLEY)
- PARCEL A — TOWN OF ROLESVILLE PARK EXPANSION PROPERTY (AREA CREDITED TOWARD OPEN SPACE REQUIREMENTS OF OVERALL PROJECT)
- * POLLINATOR GARDEN
- TYPICAL FITNESS STATION (MINIMUM OF 5 STATIONS)

LOCATIONS SHOWN FOR COMMITTED ELEMENTS INCLUDING, BUT NOT LIMITED TO GREENWAYS, STREETS, AND OPEN AREAS ARE CONCEPTUAL AND PROVIDED FOR ILLUSTRATION AND CONTEXT ONLY. FINAL LOCATIONS OF ELEMENTS SHALL BE DETERMINED AT SUBSEQUENT STAGES OF APPROVAL.

REV	1	2	3	4	5
2/23/2023					

DESIGNED BY: DF/CD
DRAWN BY: DF/JM
REVIEWED BY: DF

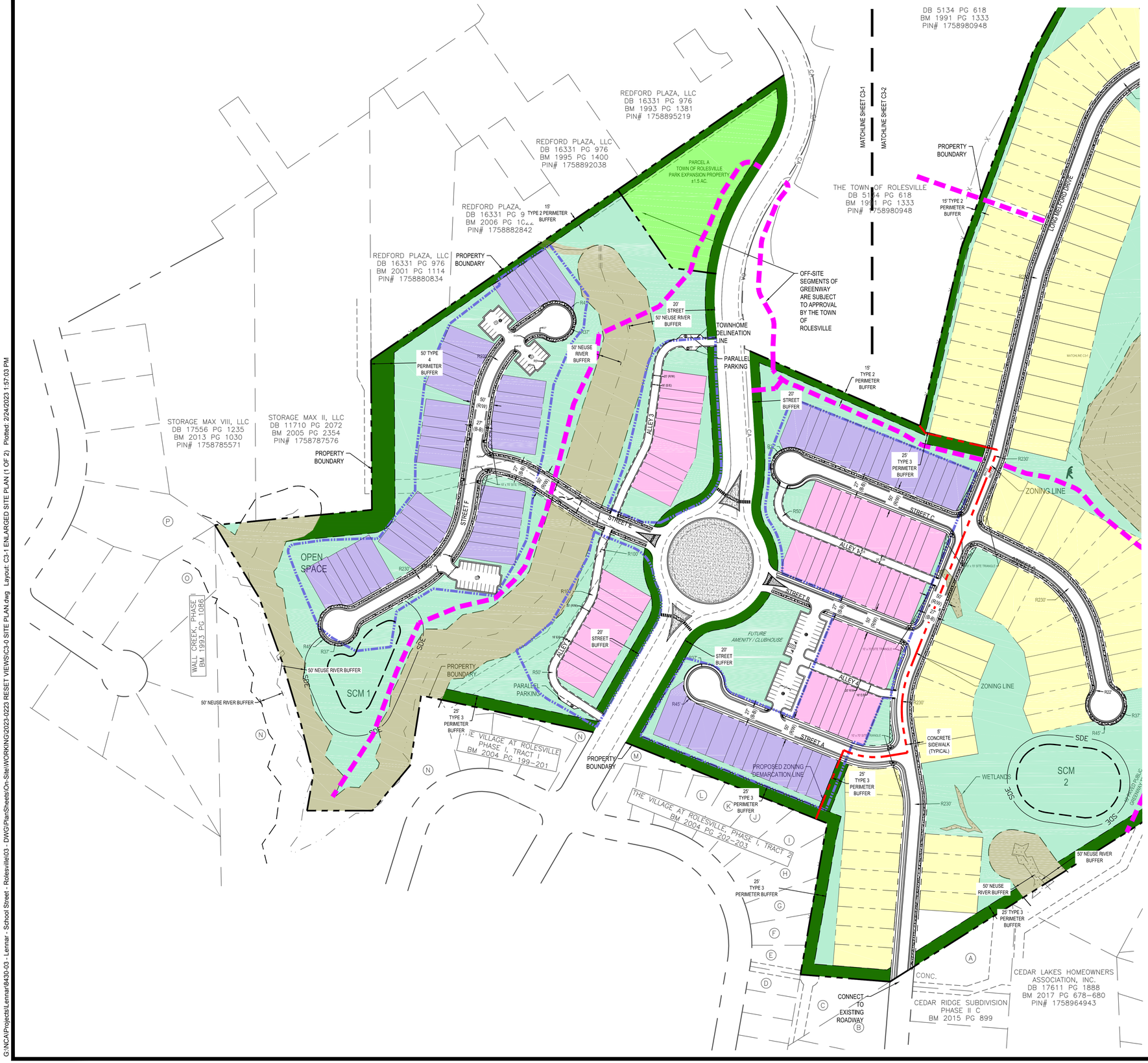
BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397
©2022

LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE MASTER PLAN
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

OVERALL SITE PLAN

NOT FOR CONSTRUCTION
FILE NUMBER: 8430-03
DATE: 02/23/2023
C3-0



LEGEND

- PUBLIC GREENWAY (EST. 10' TRAIL IN 20' ESMT)
- PERIMETER BUFFERS
- OPEN SPACE
- ENVIRONMENTAL AREAS
- PROPOSED ZONING LINE
- TOWNHOME TRACT AREA
- SINGLE FAMILY
- TOWNHOME (FRONT LOAD)
- TOWNHOME (ALLEY)
- PARCEL A — TOWN OF ROLESVILLE PARK EXPANSION PROPERTY (AREA CREDITED TOWARD OPEN SPACE REQUIREMENTS OF OVERALL PROJECT)
- * POLLINATOR GARDEN
- TYPICAL FITNESS STATION (MINIMUM OF 5 STATIONS)

LOCATIONS SHOWN FOR COMMITTED ELEMENTS INCLUDING, BUT NOT LIMITED TO GREENWAYS, STREETS, AND OPEN AREAS ARE CONCEPTUAL AND PROVIDED FOR ILLUSTRATION AND CONTEXT ONLY. FINAL LOCATIONS OF ELEMENTS SHALL BE DETERMINED AT SUBSEQUENT STAGES OF APPROVAL.

Know what's below. Call before you dig.

REV	2/23/2023
DESIGNED BY:	DF/CD
DRAWN BY:	DF/JM
REVIEWED BY:	DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH, NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397

LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE MASTER PLAN
82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

ENLARGED SITE PLAN (1 OF 2)

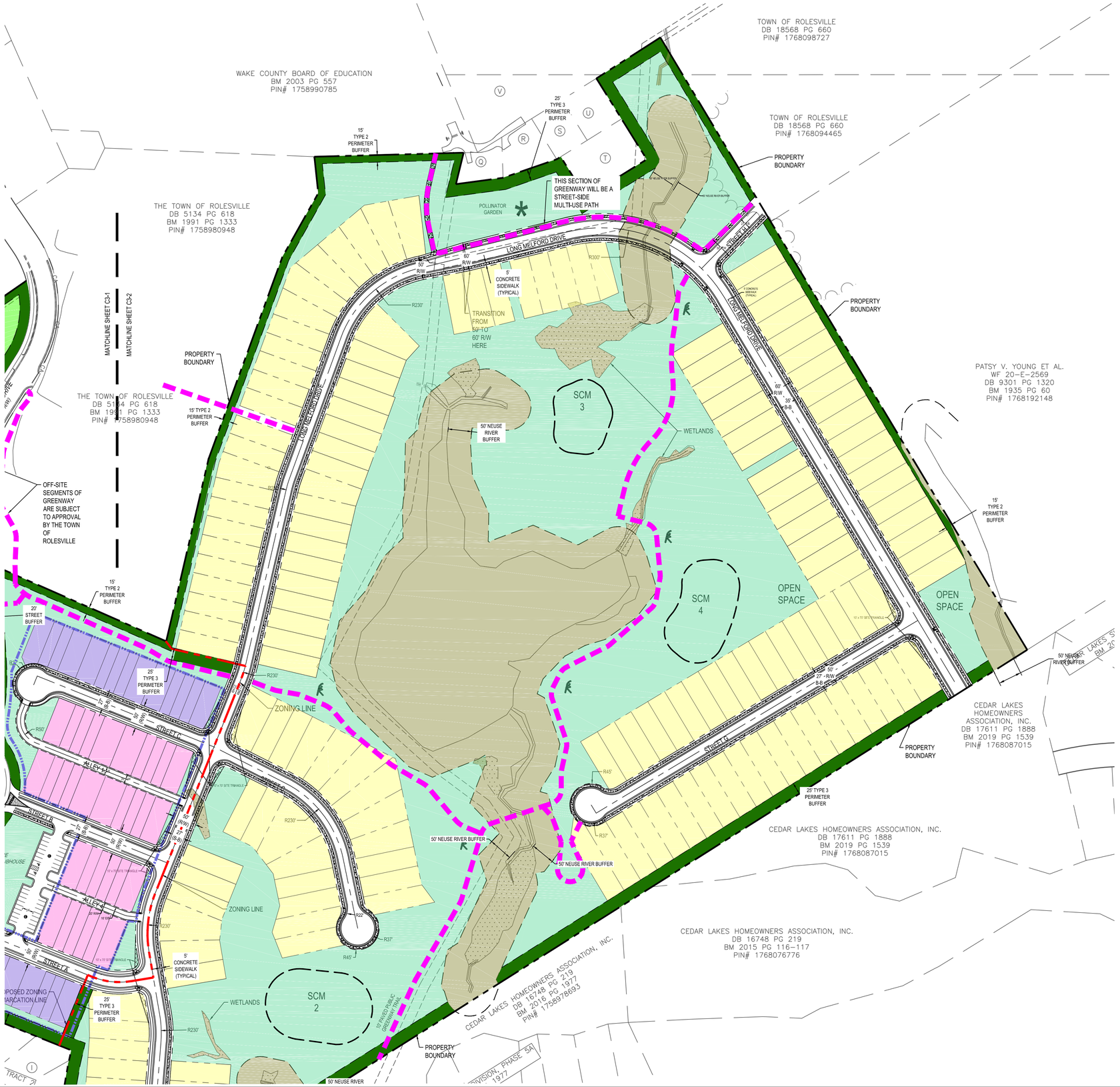
NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03

DATE: 02/23/2023

C3-1

G:\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\WORKING\2023-0223 RESET VIEWS\C2-0 SITE PLAN.dwg Layout: C3-1 ENLARGED SITE PLAN (1 OF 2) Plotted: 2/24/2023 1:57:03 PM



LEGEND

- PUBLIC GREENWAY (EST. 10' TRAIL IN 20' ESMT)
- PERIMETER BUFFERS
- OPEN SPACE
- ENVIRONMENTAL AREAS
- PROPOSED ZONING LINE
- TOWNHOME TRACT AREA
- SINGLE FAMILY
- TOWNHOME (FRONT LOAD)
- TOWNHOME (ALLEY)
- PARCEL A — TOWN OF ROLESVILLE PARK EXPANSION PROPERTY (AREA CREDITED TOWARD OPEN SPACE REQUIREMENTS OF OVERALL PROJECT)
- * POLLINATOR GARDEN
- TYPICAL FITNESS STATION (MINIMUM OF 5 STATIONS)

LOCATIONS SHOWN FOR COMMITTED ELEMENTS INCLUDING, BUT NOT LIMITED TO GREENWAYS, STREETS, AND OPEN AREAS ARE CONCEPTUAL AND PROVIDED FOR ILLUSTRATION AND CONTEXT ONLY. FINAL LOCATIONS OF ELEMENTS SHALL BE DETERMINED AT SUBSEQUENT STAGES OF APPROVAL.

REV	2/23/2023
DESIGNED BY:	DF/CD
DRAWN BY:	DF/JM
REVIEWED BY:	DF

BGE
5440 WADE PARK BLVD, SUITE 102
RALEIGH, NC 27607
WWW.BGEINC.COM
NC LICENSE #C-4397

LENNAR CORPORTAION
1100 PERIMETER PARK DRIVE, SUITE 112
MORRISVILLE / NORTH CAROLINA / 27560

PARKER RIDGE MASTER PLAN

82 SCHOOL STREET
ROLESVILLE / NORTH CAROLINA / 27571

ENLARGED SITE PLAN (2 OF 2)

NOT FOR CONSTRUCTION

FILE NUMBER: 8430-03

DATE: 02/23/2023

C3-2

811 Know what's below. Call before you dig.

G:\NCA\Projects\Lennar\8430-03 - Lennar - School Street - Rolesville\03 - DWG\PlanSheets\On-Site\WORKING\2023-0223 RESET VIEWS\C3-0 SITE PLAN.dwg - Layout: C3-2 ENLARGED SITE PLAN (2 OF 2) Plotted: 2/24/2023 2:00:38 PM

EXHIBIT D
to Parker Ridge Rezoning Application
Proposed Conditions
Rev. 5 – February 24, 2023

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 **Exhibit C**, are conceptual and provided for illustration and context only. Final locations of elements shall be determined at subsequent stages of approval. Developer shall be entitled to a credit against the Project's Parks and Recreation Fees for the costs to construct public greenways.

2. The following uses shall be prohibited on the portion of the property zoned Residential High Density (the "RH Parcel"):

   a. Live-Work Unit
   b. Residential Care (ALF, ILF, CCF)
   c. 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. Telecommunications Tower

5. The RM Parcel shall have a maximum of 170 single-family detached dwellings.

6. A single family detached home shall be developed and donated as part of Wounded Warrior Homes, Operation Coming Home, Operation Finally Home, or similar organization providing homes to veterans. Developer shall be entitled to a waiver of all Town of Rolesville permit fees for this home.

7. The development shall include at least one pollinator garden. The pollinator garden shall be a landscaped garden in which at least seventy five percent (75%) of all plants, excluding grasses, are native milkweeds and other nectar-rich flowers.

8. Perimeter buffers shall be provided as shown on the Concept plan. Type 3 and Type 4 perimeter buffers may include 6' fences instead of walls.

9. All single family detached dwellings shall have the following features:

   a. A 2 car garage;

   b. All garage doors shall have windows;

   c. Ground floor elevation at the front door shall be a minimum of 12" above average grade across the front façade of the house.

d. A minimum 24” stone or masonry water table along the front elevation;

e. If masonry is not the predominant first floor finish, then the front elevation shall have 2 types of siding. For example, horizontal siding may be combined with shake/board and batten;

f. Roof pitches on the main roof will have a pitch between 5 on 12 and 12 on 12;

g. Roof materials shall be asphalt shingles, metal, copper or wood;

h. Minimum 12” front overhangs;

i. A covered stoop or porch at least 20 sf and 5 ft deep;

j. All windows on front facades shall have shutters or window trim;

k. A minimum 64 sf rear patio;

l. At least one window on each side elevation;

m. No single family detached home shall be constructed with a front elevation or color palette that is identical to the home on either side of it or directly across from it; and

n. A varied color palette shall be used throughout the subdivision.

10. All townhouse dwellings shall have the following features:

a. A 1 or 2 car garage;

b. A minimum 24” stone or masonry water table along the front elevation;

c. If masonry is not the predominant first floor finish, then the front elevation shall have 2 types of siding. For example, horizontal siding may be combined with shake/board and batten;

d. Roof materials shall be asphalt shingles, metal, copper or wood;

e. Minimum 12” front overhangs;

f. A covered stoop or porch at least 20 sf and 5 ft deep;

g. Shutters or window trim shall be on front façade windows;

h. A minimum 64 sf rear patio shall be provided on front loaded townhouses;

i. At least one window on each side elevation (excluding interior units);

j. No townhouse shall be painted a color that is identical to the home adjacent on either side of it; and

k. A varied color palette shall be used throughout the subdivision.

11. The developer shall offer to dedicate the section of land labeled as "Parcel – A – Town of Rolesville Park Expansion" on the Concept Plan for use as a public park. This land shall count toward open space requirements for the overall development.

12. The Project shall have a public greenway stubbed to the 307 S. Main Street property line near "Access C" as shown on the "Parker Ridge Traffic Impact Analysis" prepared by Stantec Consulting Services, Inc., dated February 2, 2023 (the "TIA"). Notwithstanding the foregoing, the Project shall not have a public street access to School Street.

13. Developer shall design and construct: (1) the public collector street identified as Access D in the TIA that extends the street network within the development through Wake County PIN 1768-09-8727 (the "Campus Site") to E Young Street ("Access D Route"); and (2) a northbound left turn lane with 75 feet of full-width storage and appropriate taper from Young Street to Access D as recommended by the TIA ("Turn Lane") (Access D Route and Turn Lane are collectively referred to as the "Young Street Connection"). The Young Street Connection shall be designed and constructed to Town of Rolesville and NCDOT standards and Access D shall be located in substantial conformance with the corridor shown in the attached **Exhibit E**. The street section for Access D shall be constructed as shown in the attached **Exhibit F**. Developer shall be responsible for all costs to design and construct the Young Street Connection (the "Costs") and Developer shall be entitled to a credit against the Project's Transportation Impact Fees for the Costs. Construction of the Young Street Connection shall commence prior to issuance of the 105th Certificate of Occupancy for the Project and shall be complete not later than issuance of the 138th Certificate of Occupancy for the Project.

While it is anticipated that this condition will be clarified by a formal development agreement, reimbursement agreement, or other written agreement between the Developer and the Town, the absence of such a subsequent written agreement shall not be deemed to invalidate this condition.

This condition is subject to the following caveats:

- In the event the Campus Site, an approved alignment within the **Exhibit E** corridor, or necessary rights-of-way, easements, or other property rights are made unavailable to the Project, this condition shall be deemed extinguished.

- In the event the Town commences design and/or development of any part of the Young Street Connection, the Developer's obligations for design and/or development, as appropriate, for those portions of the Young Street Connection shall be deemed extinguished. For purposes of clarity, Developer shall remain entitled to a credit against the Project's Transportation Impact Fees for remaining Costs.

"Project" shall mean "Parker Ridge" as described by MA 22-03 and ANX 22-06.

"Developer" shall mean Lennar Carolinas LLC, and its successors and assigns.

PARKER RIDGE
PROPOSED ROADWAY
CORRIDOR EXHIBIT

ROLESVILLE, NORTH CAROLINA
FEBRUARY 22, 2023

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)

LEGEND

EXISTING PROPERTY LINE

PROPOSED ROADWAY CORRIDOR

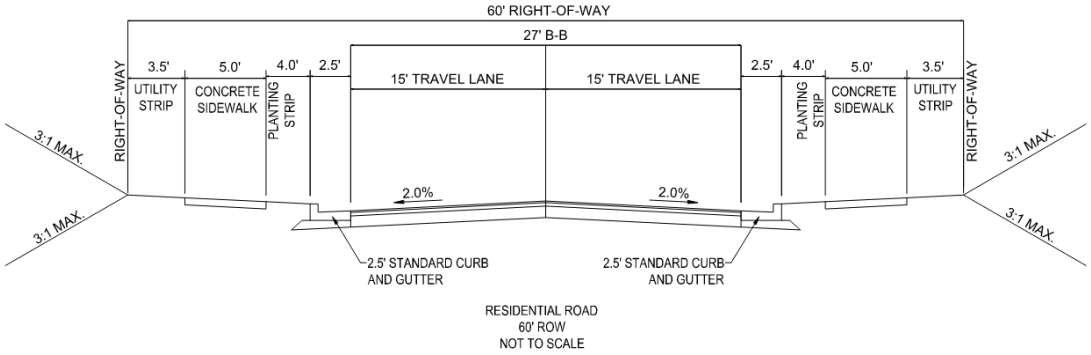
EXHIBIT E

ACCESS D PROPOSED ROADWAY CORRIDOR

E YOUNG STREET

PREPARED IN THE OFFICE OF:
Kimley»Horn
300 MORRIS STREET, DURHAM, NC 27701, SUITE 200
PHONE: (919) 682-3583 PE NO. F-0102

Exhibit F


60' RIGHT-OF-WAY
27' B-B
RIGHT-OF-WAY
3.5'
UTILITY STRIP
5.0'
CONCRETE SIDEWALK
4.0'
PLANTING STRIP
2.5'
15' TRAVEL LANE
15' TRAVEL LANE
2.5'
4.0'
PLANTING STRIP
5.0'
CONCRETE SIDEWALK
3.5'
UTILITY STRIP
RIGHT-OF-WAY
3:1 MAX.
3:1 MAX.
3:1 MAX.
3:1 MAX.
2.0%
2.0%
2.5' STANDARD CURB AND GUTTER
2.5' STANDARD CURB AND GUTTER
RESIDENTIAL ROAD
60' ROW
NOT TO SCALE

Parker Ridge
Traffic Impact Analysis

Rolesville, North Carolina

February 2, 2023

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 Pierre Tong

(signature)

Pierre Tong, PE

Reviewed by

(signature)

Jeff Weller, PE

Approved by

(signature)

Matt Peach, PE, PTOE

2/2/2023

Table of Contents

LIST OF TABLES

LIST OF FIGURES

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. Currently, the 86.76-acre site is expected to be a residential development consisting of single-family homes as well as townhomes. The current zoning is a mix of residential low density and residential/planned unit development (R&PUD). The applicant is pursuing a rezoning to Residential Medium Density (RM) and Residential High Density (RH).

The proposed development is planned to consist of 162 single-family homes and 114 townhomes with an anticipated completion date in 2028. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual, it is estimated that at full build-out 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 via four driveways as follows:

- Access A will add a western leg to the existing roundabout on Redford Place Drive
- Access B will add an eastern leg to the existing roundabout on Redford Place Drive
- Access C will be provided via an extension of School Street
- Access D will consist of a connection out to Young Street to the east

There is a possibility for Access C to be removed from the development plan, therefore, this study is performed with and without the extension of School Street.

