



Town of Clayton
Regular Town Council Meeting Agenda
Monday, September 18, 2023 at 6:00 PM
Council Chambers, Town Hall
111 E. Second Street

THE PUBLIC MAY VIEW THE LIVE COUNCIL MEETING ON THE TOWN'S YOUTUBE CHANNEL:
<https://www.youtube.com/TownofClaytonNC>

1. CALL TO ORDER

- a. Call to Order
- b. Pledge of Allegiance
- c. Invocation

2. ADJUSTMENT OF THE AGENDA

- a. **POTENTIAL ACTION:** Approve or Adjust the Agenda

3. CONSENT AGENDA

(Items on the consent agenda are considered routine in nature or have been thoroughly discussed at previous meetings. Any member of the Council may request to have an item removed from the consent agenda for further discussion.)

- a. Minutes
 - September 5, 2023 - Work Session
 - September 5, 2023 - Regular Session
 - September 5, 2023 - Closed Session

Presenter: Heidi Holland, Town Clerk
[September 5, 2023 Work Session](#)
[September 5, 2023 Regular Session](#)
- b. Budget Amendment and Amended Budget Ordinance - Section 8
Presenter: Robert McKie - Finance Director
[Budget Amendment and Amended Budget Ordinance - Section 8](#)
- c. Resolution 2023-73 Supporting a Realignment of a Section of US 70 and Elimination of US 70 Business in Johnston County
Presenter: Jonathan K. Jacobs, PE, CFM - Interim Planning Director/ Assistant Engineering Director
[Supporting a Realignment of a Section of US 70 and Elimination of US 70 Business in Johnston County](#)

POTENTIAL ACTION: Approve Consent Agenda as Presented

4. ADMINISTRATIVE ITEMS

- a. Co-Sponsorships and Exhibits Policy
Presenter: Joy Garretson, Library Director
[Co-Sponsorships and Exhibits Policy - Pdf](#)

POTENTIAL ACTION: Adoption of Resolution #2023-68

- b. Programming Policy
Presenter: Joy Garretson, Library Director
[Programming Policy](#)

POTENTIAL ACTION: Adoption of Resolution #2023-69

5. INTRODUCTIONS AND SPECIAL PRESENTATIONS

- a. National IT Professionals Day Proclamation
Presenter: Mayor McLeod Will Present to IT Staff
[National IT Professionals Day Proclamation](#)
- b. Finance and Accounting Appreciation Week Proclamation
Presenter: Mayor McLeod Will Present to Finance Staff
[Finance and Accounting Appreciation Week Proclamation](#)
- c. Human Resource Professionals Day Proclamation
Presenter: Mayor McLeod Will Present to HR Staff
[Human Resource Professional Day Proclamation](#)
- d. Fire Chief Recruitment Update
Presenter: Rich Cappola, Town Manager

6. PUBLIC HEARINGS

- a. 2023-111-RZ Project Life Dust Rezoning
Presenter: Jonathan K. Jacobs, PE, CFM - Interim Planning Director/Assistant Engineering Director
[2023-111-RZ Project Life Dust Rezoning](#)

POTENTIAL ACTION: Adoption of Ordinance 2023-09-03 Consistency and Reasonableness Statement

- b. 2022-125-CZM: Summer Glen Conditional Zoning with Master Plan
Presenter: Bruce Venable, Planner I
[2022-125-CZM: Summer Glen Conditional Zoning with Master Plan](#)

POTENTIAL ACTION: Adoption of Ordinance 2023-09-02 Consistency and Reasonableness Statement

POTENTIAL ACTION: Adoption of Wastewater Resolution #2023-70

7. OLD BUSINESS

8. NEW BUSINESS

- a. Clayton to Raleigh Pump Station Improvements Project Bid Award
Presenter: Shannon Poole - Engineering Technician
[Clayton to Raleigh Pump Station Improvements Project Bid Award](#)

POTENTIAL ACTION: Approval of Bid Award

POTENTIAL ACTION: Approval of Resolution #2023-74

9. STAFF REPORTS

- a. Town Manager

- b. Town Attorney
- c. Town Clerk
- d. Other Staff

Lead and Copper Rules Revision
Presenter: Brandon Carroll

10. OTHER BUSINESS

- a. Informal Discussion & Public Comment
 - Individuals have three (3) minutes to address the Town Council.
 - Groups will designate a spokesperson. Spokesperson will have five (5) minutes to address the Town Council.
- b. Council Comments

11. CLOSED SESSION

- a. To Discuss Legal Matter in Accordance with NC GS 143-318.11(a)(3); To Discuss Economic Development in accordance with NC GS 143-318.11(a)(4); and To Discuss Personnel Matter in accordance with NC GS 143-318.11(a)(6)

POTENTIAL ACTION: Motion To Go Into Closed Session

POTENTIAL ACTION: Motion To Return To Open Session

12. ADJOURNMENT

- a. Adjourn

POTENTIAL ACTION: Motion To Adjourn



Town of Clayton
Town Council Work Session Minutes
Tuesday, September 5, 2023 at 3:00 PM
Rotary Room, Town Hall
111 E. Second Street

Council Present:

Mayor Jody McLeod
Mayor Pro Tem Jason Thompson
Council Member Andria Archer
Council Member Avery Everett
Council Member Michael Sims
Council Member Porter Casey

Staff Present:

Rich Cappola, Town Manager
Jim Cauley, Town Attorney
Heidi Holland, Town Clerk
Dolores Gill, Deputy Town Manager
Lee Barbee, Deputy Town Manager
Robert McKie, Finance Director
Greg Tart, Police Chief
Sam Johnson-Phillips, Deputy Town Clerk
Bruce Venable, Planner
Matt Lorion, Acting Parks & Rec. Director
Nathanael Shelton, Communications Officer

Council Absent:

None

1 CALL TO ORDER

- a) Mayor McLeod called the meeting to order at 3:02 p.m.

2 ADJUSTMENT OF THE AGENDA

- a) **Approve or Adjust the Agenda**

RESULT:	CARRIED 5-0
MOVER:	Porter Casey
SECONDER:	Jason Thompson
YES:	Jason Thompson, Andria Archer, Avery Everett, Michael Sims, and Porter Casey
NO:	None

3 INTRODUCTIONS AND SPECIAL PRESENTATIONS

- a) 3:00 - 3:15 p.m. (15 Minutes)
Employee Introductions
- Kaci Shaefer, Administrative Assistant
 - Steven Motts, Planner II

Presenter: Greg Tart, Police Chief
Jonathan Jacobs, Interim Planning Director

Chief Tart introduced Kaci Schaefer, she will be working at the front desk at the

Police Department. Lara Keating-Lopez would move upstairs in investigations. Ms. Schaefer is from Robeson County and previously worked for the Robeson County Sheriff Office. She thanked Council for the opportunity.

Jonathan Jacobs introduced Steven Mott, he joins us from Tennessee. He stated he is excited to be here.

4 ITEMS FOR DISCUSSION

a) 3:15 - 3:30 p.m. (15 Minutes)

Small Area Plan Gateway 42 Update: Presentation and Discussion with Consultants.

Presenter: Jonathan K. Jacobs, PE, CFM - Interim Planning Director
Bruce Venable - Planner 1
Blake Reeves - Consultant with LS3P

Blake Reeves from LS3P was present and provided a quick overview. As US 70 is upgraded to interstate 42, a new critical junction is forming. He stated this plan would bring new opportunities to this area. A robust community engagement campaign was launched that they were happy with. Used were interactive tools for valuable feedback, they were happy with the level of participation. Gateway 42 includes regions of southwest Clayton where the upgraded Interstate 42 and its interchanges engage with Clayton as well as the Health District, the Copper District and several legacy neighborhoods.

He stated they looked at existing land uses as well as existing conditions. Shared were four critical project imperatives: Improve Mobility Corridors, Cultivate Complete Communities, Provide Green Space Amenities, and Foster Small Town Charm. Explained was how Gateway 42 adopts an ETJ expansion. Shared were current land uses: Agricultural/Rural Residential, Medium Density Residential, Low Density Residential, and High Density Residential and multi-use designations: Neighborhood Center, Employment Center, Community Center, and Recreational Open Space.

The new plan provides a regulated format to introduce integrated uses on a small scale. Commercial amenities are permitted within 100'-400' of existing corridors to encourage foster adjacent activity nodes.

Shared were plan recommendations across four categories: Branding & Wayfinding, Streetscape Improvements, Open Space Amenities, and Multi-Use Trail Systems.

Shared were Priority Actions:

1. Implement the suggested expansion of the existing ETJ.
2. Commission a branding and wayfinding campaign to define appropriate entry gateways.

3. Explore potential incentive packages that might encourage intra-block multi-use trails.
4. Promote the Copper District's concept of a connected greenspace network.
5. Study the properties along Swift Creek to understand the feasibility of a park.
6. Negotiate and purchase property along Swift Creek and south of Austin Pond.
7. Begin an assessment of open space needs for the Gateway 42 communities.
8. Explore incentive packages that might spur the development of Complete Communities.
9. Workshop Complete Communities with developers to understand feasibility and limitations.
10. Integrate Gateway 42 corridors into the Johnston County Comprehensive Transportation Plan.
11. Align Complete Communities land use designation with zoning oversight.

Mr. Cappola stated this draft can be found in the work session agenda. Jonathan Jacobs stated a lot of the area studied is outside of the current ETJ with anticipation of growth.

- b) 3:30 - 4:15 p.m. (45 Minutes)
Parks and Recreation Master Planning Input
- Input from Council
- Presenter:* Sara Burroughs, Sage Design

Sara Burroughs with Sage Design was here to discuss this plan. She stated they are in the beginning part of the process.

Shared was a timeline. She stated she hoped to have this complete by September 2024.

Discussed were economic center to parks, recreation market analysis and green infrastructure. The goal presented is how to bring people to Clayton from a recreation standpoint.

The inventory process has begun. Shared was the community engagement process; they are preparing to do community engagement. They will be at the Harvest Festival and will have an open house at The Community Center. Mayor McLeod asked is she is looking at citizens who pay taxes or citizens that don't pay taxes. Ms. Burroughs stated she would be asking those questions in the survey.

There was an admin meeting to help with guiding principles to see if they aligned with Town goals. In those, there were workshops which asked

touchpoints from what departments felt were strengths, weaknesses, opportunities and the big picture. She stated she found out how the department feels the Town goals are being met. Evaluated was each element and summarized were the findings.

Shared were the results of the strengths, weaknesses and opportunity.

She is moving in the Community input process now. On September 21, there would be open houses all day with opportunities to give input.

There was discussion on special needs. Ms. Burroughs stated those did come through but imagine this would come through the middle of November during public output. Matt Lorion stated there would be more opportunities out there on this subject.

Council Member Archer stated she heard about a skatepark and unimproved open space. Ms. Burroughs stated she would try to leave this open but would talk about this in public engagement. The skatepark is listed on the survey itself and will definitely get input on that. Open ended opportunity and green infrastructure analysis would also be discussed.

Mr. Cappola stated the survey would get into those details. Council needs to think about a skatepark, but need to have more conversation. Another topic up for discussion is a community pool. Those are what the League of Municipalities would like to talk about regarding risk management. Mayor Pro Tem Thompson stated the Council in the past has stated no to a community pool, but this Council needs to have discussion on this and may need to revisit. Council Member Casey gave an example of the success of the splash pad.

Mayor McLeod talked about insurance and in the stent of six years, about 4 situations of loss of life lawsuits have occurred. His biggest concern is the liability aspect of this. There was further discussion on this.

Mr. Lorion stated everyone's idea of a pool is different. Council Member Sims stated to look at who is doing this right and who is doing this wrong. Mr. Lorion stated the hardest thing to see in aquatics is staffing.

Ms. Burroughs stated this is good conversation to have while still accessing needs. She stated this is an effort that happens every 10 years. Last time this was done with Clayton, the Town was considered a small town. Now we have not been considered that. If we start to look at metrics, it's not because we haven't been thinking forward, it's because we are growing.

Council Member Casey asked are you looking at repurposing? Ms. Burroughs stated repurposing, sharing and overlap would be looked at.

- c) 4:15 - 4:30 p.m. (15 Minutes)
Strategic Plan Scope of Work
Presenter: Dolores Gill, Deputy Town Manager

Ms. Gill stated she is excited because the current strategic plan for the Town is coming to an end. The Town would be launching into an RFP this year to find a consultant to help us with this to 18-month process for creating a new plan. There has been lots of involvement in master planning, so this is a good time. The consultant needs to be able to take the current plan, mirror it and use new data to align. The goal is to create a plan that accurately reflects where the Town is currently.

She stated staff wants to evaluate the plan we have; we did this at the last retreat. Found were things that work and doesn't work in the current plan. The next step to ask Council where we are going. Staff has looked at other towns RFP's. She has worked with department heads asking what they would like with the next strategic plan. Ms. Gill introduced D'Arcy Aman who has been helping with this strategic plan.

Shared was the staff survey sent out and the results. This was sent out to find out how much work to ask the consultant to do. Currently the majority of staff that have taken the survey feel this does need refinement.

Regarding the current vision statement, half of staff think it needs work. The results were staff feel it's applicable but needs work. Regarding the Mission statement, staff feels it needs work. There was discussion on what the least effective issue the current plan didn't adhere to; there was discussion on this. Staff were asked what should be the next timeframe for plan? Staff responded to have things in a five-year setting.

It was stated this would have huge stakeholder input. Goal is at the retreat, that would be discussed for a full day in depth.

Ms. Gill asked Council what we are missing to put in the scope to be able to pick best consultant group for this plan. Council Member Everett feels we are on the right path. Mayor McLeod wants to make sure we keep balance in this. There is more to this than infrastructure and he doesn't want to get focused on infrastructure. He stated we want to make sure we are hiring customization.

Ms. Gill stated she is hearing that we need to think about Clayton in a way we haven't even thought of. Council Member Casey stated this is all about growth, but how can we work with what we have coming. Ms. Gill stated the biggest key to her is alignment. She would compile a list of names for a stakeholder committee, would come back to Council with this list.

Mr. Cappola asked if anyone from Council would like to be part of submittals

and interview process. Mayor McLeod stated he would be part of this process.

d) 4:30 - 4:45 p.m. (15 Minutes)

ECCP Fields Collaborations

Presenter: Matt Lorion, Acting Parks and Rec. Director & Rich Cappola, Town Manager

Matt Lorion discussed this item. He stated the Town would provide steel signage over the entrance into the fields with the name: Carolina Comfort Air fields. The approximate size of this sign will be 12 feet wide and span the double gates that are located at the SE corner of the field. The bottom of the sign will be approx. 9 feet of the ground and be 3 to 4 feet tall.

The cost would be \$75,000 for a 5-year sponsorship. If Carolina Comfort Air decides not to renew after 5 years, we just take it down.

Council Member Casey asked if they would be doing the shelter, Mr. Lorion stated not at this time. Mayor Pro Tem Thompson asked where the \$75,000 goes. Mr. Lorion stated there would be a separate GL code to be able to track the funds. The plan is to be able to redo the fields in 10 years and have the funds to do this.

Mayor McLeod asked how we arrived at \$75,000. Mr. Cappola stated that's what Caterpillar paid, and other Towns were benchmarked. Mayor McLeod asked to see renderings before moving forward.

Mr. Lorion stated the framework would not change; the inlay would be replaced every five years.

Ms. Gill stated she would be interested in a joint press release and photo op. She would like to set up a date and issue a big check. Mr. Lorion stated he should have a rendering within 24 hours.

Mr. Cappola stated he has spoken with Mark Morgan, with Neuse River Futbol Alliance, about using the fields for soccer. Mr. Morgan is on the Recreation Advisory Board. He met with Mr. Morgan, and he is trying to maintain market share and work with the Community. Mr. Lorion and staff have been speaking to them about their demands. They would like to have a flat rate so they could book their schedules and know how many fields to commit to.

Their proposal was \$2,000 a month. They would have two tournaments and that would add \$500 per event. Mr. Cappola stated the cost would be \$15,000 for naming rights, \$25,000 to use the fields, \$500 for any additional event and the cost would go up 10% each year for five years.

It was consensus of Council to use a 3-year term rather than a 5 -year term.

It was stated to have a press release and ribbon cutting for both events.

5 ADJOURNMENT

- a) With nothing further, the meeting was adjourned at 4:59 p.m.

Motion To Adjourn

RESULT:	CARRIED 5-0
MOVER:	Jason Thompson
SECONDER:	Porter Casey
YES:	Jason Thompson, Andria Archer, Avery Everett, Michael Sims, and Porter Casey
NO:	None

Duly adopted this the 18th day of September, 2023 while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi L. Holland, CMC, NCCMC
Town Clerk



Town of Clayton
Regular Town Council Meeting Minutes
Tuesday, September 5, 2023 at 6:00 PM
Council Chambers, Town Hall
111 E. Second Street

Council Present:

Mayor Jody McLeod
Mayor Pro Tem Jason Thompson
Council Member Porter Casey
Council Member Avery Everett
Council Member Andria Archer
Council Member Michael Sims

Staff Present:

Rich Cappola, Town Manager
Jim Cauley, Town Attorney
Heidi Holland, Town Clerk
Lee Barbee, Deputy Town Manager
Robert McKie, Finance Director
Jonathan Jacobs, Assistant Engineering Director
Joshua Baird, Engineering Director
Nathanael Shelton, Communications Officer
Sam Johnson-Phillips, Deputy Town Clerk

Council Absent:

None

1. CALL TO ORDER

a. Call to Order

Mayor McLeod called the meeting to order at 6:00 p.m.

b. Pledge of Allegiance

Mayor McLeod led the Pledge of Allegiance

c. Invocation

Mayor McLeod provided the Invocation

2. ADJUSTMENT OF THE AGENDA

a. **Approve or Adjust the Agenda**

RESULT:	CARRIED
MOVER:	Michael Sims
SECONDER:	Avery Everett
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

3. CONSENT AGENDA

- a. Minutes
 - August 21, 2023 - Regular Session
 - August 21, 2023 - Closed Session

Presenter: Heidi Holland, Town Clerk
- b. Water Shortage Response Plan

Presenter: Brandon Carroll, Utility Compliance Supervisor, Water Resources
- c. Resolution 2023-56: To Accept Streets into the Town Of Clayton Street System for Maintenance – Cameron Crossing, Phases 2 & 3

Presenter: Jonathan K. Jacobs, PE, CFM - Assistant Engineering Director

Approve Consent Agenda as Presented

RESULT:	CARRIED
MOVER:	Jason Thompson
SECONDER:	Michael Sims
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

4. ADMINISTRATIVE ITEMS

5. INTRODUCTIONS AND SPECIAL PRESENTATIONS

6. PUBLIC HEARINGS

- a. 2023-116-OA Yard Encroachments and Screening UDC Text Amendment

Presenter: Bruce Venable, Planner I

Mr. Venable updated Council on Proposing text amendments changes to two different sets of Unified Development Codes 155.201 (G)(4) – Yard Encroachments and 155.402.(G) – Screenings.

Aims of proposed text amendments are to allow fire escapes to encroach into a required yard/setback up to 8 feet regardless of the Zoning District. Current language exempts B-1 Zoning District from fire escape provision – not allowing Fire Escapes in B-1 District to encroach into a required yard. Proposed language: fire escapes may project up to 8 feet into any required yard but must maintain at least seven-and-one-half feet above a sidewalk, greenway, or street. Mr. Venable continued to mention removing separation requirement for dumpsters and loading zones from residentially zoned properties and add certain requirements for dumpster screening. Amendment initiated at request of the Economic Development Office. 155.402(G) Screening; Remove separation requirement for service areas (trash collection, recycling, etc.) and loading areas from residentially zoned properties. Add additional standards for service area screening. Current language requires service areas and loading areas to be located at least 50 feet away from residentially zoned properties. Proposed language removes the separation requirement and adds some standards for service area screening. Proposed language largely matches proposed draft UDO standards. There was further discussion regarding the four approval criteria and considerations and

recommendations. Mr. Venable requested Town Council to render a decision for Text Amendments for Sections 155.201(G)(4) and 155.402(G)

Mayor McLeod noted this was a public hearing and asked if anyone wished to speak. With no one wishing to speak, this was turned over to Council for deliberation.

Adoption of Ordinance #2023-09-01 and Consistency and Reasonableness Statement

RESULT:	CARRIED
MOVER:	Jason Thompson
SECONDER:	Avery Everett
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

7. OLD BUSINESS

8. NEW BUSINESS

9. STAFF REPORTS

- a. Town Manager
Presenter: Rich Cappola, Town Manager

Mr. Cappola Town Manager stated staff is still negotiating with one bidder that was received for the Community Park project; would probably have a decision by the end of the week if not able to get closer in cost the bid will be rejected. He stated they would look at the scope overall to see where pricing is and potentially re-bid.

- b. Town Attorney
c. Town Clerk
d. Other Staff

10. OTHER BUSINESS

- a. Informal Discussion & Public Comment
- Individuals have three (3) minutes to address the Town Council.
 - Groups will designate a spokesperson. Spokesperson will have five (5) minutes to address the Town Council.

Mr. Ben Chapman appeared before Council and requested Council consider an inclusive non-discrimination ordinance, Crown Act Protections, and explicit protections for the LGBTQ+ people.

Ms. Judy, a Clayton citizen, expressed concerns regarding an ordinance that is all inclusive, comprehensive and non-discrimination. That includes people specifically including regardless of sexual orientation or gender identity.

Mr. Kevin Ravens, a Clayton citizen, expressed concerns regarding a residential light ordinance in Clayton and the necessity of one.

b. Council Comments

In response to Mr. Chapman, Council Member Everett stated, it is time to collaborate, go forward and look into the current ordinance. We need to make sure that we are protecting and keeping everyone safe.

Council Member Casey appreciated Mr. Raven coming out and speaking about light pollution. He stated as part of the UDO, he would like to ask the consultant to look at some characteristics of dark skies communities. Council Member Porter Casey expressed thanks for the other speakers.

Council Member Sims stated that good points were brought up and that they are in the middle of the UDO and would take it under advisement regarding Mr. Raven's comment.

Mayor McLeod asked Mr. Raven to provide his address to the Town Clerk so that we can send staff out.

11. CLOSED SESSION

- a. To Discuss Legal Matter in Accordance with NC GS 143-318.11(a)(3) & To Discuss Economic Development in accordance with NC GS 143-318.11(a)(4)

Council Member Archer made a motion to include in the closed session a personnel matter, NC GS 143-318.11 (6)

Motion To Go Into Closed Session

RESULT:	CARRIED
MOVER:	Jason Thompson
SECONDER:	Andria Archer
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

Motion To Return To Open Session

RESULT:	CARRIED
MOVER:	Jason Thompson
SECONDER:	Andria Archer
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

12. ADJOURNMENT

- a. Adjourn
Presenter: Mayor McLeod

With nothing further, the meeting was adjourned at 8:24 p.m.

Motion To Adjourn

RESULT:	CARRIED 5-0
MOVER:	Jason Thompson
SECONDER:	Andria Archer
YES:	Jason Thompson, Porter Casey, Avery Everett, Andria Archer, and Michael Sims
NO:	None

Duly adopted by the Town Council this 18th day of September, 2023 while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Sam Johnson-Phillips
Deputy Town Clerk

September 5, 2023
Minutes



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

CONSENT AGENDA

Item Title

Budget Amendment and Amended Budget Ordinance - Section 8

Presenter(s)

Robert McKie - Finance Director

Suggested Action

Adoption of Ordinance

Strategic Priorities Alignment



Think Clayton
(Administrative)



Think Arts &
Culture



Think
Downtown



Think
Economic
Development



Think Land
Use &
Housing



Think
Mobility



Think Parks,
Recreation
& Natural
Resources



Think Public
Services &
Infrastructure

Public Hearing: No

Applicable General Statute Number: G.S. 159-15

If Approved, Will Document Require Recordation? No

Does This Item Require a Communication Plan?

- | | |
|--|--|
| ☐ Public Hearing (Required by GS) | ☐ Public Hearing (Not Required by GS) |
| ☐ Newspaper Notice (Required by GS) | ☐ Newspaper Notice (Not Required by GS) |
| ☐ Public Forum/Input Session | ☐ Press Release |
| ☐ E-News Distribution | ☐ Website |

☐ Social Media
☐ Special Mailing

☐ Survey
☒ None Required

Summary

Amendment to realign the budget to add an additional School Resource Officer position at the Johnston Charter Academy that will be subsidized by National Heritage Academies, Inc. Section 8 of the Budget Ordinance is being amended to reflect the revised full-time position count.

Recommendation

Approve the requested position based upon the MOU in conjunction with the amendment to Section 8 of the Budget Ordinance.

Funding Source

Reimbursement from National Heritage Academies, Inc.

Cost

Yes

Corresponding Documentation

[General Fund Budget Amendment School Resource Officer
FY 2023-2024 Adopted Budget Ordinance Amendment Section 8 Amended Position
Count September 18, 2023](#)

Submitted By: Robert McKie, Finance Department

Reviewed By:

Robert McKie, Finance Director
Rich Cappola, Town Manager
Heidi Holland, Town Clerk

Approved - Sep 11 2023
Approved - Sep 12 2023
Approved - Sep 12 2023

Town of Clayton
Amendment to the FY 23-24 Budget

BE IT HEREBY ADOPTED BY THE TOWN COUNCIL FOR THE TOWN OF CLAYTON that the following amendments shall be made to the FY 23-24 Budget:

Fund: General Fund

<u>Line Item</u>	<u>Previous Appropriation</u>	<u>Adjustment</u>	<u>Revised Appropriation</u>
Revenue			
100-50-00-48 60	Miscellaneous Reimbursable Projects \$525,000	+45,000	\$570,000
Expenditures			
100-50-32-50 00	Salaries Full-Time \$1,055,995	+30,154	\$1,086,149
100-50-32-51 10	Benefits FICA \$88,758	+2,307	\$91,065
100-50-32-51 11	Benefits Health \$108,339	+4,807	\$113,146
100-50-32-51 21	Benefits Retirement - LEO \$153,404	+4,234	\$157,638
100-50-32-51 31	Benefits 401K - LEO \$55,341	+1,508	\$56,849
100-50-02-53 90	New Employee Upfit \$110,628	+1,990	\$112,618

Explanation:

Amendment to realign the budget to add an additional School Resource Officer position at the Johnston Charter Academy that will be subsidized by National Heritage Academies, Inc. This amendment is required for compliance with G.S. 159-15.

Duly adopted this ____ day of _____, 2023 while in regular session.

Jody L. McLeod
Mayor

Attest:

APPROVED AS TO FORM

Heidi L. Holland, CMC, NCCMC
Town Clerk

Jim Cauley
Town Attorney

Town of Clayton
Amendment to the FY 23-24 Budget

BE IT HEREBY ADOPTED BY THE TOWN COUNCIL FOR THE TOWN OF CLAYTON that the following amendment shall be made to Section 8 in the Fiscal Year 2023-2024 Adopted Budget Ordinance:

Section 8 shall previously read: Section 8. There are hereby six (6) new positions approved for Fiscal Year 2023-2024. Authorized position totals are as follows: 6 elected officials; ~~308~~ full-time; 17 permanent part-time; 2 full-time apprentices; 5 interns; 11 total auxiliary positions in Fire and Police, and a pool of seasonal/roster workers as needed to support operations. New position authorizations are initially established by the annual budget ordinance and changes authorized by the Town Manager to this schedule may occur during the fiscal year as reclassifications of authorizations to meet the changing needs of the organization. Succession planning may require onboarding a successor employee prior to the effective date of the current employee's retirement or separation from the Town to meet the needs of the organization. The Town Manager is authorized to utilize lapse salary for succession planning without Council approval. Other funding sources for succession planning require Council approval.

Section 8 shall now read: Section 8. There are hereby six (6) new positions approved for Fiscal Year 2023-2024. Authorized position totals are as follows: 6 elected officials; **309 full-time**; 17 permanent part-time; 2 full-time apprentices; 5 interns; 11 total auxiliary positions in Fire and Police, and a pool of seasonal/roster workers as needed to support operations. New position authorizations are initially established by the annual budget ordinance and changes authorized by the Town Manager to this schedule may occur during the fiscal year as reclassifications of authorizations to meet the changing needs of the organization. Succession planning may require onboarding a successor employee prior to the effective date of the current employee's retirement or separation from the Town to meet the needs of the organization. The Town Manager is authorized to utilize lapse salary for succession planning without Council approval. Other funding sources for succession planning require Council approval.

Duly adopted this ____ day of _____, 2023 while in regular session.

Jody L. McLeod
Mayor

Attest:

APPROVED AS TO FORM

Heidi L. Holland, CMC, NCCMC
Town Clerk

Jim Cauley
Town Attorney



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

CONSENT AGENDA

Item Title

Resolution 2023-73 Supporting a Realignment of a Section of US 70 and Elimination of US 70 Business in Johnston County

Presenter(s)

Jonathan K. Jacobs, PE, CFM - Interim Planning Director/ Assistant Engineering Director

Suggested Action

Adoption of Resolution

Strategic Priorities Alignment



Think Clayton
(Administrative)



Think Arts &
Culture



Think
Downtown



Think
Economic
Development



Think Land
Use &
Housing



Think
Mobility



Think Parks,
Recreation
& Natural
Resources



Think Public
Services &
Infrastructure

Public Hearing: No

If Approved, Will Document Require Recordation? No

Does This Item Require a Communication Plan?

- ☐ Public Hearing (Required by GS)
- ☐ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☐ Website
- ☐ Survey

☐ Special Mailing

☐ None Required

Summary

NCDOT has received federal approval to designate the existing US 70 corridor between I-40 and US 70 Business as Interstate 42. The renaming on Interstate 42 will have coinciding and double shielding routes. NCDOT is proposing to eliminate the US 70 Business designation through the Clayton planning Jurisdiction by realigning US 70 from the Interstate 42 corridor to the US 70 Business corridor.

Funding Source

N/A

Corresponding Documentation

[I-42 Resolution](#)

Submitted By: Jonathan Jacobs, Engineering

Reviewed By:

Sam Johnson-Phillips, Deputy Town Clerk Approved - Sep 14 2023

Heidi Holland, Town Clerk Approved - Sep 14 2023

**RESOLUTION SUPPORTING A REALIGNMENT OF A SECTION OF US 70 AND ELIMINATION OF US 70
BUSINESS WITHIN JOHNSTON COUNTY**

WHEREAS, the North Carolina Department of Transportation (NCDOT) has received federal approval to designate the section of US 70 between I-40 in Wake County and the US 70 Business interchange in Johnston County (also known as the “Clayton Bypass”), approximately 11.70 miles, as Interstate 42; and,

WHEREAS, the proposed designation of Interstate 42 will coincide, in its entirety, with the existing US 70 designation requiring double route shielding, signage, and messaging; and,

WHEREAS, NCDOT is proposing to remove the existing US 70 designation along the section designated as Interstate 42; and,

WHEREAS, the realignment will move the existing US 70 designation to run along the existing US 70 Business corridor between I-40 in Garner through the interchange with Interstate 42 in Johnston County; and,

WHEREAS, the designation of US 70 Business would be removed and shielded as US 70; and,

WHEREAS, the realignment of route designations will assist with emergency response with only having one route designated as US 70.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE TOWN COUNCIL FOR THE TOWN OF CLAYTON, that the existing designation of US 70 between I-40 in Wake County and the interchange with US 70 Business (“Clayton Bypass”) be moved to the existing US 70 Business corridor and the US 70 Business designation be eliminated.

Duly adopted this 18th day of September 2023, while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi L. Holland, CMC, NCCMC
Town Clerk



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

ADMINISTRATIVE ITEMS

Item Title

Co-Sponsorships and Exhibits Policy

Presenter(s)

Joy Garretson, Library Director

Suggested Action

Adoption of Resolution - Adoption of Resolution 2023-68

Strategic Priorities Alignment



Think Clayton
(Administrative)



Think Arts &
Culture



Think
Downtown



Think
Economic
Development



Think Land
Use &
Housing



Think
Mobility



Think Parks,
Recreation
& Natural
Resources



Think Public
Services &
Infrastructure

Public Hearing: No

If Approved, Will Document Require Recordation? No

Does This Item Require a Communication Plan?

- ☐ Public Hearing (Required by GS)
- ☐ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media
- ☐ Special Mailing

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☐ Website
- ☐ Survey
- ☒ None Required

Summary

The Library is asking for approval of a co-sponsorships and exhibits policy in tandem with its new programming policy. This policy governs the library's utilization of co-sponsorships for library programming and for exhibits within the library,

Background/History

The library works with outside entities to provide library programs and exhibits within the library building. This policy will solidify terms for entering into co-sponsorships and allowing outside entities to make exhibits in the library.

Recommendation

Adoption of policy.

Funding Source

N/A

Cost

No

Corresponding Documentation

[Co-Sponsorships and Exhibits Policy FINAL](#)

[Co-Sponsorships and Exhibits Policy Resolution](#)

Submitted By: Joy Garretson, Library

Reviewed By:

Heidi Holland, Town Clerk

Approved - Sep 11 2023

Town of Clayton Policy & Procedure Statement

	
Policy Number	LIBRARY – 2023-02
Department	Library
Subject	Co-Sponsored Programs and Exhibits Policy
Approved By	Town Council – Resolution # 2023-68
Effective Date	September 18, 2023
Revision Date(s)	

Purpose:

The Hocutt-Ellington Memorial Library (“Library”) is a welcoming space for building community and connecting people to ideas and resources. The Library welcomes the opportunity to co-sponsor programs and exhibits with other organizations and individuals.

Policy:

This policy shall remain in effect until such time as amended by the Town Council

Co-sponsored Programs and Exhibits Policy

The Hocutt-Ellington Memorial Library ("Library") is a welcoming space for building community and connecting people to ideas and resources. The Library welcomes the opportunity to co-sponsor programs and exhibits with other organizations and individuals.

Co-sponsored programs and exhibits guidelines

The Library considers the following criteria in approving co-sponsorship of a program or exhibit:

- Relatedness of the program or exhibit to the mission of the Library
- Potential to promote the use of library materials and services
- Anticipated quality of program or exhibit; e.g., skilled presenters, interesting topics, timeliness of material, appropriateness of subject and approach; graphic and/or artistic quality
- Contribution to the variety and balance of pre-existing library programs and exhibits
- Likelihood of a successful collaboration
- Other demands for space and staff time

The Library provides staff assistance, meeting room and display space, and marketing support for programs and exhibits that meet the criteria for co-sponsorship, as agreed upon in advance with the co-sponsoring group. Co-sponsorship agreements must be pre-approved by Library staff.

Fees and Sales

Exhibits

No selling of goods or services is permitted through library exhibits, except in the case of Fundraising to benefit the Library or sponsored by the Friends of the Library.

Programs

All programs must be open to the public. Fees are permitted for co-sponsored programs when the fee is solely for materials provided to the participants. If there is a fee, the individual or group conducting the program may be required to enter into a contractual agreement with the Library.

Sales of goods during programs will be allowed only for fundraisers to benefit the Library or during Library-sponsored programs that featuring the sale of books, music, movies, or other items by authors, performers, or presenters (such as author readings and writing programs).

Liability:

Care will be taken to protect exhibit materials, but the Library cannot be responsible for loss, theft, or damage.

A. Applicability

This policy applies to all programs and exhibits co-sponsored by the Library with other organizations or individuals at all Library service locations.

B. Requests for Reconsideration of Decisions Regarding Programs and Exhibits

- Persons who disagree with a decision regarding co-sponsorship of a program or exhibit may appeal the decision by completing a Request for Reconsideration of Program or Exhibit form.
- The request will be considered by a committee composed of the Library Director, the Library Management Team, and other staff as appropriate.
- The committee will communicate its decision by letter within 30 days to the person making the request.
- If the person requesting the change is not satisfied by the decision, he or she may send a written appeal to the director, who will present the appeal to the Library Advisory Board for their ultimate decision. The Library Advisory Board will review the appeal at their next regular meeting and will issue a final written decision to the person in question. The decision of the board is final.

TOWN OF CLAYTON CO-SPONSORED PROGRAMS AND EXHIBITS POLICY

The Hocutt-Ellington Memorial Library ("Library") is a welcoming space for building community and connecting people to ideas and resources. The Library welcomes the opportunity to co-sponsor programs and exhibits with other organizations and individuals.

Co-sponsored programs and exhibits guidelines

The Library considers the following criteria in approving co-sponsorship of a program or exhibit:

- Relatedness of the program or exhibit to the mission of the Library
- Potential to promote the use of library materials and services
- Anticipated quality of program or exhibit; e.g., skilled presenters, interesting topics, timeliness of material, appropriateness of subject and approach; graphic and/or artistic quality
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- Other demands for space and staff time

The Library provides staff assistance, meeting room and display space, and marketing support for programs and exhibits that meet the criteria for co-sponsorship, as agreed upon in advance with the co-sponsoring group. Co-sponsorship agreements must be pre-approved by Library staff.

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Sales of goods during programs will be allowed only for fundraisers to benefit the Library or during Library-sponsored programs that featuring the sale of books, music, movies, or other items by authors, performers, or presenters (such as author readings and writing programs).

Liability:

Care will be taken to protect exhibit materials, but the Library cannot be responsible for loss, theft, or damage.

A. Applicability

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B. Requests for Reconsideration of Decisions Regarding Programs and Exhibits

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- The committee will communicate its decision by letter within 30 days to the person making the request.
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Duly adopted this the 18th day of September, 2023 while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi L. Holland, CMC, NCCMC
Town Clerk



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

ADMINISTRATIVE ITEMS

Item Title

Programming Policy

Presenter(s)

Joy Garretson, Library Director

Suggested Action

Adoption of Resolution - Adoption of Resolution 2023-69

Strategic Priorities Alignment



Think Clayton
(Administrative)



Think Arts &
Culture



Think
Downtown



Think
Economic
Development



Think Land
Use &
Housing



Think
Mobility



Think Parks,
Recreation
& Natural
Resources



Think Public
Services &
Infrastructure

Public Hearing: No

If Approved, Will Document Require Recordation? No

Does This Item Require a Communication Plan?

- ☐ Public Hearing (Required by GS)
- ☐ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media
- ☐ Special Mailing

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☐ Website
- ☐ Survey
- ☒ None Required

Summary

The library is proposing a new Programming Policy that outlines how we create, plan for, and provide library programs to the community.

Background/History

We have held programs for many years and are creating a policy to solidfy our process for creating and maintaining quality library programs for the public. This policy has been approved by the Library Board and has been reviewed by the Town of Clayton Executive Team.

Recommendation

Adoption of policy.

Funding Source

N/A

Cost

No

Corresponding Documentation

[Programming Policy FINAL](#)

[Programming Policy Resolution](#)

Submitted By: Joy Garretson, Library

Reviewed By:

Heidi Holland, Town Clerk

Approved - Sep 11 2023

Town of Clayton Policy & Procedure Statement

	
Policy Number	LIBRARY – 2023-03
Department	Library
Subject	Programming Policy
Approved By	Town Council – Resolution #2023-69
Effective Date	September 18, 2023
Revision Date(s)	

Purpose:

The Hocutt-Ellington Memorial Library (“Library”) is a welcoming space for building community and connecting people to ideas and resources. The Library aims to provide high-quality, engaging programs that reach people of all ages and backgrounds. Our informative programs portray a variety of viewpoints in order to meet the needs of Clayton’s diverse community. All programs are created to support the Library’s mission, vision, and goals. The Library provides free and open access to services, resources, and programs. Library-planned programs are available to all community members regardless of age, race, religion, gender, or political affiliation.

Policy:

This policy shall remain in effect until such time as amended by the Town Council

Programming Policy

The Hocutt-Ellington Memorial Library ("Library") is a welcoming space for building community and connecting people to ideas and resources. The Library aims to provide high-quality, engaging programs that reach people of all ages and backgrounds. Our informative programs portray a variety of viewpoints in order to meet the needs of Clayton's diverse community. All programs are created to support the Library's mission, vision, and goals. The Library provides free and open access to services, resources, and programs. Library-planned programs are available to all community members regardless of age, race, religion, gender, or political affiliation.

Purpose of programming

Library programs are developed to reflect our community, respond to emerging community interests, and sustain demonstrated interests and demand. Library programs extend and promote the role of the Library as a community resource; enhance the information found in library collections; offer a way for people to obtain information; encourage participation in civic life; and help to address the cultural and leisure-related interests of the Clayton community.

Programs also reflect equitable outreach and engagement to a diverse community while promoting a culture of inclusion and accessibility. The Library supports free and open access to information and ideas as stated in the Library Bill of Rights and the Freedom to View policies of the American Library Association. The Library upholds the right of individuals to access information, even though the content may be controversial or unacceptable to others.

Programming guidelines

All programs will contribute to the Library's aim to create a welcoming space, whether in the Library or at outreach events. Reasonable accommodations will be made to ensure that programs are accessible to all who wish to attend and participate.

Ultimate responsibility for programming at the Library rests with the Library Director, who designates staff to create and implement programming. Programs will be developed in adherence to the following guidelines:

- Relation to Library mission and service goals
- Community needs and interest
- Presentation quality and appropriateness of content for intended audience
- Presenter expertise, qualifications, and reputation
- Availability of program space
- Budget and staffing considerations
- Connection to other community programs, exhibits, or events

Library programs are not used for commercial, religious, recruitment, or partisan purposes or for the solicitation of business. However, educational programs such as candidate forums that include invitations to all recognized candidates, may be offered. Library programs may address religious themes to educate

or inform, but not to promote, observe, or proselytize a particular religious conviction. Holiday programs may be offered for the entertainment of Library patrons.

Outside presenters, volunteers, and co-sponsors

The Library may draw upon other community resources when developing programs and may actively partner with other community agencies, organizations, educational, and cultural institutions as well as with qualified individuals to develop and present co-sponsored programs. Professional performers and presenters that reflect specialized or unique expertise may be hired for library programs.

Library selection of a co-presenter does not constitute an endorsement of the content of the program or the views expressed by presenters. Decisions to provide programs will be made on the merits of the program in serving the interests of community members. Co-sponsors should adhere to the [Co-sponsored Programs and Exhibits Policy](#).

Evaluation

Periodically, evaluation forms will be distributed to program participants so that staff may know what has been successful and so that staff may receive ideas for new programs. Recurring programs, such as story times, book discussions, and regularly scheduled programs with repeat attendees, should receive a program evaluation at least once per quarter.

Patron and registration guidelines

Library programs will be posted via online calendar at least 60 days prior to the start of any program.

Some programs may be developed for a particular audience, i.e., attendees should be within the appropriate age group (such as children, teens, or adults) or may require an accompanying adult. All program participants must comply with the Library's Rules and Regulations for Conduct in the Library. The Library reserves the right to set age limits or recommendations for programs. In determining appropriate age recommendations, staff will consider the suitability of the program's materials, format, and program presenters and the relevance and suitability of topic, messages, and programming methods for the intended audience. Programs designed for specific audiences will be publicized as such.

The Library reserves the right to use video or photographs taken of program participants for internal use, publication, use in Library promotional outlets, and evaluation purposes. In each program, staff will provide participants an opportunity to opt out of photographs.

The Library will require registration for some events to allow for planning purposes or space limitations. In some cases, the nature and success of a program may limit attendance. The Library Director will have final approval.

Programs may be canceled due to inclement weather, low registration, technical difficulties, presenter absence, or at the discretion of the Library Director. Canceled programs are not necessarily rescheduled.

Challenging a program

The Library welcomes expressions of opinion from Library cardholders concerning programming. Patrons who have concerns about a program should first share their concerns with the Library staff member in charge of the event.

Any Library cardholder who wishes for the Library to reconsider the presentation of a Library program must fill out a "Request for Review of Library Program, Co-sponsorship, or Exhibit" form, either by contacting the Library Director for the form or by picking up a copy of the form at the front circulation desk. The request will be considered by a committee composed of the Library Director, the Library Management Team, and other staff as appropriate. The committee will communicate its decision in writing within 30 days to the person making the request.

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TOWN OF CLAYTON PROGRAMMING POLICY

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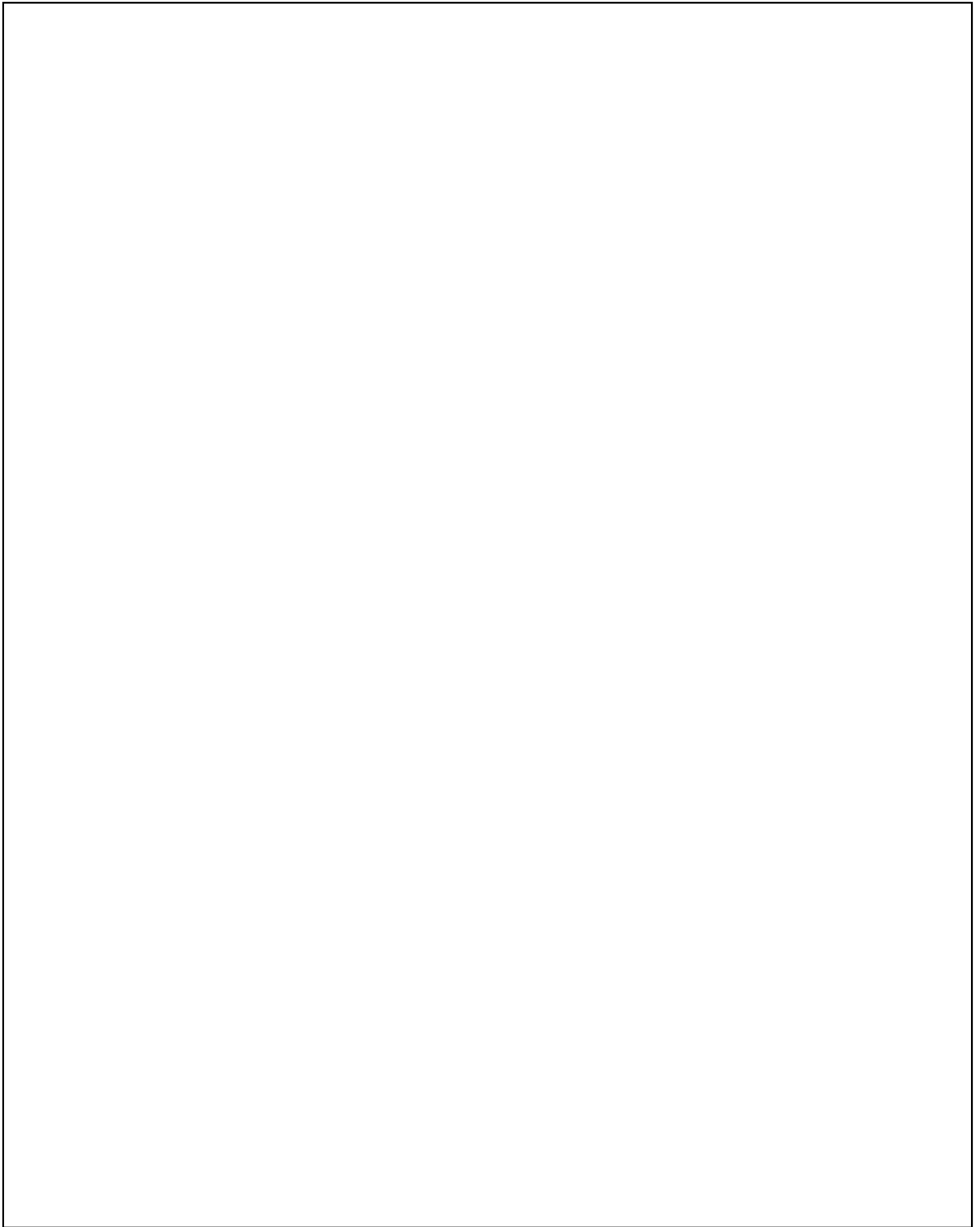
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Duly adopted this the 18th day of September, 2023 while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi L. Holland, CMC, NCCMC
Town Clerk



**TOWN OF CLAYTON
PROCLAMATION
NATIONAL IT PROFESSIONALS DAY**

WHEREAS, National IT Professionals Day was created in 2015, and celebrated the third Tuesday of September each year; and

WHEREAS, it is with acknowledgment and appreciation of the technical experts; network engineers, system administrators, database administrators, business systems analysts, GIS analysts and service desk technicians who ensure our networks, applications, tools, technology, and information are kept secure; ensuring technical processes, systems, and devices operate smoothly; and

WHEREAS, the Town of Clayton supports the skilled work of IT Professionals to strengthen community communication and resiliency, connect people with technology and each other, and provide and promote opportunities for healthy living, equity, and sustainability; and

WHEREAS, National IT Professionals Day recognizes the importance and benefits of IT Professionals as an integral role, enriching the lives of our community members, securing a desirable place to live, work, play, and visit; and

WHEREAS, the most important part of this day is taking the time to thank the IT professionals who make modern life easier for all of us; and

NOW, THEREFORE, on behalf of the Clayton Town Council, I, Mayor McLeod, hereby proclaim September 19, 2023 as National IT Professionals Day.

Proclaimed this the 18th day of September, 2023.

Jody L. McLeod
Mayor

**TOWN OF CLAYTON
PROCLAMATION
FINANCE AND ACCOUNTING APPRECIATION WEEK**

WHEREAS, the Town of Clayton honors the Finance and Accounting Department professionals as they serve their organization by managing day-to-day accounting operations and balancing the budget, both of which are needed for citizens to have faith and trust in their government; and

WHEREAS, the Finance and Accounting Department professionals are credentialed professionals, who provide financial transparency to citizens through timely publication of financial statements that meet the highest standards of governmental accounting; and

WHEREAS, this the Town of Clayton recognizes the Finance and Accounting Department during this week and honors the vital services they provide to our town and our community; and

WHEREAS, the Town of Clayton has proclaimed the week of September 25 – September 29, 2023 as Finance and Accounting Appreciation week; and

NOW, THEREFORE, on behalf of the Clayton Town Council, I, Mayor McLeod, hereby proclaim September 25 – September 29, 2023 Finance and Accounting Department Appreciation Week.

Proclaimed this the 18th day of September, 2023.

Jody L. McLeod
Mayor

**TOWN OF CLAYTON
PROCLAMATION
HUMAN RESOURCE PROFESSIONAL DAY**

WHEREAS, the Town of Clayton honors the office of Human Resources for the important work that they do to support all Town employees; and

WHEREAS, Human Resource professionals help employees adapt to an ever changing and competitive environment while responding to workplace needs and economic challenges; and

WHEREAS, these professionals enable positive organizational development and serve as strategic partners to meet public service goals by recruiting and retaining qualified diverse candidates for employment; developing equitable compensation and benefits structures; and preserving the integrity of the organization by ensuring compliance with state and federal laws; and

WHEREAS, the Town of Clayton Human Resource professionals serve as leaders, business strategists, problem-solvers, talent developers, and advocates, while displaying integrity and dedication; and

WHEREAS, Human Resource Professional Day is an opportunity to show appreciation for Human Resource professionals and the valuable work they do every day; and

NOW, THEREFORE, on behalf of the Clayton Town Council, I, Mayor McLeod, hereby proclaim September 26, 2023 as Human Resource Professional Day.

Proclaimed this the 18th day of September, 2023.

Jody L. McLeod
Mayor



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

PUBLIC HEARINGS

Item Title

2023-111-RZ Project Life Dust Rezoning

Presenter(s)

Jonathan K. Jacobs, PE, CFM - Interim Planning Director/Assistant Engineering Director

Suggested Action

Adoption of Ordinance

Strategic Priorities Alignment



☐
Think Clayton
(Administrative)



☐
Think Arts &
Culture



☐
Think
Downtown



☐
Think
Economic
Development



☒
Think Land
Use &
Housing



☐
Think
Mobility



☐
Think Parks,
Recreation
& Natural
Resources



☐
Think Public
Services &
Infrastructure

Public Hearing: Yes - Legislative

If Approved, Will Document Require Recordation? No

Does This Item Require a Communication Plan?

- ☒ Public Hearing (Required by GS)
- ☒ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media
- ☒ Special Mailing

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☒ Website
- ☐ Survey
- ☐ None Required

Other/Special Instructions: Sign Posted at site.

Summary

The Town of Clayton has initiated a rezoning of this property from R-E to I-1.

Recommendation

Approval

Funding Source

N/A

Corresponding Documentation

[1 2023-111-RZ Project Life Dust Rezoning TC STAFF REPORT](#)

[2 Neighborhood meeting Materials](#)

[3 Application 2023-111-RZ Project Life Dust](#)

[4 2023-111-RZ Project Life Dust Survey](#)

[5 Staff Report Maps - Life Dust](#)

[Resident Document](#)

[Rezoning Ordinance 2023-09-03](#)

Submitted By: Bruce Venable, Planning

Reviewed By:

Jonathan Jacobs, Assistant
Engineering Director

Approved - Sep 13 2023

Rich Cappola, Town Manager

Approved - Sep 14 2023

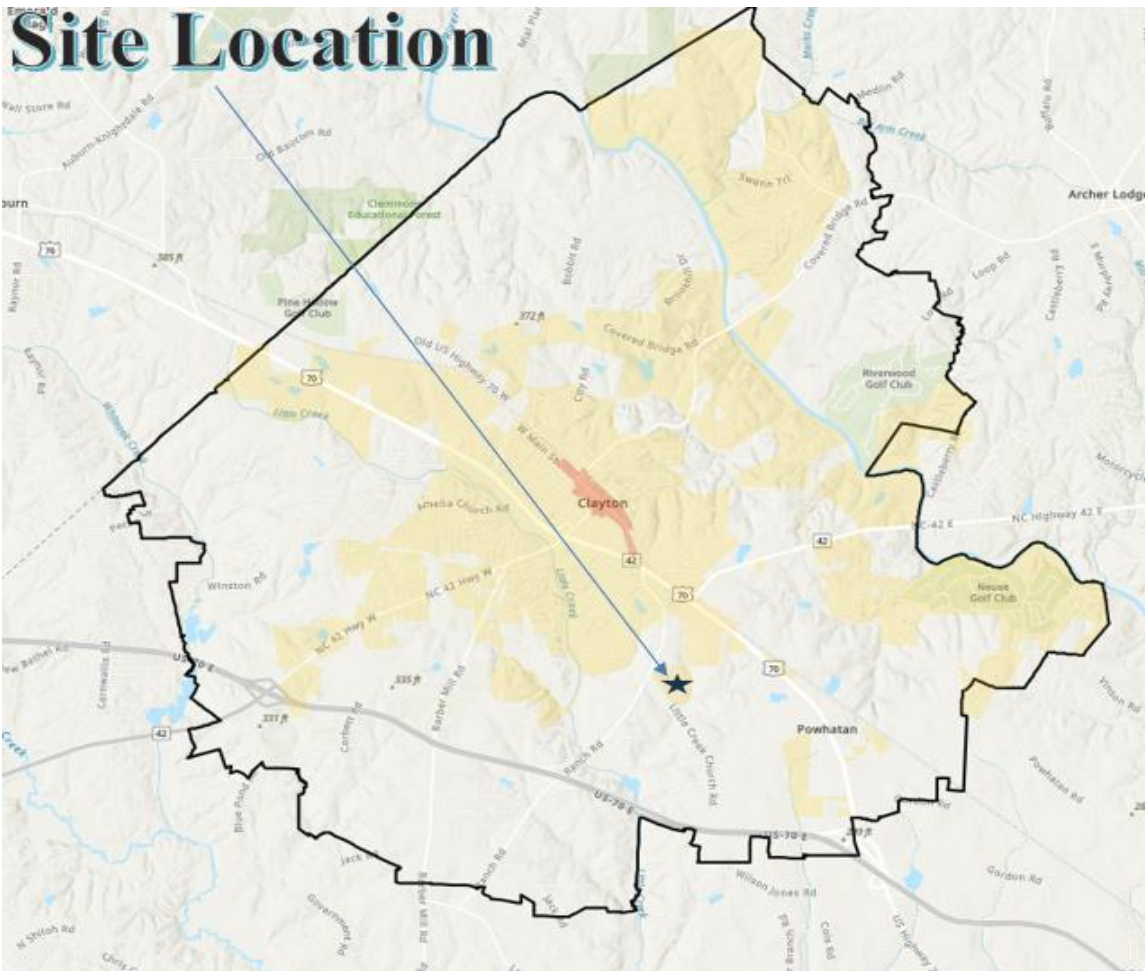
Heidi Holland, Town Clerk

Approved - Sep 14 2023



PROJECT LIFE DUST REZONING

Project #:	2023-111-RZ	Location:	Ranch Rd & Little Creek Church Rd.
Applicant:	Town of Clayton	Project Type:	Rezoning
Property Owner:	Town of Clayton	Proposed Use:	Industrial
Staff Planner:	Bruce Venable, Planner I	TAG #(s):	05H04046H



PROJECT SUMMARY

The site is located off Ranch Road and Little Creek Church Road within Clayton Town limits. The applicant has requested to rezone the above-referenced parcel that is approximately +/- 66.836 acres in size from Residential-Estate (R-E) zoning districts to the Industrial-Heavy (I-I) Zoning District. The site is currently vacant.

LAND USE REVIEW

SITE DATA:

Acreage: +/- 68.836 acres

Existing Use: Vacant

CURRENT ZONING MAP



PROPOSED ZONING MAP



AERIAL MAP



TABLE 1: COMPARISON OF SURROUNDING PROPERTIES

Direction	Zoning	Existing Use
North	R-E (Residential-Estate)	Residential.
South	R-E (Residential-Estate)	Residential: Single Family Homes; Vacant.
East	R-E (Residential-Estate)	Industrial: R&D, Manufacturing.
West	B-2 (Neighborhood-Business), R-E (Residential-Estate), R-8 (Single-Family-Residential-8)	Commercial; Residential.

