NCDOT Traffic Impact Analysis Need Screening / Scoping Request

TIA Need Screening → TIA Scoping → TIA Submittal

A Traffic Impact Analysis (TIA) may be required for developments based on the site trip generation estimates, site context, or at the discretion of the NCDOT District Engineer. The Applicant or the TIA Consultant shall submit this form along with the site plan to the District Engineer to determine the TIA need and, if a TIA is required, initiate the TIA scoping process. Without an approved scope, the TIA is incomplete and will be rejected until the study is revised to conform to NCDOT's TIA requirements.

Project Name: Woodlief Assemblage **Previous Name:** If Applicable

Location: Rolesville Road **County:** Wake **Municipality:** Rolesville

Project Description: Residential development along Rolesville Road

Project Contact:	Applicant	TIA Consultant
Company Name	Pulte Home Company LLC	Stantec
Contact Person	Chris Raughley	Matt Peach
Phone Number	919-816-1100	919-865-7375
Email	Chris.Raughley@pultegroup.com	matt.peach@stantec.com
Mailing Address	1225 Crescent Green Drive Cary, NC 27518	801 Jones Franklin Road, Suite 300 Raleigh, NC 27606

Site Plan Prepared By: Withersravenel LLC **Site Plan Date:** 3/1/2023

See site plan/vicinity map requirements on page 2.

Parcel Size: 105.9 Acre(s) **Anticipated Build-Out Year:** 2028

Weekday Site Trip Generation - Do NOT adjust for mode split, pass-by, internal capture, or diverted trips.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
210	SF Homes	158	d.u.	1538	Adj. Street	29	84	113	96	57	153	ITE Equation
220	Townhomes	95	d.u.	684	Adj. Street	12	40	52	38	23	61	ITE Equation
Total		253	d.u.	2222		41	124	165	134	80	214	

Refer to the current *NCDOT Congestion Management Capacity Analysis Guidelines* for acceptable trip calculation methods and data sources.

**Explain local or other data sources, if used:

☐ The estimated site trips meet NCDOT's TIA trip threshold of 3,000 daily trips.

☒ The estimated site trips meet the municipal TIA trip threshold of 50 peak hour trips

☐ This project is located in a known STIP and/ or local CIP project #

☐ This project includes a rezoning request.

NCDOT Traffic Impact Analysis Need Screening / Scoping Request

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☐ The proposed site access is located within 1,000 feet of an interchange.

☐ The Applicant requests for a new or modified control-of-access break.

☐ The Applicant requests for a new or modified median break.

Applicant's Signature	Chris Raughley Print Name	Date

Site Plan/Vicinity Map Requirement for TIA Need Screening: While the site plan may not be finalized during the TIA scoping stage, the graphic representation of the proposed development shall provide adequate details on the development scope and context. More specifically, the site plan/map shall clearly show the location and type of each access point, spacing to adjacent and opposing driveways or intersections, internal street network, proposed buildings/parcels with their anticipated uses and sizes at full build-out and, if applicable, any nearby interstate, US, NC or Secondary Roads (SR).

Project Name: _____ **Project Reference Number:** _____

☒ **A TIA is Required by the Local Government.** In addition, the study area is expected to include NCDOT maintained transportation facilities.

☐ **A TIA is Required by NCDOT,** per the *Policy on Street and Driveway Access to North Carolina Highways*.

If either or both of the boxes above are checked, the Applicant/TIA Consultant is hereby requested to fill out as much as possible of the following TIA scoping checklist, and return it along with the supporting documents to NCDOT prior to the scoping meeting.

☐ **A TIA is NOT required**. This decision is based on the development information presented above. Changes in the development plan will require re-evaluation of the TIA need, and may necessitate a TIA. The Applicant should inform the District Engineer of any significant changes in a timely fashion to avoid delays or rejections of the driveway permit / encroachment agreement applications.