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 with Access C
- 2028 Build Improved with Access C
- 2028 Build without Access C
- 2028 Build Improved without Access C

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

- SR 2226 (Jonesville Road) at Prides Crossing
- US 401 Business (South Main Street) at SR 2051 (Burlington Mills Road)
- Old Rogers Road/School Street at US 401 Business (South Main Street)
- Redford Place Drive/SR 2052 (Rogers Road) at US 401 Business (South Main Street)
- School Street at School Driveway/Scarboro Driveway

- Redford Place Drive at School Driveway
- US 401 at SR 1003 (Young Street)

The study will also include the following planned (i.e., future) intersections:

- US 401 Business (South Main Street) at SR 2051 (Realigned Burlington Mills Road)
- US 401 Business (South Main Street) at Virginia Water Drive Extension

The results of the capacity analysis at these existing and planned intersections, in addition to the aforementioned driveways, are summarized in Tables ES-1 and ES-2:

Table ES-1: Level of Service Summary Table with Access C

Level of Service (Delay, sec/veh)	2022 Existing		2028 No-Build		2028 Build		2028 Build Improved	
	AM	PM	AM	PM	AM	PM	AM	PM
Jonesville Road at Prides Crossing	B (10.3)	B (11.1)	B (11.9)	B (13.4)	B (12.0)	B (13.7)	B (12.0)	B (13.7)
South Main Street at Virginia Water Drive Extension	--	--	C (29.8)	D (46.3)	C (30.2)	D (46.9)	C (30.2)	D (46.9)
South Main Street at Realigned Burlington Mills Road	--	--	D (50.0)	D (43.4)	D (48.9)	D (43.7)	D (48.9)	D (43.7)
South Main Street at Burlington Mills Road	C (22.2)	B (18.0)	C (21.9)	C (20.1)	C (22.1)	C (20.2)	C (22.1)	C (20.2)
Redford Place Drive/Rogers Road at South Main Street	C (26.7)	C (27.0)	E (62.5)	E (73.3)	E (64.0)	E (73.8)	E (64.0)	E (73.8)
Old Rogers Road/School Street at South Main Street	C (22.5)	D (28.7)	F (158.5)	F (##)	F (145.6)	F (##)	F (145.6)	F (##)
School Street at School Driveway/Scarboro Driveway/Access C	--	--	A (8.9)	A (8.6)	A (8.9)	A (8.6)	A (8.9)	A (8.6)
Redford Place Drive at School Driveway	B (10.5)	A (9.7)	B (11.6)	B (10.6)	B (11.9)	B (10.8)	B (11.9)	B (10.8)
Redford Place Drive at Access A/Access B	--	--	--	--	A (3.8)	A (4.2)	A (3.8)	A (4.2)
Young Street at Access D	--	--	--	--	B (14.7)	C (21.3)	B (14.7)	C (20.7)
US 401 at Young Street (North)	A (8.0)	A (9.9)	A (9.0)	B (10.5)	B (10.2)	B (10.9)	B (10.2)	B (10.9)
US 401 at Young Street (South)	A (9.1)	A (8.1)	B (17.6)	D (44.2)	B (18.0)	D (46.4)	B (18.0)	D (46.4)
US 401 Eastern U-Turn	A (2.8)	B (11.8)	A (2.7)	A (3.3)	A (2.7)	A (3.6)	A (2.7)	A (3.6)
US 401 Western U-Turn	A (2.0)	A (4.2)	A (2.3)	A (2.9)	A (2.3)	A (3.0)	A (2.3)	A (3.0)

	Signalized Intersection
	Stop Controlled Intersection
	Roundabout
-	Intersection Not Analyzed In Scenario
##	Delay Exceeds 300 Seconds

Table ES-2: Level of Service Summary Table without Access C

Level of Service (Delay, sec/veh)	2022 Existing		2028 No-Build		2028 Build		2028 Build Improved	
	AM	PM	AM	PM	AM	PM	AM	PM
Jonesville Road at Prides Crossing	B (10.3)	B (11.1)	B (11.9)	B (13.4)	B (12.0)	B (13.7)	B (12.0)	B (13.7)
South Main Street at Virginia Water Drive Extension	--	--	C (29.8)	D (46.3)	C (30.2)	D (46.9)	C (30.2)	D (46.9)
South Main Street at Realigned Burlington Mills Road	--	--	D (50.0)	D (43.4)	D (48.9)	D (43.7)	D (48.9)	D (43.7)
South Main Street at Burlington Mills Road	C (22.2)	B (18.0)	C (21.9)	C (20.1)	C (22.1)	C (20.2)	C (22.1)	C (20.2)
Redford Place Drive/Rogers Road at South Main Street	C (26.7)	C (27.0)	E (62.5)	E (73.3)	E (64.0)	E (73.8)	E (64.0)	E (73.8)
Old Rogers Road/School Street at South Main Street	C (22.5)	D (28.7)	F (158.5)	F (##)	F (177.9)	F (##)	F (177.9)	F (##)
School Street at School Driveway/Scarboro Driveway/Access C	--	--	A (8.9)	A (8.6)	A (8.9)	A (8.6)	A (8.9)	A (8.6)
Redford Place Drive at School Driveway	B (10.5)	A (9.7)	B (11.6)	B (10.6)	B (11.9)	B (10.8)	B (11.9)	B (10.8)
Redford Place Drive at Access A/Access B	--	--	--	--	A (3.8)	A (4.2)	A (3.8)	A (4.2)
Young Street at Access D	--	--	--	--	C (15.7)	C (24.0)	C (15.6)	C (23.4)
US 401 at Young Street (North)	A (8.0)	A (9.9)	A (9.0)	B (10.5)	B (10.2)	B (10.9)	B (10.2)	B (10.9)
US 401 at Young Street (South)	A (9.1)	A (8.1)	B (17.6)	D (44.2)	B (18.0)	D (46.4)	B (18.0)	D (46.4)
US 401 Eastern U-Turn	A (2.8)	B (11.8)	A (2.7)	A (3.3)	A (2.7)	A (3.6)	A (2.7)	A (3.6)
US 401 Western U-Turn	A (2.0)	A (4.2)	A (2.3)	A (2.9)	A (2.3)	A (3.0)	A (2.3)	A (3.0)

	Signalized Intersection
	Stop Controlled Intersection
	Roundabout
-	Intersection Not Analyzed In Scenario
##	Delay Exceeds 300 Seconds

The Town of Rolesville's Land Development Ordinance (LDO)[7], 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.*

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.*

With the addition of traffic generated by the proposed development, the northbound School Street and southbound Old Rogers Road approach of the South Main Street at Old Rogers Road/School Street intersection increases in delay by greater than 5%. It is common for unsignalized side-street approaches to operate with high delays during peak periods. 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 to meet the requirements of the Rolesville 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. In addition, the low traffic volumes on the side-street approaches of Old Rogers Road and School Street are not anticipated to meet the warrants for the 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 D 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 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 access in the future.

Based on the findings of this study, specific improvements have been identified and some should be completed as part of the proposed development. These improvements are valid for both scenarios with and without Access C.

Jonesville Road at Prides Crossing

- No improvements are recommended at this intersection

South Main Street at Realigned Burlington Mills Road

- No improvements are recommended at this intersection

Redford Place Drive/Rogers Road at South Main Street

- No improvements are recommended at this intersection

Old Rogers Road/School Street at South Main Street

- No improvements are recommended at this intersection

School Street at School Driveway/Scarboro Driveway/Access C

- If Access C is constructed, the driveway should be constructed with one ingress lane and one egress lane with 100 feet of internal protective stem
- If Access C is not pursued, it is recommended that the connection be removed from the Town's Community Transportation Plan (CTP)

Redford Place at School Driveway

- No improvements are recommended at this intersection

US 401 at Young Street

- No improvements are recommended at this intersection

US 401 WB U-Turn

- No improvements are recommended at this intersection

US 401 EB U-Turn

- No improvements are recommended at this intersection

South Main Street at Virginia Water Drive Extension

- No improvements are recommended at this intersection

Redford Place Drive at Access A/Access B

- Construct Access A and Access B with one ingress lane and one egress lane 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

Young Street at Access D

It is recommended that Access D be constructed by others as a full-movement access point, with one ingress lane and one egress lane with 100 feet of internal protective stem. A northbound left turn lane should be provided in conjunction with construction of the access point with 75 feet of full-width storage and appropriate taper.

These recommendations are illustrated in Figure ES-1.

Figure ES-1: Recommended Improvements

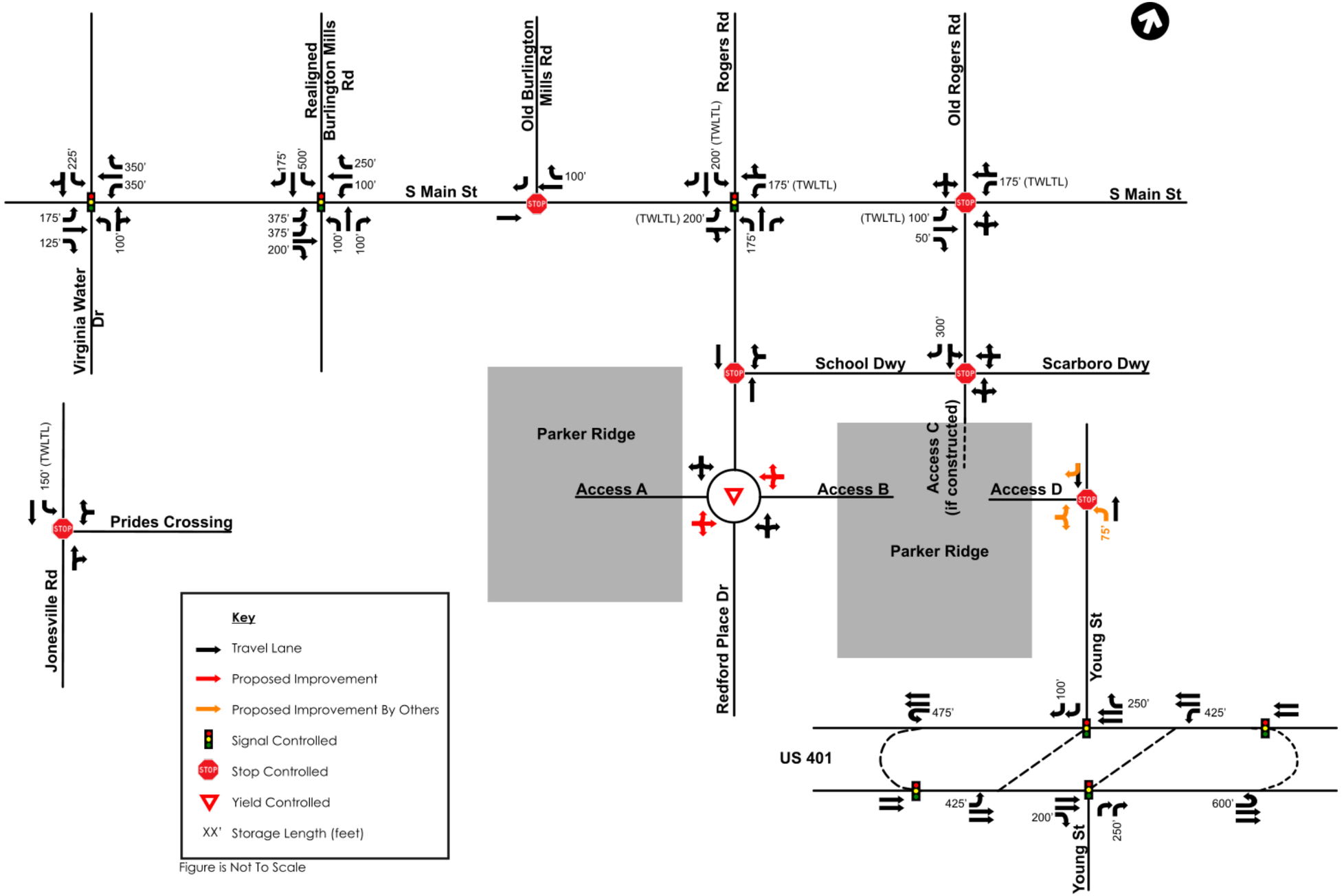


Figure is Not To Scale

1.0 INTRODUCTION

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 current zoning is a mix of residential low density and residential/planned unit development (R&PUD). The applicant is pursuing a rezoning to Residential Medium Density (RM) and Residential High Density (RH). The 86.76-acre site is anticipated to be completed in 2028 and consists of 162 single-family homes and 114 townhomes. The project location is shown in Figure 1. The site plan, prepared by BGE, Inc., can be found in Figure 2.

The traffic analysis will consider future build conditions during the build-out year (2028). Access to the site is anticipated to be provided by up to four (4) driveways as follows:

- Access A will add a western leg to the existing roundabout on Redford Place Drive
- Access B will add an eastern leg to the existing roundabout on Redford Place Drive
- Access C will connect to School Street
- Access D will create a new driveway onto Young Street

The traffic analysis was requested to be performed with and without Access C due to concerns that development traffic would interfere with Rolesville Elementary School pick-up and drop-off operations. Therefore, the analysis scenarios are as follows:

- 2022 Existing
- 2028 No-Build
- 2028 Build with Access C
- 2028 Build Improved with Access C
- 2028 Build without Access C
- 2028 Build Improved without Access C

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

Figure 1: Site Location

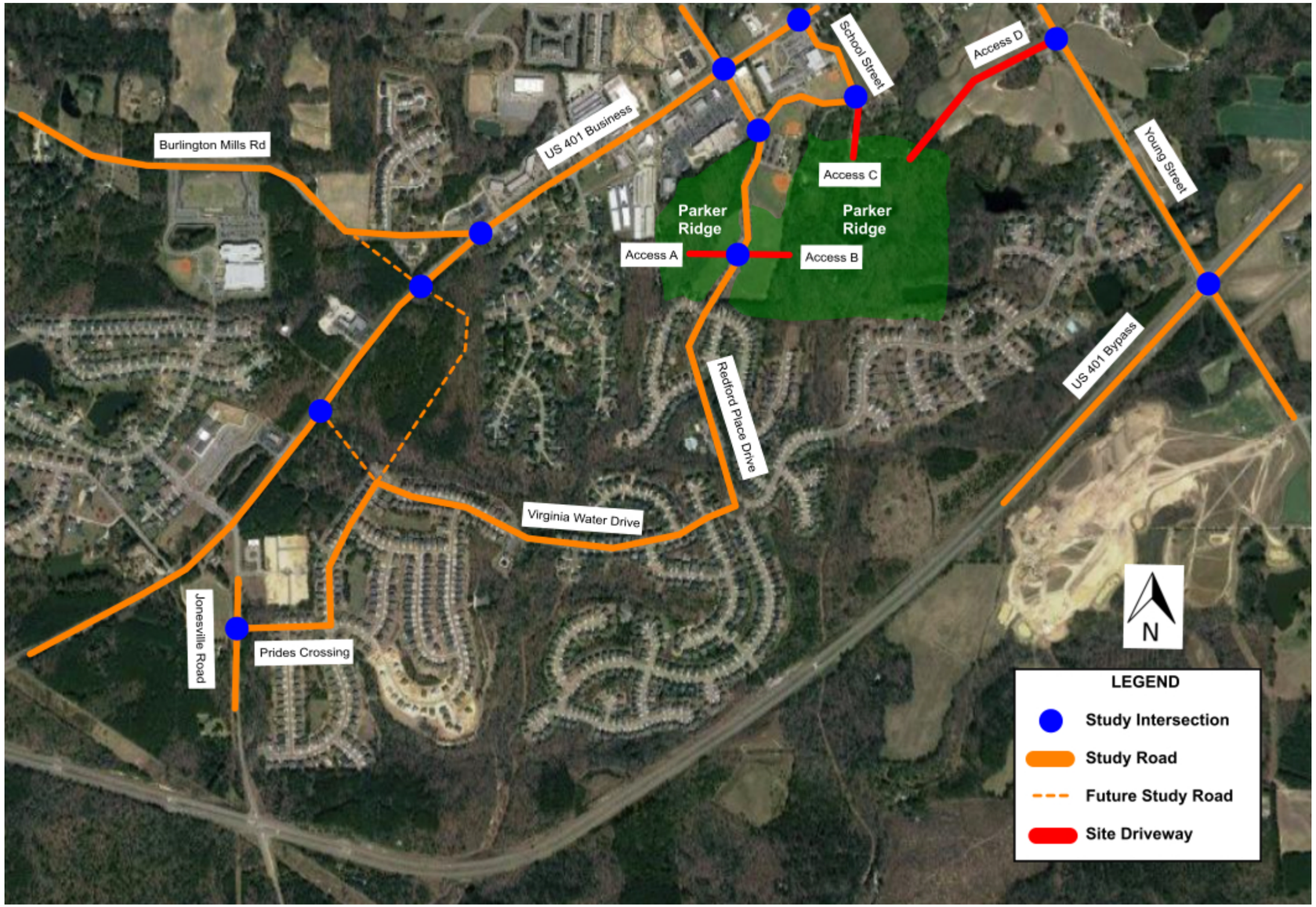
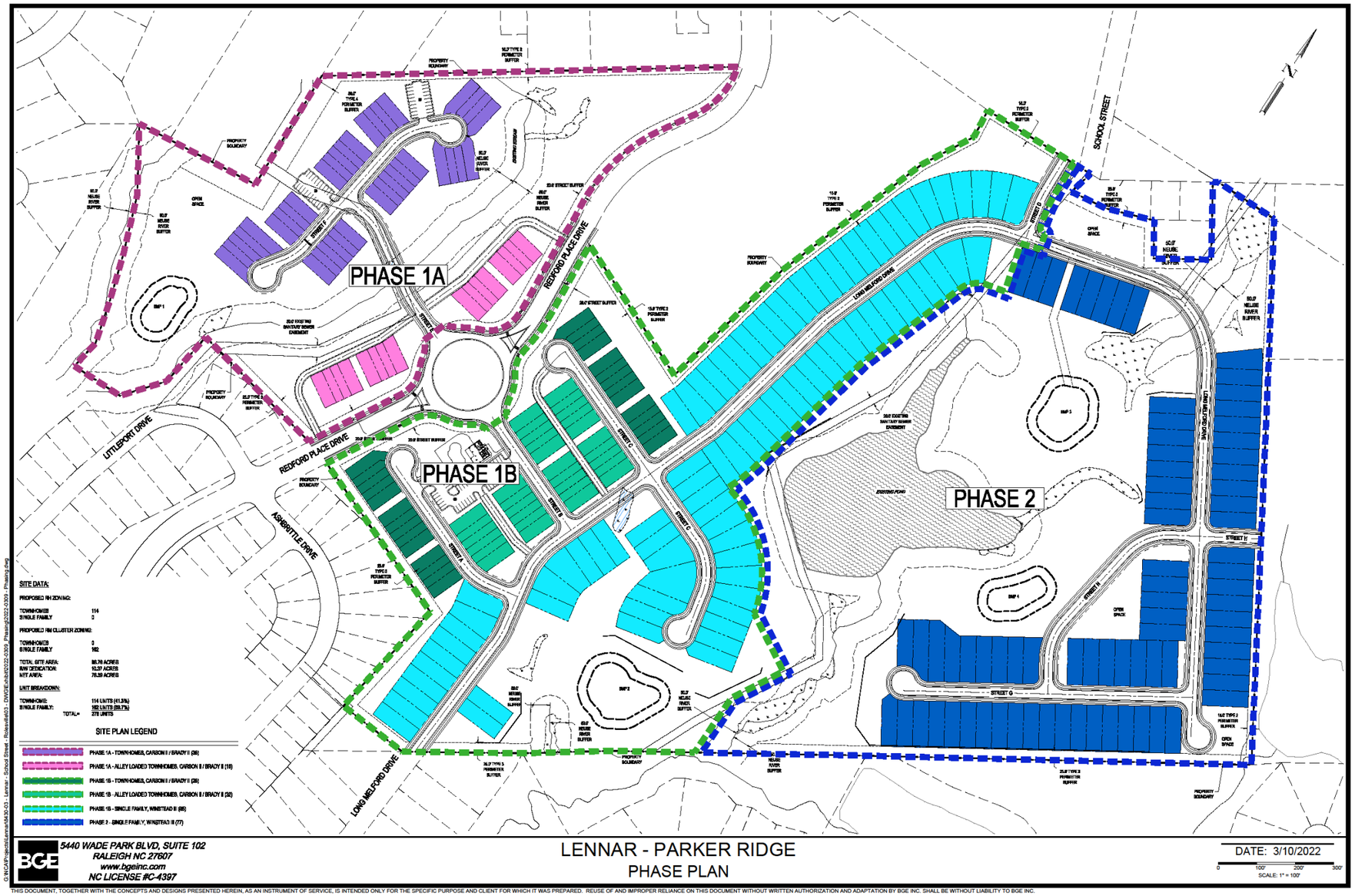


Figure 2: Site Plan



2.0 INVENTORY OF TRAFFIC CONDITIONS

2.1 STUDY AREA

Stantec coordinated with the Town of Rolesville, the applicant, and the North Carolina Department of Transportation (NCDOT) to determine the appropriate study area and assumptions. The following existing intersections were agreed upon to be analyzed to determine the impacts associated with this development. These intersections are shown in Figure 1.

- SR 2226 (Jonesville Road) at Prides Crossing
- US 401 Business (South Main Street) at SR 2051 (Burlington Mills Road)
- Redford Place Drive/SR 2052 (Rogers Road) at US 401 Business (South Main Street)
- Old Rogers Road/School Street at US 401 Business (South Main Street)
- School Street at School Driveway/Scarboro Driveway
- Redford Place Drive at School Driveway
- US 401 at SR 1003 (Young Street)
- US 401 at Young Street Westbound U-Turn
- US 401 at Young Street Eastbound U-Turn

2.2 PROPOSED ACCESS

Access to the site is envisioned to be provided by up to four access points:

- Access A will add a western leg to the existing roundabout on Redford Place Drive
- Access B will add an eastern leg to the existing roundabout on Redford Place Drive
- Access C will connect to School Street
- Access D will create a new full-movement driveway onto Young Street

The location of Access D on Young Street is unknown at this time. The driveway is anticipated to be located south of Perry Street. This and the other proposed access points are shown in Figure 1.

The traffic analysis was requested to be performed with and without Access C due to concerns that development traffic would interfere with Rolesville Elementary School pick-up and drop-off operations.

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 NCDOT.

Table 1: Existing Conditions

Road Name	Road Number	Primary Cross-Section	Functional Classification[1]	AADT[2] (year)	Speed Limit (mph)	Maintenance Agency
Burlington Mills Road	SR 2051	Two-Lane Undivided	Major Collector	4,000 vpd (2021)	35	NCDOT
Jonesville Road	SR 2226	Two-Lane Undivided	Local Road	3,000 vpd (2016)	35	NCDOT
South Main Street	US 401 Business	Two-Lane w/ TWLTL*	Principal Arterial	13,500 vpd (2021)	35	NCDOT
Old Rogers Road	-	Two-Lane Undivided	Local Road	-	35	Town of Rolesville
Prides Crossing	-	Two-Lane Undivided	Local Road	-	25	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	9,000 vpd (2019)	35	NCDOT
School Driveway	-	Two-Lane One-Way	Private Driveway	-	-	WCPSS
School Street	-	Two-Lane Undivided	Local Road	-	35	Town of Rolesville
US 401	US 401	Four-Lane Divided	Principal Arterial	15,500 vpd (2021)	55	NCDOT
Young Street	SR 1003	Two-Lane Undivided	Minor Arterial	7,200 vpd (2021)	35	NCDOT

*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 following sub-sections discuss the projects that are anticipated to modify the study area intersections between 2022 and the future year 2028. The future year lane configuration and traffic control for the study area intersections are illustrated in Figure 4.

2.4.1 U-6241 (South Main Street)

The U-6241 project will realign Burlington Mills Road near South Main Street as well as make streetscape and multimodal improvements along South Main Street. As part of the project, geometric improvements will be made in the study area, notably, removing the dedicated westbound right turn lane at the South Main Street & Rogers Road/Redford Place Drive intersection and re-striping the existing westbound through lane to a shared thru-right turn lane.

2.4.2 Wallbrook

The following improvements were committed to by the Wallbrook development:

South Main Street at Realigned Burlington Mills Road

- Construct dual northbound exclusive left-turn lanes with 375 feet of full-width storage and appropriate taper
- Construct an exclusive northbound right-turn lane with 200 feet of full-width storage and appropriate taper
- Construct an exclusive westbound left-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive westbound right-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound left-turn lane with 500 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound right-turn lane with 175 feet of full-width storage and appropriate taper
- Construct an exclusive southbound left-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive southbound right-turn lane with at least 250 feet of full-width storage and appropriate taper

South Main Street at Virginia Water Drive Extension

- Virginia Water Drive will be extended through the development and intersect South Main Street as a full-movement intersection controlled by a traffic signal. Virginia Water Drive will also be extended to provide access to South Main Street, or the land uses developed as a part of Wallbrook on the west side of South Main Street.
- Construct an exclusive northbound left-turn lane with 175 feet of storage and appropriate taper
- Construct an exclusive northbound right-turn lane with 125 feet of full-width storage and appropriate taper
- Construct an exclusive southbound left-turn lane with 350 feet of full-width storage and appropriate taper
- Construct an exclusive southbound right-turn lane with 350 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound left-turn lane with 225 feet of storage and appropriate taper
- Construct an exclusive westbound right-turn lane with 100 feet of full-width storage and appropriate taper

A copy of the TIA is contained in the Appendix. The Wallbrook development is discussed in more detail in Section 7.2.9.