Permitted Uses for the Industrial-Light (I-1) Zoning District:

Below you will find a list of all use that would be permitted by right should Town Council approve this rezoning request.

Assembly	Government Services	School (Technical, Trade or Business)
Entertainment, Indoor	Entertainment, Outdoor	Fitness/Recreation Center
Contractor Office	Convenience Store with Gas Sales	Publisher
Laundry Service	Microbrewery	Radio or Television Studio
Office, General	Pawn Shop	Vehicle Repair or Service
Retail Sales	Self-Storage Facility	Crematorium
Vehicle Sales and Rental	Building Supplies, Wholesale	Manufacturing-Light
Gas and Fuel, Wholesale	Laboratory, Research	Recycling Center
Research and Development	Warehouse, Freight Movement	Waster Service
Utility, Minor	Utility, Major	

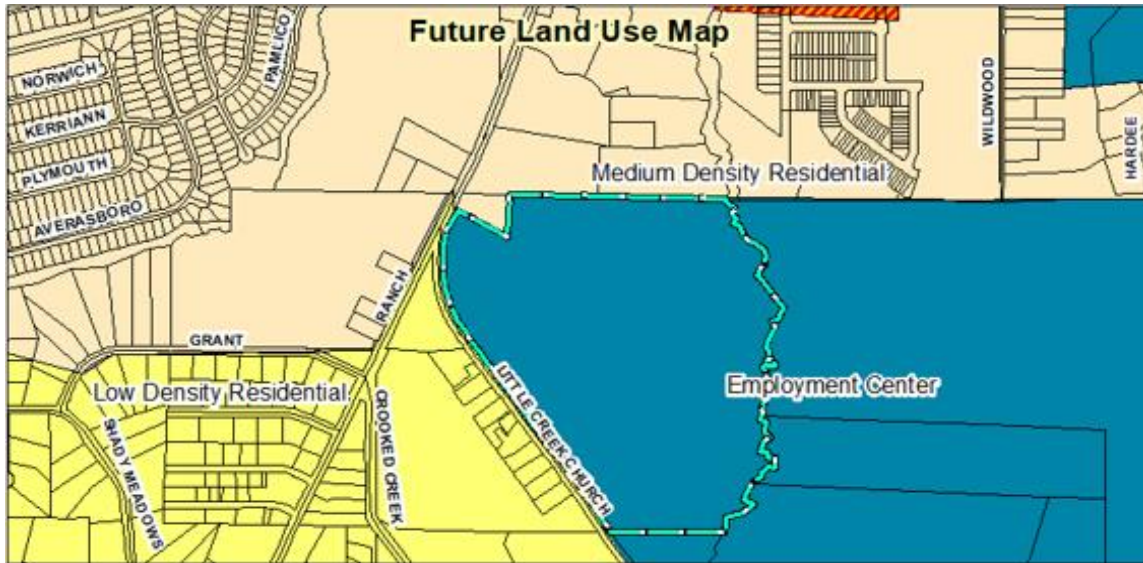
Comprehensive 2045 Growth Plan Employment Center Description:



EC Employment Center (EC)

Clayton's Employment Center Areas are designated on the Future Land Use Map to provide locations for primary employment and economic development opportunities. The Employment Centers are located along a major transportation corridor, and have adequate levels of infrastructure along with access to rail and parcels large enough to accommodate future employment growth. Uses encouraged in Employment Centers include but are not limited to, industrial, warehouse, office, research and development, tech-flex, hospital, renewable energy, recycling, fabrication, assembly, and technology. Employment Center land uses may also include a limited amount of supporting commercial uses, such as restaurants and convenience retailers to serve employees. However, these uses should only be situated where not in conflict with existing employment land uses and should not be built in such a way as to jeopardize the use of those lands most suitable for office or industrial development.

Consistency with the 2045 Comprehensive Growth Plan



The Future Land Use Map identifies this area as “Employment Center” (see map above). Page 21 of the Comprehensive Growth Plan states that Employment Center areas are designated “to provide locations for primary employment and economic development opportunities” and are “located along a major transportation corridor...” These guidelines are consistent with the purpose and function of I-1 zoning, as stated above. The rezoning request would be consistent with the Employment Center Future Land Use designation.

Comprehensive Growth Plan Goals supporting the rezoning request:

Comprehensive Growth Plan Goals supporting the rezoning request include:

Goal LU 1: Preserve Clayton’s character while allowing for growth and development in appropriate areas.

Policy LU 1.1: Manage future growth and encourage quality development through the implementation of the Comprehensive Plan, the Unified Development Code (UDC), and other plans and regulations adopted by the Town Council.

Strategy LU 1.1.1: Review development proposals for consistency with the Future Land Use Map.

Policy LU 1.3: Encourage non-residential land uses in areas consistent with the Future Land Use Map.

Strategy LU 1.3.1: Ensure the scale of non-residential uses are consistent with the Future Land Use Map.

Policy LU 1.4: Encourage new businesses and non-residential development in Employment Centers designated on the Future Land Use Map.

Strategy LU 1.4.1: Encourage a mix of non-residential land use in Employment Centers including industrial, warehouse, office, research and development, tech-flex, renewable energy, recycling, fabrication, assembly, and technology uses.

Strategy LU 1.4.3: Allow for integration of compatible uses in Employment Centers including commercial development as a supporting use.

Goal ED 1: Increase opportunities for companies that provide well-paid jobs.

Policy ED 1.5: Continue business retention efforts and support existing commercial corridors.

Strategy ED 1.5.1: Continue business retention and expansion strategies to engage with existing businesses to support existing operations and expansions.

Strategy ED 1.5.2: Increase employment and redevelopment opportunities along key corridors including 70 Bus and NC 42 and at 70 Bypass interchanges.

REZONING APPROVAL CRITERIA

In connection with its legislative decision on a rezoning request, the Planning Board may consider factors including, but not limited to, the following:

(1) Consistency with the adopted plans and policies of the Town;

Applicant's Response: The proposed rezoning is consistent with the Towns 2045 Comprehensive Growth Plan and the Future Land Use Map that shows this parcel as part of the "Employment Center" area.

Staff Commentary: Staff believes that the current zoning and the proposed zoning changes are consistent with currently adopted plans for this project.

(2) Suitability of the subject property for uses permitted by the current versus the proposed district;

Applicant's Response: Current uses are limited to single-family residential, agriculture and recreation. The proposed zoning district would allow a wide range of industrial uses.

Staff Commentary: Staff believes that this request is appropriate and achieves the best use and practice for this site.

(3) Whether the proposed change tends to improve the balance of uses, or meets a specific demand in the Town;

Applicant's Response: It is staff's belief that since this aligned with the Town's 2045 Comp plan and the FLU Map that is improving the balances uses as was the intention of the 2045 Comp. Plan.

Staff Commentary: Staff believe that this use is consistent with similar uses and may address a need for warehouse and freight services that will assist current and future businesses.

(4) The capacity of adequate public facilities and services including schools, transportation infrastructure, recreation facilities, wastewater treatment, water supply facilities, and stormwater drainage facilities for the proposed use;

Applicant's Response: Water connections are available to the site.

Staff Commentary: The rezoning should not affect the Town's compacity of public facilities, services nor will it negatively affect the current infrastructure. The applicant will be required to complete a WWA application prior to Town Council approval of any potential development on the site.

(5) It has been determined that the legal purposes for which zoning exists are not contravened;

Applicant's Response: No violations of zoning currently exist nor will the proposed zoning create any new violations to the Town's zoning.

Staff Commentary: Staff believe that this request is not contravened and is aligned with the comprehensive future land use plan of 2045 and will serve the community under the proposed I-1 zoning district.

(6) **It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare;**

Applicant's Response: It is Staff's opinion that rezoning this parcel is in line with the FLUM which is in the best interest of the public.

Staff Commentary: There should be no adverse effect upon any of the adjoining property owners due to this rezoning proposal.

(7) **It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.**

Applicant's Response: There should be no detriment to the general public from the proposed rezoning. The rezoning is aligned with the Town's future plans.

Staff Commentary: No one property owner or small group will benefit materially from this change.

Staff Recommendation

- ◆ Staff recommends **APPROVAL** of the proposed rezoning request.

Planning Board Recommendation:

- ◆ The Planning Board held a Public Meeting Session on August 28, 2023, for the project. The Planning Board unanimously voted to recommend **DENIAL** for the proposed rezoning application.

Decision: The Board referred to voting based off their conviction and a perceived understanding from the community and neighboring property owners that this parcel would be used as future park land and that rezoning the parcel to the I-1 zoning district was not aligned with the Town's plans and policy.

Consistency and Reasonableness Statement:

The Planning Board did not provide a statement on the consistency and reasonableness of the request at the time of their decision.

Town Staff has provided a statement should Town Council choose to approve the rezoning request.

Consistency and Reasonableness Statement:

“We find this rezoning action is consistent with the Future Land Use Map, Goal LU 1 and Goal ED 1 of the Town of Clayton’s 2045 Comprehensive Growth Plan.”

And

The proposed zoning amendment is reasonable and in the public interest because it supports the Town of Clayton 2045 Comprehensive Growth Plan’s policies above and because:

1. The rezoning would allow for future employment opportunities along two well-traveled corridors.
2. The rezoning is consistent with the proposed uses of the “Employment Center” Designation found in the 2045 Comprehensive Plan. “

ATTACHMENTS:

- 1) Staff Report
- 2) Application/Owner’s Consent Form
- 3) Neighborhood Meeting Materials
- 4) Survey
- 5) Staff Report Maps

PROJECT LIFE DUST NEIGHBORHOOD MEETING SIGN-IN AND MINUTES DOCUMENT

NAME	ADDRESS	HOW THEY HEARD ABOUT MEETING
Stan Wendzel	With Project	
Patrick Pierce	TOC	
Bruce Venable	TOC	

Notes from meeting:

Meeting Began promptly at 6:00pm on 8/15/2023

This meeting is to discuss the Town Initiated Rezoning of the property located at Ranch Rd and Little Creek Church Rd totaling 67.10 acres

With no adjacent property owners in attendance the meeting was concluded at 6:20pm.

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TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

REZONING APPLICATION COVER SHEET

Name of Project: Life Dust Rezoning **Date:** 06/30/2023
Applicant Name: Town of Clayton

The following checklist to be completed by applicant:

- [] Pre-Application Meeting on: 6/30/23
- [] Review Fee
- [] Advertisement Fee
- [] Completed Application
- [] Owner's Consent Form
- [] Adjacent Property Owner's List
- [] Neighborhood Meeting Notice Letter (1 copy)
- [] 2 Sets of stamped, addressed, empty envelopes for adjacent property owner notification
- [] Signed & Sealed Boundary Survey
- [] Copy of signed & sealed boundary survey in PDF on USB

Reviewed by: _____



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

REZONING APPLICATION

☒ Rezoning Fee: \$750 + \$10 per acre

SITE INFORMATION

Name of Project: Life Dust Rezoning
Acreage of Property: 66.836 Zoning District: R-E
County Tag #: 05H04046H NC Pin #: 166814-42-8880
Address/Location: To the East of Ranch Rd and Little Creek Church Rd
Existing Zoning District: R-E Proposed Zoning District: I-1

APPLICANT INFORMATION

Applicant: Town of Clayton
Mailing Address: P.O. Box 879
Phone Number: 919 553-5002 Fax: _____
Contact Person: Bruce Venable
Email Address: bvenable@townofclaytonnc.org

PROPERTY OWNER INFORMATION

Name: Town of Clayton
Mailing Address: P.O. Box 879
Phone Number: 919 553-5002 Fax: _____
Email Address: Planning@Townofclaytonnc.org

OFFICE USE ONLY

Date Received: _____ Amount Paid: _____ File Number: _____

EXPLANATION OF PROJECT

Please provide detailed information concerning all requests. Attach additional sheets if necessary.

Town initiated rezoning from Residential-Estate to Industrial-Light Zoning District.

APPROVAL CRITERIA

All applications for a Rezoning must address the following findings:

1. Consistency with the adopted plans of the Town.
The proposed rezoning is consistent with the Towns 2045 Comprehensive Growth Plan
and the Future Land Use Map that shows this parcel as part of the "Employment Center" area.

2. Suitability of the subject property for uses permitted by the current vs. the proposed district.
Current uses are limited to single-family residential, agriculture and recreation.
The proposed zoning district would allow a wide range of industrial uses.

3. Whether the proposed change tends to improve the balance of uses, or meets specific demand in the Town.
It is staff's belief that since this aligned with the Town's 2045 Comprehensive plan and the FLU Map that is
improving the balances uses as was the intention of the 2045 Comprehensive Plan.

4. The capacity of adequate public facilities and services including schools, roads, recreation facilities, wastewater treatment, potable water supply and stormwater drainage facilities is available for the proposed use.
Water connections are available along Little Creek Church Road. Sewer is available in the vicinity with the public extension

5. It has been determined that the legal purposes for which zoning exists are not violated.
No violations of zoning currently exist nor will the proposed zoning create any new violations to the Town's
Zoning.

6. It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare.
It is Staff's opinion that rezoning this parcel is in line with the FLUM which is in the best interest of the public.

7. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.

There should be no detriment to the general public from the proposed rezoning. The rezoning is aligned with the Town's future plans.

APPLICANT AFFIDAVIT

I/We, the undersigned, do hereby make application and petition to the Town Council of the Town of Clayton to amend the Zoning Ordinance and change the Official Zoning Map of the Town of Clayton as requested.. I hereby certify that I have full legal right to request such action and that the statements or information made in any paper or plans submitted herewith are true and correct to the best of my knowledge. I understand this application, related material and all attachments become official records of the Planning Department of the Town of Clayton, North Carolina, and will not be returned.

Bruce Venable -Planner I
Print Name

Bruce
Signature of Applicant

Digitally signed by Bruce
Date: 2023.07.07 14:23:27 -04'00'

07/07/2023
Date

NEIGHBORHOOD MEETING INFORMATION

Purpose:

The purpose of the Neighborhood Meeting is to inform the surrounding property owners of the nature of the proposed land use and/or development features, answer questions, respond to concerns, and solicit comments.

Meeting Date:

The neighborhood meeting must be held prior to the 1st scheduled public meeting date. It is recommended to hold the meeting at least 10 days prior to the 1st scheduled public meeting date, however, it is **not** a requirement.

Meeting Time & Location:

The meeting must be held no earlier than 6:00 pm Monday through Friday, and must be held in a location generally accessible to residents within close proximity of the request. The meeting space must be able to comfortably accommodate everyone that receives an invitation.

Meeting Notice Mailing requirements:

1. The applicant must contact all adjacent property owners via first class mailing (see sample letter).
2. The mailing must include all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the subject property. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property.
3. The notice must be mailed at least ten (10) calendar days but not more than twenty-five (25) days prior to the date of the Neighborhood Meeting.

Information required to be provided at the Neighborhood Meeting:

At a minimum, the following materials must be present and discussed at a Neighborhood Meeting:

1. A copy of the project application.
2. A schedule of all upcoming public meetings for the application.
3. A map at a scale that is appropriate to the project and shows neighboring properties and roads.
4. A map, drawing, or other depiction of the proposed land use change or development proposal.

Information provided to Planning Department:

Alert the Planning Department once the date, location, and time of the Neighborhood Meeting are determined.

Deliver the following items to the Planning Department at least ten (10) calendar days prior to the 1st scheduled public meeting in electronic or hard copy format:

- ☐ Adjacent Property Owner's List (aka "mailing list") *Should be submitted with original application packet*
- ☐ Copy of the letter mailed *Should be submitted with original application packet*
- ☐ Attendance Roster (aka "sign-in sheet") *Submit no later than 10 days prior to 1st public meeting date*
- ☐ Neighborhood Meeting Summary Form with minutes (see below) *Submit no later than 10 days prior to the 1st public meeting date*

ADJACENT PROPERTY OWNERS LIST

Project Name: _____

The following are all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the property (including across street rights of way) subject to this request. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property. Please use a separate sheet if necessary

It is the responsibility of the applicant to correctly identify the current owner, based upon records in the Johnston County GIS Office, for all property owners of land within the required public notice radius.

PARCEL NUMBER	NAME	ADDRESS
05H03011B	WALL, MARILYN P WALL, HARRY D JR	6026 LITTLE CREEK CHURCHROADCLAYTON, NC 27520
05H04030T	VANDERGRIFF, TIM VANDERGRIFF, MARTHA R	2005 RYERSON DR GARNER, NC 27529-4323
05H04031D	D. R. HORTON, INC	2000 AERIAL CENTER PKWYSTE 110 MORRISVILLE, NC 27560-9294
05H04031Y	MASSEY, ANDREA LYNN MASSEY, MICHAEL JOHN	133 ELLIOTT AVE CHARLOTTESVLE, VA22902-6183
05H04032	COX, JIMMY R COX, JUDY G	8851 US 70 BUS HWY W CLAYTON, NC 27520-9296
05I05044A	COX, JASON RALPH	8851 US 70 BUS HWY W CLAYTON, NC 27520-9296
05H04031G	WILLIAMS, BETTY SMITH SMITH, JAMES WILLIE HEIRS	435 GLENBROOK DR RALEIGH, NC 27610-3509
05H04031N	TOMLINSON, MICHAEL	10916 BEAVER CASTLE RD N PRINCE GEO, VA 23860-7643
05H04031J	SMITH, IRECKA DANIELLERENEE	5595 LITTLE CREEK CHURCHROAD CLAYTON, NC 27520-0000
05H04031M	SMITH, JAMES W JR TIDMORE, STEPHANIE	415 LANDOVER LN FOUR OAKS, NC 27524-7739
05H04031	BROWN, BEVERLY RENE DIXON, ANGELA ODOM	5675 LITTLE CREEK CHURCHRD CLAYTON, NC 27520-0000
05H04031K	SMITH, IRECKA D	5595 LITTLE CREEK CHURCHRD CLAYTON, NC 27520-6126
05H04199Z	BANKS, RILLA HEIRS	5675 LITTLE CREEK CH RD CLAYTON, NC 27520-6127
05H04031E	FIDLER, PAUL ALEXANDER	5615 LITTLE CREEK CHURCHRD CLAYTON, NC 27520-6127
05H04031H	WILLIAMS, BETTY SMITH SMITH, JAMES WILLIE HEIRS	435 GLENBROOK DR RALEIGH, NC 27610-3509
05H04033Y	GORDON, TREVOR : GORDON, KRISTEN	1012 BIRCHWOOD CT CLAYTON, NC 27520-7857
05H04031A		

SAMPLE NEIGHBORHOOD MEETING LETTER

(PLACE ON AGENT'S OR OWNER'S LETTERHEAD)

<Date>

Dear Clayton Area Property Owner:

The purpose of this letter is to notify you of an application filed with the Town of Clayton for a land use change or development proposal involving property adjacent to, or in close proximity to, property shown in your ownership by Johnston County tax records. Per Town of Clayton regulations, a Neighborhood Meeting will be held to provide information to area residents about the proposal. A representative of the applicant will be present to explain their application, answer questions, and solicit comments.

Meeting Date: _____ Meeting Time: _____

Meeting Location: _____

Type of Application: _____

Project/proposal property address: _____

Description of project/proposal: _____

Upcoming public meetings for this
application (Planning Board
and/or Town Council): _____

At a minimum, the following will be available for your inspection at the Neighborhood Meeting:

1. A copy of the project application.
2. A schedule of all upcoming public meetings for the application.
3. A map at a scale that is appropriate to the project and shows neighboring properties and roads.
4. A map, drawing, or other depiction of the proposed land use change or development proposal.

A map is enclosed with this letter showing the location of the property that is subject to this application for land use change and/or development proposal.

If you have any questions prior to or after this meeting, you may contact us at **<Insert phone number of applicant>**. You may also contact the Town of Clayton Planning Department at 919-553-5002.

Sincerely,

<Applicant>

Cc: Town of Clayton Planning Department

October 2019

Page 3 of 5

NEIGHBORHOOD MEETING ATTENDANCE ROSTER

Project: _____

Application: _____

Location/Date: _____

	NAME	ADDRESS
1		
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NEIGHBORHOOD MEETING SUMMARY FORM

FILL OUT THE FOLLOWING:

Application:

Date of Mailing:

Date of Meeting: _____ Time of Meeting: _____

Location of Meeting:

I hereby attest that letters were mailed to the addresses listed on the Adjacent Property Owners List (attached) ten days prior to the Neighborhood Meeting, and that all required information was presented at the Meeting:

Printed Name: _____ Signature: _____

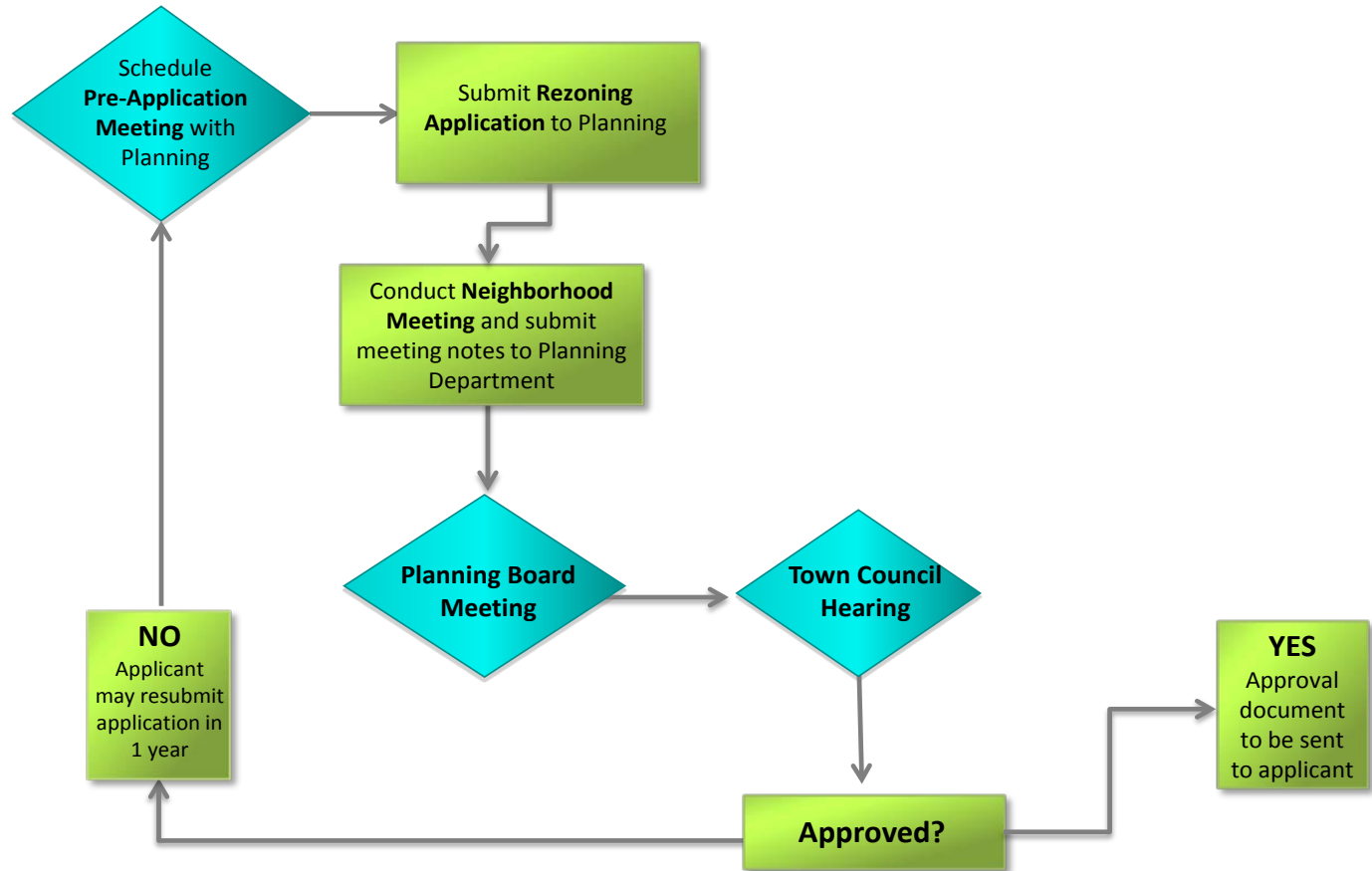
Meeting Summary/Minutes: *provide a summary of the discussion held at the meeting, including issues raised and any resolution discussed, and any changes made to the application as a result of the meeting.*

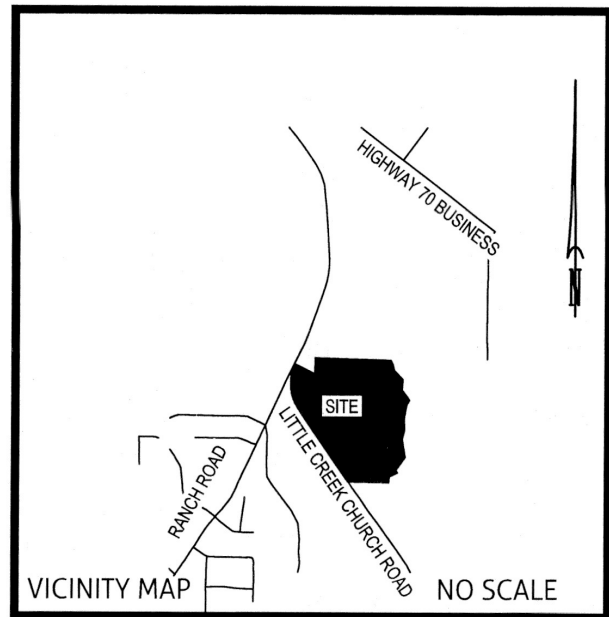
This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Please write clearly (or submit a typed summary). Use additional sheets if necessary.

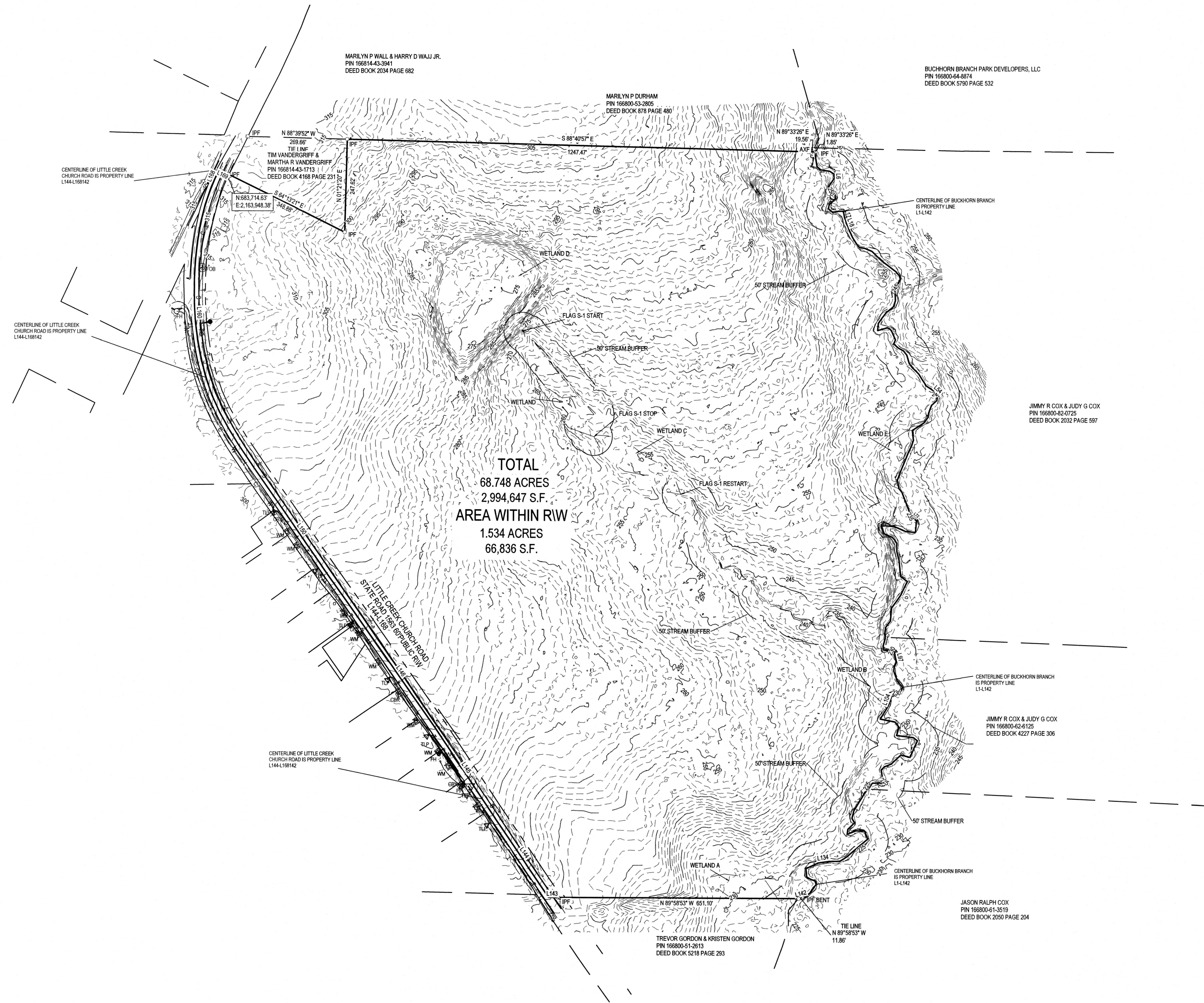
Town of Clayton Rezoning Process Flow Chart

This is the same process for a Planned Development Rezoning





1. NO NEIS MONUMENT FOUND WITHIN 2,000 FEET OF THE SITE.
2. THE FOLLOWING INFORMATION WAS USED TO OBTAIN NC GRID NAD 83 (2011) NAVD 83 (GEOID 18) STATE PLANE COORDINATES (SPC) FOR THIS PROJECT:
 - 2.1. CLASS OF SURVEY: URBAN LAND SURVEYS CLASS A
 - 2.2. POSITIONAL ACCURACY: 0.02 (H, 0.07 (V))
 - 2.3. GPS FIELD PROCEDURE: IRS
 - 2.4. DATE OF SURVEY: 07/21/2021
 - 2.5. DATUM/EPOCH: NAD 83 (2011) EPOCH 2010.0
 - 2.6. PUBLISHED INTERVIEW CONTROL USED: VRS, NCRO
 - 2.7. GEOD MODEL: GSD00 18
 - 2.8. COMBINED GRID FACTOR: 0.99878532
 - 2.9. UNITS: U.S. SURVEY FEET
 - 2.10. GRID/GROUND POINT: 10N 683.7143 XE1 2,163.948.38
3. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
4. ALL AREAS DERIVED BY THE COORDINATE COMPUTATION METHOD.
5. PROPERTY SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD. THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN CONFORMITY WITH NORTH CAROLINA STANDARDS, G.S. 47-36, AND REQUIREMENTS OF LAW, BUT A NORTH CAROLINA LICENSED ATTORNEY AT LAW SHOULD BE CONSULTED REGARDING CORRECT OWNERSHIP, WIDTH, AND LOCATION OF EASEMENTS AND OTHER TITLE QUESTIONS REVEALED BY TITLE EXAMINATION.
6. LINES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM INFORMATION REFERENCED ON THE FACE OF THIS PLAT.
7. SUBJECT PROPERTY IS NOT LOCATED WITHIN A FLOOD HAZARD AREA ACCORDING TO FLOOD INSURANCE RATE MAP 372108800K DATED JUNE 30, 2016.
8. LOCATION OF UTILITIES, WHETHER PUBLIC OR PRIVATE, IS BASED UPON FIELD LOCATION OF VISIBLE APPURTENANCES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. WITHNERSRAVENEL CANNOT ASSUME RESPONSIBILITY FOR MISIDENTIFICATION OR OMISSION OF UNDERGROUND UTILITIES.

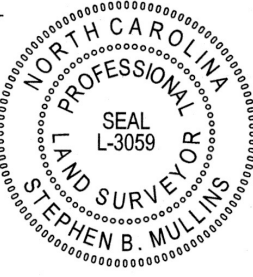


SURVEYOR'S CERTIFICATION

I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTIONS) RECORDED AS SHOWN ON HEREIN. THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION SHOWN ON THE FACE OF THIS MAP. THAT THE RATIO OF PRECISION OR POSITIVE ACCURACY IS 1:25,715+ AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD ACTUALLY FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600).

THIS 7th DAY OF SEPTEMBER, A.D. 2021

STEPHEN B. MULLINS, PROFESSIONAL LAND SURVEYOR
LICENSE NUMBER L-3059

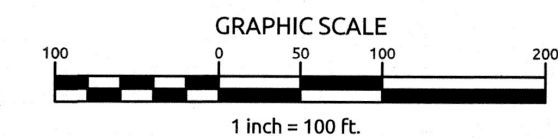


LEGEND
IRON PIPE FOUND
AXLE
TELEPHONE PEDESTAL
POWER POLE
CABLE BOX
FIBER OPTIC BOX
WATER METER
WATER VALVE
FIRE HYDRANT

○ IFF
△ AXF
▽ TLP
● PP
⊗ CBX
⊗ FCB
⊗ WM
⊗ FH

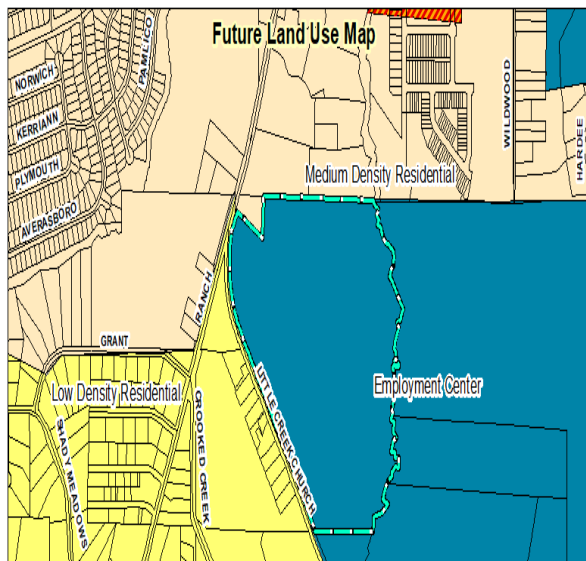
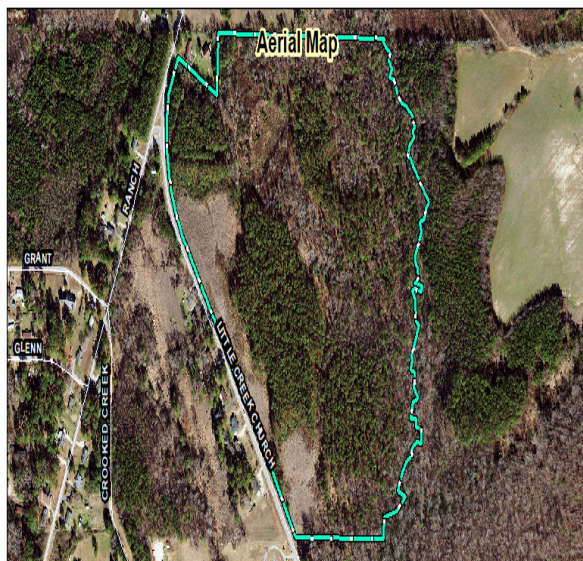
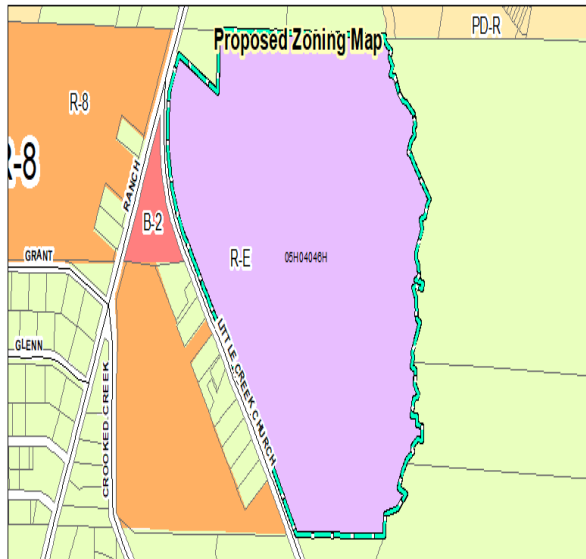
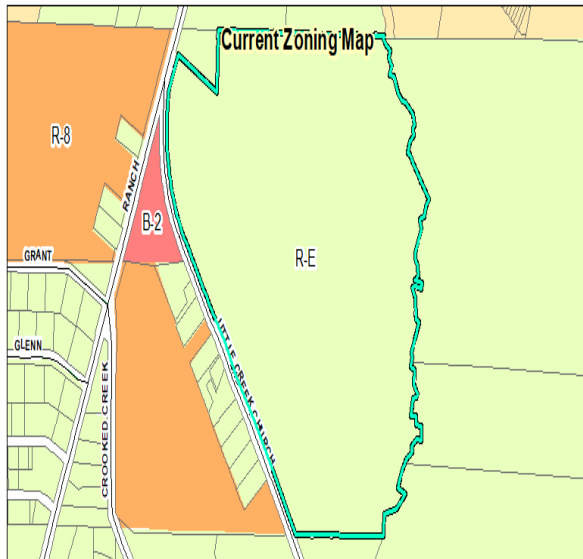
LINE/TYPE LEGEND
PROPERTY LINE
ADJOINER NOT SURVEYED
WETLAND AREA
STREAM BUFFER
TELEPHONE LINE
WATER LINE
CATV LINE
FIBER OPTIC LINE
CONTOUR 5'
CONTOUR 1'

— T — T
— W — W
— C — C
— FO — FO



REVISIONS:	DATE: 08-5-21	BOUNDARY AND TOPOGRAPHICAL SURVEY OF
	SCALE: 1"=100'	68.748 ACRE TRACT
	SURVEYED BY: DONTÉ	OWNED BY TOWN OF CLAYTON
	DRAWN BY: BURB	PARCEL NUMBER 166814-42-8880
	CHECK & CLOSURE BY: BURB	DEED BOOK 4490 PAGE 198 PLAT BOOK 80 PAGE 89
	CAD FILE: 67 ACRE	TOWNSHIP: CLAYTON
	PROJECT NO: 02170831.10	COUNTY: JOHNSTON
		STATE: NORTH CAROLINA
		ZONE:
		P.I.N. 166814-42-8880

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	S 00° 30' 31" W	58.87	L85	S 32° 41' 00" E	22.87
L2	S 10° 31' 31" E	24.87	L86	S 28° 10' 00" W	41.87
L3	S 51° 17' 31" E	13.10	L87	S 35° 10' 00" W	18.17
L4	S 11° 10' 00" E	24.87	L88	S 04° 30' 00" W	21.87
L5	S 7° 52' 44" E	13.87	L89	S 04° 30' 00" W	33.87
L6	S 11° 40' 00" E	11.87	L90	S 30° 00' 00" W	11.87
L7	S 34° 13' 59" W	26.87	L91	S 08° 10' 00" W	11.87
L8	S 34° 48' 31" E	20.87	L92	S 02° 42' 00" E	16.87
L9	S 48° 30' 00" E	7.87	L93	S 15° 32' 00" W	21.87
L10	S 03° 50' 59" E	15.10	L94	S 08° 52' 28" E	10.29
L11	S 41° 11' 11" W	11.87	L95	S 15° 32' 00" W	11.87
L12	S 51° 04' 49" W	9.07	L96	S 01° 22' 11" W	11.11
L13	S 09° 00' 00" W	11.87	L97	S 13° 50' 00" E	17.87
L14	S 11° 50' 59" E	14.32	L98	S 24° 43' 31" W	15.03
L15	N 00° 40' 24" E	17.08	L99	S 02° 14' 14" W	10.03
L16	N 00° 00' 00" E	11.87	L100	S 20° 15' 39" E	27.49
L17	S 13° 50' 59" E	18.89	L101	S 41° 24' 00" E	21.87
L18	S 13° 50' 59" E	11.87	L102	S 20° 14' 40" W	21.87
L19	S 24° 44' 41" E	22.89	L103	S 73° 37' 11" W	15.87
L20	S 01° 11' 11" W	11.87	L104	S 21° 14' 41" E	30.87
L21	S 39° 10' 00" E	13.84	L105	S 30° 23' 00" W	18.39
L22	S 02° 24' 41" E	14.32	L106	S 32° 32' 00" W	20.37
L23	S 02° 24' 41" E	11.31	L107	S 18° 53' 59" E	40.89
L24	S 46° 26' 00" E	23.97	L108	S 39° 22' 28" E	17.81
L25	S 48° 13' 59" E	11.87	L109	S 17° 10' 46" W	46.87
L26	S 52° 02' 22" E	26.97	L110	S 82° 52' 46" E	46.07
L27	S 52° 02' 22" E	11.32	L111	S 85° 12' 00" E	13.39
L28	S 59° 09' 59" E	11.31	L112	S 24° 41' 44" W	30.39
L29	S 59° 09' 59" E	8.81	L113	S 22° 52' 12" W	18.39
L30	S 42° 22' 39" W	20.44	L114	S 75° 10' 00" W	23.49
L31	S 08° 18' 19" W	14.77	L115	S 47° 17' 24" W	35.89
L32	S 08° 20' 22" E	17.29	L116	S 47° 40' 22" W	18.89
L33	S 18° 18' 59" W	18.28	L117	S 47° 48' 39" W	12.39
L34	S 40° 00' 00" E	7.87	L118	S 09° 48' 32" E	11.39
L35	S 50° 07' 23" W	15.39	L119	N 89° 48' 32" W	14.09
L36	S 50° 07' 23" W	10.11	L120	S 38° 17' 42" W	15.39
L37	S 50° 07' 49" W	11.99	L121	S 38° 07' 09" W	11.09
L38	S 50° 07' 49" W	18.89	L122	S 30° 41' 14" W	22.89
L39	N 14° 43' 58" E	11.87	L123	S 31° 30' 00" W	33.41
L40	N 72° 18' 59" E	5.87	L124	S 13° 53' 59" W	20.87
L41	S 09° 14' 14" E	11.87	L125	S 30° 10' 49" E	13.39
L42	S 38° 13' 09" E	7.27	L126	S 46° 18' 48" W	24.82
L43	S 42° 24' 41" E	14.89	L127	S 09° 48' 32" E	13.39
L44	S 20° 44' 10" W	12.17	L128	N 08° 22' 21" E	25.11
L45	S 47° 23' 00" E	18.89	L129	S 08° 10' 00" E	24.87
L46	S 11° 10' 00" E	24.87	L130	S 20° 15' 39" W	22.87
L47	S 38° 56' 12" E	14.89	L131	S 48° 47' 39" W	73.87
L48	S 10° 40' 00" E	11.87	L132	S 08° 24' 49" W	22.11
L49	S 34° 44' 41" E	11.87	L133	S 08° 50' 00" W	28.62
L50	S 34° 44' 41" E	21.87	L134	S 08° 10' 00" W	22.87
L51	S 10° 23' 00" E	18.29	L135	S 68° 11' 31" W	38.39
L52	S 10° 23' 00" E	11.87	L136	S 08° 10' 00" W	11.87
L53	S 06° 33' 59" E	17.17	L137	S 08° 10' 00" W	22.87
L54	S 48° 26' 00" E	22.18	L138	S 71° 12' 39" E	11.48
L55	S 09° 13' 59" W	14.82	L139	S 24° 47' 49" E	10.11
L56	S 47° 38' 00" W	19.49	L140	S 34° 42' 39" W	26.87
L57	S 08° 20' 22" E	17.29	L141	S 34° 42' 39" W	11.87
L58	S 08° 20' 22" E	10.37	L142	S 78° 07' 59" W	17.39
L59	S 08° 20' 22" E	11.87	L143	S 08° 10' 00" W	11.87
L60	S 01° 11' 11" W	37.89	L144	N 04° 30' 00" E	20.17
L61	S 06° 33' 59" E	25.89	L145	N 34° 09' 11" W	274.73
L62	S 17° 42' 00" E	17.77	L146	N 35° 44' 19" W	184.47
L63	S 29° 54' 00" W	22.07	L147	N 35° 35' 17" W	88.89
L64	S 29° 54' 00" W	20.87	L148	N 35° 10' 00" W	28.89
L65	S 22° 53' 00" W	26.84	L149	N 35° 10' 00" W	78.12
L66	S 22° 53' 00" W	20.84	L150	N 35° 10' 00" W	208.12
L67	S 11° 20' 00" E	22.11	L151	N 35° 21' 01" W	118.11
L68	S 38° 49' 49" E	13.11	L152	N 34° 40' 20" W	20.59
L69	S 11° 10' 00" E	24.42	L153	N 30° 20' 00" W	49.17
L70	S 22° 08' 07" E	26.46	L154	N 29° 28' 59" W	49.86
L71	S 22° 08' 07" E	18.89	L155	N 45° 52' 11" W	49.86
L72	S 50° 21' 48" E	18.89	L156	N 19° 54' 03" W	49.86
L73	S 34° 48' 00" E	33.17	L157	N 14° 40' 00" W	49.86
L74	N 85° 52' 19" W	25.10	L158	N 10° 43' 39" W	49.86
L75	N 85° 52' 19" W	33.19	L159	N 09° 50' 00" W	49.86
L76	N 85° 52' 19" W	23.86	L160	N 09° 50' 00" W	49.86
L77	S 87° 34' 38" W	12.47	L161	N 00° 34' 20" W	35.82
L78	S 82° 33' 00" E	21.86	L162	N 01° 10' 00" W	29.87
L79	S 88° 09' 54" E	24.32	L163	N 02° 54' 19" E	49.86
L80	S 88° 09' 54" E	5.86	L164	N 08° 10' 00" E	50.10
L81	S 30° 47' 39" E	10.42	L165	N 08° 10' 00" E	49.86
L82	S 10° 44' 41" E	21.86	L166	N 12° 10' 00" E	49.86
L83	S 14° 49' 39" E	21.44	L167	N 19° 03' 25" E	50.10
L84	S 06° 21' 17" E	43.57	L168	N 23° 44' 17" E	50.10
			L169	S 04° 12' 21" E	36.47



Request: Rezoning from R-E to I-1
Project Name Project Life Dust Rezoning
Project Number:

Applicant: Town of Clayton
 Property Owner: Town of Clayton
 Tag #: 05H04046H



0 0.2 0.4
 Miles



Staff Report Map
 Prepared by: TOC Planning Department
 July 7, 2023

Disclaimer: Town of Clayton assumes no legal responsibility for the quality of the data represented here.

Document Path: C:\Users\lbrearable\OneDrive - Town of Clayton, NC\Desktop\Life Dust\Staff Report Maps - Life Dust.mxd

REZONING APPROVAL CRITERIA

In connection with its legislative decision on a rezoning request, the Planning Board may consider factors including,

but not limited to, the following:

- (1) Consistency with the adopted plans and policies of the Town;

Neighbor Response: The industrial zoning request is not consistent with the town's **original** comprehensive plan for the area. This project was added to the comprehensive plan after February 2021 when town officials began talks with Stan Wendzel and BioRealty (per the 6-6-2023 news article found on <https://www.growwithjoco.com/>). You can see from the changes on the draft plans that town officials arbitrarily added this project into the plan during the confidential discussions period. Prior to that, and as still seen on the Parks and Recreation future use plan for the town, this site was to be a community park that would benefit this area of the town and the surrounding EJT occupants.

It is also my understanding from the Deed of Book 4466 Page 324, that the Town of Clayton purchased this land from The Conservation Fund (Maryland Non-Profit dedicated to protecting and conserving natural land) for the amount of \$500 (per the Johnston County GIS sale price). It is a statement of fact that the town had intended to develop this parcel into a park as noted on page 52 of the Comprehensive Growth Plan. The park itself would protect the land as conservation dictates.

- (2) Suitability of the subject property for uses permitted by the current versus the proposed district;

Neighbor Response: The area surrounding the site is predominantly rural with some subdivisions adjacent to farms. Rezoning this area will create a land use plan with different development patterns.

The property is better suited for the residential estate/ agriculture district it has always been.

From the town's Unified Zoning Codes "Residential Districts: Provide safe, healthy living environment for residents, protect the towns existing neighborhoods from incompatible uses, maintain natural areas and open spaces."

Open Space requirements for residential zoning

- * Promote the preservation of environmentally sensitive land. (This includes the 100-year flood plains.)

- * Preserve in perpetuity unique and sensitive natural resources such as ground water (used by nearby residents), floodplains, wetlands, streams, steep slopes, woodlands, and wildlife habitat. (all of which are located on or nearby this property)

- * Preserve important historical and archeological sites. (Arrowheads and trail trees have been spotted on this site)

*Protect prime agricultural land and preserve farming as an economic activity. (Active farming is happening on 3 sides of this property)

The creek abutting this parcel joins into Swift Creek downstream, right where the endangered Dwarf Wedgemussels live. These mussels are extremely sensitive to water quality changes and will be adversely affected by the increase in impervious surface from 0% to 75%.

Even with retention ponds, the runoff into the stream will increase, along with the pollution and water volume. This water volume can also create more downstream flooding. **During Hurricane Fran, the stream behind this property reached 100 feet across, meaning that any development on this land near the stream will be flooded out in future storms.** This is even more likely due to the road being put in upstream, since changes to that road will increase the water flow of the creek itself. For these reasons the property itself is more suitable for residential and agriculture or even the originally proposed park that the town had promised.

Further more: noted plans for this development project currently fails to meet 155.500 (A) Sections 1-4

The site plan for the project has parking areas and buildings located within the 100 feet that stream took out during Hurricane Fran. These impacts will be worse in future storms due to the increase water flow from the Ranch Road extension and the Buckhorn Branch development, meaning the actual flood area will be much larger.

The site plans buildings/ parking lot also appears to be within the stream buffer area and there are jurisdictional wetlands located alongside that creek. Finally, there are steep slopes on that land that suggest this project may be in code violation if built along these areas.

(3) Whether the proposed change tends to improve the balance of uses, or meets a specific demand in the Town;

Neighbor's Response: This project is in direct conflict with the stated objective of the town since it removes a proposed park and community benefit for the material benefit of one entity. "The vision for the Town of Clayton includes a thriving town where **growth contributes to the quality of life** enjoyed by long-time residents and newcomers alike; **easy access but with an atmosphere that feels smaller than it is; a system of parks and greenways that connect people and places; neighborhoods with a variety of quality living options;**"

Undoubtedly the applicant will cite "high economic impact" for this project, however Mr Stan Wendzell and BioRealty do not have any tenants for the current project. In fact they tout this during their interview with the Johnstonian Newspaper article "*County Oks Project Life Dust Incentives*" of 6-16-2023. Meaning, **economic impact is at best speculation until tenants are located and contracted.** This re-zoning is being done for a project cited as "If you build it they will come." And until they come, there will be empty buildings on the site.

So by re-zoning this site, the town is throwing away a viable and substantial community resource (the promised park) in favor of a maybe economic impact.

(4) The capacity of adequate public facilities and services including schools, transportation infrastructure, recreation facilities, wastewater treatment, water supply facilities, and stormwater drainage facilities for the proposed use;

Neighbor's Response: The town does not have existing power or wastewater treatment for this site. The county may have water at this site, though the town does not. The town will have to spend taxpayer dollars to serve this area. The builder is to install a pump station for the wastewater. As we have seen at the Flowers pump station, these release foul-smelling sewage odors at times during the day.

As mentioned before, regardless of the "best intentions" storm water will drain into the abutting creek and cause issues further downstream.

(5) It has been determined that the legal purposes for which zoning exists are not contravened;

Neighbor's Response: The fact that town staff adding this site to the comprehensive plan, after the original plan was published for the public, and during talks with the developer, may in fact represent a contraindication.

(6) It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare;

Neighbors's Response: This is incorrect. Adjoining owners are currently zoned residential. This will be detrimental to the use and value of the surrounding properties.

This project is in direct conflict with the stated objective of the town. "The vision for the Town of Clayton includes a thriving town where **growth contributes to the quality of life** enjoyed by long-time residents and newcomers alike; easy access but with an atmosphere that feels smaller than it is; **a system of parks and greenways that connect people and places**; neighborhoods with a variety of quality living options;"

The originally proposed park would prevent adverse effects on the neighbors.

Listed adverse effects from this project:

1. Stormwater runoff increases in the abutting creek.
2. Increase in downstream flooding due to impairment of wetlands alongside the creek and increase of impervious surfaces, which will increase stormwater runoff as noted in #1.
3. The stormwater and flooding may cause damage to the downstream wildlife including the endangered Dwarf Wedgemussel.
4. Loss of property value and property enjoyment due to sewage smells from the projected pump station.
5. Loss of property value due to visual impairment of utilities to feed the project. Up to 44.9% property value loss estimated by Orchard.com in their December 14, 2022 article entitled "*Power lines and property value: What you need to know*"
6. Property value loss due to industrial center noise pollution and increase traffic noise. (See "*How Does Road Noise Affect Home Value?*" Found at UpNest.com and authored by Realtor.com. Estimates are that road noise can drop a 500K home value by up to 40K)
7. Increase traffic congestion near our homes, making it harder and more dangerous to leave the driveways.
8. Visual eyesore from complex entrance.
9. Loss of farmland to supply utilities to this project.
10. Loss of patronage to existing businesses. With the installation of the sewage pump station, local businesses may need to compete with foul-smelling odors, that will be off putting to customers. Thereby reducing customer attendance.
11. Local residents may suffer adverse health effects due to chemical smells and/or sewage smells coming from this project.
12. Direct negative impacts on local businesses, including increased liabilities due to the industrial complex next door or utilities on property.
13. By re-zoning this property, most of the tree cover will be removed from the property. As with the two previous construction projects, trees will be removed and likely burned. Contributing to poor air quality in the neighborhood. This is an extreme adverse effect for people sensitive to air quality conditions like the elderly or those with asthma.
14. Heavy construction vehicles moving back and forth to the site, with increase noise pollution and damage existing roadways further.
15. This project is being touted as bio-pharmaceutical with laboratories. A chemical waste storage will need to be installed on the site. That chemical waste storage represents a risk to the neighboring properties. Improper chemical mixing can cause events as minor as noxious smells to as serious as a chemical gas cloud (See Apex Chemical Fire of 2006).
16. Given that the tenants of the complex have not been identified, but access to a creek seems to be important to plan based on the drawings and need for a pump station, one may also wonder if we will be looking at another Chemours issue in the future affecting the groundwater and drinking water of the surrounding properties. This cannot be ruled out since BioRealty cannot name tenants. Even the potential of this will drastically lower the property values of the residential units nearby because no one wants water that will cause adverse health impacts.
17. Also, re-zoning this property away from the proposed park / nature area could be seen as in direct conflict of the North Carolina State Constitution Article I Section 38 (i). Since the areas

across the street and abutting the parcel to the rear, have already been razed for residential developments, the local wildlife has been impacted. By re-zoning for industrial rather than leaving the zoning alone for open space, the town could be seen as failing to adhere to the tenants of the state constitution mandating the conservation and management of wildlife.

(7) It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.

Neighbor's Response: Incorrect. The general public loses benefits because changing to I-1 zoning removes the site from its natural state and removes the proposed park and green way connections for this area. That park would benefit the community as a whole AND satisfy the state constitution mandate to conserve wildlife. It would also fulfill the town mandate to protect natural resources found in the Unified Zoning Codes and ensure that ordinances in section 155.500A are upheld.

This project benefits 1 entity only, BioRealty, who will profit materially from this rezoning. The neighbors and the general public are losing out on a promised park for this project. And local neighbors could also sustain a lower residential property value due to unknown chemical waste, possible sewage smells in the vicinity, and other losses of property value mentioned above.

Note of importance. This re-zoning is a satellite city zone that is surrounded by neighbors of the EJT.

Finally, to quote Joni Mitchell and The Counting Crows: **They Paved Paradise To Put Up A Parking Lot.**

companies,” said Randy Jones, chairman of the Advisory Board. “The high-wage jobs that employers can bring to this park will ripple benefits across our county and ultimately across the region,” said Jones, a resident of Pine Level.

Project Life Dust marks the fourth time in two years that the County has partnered with the private sector to expand the local inventory of high-end industrial real estate. In December of last year, E.D. Parker Corporation unveiled plans for at least 275,000-sq.-ft. of Class A speculative industrial space in Benson. AdvanceTEC, a Richmond, Va. firm that designs and builds cleanroom space, and Ohio-based Al. Neyer LLC previously announced plans for developing speculative industrial space in Clayton and Smithfield, respectively.

Johnston County officials worked closely with leaders of the Town of Clayton to bring Project Life Dust to fruition. At a meeting on May 15, the Clayton Town Council agreed to its own set of economic incentives, including sale of the town-owned parcel at \$31,500 an acre. “We think this is a fantastic project,” said Patrick Pierce, economic development director for the Town of Clayton. Pierce and other town leaders had been in discussion with BioRealty about the project over the last two years. “This is a project that offers benefits across Johnston County. It builds upon the biopharma cluster that we have in the county and prepares us for additional investment,” Pierce said.