Additional Comments:

The TIA need decision is made by the NCDOT Division 5 District 2 on _____.

_____ _____

NCDOT District Representative's Signature | Print Name

Email concurrence may be used in lieu of the signature.

NCDOT TIA Scoping Checklist

TIA Need Screening → TIA Scoping → TIA Submittal

Project Name: Woodlief Assemblage **TIA Scoping Date:** _____

☒ **TIA Need Screening Forms are Attached.** Project Reference #: _____ Decision Date: _____

☒ **Site Plan and Access**

☒ Provide a site plan illustrating site access, internal and external roadways, buildings and land uses.
Refer to NCDOT's *Policy on Street and Driveway Access to North Carolina Highways* pages 14 and 15 for site plan requirements.

☒ Identify site access.

New Access	On Road	Access Type		Driveway Spacing		
	Road Name	Permitted Movements	Traffic Control	Distance (ft)	Direction	Nearest Intersection / Access
Access A	Rolesville Rd	Conventional Full-Mvmt	2-Way Stop	0	North	Catlette Farm Rd
Access B	Rolesville Rd	Conventional Full-Mvmt	2-Way Stop	0	North	Kalas Falls dvwy.
Access C						
Access D						
Access E						
Access F						
Access G						
Access H						

Existing Access	Existing Intersection of		Access Modification	Proposed Interconnectivity (If Applicable)		
	Road A	Road B		Connector #	Road Connected	Adjacent Development
Access 1			Please Select	Connector 1		
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

☒ Additional access clarifications and provisions (e.g., proposed control-of-access or median breaks, modifications of existing access, loading/unloading area access, bike/pedestrian accommodation).

☒ Development proposes two new driveways. The first being across from the existing Catlettee Farm Road and the second being across from the approved development (e.g. Kalas Falls Subdivision) driveway.

Proposed K-12 School Site

☐ NCDOT MSTA School Traffic Calculator for Select School Type shall be used.

☐ Peak Hour Factors (PHFs) shall be adjusted/weighted for new school trips (0.5 PHF by default).

☐ Internal school circulation analysis is required, and should be submitted in advance or concurrent with the TIA submittal.

☐ Clarify traffic operation plans (e.g. traffic circulation pattern, pedestrian access, drop-off/pick-up zone location and configuration, queue storage area and, if applicable, staggered start times).

☒ Trip Generation

The TIA Consultant shall prepare trip generation estimates following the current *NCDOT Congestion Management Capacity Analysis Guidelines*, and submit the calculation sheets and supporting information to the District Engineer for approval prior to capacity analysis.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
210	SF Homes	158	d.u.	1538	Adj. Street	29	84	113	96	57	153	ITE Equation
220	Townhomes	95	d.u.	684	Adj. Street	12	40	52	38	23	61	ITE Equation
Unadjusted Site Trips				2222		41	124	165	134	80	214	
Internal Capture Trips (Attach Calculation Sheets)												Please Select
Internal Capture % of Unadjusted Site Trips				%		%			%			
LUC	Proposed Land Use	Any Internal Trips?		Pass-By % of External Trips								
		Please Select		%		%			%			Please Select
				%		%			%			
				%		%			%			
				%		%			%			
				%		%			%			
Pass-By Trips (Attach Calculation Sheets)												
Adjacent Street Volumes												Please Select
Non-Pass-By Primary Trips				2222		41	124	165	134	80	214	
Diverted Trips, if Applicable and Justifiable												Please Select

**Explain local or other data sources, if used:

☐ Existing Site Trip Information for Redevelopment Projects (Attach separate sheets as needed)

ITE LUC	Existing Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
					Please Select							Please Select
Total Existing Site Trips												

☒ **Trip Distribution**

☒ Trip distribution diagrams are submitted concurrently with this document (attach separate sheets).

☐ Trip distribution diagrams will be submitted separately, along with supporting information, to the District Engineer for review and approval prior to capacity analysis. The trip distribution shall be based on the current and anticipated traffic patterns, as well as instructions noted below.