2.4.3 Scarboro

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 7.2.5.

Figure 3: 2022 Existing Lanes and Traffic Control

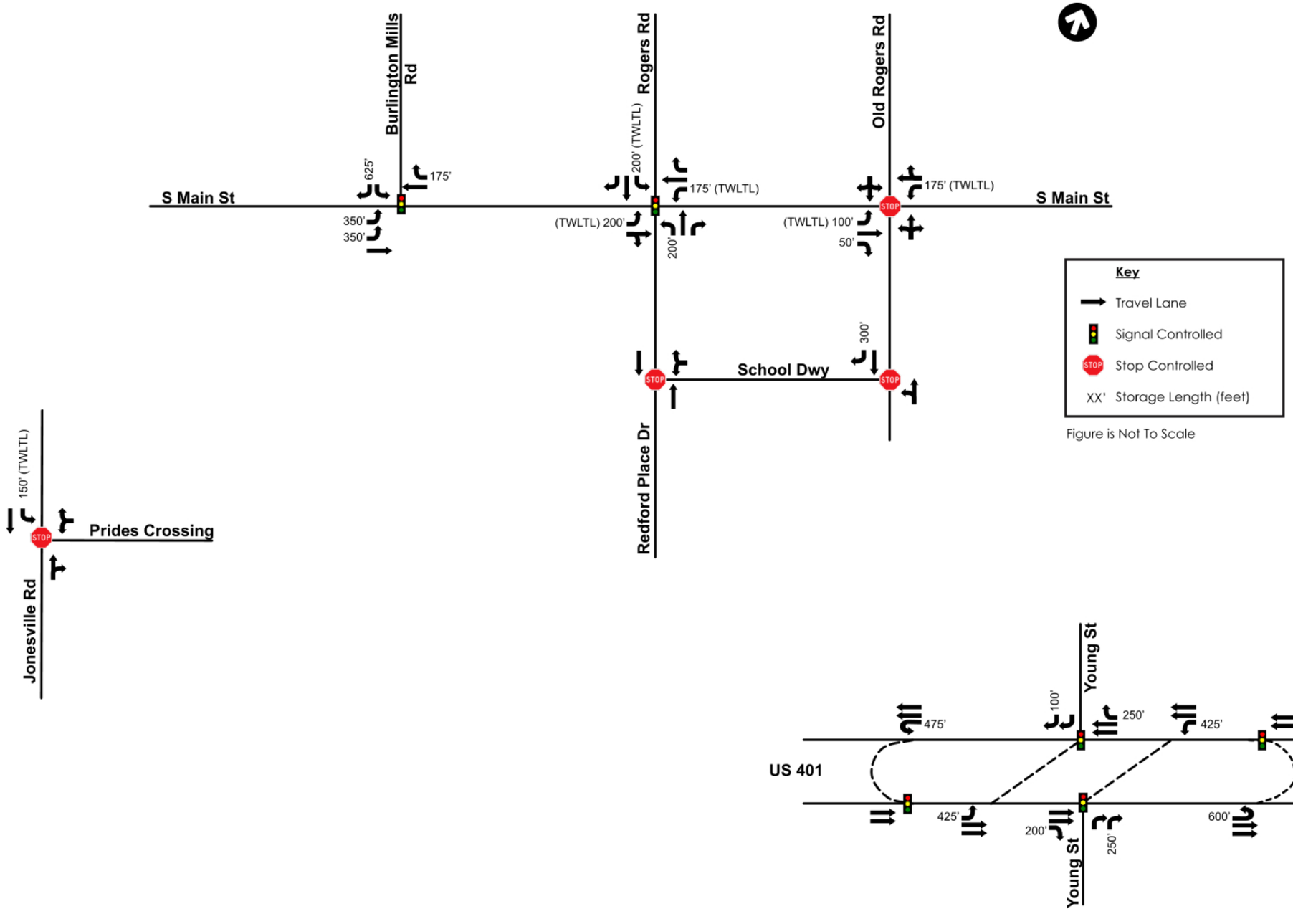


Figure 4: 2028 No-Build Lanes and Traffic Control

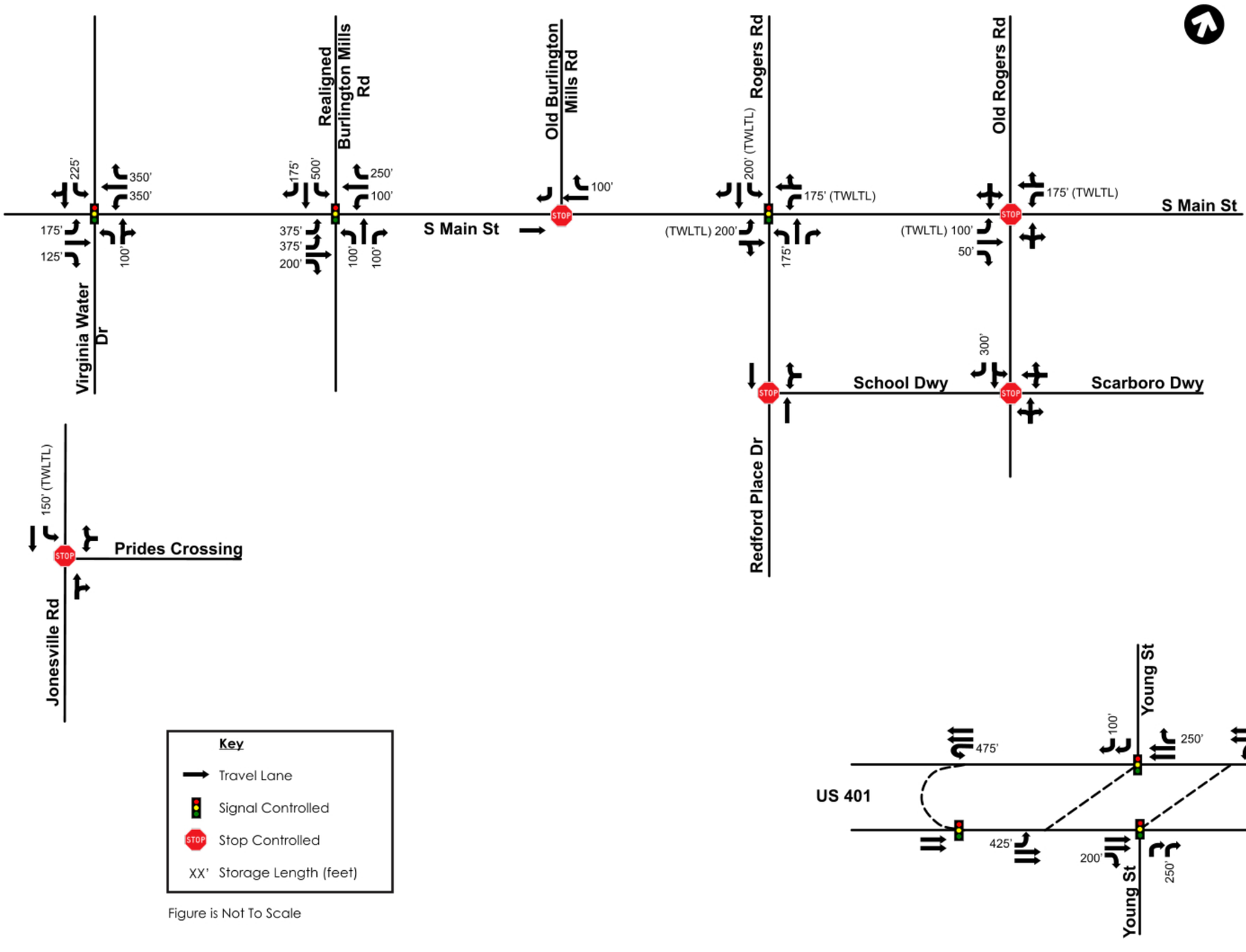


Figure is Not To Scale

3.0 TRIP GENERATION AND DISTRIBUTION

3.1 TRIP GENERATION

Trip generation for the proposed development was performed using the 11th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual[3]. The Rate versus Equation spreadsheet published by NCDOT[4] was used to supplement the ITE methodology. No trip reductions were taken for internal capture or pass-by traffic. Trip generation for the proposed development is shown in Table 2.

Table 2: Trip Generation

Land Use	Size	Daily			AM Peak			PM Peak		
		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Single-Family Detached Housing (LUC 210)	162 Units	1,573	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		**2,391**	**1,195**	**1,196**	**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. These percentages were developed using a combination of existing traffic volume counts, historic AADTs provided by NCDOT, and engineering judgment. This trip distribution was submitted as part of NCDOT's TIA Scoping Checklist contained in the Appendix. All traffic volume calculations can be found in the Appendix.

- 35% to/from the west on US 401
- 10% to/from the west on South Main Street
- 10% to/from the north on Rogers Road
- 10% to/from the east on South Main Street
- 10% to/from the north on Young Street
- 10% to/from the east on US 401
- 10% to/from the south on Young Street
- 5% to/from the south on Jonesville Road

The trip distribution for the proposed development with Access C is shown in Figure 5. The corresponding trip assignment is shown in Figure 6. The trip distribution without Access C is shown in Figure 7. The trip assignment without Access C is shown in Figure 8.

Figure 5: Trip Distribution with Access C

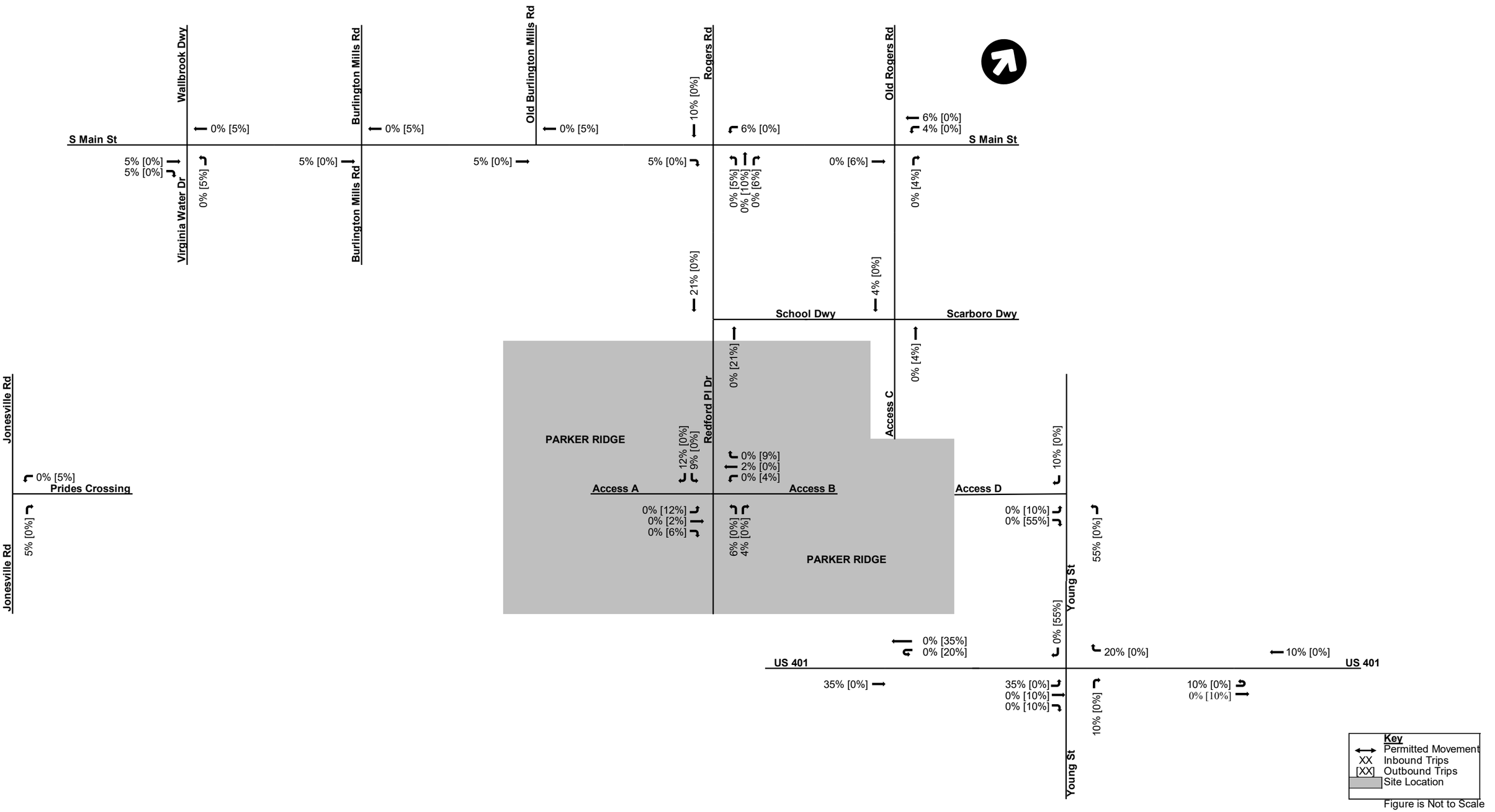


Figure is Not to Scale

Figure 6: Trip Assignment with Access C

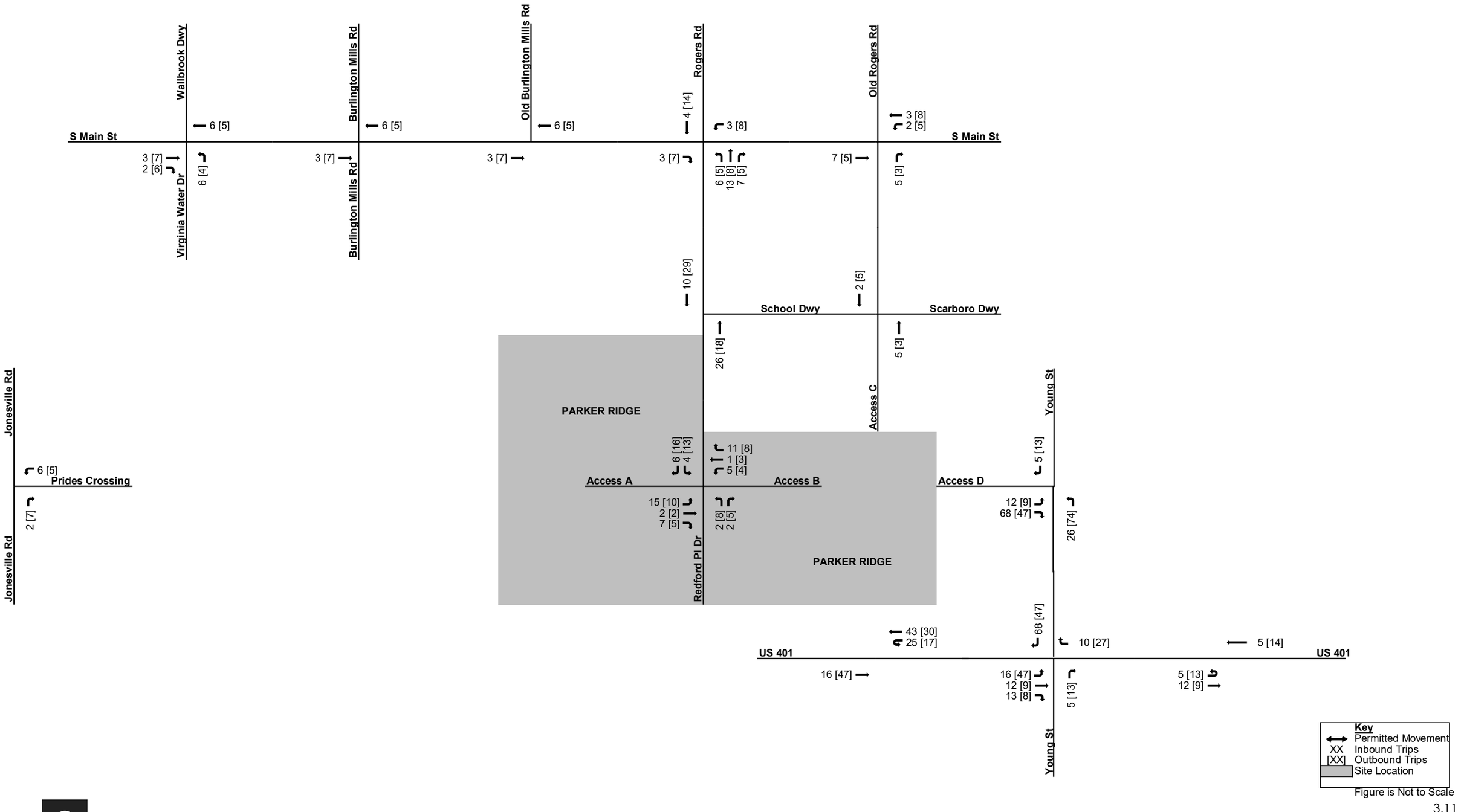


Figure is Not to Scale

Figure 7: Trip Distribution without Access C

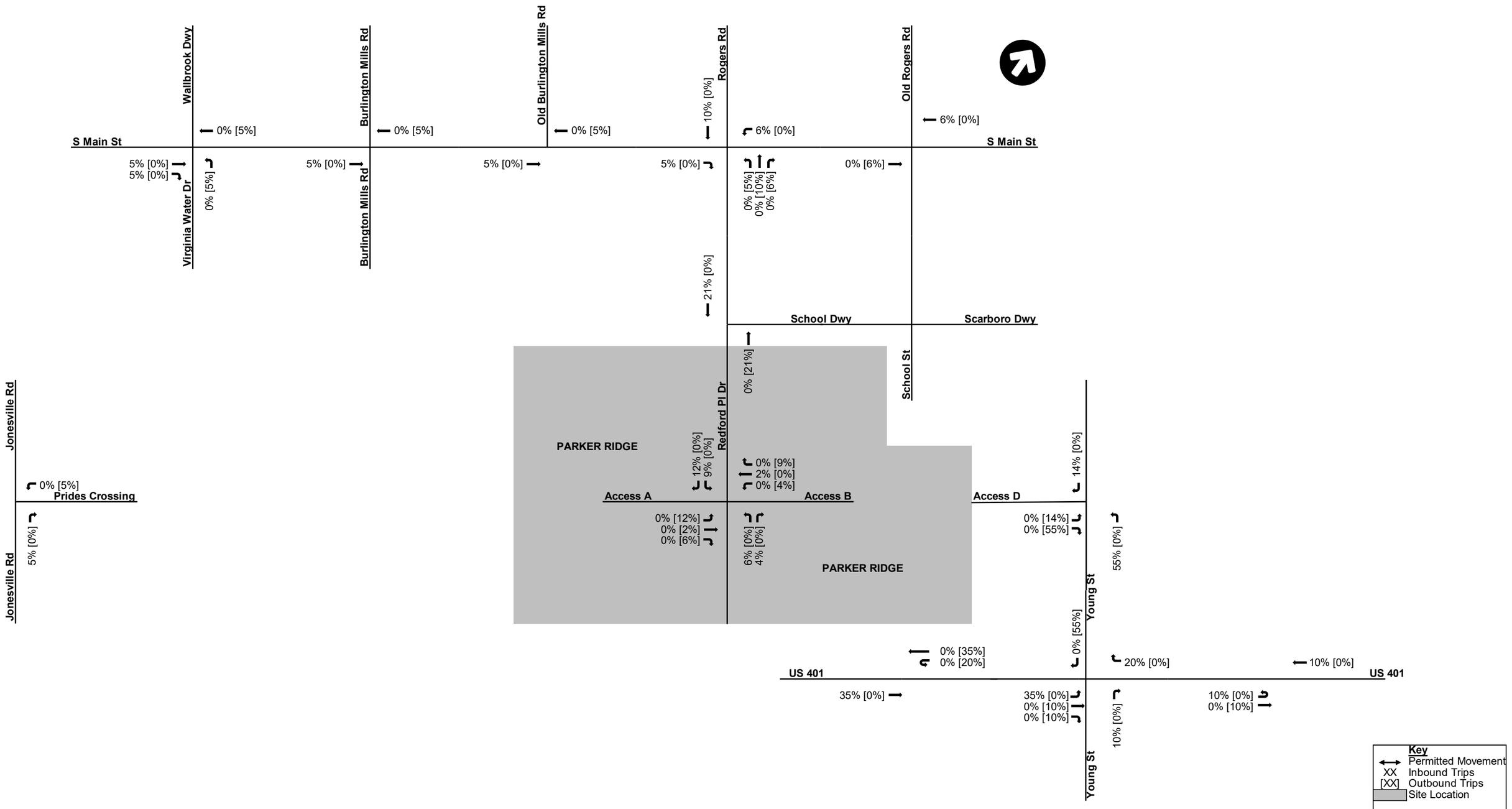


Figure is Not to Scale

Figure 8: Trip Assignment without Access C

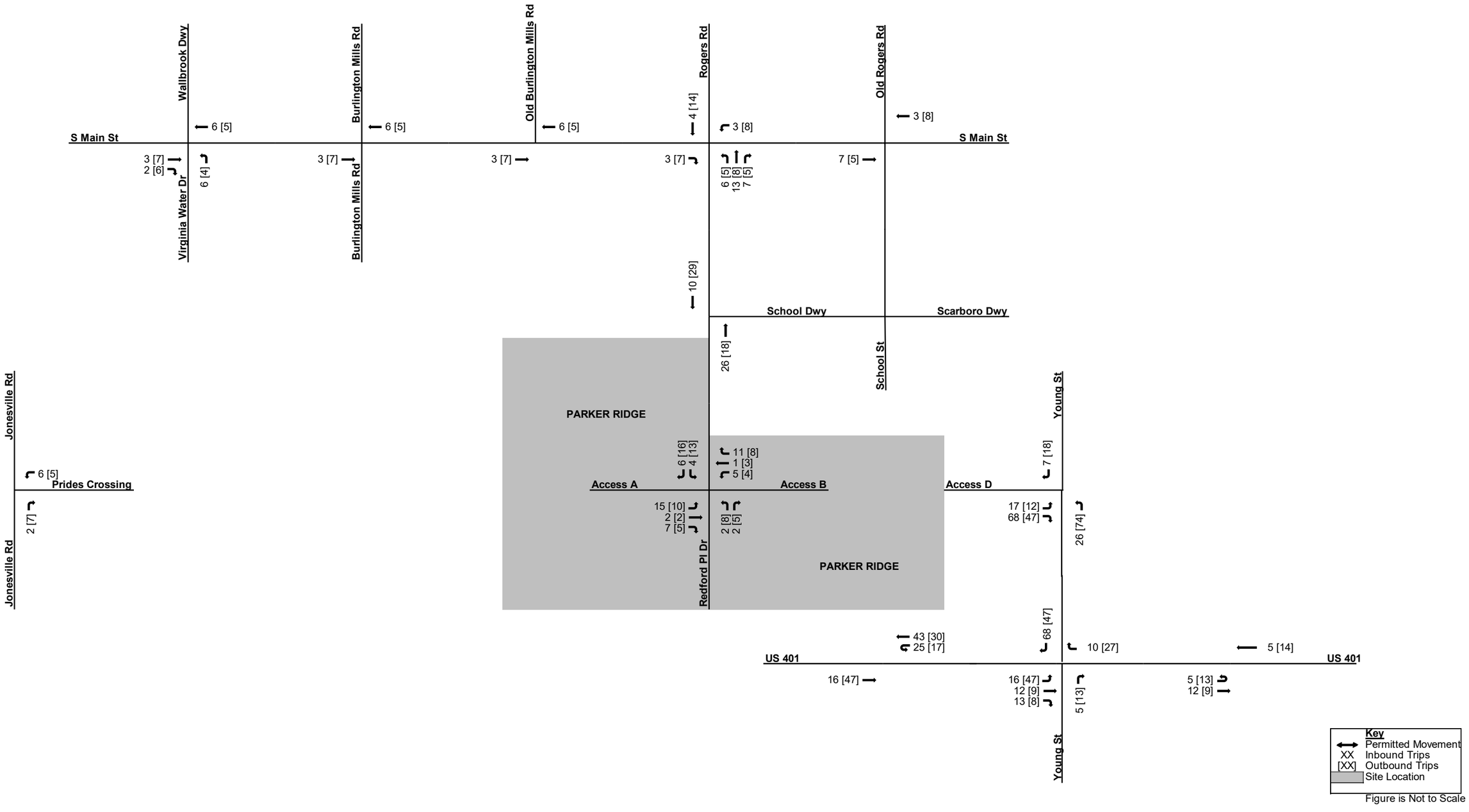


Figure is Not to Scale

4.0 TRAFFIC VOLUMES: 2022 EXISTING

4.1 DATA COLLECTION

On Tuesday, May 17, 2022, AM (7:00 – 9:45 AM) and PM (4:00 – 6:00 PM) turning movement counts were collected at the following intersection:

- South Main Street at Burlington Mills Road

On Thursday, June 9, 2022, AM (7:00 – 9:45 AM) and PM (4:00 – 6:00 PM) turning movement counts were collected 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
- Redford Place Drive at School Driveway

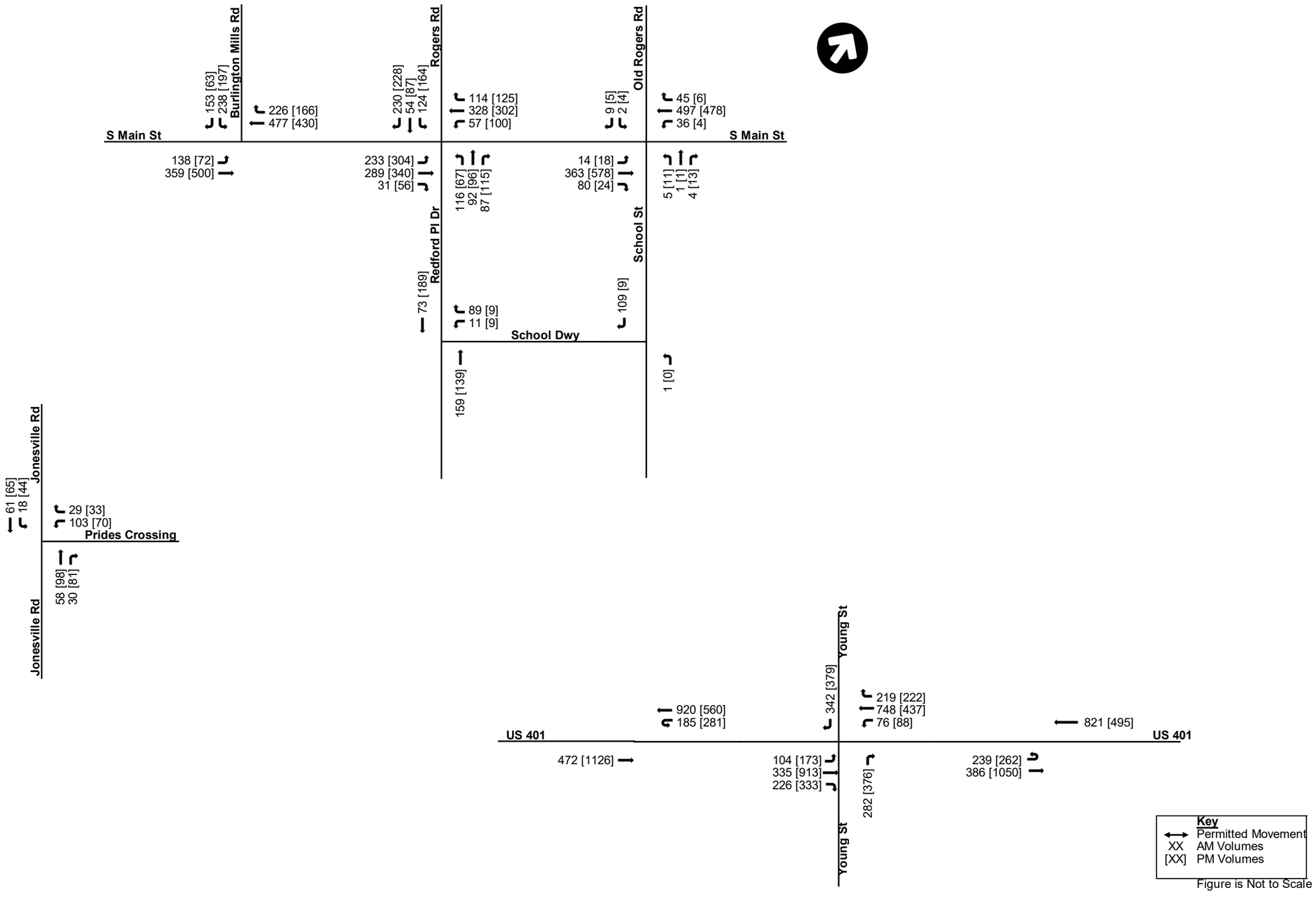
On Thursday, December 8, 2022, AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) turning movement counts were collected at the following intersections:

- Jonesville Road at Prides Crossing
- US 401 at Young Street
- School Street at School Driveway/Scarboro Driveway
- Redford Place Drive at School Driveway

The count data provided by Quality Counts, LLC is included in the Appendix.

Traffic volumes were not balanced due to the high-volume driveways and/or long distances between study intersections. The Existing (2022) traffic volumes are shown in Figure 9.

Figure 9: 2022 Existing Traffic Volumes



5.0 CAPACITY ANALYSIS

Capacity analyses were performed for the roadway network in the study area. The traffic analysis program Synchro Version 11 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 Manual[4] (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 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 Guidelines*[5] as well as the *Draft NCDOT Capacity Analysis Guidelines Best Practices*[6]. Table 3 presents the criteria of each LOS as indicated in the HCM. It should be noted that at the US 401 & Young Street U-turn intersections, Synchro did not allow the use of DP.P phasing for the flashing yellow arrow phases. As a result, protected + permitted phasing was used instead.

Table 3: Level of Service Criteria

Level of Service (LOS)	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	≤ 10	≤ 10
B	>10 and ≤ 20	>10 and ≤ 15
C	>20 and ≤ 35	>15 and ≤ 25
D	>35 and ≤ 55	>25 and ≤ 35
E	>55 and ≤ 80	>35 and ≤ 50
F	>80	>50

The Town of Rolesville's Land Development Ordinance (LDO)[7], Section 8.E, establishes the following Level of Service Standards:

3. *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.

4. *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.*

Peak hour factors for all analysis scenarios were set to 0.9 with one exception; 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.

6.0 EXISTING CAPACITY ANALYSIS (2022)

In the base year of 2022 under the existing geometric conditions, all study intersections and approaches operate at an acceptable LOS. The results from the 2022 existing analysis are shown in Table 4.

Table 4: 2022 Existing Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	10.3	11.1	B	B	15	15	75	74
		SB	L	7.4	7.7	A	A	0	3	17	42
	South Main Street at Burlington Mills Road	Overall		22.2	18.0	C	B				
		EB	L	55.3	54.4	E	D	90	55	140	103
			T	6.9	6.7	A	A	170	232	109	221
		WB	T	14.1	11.7	B	B	392	361	198	249
			R	1.9	1.0	A	A	61	10	256	136
		SB	L	56.9	57.8	E	E	266	230	302	267
			R	29.9	30.2	C	C	136	70	199	109
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		26.7	27.0	C	C				
		EB	L	9.4	8.0	A	A	90	109	228	201
			TR	15.7	11.6	B	B	265	211	235	264
		WB	L	9.8	9.4	A	A	39	57	156	113
			T	25.4	21.2	C	C	320	273	294	249
			R	7.5	7.1	A	A	45	48	98	95
		NB	L	40.6	40.1	D	D	125	83	180	116
			T	70.5	70.9	E	E	133	137	172	171
			R	23.6	38.7	C	D	66	109	130	179
		SB	L	43.7	63.2	D	E	134	182	172	208
			T	54.5	60.4	D	E	85	127	114	177
			R	36.2	38.2	D	D	158	171	249	260
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	22.5	27.8	C	D	5	15	26	37
		EB	L	8.8	8.6	A	A	0	3	20	20
		WB	L	8.5	9.0	A	A	3	0	40	24
		SB	LTR	21.1	28.7	C	D	8	8	35	30
STOP	Redford Place Drive at School Driveway	WB	LR	10.5	9.7	B	A	23	3	82	36
	US 401 at Young Street (North)	Overall		8.0	9.9	A	A				
		WB	T	3.7	5.3	A	A	258	53	144	100
			R	3.6	6.1	A	A	67	60	0	23
		EB	L	0.1	0.1	A	A	0	0	108	136
		SB	R	22.8	22.0	C	C	98	103	147	147
	US 401 at Young Street (South)	Overall		9.1	8.1	A	A				
		EB	T	2.8	4.0	A	A	40	47	91	177
			R	3.7	4.3	A	A	65	40	0	32
		NB	R	23.3	23.0	C	C	85	108	177	193
		WB	L	0	0.1	A	A	0	0	99	102
	US 401 Eastern U-Turn	Overall		2.8	11.8	A	B				
		WB	T	3.5	7.3	A	A	67	88	91	111
		EB	U	0.2	20.5	A	C	0	125	110	179
	US 401 Western U-Turn	Overall		2.0	4.2	A	A				
		EB	T	2.7	5.2	A	A	34	124	32	150
		WB	U	0.1	0.2	A	A	0	0	89	175

7.0 TRAFFIC VOLUMES: 2028 NO-BUILD & BUILD

The development is anticipated to be constructed in 2028. The following traffic volume calculations focus on the traffic conditions projected in 2028. All traffic volume calculations can be found in the Appendix.

7.1 BACKGROUND TRAFFIC GROWTH

Background traffic growth is the increase in traffic volumes due to usage increases and non-specific growth throughout the area. The 2022 existing volumes were grown by a 2.0 percent annual rate to estimate the 2028 volumes. The growth in vehicles as a result of this future traffic growth is shown in Figure 10.

7.2 ADJACENT DEVELOPMENT TRAFFIC

There are nine (9) developments proposed to be constructed within and nearby the study area: Cobblestone, Kalas Falls, Redford Place, Rolesville Crossing, Scarboro Property, The Point, The Preserve at Moody Farm, Tucker-Wilkins, and Wallbrook. It should be noted that due to their location south of US 401, the associated trips for the Kalas Farms, Rolesville Crossing, The Point, The Preserve at Moody Farm, and Tucker-Wilkins developments were only applied to the US 401 & Young Street intersection. The total trips associated with these developments are shown in

Figure 11. The following subsections highlight salient data for each of the approved developments.

7.2.1 Cobblestone

Cobblestone is a mixed-use development proposed in the northwest quadrant of the intersection of South 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 adjacent development, as well as a copy of the traffic study prepared by Ramey Kemp & Associates is provided in the Appendix.

7.2.2 Kalas Falls

Kalas Falls is a residential development on the west side of Rolesville Road just north of Mitchell Mill Road. It is anticipated to consist of 487 single-family homes and 108 townhomes. No improvements to study area intersections are expected as a part of Kalas Falls. A figure illustrating the trips attributed to Kalas Falls, as well as a copy of the traffic study prepared by Stantec, can be found in the Appendix.

7.2.3 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 South Main Street and is estimated to be built out by 2023. The trips attributed to the Redford Place development, as well as a copy of the traffic study prepared by Stantec, can be found in the Appendix.

As part of the Redford Place development, the storage of the northbound left-turn lane at the South 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.

7.2.4 Rolesville Crossing

Rolesville Crossing is a residential development located in the northeast quadrant of the intersection of Rolesville Road and Mitchell Mill Road. It is anticipated to consist of 233 single-family homes and 125 townhomes. The development is estimated to be built out in 2026. No improvements to study area intersections are expected as a part of Rolesville Crossing. A figure illustrating the trips attributed to Rolesville Crossing, as well as a copy of the traffic study prepared by Ramey Kemp & Associates, can be found in the Appendix.

7.2.5 Scarboro Property

Scarboro Property (aka 201 South Main St.) is a proposed development expected to consist of 240 units of senior adult housing. The development is estimated to be built out by 2023. A figure illustrating the trips attributed to the Scarboro Property, as well as a copy of the traffic study prepared by Ramey Kemp & Associates, can be found in the Appendix. The development will construct a driveway onto School Street at the existing School Street and School Driveway intersection.

7.2.6 The Point

The Point is a planned unit development (PUD) located along Rolesville Road south of US 401. Multiple phases of development were included in the study, however, the analysis presented herein includes the full build-out. When completed, the development is envisioned to consist of 621 single-family homes, 320 townhomes, and 122,800 square feet of commercial space. The development is estimated to be built out by 2025. No improvements to study area intersections are expected as a part of The Point. A figure illustrating the trips attributed to the site, as well as a copy of the traffic study prepared by Kimley-Horn and Associates, can be found in the Appendix.

7.2.7 The Preserve at Moody Farm

The Preserve at Moody Farm is a residential development located along Roseville Road. At full build-out, it is expected to consist of 82 single-family homes and is estimated to be built out by 2026. No improvements to study area intersections are expected as a part of The Preserve at Moody Farm. A figure illustrating the trips attributed to The Preserve at Moody Farm, as well as a copy of the traffic study prepared by Stantec, can be found in the Appendix.

7.2.8 Tucker-Wilkins

The Tucker-Wilkins Property is a residential development located along Roseville Road. At full build-out, it is expected to consist of 27 single-family homes and 64 townhomes and is estimated to be built out by 2026. No improvements to study area intersections are expected as a part of Tucker-Wilkins. A figure illustrating the trips attributed to Tucker-Wilkins, as well as a copy of the traffic study prepared by Stantec, can be found in the Appendix.

7.2.9 Wallbrook

Wallbrook is a proposed mixed-use development project located along South Main Street. The proposed development is expected to consist of 107,000 square feet of office space, 17,000 square feet of restaurants, 143,000 square feet of retail space, and 170 townhomes. The development is estimated to be built out by 2025. The improvements associated with the Wallbrook development are discussed in Section 2.4.2. The trips attributed to the Wallbrook development, as well as a copy of the traffic study prepared by Stantec, can be found in the Appendix.

7.3 NO-BUILD TRAFFIC VOLUMES

The 2028 No-Build traffic volumes consist of the sum of the 2022 Existing traffic volumes, the Background traffic growth, and the adjacent development growth. The 2028 No-Build traffic volumes are shown in Figure 12.

7.4 BUILD TRAFFIC VOLUMES

The 2028 Build traffic volumes include the 2028 No-Build traffic and the proposed development traffic discussed in Section 3.0. The 2028 Build traffic volumes are shown in Figure 13. The 2028 Build traffic volumes without Access C are shown in Figure 14.