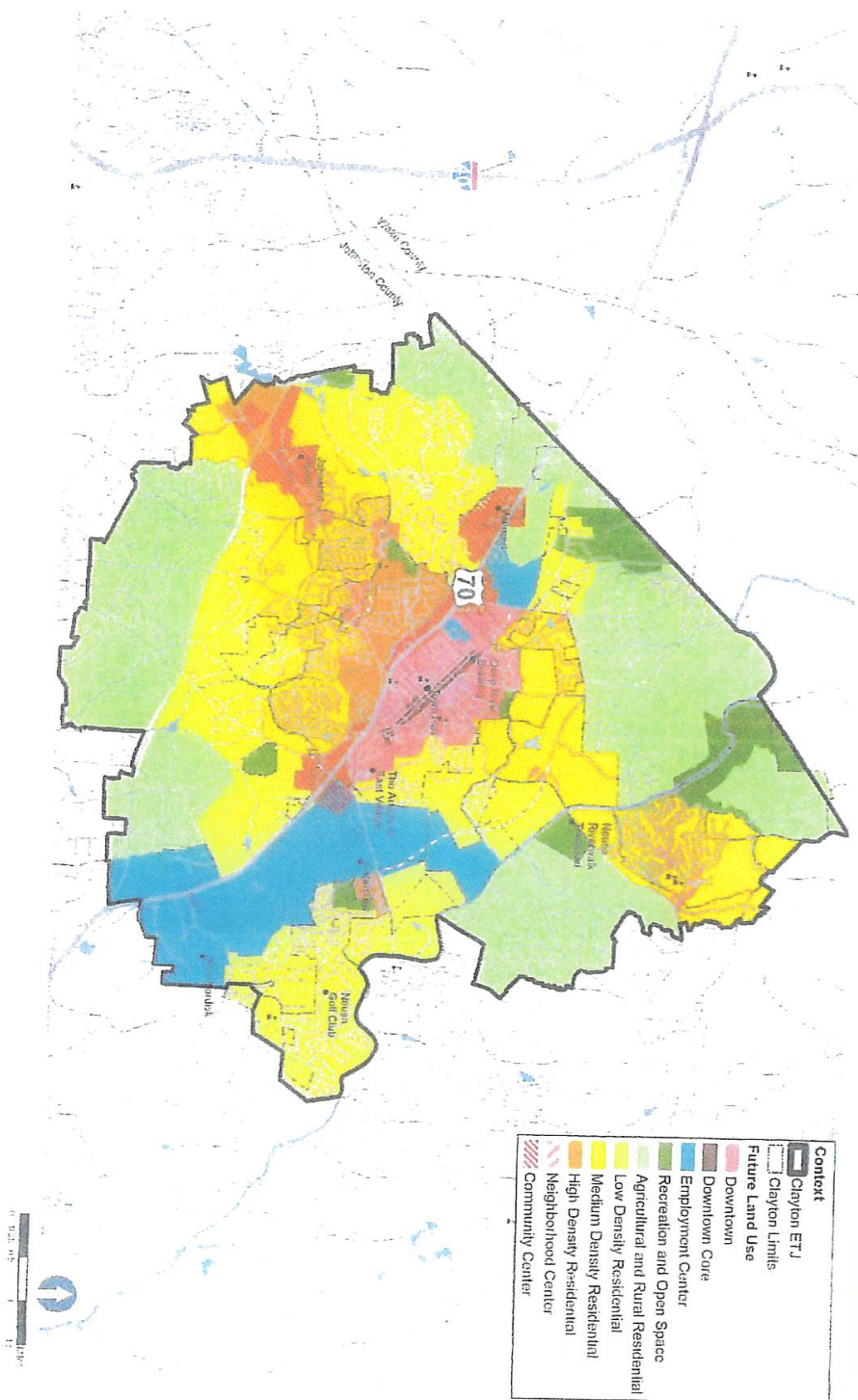
Chris Johnson, director of the Johnston County Economic Development Office, says the new life sciences park will serve as a “gateway” for the biopharmaceutical industry into the community. In seeking to remain competitive with business destinations willing to invest public funds directly in industrial sites and buildings, Johnston County implemented a building lease program wherein the county government partners with private developers to create speculative industrial real estate product. “This solution does not put the county in head-to-head competition with the private sector and it sets limits on our financial risk while ensuring we can guide private development and control our own economic destiny,” Johnson says.

Under the building lease arrangement, should no tenant or buyer be in hand by the time the development partner delivers the spec building, the county agrees to lease the facility for \$3 per square-foot up to two years. The risk-sharing mechanism enables the builder to negotiate more favorable financing terms. In return, county officials can ensure the most economically impactful employers occupy the property. “So, it’s really a win-win-win for the County, our development partners and our taxpayers,” Johnson says.

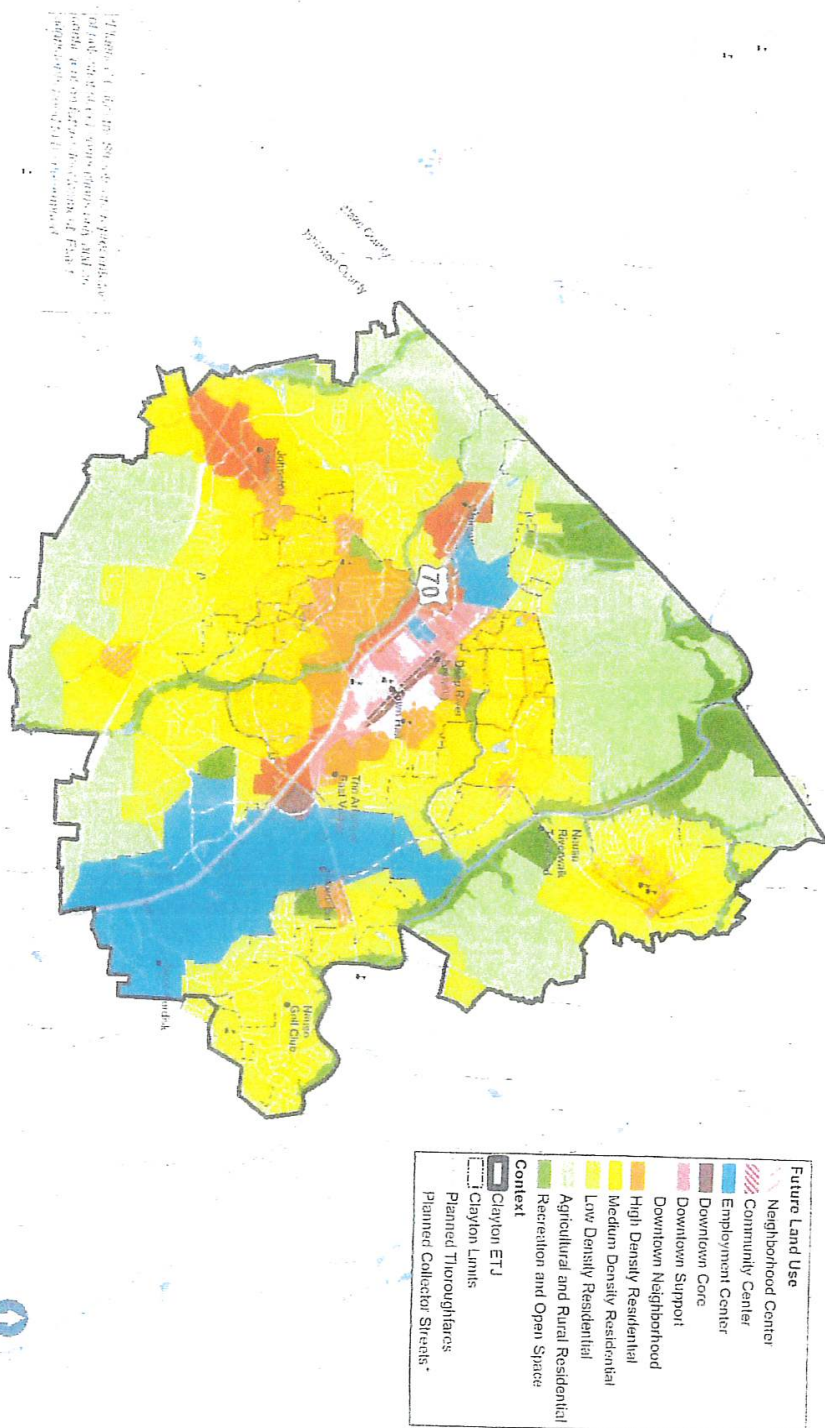
The Johnston County Economic Development Office (JCEDO) facilitates value-added interaction between government, education and the private sector in encouraging and promoting job creation and economic investment in Johnston County. A unit of county government, JCEDO collaborates with local, regional and statewide partners and allies in providing confidential location assistance to businesses and technical support to the county’s 11 municipalities. Its menu of services includes customized digital mapping, labor and wage analysis, site readiness assistance and incentive packaging. For additional information, visit www.GrowWithJoCo.com

News & Events

Future Land Use Plan – 2040 Growth Plan



Future Land Use Plan – Draft 2/21



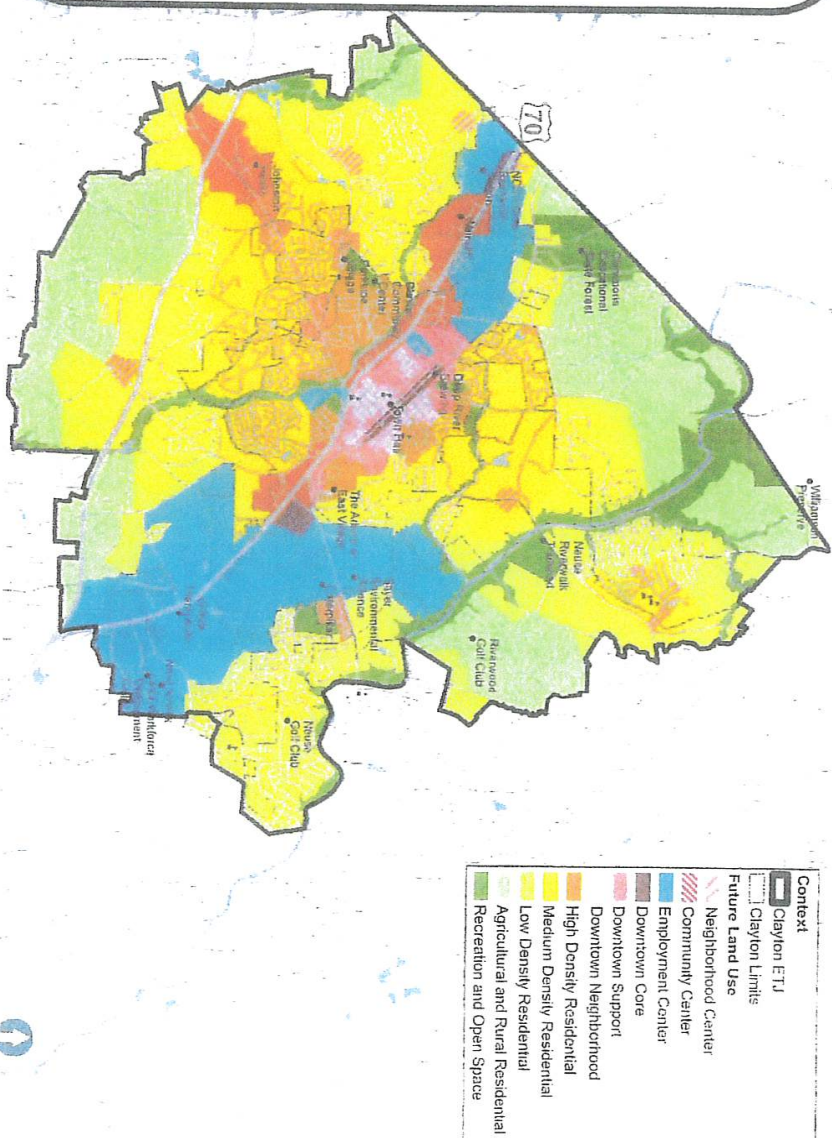
Future Land Use Plan - Draft 2/21

Has this been approved?

Future Land Use Plan – New Draft

HIGHLIGHTS

- Minor changes Neighborhood and Community Centers
- Employment Center Expansion
- Updated areas for residential growth based on utility analysis
- Floodplains shown as Open Space









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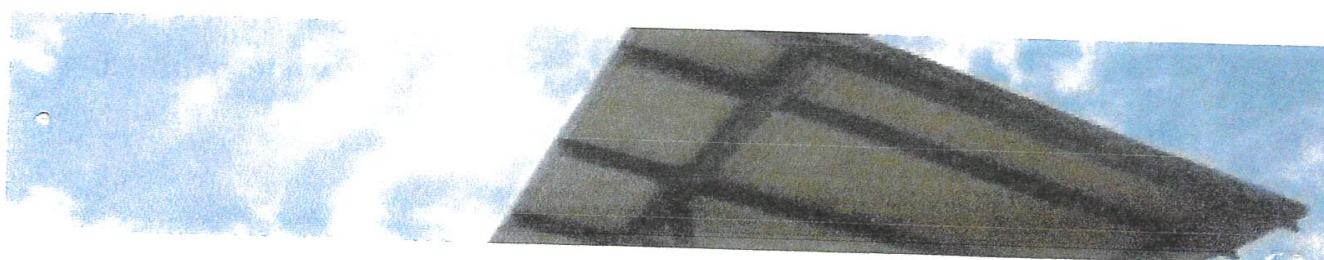
CLAYTON NEWS-STAR

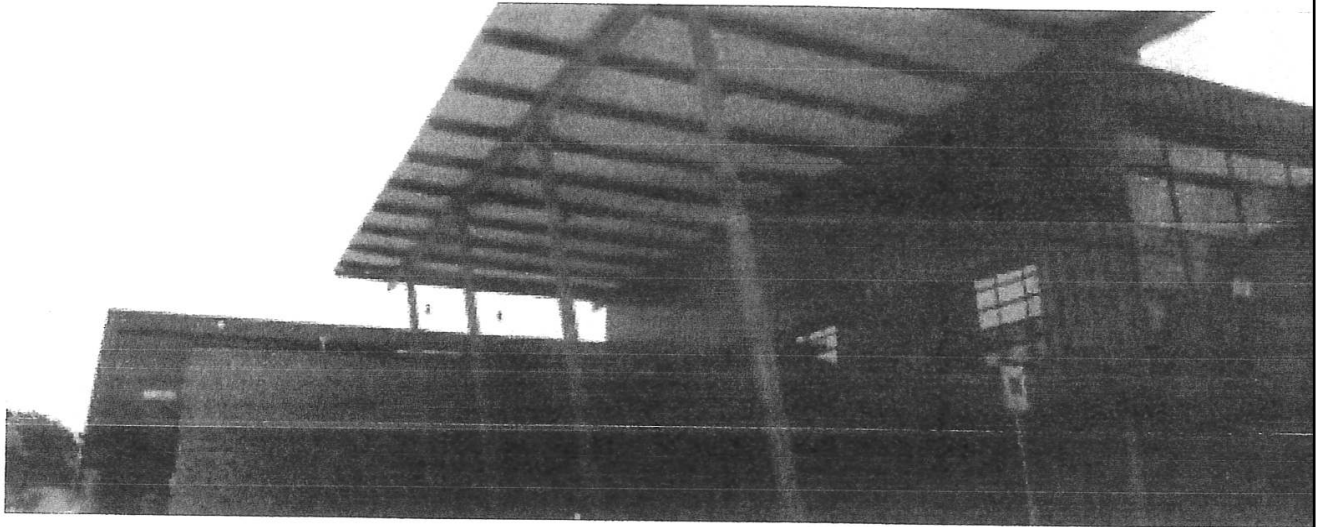
Clayton could hold bond vote in November

By Drew Jackson

jdjackson@newsobserver.com

JUNE 16, 2016 12:29 PM





A possible bond referendum in Clayton could fund the second phase of the town's Community Center, meaning a second gym, a walking track and more space. An aquatics center is not included but could come in the more distant future. DREW JACKSON jdjackson@newsobserver.com



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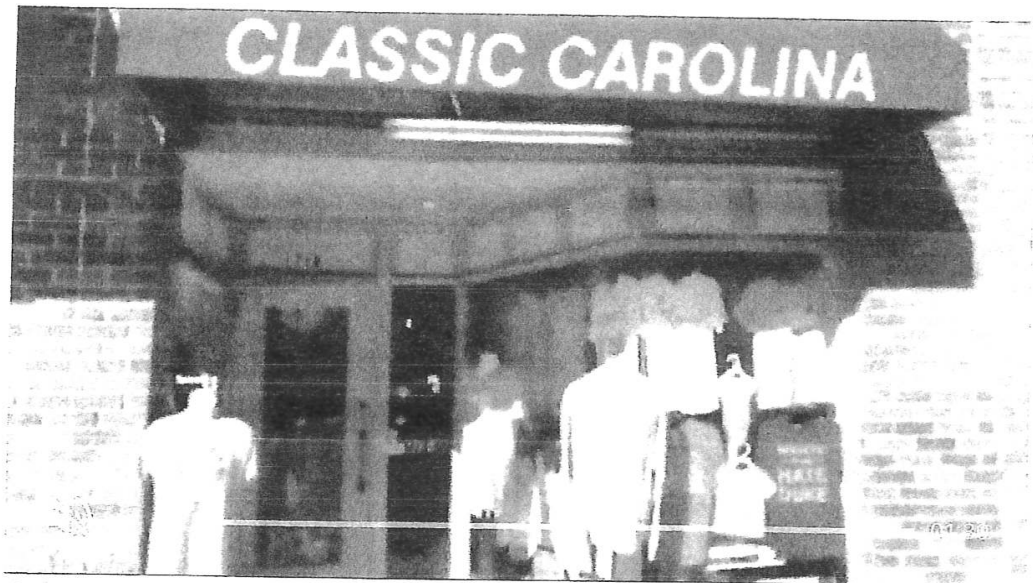
With a little more than four months until the November election, Clayton might still place a bond referendum on the ballot.

Town leaders are thinking about asking voters to borrow some \$17 million for several high-profile parks and recreation projects.

The proposed bond was one of the last things former town manager Steve Biggs put together before leaving Clayton.

With the bond dollars, Clayton would build a second gym at the Community Center, develop two parks, extend the Sam's Branch Greenway and add lights to Legend Park and East Clayton Community Park. All together, the projects total \$17.4 million, with the cost of developing one of the parks still undetermined.

TOP VIDEOS



'Classic Carolina' family ripped apart after crash kills father, son

At the town council's retreat last year, members mentioned wanting to move forward on developing town-owned parkland. Though he won't be around to see the projects through, Biggs said he brought up the bond now to give the council something to start with.

The town purchased the so-called "River Land" on the north side of the Neuse River with money from the Clayton's last bond issue in 2008. Six years later, it bought a 67-acre tract southeast of town along Little Creek Church Road.

"We went ahead and purchased those lands so we didn't lose them to a developer or economic pressures as land costs inflated," Biggs said. "When you spend capital to develop a park, people see that and appreciate that. It takes more vision and more patience to do land-banking."

On the Neuse River property, the town plans to develop an extensive and

diverse park, including an events lawn, dog park, playgrounds, ziplines and trails. Biggs said the town is still waiting on a quote for those plans. For the Little Creek Church Road property, located in a quickly growing part of town with next-to-no amenities, the town proposes six athletic fields, a playground and nature trails. That plan is projected to cost \$6.9 million.

The bond would also include the next phase of Clayton's community center. Biggs said that means a new gym and indoor walking track, plus meeting rooms and added parking. Those additions total \$9.4 million. The plan hints at an eventual aquatics center, but Biggs said the town is not prepared for and growth is so far not requiring a pool.

Biggs said that for Clayton to get the bond on the November ballot, the council would need to determine a "value not to exceed" figure by its July 18 meeting. While he compiled the plans and figures as if the town wants the referendum this year, Biggs seemed to think it was risky to hold a vote during a presidential election year.

"I think what happens in the context of a bond referendum in a general election is the referendum gets lost," Biggs said. "The advantage of doing one outside a general election is you can do a better job educating people, voters aren't as focused on national and state issues, and you can have a better-informed voter.

"A lot of times in a general election, our message about our referendum gets lost in all of what is going around a general election; the voter has less opportunity to come informed about the implications of the referendum."

Councilman Michael Grannis said the council has reached no consensus on whether to hold the referendum this year or next. But he said the risks of a general election might not compare to the benefit of polling a larger number of

Clayton residents.

“You don’t want to rush to judgment,” Grannis said about getting the bond on the ballot in a month’s time. “You want all your T’s crossed and all your I’s dotted before you do something like this, and it’s kind of tight. So right now I’m leaning more toward 2017. ... But I do believe more is better. It’s more important to me to hear from a higher number of Clayton residents.”

Drew Jackson: 919-553-7234, Ext. 104; @jdrewjackson

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Economic Benefits of Parks

Economic impact studies document the many and substantial economic benefits generated by parks. This guide identifies major studies, summarizes key findings of each and provides hyperlinks to the studies.

Economic impact studies identify a variety of economic benefits generated by parks. The studies described in this guide each analyzed one or more of these benefits, including:

- Increased property values
- Increased tax revenues
- Decreased medical costs through increased exercise
- Increased tourism revenue
- Improved attractiveness of communities to homebuyers and businesses
- Decreased stormwater treatment costs

Summary

Background

Key Economic Benefits

Parks provide a great benefit to citizens, both those who live nearby and tourists. In addition to their many environmental benefits, including preserving plant and animal habitat, decreasing air pollution, and water filtration, parks create an economic benefit for both governments and individuals. Creating well planned parks and preserving sufficient land for them can generate financial returns that are often many times greater than the money initially invested into the project, even when maintenance costs are factored in.

Homebuyers prefer homes close to parks, open space, and greenery. Proximity to parks increases property value, thereby increasing property tax revenue. Research has shown that a 5% increase in property values for houses within 500 feet of a park is a conservative estimate of the change in property value due to proximity to a park. Companies often choose to locate in communities that offer amenities such as parks as a means of attracting and retaining top-level workers.

Depending on their size, parks can draw visitors from near and far, bringing tourism revenue to local restaurants, hotels, snack shops, and stores. Parks can host festivals, concerts and athletics events, bringing additional boosts to the local economy.

Parks decrease health costs and support productivity, both through encouraging exercise and reducing air pollution. A park's plants absorb air pollutants such as nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, and some particulates, reducing the impacts they have on peoples' cardiovascular and respiratory systems. Parks provide low or no-cost recreation and encourage exercise. They bring people into nature, make outdoor recreation more accessible, and provide safe and attractive places for individuals and families to exercise and play.

Stormwater flows off of impervious surfaces like roads, parking lots and buildings, picking up pollutants and carrying them either directly to waterways or to water treatment plants. During large storms, capacity at treatment plants can be exceeded, resulting in untreated rainwater and household sewage being released into waterways. In parks, unpaved, pervious surfaces absorb rainwater, recharging ground water supplies and allowing storm runoff to be

released more slowly. Vegetation stores water and allows some to be evaporated. Reduced runoff and increased water storage can decrease the necessary size of a community's stormwater management system and leads to significant savings in water treatment costs.

Related Benefits

While this guide focuses on economic benefits, it is not meant to diminish the importance of the environmental and social benefits of parks.

Related guides at ConservationTools.org (<http://ConservationTools.org>) include:

- Economic Benefits of Biodiversity
- Economic Benefits of Land Conservation
- Economic Benefits of Trails
- Economic Benefits of Smart Growth and Costs of Sprawl

Organization of Guide

This guide presents an inventory of studies. The heading of each section is the title of a study and is hyperlinked to the ConservationTools.org (<http://ConservationTools.org>) library listing where the study can be viewed or downloaded. The organization responsible for the study is given, followed by a summary of the key economic findings of the study.

Studies of Pennsylvania Parks

The Economic Significance and Impact of Pennsylvania State Parks: An Updated Assessment of 2010 Park Visitor Spending on the State and Local Economy (http://conservationtools.org/libraries/1/library_items/1125)

The Penn State Department of Recreation, Park and Tourism Management

Prepared for the Pennsylvania Department of Conservation and Natural Resources, this study found that:

- In 2010, Pennsylvania's state parks hosted 37.9 million visitors who spent \$859 million on their trips, including \$201 million in spending by out-of-state visitors. The direct effects of this were 9,435 part-time and full-time jobs; \$227.2 million in wages, salaries and payroll benefits; and \$360.6 million in value added benefits.
- As compared to 2008 (http://conservationtools.org/libraries/1/library_items/726), there were 4.3 million more visitors and \$121 million more in visitor spending.
- This report includes both statewide and park specific analyses and a comparison the results of similar studies from other states. For example, Pennsylvania's state parks generated twice as many sales as did New Jersey's, and a similar amount to New York's.

How Much Value Does the City of Philadelphia Receive from its Park and Recreation System? (http://conservationtools.org/libraries/1/library_items/1061)

The Trust for Public Land's Center for City Park Excellence, written for the Philadelphia Parks Alliance

From the Fairmount Park system to the activities and facilities of the Philadelphia Recreation Department to the broad tourist appeal of Independence National Historical Park, parks provide Philadelphians with so many joys and benefits that many residents would not want to live in the city without them. The city's parks provide hundreds of millions of dollars of economic benefits. In 2007, the city's parks:

- Increased property tax revenue to the city's treasury by \$18.1 million due to parks enhancing the value of nearby properties.
- Generated \$5.2 million in tax receipts from spending by tourists.
- Increased the city's collective wealth through \$40.3 million in net income from tourists and \$688.8 million in increased property values.
- Saved the city \$5.9 million due to reduced stormwater treatment costs, \$1.1 billion in the value of recreation that occurred at parks, \$69.4 million in health benefits from exercise done in parks, \$1.5 million from the absorption of air pollutants by the city's trees and shrubs, and \$8.6 million in community cohesion benefits.

In summary, the park system provided the city with \$23.3 million in increased tax revenue, \$729 million in increased resident wealth, \$16 million in savings of governmental expenditures and \$1.15 billion in resident savings.

Comprehensive and National Studies

Measuring the Economic Value of a City Park System (http://conservationtools.org/libraries/1/library_items/1062)

The Trust for Public Land

- In 2003, two-dozen park experts and economists collaborated to identify the economic benefits of a city park system. While some benefits cannot be economically quantified, such as the mental health value of a walk in the woods, seven economic benefits of parks were identified. This paper describes and provides a case study for each.
- Proximity to parks increases property value and increases revenue from property taxes. Research of property values has shown that a 5% increase in property values for houses within 500 feet of a park is a conservative estimate of the change in property value due to proximity to a park. In Washington, D.C., parks range in size from the 1,754 acre Rock Creek Park to small parks surrounded by homes. The 5% average increase was applied to D.C. houses within 500 feet of a park. Because of the increased value, parks increased property values and allowed D.C. to earn an extra \$6,953,377 in property taxes in 2006.
- Parks lead to increased sales tax from spending by tourists who visit primarily because of a city's parks. Some parks, like Balboa Park in San Diego or Central Park in New York, are tourist attractions by themselves. Other parks host festivals, concerts and other events. In 2007, park-derived tourist spending in San Diego in 2007 was an estimated \$114.3 million, which generated \$8.6 million in city taxes.
- Parks provide city residents with free or low cost recreation. Because city parks are generally free to use, their value can be calculated by determining what park users would be willing to pay for a similar recreation experience in the private market. In 2006, the use of Boston's park and recreation system was valued at \$345,352,000.
- From jogging and bike paths to playgrounds, to sports facilities, parks provide a multitude of ways to stay healthy. In Sacramento, California's 5,141 acres of parks, about 78,000 residents sufficiently engage in active activities (moderate, vigorous, or strenuous activity for at least half an hour, three days a week) to improve their health. This activity created \$19,872,000 in medical savings in 2007.
- Strong webs of human relationships lead to stronger, safer and more successful neighborhoods and in some cities, parks strengthen this social capital. One measure of how parks contribute to community cohesion is the money and time residents give to their parks. In Philadelphia, this was measured by calculating the financial contributions to "friends of parks" organizations, and by volunteer hours given to improve parks. In 2007, this created a community cohesion value of \$8,600,000.
- City parks lower the cost of treating storm water and absorb air pollutants. In some cities, stormwater flows off of impervious surfaces like roads and sidewalks, picks up pollutants, and flows into waterways. In other cities, parks absorb stormwater and pollutants. During large storms, treatment capacity can be exceeded

resulting in untreated rainwater and household sewage being released into waterways. In parks, unpaved, pervious surfaces absorb rainwater, recharging ground water supplies and allowing storm runoff to be released more slowly. Vegetation stores water and allows some to be evaporated. The cost savings this provides is significant. In 2007 in Philadelphia, parks reduced runoff from rain by 496 million cubic feet. Philadelphia can treat stormwater at a cost of 1.2 cents per cubic foot. Therefore, its park system provided the city with \$5.9 million in stormwater retention.

- The plants in a city park absorb air pollutants such as nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, and some particulates, reducing the impacts they have on residents' cardiovascular and respiratory systems, reducing health-care costs and decreases in productivity. In 2005, the trees in Washington, D.C.'s parks removed 244 tons of carbon dioxide, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. This service is valued at \$1,130,000.

Economic Impact of National Parks (http://conservationtools.org/libraries/1/library_items/1133)

Headwaters Economics

<http://headwaterseconomics.org/apps-public/nps/impacts> (<http://headwaterseconomics.org/apps-public/nps/impacts>)

Headwaters Economics created this interactive web page to show how protected public lands such as national parks can play an important economic role for local communities. The web-based tool lists visits, non-local spending, and the number of jobs created in gateway communities for each of the National Park Service units.

- Visitation, tourism, and jobs related to nearby public lands annually contribute billions to regional economies while creating hundreds of thousands of private sector jobs. The economic benefits extend far beyond tourism. The greatest value of natural amenities and recreation opportunities often lies in the land's ability to attract and retain people, entrepreneurs, their businesses, and the growing number of retirees who locate for quality of life reasons.

The Benefit of Parks: Why America Needs More City Parks & Open Space (http://conservationtools.org/libraries/1/library_items/729)

The Trust for Public Land

- City parks and open space improve our physical and psychological health, strengthen our communities, and make our cities and neighborhoods more attractive places to live and work. Numerous studies have shown the social, environmental, economic, and health benefits parks bring to a city and its people.
- Homebuyers prefer homes close to parks, open space, and greenery. In Boulder, Colorado, a greenbelt added \$5.4 million to the total property values of one neighborhood. Other things being equal, there was a \$4.20 decrease in the price of residential property for every foot one moved away from the greenbelt, and the average value of homes next to the greenbelt was 32% percent higher than those 3,200 feet away.
- Parks attract tourists, filling hotel rooms and bringing customers to local stores and restaurants. As community signature pieces, parks offer a marketing tool for cities to attract businesses and conventions. Parks can be used to hold festivals, concerts and athletics events, bringing additional boosts to the local economy.
 - In Minnesota, Chain of Lakes received 5.5 million visitors in 2001, making it the state's second-biggest attraction after the Mall of America. At Chain of Lakes, residents and tourists enjoy biking, walking, jogging, rollerblading or skiing around five city lakes attached by a 12-mile system of walking and biking paths. Each of the lakes is surrounded by parkland featuring a variety of amenities.
- Green space in urban areas provides substantial ecosystem services. The U.S. Forest Service calculated that over a 50-year lifetime, one tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution

control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil erosion.

- A park's trees store water, reducing the rate at which it flows into a city's stormwater treatment facilities. Parks increase the amount of a city's pervious surfaces, which allow rainwater to infiltrate into the ground. Incorporating trees and parks into a city's infrastructure can decrease the necessary size of the city's stormwater management system.
 - Garland, Texas' tree cover prevents 19 million cubic feet of stormwater from having to be treated, a savings of \$38 million. Building facilities to handle that amount of stormwater would cost \$38 million. Instead of a flat stormwater treatment fee, the city now bases the fee on a property's impervious surface and the volume of stormwater the property generates, encouraging property owners to plant more trees.

The Economic Benefits of Open Space, Recreation Facilities and Walkable Community Design (http://conservationtools.org/libraries/1/library_items/1063)

Active Living Research

This article reviews a sizable body of peer-reviewed and independent reports on the economic value of outdoor recreation facilities, open spaces and walkable community design. It focuses on benefits that accrue to nearby homeowners and to other open space users.

- Open spaces such as parks and recreation areas can have a positive effect on nearby residential property values and can lead to proportionately higher property tax revenues for local governments (provided municipalities are not subject to caps on tax levies). A study of 193 parks in Portland Oregon found that parks increased the value of homes within 500 feet of a park by \$845 to \$2,262. Another study of that area found that large natural forest areas created an even larger rise in property values, an average of \$10,648 for homes within 1,500 feet of the forests, compared to an average increase of \$1,214 for homes within 1,500 feet from urban parks or \$5,657 for specialty parks (playgrounds and skate parks). This increase may allow a park or recreation area to pay for itself, as was the case for a \$5.4 billion green belt in Boulder, Colorado, though not if there aren't sufficient nearby residential properties. Increased property taxes may not be able to completely cover a parks cost. This was the case for a 7.9-mile greenbelt in Austin, Texas, where the city was able to meet 28.4% of the annual debt charges from the greenbelt's construction.
- The houses within 500-600 feet of open space receive the greatest increase in property value. Community parks of at least 30 acres increase the value of properties out to 1,500 feet, but 75% of the premium value generally occurs within 500-600 feet. Increasing the size of a park tends to increase the rise in property values, but proximity to the park has a greater impact than park size. Access to a park is important, and direct paths to a park and parks surrounded by roads are both factors that will cause a greater boost to nearby property values.
- The increase in property values due to proximity to open space occurs in urban, suburban and rural areas; the impact is greatest in urban areas. In rural and suburban areas, it is the houses near preserved open spaces and farmland that are associated with increases in property value.
- It is less expensive to provide roads, water and sewer services to homes in compact, walkable developments than it is to homes in large, suburban developments. A study found that Rhode Island could save more \$1.4 billion over 20 years if the state's next 20,000 housing units were built within existing urban areas instead of in undeveloped areas. The savings are due to decreased costs for providing roads, schools and utilities as well as the benefits of not losing agricultural land to development and the prevention of decay of urban centers.
- Some studies estimate that using a compact, walkable neighborhood design can save developers 32% on the cost of providing infrastructure services.
- Open space tends to require fewer municipal services than residential, so land preservation can decrease a community's tax burden. The design elements used in these neighborhoods can also create a tax savings on infrastructure. In one such neighborhood, swales were used to direct stormwater over porous soils, which

irrigated nearby agricultural fields and saved \$800 per lot compared to conventional storm sewer construction.

- The parks, open spaces and greenbelts offered by compact, walkable neighborhoods, (also known as traditional neighborhood development), create higher housing prices, create marketing opportunities, and tend to cause the neighborhood's houses to sell more quickly than conventionally designed neighborhoods.

How Cities Use Parks for Economic Development (http://conservationtools.org/libraries/1/library_items/1132)

American Planning Association

This study gives five key points on how city parks are a source of positive economic benefits and provides case studies for each. City parks:

- Increase real property values
 - Chattanooga, Tennessee: In the early 1980's, the city worked to lure middle-class residents back to the city, which faced rising unemployment and crime, polluted air, and a deteriorating quality of life, by cleaning the air, acquiring open space, and creating parks and trails. Property values rose by more than \$11 million, a 127.5% increase.
- Increase municipal revenues
 - Chattanooga, Tennessee: The city's work in the early 1980's to improve quality of life resulted in a 99% increase in combined city and county property tax revenues between 1988 and 1996.
 - Shopping Districts: Prices for products in districts with trees are an average of 11% higher than in treeless districts. The quality of products are rated 30% higher in districts with sidewalk landscaping than in those without.
 - Oakland, California: The East Bay Regional Park district stimulates an estimated \$254 million a year in park-related purchases.
- Attract and retain affluent retirees
 - A 1994 study of retirees asked respondents to indicate the importance of 14 features in their decision to move to a new location. Their top three factors (in order of importance) were scenic beauty, recreational opportunities and mild climate.
- Attract knowledge workers and talent to live and work
 - Industry today is composed of smokeless industries, high technology, and service-sector businesses, collectively referred to as the "New Economy." The workers in the New Economy, "knowledge workers" sell their knowledge, as opposed to physical labor, as the main source of wealth creation and economic growth. They work for companies tied not to a certain location in order to achieve a competitive advantage but to retaining and attracting more talent. Knowledge workers prefer places with a diverse range of outdoor recreational activities, from walking trails, to cycle friendly cities, to rock climbing. A 1998 study found that quality of life in a community increases the attractiveness of a job by 33 percent.
- Attract homebuyers
 - A 2001 survey by the National Association of Realtors found that 57% of potential homebuyers would choose a home close to parks and open space over one that was not. Fifty percent would be willing to pay 10% more for a home located near a park or protected open space.

How Smart Parks Investment Pays Its Way (http://conservationtools.org/libraries/1/library_items/1064)

New Yorkers for Parks and Ernst & Young, LLP

- An extensive analysis of New York City's parks shows that strategic investment in revitalizing parks yields significant economic returns to the city, investors and neighboring communities. While not all park

investments have generated economic returns, strategic planning, effective maintenance and community involvement can lead to successful park investments that create economic revitalization.

- City wide, across different demographic areas, parks have created economic returns. There are cases where city parks increased the value of nearby commercial real estate by up to 225% and residential real estate by up to 150%. City parks have caused turnover rates to drop to less than 1%. Park improvements have been paid for by returns from increased park use and concessions.
- One case study provided is Bryant Park. Opened as a public space in the 1880s, it has seen high and low points, but by the 1960s its decline was severe and in the 1970s it was known for crime and drugs. An additional assessment on adjacent properties and public and private funds was used for a decade long work to completely overhaul the park. In 1991, a new Bryant park opened, with improved maintenance and security, restored sculptures, and new concessions, facilities and events.
 - Approximately 20,000 people visit it each day. Moveable chairs attract nearby workers on lunch breaks, and local businesses view the park as an employee amenity and use the park for outside lunch meetings. The park is a tourist draw and residents come by the thousands for outdoor movie screenings, free concerts, a free outdoor library and the chance to enjoy fresh air in the center of Midtown.
 - Financially, the city and the local business owners made a sound investment. The entire neighborhood has become more desirable. Between 1990-2002, asking rents for commercial office space near Bryant Park increased between 115% and 225% as compared to increases ranging from 41% to 73% in the surrounding submarkets.

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The Trust for Public Land conducted an economic analysis of the return on Pennsylvania's investment in land and water conservation through the Keystone Recreation, Park, and Conservation Fund and found that every \$1 invested in land conservation returned \$7 in natural goods and services to the Penn...

Economic Benefits of Land Conservation: A Guide (/library_items/1054-Economic-Benefits-of-Land-Conservation-A-Guide)

The conservation of natural lands and of working farms and forests can generate financial returns, both to governments and individuals, and create significant cost savings. [Print version of ConservationTools.org guide]

The Economic Benefits of Seattle's Park and Recreation System (/library_items/1515-The-Economic-Benefits-of-Seattle-s-Park-and-Recreation-System)

Study evaluates the economic value of Seattle's parks, related to property value, tourism, direct use, health, community cohesion, clean water, and clean air. The parks generate nearly \$20 million in tax revenue, boost property values by \$80 million, and save residents \$64 million in medical costs.

The Economic Benefits of the Park and Recreation System in San Jose, CA (/library_items/1516-The-Economic-Benefits-of-the-Park-and-Recreation-System-in-San-Jose-CA)

By providing park areas and access to an array of free or low-cost outdoor activities, such as biking, exercising, exploring nature, gardening, hiking, picnicking, swimming, walking, and wildlife viewing, San José generates numerous economic benefits within the local community. Parks, trails, and c...

The Economic Benefits of Johnson County Park and Recreation District (/library_items/1519-The-Economic-Benefits-of-Johnson-County-Park-and-Recreation-District)

Study analyzes the economic benefits of parks and trails in Johnson County, including boosted property values, stormwater management, tax revenues, and tourism.

The Economic Benefits of San Francisco's Park and Recreation System (/library_items/1520-The-Economic-Benefits-of-San-Francisco-s-Park-and-Recreation-System)

Study calculates the economic benefits of San Francisco's parks, including \$431 million net income from tourist spending and \$122 million in boosted property values.

The Economic Benefits of Cleveland Metro Parks (/library_items/1521-The-Economic-Benefits-of-Cleveland-Metro-Parks)

Study finds that Cleveland-area parks and trails enhance property values, provide recreational opportunities, improve human health, attract visitors, and provide natural goods and services such as filtering air pollutants and managing stormwater. Additionally, they support local jobs, boost spend...

The Economic Benefits of the Park and Recreation System in Mecklenburg County, NC (/library_items/1522-The-Economic-Benefits-of-the-Park-and-Recreation-System-in-Mecklenburg-County-NC)

Study calculates the economic benefits of the county's parks, including \$19 million net income from tourist spending, \$10 million in boosted property values, and \$4 million in savings from reduced air pollution.

Disclaimer

Nothing contained in this document is intended to be relied upon as legal advice or to create an attorney-client relationship. The material presented is generally provided in the context of Pennsylvania law and, depending on the subject, may have more or less applicability elsewhere. There is no guarantee that it is up to date or error free.

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HOMEPAGE

Nonprofit helped seal Clayton land deal

BY NASH DUNN - NDUNN@NEWSOBSERVER.COM

AUGUST 18, 2014 7:25 AM



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The Town of Clayton has signed a contract to purchase this 67-acre property on Little Creek Church Road.
ndunn@newsobserver.com



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A conservation group worked between the Town of Clayton and a landowner to expedite a \$1.2 million deal for future park land.

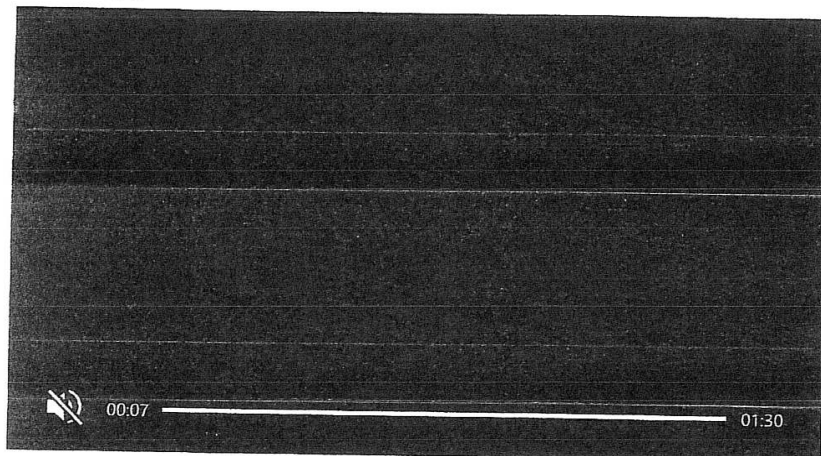
The North Carolina branch of The Conservation Fund facilitated the agreement that will allow Clayton to buy about 67 acres on Little Creek Church Road. The town has signed a contract for the land and plans to complete the purchase later this month.

The nonprofit, registered in Maryland and headquartered in Virginia, approached the town earlier this year about the possibility of banking more park land. Town Manager Steve Biggs said he had an existing relationship with one of the nonprofit's employees, David Proper, who knew about the town's desire to add park land in southeast Clayton.

Biggs said he worked with Proper in the past, when Proper worked for Wake County.

The Conservation Fund negotiated with the landowner, the Devra S. Massey Trust. Trustee Devra S. Massey, of Falls Church, Va., could not be reached for comment.

TOP VIDEOS



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On June 27, the trust sold the land to The Conservation Fund for \$1.2 million. Clayton will now buy the property from the nonprofit for the same price.

“When you have a good relationship, it pays off,” Biggs said, adding that The Conservation Fund also had a good relationship with the seller. “The seller understood and appreciated the value in public parks. Some people are strictly interested in the development interests because they think they can get more money.”

The Conservation Fund has conserved more than 211,000 acres across the state. Bill Holman, the nonprofit’s North Carolina director, said the group works with local, state and federal agencies to acquire land for parks, wildlife refuges and forests.

Tax returns show the nonprofit receives most of its funding through grants and contributions from foundations, corporations, individuals and government programs. The town paid for the nonprofit’s \$35,000 in soft costs at the site, which included services like surveying, Biggs said.

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Both Biggs and Holman said The Conservation Fund’s expertise in land negotiations helped expedite the deal, one Biggs said took less than six months.

“One of the principles we offer is that conservation real estate is what we are good at and can focus on full time,” Holman said. “They aren’t buying park land every day.”

The Little Creek Church property is vacant land with fields and trees. Johnston County land records show a one-acre pond.

By this fall, Clayton taxpayers could own nearly 200 acres of untouched land on the northeast and southeast sides of town. That includes the Little Creek Church Road property and two parcels on Covered Bridge Road. The town owns an 80-acre tract on Covered Bridge and is waiting to buy an adjoining 39 acres, pending an environmental agreement with the state.

The town plans to turn the Covered Bridge Road properties into a nature park along the Neuse River. It hasn't yet talked about what to do with the Little Creek Church land.

"We will bring in neighborhood interest, stakeholders and users," Biggs said. "A consultant, based on what they hear, will bring back a master plan."

Biggs said in two to three years, the town would look to use bond dollars to develop both the Covered Bridge and Little Creek Church parks.

When asked if the town, which currently operates six parks, two greenways and a community center, is interested in buying more land, Biggs said, "We are finished land banking for a while."

Conversation

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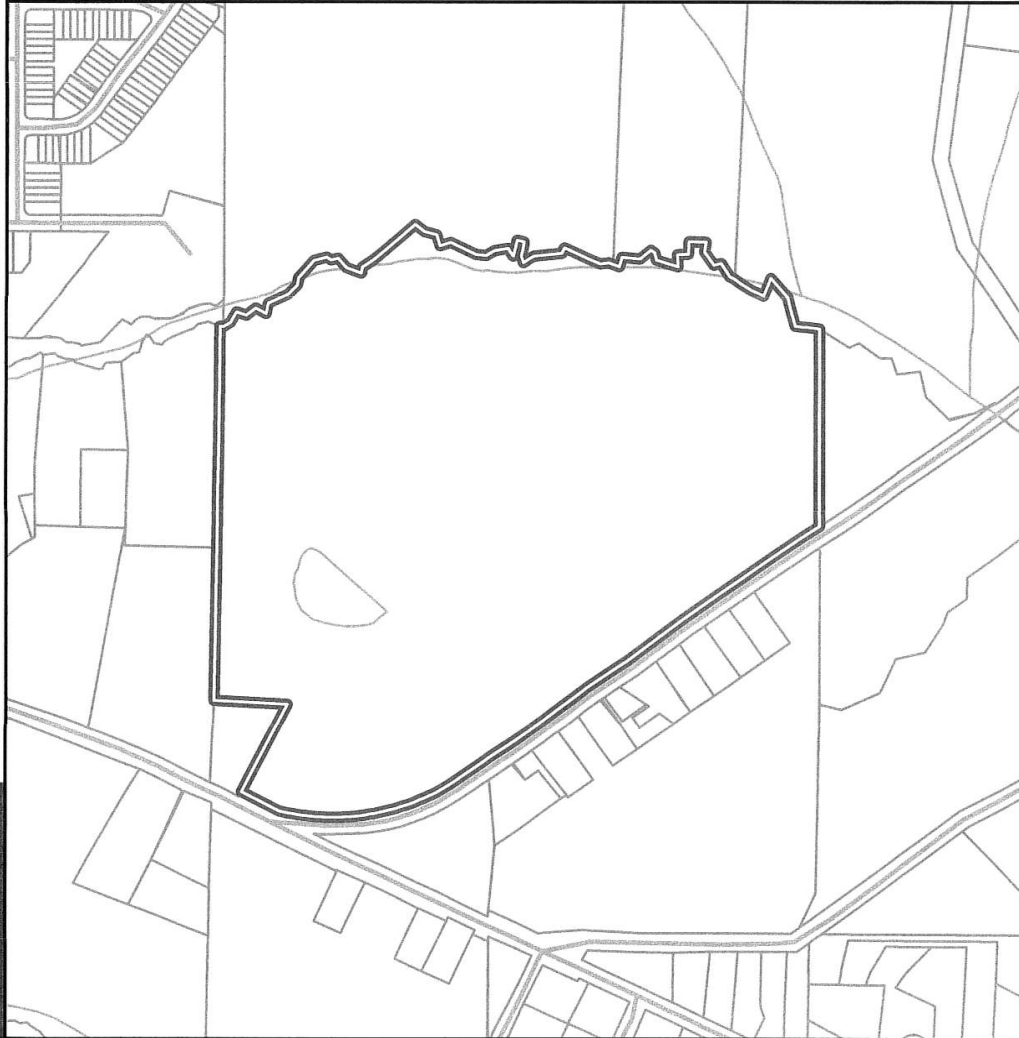
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X Coordinate: 2164935.4415588
Y Coordinate: 682719.07523435
id: 05H04046H
Tag: 05H04046H
NCPin: 166814-42-8880
Mapsheet No: 166814
Owner Name 1: TOWN OF CLAYTON
Owner Name 2:
Mail Address 1:
Mail Address 2: PO BOX 879
Mail Address 3: CLAYTON, NC 27528-0879
Site Address 1:
Site Address 2:
Book: 06073
Page: 0046
Market Value: 452270
Assessed Acreage: 67.100
Calc. Acreage: 67.100
Sales Price: 500
Sale Date: 2021-10-07
Township: Clayton
Water District: N/A
ETJ: Clayton
City Limits: Clayton
Town Zoning: R-E
County Zoning: N/A
OverLay Zoning: N/A

Scale: 1:6451 - 1 in. = 537.58 feet

(The scale is only accurate when printed landscape on a 8 1/2 x 11 size sheet with no page scaling.)

Johnston County GIS
September 13, 2023



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Power lines and property value: What you need to know

Written By: Jacqueline DeMarco

Updated December 14, 2022



In this article:

- [Do power lines decrease property value?](#)
- [How much do power lines decrease value?](#)
- [Pros and cons of living near power lines](#)



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There are certain real estate “rules” we tend to take at face value without looking into the issue on our own. One of these rules is that you don’t want to buy a house near power lines. You may have heard warnings all your life about how power lines decrease the value of a property and in this case, the rumors are true. You should expect property that is located by power lines to sell for significantly less than similar homes not near property lines.

The effects of power lines on property values may be enough to scare some potential buyers off, so let’s look at why power lines damage property values, how much value one should expect to lose, and if health issues truly are a concern.

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Do power lines decrease property value?

The short answer? Yes, power lines decrease property value. Whether or not that fact is truly as bad as it seems is something we’ll examine a bit further on. But for now, let’s try to understand *why* power lines cause property values to drop.

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they tend to block views. Sound plays just as big of a factor as sight. If a property is too close to a power line, the residents have to listen to the humming sound they produce when trying to relax in their own backyard.

While these concerns may be easy to overlook for some, one aspect of power lines that many can't ignore is the rumored health concerns. We'll break these health concerns down shortly, but for now it's worth noting that no research has proven any solid links between the proximity to power lines and medical issues.

One of the biggest hurdles when you live near power lines is quite burdensome. If a home sits right under power lines, there will be restrictions regarding how the homeowner can utilize their property. Landscaping especially causes complications, because trees can become tangled with power lines.

How much do power lines decrease value?

How much power lines decrease the value of a home varies, but many studies have been done on this issue and can give you a ballpark idea of what to expect.

A 2018 study from the Journal of Real Estate Research found that vacant lots near high-voltage power lines sell for 44.9% less than equivalent lots that aren't located near power lines. If you take a step back, a lot that is located within 1,000 feet of transmission lines tends to sell for 17.9% less.

Pros and cons of living near power lines

While there are both pros and cons of living near power lines to consider, many people tend to focus on the negatives here. While the negative aspects of power lines are hard to ignore, in some cases the benefits that come along with living near them may truly be worth it to a homebuyer.

Pros

- **They make a property more affordable.** Those that struggle to afford a home in an expensive area may find buying in neighborhoods with power lines more attainable. While your resale value may be worth less than other homes in the area, you'll also spend less when it comes time to buy the home. Plus, the less your house costs, the less your property taxes are. That said, Orchard may be able to help you to afford a more expensive home by [turning you into a cash buyer](#).
- **You'll have less competition.** In a competitive housing market, buyers may find that homes near power lines are easier to place a successful offer on. Some unsightly power lines may be worth not getting caught up in a bidding war.
- **Avoid high HOA fees.** Power lines tend to be a fixture in older neighborhoods, which usually have lower [HOA fees](#) than newer neighborhoods, if they have them at all. If you want to save on housing costs, you may appreciate not paying HOA fees in perpetuity.

Cons

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property values.

- **They're not aesthetically pleasing.** Power lines aren't super attractive and block nice views.
- **People have health concerns.** There are widespread concerns that the electromagnetic radiation generated by power lines causes cancer. Even though scientific research has yet to strongly confirm these claims, these fears are very damaging to property values.
- **There are restrictions.** You need to plan landscaping and certain construction projects around power lines. If a power line goes directly over your property, you may run into a lot of annoying property restrictions to accommodate them.
- **Noise can be an issue.** If you buy a home very close to power lines, you may be stuck listening to humming noises on an ongoing basis.

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Expected Home Sale

Price 

\$250,000

Estimated Net Proceeds

\$125,000

Remaining Mortgage

Owed 

\$0

Estimated Net Proceeds

\$125,000

Estimated Net Proceeds

\$125,000

Estimated Net Proceeds

\$125,000

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What are the health effects of living near power lines?

There is widespread concern about the health effects of the electromagnetic fields (EMFs) that are generated by power lines. Unfortunately, studies have not been able to disprove these concerns. On the flip side, no research has indicated that these concerns are valid either. The World Health Organization (WHO) and other major agencies have looked into this issue and have yet to confirm adverse health consequences caused by the EMFs associated with power lines.

There are rumors that EMFs cause cancer, miscarriages, birth defects, heart abnormalities, and other health issues, but there is no conclusive evidence to support these claims. While some studies have found correlations between power lines and cancer, these studies did not confirm how much distance from power lines is considered to be safe or how much exposure leads to health issues.

If you have your heart set on a property near power lines and are concerned about potential health effects, you can contact your local electric utility company to request an on-site reading to better understand what the property's EMF levels are like before you buy.

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between you and the power lines. Once you know what type of power lines are nearby, you can determine just how far your property needs to be from them to avoid potential EMF effects.

- 133 kV Power lines: 100 feet distance
- 230 kV Power lines: 150 feet distance
- 345 kV Power lines: 250 feet distance
- 550 kV Power: 350 feet distance

Once you're 500 feet away, it's no longer possible to measure the EMF effect of power lines, so you should be able to rest a little easier knowing you're a good distance from them.

Even though power lines negatively impact the value of a property, they don't necessarily make or break your ability to sell a home. There are plenty of house hunters who would be willing to overlook power lines in favor of skipping out on bidding wars and paying HOAs.

Want to learn more about other factors that can negatively impact the value of a home? These are [11 factors that can impact your home appraisal](#).



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Contributing Writer at
Orchard



Based in the Bay Area, Jacqueline has over eight years of experience covering real estate, personal finances, and money management. Her writing has been featured in LendingTree, The Balance, Bank Rate, Magnify Money, and Apartment Therapy, among others.

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How Does Road Noise Affect Home Value?

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by Cody Tromler August 23, 2022



Concerned About Road Noise?

Road [noise](#) can be one of the biggest nuisances when owning a home. It can prove difficult when [selling](#). It can also be a major factor in deciding if a home is worth purchasing.

Learn what is noise pollution, and how to navigate the pitfalls of living in a home consumed with noise pollution, below. There are many things to consider when buying a home with road noise. There are also many ways to curb a noisy residence.





What is noise pollution?

Noise pollution is generally any loud or disruptive noises. It could be disrupting someone's sleep, work, or life, but no matter what, it's generally considered undesirable, especially when you're talking about real estate.

Road Noise and the Value of a Home

Negative Factors of Road Noise

A noisy atmosphere is a sure way to drive down the value of a home. A home valued at 500K can drop nearly \$40,000 in value when affected by road noise pollution. A recent study showed 50% of buyers won't consider a home with road noise.

The noise drives down the overall value. Safety of children and pets are also factors.

Road noise pollution also has negative effects in other areas such as:

- Lack of privacy in your home
- Dust and pollution
- Parking for yourself or guests

- Negative health effects
 - Hypertension
 - Sleep disorders

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Benefits of Road Noise Pollution

Living with road noise doesn't have to be all bad news. One upside is non-urban homes with road noise will sell at a lower price than others. There are plenty of pros that can be taken from living in a busy area.

- A vibrant area with plenty of activity
- Access to transportation and recreation
- More businesses
- Schools and security nearby

Homes that are in heavily populated areas like San Francisco will sell at a higher price. This will benefit you as a seller. [Transit hubs](#) are often listed with a 15% increase in value.

Tuning Out the Noise

Hope is not lost when living in a home surrounded by road noise. There are many options to look into when attempting to have a peaceful living.

A [water feature](#) has been one of the top ways of providing "white noise." A list of water features include:

- Fountains
- Waterfalls

- Birdbaths
- Koi ponds

These features range from high to low in prices but will be sure to drown out the noise. You also will have these water features as a way of increasing your home value.

Water features also run as an extra expense. Maintenance can be an area that will prove costly. You must also consider the effect it may have on your water bill.

Be mindful of potential buyers not enjoying the idea of a water feature. If you are planning on living in your property long term, then it may be a more concrete solution.

Other Noise Cancelling Options

It doesn't stop at water features either. You also have plenty of other options in terms of cancelling out the road noise that has disturbed the peace.

- Planting trees: serves as a method of sound absorption
- Building a partition: acts as a way of sound deflection
- Plant coatings: coatings on outdoor surfaces refract sound

Features added to your home can also be used as noise cancellers. Triple pane windows can be ways to reduce the sound of the outside. Solid exterior doors are also ways to block loud noises from nearby roads.

You can also add features to your doors to help cancel out noise. Adding rubber/vinyl stripping to your doors can help cancel out noise.

Selling with Road Noise

Selling a home with road noise doesn't mean doom and gloom. You have plenty of options when preparing to sell at a high price.

Understanding your locale is important when listing your home. Knowing what your home is around will help you better list at a reasonable price.

Cancel out the road noise with an inviting exterior. Putting time into landscaping will better help buyers see past a noisy atmosphere. Landscaping could also work as a noise canceling barrier.