If required by the District Engineer, the following additional diagrams shall also be submitted:

☐ Mixed-Use Developments (separate diagrams for residential, commercial, and office trips)

☐ Inter-Development Trips (if 'internal" trips cross public streets)

☐ Pass-By Trips

☐ Diverted Trips

☐ Each Analysis Period

☐ **Mode Split**

☐ Provide Data Source and Justification

Mode / Period	Auto		
AM Peak	%	%	%
PM Peak	%	%	%
Daily	%	%	%
	%	%	%

☐ Identify proper infrastructure and accommodation for other modes of travel.

☒ **Analysis Peak Periods:**

☒ Weekday AM Peak 6:30 - 9:00 AM

☒ Weekday PM Peak 4:00 - 6:00 PM

☐ Weekday Midday Peak _____

☐ Weekday PM School Peak _____

☐ Weekend _____ Peak _____

☐ Other _____

☒ Study Area Intersections and Data Collection

The study area shall include the site access intersections (both new and existing) identified under "Site Plan and Access" on page 1, as well as the following external and, if applicable, internal intersections.

External Intersection	Intersection of		Traffic Control	Intersection Turning Movement Counts			Notes
	Road A	Road B		New / Existing	Date of Counts	Growth Adjustment	
#1	US 401	E. Young St.	Signal	Require New Counts			
#2	US 401	E. U-Turn	Signal	Require New Counts			
#3	US 401	W. U-Turn	Signal	Require New Counts			
#4	E. Young St.	Quarry Rd.	2-Way Stop	Require New Counts			
#5	E. Young St.	Rolesville HS	2-Way Stop	Require New Counts			
#6	Rolesville Rd.	Fowler Rd.	2-Way Stop	Require New Counts			
#7	Rolesville Rd.	Catlett Farm	2-Way Stop	Require New Counts			
#8	Rolesville Rd.	Mitchell Mill Rd	All-Way Stop	Require New Counts			
#9							
#10							
#11							
#12							

Internal Intersection	Intersection of		Access Type		Intersection Spacing		
	Road A	Road B	Traffic Control	Permitted Movements	Distance (ft)	Direction	Nearest Intersection
#101			Please Select	Please Select		Please Select	
#102							
#103							
#104							
#105							

The following data will be collected:

☒ New traffic turning movement counts in ☒ 15-min intervals ☐ 5-min intervals (near schools)
Unless otherwise noted above, new traffic counts shall be collected at the existing study intersections during the analysis periods. Weekday counts shall avoid Mondays, Fridays, holidays, school breaks, road closures, and major weather events.

☐ To account for the impact of existing and/or proposed school traffic, PHFs will be adjusted for:

intersections numbered: _____

and access points numbered: _____

☐ Traffic Forecast Data for TIP: _____

☒ Roadway/Intersection Configuration & Traffic Control

☒ Traffic Signal Phasing & Timing Data

☐ Crash Data: _____ Period: _____

☐ Other:

☒ Future Year Conditions

☒ Project Build-Out Year: 2028

☒ Future Analysis Year(s): 2028

☒ Identify below any funded/committed future transportation improvements, as well as any approved but incomplete developments near the site.

Funded STIP / Local CIP Project	Project Description	Year Complete

Nearby Approved Development	Location	Future Land Use (exclude any completed phases)	Committed Improvements
The Point	E. Young St.	Mixed-Use	Yes
Kalas Falls	Rolesville Road	Residential	Yes
Moody Farm	Rolesville Road	Residential	No
Tucker-Wilkins	Rolesville Road	Residential	No

☒ Annual Growth Factor: 2 %

Justification/Data Source: Other TIAs in immediate vicinity

☐ Local Comprehensive Transportation Plan Compliance

☐ Identify Applicable Local Transportation Planning Documents

☐ Identify Applicable Roadways inside the Study Area

Road Name	Classification	Speed Limit	Proposed Cross-Section	Proposed Right-of-Way	Compliance Requirements	Affect Study Intersection #

☒ Study Method

The traffic analysis shall follow the current *NCDOT Congestion Management Capacity Analysis Guidelines*, *Policy on Street and Driveway Access to North Carolina Highways*, and use the current approved version of analysis software (e.g. Synchro/SimTraffic, HCS, Sidra Intersection, TransModeler).