Figure 10: Background Traffic Growth

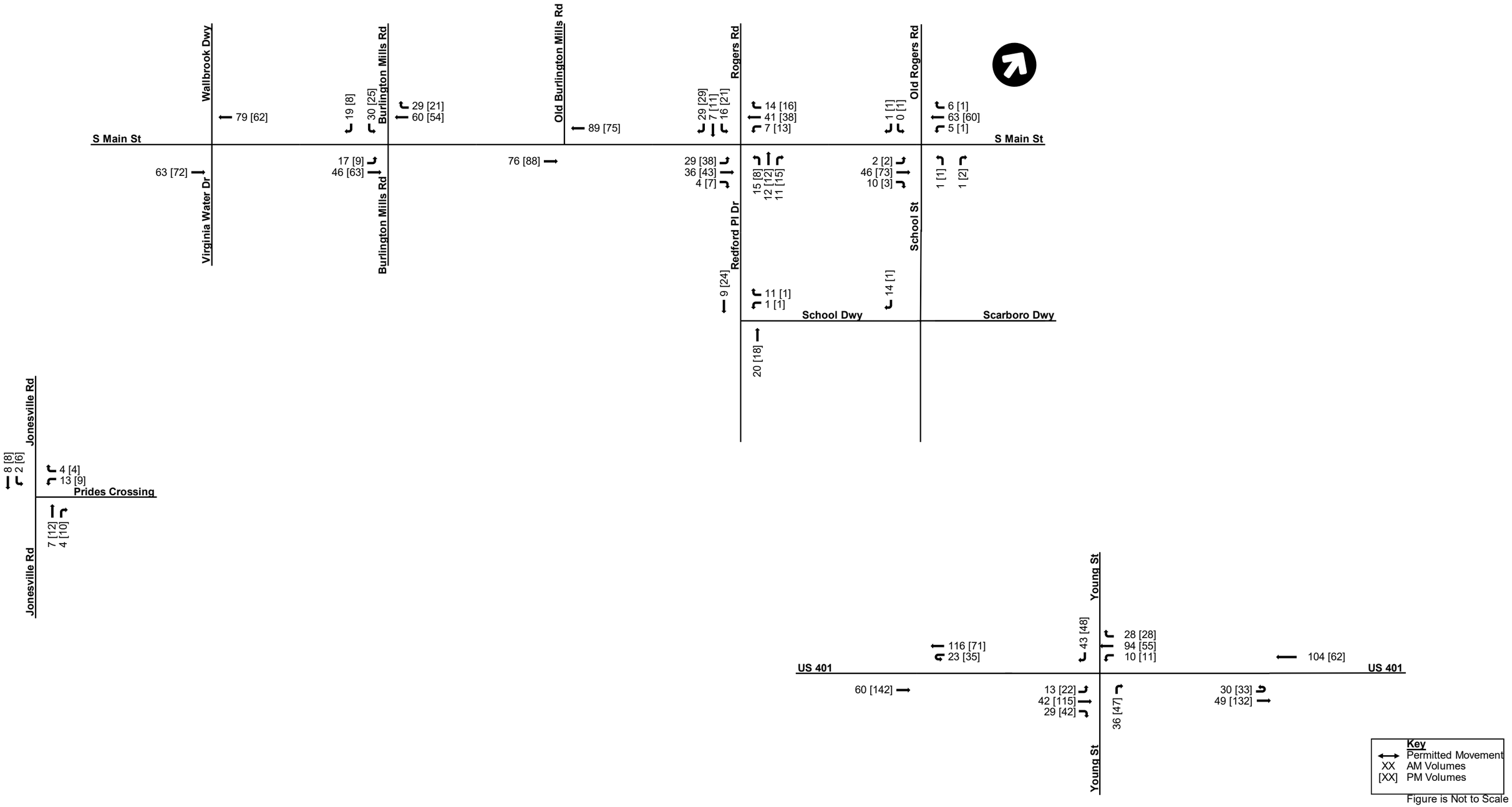


Figure is Not to Scale

Figure 11: Adjacent Development Traffic Volumes

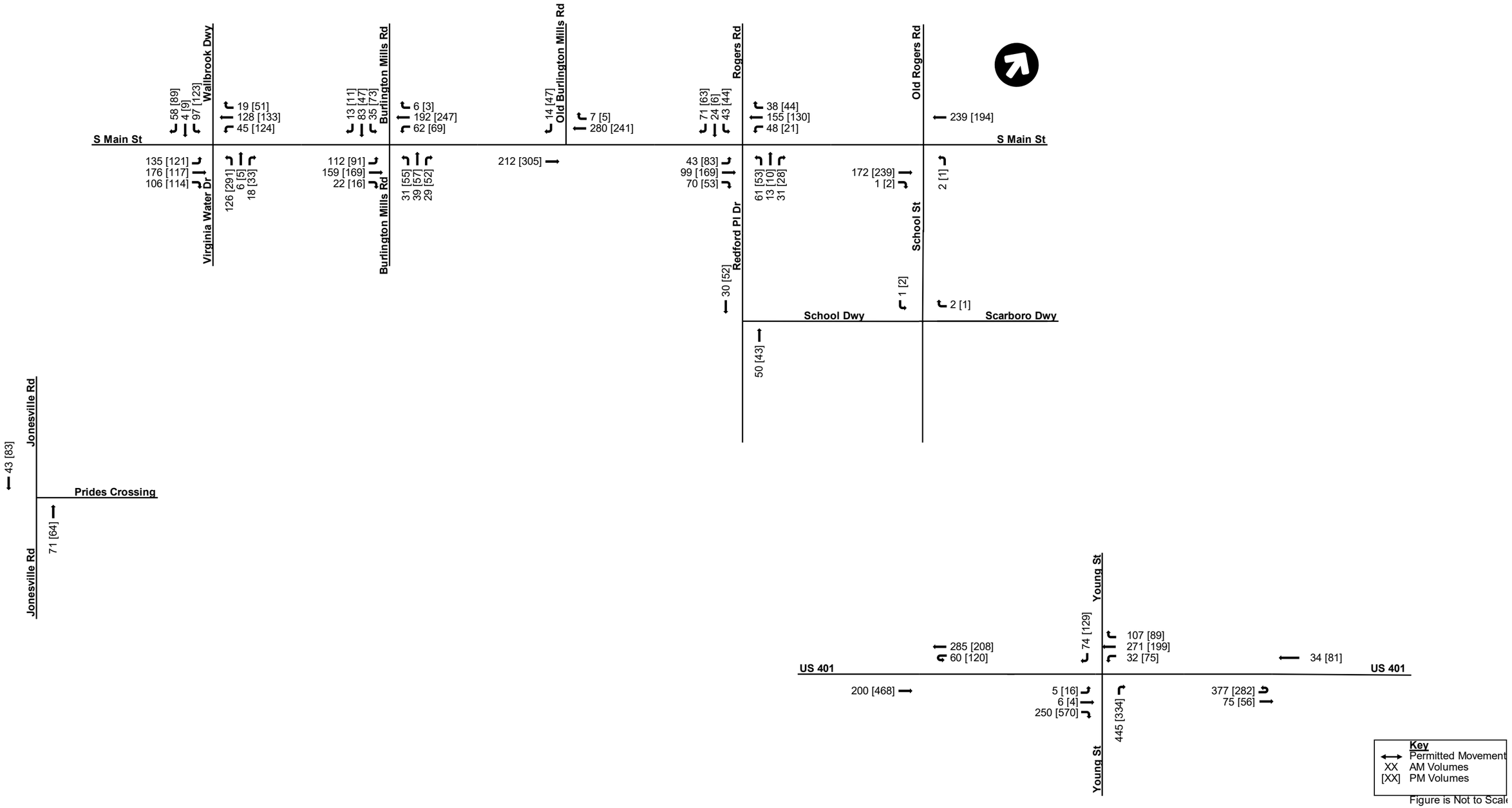


Figure 12: 2028 No-Build Traffic Volumes

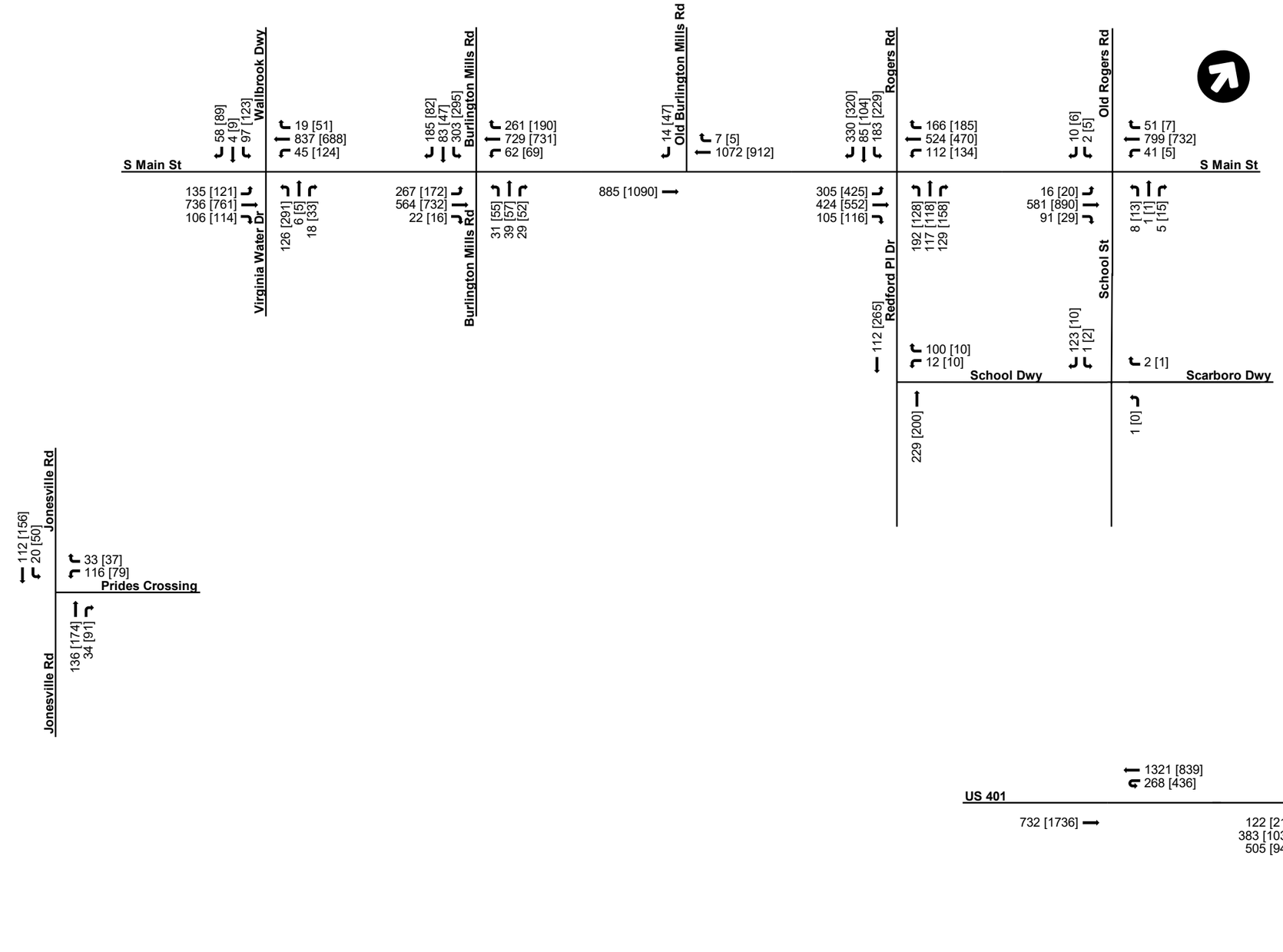


Figure 13: 2028 Build with Access C Traffic Volumes

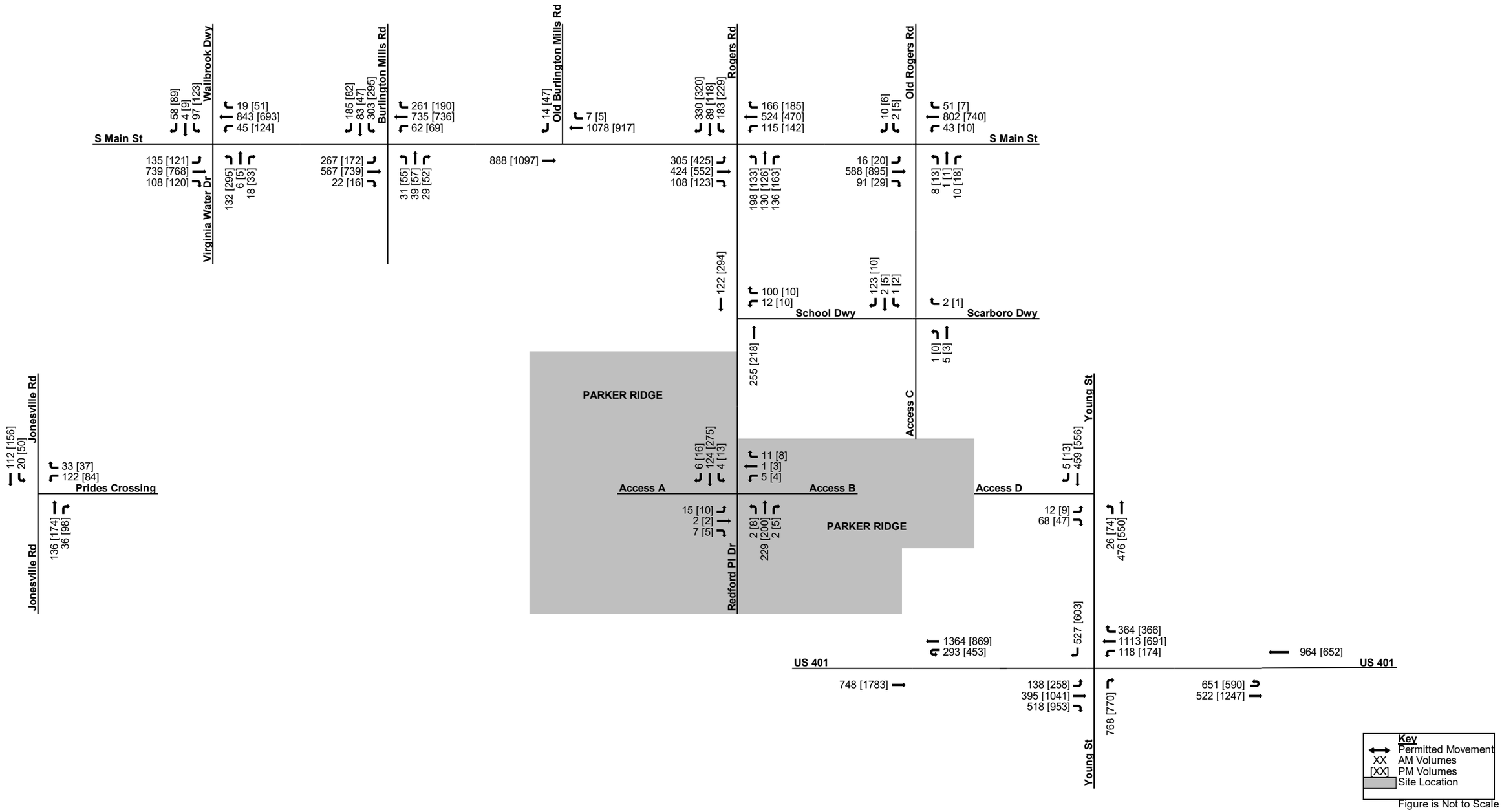
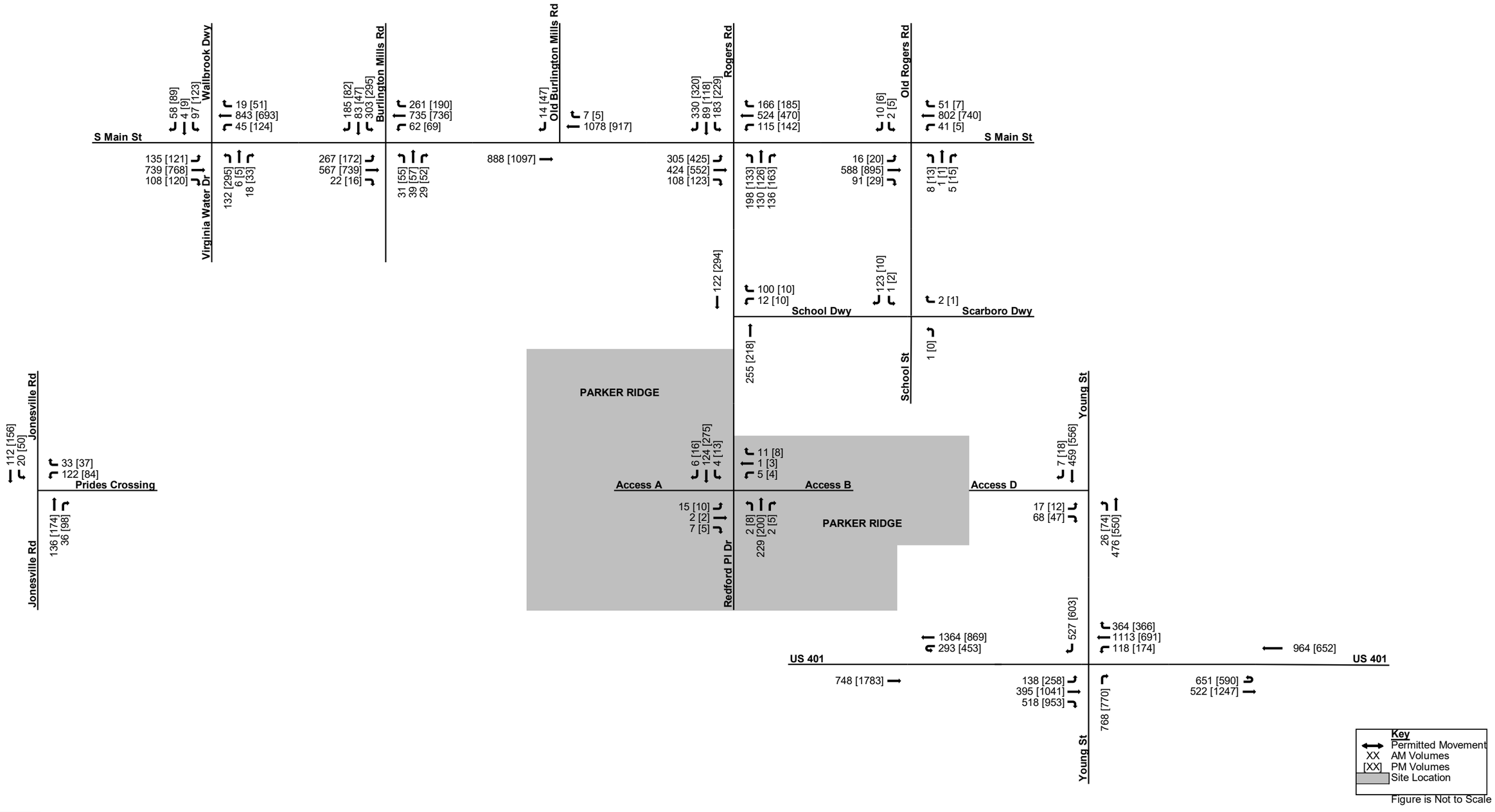


Figure is Not to Scale

Figure 14: 2028 Build without Access C Traffic Volumes



8.0 2028 NO-BUILD

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

South Main Street at Redford Place Drive/Rogers Road

- Remove the existing westbound dedicated right-turn lane and re-stripe the existing westbound through lane to a shared thru-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

South Main Street at Realigned Burlington Mills Road

- Construct dual northbound exclusive left-turn lanes with 375 feet of full-width storage and appropriate taper
- Construct an exclusive northbound right-turn lane with 200 feet of full-width storage and appropriate taper
- Construct an exclusive westbound left-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive westbound right-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound left-turn lane with 500 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound right-turn lane with 175 feet of full-width storage and appropriate taper
- Construct an exclusive southbound left-turn lane with 100 feet of full-width storage and appropriate taper
- Construct an exclusive southbound right-turn lane with at least 250 feet of full-width storage and appropriate taper

South Main Street at Virginia Water Drive Extension

- Virginia Water Drive will be extended through the development and intersect South Main Street as a full-movement intersection controlled by a traffic signal. Virginia Water Drive will also be extended to provide access to South Main Street, or the land uses developed as a part of Wallbrook on the west side of South Main Street
- Construct an exclusive northbound left-turn lane with 175 feet of storage and appropriate taper
- Construct an exclusive northbound right-turn lane with 125 feet of full-width storage and appropriate taper
- Construct an exclusive southbound left-turn lane with 350 feet of full-width storage and appropriate taper
- Construct an exclusive southbound right-turn lane with 350 feet of full-width storage and appropriate taper
- Construct an exclusive eastbound left-turn lane with 225 feet of storage and appropriate taper
- Construct an exclusive westbound right-turn lane with 100 feet of full-width storage and appropriate taper

In 2028, the South Main Street & Redford Place Drive/Rogers Road intersection operates at LOS E in both peak hours. It should be noted that the reduction in lanes along South Main Street in conjunction with the U-6241 project resulted in lengthy queues along South Main Street in both peak hours.

The northbound and southbound approaches at the South Main Street & Old Rogers Road/School Street intersection operate at LOS F in both peak hours. It is common for minor street approaches to experience high delays at unsignalized intersections during peak hours. In the AM peak hour, there is an average of 2 vehicles queued for the northbound approach and 1 vehicle queued for the southbound approach. In the PM peak hour, there is an average of 6 vehicles queued for the northbound approach and 3 vehicles queued for the southbound approach. The westbound South Main Street queue from the Rogers Road/Redford Place Drive intersection often extends past this intersection, limiting the gaps available for vehicles wanting to travel westbound on South Main Street.

The following movements operate at LOS F during one or both peak hours:

- South Main Street at Virginia Water Drive Extension: WBL/NBL – both peak hours
- South Main Street at Realigned Burlington Mills Road: WBL – both peak hours, EBL/NBL – AM peak hour, WBT/SBL – PM peak hour
- South Main Street at Redford Place Drive/Rogers Road: EBL/WBL/NBL/NBT/SBL – both peak hours, WBTR – PM peak hour
- US 401 at Young Street: NBR – PM peak hour

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

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

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	11.9	13.4	B	B	23	23	83	84
		SB	L	7.6	8.0	C	A	0	3	30	42
	South Main Street at Virginia Water Drive Extension	Overall		29.8	46.3	C	D				
		EB	L	75.5	50.0	E	D	174	186	189	184
			TR	64.7	46.7	E	D	115	147	137	188
		WB	L	93.0	91.8	F	F	232	528	227	566
			TR	59.9	43.3	E	D	57	69	76	200
		NB	L	86.5	105.5	F	F	233	269	275	275
			T	16.1	48.7	B	D	576	1125	965	1111*
			R	8.7	22.5	A	C	63	118	225	225
		SB	L	68.2	70.7	E	E	77	178	449	450
			T	15.5	15.9	B	B	268	174	1000	865
			R	8.0	10.1	A	B	7	14	329	337
	South Main Street at Realigned Burlington Mills Road	Overall		50.0	43.4	D	D				
		EB	L	123.1	75.3	F	E	586	455	449	466
			T	56.7	48.4	E	D	137	81	292	244
			R	40.7	29.8	D	C	212	93	228	137
		WB	L	82.1	92.8	F	F	74	121	90	128
			T	78.7	86.2	E	F	87	121	107	167
			R	28.0	37.2	C	D	40	65	65	110
		NB	L	104.2	72.8	F	E	267	150	474	474
			T	32.9	26.2	C	C	425	1120	859	988
			R	7.6	7.8	A	A	8	5	298	272
		SB	L	59.4	85.1	E	F	78	117	199	199
			T	29.5	42.6	C	D	762	912	1608	1649
			R	3.6	4.0	A	A	59	48	350	350
STOP	South Main Street at Old Burlington Mills Road	SB	R	21.9	20.1	C	C	5	15	46	190
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		62.5	73.3	E	E				
		EB	L	83.7	107.7	F	F	493	774	300	300
			TR	17.6	25.9	B	C	416	560	1098	3695
		WB	L	89.7	107.8	F	F	198	278	275	275
			TR	67.2	90.4	E	F	1065	1118	1617	884
		NB	L	115.3	106.9	F	F	398	265	273	235
			T	88.8	101.6	F	F	206	231	382	256
			R	39.1	46.7	D	D	145	194	203	250
		SB	L	98.6	123.3	F	F	381	503	284	299
			T	74.9	73.9	E	E	156	194	314	603
			R	42.3	30.1	D	C	338	311	354	363
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	158.5	##	F	F	43	153	142	239
		EB	L	10.1	9.6	B	A	3	3	110	122
		WB	L	9.8	12.2	A	B	5	0	205	200
		SB	LTR	103.9	##	F	F	33	83	210	173
STOP	School Street at School Driveway	NB	LTR	7.8	7.3	A	A	0	0	0	0
		WB	LTR	8.9	8.6	A	A	0	0	29	29
		SB	LT	7.2	7.2	A	A	0	0	0	0
STOP	Redford Place Drive at School Driveway	WB	LR	11.6	10.6	B	B	30	5	93	40
	US 401 at Young Street (North)	Overall		9.0	10.5	A	B				
		WB	T	5.5	6.1	A	A	66	58	232	174
			R	4.9	7.5	A	A	49	94	43	104
		EB	L	0.1	0.1	A	A	0	0	115	169
		SB	R	23.2	21.9	C	C	131	150	185	200
	US 401 at Young Street (South)	Overall		17.6	44.2	B	D				
		EB	T	7.3	10.4	A	B	70	281	158	759
			R	16.7	57.6	B	E	271	1135	139	334
		NB	R	26.1	83.7	C	F	233	537	316	373
		WB	L	0.1	0.1	A	A	0	0	81	167
	US 401 Eastern U-Turn	Overall		2.7	3.3	A	A				
		WB	T	4.2	6.0	A	A	100	265	176	135
		EB	U	0.6	0.4	A	A	0	0	432	275
	US 401 Western U-Turn	Overall		2.3	2.9	A	A				
		EB	T	3.1	3.5	A	A	212	187	84	602
		WB	U	0.2	0.4	A	A	0	0	122	579

= Delay exceeds 300 seconds

*Maximum queue extends off the SimTraffic network and may be longer than recorded

9.0 TRAFFIC ANALYSIS: BUILD WITH ACCESS C

9.1 2028 BUILD WITH ACCESS C

In the Build scenario with Access C, the conditions that were noticed in the No-Build scenario remained the same. The South Main Street & Redford Place Drive/Rogers Road intersection still operates at LOS E in both peak hours along with queues at times exceeding 1000' along South Main Street.

The minor northbound and southbound approaches at the South Main Street & Old Rogers Road/School Street intersection operate at LOS F in both peak hours. It is common for minor street approaches to experience high delays at unsignalized intersections during peak hours.

The proposed roundabout at the Redford Place Drive at Access A/Access B intersection operates at LOS A in both peak hours. The School Street/Access C at School Driveway/Scarboro Driveway operates at LOS A in both peak hours. The Young Street at Access D intersection operates at LOS B in the AM peak hour and LOS C in the PM peak hour.

Synchro LOS and delay results for the 2028 Build with Access C scenario are listed in Table 6.

Table 6: 2028 Build with Access C Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	12	13.7	B	B	25	25	90	85
		SB	L	7.6	8	A	A	0	3	30	48
	South Main Street at Virginia Water Drive Extension	Overall		30.2	46.9	C	D				
		EB	L	73.6	49.7	E	D	172	186	180	206
			TR	63.6	46.5	E	D	114	147	117	227
		WB	L	92.6	92.1	F	F	243	541	273	560
			TR	59.0	43.2	E	D	56	69	142	200
		NB	L	86.5	105.5	F	F	233	269	275	275
			T	16.7	49.5	B	D	595	1131	1000	1100*
			R	9.1	22.3	A	C	66	121	225	225
		SB	L	67.4	73.8	E	E	77	181	450	449
			T	16.3	16.4	B	B	269	174	944	886
			R	8.4	10.0	A	B	8	14	286	376
	South Main Street at Realigned Burlington Mills Road	Overall		48.9	43.7	D	D				
		EB	L	123.1	75.3	F	E	586	455	431	464
			T	56.7	48.4	E	D	137	81	318	197
			R	40.9	29.8	D	C	212	93	246	124
		WB	L	82.1	92.8	F	F	74	121	88	129
			T	78.7	86.2	E	F	87	121	136	188
			R	54.0	37.2	D	D	58	65	88	113
		NB	L	108.9	72.5	F	E	267	147	396	474
			T	20.4	26.6	C	C	450	1139	599	912
			R	8.2	7.6	A	A	11	5	220	190
		SB	L	78.5	84.3	E	F	81	117	199	200
			T	31.2	43.4	C	D	770	908	1724	1399
			R	4.0	4	A	A	51	48	350	350
STOP	South Main Street at Old Burlington Mills Road	SB	R	22.1	20.2	C	C	5	18	89	124
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		64.0	73.8	E	E				
		EB	L	82.4	99.2	F	F	484	752	300	300
			TR	19.5	26.7	B	C	432	594	1202	2691
		WB	L	89.6	108.0	F	F	202	294	275	275
			TR	67.8	94.9	E	F	1065	1130	1433	1854*
		NB	L	121.0	107.8	F	F	415	277	274	246
			T	91.5	104.6	F	F	226	256	401	311
			R	38.9	46.0	D	D	152	199	226	312
		SB	L	103.2	127.2	F	F	381	503	269	299
			T	75.8	76.6	E	E	163	216	331	636
			R	42.1	29.4	D	C	338	307	376	446
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	145.6	##	F	F	48	N/A	150	249
		EB	L	10.1	9.6	B	A	3	3	79	149
		WB	L	9.8	12.7	A	B	5	3	188	225
		SB	LTR	122	##	F	F	38	90	149	223
STOP	School Street at School Driveway/Access C	NB	LTR	7.8	7.3	A	A	0	0	0	0
		WB	LTR	8.9	8.6	A	A	0	0	29	29
		SB	LT	7.2	7.2	A	A	0	0	0	0
STOP	Redford Place Drive at School Driveway	WB	LR	11.9	10.8	B	B	33	5	83	44
	Redford Place Drive at Access A/Access B	Overall		3.8	4.2	A	A				
		NB	LTR	4.1	4	A	A	29	26	44	39
		WB	LTR	4	3.8	A	A	3	2	31	13
		SB	LTR	3.4	4.3	A	A	15	37	16	52
		EB	LTR	3.6	4.1	A	A	3	3	22	28
STOP	Young Street at Access D	NB	LT	8.5	9.1	A	A	3	8	79	160
		EB	LR	14.7	21.3	B	C	18	20	62	63
	US 401 at Young Street (North)	Overall		10.2	10.9	B	B				
		WB	T	6.6	6.8	A	A	61	61	255	177
			R	6.0	8.9	A	A	46	137	67	139
		EB	L	0.1	0.1	A	A	0	0	122	177
		SB	R	23.2	21.4	C	C	150	160	191	219
	US 401 at Young Street (South)	Overall		18.0	46.4	B	D				
		EB	T	7.6	10.2	A	B	72	264	176	782
			R	18.0	60.0	B	E	324	1148	155	337
		NB	R	26.3	89.0	C	F	252	551	314	407
		WB	L	0.1	0.1	A	A	0	0	78	159
	US 401 Eastern U-Turn	Overall		2.7	3.6	A	A				
		WB	T	4.2	6.4	A	A	102	116	189	136
		EB	U	0.6	0.4	A	A	0	0	448	292
	US 401 Western U-Turn	Overall		2.3	3.0	A	A				
		EB	T	3.2	3.6	A	A	56	199	83	631
		WB	U	0.2	0.4	A	A	0	0	139	610

= Delay exceeds 300 seconds

*Maximum queue extends off the SimTraffic network and may be longer than recorded

9.2 2028 BUILD IMPROVED WITH ACCESS C

As noted in Section 5.0, the Rolesville LDO requires that any study area intersections that operate at LOS F and where the delay in the Build scenario increases by more than 5% when compared to the No-Build scenario should be investigated for mitigation. With the addition of traffic generated by the proposed development, the northbound School Street and southbound Old Rogers Road approach of the South Main Street at Old Rogers Road/School Street intersection increases in delay by greater than 5%. 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 to meet the requirements of the Rolesville 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. In addition, the low traffic volumes on the side-street approaches of Old Rogers Road and School Street are not anticipated to meet the warrants for the 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 D 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 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 access in the future.