It is important that you don't spend more than what you could make when preparing to list your home. You also can consider selling your home as a commercial space if your zoning allows it.

Buying with Road Noise

There are plenty of steps to take when considering a home with possible road noise. You must do your research before placing an offer on your potential home.

Looking up the location of your potential home is important to get a feel for what is around. There are plenty of noise creators to be aware of:

- Highways
- Train tracks
- Industrial businesses
- Airports

Measuring the decibel levels around your home is important when gauging noise pollution. There are plenty of tools to purchase that will do so. Understanding the decibel levels will help prepare you on how to insulate your home.

Decibel levels of road noise can be at least 50 feet away from the road. It is important to consider noise levels at different times of the day. Road noise may differ when considering morning to evening.

Sound levels change depending on the temperature. If living in the Midwest, then the road noise may differ from winter to summer. Sound waves travel slower in the cold.

This may not benefit you when living on the west coast. Noise can move at a quicker frequency in high temperatures.

You also should consider the type of road noise that is being heard. Some living near heavy traffic have stated that they get used to the sounds of traffic.

Working with a Top Realtor

[Working with UpNest](#) will ensure you have a realtor that can help you block out the noise. With expert agents that will compete for you, you will win with thousands saved in commission.

You will have top rate agents at your fingertips when you work with UpNest, which is owned by parent company [Realtor.com](#). These agents

may also have suggestions on deadening the road noise and making for a more peaceful night. Whether buying or selling, a realtor from UpNest is a surefire way to get the best deal.

UpNest is a no-cost service for home sellers and buyers to find the best real estate agents locally. The UpNest platform allows you to compare multiple agents in your area so you can compare reviews, commission rates, previous sales, and more.

Our network agents have been carefully vetted and often offer competitive, lower than average commission rates to UpNest customers. There is no obligation to sign up with one of our network Realtors, but when you can potentially save thousands on commission – why wouldn't you? If you're ready to get started, just enter your zipcode below!

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What is noise pollution and its effects?

Noise pollution is any unwanted sound that affects health and well-being. There are a number of drawbacks to noise pollution. Exposure to loud noise can cause high blood pressure, heart disease, sleep disturbances, and stress. These health problems can affect all age groups, especially children.

What is noise pollution Why is it harmful?

Noise pollution occurs when unwanted sounds enter the environment. The potential health effects of noise pollution include increased stress levels, sleep disturbance, or hearing damage. Some examples of noise pollution sources include : construction.



Dwarf Wedge Mussel

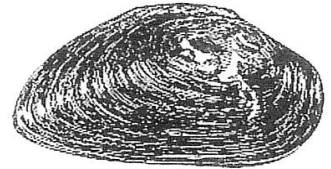
Scientific name: *Alasmodonta heterodon*

New York Status: Endangered

Federal Status: Endangered

Description

The dwarf wedge mussel is a small freshwater mussel that rarely exceeds 1.5 inches (38 mm) in length. It is brown or yellowish-brown in color. Adult mussels are filter-feeders, feeding on algae and other small suspended particles. They spend most of their time buried almost completely in the bottom of streams and rivers.

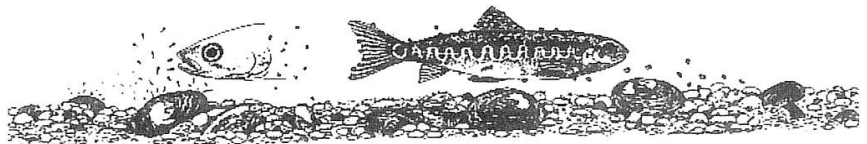


Dwarf Wedge Mussel

Life History

The dwarf wedge mussel is sexually dimorphic, with separate sexes, unlike some mussels which are hermaphroditic, with individuals having both male and female reproductive organs. Even so, the dimorphism is very subtle; routine determination of sex in dwarf wedge mussels is at best difficult. Male dwarf wedge mussels release sperm into the water column during the mid-summer or fall. Females collect the sperm while siphoning water for food; the eggs are then fertilized and kept within the female until they are released the following spring. By then, each egg has developed into a parasitic larvae called a glochidium. After release from the female, the glochidium attaches itself to a fish with the aid of a small hook-like appendage. Mussel glochidia are generally species-specific and will only live if they find the correct host. With dwarf wedge mussels, the right hosts are small bottom-dwelling fish, the tessellated darter (*Etheostoma olmstedii*) and the mottled sculpin (*Cottus bairdi*). It appears that the glochidium receives little nutrition from the fish, but uses it only as a means of dispersal. After several weeks, the glochidium detaches itself from the unharmed fish and drops to the river bottom. It is then a juvenile mussel.

1. Eggs, carried in the female's gills, are fertilized as sperm-laden water passes through.
2. The "glochidia" attach to a host fish where they develop for a time.
3. Juvenile mussels detach and sink to the bottom where they continue to develop.



Dwarf Wedge Mussel Life Cycle

Many mussels have lifespans that range upwards of 20, 30 or even 100 years. The dwarf wedge mussel is considerably different in this regard, though, as it appears to only live about 10 years. Adults must therefore be constantly replaced to maintain a viable population.

Distribution and Habitat

The dwarf wedge mussel is found at 17 sites in seven Atlantic Coast drainages. These are located in New Hampshire, Vermont, Connecticut, New York, Maryland, Virginia, and North Carolina.

Typical habitat for this mussel includes running waters of all sizes, from small brooks to large rivers. Bottom substrates include silt, sand and gravel, which may be distributed in relatively small patches behind larger cobbles and boulders. The river velocity is usually slow to moderate. Dwarf wedge mussels appear to select or are at least tolerant of relatively low levels of calcium in the water.

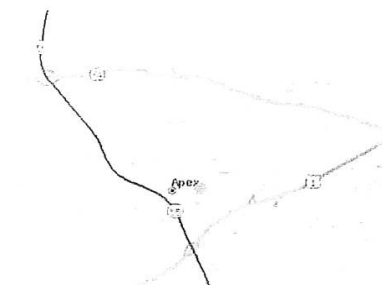
Status

This mussel was once found at 70 locations in 15 major Atlantic Coast drainages. Its numbers have declined drastically; most populations that remain number in the 100s. The two exceptions are the lower Neversink River in Orange County, where there appears to be at least ten thousand if not tens of thousands of dwarf wedge mussels, and the Tar River in North Carolina.

Plant explosion in Apex, North Carolina

Friday, October 6, 2006

Up to 17,000 people are being evacuated in Apex, North Carolina after a chlorine gas leak occurred during a Hazardous Waste facility explosion and fire.



Map showing location of plant (Red dot) and approximate evacuation zone (in Blue). *Note: Evacuation zone shown is indicative only and should not be relied upon for guidance. Contact local authorities instead.*

Residents are advised to keep windows closed, turn off all air conditioning and that tenderness of the mouth, gagging and nausea are typical signs of poisoning. They are advised to stay away from the fire and any smoke, as it could be a health hazard. CNN reports that air quality tests run by the NCDENR indicate nothing especially harmful in the air near the plant.



EQ Industrial Services Apex, NC on October 6, 2006

Area residents are being advised to call **919-856-7044** for general information as 911 lines are overloaded. Bruce Radford, manager of the town in suburban Raleigh, said that the business district, schools and the town hall will remain closed on Friday.

No fatalities have been reported. WRAL-TV reported that 90 residents of a nearby nursing care facility were moved to a

local hospital as a precautionary measure. About 20 Apex residents were reported to have been treated and released for respiratory symptoms related to exposure.

Officials are presently unsure of the cause. The fire and subsequent explosions started sometime after 9 p.m. EST Thursday, October 5.

Changing weather conditions in the area threaten additional evacuations. A section of State Highway 55 has been shut down near the incident.

The company, Environmental Quality of Wayne, Michigan, had been warned and fined \$32,000 by state regulators in March of 2006 for hazardous conditions at the plant, which temporarily stores hazardous materials including chlorine, pesticides, and PCBs.

WRAL-TV reports that Sulfur, Oxidizers, Chlorine, Pesticides and PCBs were stored in the facility.

Fire crews from Cary, Apex, Raleigh, Wake County and Fairview are assisting in the effort. However, there is no effort to fight the fire as it would be too dangerous to firefighting personnel. It will eventually burn itself out.



Wake County, NC

Sources

- "Up to 16,000 fleeing waste plant fire (<http://www.cnn.com/2006/US/10/06/plant.fire/index.html>)" — CNN, October 6, 2006
- "Apex Under State Of Emergency After Chemical Fire (<http://www.wral.com/news/10012555/detail.html>)" — WRAL, October 6, 2006
- "Apex fire forces evacuations (<http://www.newsobserver.com/102/story/495143.html>)" — Raleigh News and Observer, October 6, 2006

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'It's terrible': Fight for clean water in Cumberland County extends into its 6th year



By [Samantha Kummerer](#)

Thursday, April 20, 2023



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"Are we poisoning someone if we sell them our honey? Are we poisoning someone if we give them our chicken eggs or blueberries?" Mullins questioned.

FAYETTEVILLE, N.C. (WTVD) -- When Vickie Mullins hauls nearly a dozen gallon-water jugs into her house each week, it's more than just a chore. For the Cumberland County resident, it's a reminder of the dangers that threaten her family.



In a statement to ABC, Chemours said, "We have and continue to implement state-of-the-art technologies, including a thermal oxidizer completed in December 2019 that destroys over 99.99% of PFAS air emissions. In addition, our remediation work includes systems to intercept, collect, and treat legacy PFAS compounds in groundwater and surface water discharges from the site. These systems reduce PFAS compounds reaching the Cape Fear River and follow efforts previously taken by Chemours that reduced HFPO-DA process discharges and emissions by 97%."

The company is also working on an underground barrier wall that will work to capture and treat groundwater and reduce PFAS by at least 99%.

"Chemours' products are vital to advancing technologies for the energy transition and the next generation of sustainable innovations. The world depends on our products, and we are committed to manufacturing these essential chemistries responsibly," the company said in a statement.

In past years, Cumberland County officials have said they want to build a public water system and committed \$21 million to run water lines to affected areas, including over 1,000 homes and two public schools. Those plans have not started, but in March 2023, the county was awarded \$15 million to help build that system. It's estimated the project will cost \$28 million.

In March 2022, [the county filed a lawsuit](#) against Chemours and Dupont that alleged their products caused contamination.

The Complaint alleged that the companies discharged these toxic chemicals into Cumberland County's air, groundwater and surface water for decades, "in blatant disregard" for the effects on Cumberland County and its residents. That case is still active and pending in North Carolina's Supreme Court.

Mullins is also one of nearly 2,000 homeowners who are seeking legal action against Chemours.

A spokesperson for Chemours declined to comment on pending litigation.

Mullins, along with other residents, acknowledges the work that's been done but continues to press for more accountability and action from both Chemours and local leaders.

"It's just scary. You know?" she said. "Not knowing when we're going to get water is making it even worse."

She is concerned about county officials allowing new construction on and near land that tested positive for PFAS. She is also concerned that Chemours plans to expand its Fayetteville facility.

Mullins lived just less than 10 miles from the Chemours plant for more than three decades. She and her family raised chickens, were beekeepers and maintained a large garden, but after news of the contamination broke, they had to change their way of life.

"A lot of people were testing the food or testing the animals. We're testing the soil itself. So far from what I've heard, it's all showing up everywhere," Mullins said speaking about PFAS.

"Everyone is changing their life around."



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Her family's beehives have been reduced and they grow most of their crops out of pots now.

"Are we poisoning someone if we sell them our honey? Are we poisoning someone if we give them our chicken eggs or blueberries?" Mullins questioned.

Hoppin and a [team of researchers at NC State](#) have been studying PFAS since 2016. She recalled when they first started they quickly discovered the scope of the contamination as every person's blood they tested came back positive for these brand-new chemicals.

"It's not just one source, but the whole Cape Fear region is probably contaminated with PFAS," Hopping said. "That's alarming, it provides drinking water for like over a million people."

[Our America: Trouble On Tap | Official Trailer](#)



"We know that before the discharge stopped to the Cape Fear River that people were probably drinking 700 parts per trillion of GenX potentially every day for 40 years. But we can't measure that in people's bodies today, because that chemical has a half-life of three days." Hopping said. "So just like if you were to drink alcohol on Saturday night, on Thursday we can't measure it in your body. But we know that a lifetime of drinking on Saturday night can have health consequences."

Mullins said she can't help but worry and wonder what decades of exposure to contamination has had on the health of her community.

"I have so many friends with cancer right now; couples. I have a couple right down the road here. They both have cancer," Mullins said.

[RELATED | NatGeo explores what Americans should know about contaminants in drinking water](#)

While Mullins is still bathing and cleaning with her contaminated well water, corrective steps have started to be taken.

Since 2019, Chemours has been required by a consent order to determine the extent of the PFAS contamination related to its Fayetteville site and provide replacement water supplies from bottled water to filtration systems to some residents. Some homes have recently received a granulated activated carbon system, or a GAC system, that filters PFAS and GenX out of the home's water.

The state's consent order also requires Chemours to reduce GenX air emissions by 99.9%.

EMBED <>

MORE VIDEOS

"Our America: Trouble on Tap" is a three-part documentary series produced in partnership with ABC News and National Geographic to raise awareness around access to safe drinking water in the United States.

The North Carolina Department of Environmental Quality explained the issue of PFAS is "larger than one company or one compound." Beyond the Chemours investigation, DEQ found 42 of the 50 public water systems it sampled tested positive for some types of PFAS. DEQ said these water systems impact three million North Carolinians.

Hoppins said the full impact of long-term exposure to PFAS on individuals' health isn't known yet.

"We don't know what all these chemicals mean for your health," she said.

[The Centers for Disease Control and Prevention](#) (CDC) pointed to a number of studies that suggest that high levels of certain PFAS may lead to higher cholesterol levels, an increased risk for certain types of cancer and changes in the liver.

Hoppin explained trying to measure historic exposure to PFAS and its connection to current health effects can be challenging,

"There comes a time when this has got to stop," she said.

Mullins said she won't stop speaking out and fighting for the fair changes she'd like to see in the county.

"I'm going to protect my family and my friends the best I can," she said.

For a deeper dive into PFAS in North Carolina and the fight to reduce them, tune in on April 21 to [ABC's 'Trouble on Tap' special](#) highlighting more voices fighting for clean, safe water in the Cape Fear Valley.

[Report A Correction Or Typo](#)

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**AN ORDINANCE AMENDING THE ZONING ORDINANCE
AND ZONING MAP
OF THE TOWN OF CLAYTON, NORTH CAROLINA**

WHEREAS a petition has been filed with the Town Council of the Town of Clayton requesting an amendment to the Zoning Ordinance and Zoning Map of the Town of Clayton to include Industrial-Light (I-1) zone to the properties described below, said properties formerly being zoned Residential-Estate (R-E); and

WHEREAS said property is owned by The Town of Clayton; and

WHEREAS the Planning Board of the Town of Clayton has reviewed the proposed change(s) and made a recommendation thereupon; and

WHEREAS notice of a public hearing to consider the proposed change was published in accordance with law in The Johnstonian, a local newspaper, as required by Section 155.702(D) of the Clayton Unified Development Code and by Section 160D-602 of the North Carolina General Statutes; and

WHEREAS a notice of the proposed zoning classification action was mailed to the owner(s) of the parcel(s) of land involved, as shown on the County Tax Listing, and to the owners of all parcels of land abutting that (those) parcel(s) of land and within 100 feet of the subject parcel(s) of land, as shown on the County Tax Listings, by depositing a copy of the same in the United States Mail, first class postage paid, as required by Section 155.702(D) of the Clayton Unified Development Code and by Section 160D-602 of the North Carolina General Statutes; and

WHEREAS notice of the proposed zoning classification action was posted on the property as required by Section 155.702(D) of the Clayton Unified Development Code and by Section 160D-602 of the North Carolina General Statutes; and

WHEREAS the said public hearing was actually conducted at 6:00 p.m. on September 18, 2023, wherein a reasonable opportunity was given to all those in attendance to speak either in favor or against the said change to make relevant comments; and

THEREFORE, after duly considering the matter, **THE TOWN COUNCIL OF THE TOWN OF CLAYTON DOES HEREBY ORDAIN:**

SECTION 1. That the Unified Development Code of the Town of Clayton is hereby amended to include in the Industrial-Light zone to of the following described properties:

General Description:

Located within the Town limits; Ranch Rd & Little Creek Church Rd.

Specific Description:

NC Parcel TAG Number(s): 05H04046H

SECTION 2. That the official Town of Clayton Zoning Map is hereby amended to include the Industrial-Light zone to the above-described property and will be so marked.

SECTION 3. That if any section, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of Ordinance.

SECTION 4. That the Town Council hereby adopts the following Statement of Consistency and Reasonableness for the proposed rezoning:

“We find this rezoning action is consistent with the Future Land Use Map, Goal LU 1 and Goal ED 1 of the Town of Clayton’s 2045 Comprehensive Growth Plan.”

And

The proposed zoning amendment is reasonable and in the public interest because it supports the Town of Clayton 2045 Comprehensive Growth Plan’s policies above and because:

- 1. The rezoning would allow for future employment opportunities along two well-traveled corridors.*
- 2. The rezoning is consistent with the proposed uses of the “Employment Center” Designation found in the 2045 Comprehensive Plan. “*

SECTION 5. That this ordinance shall become effective immediately upon its adoption

Duly adopted this 18th day of September, 2023, while in regular Session

Jody L. McLeod
Mayor

ATTEST:

APPROVED AS TO FORM:

Heidi Holland, CMC and NCCMC;
Town Clerk

Jim Cauley
Town Attorney



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

PUBLIC HEARINGS

Item Title

2022-125-CZM: Summer Glen Conditional Zoning with Master Plan

Presenter(s)

Bruce Venable, Planner I

Suggested Action

Adoption of Ordinance

Strategic Priorities Alignment



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(Administrative)



☐
Think Arts &
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☐
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☐
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Infrastructure

Public Hearing: Yes - Legislative

If Approved, Will Document Require Recordation? Yes

Does This Item Require a Communication Plan?

- ☒ Public Hearing (Required by GS)
- ☒ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media
- ☒ Special Mailing

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☒ Website
- ☐ Survey
- ☐ None Required

Other/Special Instructions: Public notice signs placed at property.

Summary

The site is located off Glen Laurel Road and Vinson Road within the Town's ETJ. The applicant has requested to rezone the above referenced parcel from Residential-Estate Zoning (R-E) to Conditional Zoning-Residential Zoning District (CZ-R), which is approximately +/- 53.06 acres in size. The Conditional Zoning District would allow for up to 139 units, or a density of 2.60 units per acre. This site is located within the Watershed Protection Overlay District.

Funding Source

N/A

Corresponding Documentation

[1 Application & Neighborhood Meeting Summary 2022-125-CZM Summer Glen Subdivision](#)

[2 2022-125-CZM Master Plan Narrative \(Updated\)](#)

[3 2022-125-CZM Submittal Plan -Summer Glen Master Concept Plan](#)

[4-2022-125-CZM Neighborhood Meeting Minutes and Questions](#)

[5 2022-125-CZM Summer Glen TIA](#)

[6 NCDOT TIA Review for Summer Glen Residential TIA \(002\)](#)

[7 TIA APPENDIX - Summer Glen](#)

[8 2022-125-CZM Conditions of Approval Summer Glen Conditional Zoning 08-23-2023](#)

[8 2022-125-CZM Wastewater Allocation Policy and Request Form \(PDF\)](#)

[9 Staff Report Maps - 2022-125-CZM Summer Glen](#)

[11 2022-125-CZM Summer Glen Subdivision Conditional Zoning STAFF REPORT](#)

[Ordinance 2023-09-02](#)

[Wastewater Resolution 2022-125-CZM](#)

Submitted By: Bruce Venable, Planning

Reviewed By:

Jonathan Jacobs, Assistant
Engineering Director

Approved - Sep 13 2023

Rich Cappola, Town Manager

Approved - Sep 13 2023

Heidi Holland, Town Clerk

Approved - Sep 13 2023



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

Conditional Zoning w/Master Plan Coversheet

Summer Glen Subdivision

Name of Project: Wakefield Assemblage Date: 5-23-2022
Applicant Name: Wakefield Development

The following checklist to be completed by applicant:

- ☒ Pre-Application Meeting on: 4-12-2022
- ☒ Review Fee
- ☒ Completed Application
- ☒ Owner's Consent Form
- ☒ Adjacent Property Owner's List
- ☒ Neighborhood Meeting Letter (one copy)
- ☒ 2 sets of stamped, addressed, empty envelopes for adjacent property owner notification
- ☒ Signed & sealed boundary survey
- ☒ Copy of signed & sealed boundary survey in PDF on USB
- ☒ Master Plan Set to include the following:
- Cover Sheet
 - Survey
 - Bubble Plan Outlining:
 - a. Where and which uses or groups of uses will occur
 - b. The proposed intensity/density of those uses
 - c. General location of internal and external network of public right-of-way and public infrastructure
 - d. All required elements for establishment of a zoning district including but not limited to dimensional standards, open space network, natural resource preservation, and landscaping or buffering

Reviewed by: _____



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

Conditional Zoning w/Master Plan Application

Conditional Rezoning w/Associated Site Plan Fee: \$1000 + \$5.00 per acre
Advertising Fee: \$200.00

SITE INFORMATION

Name of Project: Wakefield Assemblage
Acreage of Property: +/- 52.58 Zoning District: R-E
County Tag #: See Next Page NC Pin #: See Next Page
Address/Location: Intersection of Glen Laurel Rd. and Vinson Rd.
Existing Zoning District: RE Proposed Zoning District: CZM

APPLICANT INFORMATION

Applicant: Wakefield Development
Mailing Address: 3100 Smoketree Ct Suite 210 Raleigh, NC 27604
Phone Number: 919.522.9837 Fax: 1.252.459.8197
Contact Person: ~~Matthew Danielson~~
Email Address: ~~Matthew@LMSSI.com~~

Copy Andrew Stocks - Astocks@stocksenineering.com and Bret Mangum Bret@lmssi.com and Mike Baust Mike@lmssi.com on all correspondences.

PROPERTY OWNER INFORMATION

Name: See Next Page
Mailing Address: _____
Phone Number: _____ Fax: _____
Email Address: _____

OFFICE USE ONLY

Date Received: _____ Amount Paid: _____ File Number: 2022-125-CZM

January 2021



*** DISCLAIMER ***

Johnston County assumes no legal responsibility for the information represented here.

Result 0

id: 05I04010A
Tag: 05I04010A
Owner Name 1: TGS PROPERTIES LLC
Owner Name 2:
Mail Address 1: 514 DANIELS ST STE 414
Mail Address 2:
Mail Address 3: RALEIGH, NC 27605-0000
Book: 03962
Page: 0691

Result 0

id: 05I04203F
Tag: 05I04203F
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2:
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 01154
Page: 0409

Result 0

id: 05I04203G
Tag: 05I04203G
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2:
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 01154
Page: 0409

Result 0

id: 05I04200S
Tag: 05I04200S
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2: GORDON, ERIC B
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 04205
Page: 0161

Result 0

id: 05I04010
Tag: 05I04010
Owner Name 1: TGS PROPERTIES LLC
Owner Name 2:
Mail Address 1: 514 DANIELS ST STE 414
Mail Address 2:
Mail Address 3: RALEIGH, NC 27605-0000
Book: 03962
Page: 0691



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

OWNER'S CONSENT FORM

Consent is required from the property owner(s) if an agent will act on their behalf. A separate form is required from each owner. Consent is valid for one year from date of notary, unless otherwise specified. All fields must be completed.

Project Name: Summer Glen **Address or PIN #:** 05104010

AGENT/APPLICANT INFORMATION:

Wakefield Development

(Name - type, print clearly)

310 Smoketree Ct Suite 210

(Address)

Raleigh, NC 27604

(City, State, Zip)

I hereby give **CONSENT** to the above referenced agent/applicant to act on my behalf, to submit applications and all required materials and documents, and to attend and represent me at all meetings and public hearings pertaining to the following processes (*list applicable requests*):

Conditional Rezoning with Master Plan

Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application.

I hereby certify that I have authority to execute this consent form as/on behalf of the property owner. I understand that any false, inaccurate or incomplete information provided by me or my agent will result in the denial, revocation or administrative withdrawal of this application, request, approval or permits. I further agree to all terms and conditions which may be imposed as part of the approval of this application.

OWNER AUTHORIZATION:

TGS Properties LLC

(Name - type, print clearly)

514 Daniels St. Suite 414

(Address)

[Signature], MANAGER, TGS Properties, Raleigh, NC 27605

(Owner's Signature)

(City, State, Zip)

STATE OF Virginia

COUNTY OF Virginia Beach

Sworn and subscribed before me Cynthia G. Shank, a Notary Public for the above State and County, this the 15 day of July, 2022.

SEAL

Cynthia G. Shank
Notary Public
REG. # 213972

Commonwealth of Virginia

MY COMMISSION EXPIRES OCTOBER 31, 2024

Cynthia G. Shank
Notary Public

My Commission
Expires:

10/31/2024

July 2018



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

OWNER'S CONSENT FORM

Consent is required from the property owner(s) if an agent will act on their behalf. A separate form is required from each owner. Consent is valid for one year from date of notary, unless otherwise specified. All fields must be completed.

Project Name: Summer Glen Address or PIN #: 05104010A

AGENT/APPLICANT INFORMATION:

Wakefield Development

(Name - type, print clearly)

310 Smoketree Ct Suite 210

(Address)

Raleigh, NC 27604

(City, State, Zip)

I hereby give **CONSENT** to the above referenced agent/applicant to act on my behalf, to submit applications and all required materials and documents, and to attend and represent me at all meetings and public hearings pertaining to the following processes (*list applicable requests*):

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OWNER AUTHORIZATION:

TGS Properties LLC

(Name - type, print clearly)

514 Daniel St Suite 414

(Address)

[Signature], Manager, TGS Properties

(Owner's Signature)

Raleigh, NC 27605

(City, State, Zip)

STATE OF

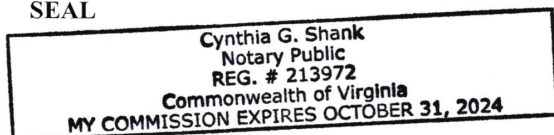
Virginia

COUNTY OF

Virginia Beach

Sworn and subscribed before me Cynthia G. Shank, a Notary Public for the above State and County, this the 15 day of July, 2022.

SEAL



July 2018

Cynthia G. Shank
Notary Public

My Commission
Expires:

10/31/2024



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

OWNER'S CONSENT FORM

Consent is required from the property owner(s) if an agent will act on their behalf. A separate form is required from each owner. Consent is valid for one year from date of notary, unless otherwise specified. All fields must be completed.

Project Name: Summer Glen **Address or PIN #:** 05104203G

AGENT/APPLICANT INFORMATION:

Wakefield Development 310 Smoketree Ct Suite 210
(Name - type, print clearly) (Address)
Raleigh, NC 27604
(City, State, Zip)

I hereby give **CONSENT** to the above referenced agent/applicant to act on my behalf, to submit applications and all required materials and documents, and to attend and represent me at all meetings and public hearings pertaining to the following processes (*list applicable requests*):

Conditional Rezoning with Master Plan

Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application.

I hereby certify that I have authority to execute this consent form as/on behalf of the property owner. I understand that any false, inaccurate or incomplete information provided by me or my agent will result in the denial, revocation or administrative withdrawal of this application, request, approval or permits. I further agree to all terms and conditions which may be imposed as part of the approval of this application.

OWNER AUTHORIZATION:

Charles B Gordon Jr. Eric B Gordon 276 Benning Circle
(Name - type, print clearly) (Address)
Clayton, NC 27527-5286
(City, State, Zip)

STATE OF NC
COUNTY OF Johnston

Sworn and subscribed before me Candace Hughes, a Notary Public for the above State and County, this 14th day of July

SEAL



Candace Hughes
Notary Public

My Commission Expires: 7/31/26

July 2018



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

OWNER'S CONSENT FORM

Consent is required from the property owner(s) if an agent will act on their behalf. A separate form is required from each owner. Consent is valid for one year from date of notary, unless otherwise specified. All fields must be completed.

Project Name: Summer Glen Address or PIN #: 05104200S

AGENT/APPLICANT INFORMATION:

Wakefield Development

(Name - type, print clearly)

310 Smoketree Ct Suite 210

(Address)

Raleigh, NC 27604

(City, State, Zip)

I hereby give **CONSENT** to the above referenced agent/applicant to act on my behalf, to submit applications and all required materials and documents, and to attend and represent me at all meetings and public hearings pertaining to the following processes (*list applicable requests*):

Conditional Rezoning with Master Plan

Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application.

I hereby certify that I have authority to execute this consent form as/on behalf of the property owner. I understand that any false, inaccurate or incomplete information provided by me or my agent will result in the denial, revocation or administrative withdrawal of this application, request, approval or permits. I further agree to all terms and conditions which may be imposed as part of the approval of this application.

OWNER AUTHORIZATION:

Charles B Gordon Jr. Eric B Gordon

(Name - type, print clearly)

276 Benning Circle

(Address)

Clayton, NC 27527-5286

(City, State, Zip)

STATE OF NC

COUNTY OF Johnston

Sworn and subscribed before me, Candice Hughes, a Notary Public for the above State and County, this the 19th day of July

SEAL



Candice Hughes
Notary Public

My Commission
Expires: 7/31/2016

July 2018



TOWN OF CLAYTON
Planning Department
111 E. Second St., P.O. Box 879
Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

OWNER'S CONSENT FORM

Consent is required from the property owner(s) if an agent will act on their behalf. A separate form is required from each owner. Consent is valid for one year from date of notary, unless otherwise specified. All fields must be completed.

Project Name: Summer Glen **Address or PIN #:** 05104203F

AGENT/APPLICANT INFORMATION:

Wakefield Development 310 Smoketree Ct Suite 210
(Name - type, print clearly) (Address)
Raleigh, NC 27604
(City, State, Zip)

I hereby give **CONSENT** to the above referenced agent/applicant to act on my behalf, to submit applications and all required materials and documents, and to attend and represent me at all meetings and public hearings pertaining to the following processes (*list applicable requests*):

Conditional Rezoning with Master Plan

Furthermore, I hereby give consent to the party designated above to agree to all terms and conditions which may arise as part of the approval of this application.

I hereby certify that I have authority to execute this consent form as/on behalf of the property owner. I understand that any false, inaccurate or incomplete information provided by me or my agent will result in the denial, revocation or administrative withdrawal of this application, request, approval or permits. I further agree to all terms and conditions which may be imposed as part of the approval of this application.

OWNER AUTHORIZATION:

Charles B Gordon Jr. Eric B Gordon 276 Benning Circle
(Name - type, print clearly) (Address)
Clayton, NC 27527-5286
(City, State, Zip)

STATE OF NC
COUNTY OF Johnston

Sworn and subscribed before me Sandra Hughes, a Notary Public for the above State and County, this 19th day of July

SEAL



Notary Public

My Commission Expires:

7/31/26

July 2018

EXPLANATION OF PROJECT

Please provide detailed information concerning all requests. Attach additional sheets if necessary.

Development of 5 parcels near the intersection of Glen Laurel Road and Vinson road into a subdivision.

APPROVAL CRITERIA – REZONING

All applications for a Conditional Rezoning must address the following Approval Criteria:

1. Consistency with the adopted plans of the Town.
The proposed development meets the Future Land Use Map which shows this area with a Low Density Residential Classification. The comprehensive 2045 Growth Plan classifies Low Density Residential as less than or equal to 3 units/acre, mostly single family, with a min of 25% open space.
2. Suitability of the subject property for uses permitted by the current vs. the proposed conditional district.
The proposed development is not in conformance with the current zoning however the proposed CZM Zoning allows the development to comply with the comprehensive 2045 growth plan.
3. Whether the proposed change tends to improve the balance of uses, or meets specific demand in the Town.
The proposed zoning change allows for low density residential option within the Town of Clayton.
The applicant believes there is a demand for residential development with the Town.
4. The capacity of adequate public facilities and services including schools, roads, recreation facilities, wastewater treatment, water supply facilities and stormwater drainage facilities is available for the proposed conditional district.
Any roadway improvements required by the TIA and deemed necessary by the NCDOT will be included in the project.
The project is just down the road from E. Clayton Community park for public recreation. Preliminary investigation has been provided to and confirmed by Clayton Engineering that shows adequate capacity at the downstream sewer lift station.
The sewer allocation sheet is also being submitted. Storm water systems will be designed to meet the criteria of the governing authorities.
5. It has been determined that the legal purposes for which zoning exists are not violated.
None violated that the applicant is aware of.
6. It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare.
It is our understanding that there will be no adverse effect upon adjoining property owners by this project.

January 2021

-
7. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.

It is our understanding that this project produces no detriment to the general public.

APPROVAL CRITERIA- MASTER PLAN

All associated Master Plans must address the following Approval Criteria:

1. Compliance with code section 155.203(L) and all other applicable requirements of this chapter, or analysis and justification if it deviates from the requirements of this chapter.

The proposed master plan and subdivision design will comply with 155.203(L) and the other referenced sections.

2. Consistency with the Clayton General Design guidelines.

The Town of Clayton general design guidelines and details will be followed.

3. Conformance of the proposal with the stated purpose of the requested conditional zoning district.

The proposed CZM district works well for this project that does not easily fit into other zoning districts. The layout will demonstrate excellence in site design, circulation, use coordination, and compatibility with neighboring properties. See 155.200(C.1)

4. Compatibility of the proposed development with the adjacent community.

The project is compatible with other recent projects on Glen Laurel Rd.

5. The quality of design intended for each component of the project and the ability of the overall development plan to ensure a unified, cohesive environment at full build-out.

The proposed layout presents a unified, cohesive environment within the project at full build out.

6. Compatible relationships between each component of the overall project.

The open space amenity uses (ie. Dog park and play ground) will be compatible with the proposed residential community.

7. Self-sufficiency of each phase of the overall project.

The connections to existing water and sewer will be in Phase One. Future phases will connect to Phase One.

8. Documentation that the proposed infrastructure improvements accommodate the additional impacts caused by the development, or documentation to assure that the development, as proposed, will not overtax the existing public infrastructure systems.

A sanitary sewer analysis has been conducted and confirmed by Town of Clayton Engineering of the available sewer capacity.

9. The fiscal impact of the proposal and the proposed financing of required improvements.

The applicant believes that the towns tax base from the development will provide adequate funding for maintaining the required infrastructure.

10. The success of the proposal in providing adequate pedestrian and bicycle links within the development and with the adjacent community.

The proposed development will provide sidewalks which will provide pedestrian connection to internal amenities there are no public greenways in close proximity to the development.

11. The effectiveness with which the proposal protects and preserves the ecologically sensitive areas within the development.

One stream crossing is proposed and wetland impacts will be avoided and minimized where possible.

APPLICANT AFFIDAVIT

I/We, the undersigned, do hereby make application and petition to the Town Council of the Town of Clayton to amend the Zoning Ordinance and change the Official Zoning Map of the Town of Clayton as requested.. I hereby certify that I have full legal right to request such action and that the statements or information made in any paper or plans submitted herewith are true and correct to the best of my knowledge. I understand this application, related material and all attachments become official records of the Planning Department of the Town of Clayton, North Carolina, and will not be returned.

Matthew Danielson
Print Name

Matthew Danielson Digitally signed by Matthew Danielson
Date: 2022.05.23 12:43:29 -04'00'
Signature of Applicant

5/23/22
Date

NEIGHBORHOOD MEETING INFORMATION

Purpose:

The purpose of the Neighborhood Meeting is to inform the surrounding property owners of the nature of the proposed land use and/or development features, answer questions, respond to concerns, and solicit comments.

Meeting Date:

The neighborhood meeting must be held at least 10 days prior to the 1st scheduled public meeting date.

Meeting Time & Location:

The meeting must be held no earlier than 6:00 pm Monday through Friday, and must be held in a location generally accessible to residents within close proximity of the request. The meeting space must be able to comfortably accommodate everyone that receives an invitation.

Meeting Notice Mailing requirements:

- a. The applicant must contact all adjacent property owners via first class mailing (see sample letter).
- b. The mailing must include all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the subject property. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property.
- c. The notice must be mailed at least ten (10) calendar days but not more than twenty-five (25) days prior to the date of the Neighborhood Meeting.

Information required to be provided at the Neighborhood Meeting:

At a minimum, the following materials must be present and discussed at a Neighborhood Meeting:

- i. A copy of the project application.
- ii. A schedule of all upcoming public meetings for the application.
- iii. A map at a scale that is appropriate to the project and shows neighboring properties and roads.
- iv. A map, drawing, or other depiction of the proposed land use change or development proposal.

Information provided to Planning Department:

Alert the Planning Department once the date, location, and time of the Neighborhood Meeting are determined.

Deliver the following items to the Planning Department at least ten (10) calendar days prior to the 1st scheduled public meeting in electronic or hard copy format:

- | | |
|--------------------------|---|
| ☐ | Adjacent Property Owner's List (aka "mailing list") <i>Should be submitted with original application packet</i> |
| ☐ | Copy of the letter mailed <i>Should be submitted with original application packet</i> |
| ☐ | Attendance Roster (aka "sign-in sheet") <i>Submit no later than 10 days prior to 1st public meeting date</i> |
| ☐ | Neighborhood Meeting Summary Form with minutes (see below) <i>Submit 10 days prior to 1st public hearing</i> |

ADJACENT PROPERTY OWNERS LIST

Project Name: Wakefield Assemblage

The following are all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the property (including across street rights of way) subject to this request. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property. Please use a separate sheet if necessary

It is the responsibility of the applicant to correctly identify the current owner, based upon records in the Johnston County GIS Office, for all property owners of land within the required public notice radius.

PARCEL NUMBER	NAME	ADDRESS
05I04199M,	Ava C Spence,	4579 C Barber Mill Rd. Clayton, NC 27520
05I04013X,	Leslie and Michael Alan Sharp,	307 Snead Rd, Clayton, NC 27527-7544
05I04013T,	Jodi and William D Bloom,	117 Palmer Dr. Clayton NC 27527
05I04013U,	Margarito Fernandez Santos and Dismairy Florian-Cruz,	112 Palmer Dr. Clayton, NC 27527
05I04013S,	Suzan and Rober Puttkamer,	113 Palmer Dr. Clayton, NC 27527-7540
05I04015J,	Cemetery	
05I04015K,	Lillian and Andrew Kent Seaton,	109 Palmer Dr. Clayton, NC 27527-7540
05I01013W,	Debra A Farmer,	305 Snead Dr. Clayton, NC 27527-7544
0504013V,	Johnnie M McManus,	303 Snead Dr. Clayton, NC 27527
05I04058L,	Toni and Johnny Robinson,	541 Wildlife Pkwy, Clayton, NC 27527-5139
05I04200J,	Sharon S Whitley,	317 Hereford Dr. Clayton, NC 27520-8549
05E99015N,	Kelly and Jon Authier,	958 Glen Laurel Rd. Clayton, NC 27527-6685
05E99014T,	Alton Morgan Heirs,	PO Box 28743 Raleigh, NC 27611
05E99014D,	Pember and Patrick Matthew Wood,	972 Glen Laurel Rd. Clayton, NC 27527-6685
05E99014U,	Longview Acre, LLC,	2405 Poole Rd. Raleigh, NC 27610-2748
05I04011I,	Anne Marie and Francis Patrick Hunter,	3 Pinnacle Pt. Clayton, NC 27527-6635

ADJACENT PROPERTY OWNERS LIST

Project Name: Wakefield Assemblage

The following are all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the property (including across street rights of way) subject to this request. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property. Please use a separate sheet if necessary

It is the responsibility of the applicant to correctly identify the current owner, based upon records in the Johnston County GIS Office, for all property owners of land within the required public notice radius.

PARCEL NUMBER	NAME	ADDRESS
05I04013R,	Glen Ridge Homeowners Association,	PO Box 212 Clayton, NC 27520
05I04011J,	Kimberly and Brandon Foster Roberts,	4 Pinnalcle Pt. Clayton, NC 27527-6635
05E99013L,	Kristen and Mark J Zillioux,	830 Glen Laurel Rd. Clayton, NC 27527
05I04011Q,	Christin Butler Murphy and Christopher D. Hopper,	909 Birkdale Dr. Clayton, NC 27527-6601
05E99023A,	Deborah and Phillip James Kirby,	598 Glen Laurel Rd. Clayton, NC 27520
05I04203K,	Diane Alford Strouse and Steve Kehne Strouse,	68 Tanners Way, Clayton, NC 27527-9504
05I04011O,	Kelly and Leonard D Poole,	905 Birkdale Dr. Clayton, NC 27527
05I04203Q,	Katie and Denis Canelo,	67 Tanners Way, Clayton, NC 27527-9504
05I04200U,	Jamie and Roark Garth Stewart Jr.,	100 Tanners Way, Clayton, NC 27527
05I04203N,	Centennial and James Brent Gurganus,	26 Oak Cine Cir. Clayton, NC 27527-9503
05I04203O,	Jacqueline and Michael Patrick Dunlop,	33 Tanners Way, Clayton, NC 27527-9504
05I04011R,	Janice Cutinho and Justin Patrick Sullivan,	911 Birkdale Dr. Clayton, NC 27527-6601
05I04011P,	Diane E Morris and Alan G Wood,	907 Birkdale Dr. Clayton, NC 27527-6601
05I04011Y,	Neuse Country Club, LLC,	918 Birkdale Dr. Clayton, NC 27527-6600
05I04203L,	Christy Lynn Harmon and Charles Chirstopher Sutton,	67 Oak Vine Cir. Clayton, NC 27527-9502
05I04203M,	Brandy E. B. Creech,	64 Oak Vine Cir. Clayton, NC 27527-9503

ADJACENT PROPERTY OWNERS LIST

Project Name: Wakefield Assemblage

The following are all the persons, firms, or corporations owning property within 100 feet and immediately adjacent to the property (including across street rights of way) subject to this request. Where the subject property immediately adjoins a public or private right-of-way, landscape or riparian buffer, commonly-owned private area, public property, or homeowners' association property, then letters of notification shall be sent to adjoining property owners as if they directly abut the subject property. Please use a separate sheet if necessary

It is the responsibility of the applicant to correctly identify the current owner, based upon records in the Johnston County GIS Office, for all property owners of land within the required public notice radius.

PARCEL NUMBER	NAME	ADDRESS
05I04203J,	Andrea and Warrick L Jones,	34 Tanners Way, Clayton, NC 27527-9504
05I04009,	Betty Sue Woodall,	484 Packing Plant Rd, Smithfield, NC 27577-7729
05J05003B,	Geraldine B Byrd Life Estate,	3165 Vinson Rd. Clayton, NC 27527
05I04018I,	Glen Laurel Tennis Courts Holdings, LLC,	204 Cherry Laurel Dr. Clayton, NC 27527-6639
05J05003,	Stanley C Jones,	PO Box 1345 Clayton, NC 27528
05J05003A,	Debra and Stanley Cleveland Jones,	PO Box 1345 Clayton, NC 27528-1345
05I04058M,	Paulette and Marcus K Sanders,	557 Wildlife Pkwy Clayton, NC 27527-5139

05I04010	TGS PROPERTIES LLC		514 DANIELS ST STE 414	RALEIGH, NC 27605-0000
05E99023A	KIRBY, PHILLIP JAMES	KIRBY, DEBORAH	598 GLEN LAUREL RD	CLAYTON, NC 27520-0000
05J05003	JONES, STANLEY C		PO BOX 1345	CLAYTON, NC 27528
05I04200S	GORDON, CHARLES B JR	GORDON, ERIC B	276 BENNING CIR	CLAYTON, NC 27527-5286
05I04200J	WHITLEY, SHARON S		317 HEREFORD DR	CLAYTON, NC 27520-8549
05I04009	WOODALL, BETTY SUE		484 PACKING PLANT RD	SMITHFIELD, NC 27577-7729
05I04058L	ROBINSON, JOHNNY	ROBINSON, TONI	541 WILDLIFE PKWY	CLAYTON, NC 27527-5139
05J05003B	BYRD, GERALDINE B LIFE ESTATE		3165 VINSON RD	CLAYTON, NC 27527-0000
05I04058M	SANDERS, PAULETTE F.	SANDERS, MARCUS K.	557 WILDLIFE PKWY	CLAYTON, NC 27527-5139
05I04018I	GLEN LAUREL TENNIS COURTS HOLDINGS, LLC		204 CHERRY LAUREL DR	CLAYTON, NC 27527-6639
05I04011Y	NEUSE COUNTRY CLUB, LLC		918 BIRKDALE DR	CLAYTON, NC 27527-6600
05I04011R	CUTINHO, JANICE	SULLIVAN, JUSTIN PATRIC	911 BIRKDALE DR	CLAYTON, NC 27527-6601
05I04011Q	HOPPER, CHRISTOPHER D. JOINT TENANTS (WROS)	MURPHY, CHRISTIN BUTL	909 BIRKDALE DR	CLAYTON, NC 27527-6601
05I04011P	MORRIS, DIANE E	WOOD, ALAN G	907 BIRKDALE DR	CLAYTON, NC 27527-6601
05I04200U	STEWART, ROARK GARTH JR	STEWART, JAMIE W	100 TANNER'S WAY	CLAYTON, NC 27527-0000
05I04203M	CREECH, BRANDY E. B.		64 OAK VINE CIR	CLAYTON, NC 27527-9503
05I04203L	SUTTON, CHARLES CHRISTOPHER	SUTTON, CHRISTY LYNN	67 OAK VINE CIR	CLAYTON, NC 27527-9502
05I04203J	JONES, WARRICK L.	JONES, ANDREA M.	34 TANNERS WAY	CLAYTON, NC 27527-9504
05I04203K	SCHENCK, DAVID	SCHENCK, CYNTHIA	68 TANNERS WAY	CLAYTON, NC 27527-9504
05I04203Q	CANELO, DENIS	CANELO, KATIE	67 TANNERS WAY	CLAYTON, NC 27527-9504
05I04011O	POOLE, LEONARD D	POOLE, KELLY R	905 BIRKDALE DRIVE	CLAYTON, NC 27527-0000
05I04011I	HUNTER, FRANCIS PATRICK	HUNTER, ANNE MARIE	3 PINNACLE PT	CLAYTON, NC 27527-6635
05I04011J	ROBERTS, BRANDON FOSTER	ROBERTS, KIMBERLY A.	4 PINNACLE PT	CLAYTON, NC 27527-6635
05I04013T	BLOOM, WILLIAM D	BLOOM, JODI D	117 PALMER DR	CLAYTON, NC 27527-0000
05I04013U	SANTOS, MARGARITO FERNANDEZ	FLORIAN-CRUZ, DISMAIR	121 PALMER DR	CLAYTON, NC 27527-7540
05I04013W	FARMER, DEBRA A		305 SNEAD DR	CLAYTON, NC 27527-7544
05I04015K	SEATON, ANDREW KENT	SEATON, LILLIAN A.	109 PALMER DR	CLAYTON, NC 27527-7540
05I04013S	PUTTKAMER, ROBERT	PUTTKAMER, SUZAN	113 PALMER DR	CLAYTON, NC 27527-7540
05I04013V	MCMANUS, JOHNNIE M		303 SNEAD DRIVE	CLAYTON, NC 27527-0000
05I04013X	SHARP, MICHAEL ALAN	SHARP, LESLIE MAXWELL	307 SNEAD DR	CLAYTON, NC 27527-7544
05I04203N	GURGANUS, JAMES BRENT	GURGANUS, CENTENNIAL	26 OAK VINE CIR	CLAYTON, NC 27527-9503
05I04203O	DUNLOP, MICHAEL PATRICK	DUNLOP, JACQUELINE W	33 TANNERS WAY	CLAYTON, NC 27527-9504
05I04199M	SPENCE, AVA C		4579 C BARBER MILL ROAD	CLAYTON, NC 27520-0000
05E99014D	WOOD, PATRICK MATTHEW	WOOD, PEMBER ROULEA	972 GLEN LAUREL RD	CLAYTON, NC 27527-6685
05E99014U	LONGVIEW ACRE, LLC		2405 POOLE RD	RALEIGH, NC 27610-2748
05E99014T	MORGAN, ALTON HEIRS		PO BOX 28743	RALEIGH, NC 27611-0000
05E99015N	AUTHIER, KELLY	AUTHIER, JON	958 GLEN LAUREL RD	CLAYTON, NC 27527-6685
05E99013L	ZILLIOUX, MARK J	ZILLIOUX, KRISTEN LAUR	830 GLEN LAUREL RD	CLAYTON, NC 27527-0000
05I04013R	GLEN RIDGE HOMEOWNERS ASSOCIAT		P O BOX 212	CLAYTON, NC 27520-0000
	Town of Clayton Planning Department	Bryant, Lori Bridget	111 E Second Street	Clayton, NC 27520
	Stocks Engineering	Stocks, Andrew	801 E Washington Street	Nashville, NC 27856



May 20, 2022

Dear Clayton Area Property Owner:

The purpose of this letter is to notify you of an application filed with the Town of Clayton for a land use change and development proposal involving property adjacent to, or in close proximity to property shown in your ownership by Johnston County tax records. Per Town of Clayton regulations, a Neighborhood Meeting must be held to provide information to area residents about the proposal. Due to current social distancing resulting from COVID-19, the Town of Clayton has authorized temporary use of Virtual Neighborhood Meetings. This letter includes instructions on how to access the virtual neighborhood meeting for this application. A representative of the applicant will coordinate this meeting and explain the application, answer questions, and solicit comments.

Meeting Date & Time: **June 7, 2022, 6-8pm**

Meeting Location: **virtual Zoom Meeting** (see link and information below to register)

Type of Application: **Conditional Re-Zoning**

Project/proposal property address: **584 & 700 Glen Laurel Rd** (see attached vicinity map)

Description of project/proposal: **Single-Family Development**

Upcoming public meetings for this application:

Planning Board: **June 27, 2022**

The following will be available for your review at the Neighborhood Meeting:

1. Aerial Image of Property
2. Current Zoning Map of Property
3. Copy of Application
4. Anticipated Public Meeting dates
5. Proposed Site Plan

If you have any questions prior to or after this meeting, you may contact us at (919) 484-8880 or email me at tony@tmtla.com.

You may also contact the Town of Clayton Planning Department at 919-553-5002.

Thank you,
Tony M. Tate, PLA
Principal
TMTLA Associates
P: (919) 484-8880
E: tony@tmtla.com

Cc: Town of Clayton Planning Department

TMTLA Associates
5011 Southpark Drive Suite 200 - Durham, NC 27713
p: (919) 484-8880 - e: info@tmtla.com



How to Register for and Participate in the June 7th Neighborhood Meeting:

To Register for Zoom meeting: if you would like the link emailed to you, please contact

robin@tmtla.com or tony@tmtla.com

Use this link to register for the Neighborhood Meeting

<https://us02web.zoom.us/join/tZAtduyhpzIqHNcJpt8QcyqaBKq7C6HxbIQQ>

To Participate by PC, Mac, iPad, iPhone, or Android Device:

NOTE: This meeting will require registration prior to attending if participating by video.

- Go to the following website to attend the meeting: <https://zoom.us/>
- Click on the "Join A Meeting" link at the top of the website.
- Enter the following information where prompted:
 - Meeting ID: **840 1599 9063**
- Once you enter the Meeting ID and click "Join" you will be prompted to register for the meeting. Fill out the required information. After you register for the meeting, you will receive an email with a link to join the meeting.

To Participate by Phone:

- Dial the following number: **(929) 205-6099**
- Enter the following information when prompted:
 - Meeting ID: **840 1599 9063**
- After you enter the Meeting ID please press # to enter the meeting. There is no passcode for this meeting.
- If you are participating by phone all graphics to be discussed during the meeting can be mailed to you.

Once the meeting has started and attendance has been taken, all participants will be muted to allow for presentation by the meeting host. Please note that participants' video will be off by default, as well, so meeting host can display the below maps during the meeting. **Please note this meeting will be recorded.**

During the call attendees are asked to use the raise hand function to ask questions. This can be done by using the Raise Hand function if joining by video or by dialing *9 if joining by telephone.

We look forward to discussing our proposal with you.

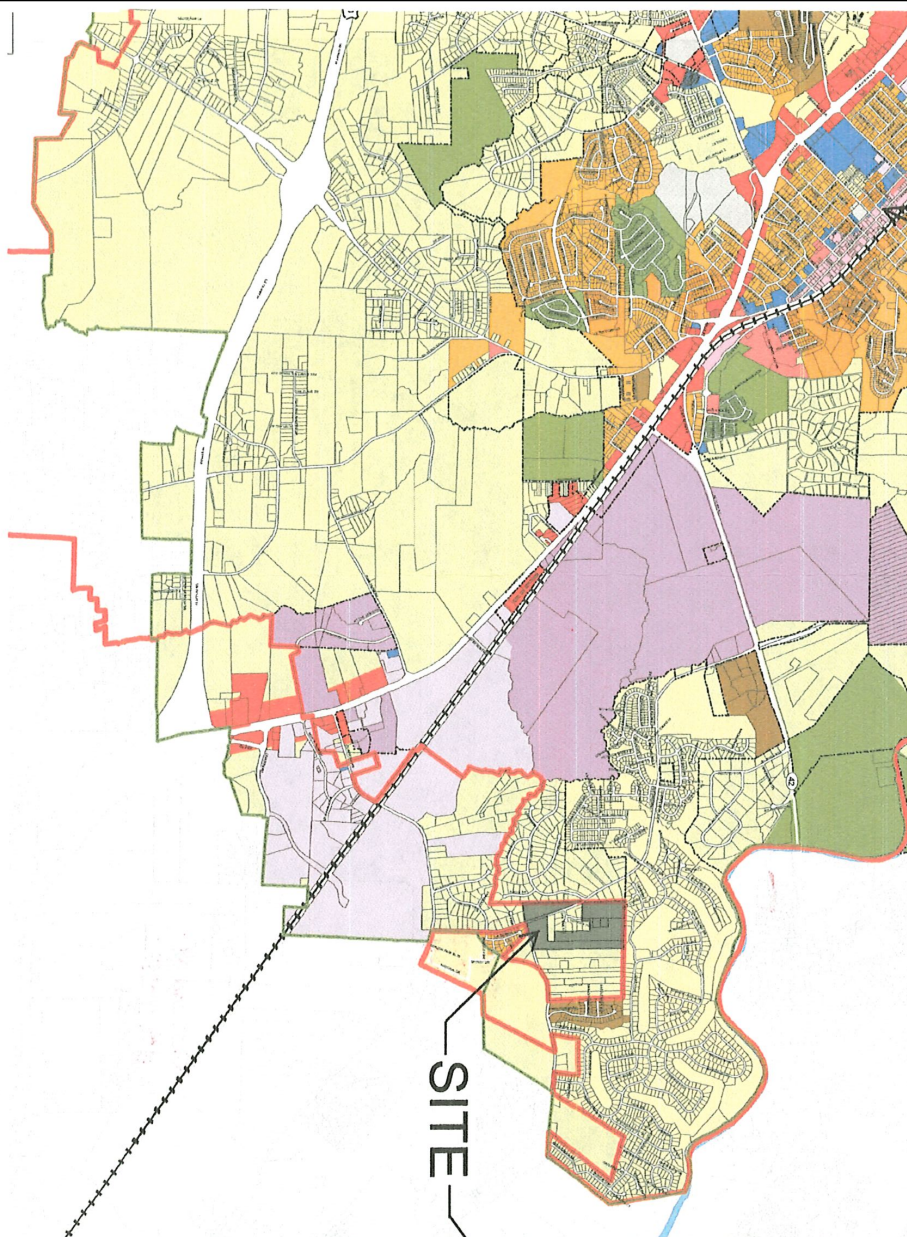
TMTLA Associates
5011 Southpark Drive Suite 200 - Durham, NC 27713
p: (919) 484-8880 - e: info@tmtla.com



VICINITY MAP
SCALE: 1"=1,000'

DOWNTOWN
CLAYTON

SITE



Official Zoning Map

Clayton, North Carolina
Last Amended: February 22 2021

- Clayton Town Limits
- Extra Territorial Jurisdiction
- County Boundary
- Claytex Fire District
- Railroad
- Special Use District
- Residential Estate
- Single-Family Residential: 10,000 S.F./Lot
- Single-Family Residential: 8,000 S.F. Lot
- Single-Family Residential: 6,000 S.F. Lot
- Office-Residential
- Office-Institutional
- Central Business
- Neighborhood Business
- Highway Business
- Industrial-Light
- Industrial-Heavy
- Public-Facilities
- Planned Development-Mixed Use



Wakefield Assemblage

TM/TA Associates
Landscape Architecture & Planning



Preliminary - Subject to Change
Glen Laurel Road @ Vinson Road
Clayton, North Carolina

STOCKS

ENGINEERING

1000 E. 10th St.

PO Box 1000

Rockwell, NC 27854

TEL: 703.200.1000

FAX: 703.200.1001

WWW.STOCKSENG.COM

PHONE: 202.335.8888

202.335.8888

NEIGHBORHOOD MEETING ATTENDANCE ROSTER

Project: _____

Application: _____

Location/Date: _____

NAME	ADDRESS
1	
2	
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20	

January 2021

m.us/meeting/84015999063

cape-Manual-... Sec. 8.3 Tree Protec... Interactive Maps |... iMAPS General Map - Meb... Coronado Stone Pr... Preliminary Subdivi... Raleigh Historic

REQUEST A DEMO 1.888.791

PLANS & PRICING CONTACT SALES RESOURCES SCHEDULE JOIN HOST WHITEBOARD

Automatically record meeting in the cloud

Registrants for 'Glen Laurel Rd - Clayton Neighborhood Mtg'

Search by name or email Search

☐	Registrants	Email Address	Registration Date	
☐	Kim Roberts	Kim@nexgenhomesn c.com	Jun 7, 2022 07:07 PM	Copy
☐	Christin Hopper	Murphy_christin@yah oo.com	Jun 7, 2022 06:16 PM	Copy
☐	Andy S	llbasspro@yahoo.com	Jun 7, 2022 06:09 PM	Copy
☐	John Barnes	john@cheshomes.co m	Jun 7, 2022 06:06 PM	Copy
☐	Angela Crumpler	ascrump09@gmail.co m	Jun 7, 2022 06:02 PM	Copy
☐	Tom Schueller	tjs3914@aol.com	Jun 7, 2022 05:59 PM	Copy
☐	Matthew Danielson	matthew@lmssi.com	Jun 7, 2022 05:59 PM	Copy
☐	Tony Tate	tony@tmtda.com	Jun 7, 2022 05:59 PM	Copy
☐	Jamie Stewart	jaimeelove@gmail.co m	Jun 7, 2022 05:58 PM	Copy
☐	Brandy Creech	bcreech@mbakerintl.c om	Jun 7, 2022 05:56 PM	Copy
☐	Anne Marie Hunter	amhunter999@gmail. com	Jun 7, 2022 05:56 PM	Copy
☐	Paulette Sanders	paulettesanders2@ya hoo.com	Jun 7, 2022 05:48 PM	Copy
☐	Mike Baust	mike@lmssi.com	Jun 7, 2022 05:30 PM	Copy
☐	Rob Puttkamer	robputt108@hotmai l.com	Jun 7, 2022 05:25 PM	Copy
☐	Kristen Zillioux	kzill@padovanoandzill ioux.com	Jun 7, 2022 03:55 PM	Copy
☐	William Smith	bsmith@tgsgroup.biz	Jun 7, 2022 01:27 PM	Copy

YouTube Facebook Instagram

ation | Cookies Settings

☐	Matthew Danielson	matthew@lmssi.com	Jun 7, 2022 05:59 PM	Copy
☐	Tony Tate	tony@tmtla.com	Jun 7, 2022 05:59 PM	Copy
☐	Jamie Stewart	jaimeelove@gmail.com	Jun 7, 2022 05:58 PM	Copy
☐	Brandy Creech	bcreech@mbakerintl.com	Jun 7, 2022 05:56 PM	Copy
☐	Anne Marie Hunter	amhunter999@gmail.com	Jun 7, 2022 05:56 PM	Copy
☐	Paulette Sanders	paulettesanders2@yahoo.com	Jun 7, 2022 05:48 PM	Copy
☐	Mike Baust	mike@lmssi.com	Jun 7, 2022 05:30 PM	Copy
☐	Rob Puttkamer	robputt108@hotmail.com	Jun 7, 2022 05:25 PM	Copy
☐	Kristen Zillioux	kzill@padovanoandzillioux.com	Jun 7, 2022 03:55 PM	Copy
☐	William Smith	bsmith@tgsgroup.biz	Jun 7, 2022 01:27 PM	Copy
☐	Christin Murphy	christin.murphy@habitatwake.org	Jun 7, 2022 01:11 PM	Copy
☐	Andrew Stocks	astocks@stocksengineering.com	Jun 7, 2022 12:00 PM	Copy
☐	jacob callahan	jacob.callahan05@gmail.com	Jun 6, 2022 01:28 PM	Copy
☐	Debra AndersonFarmer	dafarmer60@hotmail.com	Jun 6, 2022 10:42 AM	Copy

[Cancel Registration](#)
[Resend Confirmation Email](#)

[<](#)
[1](#)
[>](#)

GMT20220607-215....txt ^

GMT20220607-2....mp4 ^

NEIGHBORHOOD MEETING SUMMARY FORM

FILL OUT THE FOLLOWING:

Application:

Date of Mailing:

Date of Meeting: _____

Time of Meeting:

Location of Meeting:

I hereby attest that letters were mailed to the addresses listed on the Adjacent Property Owners List (attached) ten days prior to the Neighborhood Meeting, and that all required information was presented at the Meeting:

Printed Name:

Signature: _____

Meeting Summary/Minutes: *provide a summary of the discussion held at the meeting, including issues raised and any resolution discussed, and any changes made to the application as a result of the meeting.*

[illegible]

Please write clearly (or submit a typed summary). Use additional sheets if necessary.