The study shall include the following analysis scenarios for each analysis period.

1. Existing Conditions
2. Future No-Build Conditions (existing + background growth + approved developments + committed or funded improvements)
3. Future Build Conditions (future no-build + site trips)
4. Future Build with Improvements Conditions (future build traffic with improvements to mitigate the proposed development's impacts) and, if applicable:

☐ 5. TIP Design Year Analysis _____

☐ 6. Alternative Access Scenario (without proposed control-of-access or median break / modification)

The following additional analysis/outputs should be provided as warranted:

☐ Signal Warrant Analysis for accesses/intersections _____
☐ Multi-Modal Level of Service Analysis
☐ School Loading Zone Traffic Simulation
☐ Phasing Analysis (scope separately as needed)
☐ Safety/Crash Analysis
☐ Control-of-Access Modification Justification
☐ Median Break / Modification Justification
☐ Other _____

☒ Submittals

In addition to the hardcopies required below, the TIA Consultant shall provide the District Engineer and, if required, the local government an electronic copy of the study documents, including the latest site plan, figures and appendices, in searchable PDF files and the original traffic analysis files (e.g., Synchro, HCS). To expedite review, the NCDOT electronic submittals shall also be delivered concurrently to:

☐ Div. Traffic Engr ☐ Regional Traffic Engr ☐ Congestion Management ☐ Other _____

Submittals	NCDOT		Local Government	
	Electronic	Hardcopy	Electronic	Hardcopy
Trip Generation & Distribution	Required		Please Select	
Draft TIA Report	Required			
Final Sealed TIA Report	Required			

☒ Additional Comments (municipal TIA requirements, approved variations from NCDOT guidelines)

Rolesville Crossing (fka Wheeler Tract) located at 1801 Rolesville Road will also be included as an approved development.

Agreement by All Parties

The undersigned agree to the contents and methodology described above for completing the required traffic impact analysis for the proposed development identified herein. Any changes to the above methodology contemplated by the Applicant or the TIA Consultant must be submitted to the District Engineer in writing. If approved by NCDOT, then such changes may be accepted for the TIA report. Subsequent revisions to the development plan (e.g. land use, density, site access, or schedule) may require additional scoping and analysis, and may modify the TIA requirements.

This agreement shall become effective on the date approved by NCDOT, and shall expire ____ months after the effective date or upon significant changes to the roadway network and/or development assumptions, whichever occurs first. Once expired, renewal or re-scoping will be required for subsequent TIA submittals.

APPLICANT

_____	Chris Raughley	_____
Signature	Print Name	Date

TIA CONSULTANT

_____	Matt Peach	_____
Signature	Print Name	Date

LOCAL GOVERNMENT REPRESENTATIVE (If Applicable)