9.2.1 Proposed Improvements By Others

This study assumes that Access D, from the proposed development to Young Street, is constructed by others. Based on the findings of this study, the following improvements are recommended for this access point:

Young Street at Access D

- Construct Access D as a full-movement access point
- Construct Access D with one ingress lane and one egress lane with 100 feet of internal protective stem
- Provide a northbound left turn lane with 75 feet of full-width storage and appropriate taper

The 2028 Build Improved with Access C capacity analysis results is shown in Table 7.

Table 7: 2028 Build Improved with Access C Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	12	13.7	B	B	25	25	100	81
		SB	L	7.6	8	A	A	0	3	33	51
	South Main Street at Virginia Water Drive Extension	Overall		30.2	46.9	C	D				
		EB	L	73.6	49.7	E	D	172	186	172	234
			TR	63.6	46.5	E	D	114	147	131	272
		WB	L	92.6	92.1	F	F	243	541	252	580
			TR	59.0	43.2	E	D	56	69	107	200
		NB	L	86.5	105.5	F	F	233	269	275	275
			T	16.7	49.5	B	D	595	1131	924	1113*
			R	9.1	22.3	A	C	66	121	225	225
		SB	L	67.4	73.8	E	E	77	181	340	439
			T	16.3	16.4	B	B	269	174	958	702
			R	8.4	10.0	A	B	8	14	368	374
	South Main Street at Realigned Burlington Mills Road	Overall		48.9	43.7	D	D				
		EB	L	123.1	75.3	F	E	586	455	457	504
			T	56.7	48.4	E	D	137	81	309	409*
			R	40.9	29.8	D	C	212	93	233	132
		WB	L	82.1	92.8	F	F	74	121	77	144
			T	78.7	86.2	E	F	87	121	117	270
			R	54.0	37.2	D	D	58	65	78	111
		NB	L	108.9	72.5	F	E	267	147	380	442
			T	20.4	26.6	C	C	450	1139	577	1064
			R	8.2	7.6	A	A	11	5	219	274
		SB	L	78.5	84.3	E	F	81	117	200	199
			T	31.2	43.4	C	D	770	908	2000	1521
			R	4.0	4.0	A	A	51	48	350	350
STOP	South Main Street at Old Burlington Mills Road	SB	R	22.1	20.2	C	C	5	18	128	154
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		64.0	73.8	E	E				
		EB	L	82.4	99.2	F	F	484	752	300	300
			TR	19.5	26.7	B	C	432	594	1113	3737
		WB	L	89.6	108.0	F	F	202	294	275	275
			TR	67.8	94.9	E	F	1065	1130	1373	1855*
		NB	L	121.0	107.8	F	F	415	277	268	250
			T	91.5	104.6	F	F	226	256	396	293
			R	38.9	46.0	D	D	152	199	180	400
		SB	L	103.2	127.2	F	F	381	503	281	300
			T	75.8	76.6	E	E	163	216	282	820*
			R	42.1	29.4	D	C	338	307	364	447
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	145.6	##	F	F	48	N/A	102	289
		EB	L	10.1	9.6	B	A	3	3	57	163
		WB	L	9.8	12.7	A	B	5	3	207	151
		SB	LTR	122	##	F	F	38	90	100	266
STOP	School Street at School Driveway/Access C	NB	LTR	7.8	7.3	A	A	0	0	0	0
		WB	LTR	8.9	8.6	A	A	0	0	29	29
		SB	LT	7.2	7.2	A	A	0	0	0	3
STOP	Redford Place Drive at School Driveway	WB	LR	11.9	10.8	B	B	33	5	89	49
	Redford Place Drive at Access A/Access B	Overall		3.8	4.2	A	A				
		NB	LTR	4.1	4	A	A	29	26	43	33
		WB	LTR	4	3.8	A	A	3	2	28	23
		SB	LTR	3.4	4.3	A	A	15	37	9	60
		EB	LTR	3.6	4.1	A	A	3	3	30	26
STOP	Young Street at Access D	NB	L	8.5	9.1	A	A	3	8	44	64
		EB	LR	14.7	20.7	B	C	18	20	64	70
	US 401 at Young Street (North)	Overall		10.2	10.9	B	B				
		WB	T	6.6	6.8	A	A	61	61	251	187
			R	6.0	8.9	A	A	46	137	92	146
		EB	L	0.1	0.1	A	A	0	0	137	171
		SB	R	23.2	21.4	C	C	150	160	165	224
	US 401 at Young Street (South)	Overall		18.0	46.4	B	D				
		EB	T	7.6	10.2	A	B	72	264	170	751
			R	18.0	60.0	B	E	324	1148	138	338
		NB	R	26.3	89.0	C	F	252	551	310	379
		WB	L	0.1	0.1	A	A	0	0	76	175
	US 401 Eastern U-Turn	Overall		2.7	3.6	A	A				
		WB	T	4.2	6.4	A	A	102	116	193	133
		EB	U	0.6	0.4	A	A	0	0	433	367
	US 401 Western U-Turn	Overall		2.3	3.0	A	A				
		EB	T	3.2	3.6	A	A	56	199	72	608
		WB	U	0.2	0.4	A	A	0	0	132	607

= Delay exceeds 300 seconds
*Maximum queue extends off the SimTraffic network and may be longer than recorded

10.0 TRAFFIC ANALYSIS: BUILD WITHOUT ACCESS C

10.1 2028 BUILD WITHOUT ACCESS C

In the Build scenario without Access C, the conditions that were noticed in the No-Build scenario remained the same. The South Main Street & Redford Place Drive/Rogers Road intersection still is expected to operate at LOS E in both peak hours along with queues at times exceeding 1000' along South Main Street.

The minor northbound and southbound approaches at the South Main Street & Old Rogers Road/School Street intersection operate at LOS F in both peak hours. It is common for minor street approaches to experience high delays at unsignalized intersections during peak hours.

The proposed roundabout at the Redford Place Drive at Access A/Access B intersection operates at LOS A in both peak hours. The School Street/Access C at School Driveway/Scarboro Driveway intersection operates at LOS A in both peak hours. The Young Street at Access D intersection operates at LOS C in both peak hours.

Synchro LOS and delay results for the 2028 Build without Access C analysis scenario are listed in Table 8.

Table 8: 2028 Build without Access C Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	12	13.7	B	B	25	25	90	98
		SB	L	7.6	8	A	A	0	3	30	37
	South Main Street at Virginia Water Drive Extension	Overall		30.2	46.9	C	D				
		EB	L	73.6	49.7	E	D	172	186	197	201
			TR	63.6	46.5	E	D	114	147	120	175
		WB	L	92.6	92.1	F	F	243	541	278	543
			TR	59.0	43.2	E	D	56	69	142	200
		NB	L	86.5	105.5	F	F	233	269	274	275
			T	16.7	49.5	B	D	595	1131	966	1110*
			R	9.1	22.3	A	C	66	121	225	225
		SB	L	67.4	73.8	E	E	77	181	449	449
			T	16.3	16.4	B	B	269	174	961	830
			R	8.4	10.0	A	B	8	14	253	450
	South Main Street at Realigned Burlington Mills Road	Overall		48.9	43.7	D	D				
		EB	L	123.1	75.3	F	E	586	455	475	451
			T	56.7	48.4	E	D	137	81	332	144
			R	40.9	29.8	D	C	212	93	199	135
		WB	L	82.1	92.8	F	F	74	121	86	138
			T	78.7	86.2	E	F	87	121	119	172
			R	54.0	37.2	D	D	58	65	72	128
		NB	L	108.9	72.5	F	E	267	147	373	475
			T	20.4	26.6	C	C	450	1139	569	1067
			R	8.2	7.6	A	A	11	5	214	300
		SB	L	78.5	84.3	E	F	81	117	199	200
			T	31.2	43.4	C	D	770	908	1750	1876
			R	4.0	4.0	A	A	51	48	350	350
STOP	South Main Street at Old Burlington Mills Road	SB	R	22.1	20.2	C	C	5	18	94	225
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		64.0	73.8	E	E				
		EB	L	82.4	99.2	F	F	484	752	300	300
			TR	19.5	26.7	B	C	432	594	1271	3389
		WB	L	89.6	108.0	F	F	202	294	275	275
			TR	67.8	94.9	E	F	1065	1130	1564	1607
		NB	L	121.0	107.8	F	F	415	277	270	261
			T	91.5	104.6	F	F	226	256	387	273
			R	38.9	46.0	D	D	152	199	227	222
		SB	L	103.2	127.2	F	F	381	503	283	300
			T	75.8	76.6	E	E	163	216	365	532
			R	42.1	29.4	D	C	338	307	408	314
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	177.9	##	F	F	45	158	114	200
		EB	L	10.1	9.6	B	A	3	3	88	95
		WB	L	9.8	12.6	A	B	5	0	159	148
		SB	LTR	115.3	##	F	F	35	88	144	131
STOP	School Street at School Driveway/Access C	NB	LTR	7.8	7.3	A	A	0	0	0	0
		WB	LTR	8.9	8.6	A	A	0	0	29	29
		SB	LT	7.2	7.2	A	A	0	0	0	2
STOP	Redford Place Drive at School Driveway	WB	LR	11.9	10.8	B	B	33	5	80	34
	Redford Place Drive at Access A/Access B	Overall		3.8	4.2	A	A				
		NB	LTR	4.1	4	A	A	29	26	45	17
		WB	LTR	4	3.8	A	A	3	2	31	23
		SB	LTR	3.4	4.3	A	A	15	37	20	52
		EB	LTR	3.6	4.1	A	A	3	3	27	27
STOP	Young Street at Access D	NB	LT	8.5	9.2	A	A	3	8	85	156
		EB	LR	15.7	24.0	C	C	20	25	67	68
	US 401 at Young Street (North)	Overall		10.2	10.9	B	B				
		WB	T	6.6	6.8	A	A	61	61	254	166
			R	6.0	8.9	A	A	46	137	140	134
		EB	L	0.1	0.1	A	A	0	0	120	168
		SB	R	23.2	21.4	C	C	150	160	191	194
	US 401 at Young Street (South)	Overall		18.0	46.4	B	D				
		EB	T	7.6	10.2	A	B	72	264	158	764
			R	18.0	60.0	B	E	324	1148	140	336
		NB	R	26.3	89.0	C	F	252	551	324	378
		WB	L	0.1	0.1	A	A	0	0	94	152
	US 401 Eastern U-Turn	Overall		2.7	3.6	A	A				
		WB	T	4.2	6.4	A	A	102	116	185	149
		EB	U	0.6	0.4	A	A	0	0	466	318
	US 401 Western U-Turn	Overall		2.3	3.0	A	A				
		EB	T	3.2	3.6	A	A	56	199	69	536
		WB	U	0.2	0.4	A	A	0	0	126	582

= Delay exceeds 300 seconds

*Maximum queue extends off the SimTraffic network and may be longer than recorded

10.2 2028 BUILD IMPROVED WITHOUT ACCESS C

As noted in Section 5.0, the Rolesville LDO requires that any study area intersections that operate at LOS F and where the delay in the Build scenario increases by more than 5% when compared to the No-Build scenario should be investigated for mitigation. With the addition of traffic generated by the proposed development, the northbound School Street and southbound Old Rogers Road approach of the South Main Street at Old Rogers Road/School Street intersection increases in delay by greater than 5%. 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 to meet the requirements of the Rolesville 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. In addition, the low traffic volumes on the side-street approaches of Old Rogers Road and School Street are not anticipated to meet the warrants for the 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 D 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 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 access in the future.

10.2.1 Proposed Improvements By Others

This study assumes that Access D, from the proposed development to Young Street, is constructed by others. Based on the findings of this study, the following improvements are recommended for this access point:

Young Street at Access D

- Construct Access D as a full-movement access point
- Construct Access D with one ingress lane and one egress lane with 100 feet of internal protective stem
- Provide a northbound left turn lane with 75 feet of full-width storage and appropriate taper

The Build Improved capacity analysis results are shown in Table 9.

Table 9: 2028 Build Improved without Access C Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
STOP	Jonesville Road at Prides Crossing	WB	LR	12	13.7	B	B	25	25	103	80
		SB	L	7.6	8	A	A	0	3	30	38
	South Main Street at Virginia Water Drive Extension	Overall		30.2	46.9	C	D				
		EB	L	73.6	49.7	E	D	172	186	198	199
			TR	63.6	46.5	E	D	114	147	166	217
		WB	L	92.6	92.1	F	F	243	541	244	526
			TR	59.0	43.2	E	D	56	69	106	200
		NB	L	86.5	105.5	F	F	233	269	274	275
			T	16.7	49.5	B	D	595	1131	997	1114*
			R	9.1	22.3	A	C	66	121	225	225
		SB	L	67.4	73.8	E	E	77	181	449	432
			T	16.3	16.4	B	B	269	174	876	787
			R	8.4	10.0	A	B	8	14	286	374
	South Main Street at Realigned Burlington Mills Road	Overall		48.9	43.7	D	D				
		EB	L	123.1	75.3	F	E	586	455	495	449
			T	56.7	48.4	E	D	137	81	382	209
			R	40.9	29.8	D	C	212	93	215	134
		WB	L	82.1	92.8	F	F	74	121	87	130
			T	78.7	86.2	E	F	87	121	111	179
			R	54.0	37.2	D	D	58	65	88	105
		NB	L	108.9	72.5	F	E	267	147	444	475
			T	20.4	26.6	C	C	450	1139	665	1006
			R	8.2	7.6	A	A	11	5	136	300
		SB	L	78.5	84.3	E	F	81	117	199	200
			T	31.2	43.4	C	D	770	908	1849	1527
			R	4.0	4.0	A	A	51	48	350	350
STOP	South Main Street at Old Burlington Mills Road	SB	R	22.1	20.2	C	C	5	18	85	185
	Redford Place Drive/Rogers Road at South Main Street (US 401 Business)	Overall		64.0	73.8	E	E				
		EB	L	82.4	99.2	F	F	484	752	300	300
			TR	19.5	26.7	B	C	432	594	1487	3730
		WB	L	89.6	108.0	F	F	202	294	275	275
			TR	67.8	94.9	E	F	1065	1130	1387	1827*
		NB	L	121.0	107.8	F	F	415	277	273	268
			T	91.5	104.6	F	F	226	256	428	322
			R	38.9	46.0	D	D	152	199	231	298
		SB	L	103.2	127.2	F	F	381	503	292	296
			T	75.8	76.6	E	E	163	216	413	595
			R	42.1	29.4	D	C	338	307	450	308
STOP	Old Rogers Road/School Street at South Main Street (US 401 Business)	NB	LTR	177.9	##	F	F	45	158	142	276
		EB	L	10.1	9.6	B	A	3	3	87	131
		WB	L	9.8	12.6	A	B	5	0	161	200
		SB	LTR	115.3	##	F	F	35	88	136	254
STOP	School Street at School Driveway/Access C	NB	LTR	7.8	7.3	A	A	0	0	0	0
		WB	LTR	8.9	8.6	A	A	0	0	29	31
		SB	LT	7.2	7.2	A	A	0	0	3	0
STOP	Redford Place Drive at School Driveway	WB	LR	11.9	10.8	B	B	33	5	102	42
	Redford Place Drive at Access A/Access B	Overall		3.8	4.2	A	A				
		NB	LTR	4.1	4	A	A	29	26	40	36
		WB	LTR	4	3.8	A	A	3	2	35	23
		SB	LTR	3.4	4.3	A	A	15	37	26	47
		EB	LTR	3.6	4.1	A	A	3	3	28	29
STOP	Young Street at Access D	NB	L	8.5	9.2	A	A	3	8	38	58
		EB	LR	15.6	23.4	C	C	20	25	62	58
	US 401 at Young Street (North)	Overall		10.2	10.9	B	B				
		WB	T	6.6	6.8	A	A	61	61	242	195
			R	6.0	8.9	A	A	46	137	104	154
		EB	L	0.1	0.1	A	A	0	0	116	179
		SB	R	23.2	21.4	C	C	150	160	189	230
	US 401 at Young Street (South)	Overall		18.0	46.4	B	D				
		EB	T	7.6	10.2	A	B	72	264	157	760
			R	18.0	60.0	B	E	324	1148	122	332
		NB	R	26.3	89.0	C	F	252	551	351	372
		WB	L	0.1	0.1	A	A	0	0	78	159
	US 401 Eastern U-Turn	Overall		2.7	3.6	A	A				
		WB	T	4.2	6.4	A	A	102	116	194	138
		EB	U	0.6	0.4	A	A	0	0	445	267
	US 401 Western U-Turn	Overall		2.3	3.0	A	A				
		EB	T	3.2	3.6	A	A	56	199	88	595
		WB	U	0.2	0.4	A	A	0	0	142	591

= Delay exceeds 300 seconds

*Maximum queue extends off the SimTraffic network and may be longer than recorded

11.0 COMPREHENSIVE RECOMMENDATIONS

Based on the findings of this study, specific improvements have been identified and some should be completed as part of the proposed development. These improvements are valid for both scenarios with and without Access C.

Jonesville Road at Prides Crossing

- No improvements are recommended at this intersection

South Main Street at Realigned Burlington Mills Road

- No improvements are recommended at this intersection

Redford Place Drive/Rogers Road at South Main Street

- No improvements are recommended at this intersection

Old Rogers Road/School Street at South Main Street

- No improvements are recommended at this intersection

School Street at School Driveway/Scarboro Driveway/Access C

- If Access C is constructed, the driveway should be constructed with one ingress lane and one egress lane with 100 feet of internal protective stem
- If Access C is not pursued, it is recommended that the connection be removed from the Town's Community Transportation Plan (CTP)

Redford Place at School Driveway

- No improvements are recommended at this intersection

US 401 at Young Street

- No improvements are recommended at this intersection

US 401 WB U-Turn

- No improvements are recommended at this intersection

US 401 EB U-Turn

- No improvements are recommended at this intersection

South Main Street at Virginia Water Drive Extension

- No improvements are recommended at this intersection

Redford Place Drive at Access A/Access B

- Construct Access A and Access B with one ingress lane and one egress lane 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

Young Street at Access D

It is recommended that Access D be constructed by others as a full-movement access point, with one ingress lane and one egress lane with 100 feet of internal protective stem. A northbound left turn lane should be provided in conjunction with construction of the access point with 75 feet of full-width storage and appropriate taper.

These recommendations are illustrated in Figure ES-1.