WAKEFIELD DEVELOPMENT
GIVEN LAUREL ASSEMBLY - NEIGHBORHOOD MTC.
QUESTIONS

- JACOB CAUNTAN GIVEN RIDGE HOA PRESIDENT - CROSSING STREET
 - LEAVE AS NATURAL AS POSSIBLE
 - CONSIDERATION FOR CURRENT HORUS MARKET →
- PAULETTE SANDERS TRAFFIC, How many HOMES
- DORIS ANDERSON GIVEN RIDGE - PRICE OF HOMES
TEMPER ON GIVEN LAUREL
- CRISTIN HOPPER - PEER REVIEW
 - WHEN WILL CONSTRUCTION START
- ANNIE MIRE HUNTER - SURROUNDING OAK GROVE
- GARETH STEWART - OAK GROVE OPEN SPACE
 - CAN SOMEONE PURCHASE LAND FOR PRESERVATION
 - WETLANDS DISTANCE FROM ROAD TO PROPERTY AT CURRENT
- CONSTRUCTION START
- BRAND CREEK - DENSITY
 - TIA
 - BUFFER ON STREAMS ?

AUGUST RANKING BOARD →
TOWN COUNCIL →

KIM FORREST - WHO IS THE BUILDER

JAMIE STEWART - POND CONSTRUCTION & DESIGN

JUNE 7, 2022

18-19 PARTICIPANTS INCL.
PROJ. TEAM

CLAYTON: GLEN LAUREL RD. -

WAKEFIELD DEVELOPMENT

WAKEFIELD ASSEMBLAGE

- INTRODUCTIONS

- DESCRIBE SITE

- DESCRIBE ZONING

- DESCRIBE PROPOSED DEVELOPMENT

- RESPOND TO QUESTIONS.

- MATTHEW DANIELSON ^{WAKEFIELD DEVELOPMENT} DISCUSSED WHAT THE
HOMES WILL LOOK LIKE

- ANDREW RESPONDED TO ADDITIONAL Q'S.

- JOHN TURNER - DISCUSSED HOMES
3 BDR - 5 BDR

LOKI BRIDGET - CONTACT @ CLAYTON

~~Q&A:~~

JACOB CALLAHAN:

GLEN RIDGE HOA OFFICER

CHALLENGES OF SPLITTING SUB ACROSS
G.L. RD. -

ANDREW RESPONDS: TROP'LL HAVE THEIR
OWN MAIL BOX BUT UNDER SAME HOA

J. CALLAHAN -

W WHAT WILL HAPPEN TO GRASSLAND -
MAINTAINED AS GRASS OPEN SPACE

PAULSTIE SANDERS -

W VINSON RD - LOTS OF TRAFFIC -

HOW MANY HOMES? 134 ON TOTAL
SITE - IS ON OTHER SIDE OF
G.L. RD.

NC DOT WILL DETERMINE TRAFFIC NEEDS -
WE WILL MEET THOSE REQUIREMENTS.

DEBRA ANDERSON -

W WHAT IS PRICE PT? W WILL VALUE GO
DOWN? \$400'S TO 500 K - JOHN BARNES

W TRAFFIC IS ALREADY BAD - WON'T IT
GET WORSE? PRONE TO ACCIDENTS
WE WILL DO EVERYTHING WE CAN
TO MEET TRAFFIC NEEDS.

CRISTIN HOPPER

REQUESTING A
PEER REVIEW OF TRAFFIC STUDY -
WILL YOU PAY FOR IT?

BIRANDY CROUCH -

WHERE ARE YOU AT IN TERMS OF TRAFFIC STUDY?

- EARLY PROCESS - ANDREW

MORE WILL OCCUR AFTER U.S. ZONING
IS

JACOB CALAHAN

- ~~IF THE~~ WHAT WILL THE LARGEST IMPACT TO THE SITE IF MARKET DOWNTURN

MATTHEW - RALEIGH DOESN'T SUFFER ^{MUCH} ~~AT ALL~~
WE WILL NOT ABANDON THE SITE

GARTH STEWART (JAMIE STEWART)

OAK GROVE - WHAT WILL HAPPEN AT END OF TANNER'S WAY. HOW WILL WE GET ACCESS TO THAT OPEN SPACE.

ANDREW - STILL DEVELOPING - PROBABLY FOREST. ACCESS - NOT SURE HOW IT WILL END UP. -

HOW URGENT END UP WOODED

G. STEWART -

CAN SOMEONE BUY UNDEVELOPED LOT? UNLIKELY
NOW BEING ~~WANTED~~ WANTED A LOT COST

BRANDY CREEK

3 OVERALL DENSITY? - LESS THAN
3 UNITS/ACRE - CURRENTLY SHOWN
BE 2.5 UNITS/ACRE

PIKE BLVD -

ANDREW PLEASE SPEAK TO ^{COMMUNITY} ~~THE~~ ^{ENGINEERS.}

IN PROCESS GOING FORWARD. & SCHEDULE

STAFF 1st THEN PLANNING BD - REVIEW 1st
TOWN COUNCIL.

ONCE FULL REVIEW IS IN PLACE THEN
INFRASTRUCTURE WILL BE DESIGNED

THEN MORE REVIEW BY VARIOUS MUNICIPAL
& UTILITY EXPERTS & ADVISORS

BRANDY CREEK

WHEN WILL TIA ACTUALLY BE COMPLETED?

EXPECTING TO COMPLETE BEFORE SCHOOL
STARTS AGAIN.

CAN WE GET A COPY OF THE SITE PLAN?

STREAMS HAVE A BUFFER - WETLANDS DO NOT

GARTH STEWART -

IS THERE A DIMENSION RE: WETLANDS

~~IS~~

ANDREW: 200' FROM LOT TO CULVERT

BRANDY:

RUN UTILITY UNDER THE STREET

ALONG/ACROSS CULVERT

SECTION WILL FLOW TO NEUSE ~~RIVER~~ ^{C.C. EXIST. & SOLE}

~~SECTION~~

GARTH:

STORM WATER PONDS - WHAT DETERMINES
THEIR LOCATIONS?

LOCATED IN LOW AREAS ON THE SITE -
FIT EXIST. CHARACTERISTICS OF THE
SITE

BRANDY -

WHEN WILL CLEARING BEGIN

D: PROB A YEAR

GARTH - WILL NEIGHBORHOOD BE DEV. IN
PHASES?

A: WILL START W/ CREATING ACCESS FROM VIRSON -

MICHAEL PAUST -

THANK YOU TO THE COMMUNITY

KIM - REQUESTED ADDL INFO ^{REGARDING} ~~THE~~
HOMES / WHAT THEY WILL LOOK LIKE

GARTH STEWART -

ARE THE STRUCTURES SHOWN ON THE PLAN
EXISTING?

A: YES

G STEWART -

WILL PONDS BE PLANTED?

POND DAMS WILL BE GRASS SEEDS -

G. STEWART -

WILL POND DISCHARGE TO STREAM? YES.

KRISTEN ZILLOUX

ANGELA CRUMPLE

BILL SMITH

} REMAINING CREW ON
THE CALL. -

NOT SURE THE WOMEN
ARE EVEN STILL THERE

"ROCKY BRANCH RD" - WAS PREV. ~~THE~~ NAME
OF GLEN LAUREL RD.

Questions from Brandy Creech and Neighbors

- Define “Open Space” and its requirements
 - Will the green shaded areas remain wooded?

The open space is all area that is not within the ROW or on proposed individual lots, the open space will be dedicated to the HOA for ownership and maintenance. The area will consist of amenity areas, perimeter buffers, the Stormwater Control Measures (SCMs), riparian buffers, etc. Portions of this space will remain wooded. The limit of disturbance have not been determined at this time but will be as construction drawings progress.

- SCM – is this a retention pond/water feature?

SCM is an acronym for Stormwater Control Measure and yes would be a retention pond/water feature.

- Two proposed roads are shown tying into an adjacent property. Is there a current plan for the neighborhood to extend?

There is no current plan for the neighborhood to be extended, these are required stubs by the Town of Clayton to meet block length criteria and interconnectivity to adjacent property however there are no current plans by Wakefield Development to further extend the subdivision.

- Size of Lots?

Currently the minimum lot size is 6,900 sf, the typical lot size is 7,200 sf and the largest is 23,519 sf.

- Size of homes?

The typical building pad will be 45' x 55' with options that alter this size. I will let John Barnes from Chesapeake Homes who will be the homebuilder add any additional information about the homes.

- Has an erosion control plan prepared?

Not at this time, Erosion control plans will be a part of the construction drawing process after the rezoning process.

- Is there a plan to restore the creek/natural spring?
 - This is a loaded question.

All environmental features were located by Sage Ecological and were included on the ALTA Survey. Sage will also be coordinating the impact permitting with USACE and NCDEQ. Our current plan is to minimize the proposed impacts and any requirements of the permitting process will be included in the scope of work.

- Will the developer request and participate in the improvement of Glen Laurel and/or Vinson Roads to minimize traffic congestion?

A TIA is currently being performed by Exult Engineering. Any recommendations from the TIA, the Town of Clayton, and NCDOT will be incorporated into the improvements.

- Site Plan Request:
 - Plans to scale**
 - Include park, pool, community building/structures, etc
 - Show property lines (specifically Oak Grove neighborhood)**
 - Show wetland boundaries/all water surveys **

Our current preliminary site plan has been included in the presentation. We would like to note that modifications are being made and the plan is not final until it has received approval from all jurisdictional authorities.

- Is Oak Grove at risk of being annexed because of this proposed development?

No, State law has eliminated forced annexation Oak Grove. The developer cannot annex any land owned by a third party. Oak Grove would have to request voluntary annexation only if there was a desire to do so.

- Will Oak Grove be used as a construction entrance for the back side of the proposed neighborhood?
 - If so, how will the developer compensate Oak Grove residents for excessive wear and tear on our private street?

Oak Grove will **not** be used as a construction entrance, during preliminary discussions with the Town of Clayton, the Engineering department has requested that we not provide a street connection to Tanners Way. This connection is not shown.

- Will neighborhood street creek crossings on the map be culverts or bridges?

We will propose this as a pipe culvert crossing. This crossing will require the US Army Corp of Engineers and NCDEQ approval for stream/wetland impacts.

- Will vegetation be planted to define neighborhood boundaries?

The Town of Clayton requires a perimeter landscape buffer between the proposed zoning and the adjacent property. Natural vegetation will remain where possible however if the natural vegetation is removed for any reason a buffer in accordance with the Towns UDO will be planted.

-

Questions from Betty Woodall

- This tract was once her families farm and she asked if we located the slave cemetery that was on site.

An ALTA Survey and an Environmental Phase One have been performed on the site and neither of those studies found documentation or evidence of any Cemeteries on this site. We do know there is a Cemetery adjacent to this site, inside of the Glen Ridge Subdivision. If any cemeteries are encountered the development team will handle in accordance with typical protocol to investigate concern.

- She also had questions about traffic and turn lanes.

Addressed Above, however a TIA is currently being performed by Exult Engineering. Any recommendations from the TIA, the Town of Clayton, and NCDOT will be incorporated into the improvements.

-

Questions from Christin Hopper

Our lot directly abuts several proposed at the northernmost portion of the property. The stream to be impacted flows through our front yard. Our concerns relate to stormwater management and forest clearing.

1: Would the project comply with the basic requirements of the town of Clayton or are more protective measures proposed?

The stream shared by existing residences and the proposed development, as evidenced by its excessive incision in the landscape, is subject to very flashy storm flows. This perennial feature should be provided more protections than the town of Clayton's basic standards.

The project will comply with all applicable requirements from various governing authorities. The stream has a 50' riparian buffer from the top of the stream bank and these buffers are regulated by Johnston County. Streams and wetlands are regulated by the US Army Corp of Engineers the NC Department of Environmental Quality. There are some proposed impacts to this stream and wetlands so the USACE and NCDEQ will be involved in permitting of this site and be aware of all construction activity.

2: we understand the need for mass balancing, but see no need to clear all the way to the property line. Wide forested buffers provide better living conditions for both existing and future residents. Would the applicant entertain preserving 50ft wooded buffer along property lines adjacent to existing residences?

The plan is to leave a 15' undisturbed buffer where existing vegetation exists. If there is no vegetation or the existing vegetation must be removed, then a Type C landscape buffer as described in the Towns development ordinance will be planted.

3: The dominant winds in our area are from the southwest. Windthrow is common in forests cleared for differing land uses. A wider buffer would reduce the potential for trees to be pushed across the power lines already in our backyard and would increase property values and attractiveness. Some trees along the property line could not be cleared without our approval. Several are tall enough to impact our home.

Care will be taken to keep the existing wooded area within 15' of the property line as the landscape buffer and to avoid any impacts to adjacent properties especially in areas where existing vegetation is to be removed.

4: If the applicant will not agree to preserving this wide forested buffer along property lines, we request that tall opaque, vegetated buffers be planted by the applicant.

If the existing trees are to be removed, the development will provide the Type C landscape buffer as required by the Town of Clayton's development ordinance.

5: Will the applicant entertain allowing a native plant harvest to occur before the forests are cleared? We understand a waiver would need to be signed.

Please provide additional detail and present a more specific request. This can be discussed on a case-by-case basis. Any proposal presented will be reviewed by the developers.

6: The Town of Clayton and Johnston County in general, have done a very poor job of planning infrastructure to accommodate all the growth that is being approved. We request the town consider beginning a fund for all new homes that would be used to improve water and sewer, infrastructure, failing roadways, availability of schools, etc. Our standard of living steadily declines as more and more homes are approved without the most basic considerations for existing residents.

This is an item the Citizens of Clayton and Johnston County should bring to the attention of the elected officials. Typically, municipalities have tap fees and/or development fees to make connections to existing lines which are paid to the town for infrastructure improvements.

Master Plan Narrative

Summer Glen

Conditional Zoning

Town of Clayton Project 2022-125-CZM

July 15, 2022

REV. 10-28-22

REV. 2-27-23

REV. 6-20-23

REV. 7-20-23

REV. 8-29-23

Owner/Developer:



3100 Smoketree Ct. Suite 210
Raleigh, NC 27604





Town of Clayton
Conditional Zoning with Master Plan
For
Summer Glen

Applicant:
Wakefield Development
3100 Smoketree Court
Suite 210
Raleigh, NC 27604



~~July 15, 2022~~

~~REV. February 27, 2023~~

~~REV. June 19, 2023~~

~~REV. July 20, 2023~~

REV. August 29, 2023

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Project Development Team:

Civil Engineer – Stocks Engineering, PA

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Nashville, NC 27856

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Surveyor – Bateman Civil Survey Company, PC

2524 Reliance Avenue
Apex, NC 27539

Contact: Steven Carson, PLS
(919) 577-1080
info@batemancivilsurvey.com

Transportation Engineer – Exult Engineering

PO Box 99277
Raleigh, NC 27624

Contact: Brittany Chase, PE
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brittany@exultengineering.com

Environmental Consultant – Sage Ecological Services, Inc.

3707 Swift Drive
Raleigh, NC 27606

Contact: Sean Clark
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Summer Glen Subdivision

Overall Master Plan Summary:

The proposed Summer Glen Subdivision will be the recombination and subdivision of 5 parcels near the intersection of Glen Laurel Road and Vinson Road. The proposed project boundaries would be on each side of Glen Laurel Road and the properties surrounding the existing Oak Grove Subdivision. The parcel id numbers are 05I04010, 05I04010A, 05I04200S, 05I04203F, and 05I04203G. The combined total acreage of the project is approximately 53.06 Acres.

The site is currently in the Town of Clayton's ETJ and upon rezoning and prior to construction drawing approval would voluntarily annex into the Town of Clayton. This area is located within the limits of the 2045 Comprehensive Growth Plan but is also located in the Wilsons Mills Fire District. Additional time will be allotted in the schedule for annexation since this area this jurisdictional overlap.

The Town of Clayton's 2045 Comprehensive Growth Plan describes the plan for this area as Low-Density Residential. Low-Density Residential is defined with the following excerpt from the Plan:

LDR	Low Density Residential (LDR)
	Areas designated as Low-Density Residential are intended to remain predominantly suburban in character and provide for low-density, single-family residential development on smaller lots than those in Rural Residential areas. However, a mix of residential housing types may occur under a conditional zoning district to support conservation of open space, as long as a gross density of 3 units per acre is not exceeded. • Gross Residential Density*: ≤3 units/acre • Unit Type: Mostly single family detached homes, generally less than 25% attached units • Open Space: Minimum of 25%***. Open space should be a mix of preserved natural features with passive recreation such as greenways and trails and more formal or developed open space such as common greens, playgrounds or sports fields.

**Gross Residential Density is defined as the number of dwelling units divided by the total project area without subtracting areas devoted to open space, road right-of-ways, parks or similar public use and infrastructure areas.*

***Open Space minimums suggested for new developments over a minimum size or number of units. Does not apply to existing development.*

[From Page 18 of the Clayton Comprehensive 2045 Growth Plan]

The proposed plan outlines a development that will be below the Low-Density Residential goals set by the Growth Plan at a density less than or equal to 3 units per acre and above the minimum required open space of 25%. A pre-application meeting was held for this proposed application on April 12, 2022. In that meeting the unique nature of this site was discussed specifically revolving around the proposed lot sizes and density. The recommendation following that meeting from staff was to submit a Conditional Zoning w/ Master Plan. The proposed plan only includes single family residential detached homes however the Conditional Zoning with Master Plan is being pursued due to the unique nature of the lot sizes, density, open space, and partnership with the Neuse Country Club for amenity access. The proposed lot sizes and setbacks also do not neatly fit into a conventional zoning district, so the Conditional Zoning with Master Plan is the best fit and procedure for this project moving forward.

The applicant understands the scale of this development and proposes that it will be completed in multiple phases and may take approximately 3 years to complete final build-out. Phase One of the proposed project will be driven by the connection to the Town of Clayton's sewer main located in Birkdale Drive at the Northern portion of the project area and by an entrance connecting to Vinson Road on the southern end of the project area. A TIA has been reviewed and approved for this site by NCDOT and any requirement from the NCDOT are described herein. Two comments generated during the initial review regarding the proposed sites connection to Glen Laurel Road and Tanners Way will also be discussed in the public facilities section of the Master Plan Narrative.

The number of units proposed for this development is 138 which is 2.60 units per acre. This site is within the watershed protection overlay district which would typically limit the density to 2 units per acre however UDO Sec. 155.501(E)(1) allows an exception to this criterion as a high-density site if the development remains below 36% impervious area for the entire project area. The current Master Plan Conceptual Subdivision Layout shows the general layout of the proposed development with anticipated use areas. Per UDO Sec. 155.400(i) and comment from the master plan review a stub road to an adjacent property has been added. During the neighborhood meeting and other public meetings neighbors requested that stub roads not be included in the design. The Plan also shows the general area of Stormwater Control Devices and Open Space Amenity Areas. As the plan is further developed, the actual locations of the proposed Stormwater Devices, Residential Product Types and Locations may vary to conform to the Construction Drawings. The final overall unit count may be less but will not exceed the specified maximum units specified above and the overall Open Space will not fall below 25% of the proposed development or 13.27 acres. The open space lots will include the landscape buffers, amenity area, and mail kiosk locations for the residents.

The open space requirement per the Town of Clayton Development Code Section 155.203.1.2.B is 1,245 SF per Lot. Which equates to 3.94 Acres of required open space for the 138 Lots. The current site layout provides approximately 17.9 Acres of the property that will be owned by the homeowner's association. Some of this area fits the criteria of Section 155.500 Resource Conservation Areas. These areas will not be accurately assessed until the site topographic survey is completed however using the Johnston County GIS topography as well as the boundary and environmental survey there are approximately 30,217 SF of Wetlands, 141,859 SF of Buffer, 13,475 SF of slopes greater than 25% and no 100-yr floodplain. Portions of the wetlands and steep slopes are located within the buffer so the summation of the three areas should provide an over estimation of the RCA's. These features sum to 158,601 SF (3.64 Acres). Subtracting the RCA from the overall area outside of the lots and ROW leaves the site with approximately 14.26 acres of open space which is well above the 3.94 Acres required by this section and above the 25% that is stated in the Comprehensive 2045 Growth Plan. The developers are currently proposing community open flex space amenity areas within the development as well as a joint venture for future residents to access the amenities located at Neuse Country Club.

Recreation/open space is required to be dedicated to the town and must be accepted by Town Council. If the open space is not accepted by the town the recreation/open space fee-in-lieu per lot will apply in accordance with UDC Section 155.206(I).

Assuming the Council finds this Master Plan favorable, the combined Site Plan and Construction Drawings will provide a much higher level of technical data and detail appropriate for review by the Technical Review Committee, NCDOT, and other agencies having jurisdiction.

Exhibit A – Master Concept Plan

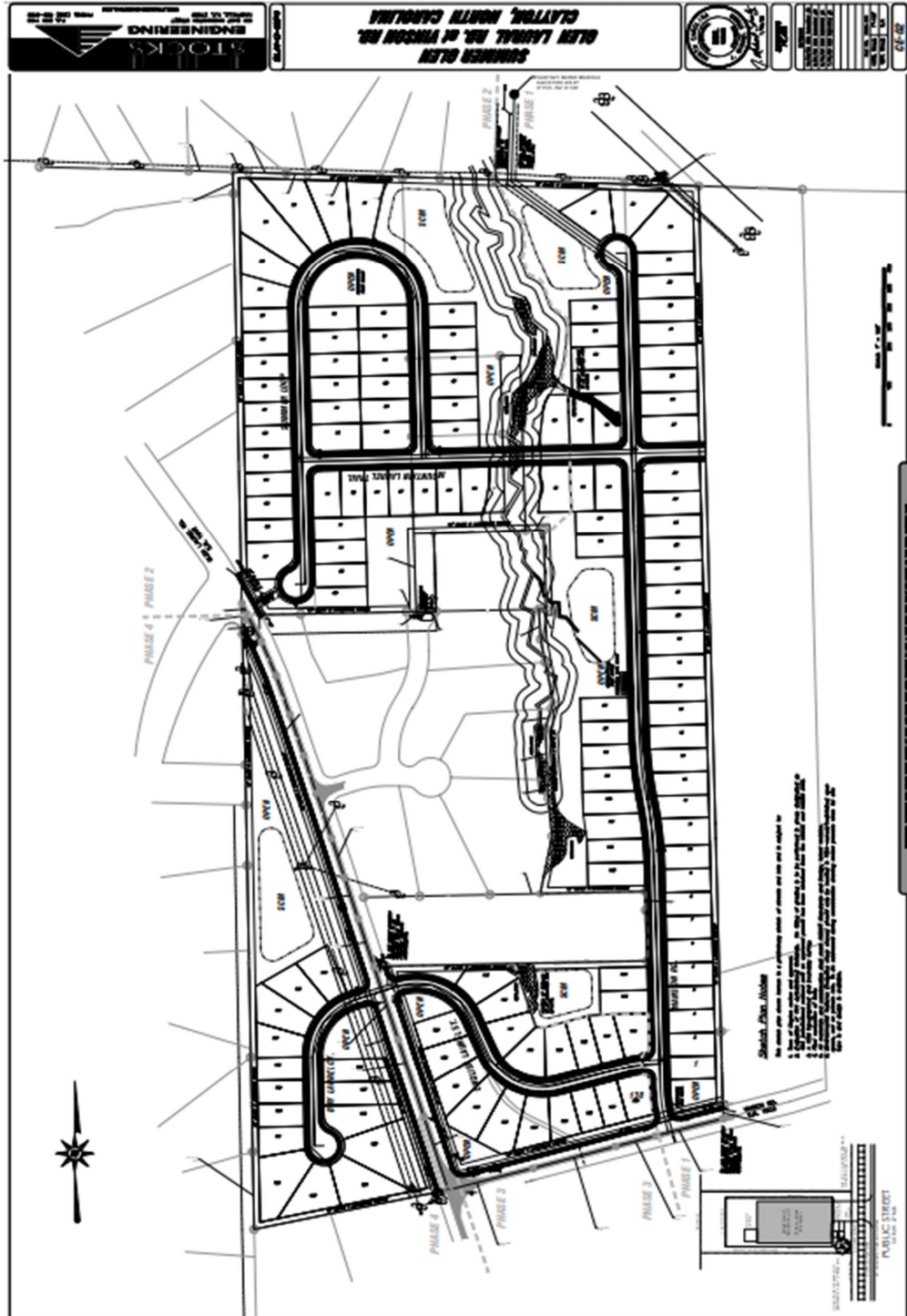


Exhibit B – Site Data

SITE INFORMATION

PROJECT NAME: SUMMER GLEN SUBDIVISION
 SITE LOCATION: GLEN LAUREL RD AND VINSON
 RD CLAYTON, NORTH CAROLINA
 PARID: 05104010A, 05104203G, 05104010
 05004203F, 05104200S
 DEED BOOK/PAGE: 0691/03962, 0409/01154,
 0691/03962, 0409/01154,
 0161/04205
 ZONE: EX. – RESIDENTIAL ESTATE (RE)
 PRO. – CONDITIONAL ZONING WITH
 MASTER PLAN (CZM)
 USE: EX. – AG./RES./VACANT
 PRO. – SINGLE FAMILY RES.
 TOTAL TRACK ACREAGE: ±53.06 Ac.
 NUMBER OF PROPOSED LOTS: ±138 LOTS
 PROPOSED DENSITY: 2.6 per Acre (<3)
 MINIMUM LOT SIZE: 6,500 SF
 (ALLOWED TO BE LESS THAN 1/3 AC. IF OPEN SPACE SUBDIVISION)
 LINEAR FOOTAGE OF STREETS: ±6,420 LF
 AREA OF PROPOSED STREET R/W: ±7.46 Ac.
 MINIMUM BUILDING SETBACKS:
 FRONT/ R/W: 21.5'
 (25' FROM SIDEWALK)
 SIDE: 6'
 CORNER SIDE: 10'
 REAR: 15'
 PROPERTY IS WITHIN WATER SUPPLY WATERSHED OVERLAY DISTRICT.
 RESOURCE CONSERVATION AREAS (RCA) (APPROX.):
 WETLANDS: 30,217 SF
 BUFFERS: 141,895 SF
 STEEP SLOPES(>25%): 13,475 SF
 100-YR FLOODPLAIN: 0 SF
 REQ. OPEN SPACE (155.203.1.2.B) – 1,245 SF/LOT=171,810 SF(3.94 AC.)
 OPEN SPACE COMMON AREA (155.501.E.1): ±17.9 Ac. (±34%)
 MAX. IMPERVIOUS AREA: 36% (19.10 AC)
 EST. IMPERVIOUS AREA: 809,159 SF (±35%)
 (155.501.E.1 MAX 2 UNITS PER ACRE OR 36% IMPERVIOUS)
 WATER AND SEWER SERVICES PROVIDED BY THE TOWN ON CLAYTON
 138 SEWER SERVICES WILL BE REQUIRED TO SERVE
 THIS DEVELOPMENT.
 PROPOSED 140 – 1" DOMESTIC WATER METERS.
 SITE PLAN AND CONSTRUCTION DRAWING APPROVAL IS REQUIRED FROM
 THE TOWN OF CLAYTON PRIOR TO ANY CONSTRUCTION ACTIVITY RELATED
 TO THIS PROJECT. DEVELOPMENT FEES ARE DUE BEFORE CONSTRUCTION
 DRAWING APPROVAL.
 PER DISCUSSION WITH THE TOWN OF CLAYTON STAFF WE PLAN TO
 DO A JOINT SITE PLAN AND CONSTRUCTION DRAWING REVIEW.
 THIS PLAN IS SUBJECT TO MINOR REVISION THROUGHOUT THE
 CONSTRUCTION DRAWING APPROVAL PROCESS. REVISIONS TO THE
 APPROVED MASTER PLANS ARE LIMITED.
 ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF
 CLAYTON ENGINEERING DESIGN STANDARDS, SPECIFICATIONS, AND DETAILS.

Existing Conditions:

The site consists predominantly of wooded area (+/- 40 Acres) with a variety of evergreen and hardwood trees. The remainder of the property contains approximately 13 Acres of tillable agricultural land. There is one residential home site that will be removed by the seller prior to the purchase of the land by the developer. The property contains a buffered stream which is an unnamed tributary to the Neuse River and multiple wetland pockets. The environmental features have been located by Sage Ecological Services, Inc. and the flags located by Bateman Civil Survey Company. The existing properties are zoned Residential Estate and the proposed zoning is Conditional Zoning with Master Plan. The following exhibits include a copy of the Boundary Survey, the Current Zoning Map, and an Aerial Image.

Exhibit D – Current Zoning Map

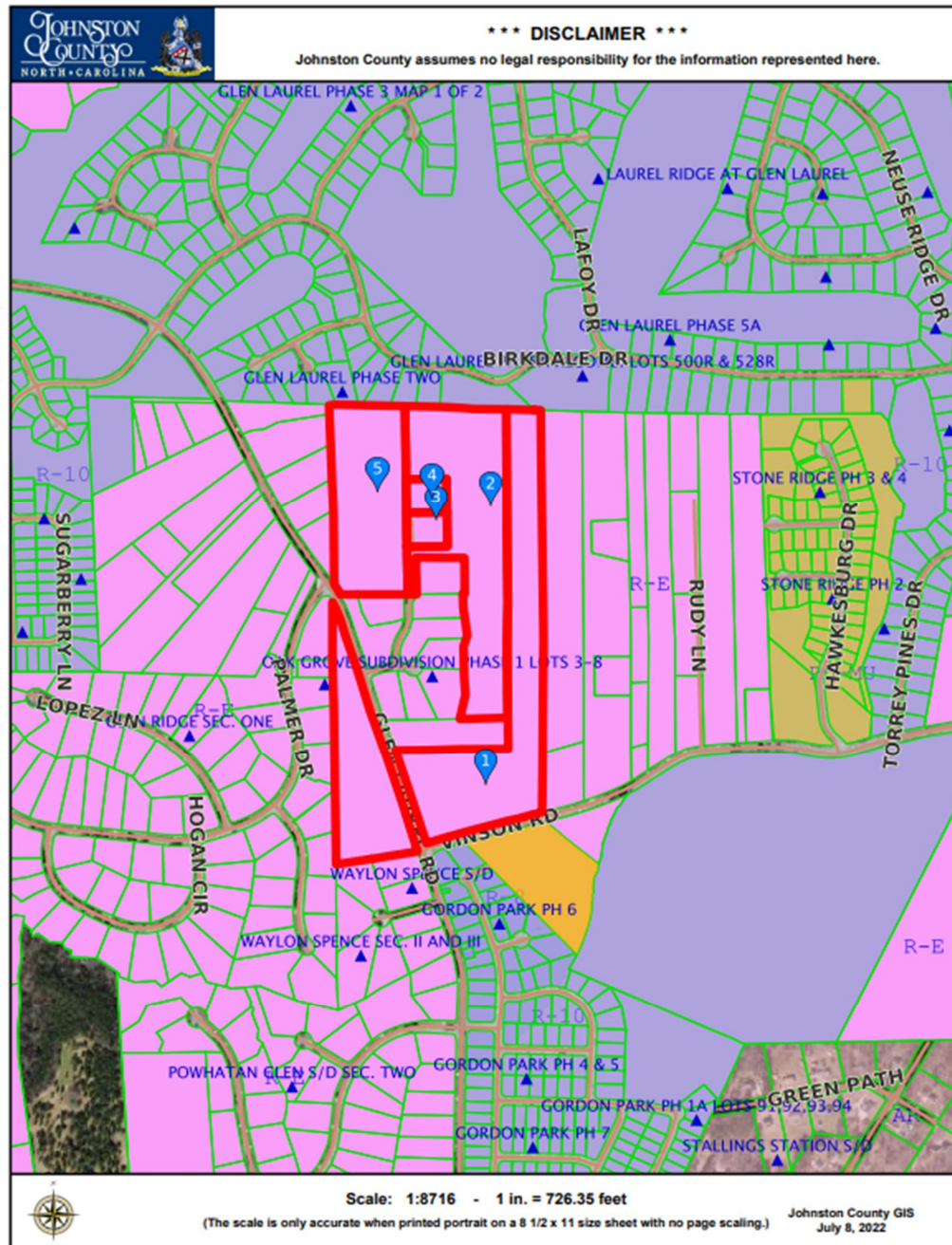


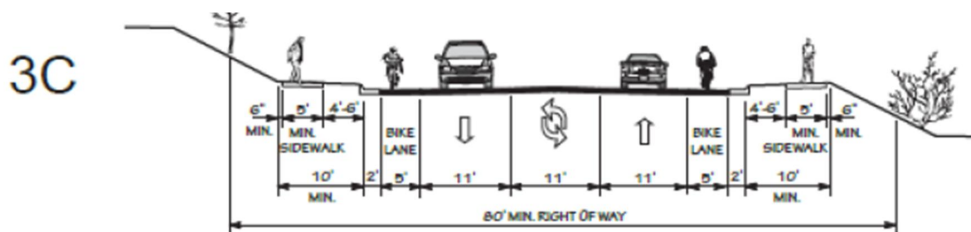
Exhibit E – Aerial Image



Approval Criteria – Conditional Rezoning

1. Consistency with the adopted plans of the Town.
 - a. The Comprehensive 2045 Growth Plan Future Land Use Map labels this area as Low Density Residential (LDR), and the current zoning is Residential Estate (RE). The Growth Plan represents LDR as equal to or less than 3 units per acre and a minimum required open space of 25%. The proposed Summer Glen Project has a proposed density of 2.60 units per acre (138 Units/53.06 Ac.) which is achievable by conditional rezoning with master plan and will provide approximately 34% open space. This site is within the watershed which would typically limit the density to 2 units per acre however UDO Sec. 155.501(E)(1) allows an exception to this criterion as a high-density site if the development remains below 36% impervious area for the entire project area. The project will provide any required infrastructure/utility improvements to accommodate the development by extending water, sewer, electricity, public roads, and by following any recommendation from the TIA, the North Carolina Department of Transportation, and the Town of Clayton. The proposed rezoning meets the intent of the growth plan.
2. Suitability of the subject for uses permitted by the current vs. the proposed conditional district.
 - a. The proposed development consists of single family detached residential homes which are allowed in the current RE zoning. The approval of the conditional rezoning would allow a higher density than allowed in the current zoning, however, the use is consistent with the current zoning and the proposed density is consistent with the Comprehensive 2045 Growth Plan.
3. Whether the proposed change tends to improve the balance of uses or meets specific demand in the Town.
 - a. Being consistent with the 2045 Growth Plan the proposed development is cohesive with development in close proximity to the project area. There is high demand for residential development in and around the Town of Clayton and this project helps meet the demand within the Town and increases, improve, and expand the Town Limits, Towns Tax Base, and infrastructure network.
4. The capacity of adequate public facilities and services included schools, roads, recreation facilities, wastewater treatment, water supply facilities and stormwater drainage facilities are available for the proposed conditional district.
 - a. Schools: The proposed development will be served by Powhatan Elementary School (<1 mile), Riverwood Middle School (8.8 miles), and Clayton High School (5.2 miles). Powhatan Elementary School was added to Johnston county Public Schools Capped Schools list for the 2022-2023 School year. Clayton High School has been on this list since 2020-2021 and Riverwood Middle School was removed from this list after the 2021-2022 School year. According to Johnston County Schools website, Capped Schools will continue to enroll students who live within the attendance area but may not accept students who live outside of that area.

- b. Roads: A traffic impact analysis (TIA) has been performed by Exult Engineering and has been reviewed by the North Carolina Department of Transportation (NCDOT) to determine if there is adequate roadway infrastructure to serve the proposed development. The developer has agreed to construct any required road improvements resulting from the professional engineers TIA and subsequent review by NCDOT. The NCDOT Congestion Management Section has required left turn lanes with 100' of storage at each of the three intersections. The striping for the turn lanes that have been found to be what is required will fit within the Frontage Widening criteria of the Towns Ordinance. The frontage widening along Glen Laurel Rd. and Vinson Rd. are shown on the master concept plan. The frontage widening will meet the criteria of the 3C Cross Section per the Transportation Guidance Document. See Figure 3C Below.



- c. Recreation Facilities: The proposed development will provide community flex open space and is located approximately 1.5 miles from East Clayton Community Park. The developers have also discussed with The Neuse Country Club the option of pursuing their facilities as an amenity to the residents. Negotiations regarding this agreement are currently underway.
- d. Wastewater Treatment: The engineering design team has been working with the Town of Clayton Engineering Department and determined that the downstream sewer lift station in Glen Laurel Subdivision has adequate capacity for allocation of additional tributary flow from the proposed development. Communication with Staff regarding this lift station and the available capacity at the WWTP are ongoing and the current development schedule is set for after the opening of the WWTP expansion with the potential of bringing a few lots onboard prior to that time.
- e. Water Supply: The proposed development has proposed connection to the Town of Claytons existing water in Birkdale Road and Vinson Road creating an additional loop in the water system.
- f. Stormwater Drainage Facilities: The proposed development is within the Neuse River Basin and will require stormwater management for water quantity and quality before leaving the site. Stormwater runoff will be collected by street curb and gutters and above ground swales and will be directed into an underground pipe system that will route stormwater to proposed stormwater control facilities (SCM). Approximate locations of these facilities are included on the master plan. The final location, size, and detail of these devices will be provided during the construction drawing submittal process. All stormwater management will be designed to meet the requirements set by the Town of Clayton and the North Carolina Department of Environmental Quality.

5. It has been determined that the legal purposes for which zoning exists are not violated.
 - a. The applicant has followed the procedure as outlined in Section 155.203 Part 3 and 155.705. All Town of Clayton process and procedures have been and will be followed throughout the rezoning process.
6. It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare.
 - a. It is our understanding that there will be no adverse effect upon adjoining property owners by this project further the proposed development will be expanding the public utility system providing additional loops in the water system which has the potential to increase water quality in the water lines and increase water pressure.
7. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.
 - a. It is our understanding that this project produced no detriment to the general public and the public improvements will benefit the Town of Clayton and the adjacent property owners.
8. Compliance with code section 155.203(L) and all other applicable requirements of this chapter, or analysis and justification if it deviates from the requirements of this chapter.
 - a. The proposed master plan and subsequent subdivision design will comply with 155.203(L) and the other referenced sections except for the deviations listed in the following section.
9. Consistency with the Clayton General Design Guidelines.
 - a. The Town of Clayton General Design guidelines and standard details for construction will be followed.
10. Conformance of the proposal with the stated purpose of the requested conditional zoning district.
 - a. The proposed CZM district works well for this project that does not easily fit into other zoning districts. A table of the differences is in the next section. The layout demonstrates excellence in site design, circulation, use coordination and compatibility with neighboring properties. See 155.200 (C.1).
11. Compatibility of the proposed development with the adjacent community.
 - a. The project is very similar to other development in the project area and will be compatible with the other recent projects on Glen Laurel Road.
12. The quality of design intended for each component of the project and the ability of the overall development plan to ensure a unified, cohesive environment at full build-out.

- a. The proposed layout presents a unified, cohesive environment within the project at full build-out.
13. Compatible relationships between each component of the overall project.
- a. The open space amenity uses will be compatible with the proposed residential community. The developers are also pursuing a joint venture with the adjacent Neuse Country Club for access to additional amenities.
14. Self-sufficiency of each phase of the overall project.
- a. The connections to existing water and sewer will be in Phase One. Future phases will connect to Phase One.
15. Documentation that the proposed infrastructure improvements accommodate the additional impacts caused by the development, or documentation to assure that the development, as proposed will not overtax the existing public infrastructure systems.
- a. A sanitary sewer analysis has been performed by Stocks Engineering and reviewed and confirmed by the Town of Clayton Engineering that the downstream sewer has available capacity at the lift station. We are having ongoing discussions with the staff regarding the WWTP expansion timeline and its coordination with development.
16. The fiscal impact of the proposal and the proposed financing of required improvements.
- a. The applicant believes that the towns tax base from the development will provide adequate funding for maintaining the required infrastructure.
17. The success of the proposal in providing adequate pedestrian and bicycle links within the development and with the adjacent community.
- a. The proposed development will provide sidewalks which will provide pedestrian connection to internal amenities. There are no public greenways in close proximity to the development however the frontage widening will provide sidewalks on our side of the property for the length of the frontage.
18. The effectiveness with which the proposal protects and preserves the ecologically sensitive areas within the development.
- a. One stream crossing is proposed, and wetland impacts will be avoided and minimized where possible. All impact permitting will be performed by Sage Ecological with the support of the developer and Stocks Engineering.

Consistency with Unified Development Code

The proposed subdivision concept is drawn with the intent to meet the requirements of the Town of Clayton Unified Development Code (UDC) where practical and applicable. During the Construction Drawing process and review by the Town Staff, considerable time will be spent to ensure the plans meet the intent of the Code and the following modifications to the code as requested herein.

Comparison for Proposed Lot Dimensional Standards for Open Space Subdivisions:

	Current Zoning			Proposed Zoning
	R-E	R-10	R-8	CZM
Minimum Lot Size	12,000 SF	8,000 SF	6,000 SF	6,500 SF (Allowed in Open Space Sub.)
Minimum Lot Width	48 FT	50 FT	42 FT	60 FT
Maximum Lot Coverage	35%	35%	35%	70%
Maximum Impervious Area	50%	50%	55%	70% (per lot) 36% (full site)
Density (Units/Acre)	3.7	5	7	2.6
Front Setback	25	25	25	21.5
Side Setback	9	6	6	6
Side Street Setback	15	15	10	10
Rear Setback	18	15	15	15

Landscape Buffer Criteria:

The proposed master plan includes a 15' landscape buffer around the perimeter of the project boundary as required per 155.203.L.1.i. Existing vegetation may be used to satisfy the Class C buffer requirement. A Tree and Shrub study will be coordinated with Town Staff during construction to verify the remaining vegetation meets the criteria of the required buffer planting ratios for every 100' of lineal buffer. If the existing vegetation does not meet the minimum planting requirements, then more plantings will be installed to supplement the existing vegetation. If there is no existing vegetation or grading activity that requires the existing vegetation to be removed, then a Class "C" – 15' buffer will be planted. The existing vegetation may also provide the screening of the required wall, opaque fence, evergreen hedge, berm, or combination thereof. If the existing vegetation does not provide adequate screening, then supplemental plantings will be added to increase the screening. One of the goals of this development is to leave as much existing vegetation as possible within the 15' buffer and to minimize the disturbed area however this may not be possible for entire perimeter buffer. During the construction process the site perimeter buffers will be evaluated and considered for potential areas to increase the landscape buffers. The buffers will meet the minimums as described in the ordinance. The planning director may grant an exception to the wall, opaque fence, evergreen hedge, berm, or combination thereof within the Class C buffer. Generally, if the topography or thickness of the existing mature vegetation functionally meets the 6' screening requirement the installation of the fence, wall, berm, or hedge can be waived.

Public Utility Extensions:

The project will connect to existing Town of Clayton Utilities that are on or within proximity of the project area. The Town has an 8" water line in Vinson Road as well as an 8" waterline in Birkdale Road. There is also a gravity sewer main in Birkdale that will be accessible by an easement from Neuse Country Club. The Water and Sewer that is in Birkdale Road is less than 300' from the development making this an "Infill Development" according to the Water and Wastewater Allocation Criteria. Johnston County has 6" water in Oak Grove Subdivision and 12" Water in Glen Laurel Road. The county also has a 16" Sanitary Sewer Force Main in Glen Laurel Road. The proposed project will connect to town water in both Birkdale Road and Vinson Road and will not connect to county utilities.

During the preconstruction meeting we were requested to analyze the sewer capacity of the lift station in Glen Laurel Subdivision. An analysis of this lift station was performed by Stocks Engineering based on current data provided by the Town of Clayton Public Utilities. The analysis was reviewed by the Engineering department, and they confirmed that the lift station had available capacity for the proposed development. A copy of the "Preliminary Pump Station Calcs" and the emails noting the Engineering Departments confirmation of the available capacity has been added as Exhibit H following the Water and Wastewater Allocation Criteria.

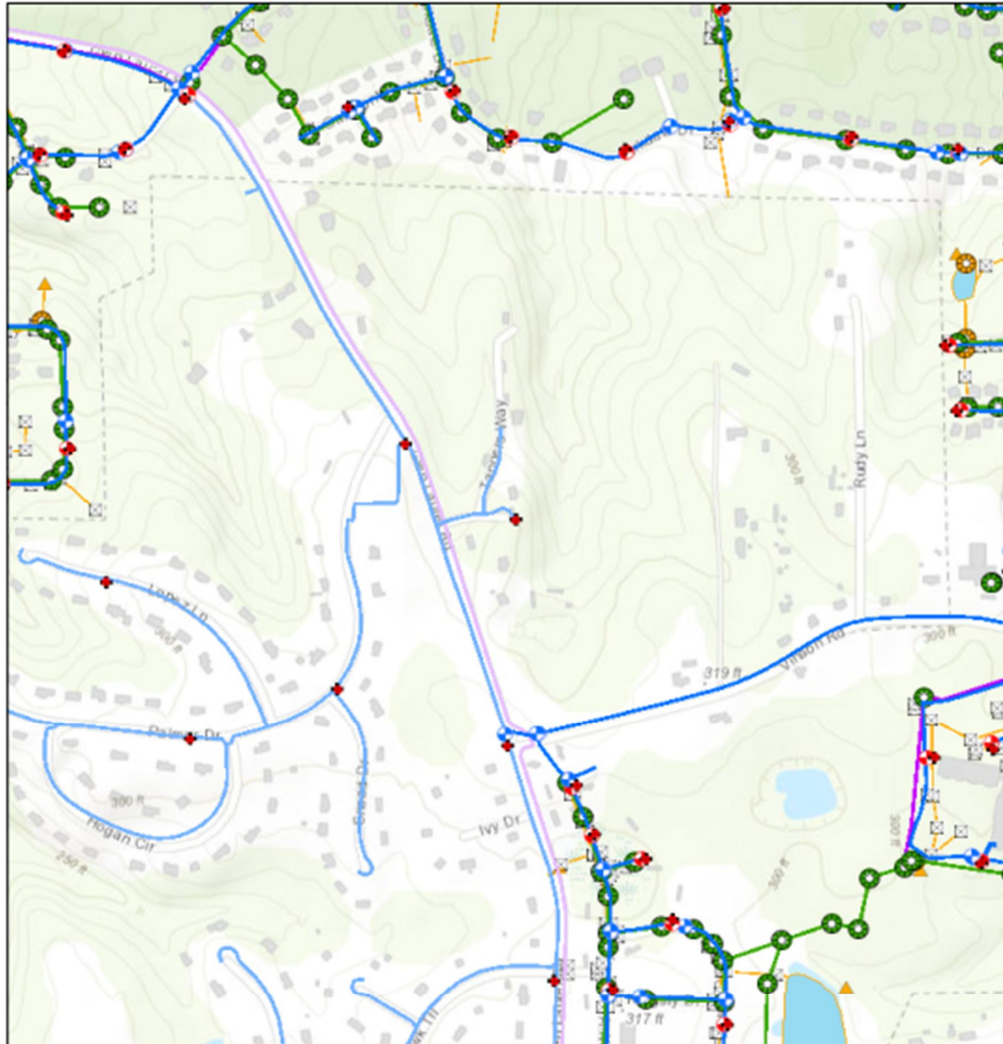
Actual allocation of water and sewer for the proposed development will come from Town Council after the submittal of the Water and Wastewater Allocation Criteria Request. This policy requires a project score a minimum of 50 points from the provided Allocation Criteria worksheet. The proposed project will exceed the 50-point minimum from a combination of being an infill development type (25 pts), a residential future tax status (5 pts), a town electric customer (20 pts) and by providing multiple car garages (5 pts) from the community benefit bonus points section. The proposed development will request allocation of 34,500 GPD of water and sewer from Town Council and the Water and Wastewater Allocation Request has been submitted to run parallel with this application. The bulk of this flow will not be available until the new WWTP comes online however there was some discussion with Engineering that would potentially allow for a small portion of the homes to be platted sooner if the flow was available at the time of platting.

The Town of Clayton also has Electricity adjacent to this property and the developer has been in communication with the Electric Department about being an electric customer.

Included in the next two exhibits are a map showing the approximate locations of the existing utilities and the Town of Clayton Water and Wastewater Allocation Criteria. The third Exhibit contains email confirmation and the pump station calculation showing the downstream sewer system has available capacity for this project.

Exhibit F – Existing Utility Map

Summer Glen Utility Connection



July 7, 2022

1:9,028
0 0.05 0.1 0.2 mi
0 0.1 0.2 0.4 km

Town of Cary, Johnston County, State of North Carolina DOT, Esri, HERE,
Garmin, GeoTechnologies, Inc., Intermap, USGS, METI/NASA, EPA, USDA

Exhibit G – Water and Wastewater Allocation Criteria



WATER & WASTEWATER ALLOCATION CRITERIA				
		TOTAL POINTS =	55	MINIMUM 40 POINTS REQUESTED
	Category	Points	Calc.	Notes
LEVEL OF ACTIVITY # (See 3.1 for the request)	Government/Public Admin./Public Safety	50		
	Non-residential (Commercial) - Retail & Restaurant	30		
	Non-residential (Commercial) - Office	20		
	Non-residential (Commercial) - Warehouse	15		
	Non-residential (Commercial) - Medical	25		
	Non-residential (Commercial) - Hotel/Motel	35		
	Industrial/Manufacturing	30		
	Institutional	15		
	Residential Existing Lot- Single Family Detached	40		Individual Existing Lot construction
	Residential Subdivision - Single Family Detached (> 0.25 Acre Lots)	20		Single Family Homes on Individual Lots greater than 0.25 acres
	Residential Subdivision - Single Family Detached (< 0.25 Acre Lots)	15		Single Family Homes on Individual Lots less than 0.25 Acres
	Residential Subd - Single Family Attached (> 1,500 SF Heated Space)	10		Townhomes with heated square-footage greater than 1,500 SF
	Residential Subd - Single Family Attached (< 1,500 SF Heated Space)	5		Townhomes with heated square-footage less than 1,500 SF
	Residential - Multifamily (Apartments)	10		
	Mixed-Residential	25		Mix of various lot sizes of Single-family, Townhomes, and Apartments
	Mixed-Use Commercial & Residential	30		Mix of Residential and Non-residential (Commercial) uses
	Overseas Redevelopment	30		
POTENTIAL SUBJECTS (See 3.1 for the request)	Industrial Development	25	25	Utilities already exist within 300 Feet of property
	Exempt	0		
	Residential	5	5	
	Non-residential	10		
COMMUNITY IMPROVEMENT BENEFITS (See 3.1 for the request)	Industrial	10		
	Cultural Arts/Entertainment for Public	10		
	Sports Recreation for Public	10		
	Town Electric Customer	20	20	
	Expansion of existing non-residential use	10		
	Re-development of an existing property	5		Must result in increased property value
	Residential Subdivision - Additional amenities included	5 - 15		Pool, Clubhouse, sports courts, etc. - 5 pts per, max 15 pts
	Job Creation - 10 to 25 new jobs	5		
	Job Creation - 26 to 100 new jobs	10		
	Job Creation - 100+ new jobs	15		
	Job creation - Jobs created will have salaries at or above median income	5		Must be greater than 50% of jobs added with documentation to confirm
	Residential - Multiple-Car Garages provided	5	5	
	Residential - Overflow Parking provided	5		Subject to Planning and Engineering support
	Masonry Elements included in Building Construction	10		
	Sustainable/High Efficiency Products and appliances used	5 - 15		5 pts per, max 15 pts
	Private trail connection to Public Greenway	10		

Exhibit H – Sanitary Sewer System Capacity Confirmation

Andrew Stocks

From: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Sent: Wednesday, May 4, 2022 4:44 PM
To: Andrew Stocks
Cc: James Blalock; Joshua Baird; Gray Methven
Subject: Re: Glen Laurel 1

Andrew - sorry for the delays on our end, but I have been out of the office and unable to review. In looking at your data, I am comfortable with the available capacity. Your analysis assumed almost double per lot, as we have a reduced flow rate for single family of 250GPD.

This confirmation is separate from the actual allocation that will take place at the council level.

If you have any other questions, please let me know.

Thanks,

Jonathan K. Jacobs, PE

Town of Clayton
Assistant Town Engineer
111 E. Second Street
Clayton, NC 27520
(919) 359-1297
ClaytonNC.org

Sent from my iPhone

From: Andrew Stocks <astocks@stocksengineering.com>
Sent: Wednesday, May 4, 2022 4:41:18 PM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: James Blalock <jblalock@townofclaytonnc.org>; Joshua Baird <jbaird@townofclaytonnc.org>; Gray Methven <gray@lmssi.com>
Subject: RE: Glen Laurel 1

Be Advised: This email originated from outside of the Town of Clayton's network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Josh, Jonathan, or James,

I have tried to reach all of you by phone this afternoon, Wakefield is looking for some agreement from the Town to the calculations that no improvements will be required to the lift station down stream of the Glen Laurel Project Area. It is critical to the projects schedule to get traffic counts that are needed before the end of the school year. Wakefields officers are not allowing the traffic to be ordered until there is an answer on the sewer. If you could provide some feedback on the calculations or confirm that no improvements are needed at the lift station it would be greatly appreciated.

We look forward to a response.