_____	Meredith Gruber	_____
Signature	Print Name	Date

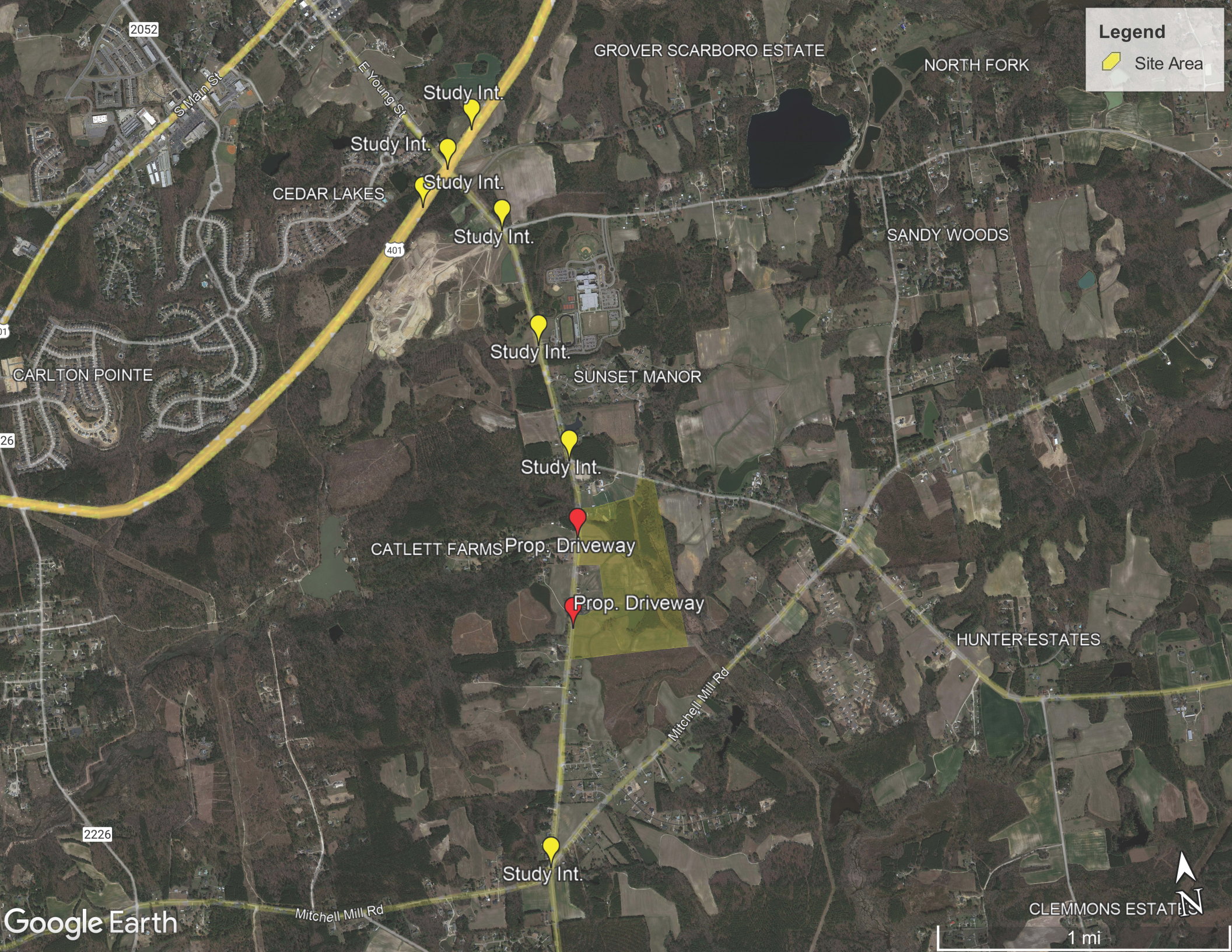
Email concurrence may be used in lieu of the signature.

NCDOT DISTRICT REPRESENTATIVE

Reviewed and approved by the NCDOT Division 5 District 2 on _____.