Figure 15: Recommended Improvements

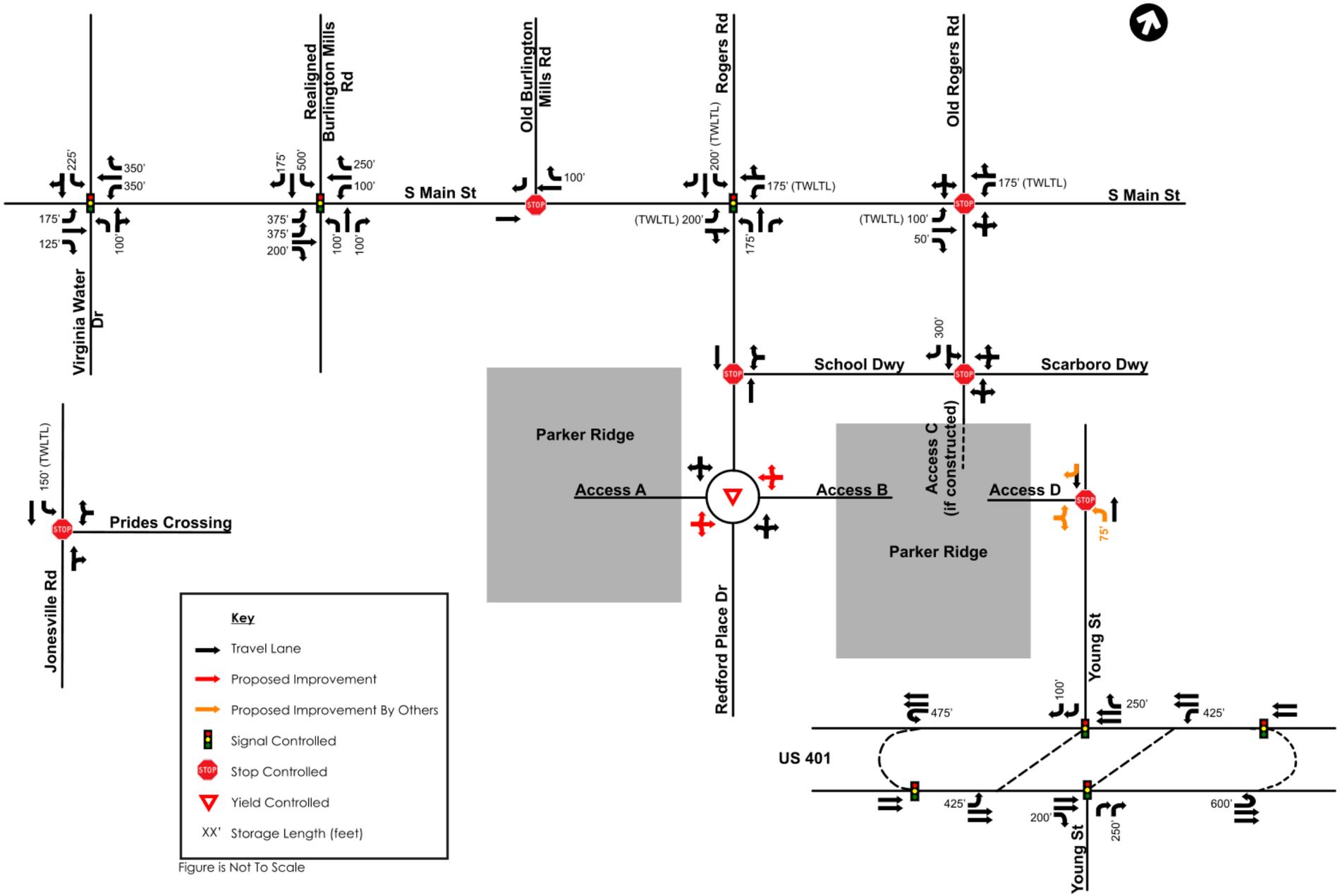


Figure is Not To Scale

12.0 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

13.0 APPENDIX

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

Parker Ridge

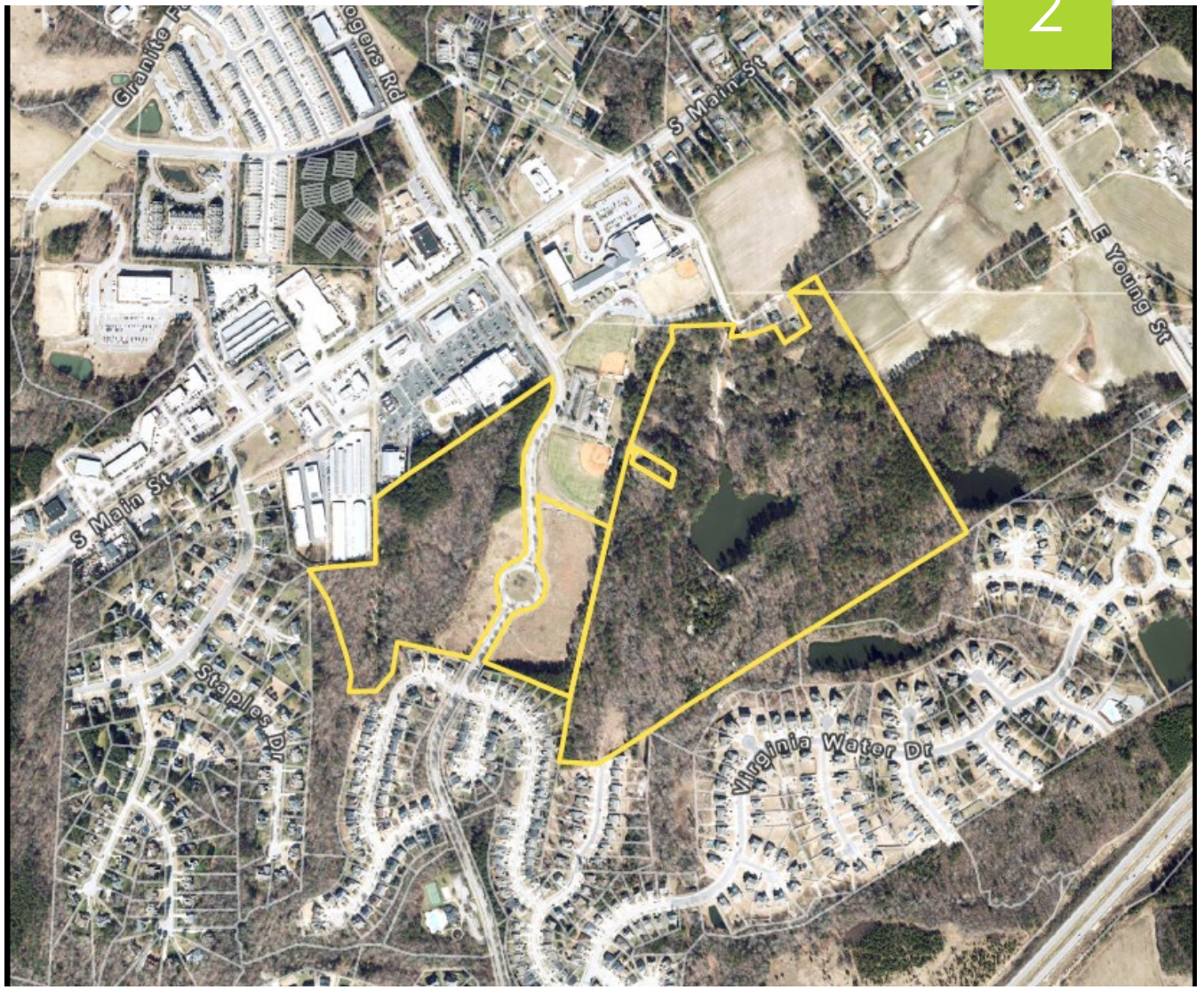
MA 22-03

ROLESVILLE BOARD OF COMMISSIONERS

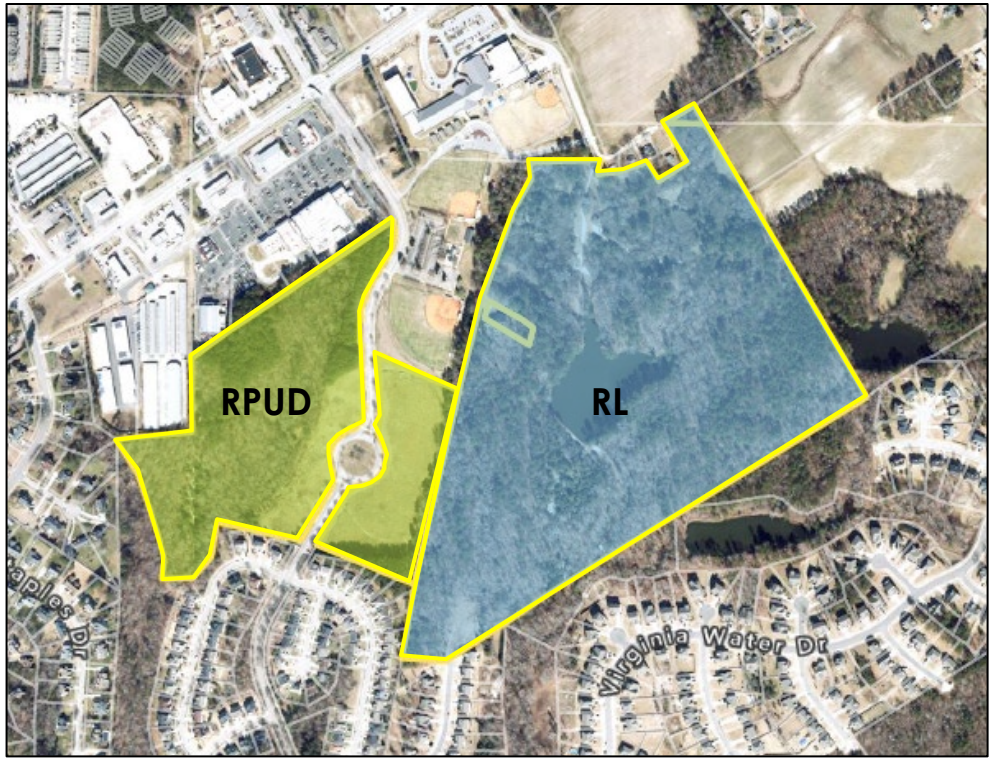
MARCH 7, 2023

Site and Surrounding Area

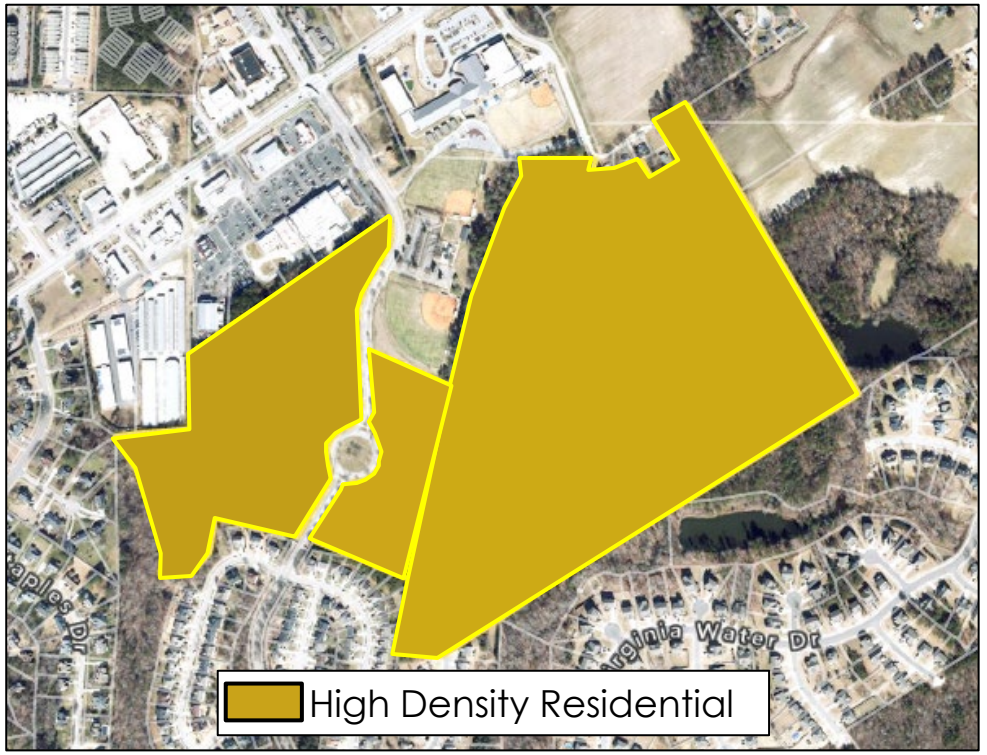
- 0, 82, and 120 School Street;
- 201 Redford Place Drive
- 88 total acres



Existing Zoning



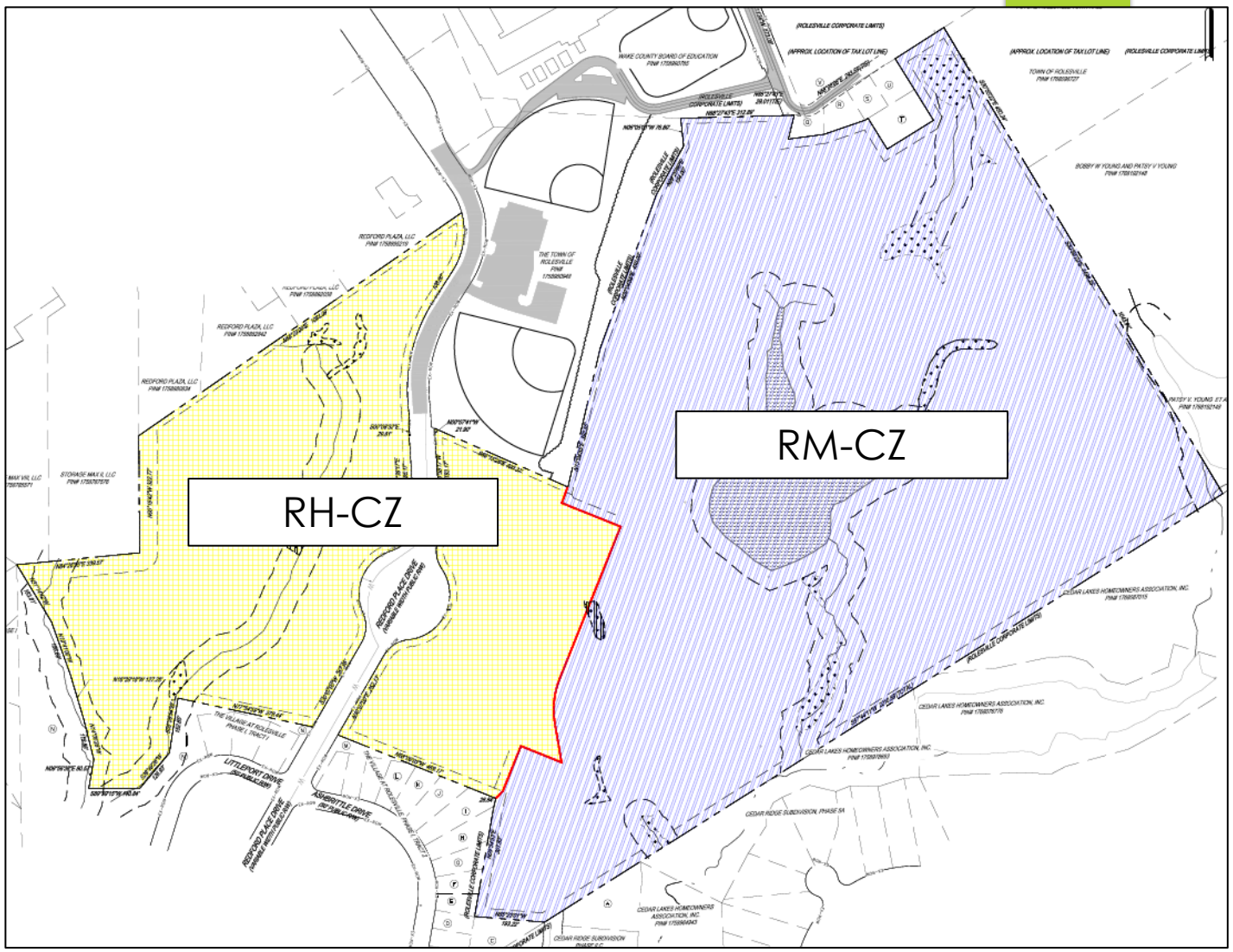
Future Land Use



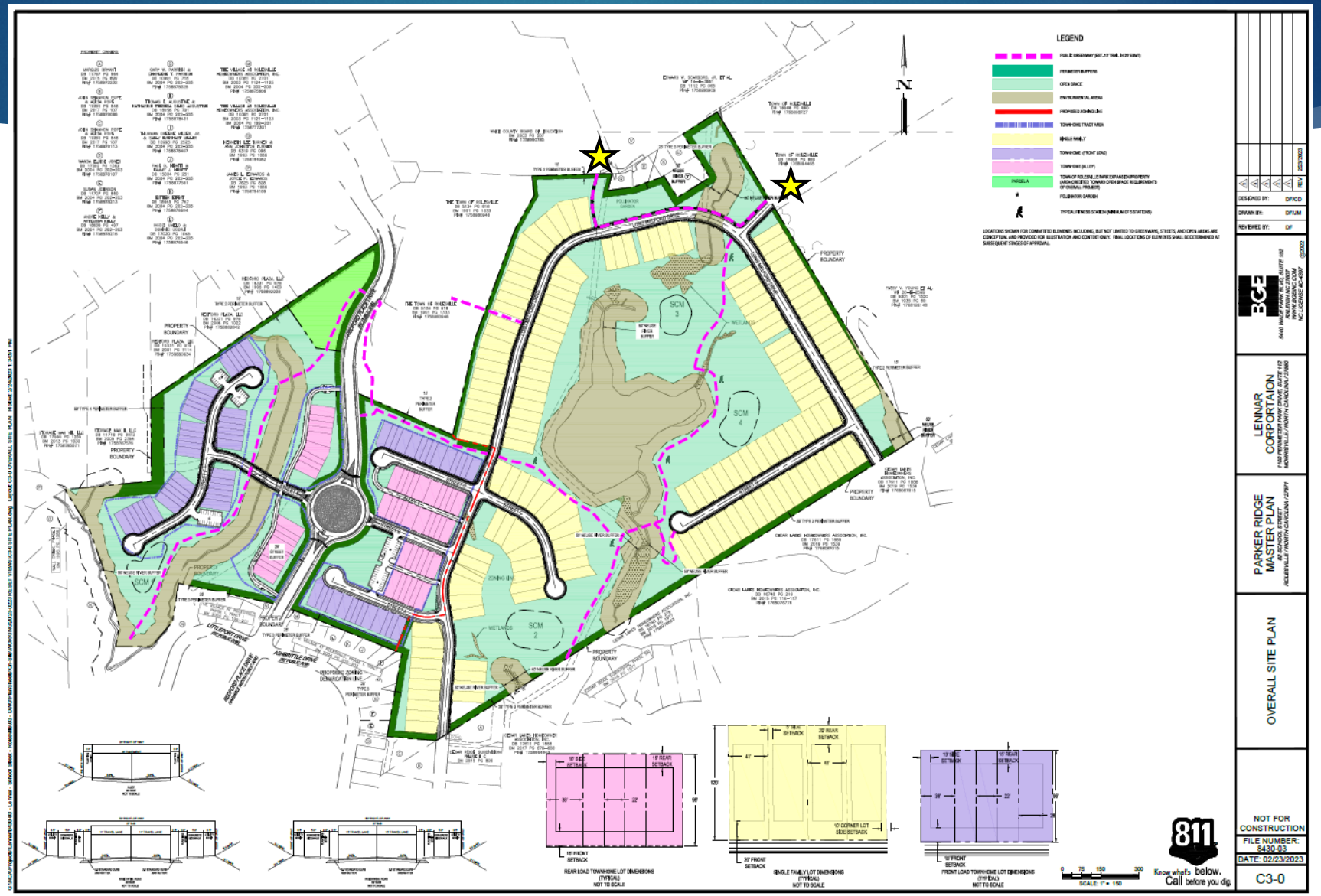
Residential High Density Conditional Zoning and Residential Medium Density Conditional Zoning

Eleven Conditions

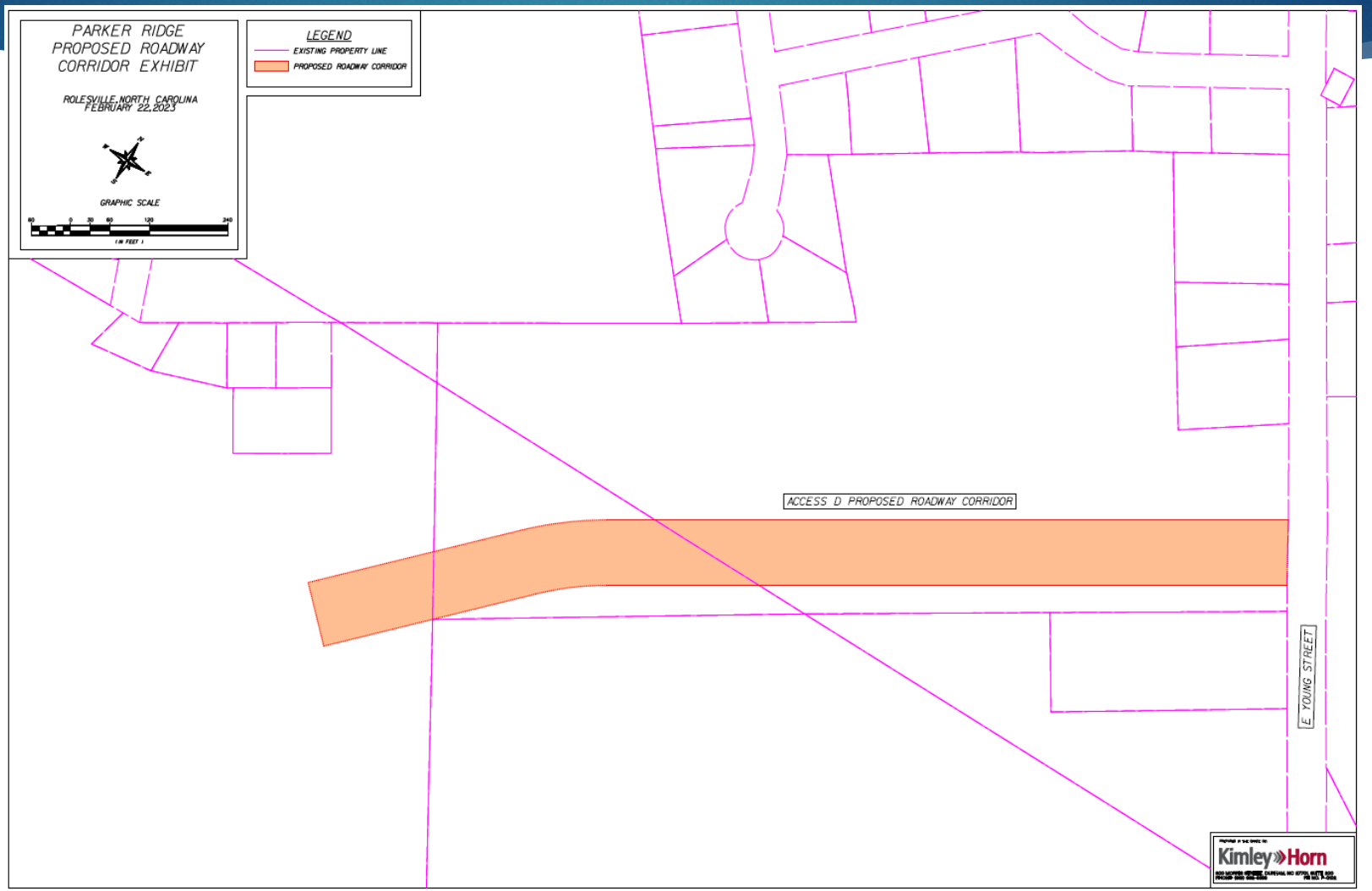
- RH prohibited uses
  - family care facility, live-work unit, residential care, and telecom tower
- Max of 120 townhomes in RH district
- RM prohibited uses
  - family care facility and telecom tower
- Max of 170 single family detached homes in RM district