Thanks,

"For such a time as this",

J. Andrew Stocks

J. Andrews Stocks, PE

Stocks Engineering, PA

801 East Washington Street
P.O. Box 1108
Nashville, NC 27856

252.459.8196 (voice)
252.459.8197 (fax)
252.450.5140 (cell)

www.stocksengineering.com

"Designing the Future – Today" - We remain dedicated to providing innovative Cost-efficient engineering solutions. We value clients, and we are not only Committed to meeting their needs, but exceeding their expectations with a Strong commitment to moral, ethical and professional standards.

From: Andrew Stocks

Sent: Monday, May 2, 2022 11:48 AM

To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>

Cc: James Blalock <jblalock@townofclaytonnc.org>; Joshua Baird <jbaird@townofclaytonnc.org>; Gray Methven <gray@lmssi.com>

Subject: FW: Glen Laurel 1

Jonathan,

Have you had the opportunity to look at the attached pump station calcs to confirm on the Towns end that there is sewer capacity without any upgrades?

This is critical for Wakefields officers to be able to give the go ahead on the traffic count before school lets out so that those numbers are accurate.

Let us know if you have any questions.

Thanks,

"For such a time as this",

J. Andrew Stocks

J. Andrews Stocks, PE

Stocks Engineering, PA

801 East Washington Street
P.O. Box 1108
Nashville, NC 27856

252.459.8196 (voice)
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2

needs, but exceeding their expectations with a Strong commitment to moral, ethical and professional standards.

From: Andrew Stocks
Sent: Monday, April 25, 2022 5:38 PM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>; James Blalock <jblalock@townofclaytonnc.org>
Cc: Gray Methven <gray@lmssi.com>
Subject: RE: Glen Laurel 1

Jonathan and James,
I plugged the data you provided into our pump station design worksheet along with the proposed flow from our development added to the average weekly run times from the excel sheet with a peaking factor of 2.5. I am not about the current elevation on the pump on and off elevations but the station appears to continue to operate with above 2 fps velocity in the force main, close to a 2 minute run time cycling a little more than 3.5 times per hour. Take a look and let me know if there is anything else that we will need to provide.
Gray's corporate officers are looking for some answers on sewer allocation before they will allow the project to proceed.
Thanks for your help!

"For such a time as this",

J. Andrew Stocks

J. Andrews Stocks, PE

Stocks Engineering, PA

801 East Washington Street
P.O. Box 1108
Nashville, NC 27856

252.459.8196 (voice)
252.459.8197 (fax)
252.450.5140 (cell)

www.stocksengineering.com

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From: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Sent: Friday, April 22, 2022 5:43 AM
To: Andrew Stocks <astocks@stocksengineering.com>
Cc: Gray Methven <gray@lmssi.com>
Subject: Fwd: Glen Laurel 1

Jonathan K. Jacobs, PE

Town of Clayton
Assistant Town Engineer
111 E. Second Street
Clayton, NC 27520
(919) 359-1297
ClaytonNC.org

Sent from my iPhone

From: James Blalock <jblalock@townofclaytonnc.org>
Sent: Friday, April 22, 2022 5:42:32 AM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Subject: RE: Glen Laurel 1

Jonathan,

Please see attached.

James Blalock

Maintenance Superintendent, Water Resources
PO Box 879
Clayton, NC 27528
ClaytonNC.org
O: 919-553-1530 x6524
C: 919-538-3320



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From: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Sent: Thursday, April 21, 2022 4:08 PM
To: James Blalock <jblalock@townofclaytonnc.org>
Subject: Glen Laurel 1

James – Can you send me the latest data for GL PS #1?

Thanks!

Jonathan K. Jacobs, PE

Assistant Town Engineer
111 E. Second St.
Clayton, NC 27520
O: 919-553-5002 x6537
D: 919-359-1297

ClaytonNC.org



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Pump Station Calculations Worksheet

Project: East School Road
Location: Flowers Plantation

Date: 4/25/2022
Designer: JAS

Known/Assume
Calculated
From Pump Supplier

Design Data:

Number of Lots:		Proposed Subdivision	
Proposed Flow from Lots:	@ 480 GPD	139	Lots
Existing Flow		66720	GPD
Pump Rate Selection (GPDx2.5PeakFactor/1,440min/day)		164,038	
		400.62	GPM
Force Main Discharge Elevation (Peak Elevation)		292	feet
Gravity Influent Elevation		135.70	feet
Ground Elevation at Lift Station		156.50	feet
Bottom of Wetwell		129.40	feet
Force Main Type and Size	PVC C=140	8	inch
Force Main Length		10000	feet
Wetwell Diameter		8	feet
Wetwell Surface Area		50.24	sf
Gallons per vertical foot of Wetwell		375.80	

Velocity in Force Main $V = \frac{\text{Design Flow (GPM)}}{[r^2 \pi \cdot 7.48 \cdot 60]}$ 2.56 fps

Total Dynamic Head (Provided by Town of Clayton) 160 feet

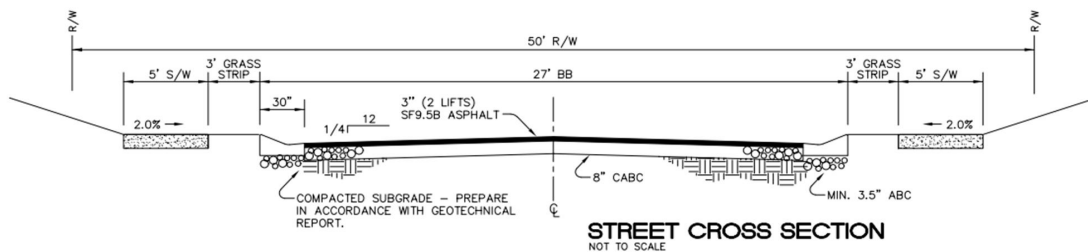
Pump Selected
 Pump Capacity
 Pump Speed
 Pump Impeller Diameter
 Pump HP
 Voltage
 Hertz
 Phase
 Minimum Solid Size

Pump On Elevation 133.50 feet
 Pump Off Elevation 131.70 feet

Detention Volume (Area x (Pump On - Pump Off) x (7.48 gal/cf))	676.43	gallons
Total Daily Flow (Q = Flow Projection/(24hours x 60 min.))	46.33	gpm
Pump On Time (Detention Volume/(Pump Capacity - Q))	1.91	minutes
Run Time per Day (Pump On time x # of Cycles x 24 hours/day)	166.54123	minutes
Pump Off Time (Detention Volume / Q)	14.60	minutes
Pumping Cycle (Pump On + Pump Off)	16.51	minutes
Cycles (60 min/hour / Pumping Cycle)	3.63	cycles/hr

Public Facilities

Streets: The proposed master plan proposes 6 new public streets, 2 intersections with existing State Roads, 1 emergency access easement to Glen Laurel Road. Per UDO Sec. 155.400(i) and comment from the master plan review a stub road to an adjacent property has been added. During the neighborhood meeting and other public meetings neighbors requested that stub roads not be included in the design. Approximately 6,420 Linear Feet of street will be constructed and dedicated to the Town as Public Streets. A typical cross section of the proposed streets is provided below.



Exult Engineering prepared a Traffic Impact Analysis (TIA) for the proposed development. As of the original submittal date the TIA had not been reviewed by the NCDOT. The NCDOT Congestion Management has completed their review and is requiring left turn lanes with 100' of storage for each of the three entrances. The linework and striping for these turn lanes will be incorporated into the frontage widening which has been added to the master plan. Any recommendations or improvements to the existing road system found by the TIA and NCDOT congestion management will be included in the construction drawings for implementation. The developers request for a variance for the frontage widening has been denied therefore the frontage widening is shown on the master concept plan. This frontage widening will incorporate the recommendations from the TIA and NCDOT.

During the review process there were two street layout comments that are worth noting and discussing in this document, the emergency access from the cul-de-sac to Glen Laurel Road and a connection to Tanners Way. The layout was revised based on a meeting with the Engineering Department between the pre-application meeting and the first CZM submittal. It was recommended by Town of Clayton Engineering that any connection to Tanners Way be avoided, and a Knox box gated emergency access connect the cul-de-sac to Glen Laurel Road.

The development team discussed eliminating the cul-de-sac and providing a connection to Glen Laurel across from Palmer Drive with NCDOT however this development does not own the land that would be required to properly align a new driveway with Palmer Drive. Since this would create an offset intersection on Glen Laurel NCDOT has denied a drive at this location due to safety concerns with the road alignments. In the place of a full drive the NCDOT will allow a Knox box gated emergency access to be installed in this location if that is favorable to the Town.

Tanners Way was designed as a public street that would be dedicated to the NCDOT however NCDOT has not taken ownership of this road. Tanners way also has Johnston County water and avoiding this connection would also eliminate a connection to the County water system. During the neighborhood meeting the residents on Tanners Way expressed concern with additional traffic on their neighborhood streets and it was represented to them, as was to us from Engineering, that this connection would not

be made. Avoiding this connection helps satisfy the residents of Tanners Way that were otherwise in favor of the development.

Refuse Collection/Recycling: The proposed development will voluntarily annex into the Limits of the Town of Clayton and refuse and recycling will be provided by municipal waste collection with individual roll out bins for each lot.

Water and Fire Protection: The proposed development will connect to the Town of Clayton water system at two points. A fire flow analysis will be prepared on the proposed design to model the domestic and fire flow demand on the water system. A fire truck vehicle tracking has been included with the master plan. The proposed master plan includes approximately 6,800 Linear Foot of water line. The water will vary between 6" and 8" in size as well as PVC and DIP in material. The water will connect to the existing Town of Clayton Public Water in Vinson Road and Birkdale Road by easement from the Neuse Country Club.

Sewer: Public sewer is accessible to the site by an easement from the Neuse Country Club and is less than 300' from the project boundary. It is our understanding that the easement is currently being reviewed by the Town for dedication from the Neuse Country Club property. The existing downstream pump station and line has been analyzed by Stocks Engineering and Reviewed by the Town of Clayton Engineering Department. It was determined that the pump station has adequate capacity for the proposed development. The chain of emails where this was discussed is included in the following pages. We have also had discussions regarding the WWTP expansion and have adjusted the time schedule to better align with the completion of this project. An Allocation Request Application has been submitted to run in parallel with the conditional rezoning request.

Electricity: The Town of Clayton Electric Department has power easements on and adjacent to portions of the project's Northern boundary. The developer has initiated conversations with them to be a Town of Clayton Electric customer. Streetlights will be provided if required by the Town of Clayton's Unified Development Code.

Exhibit I – Email from NCDOT

Andrew Stocks

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Sent: Tuesday, September 27, 2022 4:09 PM
To: Andrew Stocks
Subject: RE: [External] Summer Glen Subdivision - Town of Clayton

Andrews,

This access was already requested and denied during the TIA review by NCDOT. The offset intersection gives me safety concerns. I am not sure that three access is needed for this site, but the Town is requiring another access has Tanner Way been look into?

Sam Lawhorn, P.E.
District 3 Engineer
Highway Division 4
North Carolina Department of Transportation

919-739-5300
sclawhorn@ncdot.gov

2671 US 70 West
Goldsboro, NC 27530



Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Andrew Stocks <astocks@stocksengineering.com>
Sent: Monday, September 26, 2022 7:24 PM
To: Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Subject: [External] Summer Glen Subdivision - Town of Clayton

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to [Report Spam](#).

Sam,
Please reference the attached PDF of Summer Glen Subdivision. The Town of Clayton has requested that we eliminate the CDS and provide a connection to Glen Laurel Road. I expressed some concern about this to the Town since we do not own enough property to align with Palmer Drive, the entrance to Glen Ridge Subdivision, but wanted to get your thoughts on before we make any changes to the plans. Can you give us some direction from NCDOT's perspective? Feel free to call me to discuss (252-450-5140).

Thanks,

"For such a time as this",

The Arietta (Model 850)

Conceptual Unit Elevations

The Arietta

MODEL 850

BEDROOMS: 4 - 5
BATHROOMS: 2.5 - 4
SQUARE FEET: 3,351



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TODAY HOMES
— REALTY NC —



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05/21

The Arietta (Model 850)

Picture from Highgate Subdivision



The Concerto (Model 6260)

Conceptual Unit Elevations

The Concerto

MODEL 6260

BEDROOMS: 4 - 5
BATHROOMS: 2.5 - 3
SQUARE FEET: 2,656



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05/21

The Concerto (Model 6260)

Picture from Highgate Subdivision



The Melody (Model 6280)

Conceptual Unit Elevations

The Melody MODEL 6280	BEDROOMS: 3-4 BATHROOMS: 2.5-3.5 SQUARE FEET: 2,340
-------------------------------------	--



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— REALTY NC —

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www.tidewatermortgage.com

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07/22

The Melody (Model 6280)

Picture from Highgate Subdivision



The Grace (Model 62900)

Conceptual Unit Elevations

The Grace

MODEL 62900

BEDROOMS: 4-5
BATHROOMS: 2.5-3
SQUARE FEET: 2,454



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Services, Inc.
BILLS #100000000
www.tidewatermortgage.com



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05/21

The Grace (Model 62900)

Picture from Highgate Subdivision



Architectural Standards

1. All units to be 1 and 2 story with a variety of Craftsman, Colonial and Transitional themed elevations. Home plans of the same elevation shall not be side by side or directly across from one another.
2. Exterior color packages will enhance variety of color throughout the neighborhood and will not be duplicated side by side.
3. Siding elements to include a mix of premium vinyl siding with varying patterns such as lap siding, shake, and board and batten materials per architectural elevations.
4. All build facades to include a variety of craftsman columns with masonry, square and round columns per elevation.
5. Each home will have either a front porch or covered stoop element with a front lead walk that connects to the driveway.
6. Four vehicular parking spaces to be provided on each lot, two-car front loaded garage spaces (decorative garage door with glass windows and carriage details) with two parking spaces on the driveway.
7. Side roof eaves to be a minimum 10" overhang.
8. All front building facades to require a goal of 25% masonry elements such as Stone/brick accents of the portion of the house excluding the garage door(s).
9. Architectural style shingles to be used.
10. Side or rear patios to be provided on all units for outdoor living as well as optional covered porches available per plan.

General Zoning Conditions

1. Following Town Council approval, an electronic copy of the Master Plan and Narrative including the Conditions of Approval shall be submitted to the Planning Department for final approval.
2. The development shall meet all adopted Town of Clayton Unified Development Code (UDC) requirements, Town of Clayton Engineering and Stormwater design standards, and the North Carolina Fire Code and NFPA Fire standards, except where specifically modified by the approved master plan.
3. The developer will be required to pay their portion of the Wilsons Mills Fire District Capital Dept prior to the time the annexation is effective.
4. The Development shall be constructed in substantial conformance with the Master Plan and Master Plan Narrative as approved by the Clayton Town Council.
5. All parcels subject to the rezoning and master plan shall be annexed into the Town prior to any additional development approvals.
6. Uses in the Development will be limited to single family residential homes, and any allowed accessory uses within the Town of Clayton UDC for residential development.
7. The following standards will apply to the Development:
 - a. Maximum Number of units: 139
 - b. Maximum Density: 2.6 Dwelling units per acre and 36% Total Site Impervious Area
 - c. Lot Dimensional Standards as specified on the Master Plan
 - d. Must be a Town Electric Customer
 - e. Tree protection fence must be installed at the clearing limits to maximize preservation of existing vegetation.
8. A gated emergency access (w/ Knox box meeting Town of Clayton Fire Dept. standards) connecting the cul-de-sac on Summer Loop to Glen Laurel Road.
9. Frontage widening improvements will be made in phases that correlate with the driveway connections to the existing roadways in the respective phase.
10. TIA/NCDOT Requirements:

Planned Improvements By NCDOT/Others:

- According to the NCDOT Congestion Management Sections comments on the TIA, The NCDOT Signal Improvements by others are planned for the intersection of Glen Laurel Road and Vinson Road. The development team will discuss the timing of these improvements with the NCDOT.

Planned Improvements By Developer:

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100' of internal protected stems and a northbound and southbound left turn lane on Glen Laurel Road consisting of a minimum of 100' full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

Vinson Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the southbound approach of the Proposed Site Driveway with 100' of internal protected stem and a eastbound left turn lane on Vinson Road consisting of a minimum of 100' full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

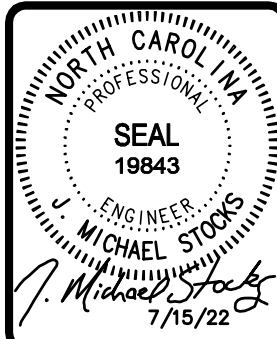
SUMMER GLEN
GLEN LAUREL ROAD at VINSON ROAD
CLAYTON, JOHNSTON COUNTY, NORTH CAROLINA
TOWN OF CLAYTON PROJECT NO. 2022-125-CZM

CONDITIONAL REZONING WITH MASTER PLAN - JULY 15, 2022
REVISED 2-27-23 6-19-23 7-19-23



BLN-C-1874

SUMMER GLEN
GLEN LAUREL RD. at VINSON RD.
CLAYTON, NORTH CAROLINA



COVER SHEET

REVISIONS
10/28/22 CZM Submittal #2
2/21/23 CZM Submittal #3
6/19/23 CZM Submittal #4
7/19/23 CZM Submittal #5

FILE NO. 2022-031
HORIZ. SCALE: 1"=100'
VERT. SCALE: NONE

COVER

GOVERNING AGENCIES:

PLANNING:
TOWN OF CLAYTON
PLANNING DEPARTMENT
111 E. SECOND STREET
CLAYTON, NC 27520

CONTACT: MR. BEN HOWELL, AICP, CZO
(919) 359-9364
BHOWELL@TOWNOFCLAYTONNC.ORG

PUBLIC UTILITIES:
TOWN OF CLAYTON
ENGINEERING
111 E. SECOND STREET
CLAYTON, NC 27520

CONTACT: MR. JOSHUA BAIRD
(919) 359-1288
JBAIRD@TOWNOFCLAYTONNC.ORG

NATURAL GAS
Piedmont Natural Gas
250 FIVE POINTS ROAD
DUDLEY, NC 28333

CONTACT: MARCUS THOMPSON
(919) 920-0257

ELECTRIC
TOWN OF CLAYTON
653 NC HIGHWAY 42 W
CLAYTON, NC 27520

MR. ALLEN TURNAGE
(919) 553-1530
ATURNAGE@TOWNOFCLAYTONNC.ORG

UTILITY AGENCIES:

WATER & SEWER:
TOWN OF CLAYTON
PUBLIC UTILITIES
111 E. SECOND STREET
CLAYTON, NC 27520

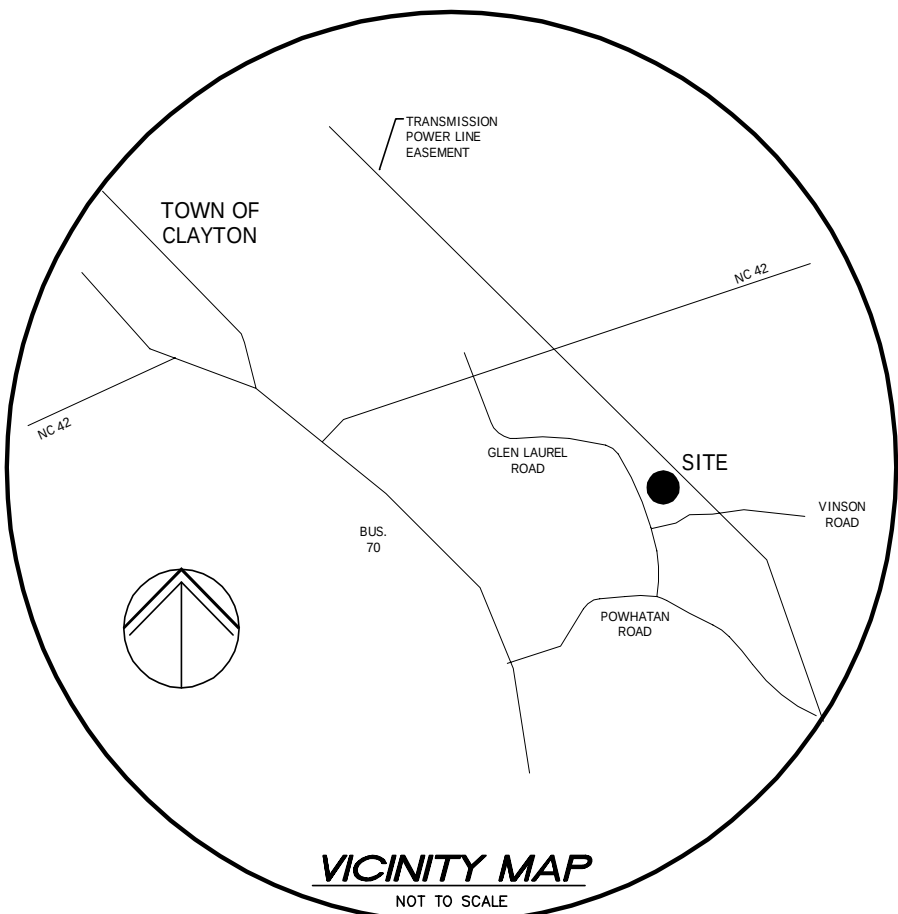
CONTACT: (OFFICE)
919.553.5002
UTILITIES@TOWNOFCLAYTONNC.ORG

EROSION CONTROL:
TOWN OF CLAYTON
ENGINEERING
PO BOX 879
111 E. SECOND STREET
CLAYTON, NC 27520

CONTACT: JONATHAN JACOBS
(919) 359-1297
JJACOBS@TOWNOFCLAYTONNC.ORG

SITE INFORMATION

PROJECT NAME: SUMMER GLEN SUBDIVISION
SITE LOCATION: GLEN LAUREL RD AND VINSON
RD CLAYTON, NORTH CAROLINA
PARID: 0504010A, 0504203G, 0504010
0504020F, 0504200S
DEED BOOK/PAGE: 0691/03962, 0409/01154,
0181/04205
ZONE: EX - RESIDENTIAL ESTATE (RE)
PRO - CONDITIONAL ZONING WITH
MASTER PLAN (CZM)
USE: EX - AG./RES./VACANT
PRO - SINGLE FAMILY RES.
TOTAL TRACK ACREAGE: 453.06 AC.
NUMBER OF PROPOSED LOTS: 138 LOTS
PROPOSED DENSITY: 2.6 per Acre (<3)
MINIMUM LOT SIZE: 6,500 SF
(ALLOWED TO BE LESS THAN 1/3 AC. IF OPEN SPACE SUBDIVISION)
LINEAR FOOTAGE OF STREETS: 16,420 LF
AREA OF PROPOSED STREET R/W: 17.46 AC.
MINIMUM BUILDING SETBACKS:
FRONT/ R/W: 21.5' (25' FROM SIDEWALK)
SIDE: 6'
CORNER SIDE: 10'
REAR: 15'
PROPERTY IS WITHIN WATER SUPPLY WATERSHED OVERLAY DISTRICT.
RESOURCE CONSERVATION AREAS (RCA) (APPROX.):
WETLANDS: 30,217 SF
BUFFERS: 141,895 SF
STEEP SLOPES (>25%): 13,475 SF
100-YR FLOODPLAIN: 0 SF
REQ. OPEN SPACE (155.203.1.2.B) - 1,245 SF/LOT=171,810 SF(3.94 AC.)
OPEN SPACE COMMON AREA (155.501.E.1): 17.9 AC. (±34%)
MAX. IMPERVIOUS AREA: 36% (19.10 AC.)
EST. IMPERVIOUS AREA: 809,159 SF (±33%)
(155.501.E.1 MAX 2 UNITS PER ACRE OR 36% IMPERVIOUS)
WATER AND SEWER SERVICES PROVIDED BY THE TOWN ON CLAYTON
138 SEWER SERVICES WILL BE REQUIRED TO SERVE
THIS DEVELOPMENT.
PROPOSED 140 - 1" DOMESTIC WATER METERS.
SITE PLAN AND CONSTRUCTION DRAWING APPROVAL IS REQUIRED FROM
THE TOWN OF CLAYTON PRIOR TO ANY CONSTRUCTION ACTIVITY RELATED
TO THIS PROJECT. DEVELOPMENT FEES ARE DUE BEFORE CONSTRUCTION
DRAWING APPROVAL.
PER DISCUSSION WITH THE TOWN OF CLAYTON STAFF WE PLAN TO
DO A JOINT SITE PLAN AND CONSTRUCTION DRAWING REVIEW.
THIS PLAN IS SUBJECT TO MINOR REVISION THROUGHOUT THE
CONSTRUCTION DRAWING APPROVAL PROCESS. REVISIONS TO THE
APPROVED MASTER PLANS ARE LIMITED.
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL TOWN OF
CLAYTON ENGINEERING DESIGN STANDARDS, SPECIFICATIONS, AND DETAILS.



INDEX

COVER COVER SHEET
CE-01.1 BOUNDARY AND ALTA SURVEY
CE-01.2 BOUNDARY AND ALTA SURVEY
CE-02 MASTER PLAN
CE-03 FIRE TRUCK VEHICLE TRACKING

TOWN OF CLAYTON GENERAL ZONING CONDITIONS:

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 - Maximum Density: 2.6 Dwelling units per acre and 36% Total Site Impervious Area
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 - Must be a Town Electric Customer
 - Tree protection fence must be installed at the clearing limits to maximize preservation of existing vegetation.
- A gated emergency access (w/ Knox box meeting Town of Clayton Fire Dept. standards) connecting the cul-de-sac on Summer Loop to Glen Laurel Road.
- Frontage widening improvements will be made in phases that correlate with the driveway connections to the existing roadways in the respective phase.
- THA/NC DOT Requirements:
 - Planned Improvements By NCDOT/Other:
 - According to the NCDOT Congestion Management Sections comments on the TIA, The NCDOT Signal Improvements by others are planned for the intersection of Glen Laurel Road and Vinson Road. The development team will discuss the timing of these improvements with the NCDOT.
 - Planned Improvements By Developer:
 - Glen Laurel Road at Proposed Site Driveway:
 - Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100' of internal protected stems and a northbound and southbound left turn lane on Glen Laurel Road consisting of a minimum of 100' full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.
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Owner/Developer:

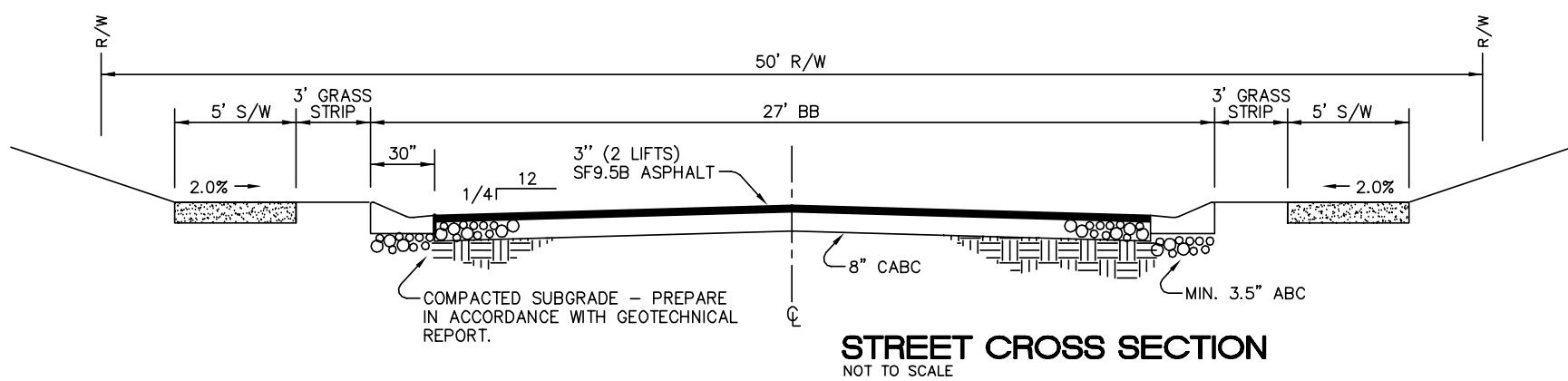
Wakefield Development, LLC
448 Viking Drive, Suite 220
Virginia Beach, VA 23452
757-463-6000 (v)
Contact: Mike Baust

Civil Engineering:

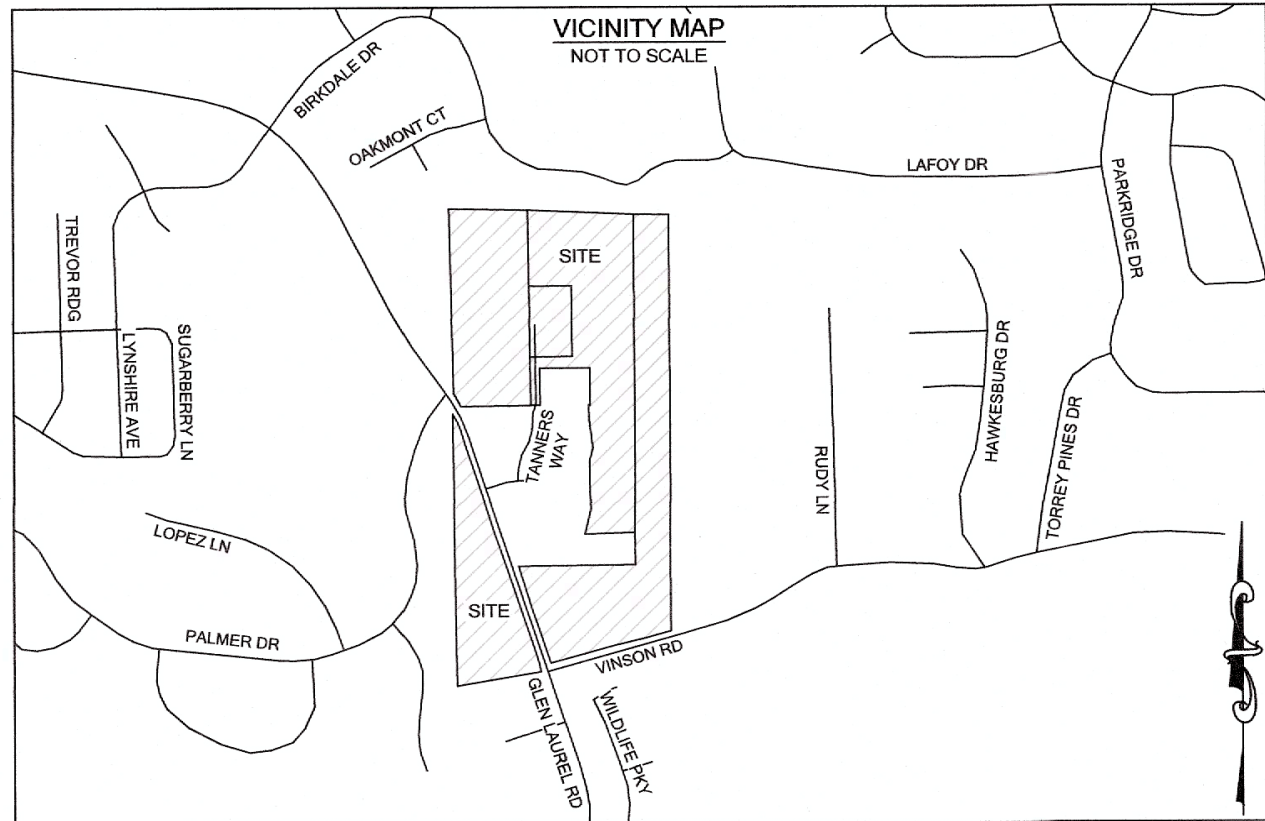
Stocks Engineering, PA
801 East Washington Street
Nashville, North Carolina 27856
252-459-8186 (v) 252-903-6891 (c)
Contact: Mike Stocks, PE
metocks@stocksengineering.com

Surveying:

Bateman Civil Survey Company
2524 Reliance Avenue
Apex, North Carolina 27539
919-677-1080 (v)
Contact: Josh Davidson, PLS
josh@batemancivilsurvey.com



THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24



LEGEND

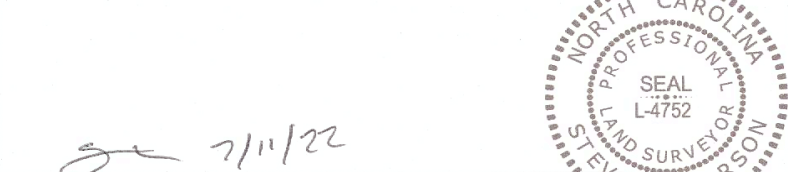
EXISTING BOUNDARY CORNER FOUND
BOUNDARY CORNER SET (3/4" IPS UNLESS OTHERWISE NOTED)
COMPUTED POINT
CONCRETE MONUMENT FOUND
CLEAN CUT
TRANSFORMER / ELECTRIC BOX
LIGHT POLE
UTILITY POLE
WATER METER
FIRE HYDRANT
UTILITY VALVE
TELEPHONE PEDESTAL
CABLE PEDESTAL
CATCH BASIN
DROP INLET
UTILITY MANHOLE
UTILITY HAND HOLE
AIR CONDITIONING UNIT
WELL
SIGN

UNDERGROUND FIBER
UNDERGROUND TELEPHONE
UNDERGROUND GAS
UNDERGROUND ELECTRIC
STORM DRAIN
OVERHEAD UTILITY

GUY WIRE
BURIED UTILITY MARKER
EXISTING IRON PIPE
EXISTING IRON REBAR
IRON PIPE SET
PKS PK NAIL SET
PKF PK NAIL FOUND
SSMH SANITARY SEWER MANHOLE
N NORTH
E EAST
S SOUTH
W WEST
NE NORTHEAST
SE SOUTHEAST
SW SOUTHWEST
NW NORTHWEST
DB DEED BOOK
PG PAGE
BM BOOK OF MAPS
RW RIGHT OF WAY
POB POINT OF BEGINNING
(T) TOTAL
TIE (INDICATES 2 PARTS OF THE SAME PARCEL)

- NOTES**
1. THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 3720167800K, DATED 06/29/2018.
 2. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE BASED ON GPS OBSERVATIONS, NAD 83/NSRS 2011/SPC UNLESS OTHERWISE SHOWN.
 3. SITE ZONED "R-2" FOR THE TOWN OF CLAYTON PER JOHNSTON COUNTY GIS.
 4. AREAS COMPUTED BY COORDINATE METHOD.
 5. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY COMPANY, UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
 6. THIS MAP HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
 7. NO CEMETERIES OR GRAVES WERE OBSERVED AS A RESULT OF THIS SURVEY.
 8. NO BUILDINGS OR STRUCTURES WERE OBSERVED AS A RESULT OF THIS SURVEY.
 9. STREAMS, STREAM BUFFERS & WETLANDS SHOWN PER WETLAND SKETCH MAP BY SAGE ECOLOGICAL SERVICES, DATED MARCH 21, 2022

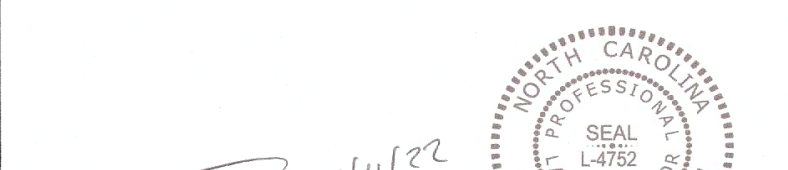
TO: EQUITY TITLE COMPANY, LLC, FIDELITY NATIONAL TITLE INSURANCE COMPANY AND WAKEFIELD DEVELOPMENT, LLC, A VIRGINIA LIMITED LIABILITY COMPANY. THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS OF TABLE A THEREOF (NONE SELECTED). THE FIELDWORK WAS COMPLETED ON APRIL 28TH, 2022.



STEVEN P. CARSON, PLS
NC LICENSE NO. 4752

I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED BOOK 3962 PAGE 691, DEED BOOK 4205 PAGE 161, DEED BOOK 1154 PAGE 409); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND AS SHOWN HERE ON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000 +; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-20 AS AMENDED, WITH MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 11 DAY OF JULY, A.D., 2022.

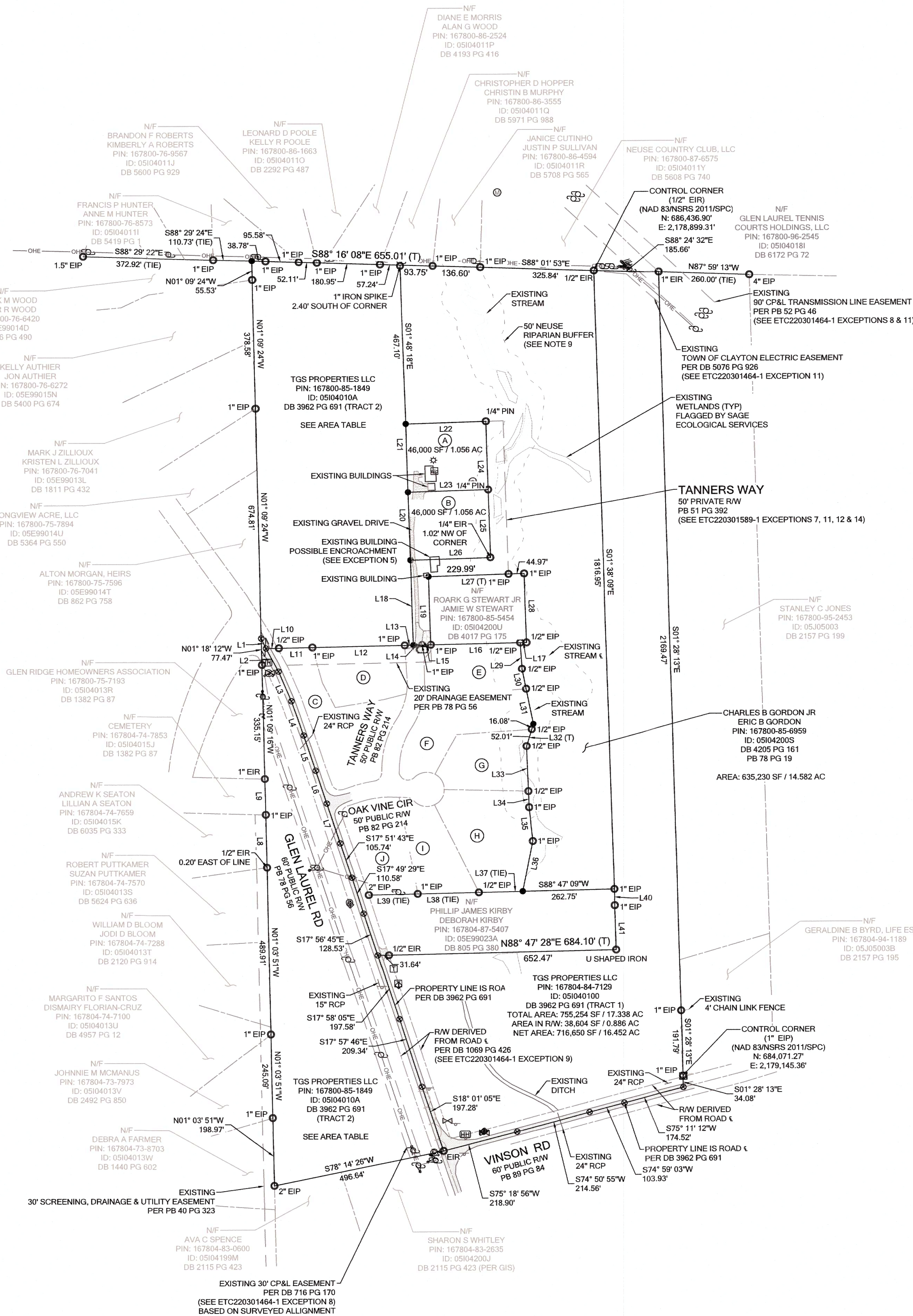
I, FURTHER THAT IN ACCORDANCE WITH G.S. 47-30-F-11-C-1; CERTIFY THAT THE SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND OR ONE OR MORE EXISTING EASEMENTS AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET. FOR THE PURPOSES OF THIS SUBSECTION, AN "EXISTING PARCEL" OR "EXISTING EASEMENT" IS AN AREA OF LAND DESCRIBED IN A SINGLE LEGAL DESCRIPTION OR LEGALLY RECORDED SUBDIVISION THAT HAS BEEN OR MAY BE LEGALLY CONVEYED TO A NEW OWNER BY DEED IN ITS EXISTING CONFIGURATION.



STEVEN P. CARSON, PLS
NC LICENSE NO. 4752

LOT INFORMATION				
PROPERTY	OWNER	DEED	PIN	ID
A	CHARLES B GORDON JR	DB 1154 PG 409	167800-85-4971	0504203F
B	CHARLES B GORDON JR	DB 1154 PG 409	167800-85-4781	0504203D
C	MICHAEL P DUNLOP	DB 9602 PG 691	167800-85-1063	0504203O
D	DENIS CAMELO	DB 4943 PG 703	167800-85-2226	0504203Q
E	STEVE K STROUSE	DB 5855 PG 522	167800-85-5247	0504203K
F	WARRICK L JONES	DB 5039 PG 189	167800-85-5124	0504203J
G	ANDREA M JONES	DB 4721 PG 209	167800-85-5969	0504203L
H	CHRISTY LYNN H SUTTON	DB 4801 PG 579	167804-84-5766	0504203M
I	BRANDY E B GREICH	DB 4312 PG 754	167804-84-4723	0504203N
J	VANESSA THOMAS	DB 4461 PG 357	167804-84-2765	0504203N
	JAMES B GURGANUS			

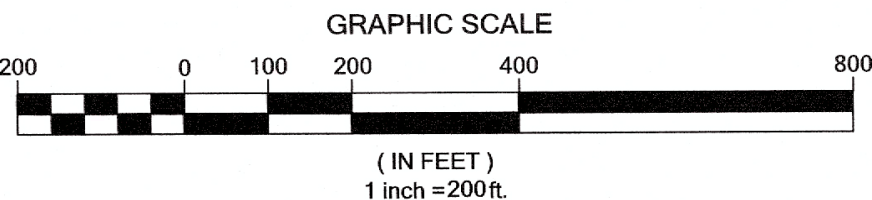
AREAS OF PIN 167800-85-1849	
NORTHERN SECTION	AREA
TOTAL	485,021 SF / 11.134 AC
IN RW	2,011 SF / 0.046 AC
NET	483,010 SF / 11.088 AC
SOUTHERN SECTION	AREA
TOTAL	410,433 SF / 9.423 AC
IN RW	48,740 SF / 1.073 AC
NET	363,713 SF / 8.350 AC
TOTAL PARCEL	895,474 SF / 20.557 AC
IN RW	48,751 SF / 1.110 AC
NET	846,723 SF / 19.438 AC



LINE TABLE		
LINE#	DIRECTION	LENGTH
L1	S24° 41' 24"E	32.33'
L2	N27° 50' 58"W	76.78'
L3	S22° 47' 42"E	94.11'
L4	S19° 08' 39"E	106.37'
L5	S18° 18' 38"E	109.77'
L6	S18° 01' 43"E	101.90'
L7	S18° 00' 39"E	123.02'
L8	N01° 03' 51"W	155.03'
L9	N01° 09' 16"W	105.00'
L10	S88° 49' 44"W	36.97'
L11	S88° 49' 44"W	96.87'
L12	S88° 49' 44"W	264.47'
L13	S88° 49' 44"W	24.97'
L14	S88° 50' 00"W	25.02'
L15	S88° 50' 00"W	25.04'
L16	N88° 50' 00"E	257.08'
L17	S88° 50' 00"W	17.98'
L18	S01° 44' 46"E	250.03'

LINE TABLE		
LINE#	DIRECTION	LENGTH
L19	S01° 45' 16"E	200.61'
L20	S01° 45' 30"E	200.00'
L21	S01° 45' 30"E	200.00'
L22	S88° 14' 30"W	230.00'
L23	S88° 14' 30"W	230.00'
L24	N01° 45' 30"W	200.00'
L25	N01° 45' 30"W	200.00'
L26	N88° 14' 30"E	230.00'
L27	S88° 19' 57"W	274.96'
L28	N01° 46' 36"W	203.34'
L29	N03° 17' 54"W	77.05'
L30	N11° 06' 00"W	59.49'
L31	N11° 06' 00"W	105.09'
L32	N16° 41' 40"E	68.09'
L33	N02° 07' 38"W	132.30'
L34	N02° 07' 38"W	47.67'
L35	N05° 47' 24"W	99.82'
L36	N11° 29' 43"E	149.79'

LINE TABLE		
LINE#	DIRECTION	LENGTH
L37	S88° 46' 47"W	126.36'
L38	S88° 46' 47"W	175.27'
L39	S88° 46' 47"W	140.20'
L40	S01° 29' 44"E	47.82'
L41	S01° 29' 44"E	128.73'



BATEMAN CIVIL SURVEY COMPANY
ENGINEERS • SURVEYORS • PLANNERS
2524 RELIANCE AVENUE, APEX, NC 27539
PHONE: (919) 577-1080 FAX: (919) 577-1081
INFO@BATEMANCIVLSURVEY.COM
NCBELS FIRM# C-2378

ALTANSPS/LAND TITLE SURVEY
EXCLUSIVELY FOR: WAKEFIELD DEVELOPMENT

PROPERTY PINS:
167800-85-1849, 167800-85-6959, 167804-84-1128, 167800-85-4781 & 167800-85-4971
AS RECORDED IN DEED BOOK 3962, PAGE 691, DEED BOOK 4205, PAGE 161,
& DEED BOOK 1154, PAGE 409
CLAYTON TOWNSHIP - JOHNSTON COUNTY - NORTH CAROLINA

- REVISIONS**
1. ADDED FEATURES FOR LOTS A & B (8/22/22)
 2. ADDED SECOND TITLE REPORT (8/22/22)
 3. REVISED SECOND TITLE REPORT (7/6/22)
 - 4.
- DESIGNED BY: N/A
DRAWN BY: ELS
CHECKED BY: SPC
SCALE: 1" = 200'
DATE: 04/28/2022
JOB NUMBER: 220214

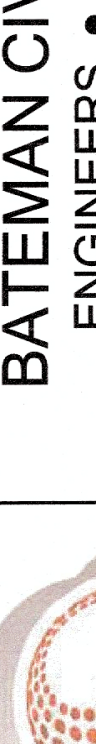
SHEET 1 OF 2

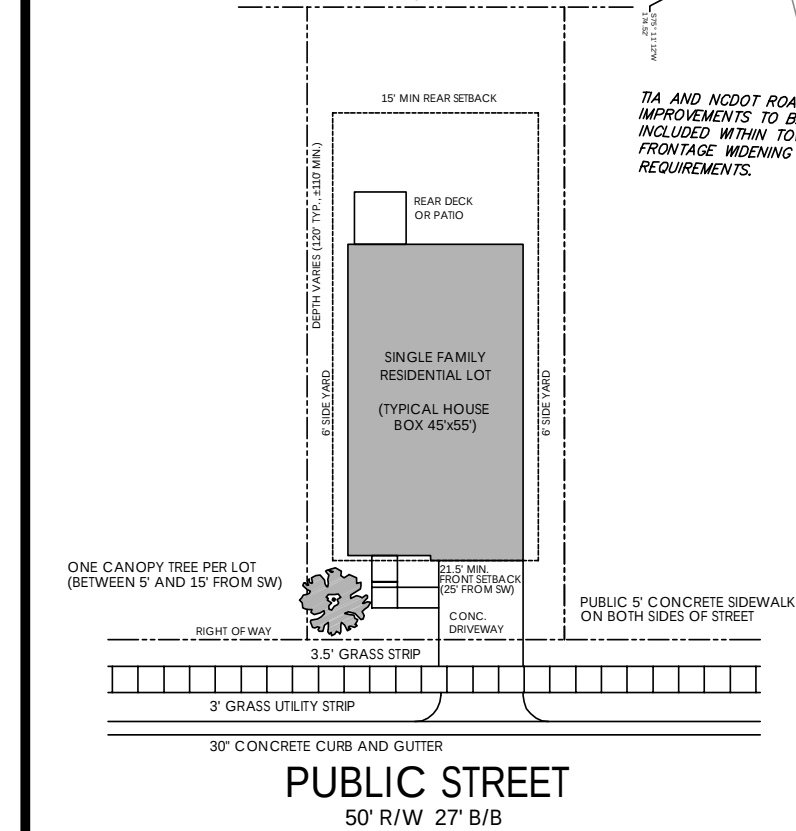
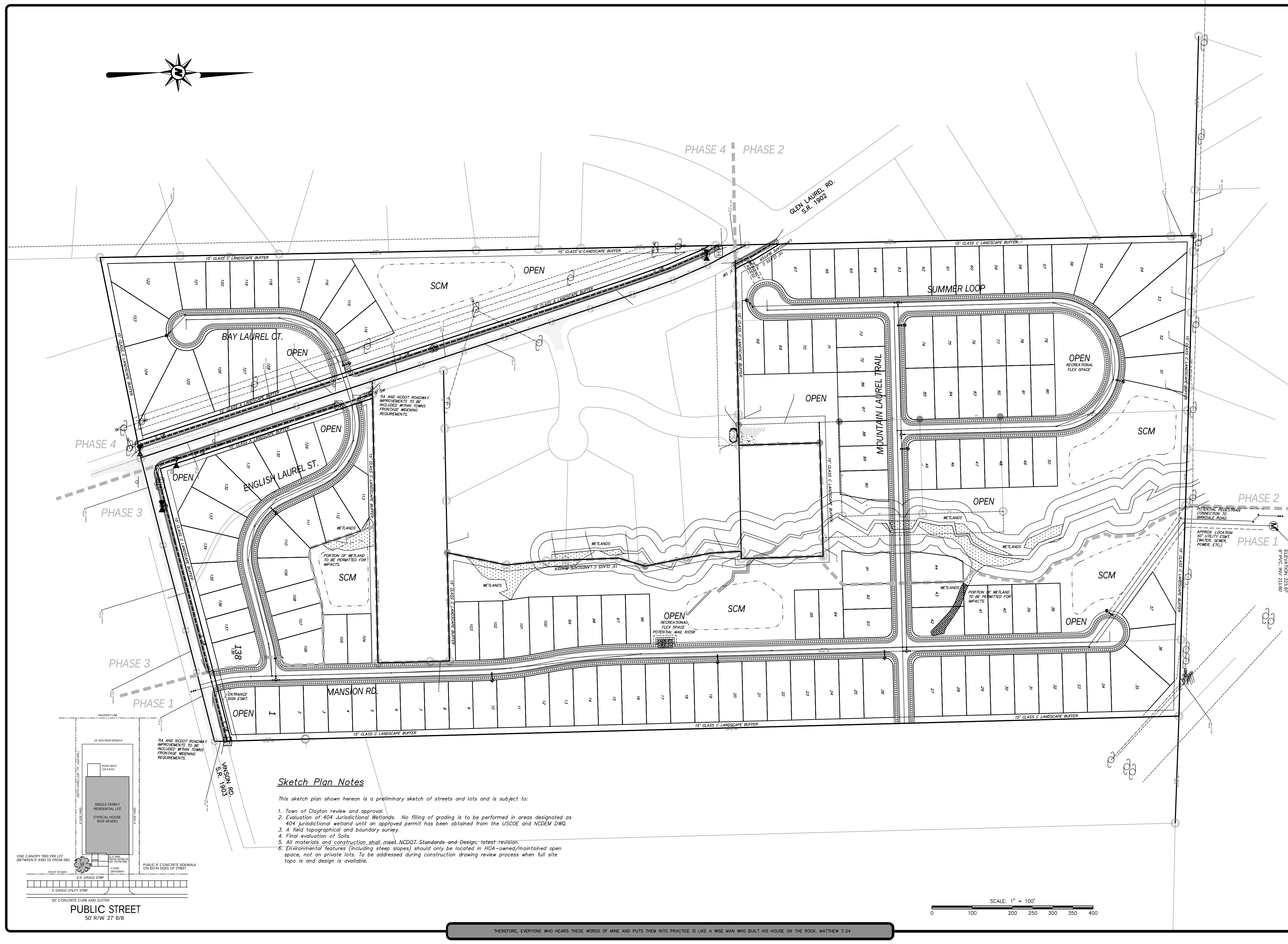
NAD 83/NSRS 2011/SPC

ISSUING AGENCY: EQUITY TITLE COMPANY, LLC ISSUING OFFICE: 200 GOLDEN OAK COURT, STE. 150, VIRGINIA BEACH, VA 23462 ISSUING OFFICER: ALTA REGISTRY ID: 1177969 COMMITMENT NO.: ETC220301464-1 PROPERTY ADDRESS: 36.89 ACRES, MORE OR LESS, ON GLEN LAUREL RD., CLAYTON, NC 27527 PROPERTY SURVEY DATE: 04/21/2022, JOB NO. 220214 SCHEDULE A	
1. COMMITMENT DATE: APRIL 1, 2022 AT 08:00 AM	
2. POLICY TO BE ISSUED: (A) ALTA OWNERS POLICY (06/17/06) PROPOSED INSURED: WAKEFIELD DEVELOPMENT, LLC, A VIRGINIA LIMITED LIABILITY COMPANY POLICY AMOUNT: \$1,680,050.00	
3. THE ESTATE OR INTEREST IN THE LAND DESCRIBED OR REFERRED TO IN THIS COMMITMENT IS: FEE SIMPLE.	
4. TITLE TO THE FEE SIMPLE ESTATE OR INTEREST IN THE LAND IS, AT THE COMMITMENT DATE, VESTED IN: TGS PROPERTIES, LLC, A NORTH CAROLINA LIMITED LIABILITY COMPANY	
5. THE LAND IS DESCRIBED AS FOLLOWS:	
TRACT 1: BEGINNING AT A STAKE IN THE INTERSECTION OF STATE ROAD 1902 AND STATE ROAD 1903, CORNER OF LOT NOS. 1 AND 5, AND RUNNING THENCE WITH THE CENTER OF STATE ROAD 1902, NORTH 13 DEGREES 55 MINUTES WEST 607.75 FEET TO A STAKE IN THE CENTER OF THE ROAD, CORNER OF LOT NO. 4; THENCE WITH THE LINE OF LOT NO. 4, THENCE NORTH 86 DEGREES 45 MINUTES WEST 690 FEET TO A STAKE, CORNER OF LOT NO. 4; THENCE WITH THE LINE OF LOT NO. 4, NORTH 3 DEGREES 15 MINUTES EAST 2901 FEET TO A STAKE, CORNER OF LOT NO. 4; THENCE SOUTH 83 DEGREES 30 MINUTES EAST 597.5 FEET TO THE POINT AND PLACE OF BEGINNING, AND CONTAINING 18.5 ACRES, MORE OR LESS, SAID TRACT BEING LOT NOS. 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678,	