_____	_____
Signature	Print Name

Email concurrence may be used in lieu of the signature.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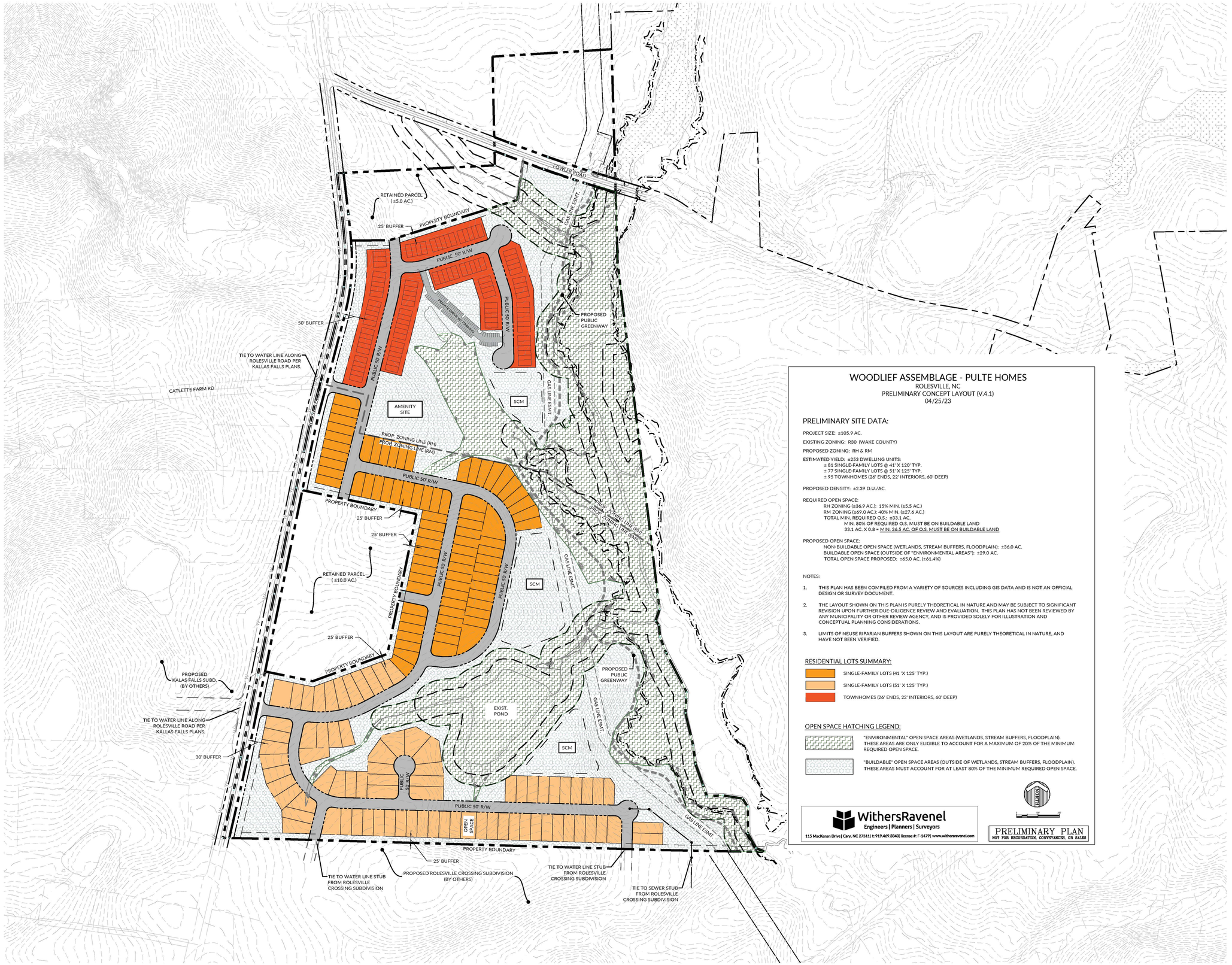


WOODLIEF ASSEMBLAGE - PULTE HOMES

ROLESVILLE, NC
PRELIMINARY CONCEPT LAYOUT (V.4.1)
04/25/23

PRELIMINARY SITE DATA:

PROJECT SIZE: ±105.9 AC.