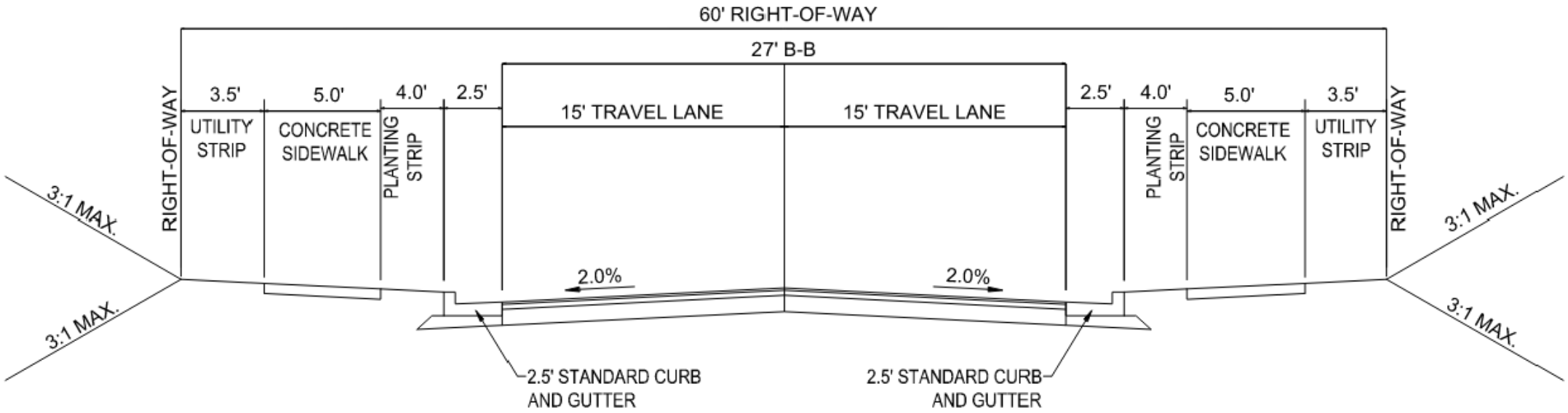
Updated Concept Plan



Young Street Connection



Young Street Connection



RESIDENTIAL ROAD
60' ROW
NOT TO SCALE

Redford Place Drive at Virginia Water Drive

Feb 2005

May 2022

Prides Crossing at Bendemeer Lane

March 2013

March 2022

Yates Store Road at Stonewater Glen Lane

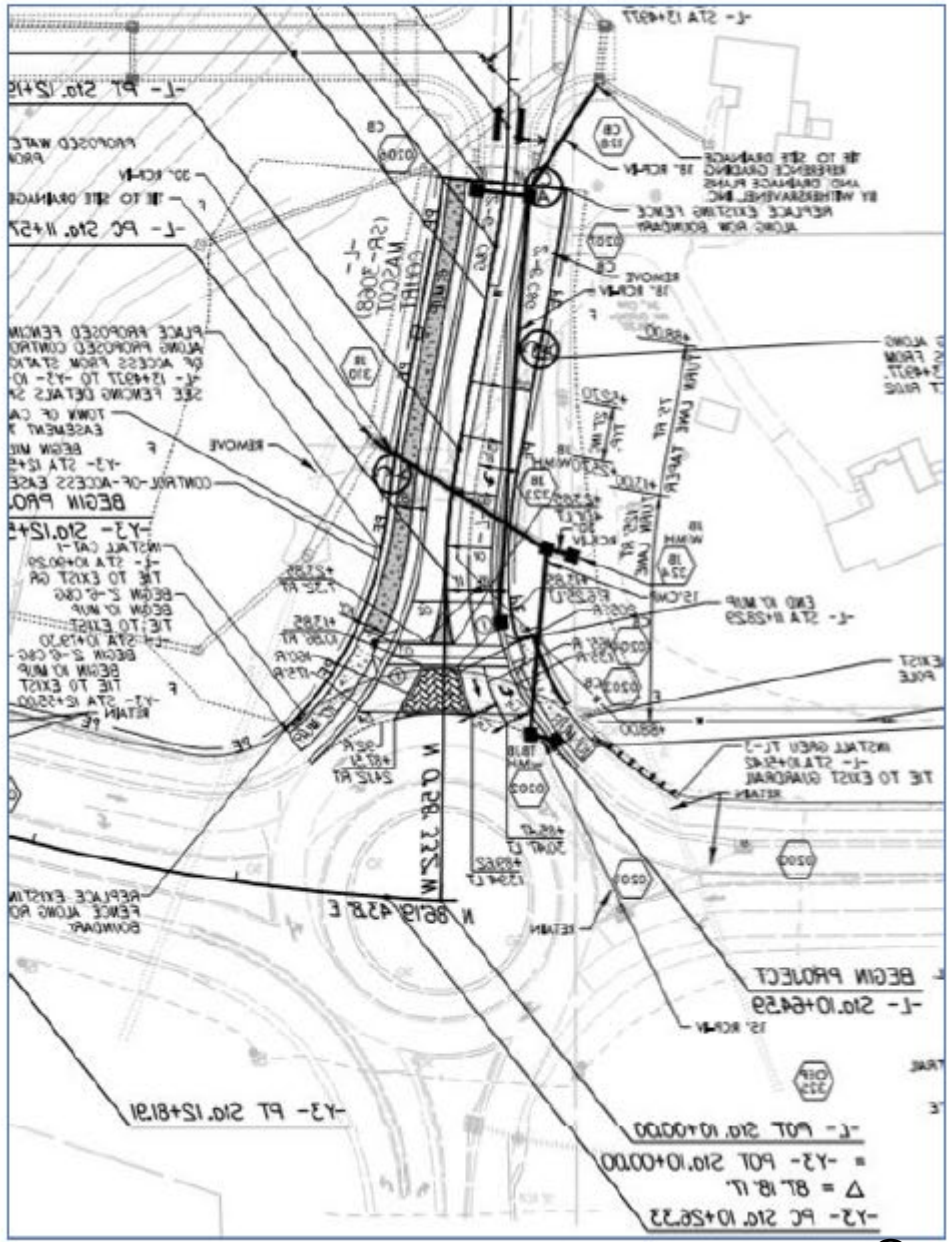
April 2013

May 2022

Morrisville Parkway at NC 540 NB Ramps

March 2022

Plans for 4th Leg

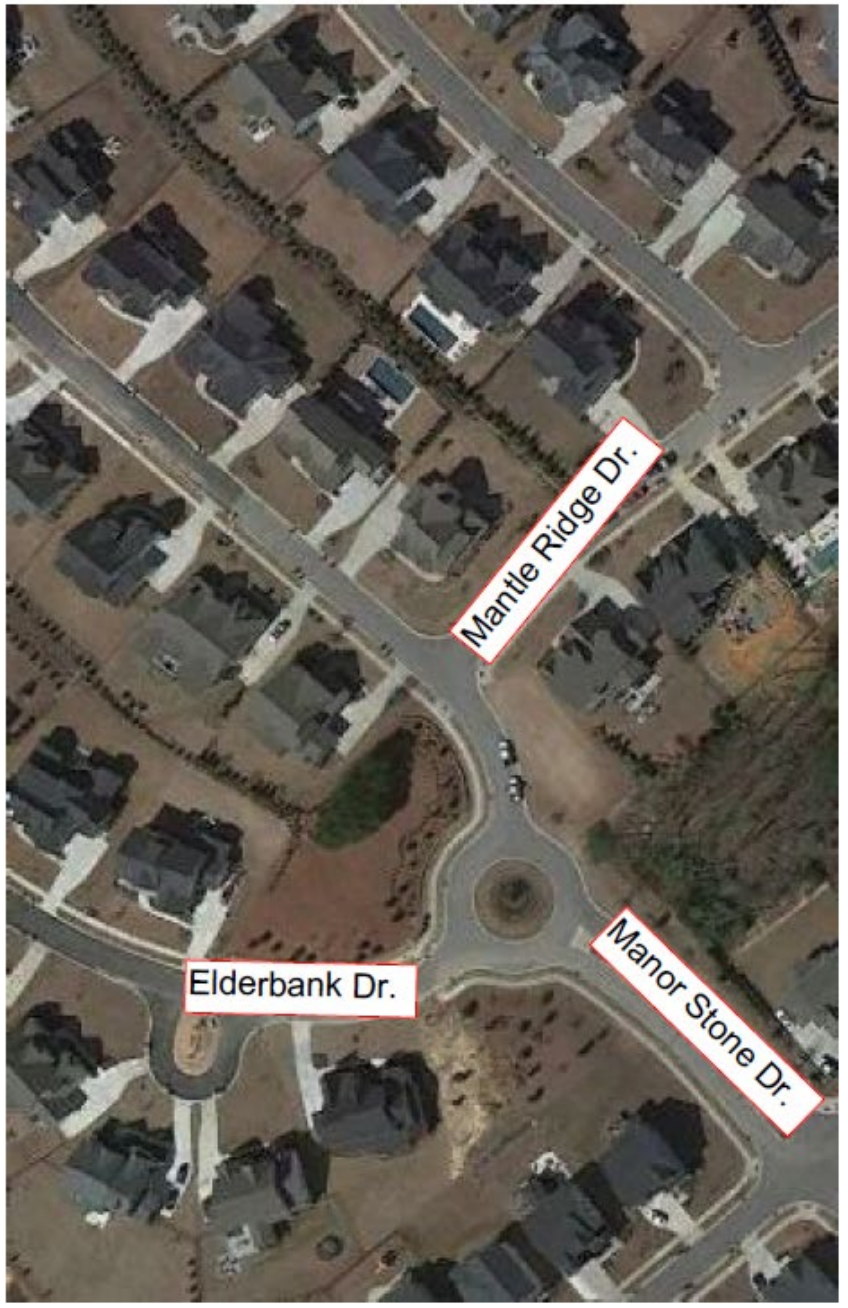


Cary

Manor Stone Drive at Elderbank Drive

February 2018

March 2022



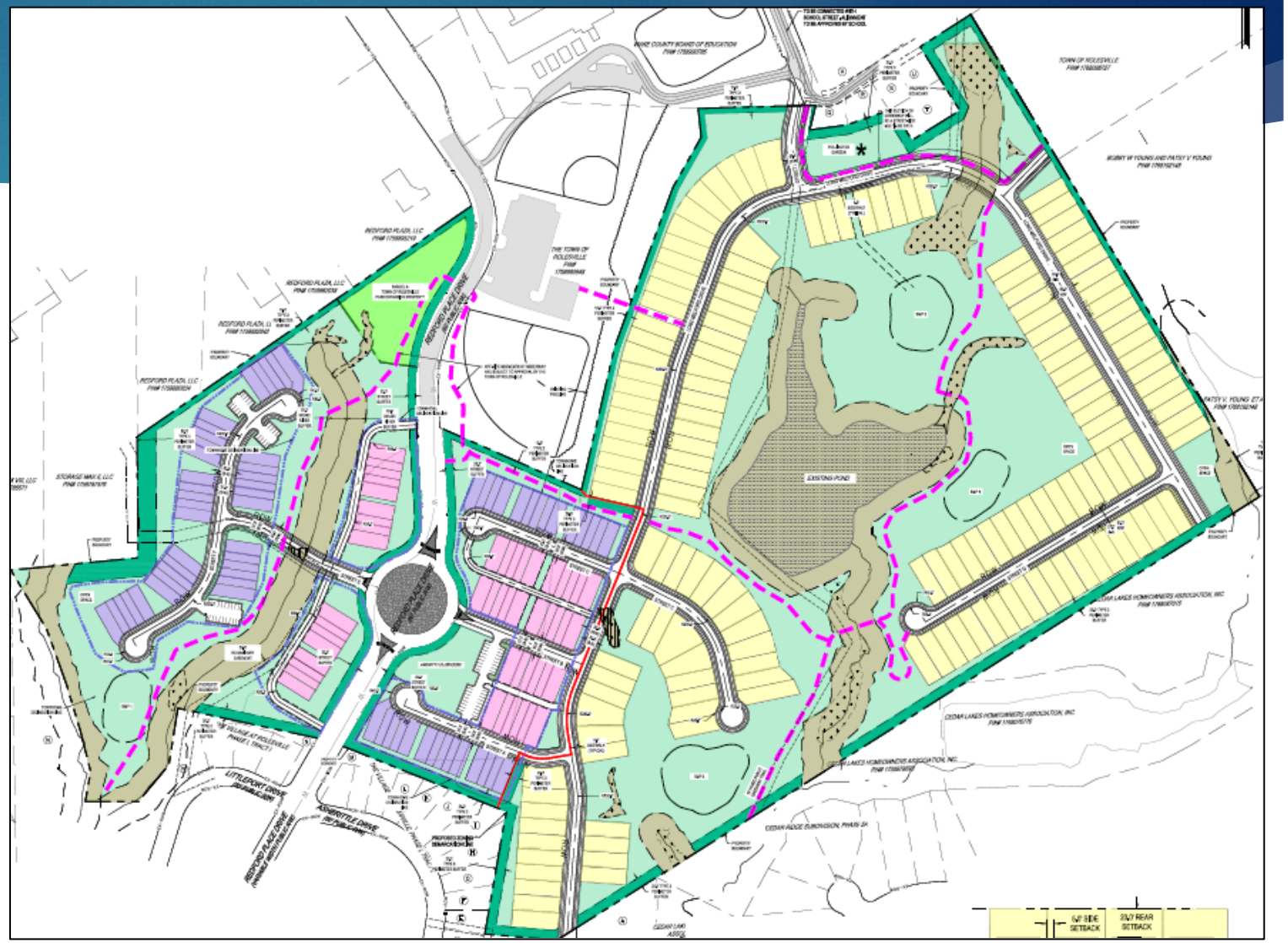
Conditions – Operation Coming Home

LENNAR®

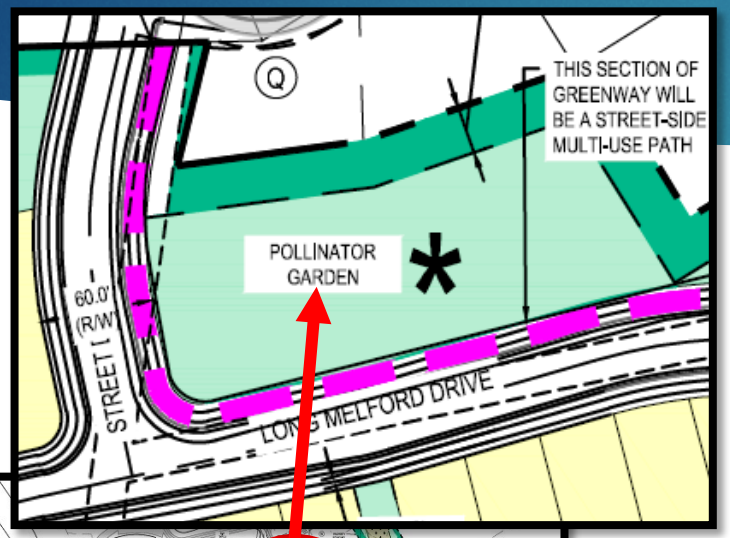
OPERATION:
Coming Home

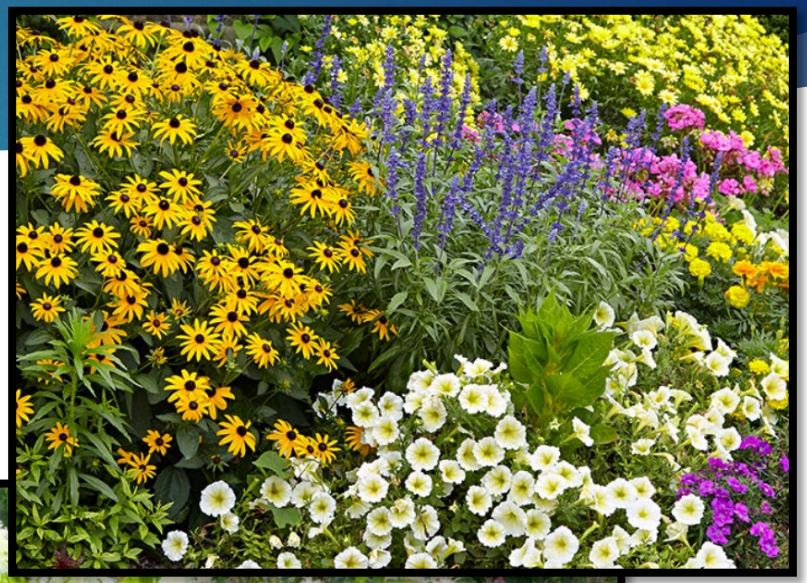
Conditions and Concept Plan

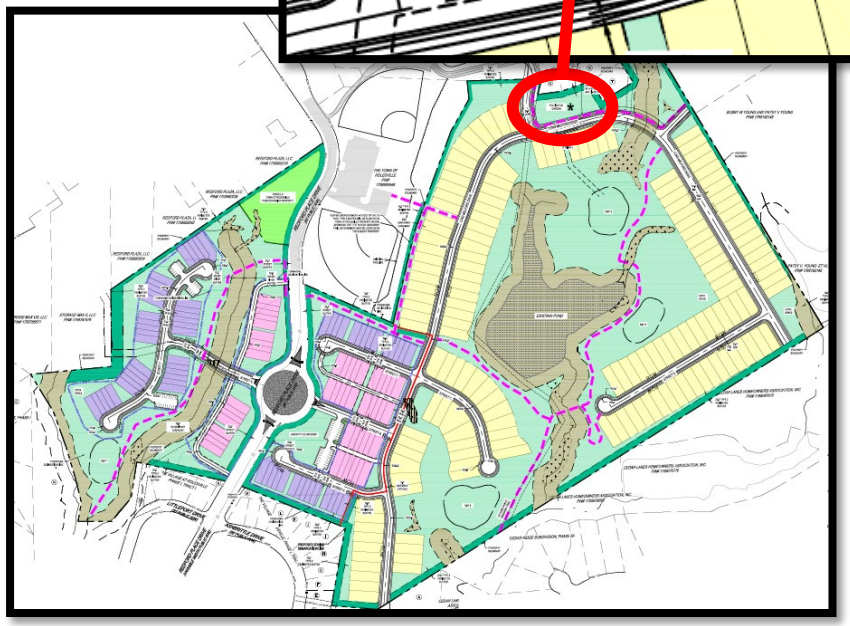
- Development must conform with Concept plan
- Perimeter buffers must be provided as shown on plan and shall contain 6’ fences



Conditions – Pollinator Garden







Architectural Commitments

Single Family Detached

- 2 car garage;
- Garage doors windows;
- Raised ground floor elevation
- Minimum 24" stone or masonry water table;
- Masonry as predominant first floor finish or 2 types of siding
- Roof pitches between 5 on 12 and 12 on 12;
- Roofs shall be asphalt shingles, metal, copper or wood;
- Minimum 12" front overhangs;
- Covered stoop or porch at least 20 sf and 5 ft deep;
- Shutters or window trim on front façade windows;
- Minimum 64 sf rear patio;
- At least one window on each side elevation;
- Adjacent homes cannot have the same façade or color; and
- Varied color palette throughout the subdivision.

Townhomes

- 1 or 2 car garage;
- Minimum 24" stone or masonry water table;
- Masonry as predominant first floor finish or 2 types of siding
- Roofs shall be asphalt shingles, metal, copper or wood;
- Minimum 12" front overhangs;
- Covered stoop or porch at least 20 sf and 5 ft deep;
- Shutters or window trim on front façade windows;
- Minimum 64 sf rear patio;
- At least one window on each side elevation (excluding interior units);
- Adjacent units cannot have the same color; and
- Varied color palette throughout the subdivision.

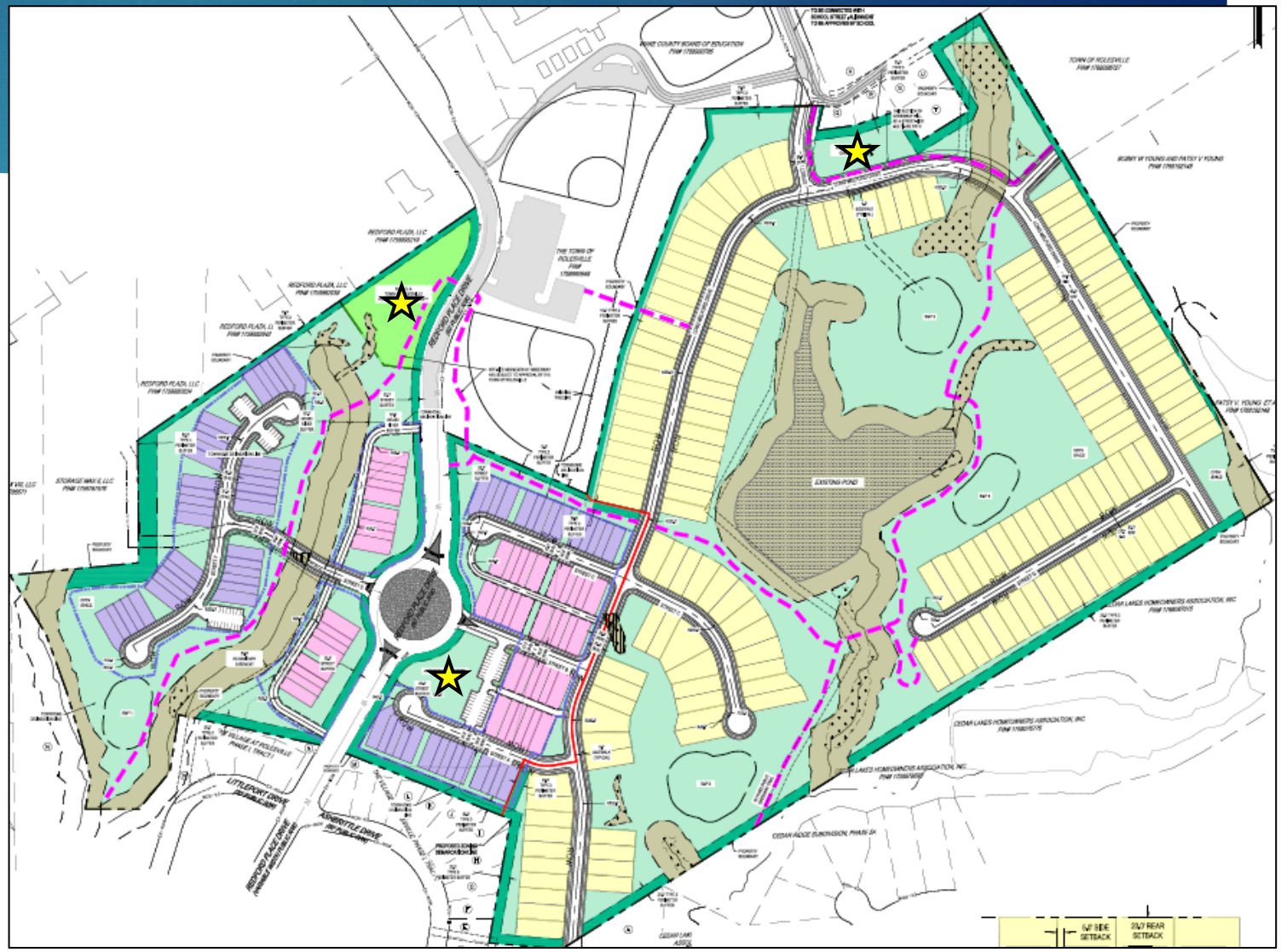
Architectural Commitments

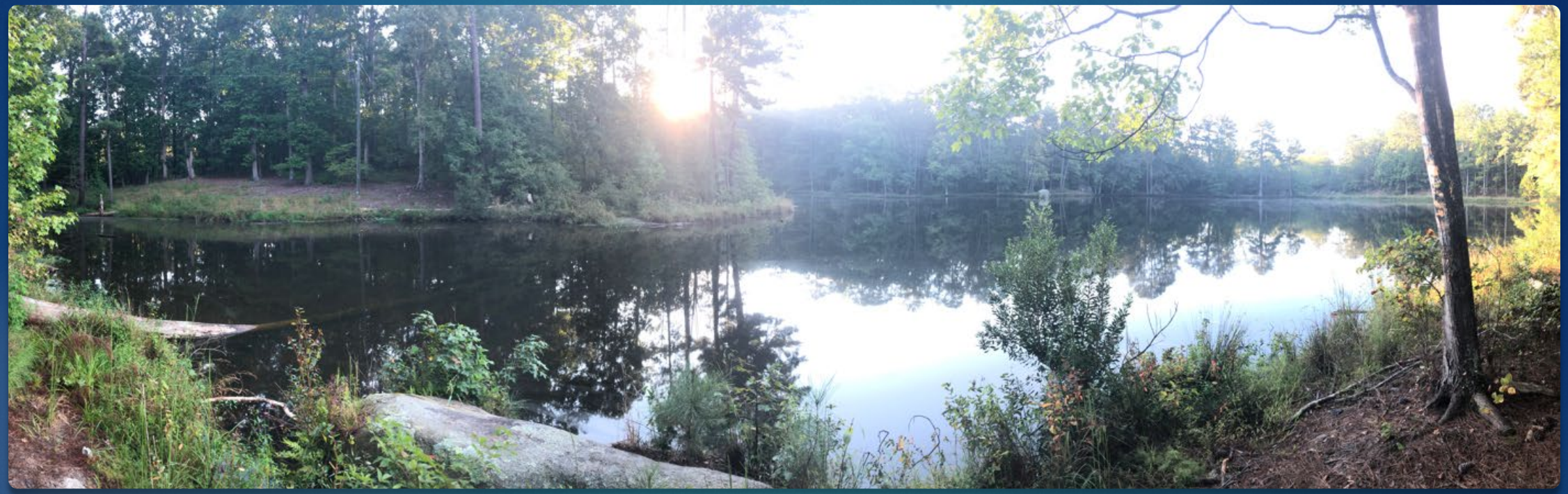
Architectural Commitments

Architectural Commitments

Parks and Recreation

- 1.5 acres for park expansion
- 46.25 acres of open space
- 2.8 miles of sidewalks
- 1.5 miles of public greenway trails
- Clubhouse and pool
- Pollinator garden
- Preservation and greenway activation of lake





Lake Amenity with Public Greenway