SURVEY MADE BY BATEMAN CIVIL SURVEY COMPANY DATED 04/27/2022, JOB NO. 220214 SCHEDULE A	
ISSUING AGENT: EQUITY TITLE COMPANY, LLC ISSUING OFFICE: 200 GOLDEN OAK COURT, STE. 150, VIRGINIA BEACH, VA 23452 ISSUING OFFICES ALTA REGISTRY ID: 1171969 COMMITMENT NO.: ETC220301589-1 PROPERTY ADDRESS: 200 1.06 ACRES TRACTS ON TANNERS WAY NEAR GLEN LAUREL DRIVE, CLAYTON, NC 27527 15.06 ACRES MORE OR LESS NEAR GLEN LAUREL DRIVE, CLAYTON, NC 27527 REVISION NO.: 2	
1. COMMITMENT DATE: APRIL 22, 2022 AT 08:00 AM	
2. POLICY TO BE ISSUED: (A) ALTA OWNERS POLICY (09/17/06) PROPOSED INSURED: WAKEFIELD DEVELOPMENT, LLC, A VIRGINIA LIMITED LIABILITY COMPANY POLICY AMOUNT: \$793,100.00	
3. THE ESTATE OR INTEREST IN THE LAND DESCRIBED OR REFERRED TO IN THIS COMMITMENT IS: FEE SIMPLE AND THE APPURTENANT EASEMENT.	
4. THE TITLE IS, AT THE COMMITMENT DATE, VESTED IN: CHARLES B. GORDON, JR. (AS TO PARCEL ONE) CHARLES B. GORDON, JR. AND ERIC B. GORDON (AS TO PARCEL TWO)	
5. THE LAND IS DESCRIBED AS FOLLOWS:	
PARCEL ONE: ALL OF LOT 1, 1.056 ACRES AND ALL OF LOT 2, 1.056 ACRES AS SHOWN ON PLAT THEREOF RECORDED IN PLAT BOOK 44, PAGE 381, JOHNSTON COUNTY, REGISTRY.	
TOGETHER WITH THAT CERTAIN 50' ACCESS EASEMENT AS INDICATED ON PLAT RECORDED IN PLAT BOOK 44, PAGE 381, JOHNSTON COUNTY, REGISTRY, LESS THAT PORTION OF THE 50' ACCESS EASEMENT EXTINGUISHED IN PLAT BOOK 77, PAGE 480 (SEE ALSO PLAT BOOK 51, PAGE 392 AND PLAT BOOK 8, PAGE 13, FOR FURTHER DEPICTIONS OF SAID EASEMENT)	
PARCEL TWO: BEGINNING AT AN EXISTING PK NAIL LOCATED IN THE CENTERLINE OF NCSR 1901 (GLEN LAUREL ROAD), SAID EXISTING PK NAIL BEING SOUTHWEST CORNER OF PROPERTY OWNED BY ERIC B. GORDON AND AMANDA DAVIS GORDER (DEED BOOK 3150, PAGE 887) AND RUNNING THENCE ALONG THE CENTERLINE OF NCSR 1902 THE FOLLOWING COURSES AND DISTANCES: NORTH 14 DEGREES 18 MINUTES 36 SECONDS WEST 114.10 FEET, NORTH 13 DEGREES 58 MINUTES 07 SECONDS WEST 146.66 FEET, NORTH 13 DEGREES 53 MINUTES 12 SECONDS WEST 18.25 FEET, NORTH 13 DEGREES 16 MINUTES 02 SECONDS WEST 75.00 FEET, NORTH 15 DEGREES 38 MINUTES 35 SECONDS WEST 159.74 FEET, NORTH 14 DEGREES 53 MINUTES 09 SECONDS WEST 53.58 FEET, NORTH 16 DEGREES 31 MINUTES 45 SECONDS WEST 100.00 FEET, NORTH 20 DEGREES 28 MINUTES 13 SECONDS WEST 87.30 FEET, NORTH 35 DEGREES 01 MINUTE 01 SECOND WEST 15.91 FEET TO AN EXISTING PK NAIL, THENCE RUNNING SOUTH 87 DEGREES 17 MINUTES 53 SECONDS EAST 423.28 FEET TO AN EXISTING IRON PIPE; THENCE RUNNING NORTH 02 DEGREES 06 MINUTES 05 SECONDS EAST 1116.36 FEET TO AND EXISTING IRON PIPE; THENCE RUNNING SOUTH 14 DEGREES 30 MINUTES 33 SECONDS EAST 596.50 FEET TO A POINT; THENCE RUNNING NORTH 02 DEGREES 19 MINUTES 10 SECONDS WEST 1.68431 FEET TO A POINT; THENCE RUNNING SOUTH 01 DEGREE 35 MINUTES 30 SECONDS WEST 54.28 FEET TO A POINT; THENCE RUNNING SOUTH 01 DEGREE 33 MINUTES 09 SECONDS WEST 100.08 FEET TO A POINT; THENCE RUNNING NORTH 87 DEGREES 20 MINUTES 05 SECONDS WEST 262.77 FEET TO AN EXISTING IRON PIPE; THENCE RUNNING NORTH 87 DEGREES 20 MINUTES 05 SECONDS WEST 473.01 FEET TO THE POINT AND PLACE OF BEGINNING.	
LESS AND EXCEPT THE FOLLOWING PARCELS OF LAND:	
1. BEING ALL OF LOT 1, CONTAINING 1.275 ACRES, MORE OR LESS, AS SHOWN ON A MAP RECORDED IN PLAT BOOK 51, PAGE 392, JOHNSTON COUNTY REGISTRY, TO WHICH PLAT REFERENCE IS HEREBY MADE FOR A FULL AND COMPLETE DESCRIPTION OF SAID LOT.	
2. BEING ALL OF LOT 1, CONTAINING 1.056 ACRES, MORE OR LESS, AS SHOWN ON A MAP RECORDED IN PLAT BOOK 44, PAGE 381, JOHNSTON COUNTY REGISTRY, TO WHICH PLAT REFERENCE IS HEREBY MADE FOR A FULL AND COMPLETE DESCRIPTION OF SAID LOT.	
3. BEING ALL OF LOT 2, CONTAINING 1.056 ACRES, MORE OR LESS, AS SHOWN ON A MAP CORDED IN PLAT BOOK 44, PAGE 381, JOHNSTON COUNTY REGISTRY, TO WHICH PLAT REFERENCE IS HEREBY MADE FOR A FULL AND COMPLETE DESCRIPTION OF SAID LOT.	
4. BEING ALL OF THAT 50' ACCESS EASEMENT WHICH IS SHOWN AS TANNERS WAY ON THOSE MAPS RECORDED IN PLAT BOOK 44, PAGE 381 AND PLAT BOOK 51, PAGE 392, JOHNSTON COUNTY REGISTRY.	
THE ABOVE-DESCRIBED REAL PROPERTY IS NOW SHOWN ON THAT MAP RECORDED IN PLAT BOOK 78, PAGE 19, JOHNSTON COUNTY REGISTRY.	
LESS AND EXCEPT THOSE PARCELS DEPICTED ON PLAT BOOK 78, PAGE 56 AND ON PLAT BOOK 82, PAGE 214, JOHNSTON COUNTY REGISTRY.	
COMMITMENT NO.: ETC220301589-1	SCHEDULE B, PART II EXCEPTIONS
THIS COMMITMENT DOES NOT REPELISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.	
THE POLICY WILL NOT INSURE AGAINST LOSS OR DAMAGE RESULTING FROM THE TERMS AND PROVISIONS OF ANY LEASE OR EASEMENT IDENTIFIED IN SCHEDULE A, AND WILL INCLUDE THE FOLLOWING EXCLUSIONS UNLESS CLEARLY TO THE SATISFACTION OF THE COMPANY:	
1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I - REQUIREMENTS ARE MET. (NO MATTER OF SURVEY)	
2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION AND EASEMENTS OR CLAIMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS. (NO MATTER OF SURVEY)	
3. ANY LIEN, CLAIM OR RIGHT TO A LIEN, FOR SERVICES, LABOR OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS. (NO MATTER OF SURVEY)	
4. TAXES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS. (NO MATTER OF SURVEY)	
5. ANY DISCREPANCY, CONFLICT, MATTER AFFECTING ACCESS, SHORTAGE IN AREA OR BOUNDARY LINES, ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OVERLAP, SETBACK OR EASEMENT OR CLAIMS OF EASEMENT, RIPARIAN RIGHT, AND TITLE TO LAND WITHIN ROADS, WAYS, RAILROADS, WATERCOURSES, BURIAL GROUNDS, MARSHES, DREDGED OR FILLED AREAS OR LAND BELOW THE MEAN HIGH-WATER MARK OR WITHIN THE BOUNDS OF ANY ADJOINING BODY OF WATER, OR OTHER ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY A CURRENT INSPECTION AND ACCURATE AND COMPLETE LAND AND WATER OF THE LAND. (TO BE DELETED UPON RECEIPT OF REQUIREMENT NOTED UNDER SCHEDULE B, PART I, ITEM #7, HEREIN) (AS SHOWN HEREON)	
6. THE LIEN FOR ALL TAXES FOR THE YEAR 2022, WHICH ARE NOT YET DUE AND PAYABLE, AND SUBSEQUENT YEARS. (NO MATTER OF SURVEY)	
7. DECLARATION OF RESTRICTIONS AND PROVISIONS FOR PRIVATE ROAD MAINTENANCE RECORDED IN BOOK 1883, PAGE 155, JOHNSTON COUNTY REGISTRY. (AS SHOWN HEREON)	
8. EASEMENTS IN FAVOR OF CAROLINA POWER & LIGHT COMPANY RECORDED IN BOOK 716, PAGE 171, BOOK 1045, PAGE 315, BOOK 1447, PAGE 695 AND BOOK 3995, PAGES 23, 25 AND 27, JOHNSTON COUNTY REGISTRY. (EASEMENTS ARE BLANKET IN NATURE, UNABLE TO PLOT)	
9. DELETED PER SURVEYOR	
10. MEMORANDUM OF WATER USE AGREEMENT RECORDED IN BOOK 2373, PAGE 455, JOHNSTON COUNTY REGISTRY. (NO MATTER OF SURVEY)	
11. RIGHTS OF OTHERS IN AND TO TANNERS WAY AND ACCESS EASEMENT IN PLAT BOOK 44, PAGE 381. (AS SHOWN HEREON)	
12. FIFTY (50) FOOT PRIVATE RIGHT OF WAY AS SHOWN ON PLAT BOOK 51, PAGE 392, JOHNSTON COUNTY REGISTRY. (AS SHOWN HEREON)	
13. TITLE TO ANY HOUSE TRAILER, MOBILE HOME, OR MANUFACTURED HOME LOCATED ON THE LAND. (NO MATTER OF SURVEY)	
14. PLAT RIGHT, EASEMENT, SETBACK, INTEREST, CLAIM, ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATIONS OR OTHER ADVERSE CIRCUMSTANCE AFFECTING THE TITLE DISCLOSED BY PLAT(S) RECORDED IN PLAT BOOK 44, PAGE 381, PLAT BOOK 51, PAGE 392, PLAT BOOK 78, PAGE 19, PLAT BOOK 77, PAGE 480, PLAT BOOK 52, PAGE 343 AND PLAT BOOK 9, PAGE 3. (AS SHOWN HEREON)	
15. THE FOLLOWING MATTER(S) AS SHOWN ON PLAT OF SURVEY BY BATEMAN CIVIL SURVEY COMPANY, DATED APRIL 28, 2022 LAST REVISED JUNE 2, 2022, AND ANY EASEMENT(S) OR RIGHT(S)-OF-WAY ASSOCIATED THEREWITH, INCLUDING THE FOLLOWING:	
A) EXISTING BOUNDARY ENCROACHMENTS AS SHOWN ON SURVEY; B) 50' RUISE RIPARIAN BUFFER, AND 50' RIPARIAN BUFFER SHOW ON PLAT BOOK 78, PAGE 56; C) RIGHTS OF UPPER AND LOWER RIPARIAN OWNERS IN AND TO THE WATERS OF STREAM CROSSING OR ADJOINING THE LAND, AND THE NATURAL FLOW THEREOF, FREE FROM DIMINUTION OR POLLUTION; D) 50' PRIVATE R/W AS SHOWN ON SURVEY; E) ANY TITLE OR RIGHTS ASSERTED BY ANYONE, INCLUDING BUT NOT LIMITED TO, PERSONS, CORPORATIONS, GOVERNMENTS OR OTHER ENTITIES, TO WETLANDS AS ESTABLISHED OR CHANGED BY THE UNITED STATES GOVERNMENT OR WATERS RIGHTS, IF ANY. (AS SHOWN HEREON)	

[illegible]

BATEMAN CIVIL SURVEY COMPANY ENGINEERS • SURVEYORS • PLANNERS 2524 RELIANCE AVENUE, APEX, NC 27539 PHONE: (919) 577-1080 FAX: (919) 577-1081 INFO@BATEMANCIVILSURVEY.COM NCBELS FIRMP C-2378	
	
ALTANSPS/LAND TITLE SURVEY EXCLUSIVELY FOR: WAKEFIELD DEVELOPMENT PROPERTY PINS: 167900-35-1848, 167900-35-6559, 167904-94-7121, 167900-35-4971 167900-35-1849, 167900-35-6560, 167904-94-7122, 167900-35-4972 AS RECORDED IN DEED BOOK 3862, PAGE 691, DEED BOOK 4205, PAGE 181, & DEED BOOK 1154, PAGE 408 CLAYTON TOWNSHIP - JOHNSTON COUNTY - NORTH CAROLINA	
REVISIONS 1. ADDED FEATURES FOR LOTS A & B (5/02/22) 2. ADDED SECOND TITLE REPORT (6/02/22) 3. REVISED SECOND TITLE REPORT (7/06/22) 4.	
DESIGNED BY: N/A DRAWN BY: ELS CHECKED BY: SPC SCALE: 1" = 200' DATE: 04/28/2022 JOB NUMBER: 220214	
SHEET 2 OF 2	



Sketch Plan Notes

This sketch plan shown hereon is a preliminary sketch of streets and lots and is subject to:

1. Town of Clayton review and approval.
2. Evaluation of 404 Jurisdictional Wetlands. No filling of grading is to be performed in areas designated as 404 jurisdictional wetland until an approved permit has been obtained from the USCOE and NCDEM DWA.
3. A field topographical and boundary survey.
4. Final evaluation of Soils.
5. All materials and construction shall meet NCDOT Standards and Design, latest revision.
6. Environmental features (including steep slopes) should only be located in HOA-owned/maintained open space, not on private lots. To be addressed during construction drawing review process when full site topo is and design is available.

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
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BLN-C-1874

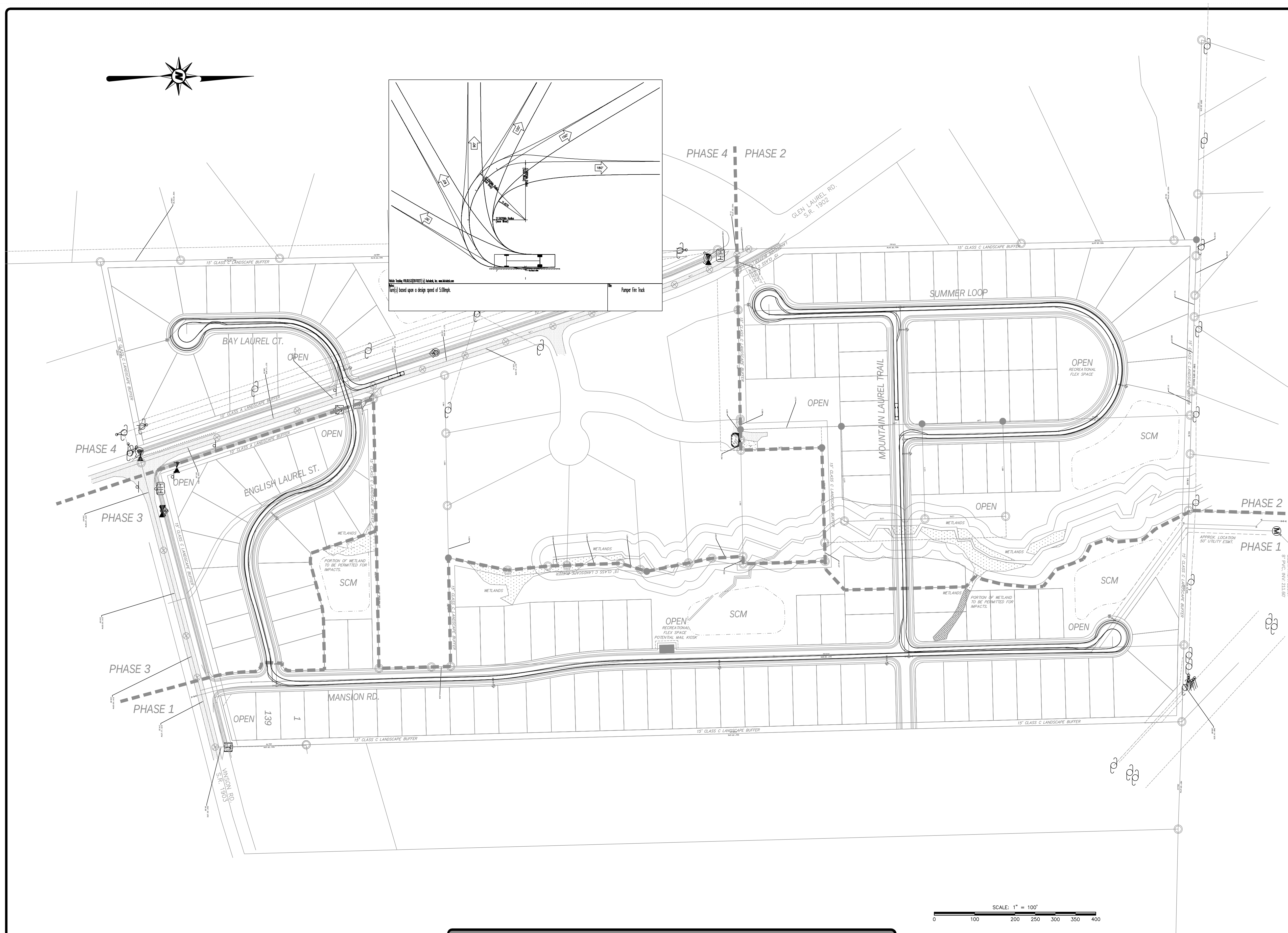
**SUMMER GLEN
GLEN LAUREL RD. at VINSON RD.
CLAYTON, NORTH CAROLINA**

MASTER PLAN

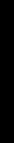
REVISIONS
10/29/22 CDM Submittal #2
2/21/23 CDM Submittal #3
6/19/23 CDM Submittal #4
7/19/23 CDM Submittal #5

FILE NO. 2022-031
HORZ. SCALE: 1"=100'
VERT. SCALE: N/A

CE-02



THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24



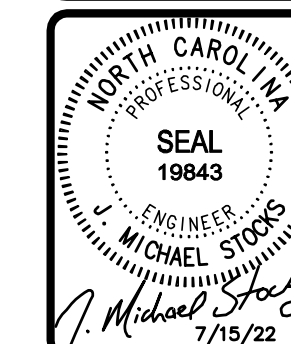
STOCKS
ENGINEERING

901 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856

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BLN-C-1874

**SUMMER GLEN
GLEN LAURAL RD. at VINSON RD.
CLAYTON, NORTH CAROLINA**



FIRE TRUCK TRACKING

REVISIONS
10/28/22 CZM Submittal
2/27/23 CZM Submittal #
6/19/23 CZM Submittal #
7/19/23 CZM Submittal #

FILE NO. 2022-031	
HORIZ. SCALE:	1"=100'
VERT. SCALE:	N/A

CE-03

Wakefield Development Glen Laurel Assemblage

Neighborhood Meeting Questions

- Jacob Callahan - Glen Ridge HOA President – Crossing Street
 - Leave as natural as possible
 - Consideration for current housing market
- Paulette Sanders – Traffic, how many homes
- Debra Anderson Glen Ridge – Price of homes, Traffic on Glen Laurel
- Cristin Hopper – Peer Review – When will construction start
- Anne Marie Hunter – Surrounding Oak
- Garth Stewart – Oak Grove open space
 - Can someone purchase lots for preservation
- - Wetlands distance from road to property at culvert
 - Construction start
- Brandy Creech
 - Density
 - TIA
 - Buffer on streams
- August Planning Board
- Town Council
- Kim Roberts – Who is the builder
- Jamie Stewart – Pond construction & design

Clayton: June 7th, 2022 Wakefield Assemblage (18-19 Participants)

- Introductions
- Describe Site
- Describe Zoning
- Describe Proposed Development
- Respond to Questions
 - Matthew Danielson, Wakefield Development, discussed what the homes will look like
 - Andrew responded to additional questions
 - John Barnes discussed houses 3BR – 5BR
 - Lori Bridget – Contact @ Clayton

Q&A

Jacob Callahan: Glen Ridge HOA Officer

-Challenges of splitting sub across G.L. Rd

Andrew responds: They'll have their own mail kiosk but under same HOA

J. Callahan:

What will happen to grassland Maintained as grass open space

Paulette Sanders Vinson Rd:

Lots of traffic, NCDOT will determine traffic needs – we will meet those requirements

how many houses 136 on total site – 15 on other side of GL Rd

Debra Anderson:

What is price pt, will value go down, John Barnes - \$400's to 500K

Traffic is already bad. Won't it get worse? Prone to accidents... We will do everything we can to meet traffic needs.

Cristin Hopper:

Requesting a peer review of traffic study... Will you pay for it?

Brandy Creech:

Where are you in terms of traffic study? Andrew-early process

More will occur after zoning

Jacob Callahan:

What will be the impact to the site if market downturn? Matthew-Raleigh doesn't suffer much. We will not abandon the site

Garth Stewart (Jamie Stewart) Oak Grove

What will happen at end of Tanner's Way. How will we get access to that open space Andrew – Still developing – Probably best access – Not sure how it will end up. Will likely end up wooded.

Can someone buy undeveloped lot? Unclear

Brandy Creech:

Overall density? **Less than 3 units/acre – currently shown at 2.5 units/acre**

Mike Baust:

Andrew please speak to community in process going forward and schedule **Staff then planning board review, town council- One full review is in place then infrastructure will be designed. Then more review by various municipal & utility experts & advisors.**

Brandy Creech:

When will TIA actually be completed **Expecting to complete before school starts again**

Can we get a copy of the site plan?

Streams have a buffer. Wetlands do not.

Garth Stewart:

Is there a dimension RE: Wetlands **Andrew- 200' from lot to culvert**

Brandy Creech:

Run utility under the street

Along/across culvert **Sections will flow to Neuse cc exist.....**

Garth Stewart:

Stormwater ponds – what determines their location **Location in low areas on the site, fit exist characteristics of the site**

Brandy Creech:

When will clearing begin **Andrew-Probably a year**

Garth Stewart:

Will neighborhood be developed in phases Yes, connection to Vinson Road to sewer connection and phases will grow from there

Mike Baust:

Thank you to the community.

Kim:

Requested additional info regarding homes/what will they look like

Garth Stewart:

Are the structures shown on the plan existing? Andrew-Yes

Will ponds be planted? Pond dam will be grass seeded.

Will pond discharge to stream? Yes

Kristen Zillioux, Angela Crumpler, Bill Smith Remaining crew on the call. Not sure Kristen and Angela are even still there though their computer is logged in.

"Rocky Branch Rd" was previous name of Glen Laurel Rd.

Questions from Brandy Creech and Neighbors

- Define "Open Space" and its requirements
 - o Will the green shaded areas remain wooded?

The open space is all area that is not within the ROW or on proposed individual lots, the open space will be dedicated to the HOA for ownership and maintenance. The area will consist of amenity areas, perimeter buffers, the Stormwater Control Measures (SCMs), riparian buffers, etc. Portions of this space will remain wooded. The limit of disturbance have not been determined at this time but will be as construction drawings progress.

- SCM – is this a retention pond/water feature?

SCM is an acronym for Stormwater Control Measure and yes would be a retention pond/water feature.

- Two proposed roads are shown tying into an adjacent property. Is there a current plan for the neighborhood to extend?

There is no current plan for the neighborhood to be extended, these are required stubs by the Town of Clayton to meet block length criteria and interconnectivity to adjacent property however there are no current plans by Wakefield Development to further extend the subdivision.

- Size of Lots?

Currently the minimum lot size is 6,900 sf, the typical lot size is 7,200 sf and the largest is 23,519 sf.

- Size of homes?

The typical building pad will be 45' x 55' with options that alter this size. I will let John Barnes from Chesapeake Homes who will be the homebuilder add any additional information about the homes.

- Has an erosion control plan prepared?

Not at this time, Erosion control plans will be a part of the construction drawing process after the rezoning process.

- Is there a plan to restore the creek/natural spring?
 - o This is a loaded question.

All environmental features were located by Sage Ecological and were included on the ALTA Survey. Sage will also be coordinating the impact permitting with USACE and NCDEQ. Our current plan is to minimize the proposed impacts and any requirements of the permitting process will be included in the scope of work.

- Will the developer request and participate in the improvement of Glen Laurel and/or Vinson Roads to minimize traffic congestion?

A TIA is currently being performed by Exult Engineering. Any recommendations from the TIA, the Town of Clayton, and NCDOT will be incorporated into the improvements.

- Site Plan Request:
 - o Plans to scale**
 - o Include park, pool, community building/structures, etc
 - o Show property lines (specifically Oak Grove neighborhood)**
 - o Show wetland boundaries/all water surveys **

Our current preliminary site plan has been included in the presentation. We would like to note that modifications are being made and the plan is not final until it has received approval from all jurisdictional authorities.

- Is Oak Grove at risk of being annexed because of this proposed development?

No, State law has eliminated forced annexation Oak Grove. The developer cannot annex any land owned by a third party. Oak Grove would have to request voluntary annexation only if there was a desire to do so.

- Will Oak Grove be used as a construction entrance for the back side of the proposed neighborhood?
 - o If so, how will the developer compensate Oak Grove residents for excessive wear and tear on our private street?

Oak Grove will not be used as a construction entrance, during preliminary discussions with the Town of Clayton, the Engineering department has requested that we not provide a street connection to Tanners Way. This connection is not shown.

- Will neighborhood street creek crossings on the map be culverts or bridges?

We will propose this as a pipe culvert crossing. This crossing will require the US Army Corp of Engineers and NCDEQ approval for stream/wetland impacts.

- Will vegetation be planted to define neighborhood boundaries?

The Town of Clayton requires a perimeter landscape buffer between the proposed zoning and the adjacent property. Natural vegetation will remain where possible however if the natural vegetation is removed for any reason a buffer in accordance with the Towns UDO will be planted.

·

Questions from Betty Woodall

- This tract was once her families farm and she asked if we located the slave cemetery that was on site.

An ALTA Survey and an Environmental Phase One have been performed on the site and neither of those studies found documentation or evidence of any Cemeteries on this site. We do know there is a Cemetery adjacent to this site, inside of the Glen Ridge Subdivision. If any cemeteries are encountered the development team will handle in accordance with typical protocol to investigate concern.

- She also had questions about traffic and turn lanes.

Addressed Above, however a TIA is currently being performed by Exult Engineering. Any recommendations from the TIA, the Town of Clayton, and NCDOT will be incorporated into the improvements.

Questions from Christin Hopper

Our lot directly abuts several proposed at the northernmost portion of the property. The stream to be impacted flows through our front yard. Our concerns relate to stormwater management and forest clearing.

1: Would the project comply with the basic requirements of the town of Clayton or are more protective measures proposed?

The stream shared by existing residences and the proposed development, as evidenced by its excessive incision in the landscape, is subject to very flashy storm flows. This perennial feature should be provided more protections than the town of Clayton's basic standards.

The project will comply with all applicable requirements from various governing authorities. The stream has a 50' riparian buffer from the top of the stream bank and these buffers are regulated by Johnston County. Streams and wetlands are regulated by the US Army Corp of Engineers the NC Department of Environmental Quality. There are some proposed impacts to this stream and wetlands so the USACE and NCDEQ will be involved in permitting of this site and be aware of all construction activity.

2: we understand the need for mass balancing, but see no need to clear all the way to the property line. Wide forested buffers provide better living conditions for both existing and future residents. Would the applicant entertain preserving 50ft wooded buffer along property lines adjacent to existing residences?

The plan is to leave a 15' undisturbed buffer where existing vegetation exists. If there is no vegetation or the existing vegetation must be removed, then a Type C landscape buffer as described in the Towns development ordinance will be planted.

3: The dominant winds in our area are from the southwest. Windthrow is common in forests cleared for differing land uses. A wider buffer would reduce the potential for trees to be pushed across the power lines already in our backyard and would increase property values and attractiveness. Some trees along the property line could not be cleared without our approval. Several are tall enough to impact our home.

Care will be taken to keep the existing wooded area within 15' of the property line as the landscape buffer and to avoid any impacts to adjacent properties especially in areas where existing vegetation is to be removed.

4: If the applicant will not agree to preserving this wide forested buffer along property lines, we request that tall opaque, vegetated buffers be planted by the applicant.

If the existing trees are to be removed, the development will provide the Type C landscape buffer as required by the Town of Clayton's development ordinance.

5: Will the applicant entertain allowing a native plant harvest to occur before the forests are cleared? We understand a waiver would need to be signed.

Please provide additional detail and present a more specific request. This can be discussed on a case-by-case basis. Any proposal presented will be reviewed by the developers.

6: The Town of Clayton and Johnston County in general, have done a very poor job of planning infrastructure to accommodate all the growth that is being approved. We request the town consider beginning a fund for all new homes that would be used to improve water and sewer, infrastructure, failing roadways, availability of schools, etc. Our standard of living steadily declines as more and more homes are approved without the most basic considerations for existing residents.

This is an item the Citizens of Clayton and Johnston County should bring to the attention of the elected officials. Typically, municipalities have tap fees and/or development fees to make connections to existing lines which are paid to the town for infrastructure improvements.

July 2022



SUMMER GLEN RESIDENTIAL

Traffic Impact Analysis

LOCATED IN CLAYTON, NC

Prepared for:

Wakefield Development, LLC
3100 Smoketree Court, Suite 210
Raleigh, North Carolina 27604

Prepared by:

Exult Engineering, PC
P.O. Box 99277
Raleigh, NC 27624



SUMMER GLEN RESIDENTIAL TRAFFIC IMPACT ANALYSIS

This document entitled Summer Glen Residential Traffic Impact Analysis was prepared by Exult Engineering, PC for the account of Wakefield Development, LLC. The material in it reflects Exult Engineering's best judgement in light of the information available to them at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Exult Engineering, PC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Summer Glen Residential Traffic Impact Analysis

Prepared by: Brittany Chase (sign)

Date: 7-14-22

Brittany Chase, PE

Reviewed by: Lisa Lundeen (sign)

Date: 7-14-22

Lisa Lundeen, PE

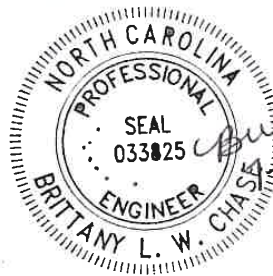


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EXECUTIVE SUMMARY

The proposed 54.07-acre site is located on the east and west side of Glen Laurel Road, north of Vinson Road in Clayton, North Carolina. The property is currently zoned as Residential Estate (R-E). The proposed development consists of approximately 135 single family detached homes. The proposed site is to be developed within three years by the year 2025 and requires Conditional Zoning. The proposed development will be accessed by one full movement driveway on Glen Laurel Road and one full movement driveway on Vinson Road. The purpose of this Traffic Impact Analysis (TIA) is to analyze the potential traffic impacts of the proposed development on the surrounding roadway network and to identify any roadway improvements necessary to mitigate the impact of the project traffic.

The North Carolina Department of Transportation (NCDOT) TIA Scoping Checklist was prepared and submitted to the Town of Clayton and NCDOT. The NCDOT TIA Scoping Checklist and subsequent correspondence regarding the scope of the TIA is included in the Appendix of this report. The *NCDOT Congestion Management Capacity Analysis Guidelines* and the Town of Clayton's *Code of Ordinances* were referenced to perform this traffic study.

As determined by the Town and NCDOT, the study area includes:

1. Glen Laurel Road at Vinson Road
2. Glen Laurel Road at Powhatan Road
3. Glen Laurel Road at Proposed Site Driveway
4. Vinson Road at Proposed Site Driveway

The proposed development is expected to generate 1,370 daily trips, 101 AM peak hour trips (26 entering, 75 exiting), and 135 PM peak hour trips (85 entering, 50 exiting).

As justified by historical daily traffic volumes in the vicinity, a 3% annual growth rate was assumed as required by the Town. Approved developments are developments in the area of the proposed site that have been approved but not yet constructed. The traffic from these approved developments is expected to contribute to the no-build traffic volumes projected for the study intersections. According to the Town and NCDOT, there are no approved developments to consider in the study area. All adjacent development is expected to be accounted for in the annual growth rate.

To determine the traffic impacts of the proposed development, capacity analyses were performed at the study intersections under the following scenarios:

- Existing (2022) Traffic Conditions
- No-Build (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions with Recommended Improvements

As indicated by NCDOT, the following roadway improvement is committed to **by NCDOT** and included in the future year analysis scenarios:

Glen Laurel Road at Vinson Road:

- Install a traffic signal

Based on the capacity analysis presented herein, the following roadway improvements are recommended to be completed **by the developer** to accommodate project traffic:

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway.

Vinson Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the southbound approach of the Proposed Site Driveway.

INTRODUCTION

The proposed 54.07-acre site is located on the east and west side of Glen Laurel Road, north of Vinson Road in Clayton, North Carolina as shown on Figure 1. The property is currently zoned as Residential Estate (R-E). The proposed development consists of approximately 135 single family detached homes and requires Conditional Zoning. As shown on Figure 2, the proposed development will be accessed by one full movement driveway on Glen Laurel Road and one full movement driveway on Vinson Road. The proposed site is to be developed within three years by the year 2025.

The purpose of this TIA is to analyze the potential traffic impacts of the proposed development on the surrounding roadway network and to identify any roadway improvements necessary to mitigate the impact of the project traffic. This study includes the analysis of the following traffic scenarios:

- Existing (2022) Traffic Conditions
- No-Build (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions with Recommended Improvements

As justified by historical daily traffic volumes in the vicinity, a 3% annual growth rate was assumed as required by the Town. Approved developments are developments in the area of the proposed site that have been approved but not yet constructed. The traffic from these approved developments is expected to contribute to the no-build traffic volumes projected for the study intersections. According to the Town and NCDOT, there are no approved developments to consider in the study area. All adjacent development is expected to be accounted for in the annual growth rate.

Summer Glen Residential TIA

Vicinity Map

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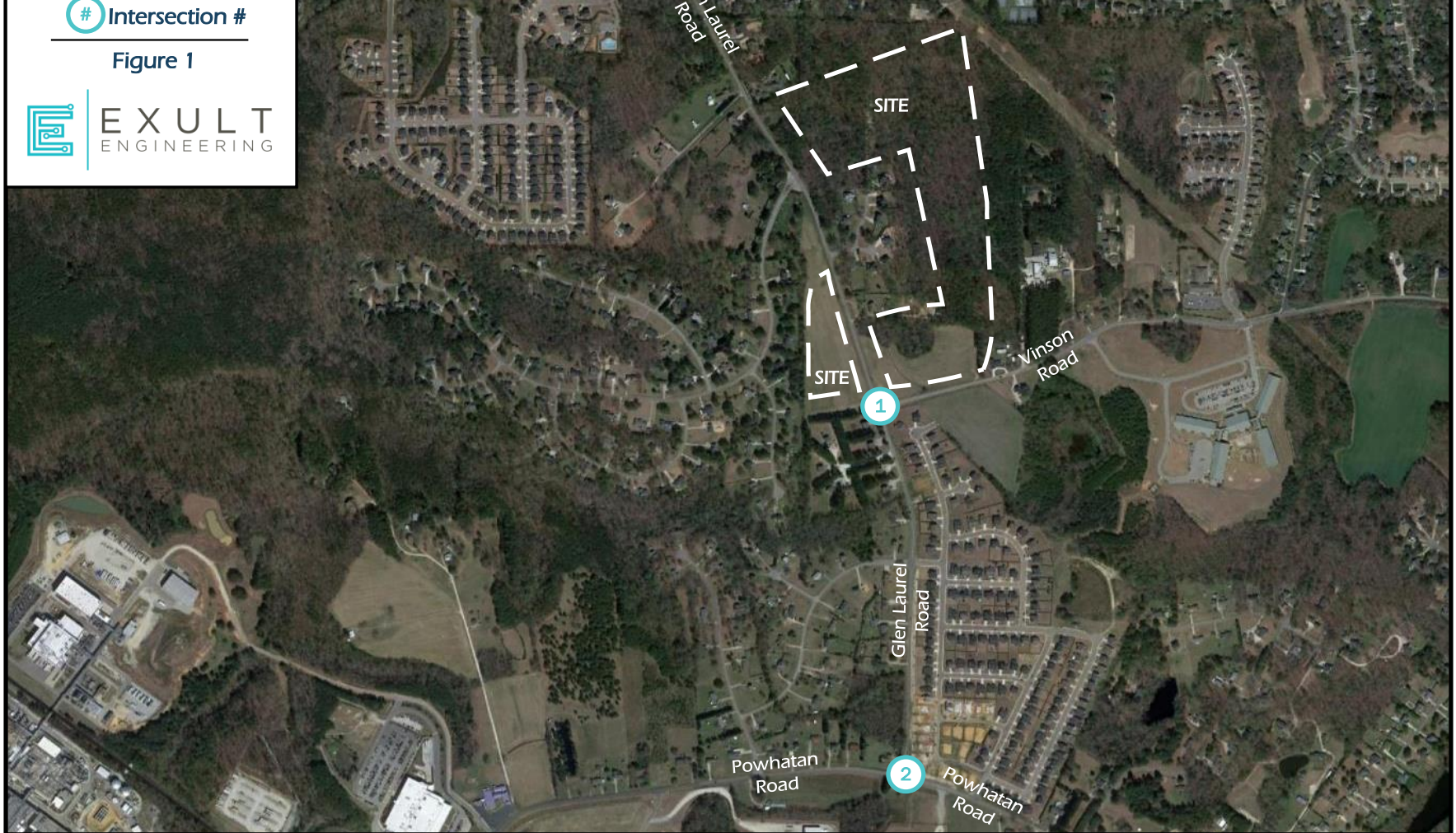
Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

LEGEND

Intersection

Figure 1



Summer Glen Residential TIA

Proposed Site Plan

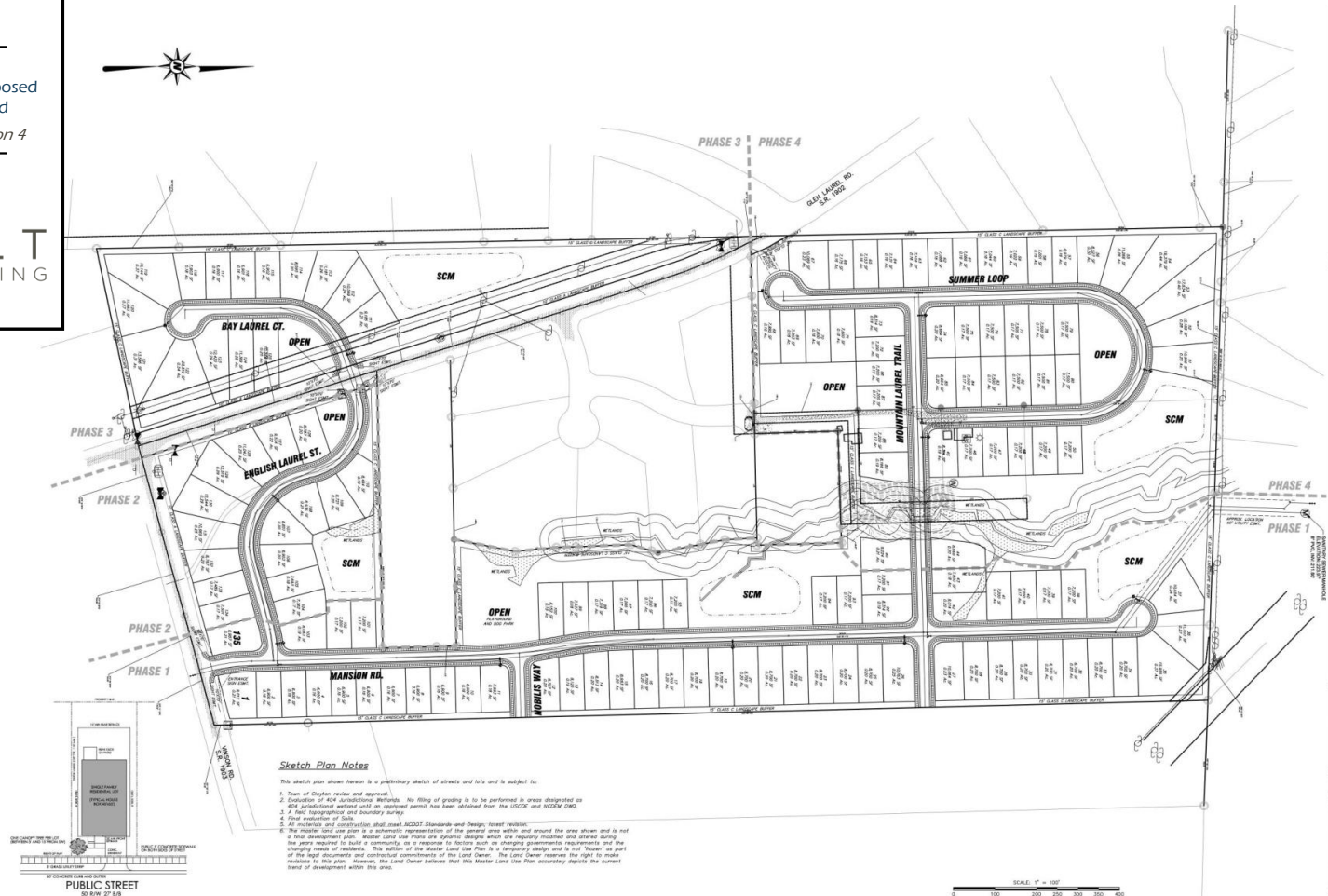
Prepared by
TMTLA Associates

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Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 2



EXISTING CONDITIONS

The proposed 54.07-acre site is located on the east and west side of Glen Laurel Road, north of Vinson Road in Clayton, North Carolina. The property is currently zoned as Residential Estate (R-E). Per the Town and NCDOT, the study area for the proposed development includes the following intersections:

1. Glen Laurel Road at Vinson Road
2. Glen Laurel Road at Powhatan Road
3. Glen Laurel Road at Proposed Site Driveway
4. Vinson Road at Proposed Site Driveway

A site visit was performed on Thursday, May 16, 2022 to observe existing field conditions, such as lane geometry, posted speed limits, and traffic operations. Figure 3 shows the Existing Lane Geometry at the above existing study intersections.

Peak-hour turning movement traffic counts were performed at the existing study intersections during the AM (7:00 – 9:00) and PM (3:45 – 6:00) peak periods on Thursday, May 12, 2022 while school was still in session. As required by NCDOT, the PM peak period began 15 minutes early to ensure school traffic volumes were captured. Traffic count data is included in the Appendix of this report. Any traffic imbalances were justified based on the number of access points and land uses located between study intersections. Figure 4 shows the 2022 AM and PM Peak Hour Existing Traffic Volumes for the study intersections.

Glen Laurel Road (SR-1902) is currently a 2-lane undivided roadway with a posted speed limit of 45 miles per hour in the project vicinity. Glen Laurel Road is classified as a Local Road on the *NCDOT Functional Class Map* and has a 2019 average annual daily traffic (AADT) volume of 4,400 vehicles per day on the *NCDOT Interactive Traffic Volume Map*.

Vinson Road (SR-1903) is currently a 2-lane undivided roadway with a posted speed limit of 45 miles per hour in the project vicinity with a 35 miles per hour school zone. Vinson Road is classified as a Local Road on the *NCDOT Functional Class Map*. Assuming the PM peak hour accounts for approximately 10% of the daily traffic volume, Vinson Road has an estimated 2022 annual daily traffic volume of 5,970 vehicles per day.

Powhatan Road (SR-1901) is currently a 2-lane undivided roadway with a posted speed limit of 45 miles per hour to the west of Glen Laurel Road and 55 miles per hour to the east of Glen Laurel Road. Powhatan Road is classified as a Local Road on the *NCDOT Functional Class Map*. Assuming the PM peak hour accounts for approximately 10% of the daily traffic volume, Powhatan Road has an estimated 2022 annual daily traffic volume of 7,020 vehicles per day.

Summer Glen Residential TIA

Existing Lane Geometry

LEGEND

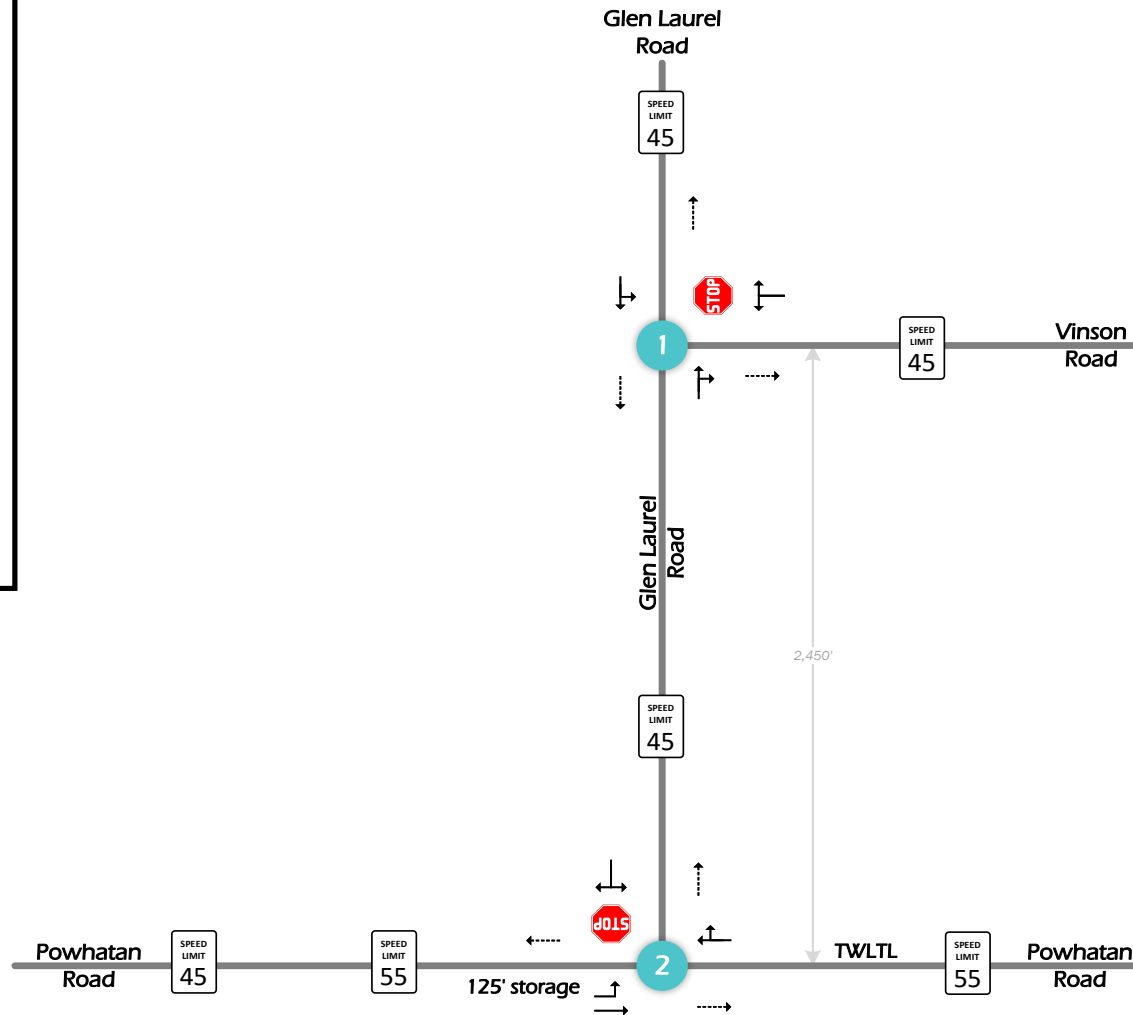
	Stop Control	→	Approach Lane
	Speed Limit	····→	Departure Lane
	Signal Control	► XX' ◄	Intersection Spacing
	XX' - Full Storage Length		

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Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 3



Summer Glen Residential TIA

Existing 2022 AM and PM Traffic Volumes

LEGEND

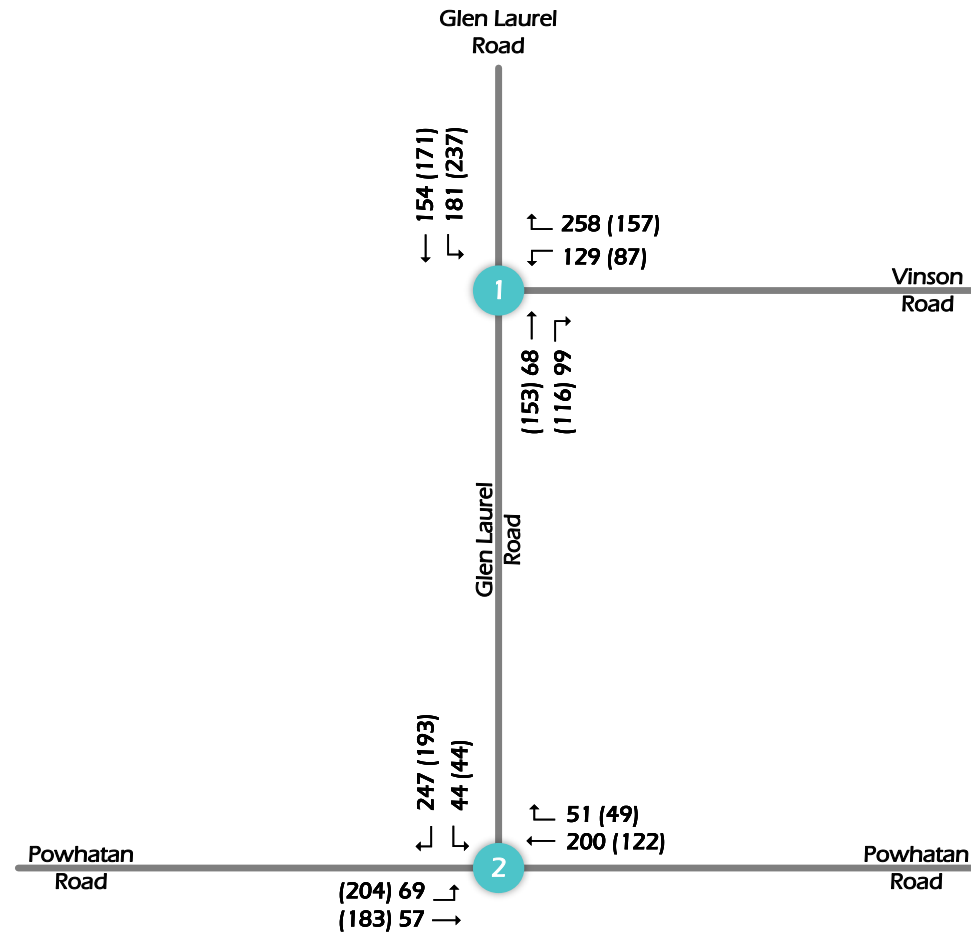
(XX) XX – (PM) AM Traffic Volumes

EXTENTS

Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 4



FUTURE CONDITIONS

The proposed site is to be developed within three years by the year 2025. The projected 2025 no-build traffic volumes consist of existing 2022 traffic volumes plus background growth and approved development traffic.

As justified by historical daily traffic volumes in the vicinity, a 3% annual growth rate was assumed as required by the Town. Approved developments are developments in the area of the proposed site that have been approved but not yet constructed. The traffic from these approved developments is expected to contribute to the no-build traffic volumes projected for the study intersections. According to the Town and NCDOT, there are no approved developments to consider in the study area. All adjacent development is expected to be accounted for in the annual growth rate.

The projected no-build traffic volumes at the study intersections are shown in Figure 5 (2025 AM Peak Hour No-Build Traffic Volumes) and Figure 6 (2025 PM Peak Hour No-Build Traffic Volumes). Traffic volume calculations are also included in the Appendix of this report.

NCDOT indicated the following roadway improvement is committed to **by NCDOT** and is therefore included in the future year analysis scenarios:

Glen Laurel Road at Vinson Road:

- Install a traffic signal

Summer Glen Residential TIA

2025 AM Peak Hour No-Build Traffic

LEGEND

XX – 2022 Existing Traffic
[XX] – Background Growth
[XX] – 2025 Total No-Build Traffic

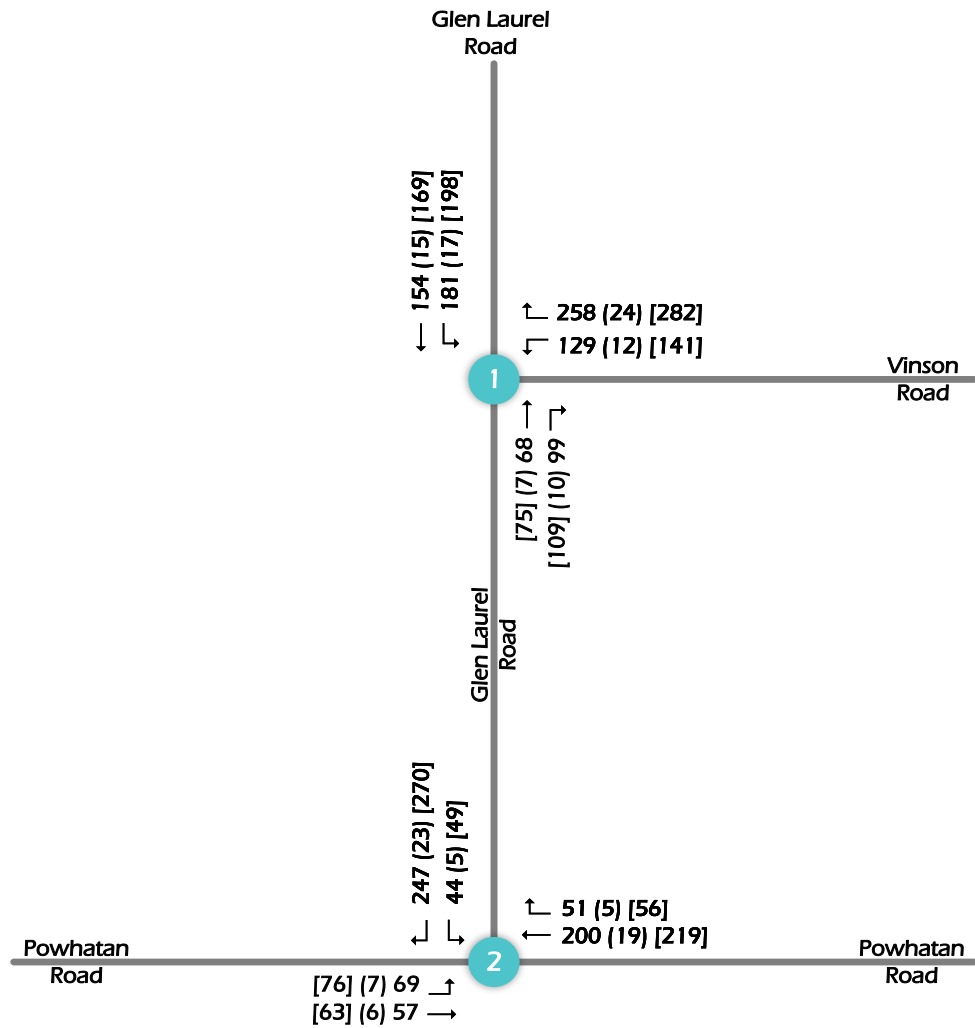
XX + [XX] = [XX]

EXTENTS

Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 5



Summer Glen Residential TIA

2025 PM Peak Hour No-Build Traffic

LEGEND

XX – 2022 Existing Traffic
[XX] – Background Growth
[XX] – 2025 Total No-Build Traffic

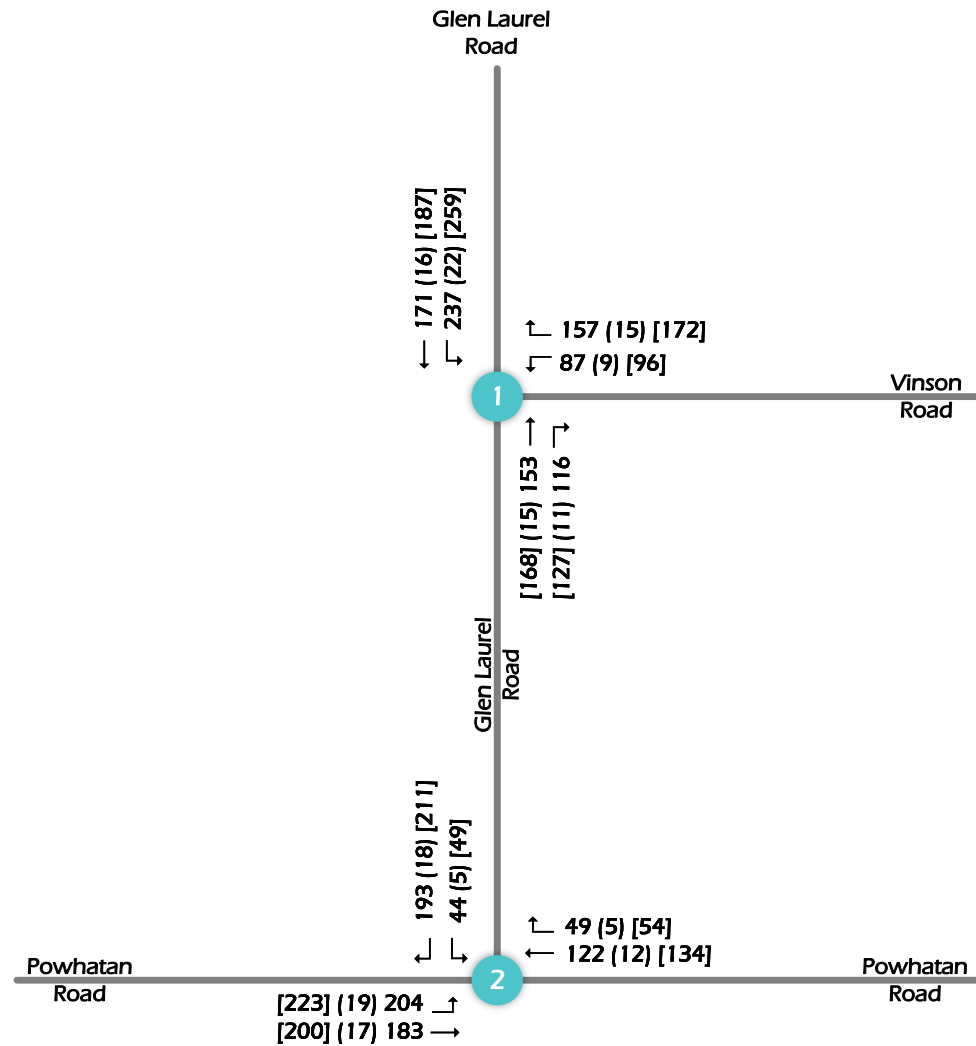
XX + [XX] = [XX]

EXTENTS

Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 6



PROPOSED SITE

The proposed 54.07-acre site is located on the east and west side of Glen Laurel Road, north of Vinson Road in Clayton, North Carolina. The property is currently zoned as Residential Estate (R-E). The proposed development consists of approximately 135 single family detached homes and requires Conditional Zoning. The proposed site is to be developed within three years by the year 2025. The proposed development will be accessed by one full movement driveway on Glen Laurel Road and one full movement driveway on Vinson Road.

Table 1 shows the projected trip generation for the proposed development. Trips were calculated for the portion of the site east of Glen Laurel Road (120 homes) and the portion of the site west of Glen Laurel Road (15 homes). The trip generation was based on rates published in the ITE *Trip Generation Manual*, 11th Edition. The proposed development is expected to generate 1,370 daily trips, 101 AM peak hour trips (26 entering, 75 exiting), and 135 PM peak hour trips (85 entering, 50 exiting).