EXISTING ZONING: R30 (WAKE COUNTY)

PROPOSED ZONING: RH & RM

ESTIMATED YIELD: ±253 DWELLING UNITS:
- ± 81 SINGLE-FAMILY LOTS @ 41' X 120' TYP.
- ± 77 SINGLE-FAMILY LOTS @ 51' X 125' TYP.
- ± 95 TOWNHOMES (26' ENDS, 22' INTERIORS, 60' DEEP)

PROPOSED DENSITY: ±2.39 D.U./AC.

REQUIRED OPEN SPACE:
- RH ZONING (±36.9 AC.): 15% MIN. (±5.5 AC.)
- RM ZONING (±69.0 AC.): 40% MIN. (±27.6 AC.)
- TOTAL MIN. REQUIRED O.S.: ±33.1 AC.
  - MIN. 80% OF REQUIRED O.S. MUST BE ON BUILDABLE LAND
  - 33.1 AC. X 0.8 = MIN. 26.5 AC. OF O.S. MUST BE ON BUILDABLE LAND

PROPOSED OPEN SPACE:
- NON-BUILDABLE OPEN SPACE (WETLANDS, STREAM BUFFERS, FLOODPLAIN): ±36.0 AC.
- BUILDABLE OPEN SPACE (OUTSIDE OF "ENVIRONMENTAL AREAS"): ±29.0 AC.
- TOTAL OPEN SPACE PROPOSED: ±65.0 AC. (±61.4%)

NOTES:

1. THIS PLAN HAS BEEN COMPILED FROM A VARIETY OF SOURCES INCLUDING GIS DATA AND IS NOT AN OFFICIAL DESIGN OR SURVEY DOCUMENT.
2. THE LAYOUT SHOWN ON THIS PLAN IS PURELY THEORETICAL IN NATURE AND MAY BE SUBJECT TO SIGNIFICANT REVISION UPON FURTHER DUE-DILIGENCE REVIEW AND EVALUATION. THIS PLAN HAS NOT BEEN REVIEWED BY ANY MUNICIPALITY OR OTHER REVIEW AGENCY, AND IS PROVIDED SOLELY FOR ILLUSTRATION AND CONCEPTUAL PLANNING CONSIDERATIONS.
3. LIMITS OF NEUSE RIPARIAN BUFFERS SHOWN ON THIS LAYOUT ARE PURELY THEORETICAL IN NATURE, AND HAVE NOT BEEN VERIFIED.

RESIDENTIAL LOTS SUMMARY:

- SINGLE-FAMILY LOTS (41 'X 125' TYP.)
- SINGLE-FAMILY LOTS (51' X 125' TYP.)
- TOWNHOMES (26' ENDS, 22' INTERIORS, 60' DEEP)

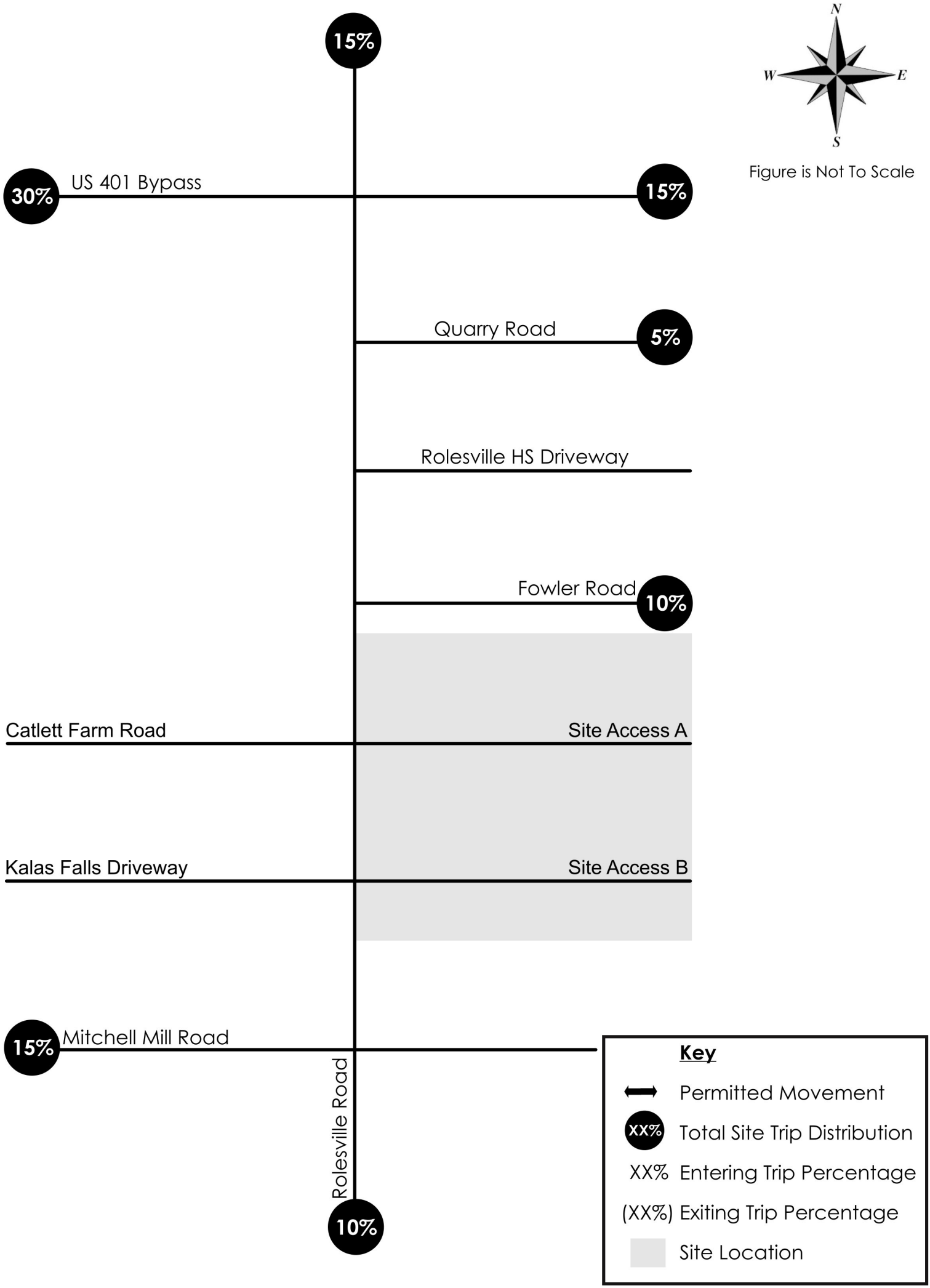
OPEN SPACE HATCHING LEGEND:

- "ENVIRONMENTAL" OPEN SPACE AREAS (WETLANDS, STREAM BUFFERS, FLOODPLAIN). THESE AREAS ARE ONLY ELIGIBLE TO ACCOUNT FOR A MAXIMUM OF 20% OF THE MINIMUM REQUIRED OPEN SPACE.
- "BUILDABLE" OPEN SPACE AREAS (OUTSIDE OF WETLANDS, STREAM BUFFERS, FLOODPLAIN). THESE AREAS MUST ACCOUNT FOR AT LEAST 80% OF THE MINIMUM REQUIRED OPEN SPACE.

WithersRavenel
Engineers | Planners | Surveyors
115 MacKenan Drive| Cary, NC 27511| t: 919.469.3340| license #: F-1479| www.withersravenel.com

NORTH

PRELIMINARY PLAN
NOT FOR RECORDATION, CONVEYANCES, OR SALES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Fowler Road
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Catlett Farm Road
Site Access A
Kalas Falls Driveway
Site Access B
15%
Mitchell Mill Road
Rolesville Road
10%
Key
Permitted Movement
XX%
Total Site Trip Distribution
XX% Entering Trip Percentage
(XX%) Exiting Trip Percentage
Site Location