Table 1: Trip Generation

Land Use			Daily	AM Peak Hour			PM Peak Hour		
				Total	Enter	Exit	Total	Enter	Exit
210: Single-Family Detached Housing	120	d.u.	1,194	88	23	65	118	74	44
210: Single-Family Detached Housing	15	d.u.	176	13	3	10	17	11	6
Total Site Trips			1,370	101	26	75	135	85	50

References: *Trip Generation Manual*, 11th Edition, Institute of Transportation Engineers, September 2021

Based on the existing traffic patterns, surrounding opportunities to access retail and office developments, and access to commuter roadways, the proposed trip distribution for the site is as follows:

- 30% to/from the north on Glen Laurel Road
- 15% to/from the east on Vinson Road
- 15% to/from the east on Powhatan Road
- 40% to/from the west on Powhatan Road

The proposed site trip distributions were previously approved by the Town and NCDOT. Figure 7A shows the Site Traffic Distribution and Assignment at each of the study intersections for the Eastern Portion of the site. Figure 7B shows the Site Traffic Distribution and Assignment at each of the study intersections for the Western Portion of the site.

The trip assignment was applied to the trips generated for the proposed development to determine the projected AM and PM peak hour site traffic volumes. The projected AM and PM peak hour site traffic volumes were added to the 2025 no-build traffic volumes to determine the buildout traffic volumes at the study intersections. The projected buildout traffic volumes at the study intersections are shown in Figure 8 (2025 AM Peak Hour Buildout Traffic Volumes) and Figure 9 (2025 PM Peak Hour Buildout Traffic Volumes).

Summer Glen Residential TIA

Eastern Portion: Site Traffic Distribution & Assignment

LEGEND

(XX%) – Outbound Site Traffic

XX% – Inbound Site Traffic

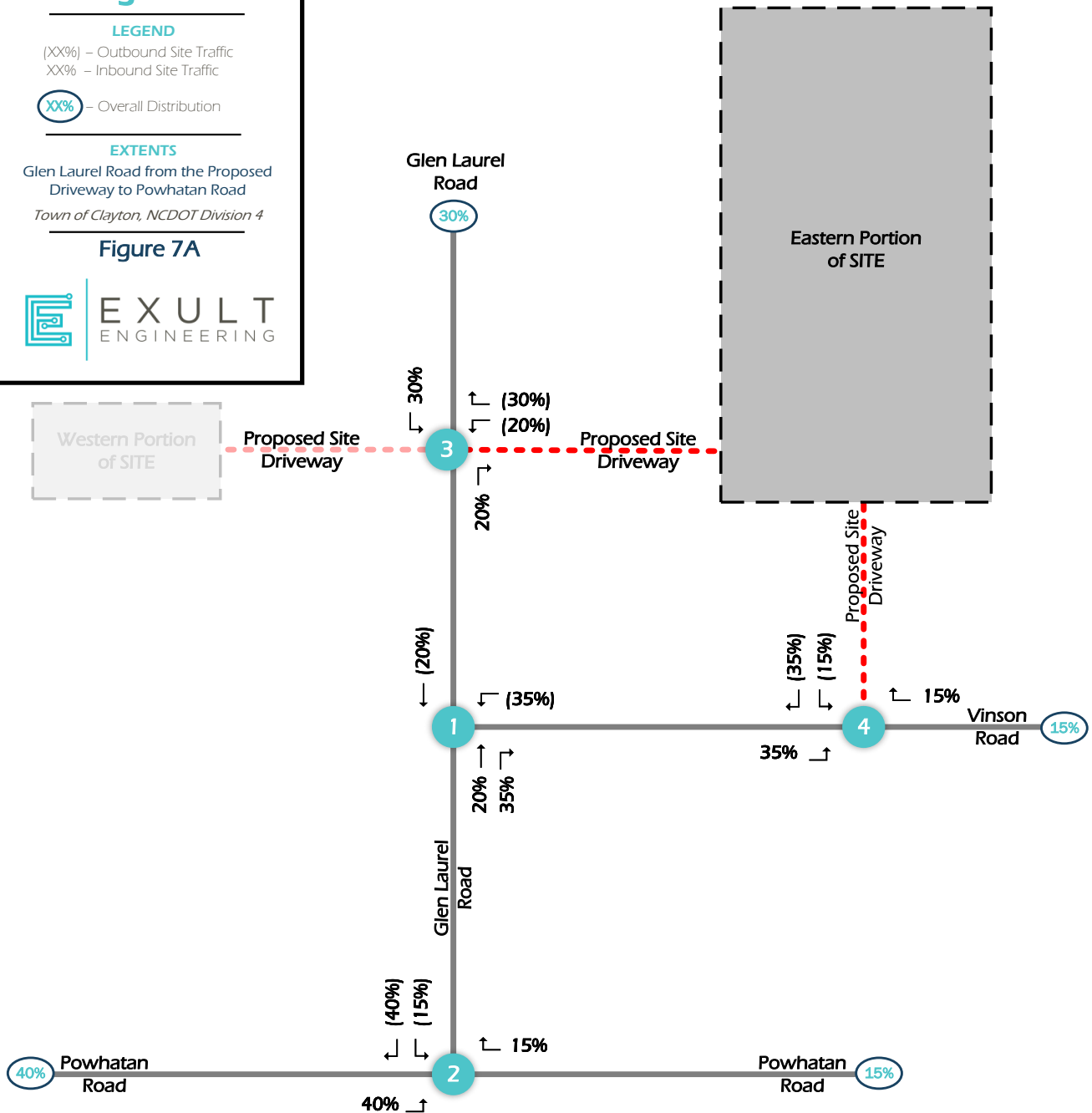
(XX%) – Overall Distribution

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Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 7A



Summer Glen Residential TIA

Western Portion: Site Traffic Distribution & Assignment

LEGEND

(XX%) – Outbound Site Traffic
XX% – Inbound Site Traffic

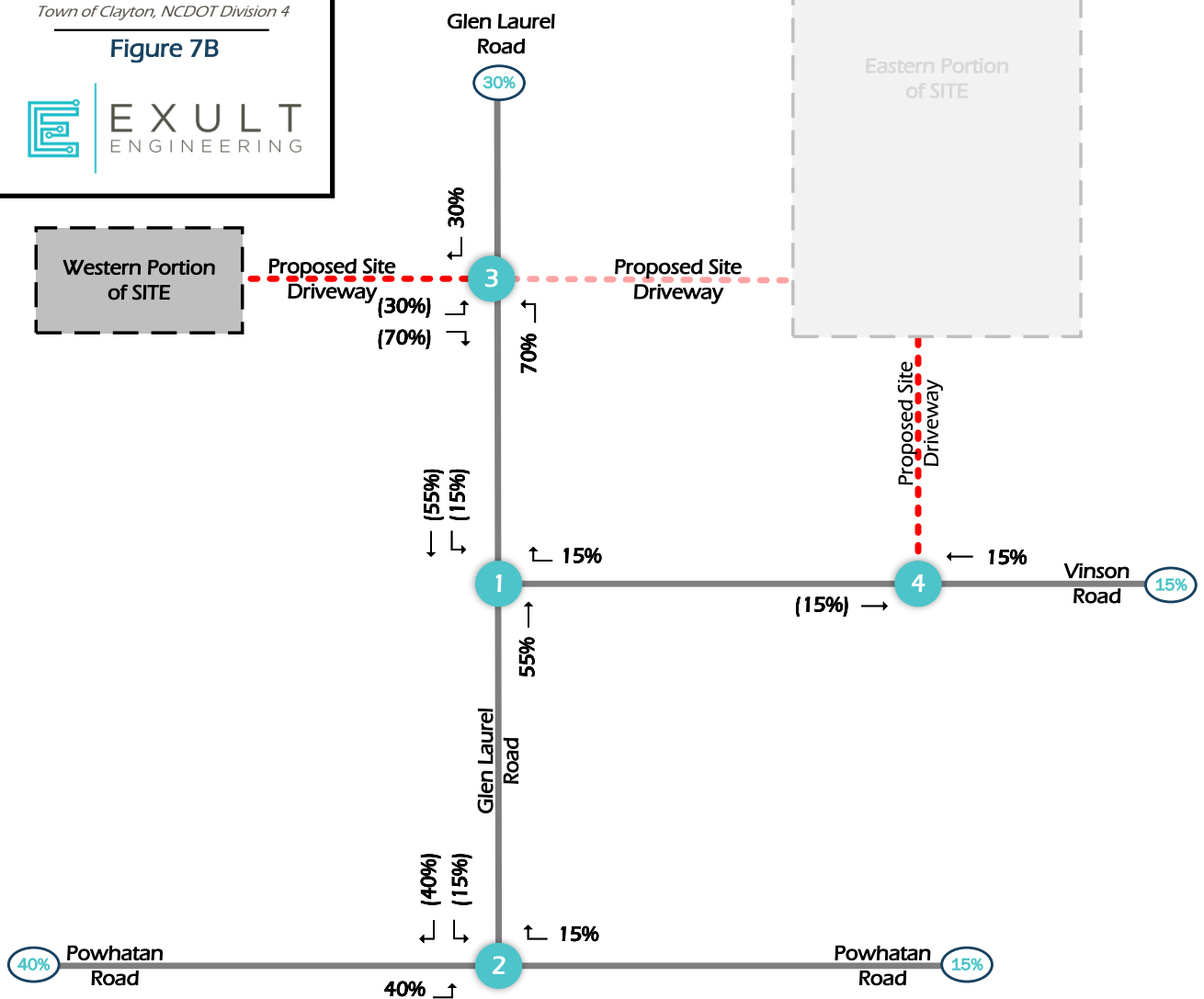
(XX%) – Overall Distribution

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Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 7B



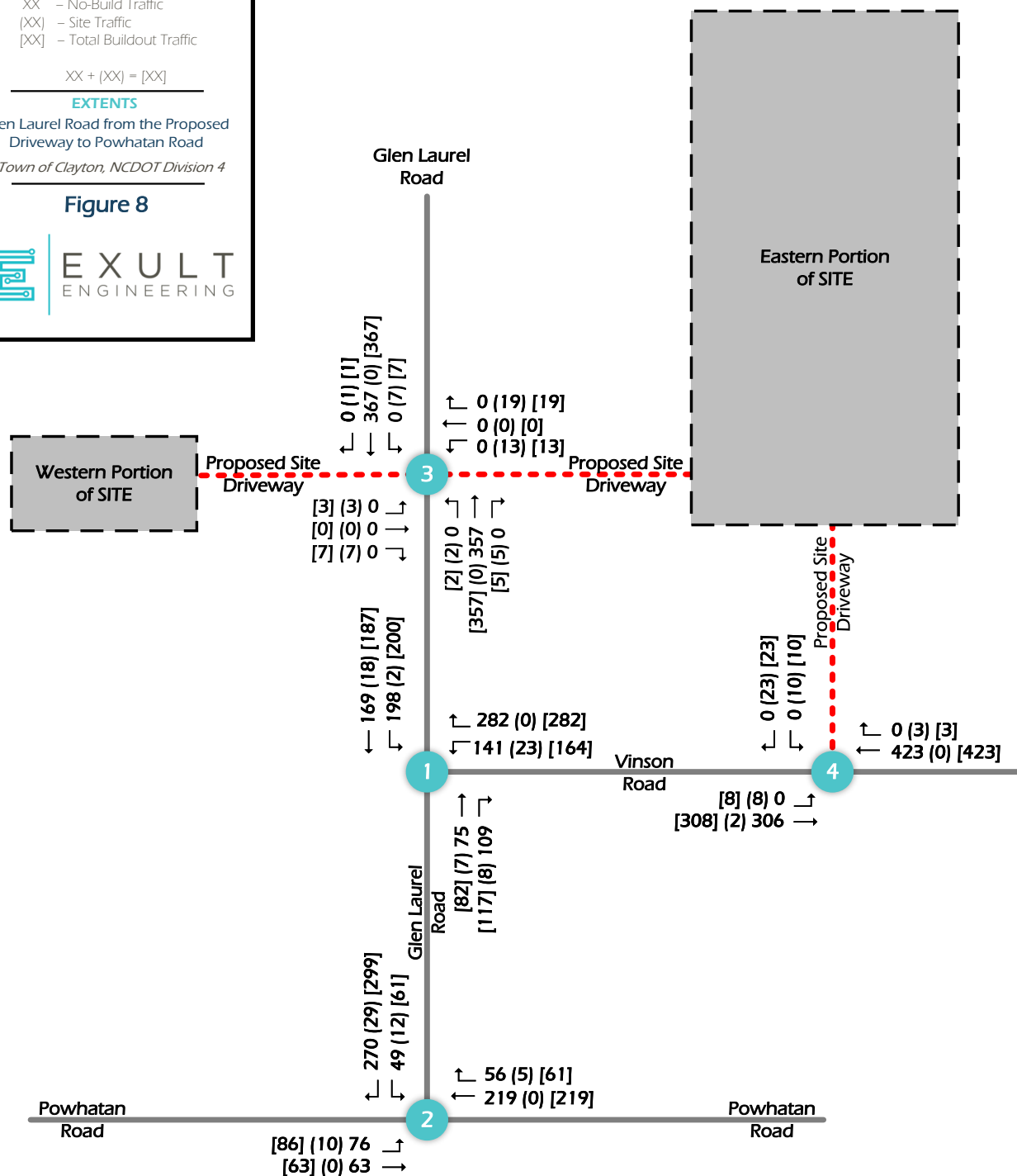
2025 AM Peak Hour Buildout Traffic

XX – No-Build Traffic
(XX) – Site Traffic
[XX] – Total Buildout Traffic

$$XX + (XX) = [XX]$$

Glen Laurel Road from the Proposed
Driveway to Powhatan Road
Town of Clayton, NCDOT Division 4

Figure 8



Summer Glen Residential TIA

2025 PM Peak Hour Buildout Traffic

LEGEND

- XX - No-Build Traffic
- (XX) - Site Traffic
- [XX] - Total Buildout Traffic

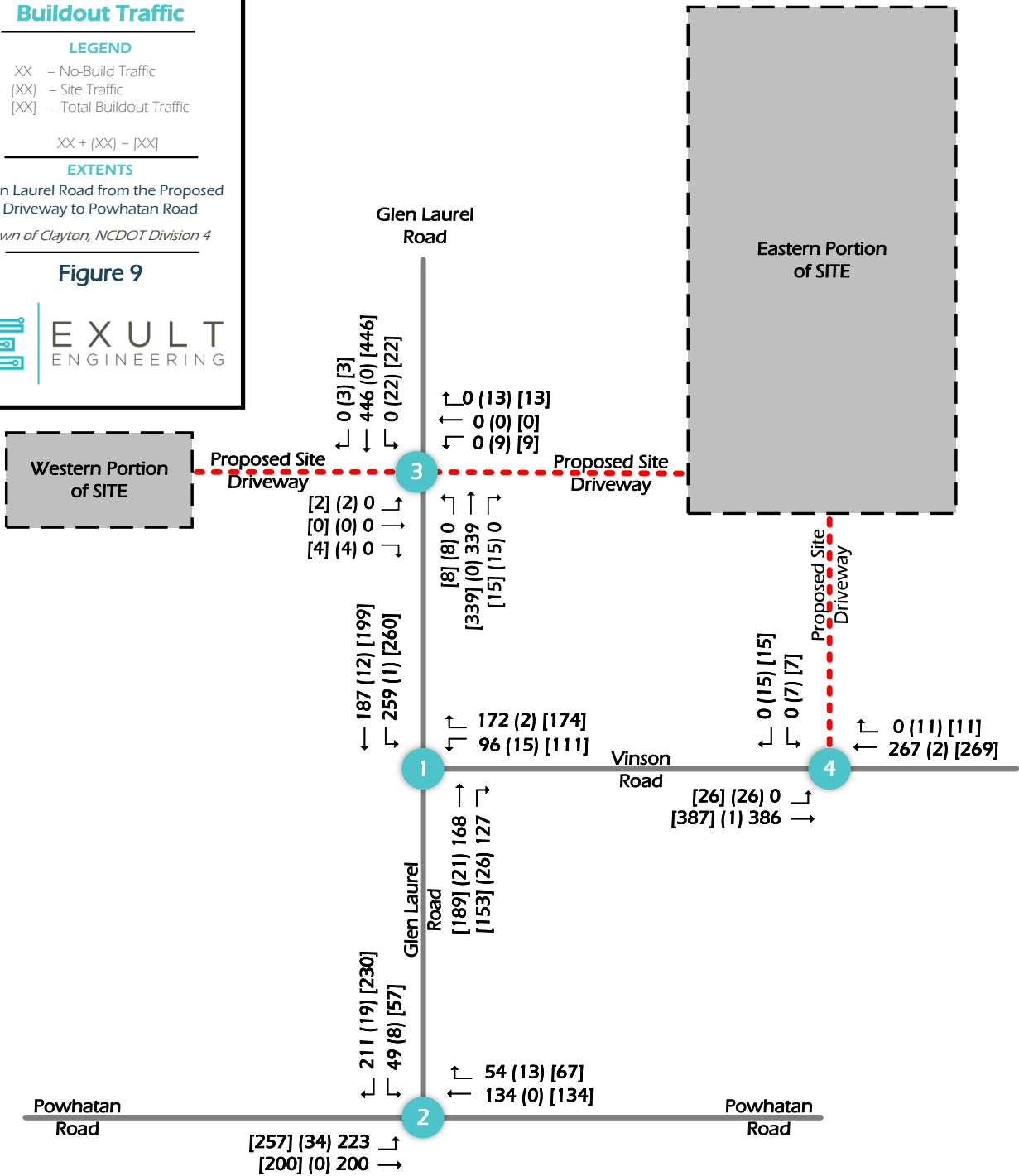
$$XX + (XX) = [XX]$$

EXTENTS

Glen Laurel Road from the Proposed
Driveway to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 9



CAPACITY ANALYSIS

The intersections identified within the study area were analyzed under 2022 existing, 2025 no-build, and 2025 buildout conditions to identify the potential traffic impact of the proposed development on the roadway network. Necessary roadway improvements to mitigate the anticipated impact of the proposed site traffic were recommended based on the level-of-service (LOS) analysis results.

The proposed site is to be developed within three years by the year 2025. This study includes the analysis of the following traffic scenarios:

- Existing (2022) Traffic Conditions
- No-build (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions
- Buildout (2025) Traffic Conditions with Recommended Improvements

LOS is a qualitative measurement of traffic operations that is a measure of delay time. The Transportation Research Board's *Highway Capacity Manual* (HCM) defines six levels of service for intersections with LOS "A" representing the best operating condition and LOS "F" representing the worst. The following table summarizes the criteria for signalized intersections and stop-controlled intersections.

Table 2: Highway Capacity Manual (LOS and Delay)

Signalized Intersection		Stop-Controlled Intersection	
Level-of-Service (LOS)	Average Control Delay (Seconds per Vehicles)	Level-of-Service (LOS)	Average Control Delay (Seconds per Vehicle)
A	≤ 10.0	A	≤ 10.0
B	> 10.0 and ≤ 20.0	B	> 10.0 and ≤ 15.0
C	> 20.0 and ≤ 35.0	C	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	D	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	E	> 35.0 and ≤ 50.0
F	> 80.0	F	> 50.0

Version 10.3 of Synchro Professional software was used to determine the LOS, delay, and expected queue length at the signalized and unsignalized intersections. SimTraffic was also used to determine the maximum queue length experienced at the study intersections. This software is based on the analysis procedures defined in the HCM. For unsignalized intersections, Synchro reports were created using the HCM 6th Edition option for unsignalized intersections. Queue lengths for the turn lanes are shown in the summary tables. Detailed Synchro and SimTraffic reports are included in the Appendix of this report.

LOS for a two-way stop-controlled (TWSC) intersection is determined by the control delay and is defined for the minor approaches. Control delay includes initial deceleration delay, queue move-up time, stopped

delay, and final acceleration delay. With respect to field measurements, this summation of control delay is defined as the total time elapsed from the time a vehicle stops at the end of the queue to the time the vehicle departs from the stop line. Capacity analysis results between LOS A and LOS C for the minor street stop-controlled approaches are assumed to represent short delays. Results between LOS D and LOS E for the minor street stop-controlled approaches are assumed to represent moderate delays, and LOS F for the minor street stop-controlled approaches is assumed to represent long delays. It is typical for minor street stop-controlled approaches and driveways intersecting major streets to experience long delays during peak hours, particularly for left-turn movements. However, the majority of the traffic moving through the intersection experiences little or no delay on the major street approaches.

Capacity Analysis Inputs

The following inputs were used for all intersections:

- Peak Hour Factor (PHF) was based on existing count data by intersection for existing scenarios. For no-build and buildout scenarios, a PHF of 0.90 was used to remain conservative.
- Heavy vehicle (HV%) percentages were based on existing count data by approach for existing scenarios. Heavy vehicle percentages were set to existing percentages for no-build and buildout scenarios to remain conservative and account for school buses.
- For allowable movements where zero (0), one (1), two (2), or three (3) volumes are projected, a value of four (4) was used in the Synchro capacity analysis model.
- For signalized intersections with movements without a detector, "none" was coded for the detector phase.
- For signals in future scenarios, cycle lengths were optimized separately for all future year scenarios following minimum and maximum cycle length guidelines.
- Right-turns on red were not permitted.
- Lost time set to 5 seconds, yellow time set to 5 seconds, and red time set to 2 seconds in future scenarios.

For unsignalized intersections, queue length for HCM from Synchro is given in terms of number of vehicles. To convert to queue length in feet, an estimated 25'/vehicle was applied.

The following subsections summarize the LOS and queue length results for the capacity analysis under 2022 existing, 2025 no-build, and 2025 buildout traffic scenarios for each study intersection.

Glen Laurel Road at Vinson Road

Glen Laurel Road at Vinson Road is currently a three-legged unsignalized intersection with the westbound Vinson Road minor street approach operating under stop control and the northbound and southbound major street approaches of Glen Laurel Road operating as free-flow.

According to NCDOT, there are plans to install a traffic signal at the intersection. Therefore, a signal was assumed to be in place under future year analysis scenarios. For future no-build and buildout scenarios, the following input values were used in accordance with *NCDOT Congestion Management Capacity Analysis Guidelines*:

- Cycle lengths were optimized following minimum and maximum cycle length guidelines. Lead/lag phasing and splits were optimized.
- Minimum initial was set to 12 seconds for the major street through movements and 7 seconds for the major street left-turn and minor street movements.
- Left-turn treatment for exclusive left-turn movements was set to protected only.
- Default detector settings were used.



Southbound Approach of Glen Laurel Road at Vinson Road

The capacity analysis results for the intersection are summarized in Table 3 below under 2022 existing, 2025 no-build, and 2025 buildout scenarios. As shown in Table 3 below, the intersection currently operates with moderate delays for the westbound minor street approach. Under future no-build conditions, with the signal in place, the intersection is expected to operate at LOS C during the AM and PM peak hour. The intersection is expected to continue to operate at an acceptable LOS C during the AM and PM peak hour under buildout conditions. As shown in Table 3, the proposed site has minimal impact on the operation of the intersection.

According to the guidelines published in NCDOT's *Policy on Street and Driveway Access to North Carolina Highways* (July 2003), mitigation improvements should be identified if the total average delay at the intersection increases by 25% or more with the addition of the proposed development site trips. The overall projected delay for the intersection and each approach under buildout conditions increases by less than 25% when compared to no-build conditions. Therefore, there are no roadway improvements recommended to be completed by the developer to accommodate site traffic.

Table 3: Level-of-Service: Glen Laurel Road and Vinson Road (Unsignalized and Signalized)

Condition	AM Peak		PM Peak	
	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)
2022 Existing	WB – E (48.5) SBL – A (8.2)	No Turn Lanes	WB – E (46.4) SBL – A (8.8)	No Turn Lanes
2025 No-Build (Signalized)	Overall – C (27.2) WB – C (31.7) NB – B (14.3) SB – C (28.5)	No Turn Lanes	Overall – C (24.5) WB – D (36.6) NB – A (9.2) SB – C (27.3)	No Turn Lanes
2025 Buildout (Signalized)	Overall – C (30.6) WB – C (34.2) NB – B (15.2) SB – C (34.2)	No Turn Lanes	Overall – C (28.3) WB – D (43.7) NB – A (9.3) SB – C (32.8)	No Turn Lanes

Glen Laurel Road at Powhatan Road

Glen Laurel Road at Powhatan Road is currently a three-legged unsignalized intersection with the southbound Glen Laurel Road approach operating under stop control and the eastbound and westbound major street approaches of Powhatan Road operating as free-flow.

The capacity analysis results for the intersection are summarized in Table 4 below under 2022 existing, 2025 no-build, and 2025 buildout scenarios. As shown in Table 4 below, the intersection currently operates with short delays for the southbound minor street approach. Under future no-build conditions, the intersection is expected to continue to operate with short delays for the minor street approach. The intersection is expected to continue to operate with short delays for the southbound minor street approach during the AM and PM peak hour under buildout conditions.



**Westbound Approach of Powhatan Road at
Glen Laurel Road**

According to the guidelines published in NCDOT's *Policy on Street and Driveway Access to North Carolina Highways* (July 2003), mitigation improvements should be identified if the total average delay at the intersection increases by 25% or more with the addition of the proposed development site trips. The projected delay for each approach under buildout conditions increases by less than 25% when compared to no-build conditions. The intersection is expected to operate acceptably at project buildout and the site traffic has minimal impact on the operation of the intersection. Therefore, there are no roadway improvements recommended to be completed by the developer to accommodate site traffic.

Table 4: Level-of-Service: Glen Laurel Road at Powhatan Road (Unsignalized)

Condition	AM Peak		PM Peak	
	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)
2022 Existing	EBL – A (8.0) SB – B (13.5)	EBL – 5'/45'	EBL – A (8.1) SB – B (12.7)	EBL – 15'/54'
2025 No-Build	EBL – A (8.1) SB – B (14.8)	EBL – 5'/46'	EBL – A (8.2) SB – B (13.9)	EBL – 18'/61'
2025 Buildout	EBL – A (8.1) SB – C (16.5)	EBL – 8'/48'	EBL – A (8.4) SB – C (15.6)	EBL – 20'/71'

Glen Laurel Road at Proposed Site Driveway

The future intersection of Glen Laurel Road at Proposed Site Driveway is an unsignalized four-legged intersection. The eastbound and westbound (Proposed Site Driveway) minor street approaches will operate under stop control while the major street approaches (Glen Laurel Road) will operate as free-flow. The Proposed Site Driveway will serve as access for the portion of the development located west of Glen Laurel Road as well as east of Glen Laurel Road.

The capacity analysis results for the intersection are summarized in Table 5 below. The intersection of Glen Laurel Road at Proposed Site Driveway is expected to operate with short delays for the eastbound and westbound approaches (Proposed Site Driveway) during the AM and PM peak hours at project buildout.

According to the “Warrant for Left and Right-Turn Lanes” published in the NCDOT’s *Policy On Street And Driveway Access to North Carolina Highways* (July 2003), the projected traffic volumes at the Proposed Site Driveway do not firmly support the need for turn lanes. Warrant information is included in the Appendix of this report. Furthermore, turn lanes are not needed based on Synchro and SimTraffic capacity analysis results. The following roadway improvements are recommended for the intersection of Glen Laurel Road at Proposed Site Driveway to accommodate the proposed site traffic:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of Proposed Site Driveway.

Table 5: Level-of-Service: Glen Laurel Road at Proposed Site Driveway (Unsignalized)

Condition	AM Peak		PM Peak	
	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)
2025 Buildout	NBL – A (8.2) SBL – A (8.1) EB – B (14.9) WB – C (15.0)	No Turn Lanes	NBL – A (8.4) SBL – A (8.2) EB – C (18.0) WB – C (16.4)	No Turn Lanes

Vinson Road at Proposed Site Driveway

The future intersection of Vinson Road at Proposed Site Driveway is an unsignalized three-legged intersection. The southbound (Proposed Site Driveway) minor street approach will operate under stop control while the major street approaches (Vinson Road) will operate as free-flow.

The capacity analysis results for the intersection are summarized in Table 7 below. The intersection of Vinson Road at Proposed Site Driveway is expected to operate with short delays for the southbound approach (Proposed Site Driveway) during the AM and PM peak hours at project buildout.

According to the “Warrant for Left and Right-Turn Lanes” published in the NCDOT’s *Policy On Street And Driveway Access to North Carolina Highways* (July 2003), the projected traffic volumes at the Proposed Site Driveway do not firmly support the need for turn lanes. Warrant information is included in the Appendix of this report. Furthermore, turn lanes are not needed based on Synchro and SimTraffic capacity analysis results. The following roadway improvements are recommended for the intersection of Vinson Road at Proposed Site Driveway to accommodate the proposed site traffic:

- Provide one ingress and one egress lane on the southbound approach of Proposed Site Driveway.

Table 6: Level-of-Service: Vinson Road at Proposed Site Driveway (Unsignalized)

Condition	AM Peak		PM Peak	
	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)	LOS and Delay (sec/veh)	Turn Lane Synchro 95% Queue Length (feet)
2025 Buildout	EBL – A (8.3) SB – B (13.1)	No Turn Lanes	EBL – A (8.0) SB – B (12.0)	No Turn Lanes

RECOMMENDATIONS

The recommended lane geometry is shown on Figure 10.

As indicated by NCDOT, the following roadway improvement is committed to **by NCDOT** and included in the future year analysis scenarios:

Glen Laurel Road at Vinson Road:

- Install a traffic signal

Based on the capacity analysis presented herein, the following roadway improvements are recommended to be completed **by the developer** to accommodate project traffic:

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway.

Vinson Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the southbound approach of the Proposed Site Driveway.

Summer Glen Residential TIA

Recommended Lane Geometry

LEGEND

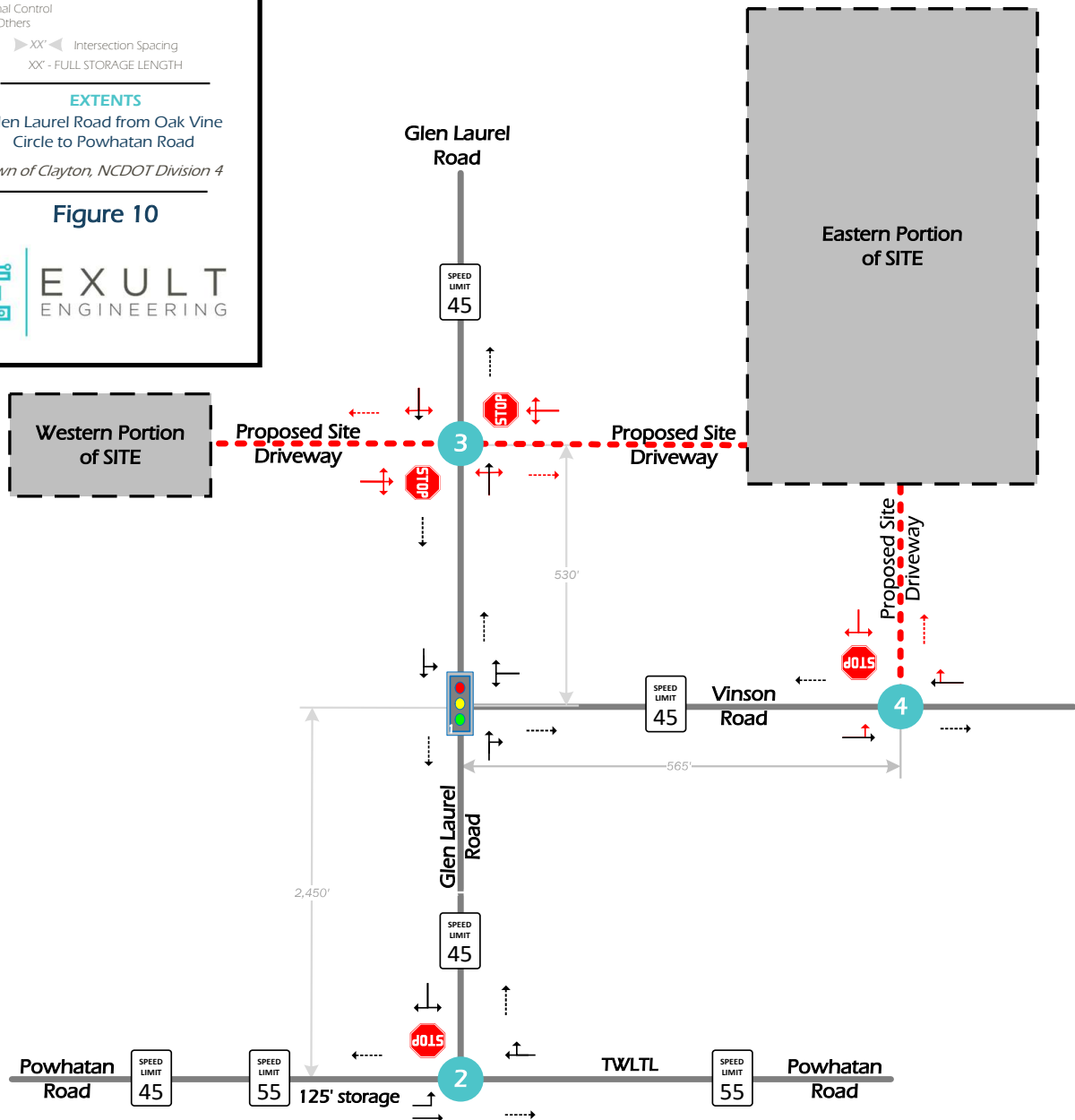
-  Stop Control
-  Speed Limit
-  Committed Signal Control by Others
-  Existing Approach Lane
-  Recommended Approach Lane (By Developer)
-  Departure Lane
-  XX' - Intersection Spacing
-  XX' - FULL STORAGE LENGTH

EXTENTS

Glen Laurel Road from Oak Vine Circle to Powhatan Road

Town of Clayton, NCDOT Division 4

Figure 10





STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

DELIVERY VIA EMAIL

August 4, 2022

Jonathan K. Jacobs, PE
Assistant Town Engineer - Town of Clayton
111 E. Second Street
Clayton, NC 27528

COUNTY: Johnston

SUBJECT: **TIA Review of Proposed Summer Glen Residential TIA**

Dear Mr. Jacobs,

Highway Division Four (Division) has reviewed the Traffic Impact Analysis (TIA) for the subject development. Please accept this letter as concurrence with the TIA and the attached TIA Review Report performed by the Congestion Management Section of the Transportation Mobility and Safety Division of NCDOT. Any comments below are in addition to the requirements that are included in the actual TIA or Traffic Impact Analysis Review. All requirements or recommendations included herein are based off current Department and Division policies. This review should not be mistaken for approval of the driveway permit, design/construction plans, final plat, site plans, or access locations. A driveway permit must be obtained prior to construction and NCDOT will approve site plan and access locations during this review. All design aspects of any submitted plans shall comply with current NCDOT Standard Specifications for Roads and Structures and Policy on Street and Driveway Access to North Carolina Highways.

GENERAL COMMENTS

- Any roadway improvements and right-of-way dedication necessary to accommodate the road construction shall be the responsibility of the owner/developers. All required ROW shall be dedicated as public ROW in the final plat. Installation of right turn lanes will typically require at least 15' of dedication.
- Lane Closures for required improvement construction will only be permitted under restricted hours due to heavy traffic volumes in the vicinity of the proposed development. These restrictions will be determined during the driveway permitting application and approval.
- These conditions are based on current traffic volumes and projected growth for the study area. If the proposed build out year for this development, as stated in the TIA, varies more than one year an addendum or revised TIA may be required.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS | DIV. 4 DIST. 3
2671 US 70 WEST
GOLDSBORO, NC 27530

Telephone: (919) 739-5300
Fax: (919) 731-2017
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
2671 US 70 WEST
GOLDSBORO, NC 26730

- The installation of any improvements being identified by a TIA for an adjacent development does not dismiss or release this development from installation and/or participation of these improvements provided the other development does not move forward as intended. It is recommended that the Developers coordinate this installation with other committed developments. The Department will not participate in determining the value of each individual contribution to this roadway improvement.

Additional Requirements

- All driveways for this site on NCDOT ROW must be spaced 600' on secondary and 1,000' on primary routes. This is measured along the ROW line between the tangent projection of the inside edges of adjacent driveways apart measuring the distance between the radiuses of both driveways.
- Any additional improvements that are constructed by others and not shown on this TIA must be maintained while constructing the improvements required by this letter.
- All left and right turns installed on NCDOT ROW at will required a minimum of 100' of storage if located at a site driveway. If any left turn lane taper overlaps with any existing or proposed middle turn lane or taper, the entire section will need to be widened to three lanes.
- The analysis includes background improvements by others. If these improvements are not in place at the time of construction, the site should provide these improvements or analysis demonstrating mitigation is not necessary.

Feel free to contact me if you have any additional questions or concerns.

Sincerely,



Sam Lawhorn, PE
District Engineer

cc: Kevin Bowen, PE - Division Engineer
Paul Marak, PE - Division Traffic Engineer
Charles Sorrell - Congestion Management Engineer
Brittany Chase, P.E. – Exult Engineering
Driveway Permit File



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

August 3, 2022

Summer Glen Residential

Traffic Impact Analysis Review Report Congestion Management Section

TIA Project: SC-2022-249
Division: 4
County: Johnston



Doumit Y. Ishak, Regional Engineer
Clarence B. Bunting, IV, P.E. Project Engineer
Charles Sorrell, Project Design Engineer

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION MOBILITY & SAFETY DIVISION
1561 MAIL SERVICE CENTER
RALEIGH, NC 27699-1561

Telephone: (919) 814-5000
Fax: (919) 771-2745
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
750 N. GREENFIELD PARKWAY
GARNER, NC 27529

Summer Glen Residential TIA

SC-2022-249

Clayton

Johnston County

Per your request, the Congestion Management Section (CMS) of the Transportation Mobility and Safety Division has completed a review of the subject site. The comments and recommendations contained in this review are based on data for background conditions presented in the Traffic Impact Analysis (TIA) and are subject to the approval of the local District Engineer's Office and appropriate local authorities.

Date Initially Received by CMS	7/18/22	Date of Site Plan	N/A
Date of Complete Information	7/18/22	Date of Sealed TIA	7/14/22

Proposed Development

The TIA assumes the development is to be completed by 2025 and consist of the following:

Land Use	Land Use Code	Size
Single-Family Detached Housing	210	120 units
Single-Family Detached Housing	210	15 units

Trip Generation - Unadjusted Volumes During a Typical Weekday			
	IN	OUT	TOTAL
AM Peak Hour	26	75	101
PM Peak Hour	85	50	135
Daily Trips			1,370

General Reference

For reference to various documents applicable to this review please reference the following link: <https://connect.ncdot.gov/resources/safety/Pages/Congestion-Management.aspx>

Once the driveway permit has been approved and issued, a copy of the final driveway permit requirements should be forwarded to this office. If we can provide further assistance, please contact the Congestion Management Section.

Signalization

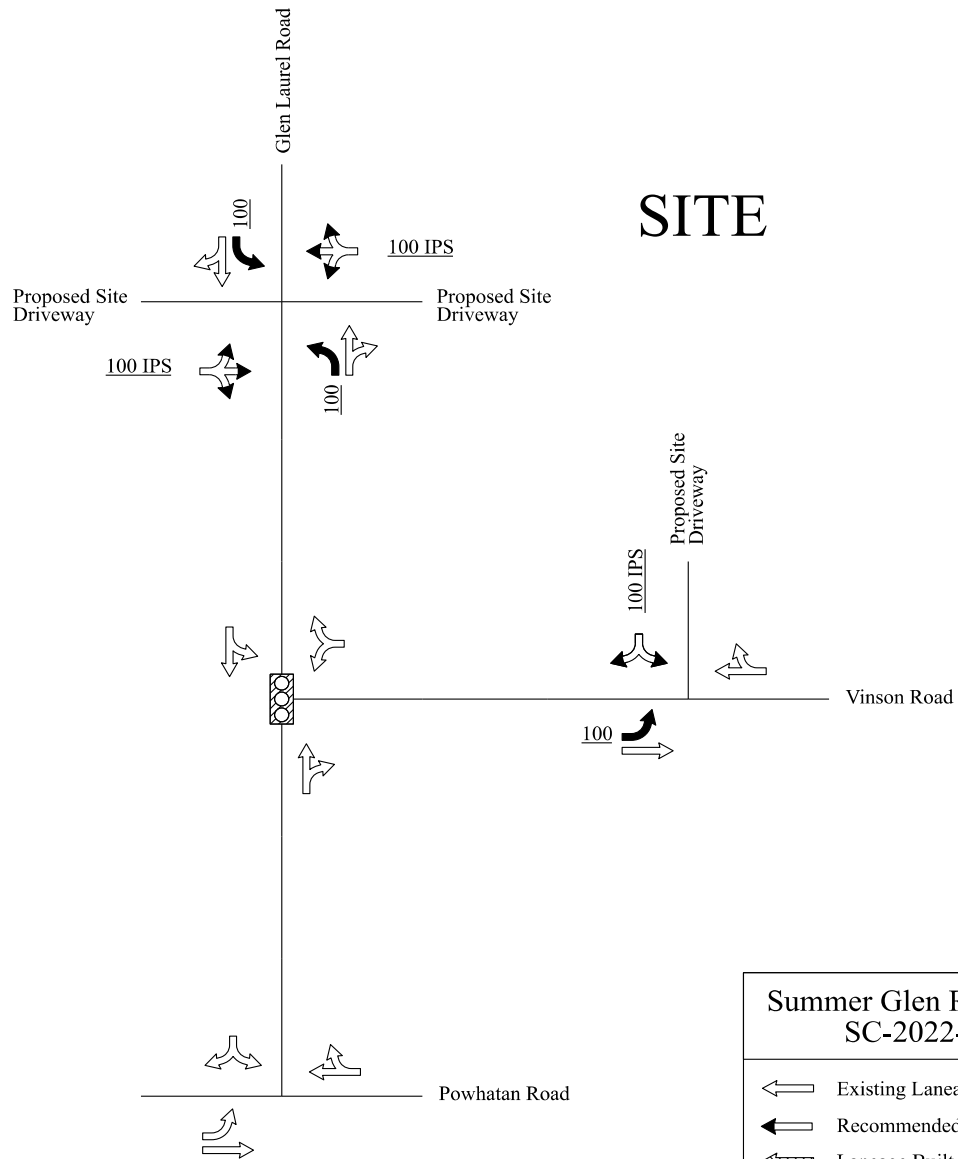
We defer to the District Engineer, the Division Traffic Engineer, and the Regional Traffic Engineer for final decisions regarding signalization.

Improvements By Others

The analysis includes background improvements by others. If these improvements are not in place at the time of construction, the site should provide these improvements or analysis demonstrating mitigation is not necessary.

SITE

SITE



Summer Glen Residential SC-2022-249

-  Existing Laneage
-  Recommended Laneage
-  Laneage Built By Others
-  NCDOT Recommendation
-  Existing Signal
-  Monitor for Signal
-  Developer Proposed Signal
- XXX Storage
- XXX NCDOT Recommended Storage
- <XXX> Distance Between Intersections
- IPS Internal Protected Stem
- All Distances in Feet
- Drawing Not to Scale

Charles Sorrell 7/19/22

APPENDIX

NCDOT TIA SCOPING CHECKLIST AND CORRESPONDENCE



NCDOT TIA Scoping Checklist



Project Name: Glen Laurel Residential

TIA Scoping Date: 5/5/2022

☐ **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	Glen Laurel Road	Conventional Full-Mvmt	2-Way Stop	1100	North	Vinson Road
Access B	Vinson Road	Conventional Full-Mvmt	2-Way Stop	1200	East	Glen Laurel
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	Oak Vine Circle	Glen Laurel	N/A	Connector 1	Tanners Way	
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

Removed
per Town

☐ 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).

☐

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).





NCDOT TIA Scoping Checklist



☒ 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.

Trip distribution will be determined and submitted for comment/approval once traffic volume data is collected.

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 7-9 am
- ☒ Weekday PM Peak 4-6 pm
- ☐ Weekday Midday Peak _____
- ☐ Weekday PM School Peak _____
- ☐ Weekend _____ Peak _____
- ☐ Other _____





NCDOT TIA Scoping Checklist



☒ 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.

Trip distribution will be determined and submitted for comment/approval once traffic volume data is collected.

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 7-9 am
- ☒ Weekday PM Peak 4-6 pm
- ☐ Weekday Midday Peak _____
- ☐ Weekday PM School Peak _____
- ☐ Weekend _____ Peak _____
- ☐ Other _____



NCDOT TIA Scoping Checklist

TIA Need
Screening



TIA
Scoping



TIA
Submittal



☒ 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	Glen Laurel Road	Vinson Road	2-Way Stop	Require New Counts			
#2	Glen Laurel Road	Powhatan Road	2-Way Stop	Require New Counts			
#3							
#4							
#5							
#6							
#7							
#8							
#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: _____



NCDOT TIA Scoping Checklist

TIA Need
Screening



TIA
Scoping



TIA
Submittal



☒ Future Year Conditions

☒ Project Build-Out Year: 2025

☒ Future Analysis Year(s): 2025

☒ 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
	Signal at Glen Laurel and Vinson (NCDOT)		
Nearby Approved Development	Location	Future Land Use (exclude any completed phases)	Committed Improvements
Gordon Park	NE of Powhatan and Glen Laur	Residential	

☒ Annual Growth Factor: 3 %

Justification/Data Source: Per the Town and historical growth on Glen Laurel Road

☐ 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 #



NCDOT TIA Scoping Checklist



☒ 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)



NCDOT TIA Scoping Checklist



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

_____	Gray Methven	5/13/2022
Signature	Print Name	Date

TIA CONSULTANT

_____	Brittany Chase	5/13/2022
Signature	Print Name	Date

LOCAL GOVERNMENT REPRESENTATIVE (If Applicable)

_____	_____	_____
Signature	Print Name	Date

Email concurrence may be used in lieu of the signature.

NCDOT DISTRICT REPRESENTATIVE

Reviewed and approved by the NCDOT Division ____ District ____ on _____.

_____	_____
Signature	Print Name

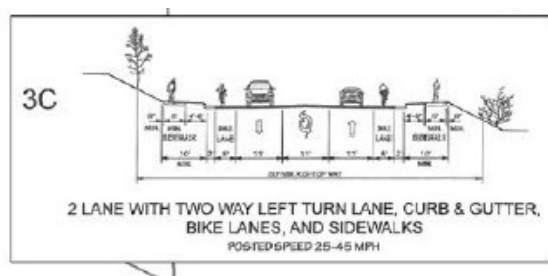
Email concurrence may be used in lieu of the signature.

Brittany Chase

From: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Sent: Friday, June 3, 2022 8:34 AM
To: Brittany Chase
Cc: Lisa Lundeen; Chanlin Wong; Ben Howell; Lawhorn, Samuel C
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Brittany – I am comfortable with your proposed distribution.

For Vinson Road, see the snippet below. Both Glen Lauren and Vinson are cross-section 3C, and half the ultimate section would be expected.



Gordon Park has 3-4 lots remaining, so I am comfortable with that being captured in your background growth. I did not realize it was that built out.

Let me know if you need anything else.

Thanks!

Jonathan K. Jacobs, PE

Assistant Town Engineer

111 E. Second St.

Clayton, NC 27520

O: 919-553-5002 x6537

D: 919-359-1297

ClaytonNC.org





Please note that email sent to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Brittany Chase <Brittany@ExultEngineering.com>
Sent: Wednesday, June 1, 2022 4:01 PM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>; Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Be Advised: This email originated from outside of the Town of Clayton's network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Jonathan!

I hope you are doing well.

I wanted to close the loop with you on a few items as we are trying to finalize our analysis this week for Glen Laurel Residential:

1. Were you okay with the previously provided proposed distribution? Sam concurred, but I do not think we have record of the Town's response. I have re-attached for your quick reference.
2. Were you able to confirm the number of remaining lots in Gordon Park? You had mentioned it may be close to buildout and therefore we would assume remaining trips would be included in background growth.
3. Are there any frontage widening requirements for the proposed site along Glen Laurel or Vinson Road?

Thank you and have a great rest of your day!



Brittany Chase, P.E.
Exult Engineering | P.O. Box 99277, Raleigh, NC 27624
Office: 984-500-5428 | Mobile: 919-610-4444
Email: Brittany@ExultEngineering.com
Website: www.ExultEngineering.com

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Sent: Tuesday, May 24, 2022 4:00 PM

To: Brittany Chase <Brittany@ExultEngineering.com>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Brittany,

I am still trying to shake this stuff, but thanks for asking. I am okay with distributions shown.

Sam Lawhorn, P.E.
District 3 Engineer
Highway Division 4
North Carolina Department of Transportation

919-739-5300
sclawhorn@ncdot.gov

2671 US 70 West
Goldsboro, NC 27530



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From: Brittany Chase <Brittany@ExultEngineering.com>
Sent: Monday, May 23, 2022 8:32 PM
To: Lawhorn, Samuel C <sclawhorn@ncdot.gov>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

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Hi Sam and Jonathan –

I hope you both are doing well and had a great weekend. Sam – I hope you are feeling better this week!

Please find attached proposed distribution for the Glen Laurel Residential site in Clayton. I have also attached a sketch of the existing traffic volumes collected for your reference. Please let us know if you have any comments or if you approve of the distribution.

Jonathan – have you been able to confirm the number of lots remaining for the Gordon Park development (potential approved development)?

Thank you both and have a great night!



Brittany Chase, P.E.

Exult Engineering | P.O. Box 99277, Raleigh, NC 27624

Office: 984-500-5428 | Mobile: 919-610-4444

Email: Brittany@ExultEngineering.com

Website: www.ExultEngineering.com

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>

Sent: Monday, May 16, 2022 8:37 AM

To: Brittany Chase <Brittany@ExultEngineering.com>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>

Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>

Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

I am good with just starting the PM counts at 3:45.

Thanks,

Sam Lawhorn, P.E.

District 3 Engineer

Highway Division 4

North Carolina Department of Transportation

919-739-5300

sclawhorn@ncdot.gov

2671 US 70 West

Goldboro, NC 27530



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From: Brittany Chase <Brittany@ExultEngineering.com>

Sent: Friday, May 13, 2022 1:15 PM

To: Lawhorn, Samuel C <sclawhorn@ncdot.gov>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>

Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>

Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

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Hi Sam –

Thank you for your response.

In regards to the weekday PM school traffic for Glen Laurel at Vinson:

- Is the backup concern related to vehicles leaving the school after pickup in the afternoon? I am assuming so with the westbound direction of Vinson Road being stop controlled at that intersection. The school dismissal (Powhatan Elementary) begins at 3:55 so those vehicles would most likely be captured in that count beginning at 4:00 pm. We could extend the count time by 15 minutes if you feel that is necessary. But, I am not sure a separate analysis is needed because of the school dismissal time pretty much aligning with our peak period. Please advise so I can let our counters know.
- Our client indicated that requested access is no longer required by the Town because of property ownership constraints.

Have a great rest of your afternoon!



Brittany Chase, P.E.

Exult Engineering | P.O. Box 99277, Raleigh, NC 27624

Office: 984-500-5428 | Mobile: 919-610-4444

Email: Brittany@ExultEngineering.com

Website: www.ExultEngineering.com

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>

Sent: Friday, May 13, 2022 12:50 PM

To: Brittany Chase <Brittany@ExultEngineering.com>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>

Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell

<bhowell@townofclaytonnc.org>

Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Brittany,

Just one comment and one question.

- I would like to see the Weekday PM school traffic studied for just the intersection of Glen Laurel and Vinson. I have been told the traffic backs up significantly at this intersection and would like to just verify the traffic would not back up past the site driveway on Vinson rd.
- How is the requested access on Glen Lauren being dealt with? Having this as a public driveway would give me concerns with the offset of the adjacent subdivision roadway and distance from Oak Vine Circle.

Sam Lawhorn, P.E.

District 3 Engineer

Highway Division 4

North Carolina Department of Transportation

919-739-5300

sclawhorn@ncdot.gov

2671 US 70 West

Goldsboro, NC 27530



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From: Brittany Chase <Brittany@ExultEngineering.com>
Sent: Friday, May 13, 2022 10:39 AM
To: Lawhorn, Samuel C <sclawhorn@ncdot.gov>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

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Good morning Sam and Jonathan –

As discussed, we have prepared the NCDOT TIA Scoping Checklist for your records. Please let me know if you have any comments.

Sam – I wasn't sure on the construction year for the planned signal at Vinson and Glen Laurel, but would assume it would be completed by our buildout year.

Jonathan – Just let me know on the remaining lots for Gordon Park when you have a moment.

Thank you both and I hope you have a great weekend!



Brittany Chase, P.E.
Exult Engineering | P.O. Box 99277, Raleigh, NC 27624
Office: 984-500-5428 | Mobile: 919-610-4444
Email: Brittany@ExultEngineering.com
Website: www.ExultEngineering.com

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Sent: Tuesday, May 10, 2022 3:18 PM
To: Brittany Chase <Brittany@ExultEngineering.com>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

I need the checklist as it saves so much time compared to reading different types of MOUs from every company.

Sam Lawhorn, P.E.
District 3 Engineer

Highway Division 4
North Carolina Department of Transportation

919-739-5300
sclawhorn@ncdot.gov

2671 US 70 West
Goldsboro, NC 27530



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From: Brittany Chase <Brittany@ExultEngineering.com>
Sent: Tuesday, May 10, 2022 12:08 PM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>; Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

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Thanks so much Jonathan – we appreciate the heads up related to the pedestrian concerns.

We will get these summarized in a TIA Scoping MOU for everyone's records. Sam – I have never asked you, but do you prefer the NCDOT TIA Scoping Checklist Form, or is it okay if we summarize these items using our own template?



Brittany Chase, P.E.
Exult Engineering | P.O. Box 99277, Raleigh, NC 27624
Office: 984-500-5428 | Mobile: 919-610-4444
Email: Brittany@ExultEngineering.com
Website: www.ExultEngineering.com

From: Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Sent: Tuesday, May 10, 2022 12:02 PM
To: Brittany Chase <Brittany@ExultEngineering.com>; Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>; Ben Howell <bhowell@townofclaytonnc.org>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Brittany – I have responded below in Green.

Thanks!

Jonathan K. Jacobs, PE

Assistant Town Engineer

111 E. Second St.

Clayton, NC 27520

O: 919-553-5002 x6537

D: 919-359-1297

ClaytonNC.org



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From: Brittany Chase <Brittany@ExultEngineering.com>

Sent: Friday, May 6, 2022 2:45 PM

To: Lawhorn, Samuel C <sclawhorn@ncdot.gov>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>

Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>

Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

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Thanks for your response Sam!

I will wait for input from Jonathan before preparing the MOU. Just for your records, the developer has informed us that the buildout year will be 2025 (not 2026 as indicated on the TIA Needs Screening form).

Thank you both and have a great weekend!



Brittany Chase, P.E.

Exult Engineering | P.O. Box 99277, Raleigh, NC 27624
Office: 984-500-5428 | Mobile: 919-610-4444
Email: Brittany@ExultEngineering.com
Website: www.ExultEngineering.com

From: Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Sent: Friday, May 6, 2022 9:51 AM
To: Brittany Chase <Brittany@ExultEngineering.com>; Jonathan Jacobs <jjacobs@townofclaytonnc.org>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>
Subject: RE: [External] Glen Laurel Residential - TIA Scoping Request

Since this study is already being completed and is in a busy area, I would like to review it as well. See below in red for my comments.

Sam Lawhorn, P.E.
District 3 Engineer
Highway Division 4
North Carolina Department of Transportation

919-739-5300
sclawhorn@ncdot.gov

2671 US 70 West
Goldsboro, NC 27530



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From: Brittany Chase <Brittany@ExultEngineering.com>
Sent: Thursday, May 5, 2022 7:07 PM
To: Jonathan Jacobs <jjacobs@townofclaytonnc.org>; Lawhorn, Samuel C <sclawhorn@ncdot.gov>
Cc: Lisa Lundeen <LisaL@ExultEngineering.com>; Chanlin Wong <ChanlinW@ExultEngineering.com>
Subject: [External] Glen Laurel Residential - TIA Scoping Request

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Hi Jonathan and Sam –

I hope you both are doing well.

We have been contracted by Wakefield Development to perform the TIA for the proposed Glen Laurel Residential development. Please see the attached concept sketch (with Town Pre-App Comments) and *NCDOT TIA Needs Screening* form. We understand the Town will require a TIA. Will NCDOT also require a TIA with the trip generation below the TIA threshold?

We would like to request the TIA scope from the Town and NCDOT (if applicable). I am still waiting on confirmation of buildout year from the developer. Do you prefer to set up a meeting to discuss or is scoping via email acceptable?

If scoping via email is acceptable, could you please provide feedback on the following items and I can summarize in the *NCDOT TIA Scoping Checklist* form:

1. Study area I would like to at least see the Glen Laurel and Vinson intersection, but the Town may want additional intersections. Additionally, please add Powhatan and Glen Laurel Road.
2. Growth rate: Historical ADT volumes show an annual growth rate of 2% in the area (please see attached). I am okay with this if the Town is. The Town has been utilizing a 3% growth rate which aligns more with Glen Laurel on your Growth Calculation sheet.
3. Approved Developments Gordon Park – this is close to built-out. Let me see how many units remain.
4. There may be TIP projects to consider, depending on the required study intersections. Are there any committed or planned improvements at the study area intersections? NCDOT is currently trying to secure funding for a signal at Glen Laurel and Vinson. This should be included in the study. There has been a lot of concern over the pedestrian safety at Powhatan Elementary. I don't expect the developer to make any additional improvements, but expect this to come up in any type of rezoning/public hearing discussion and want the developer to be prepared.

We do appreciate your attention to this request. As the school year is coming to a close, there is a rush to collect traffic count data in the next month!

Thank you!



Brittany Chase, P.E.

Exult Engineering | P.O. Box 99277, Raleigh, NC 27624

Office: 984-500-5428 | Mobile: 919-610-4444

Email: Brittany@ExultEngineering.com

Website: www.ExultEngineering.com

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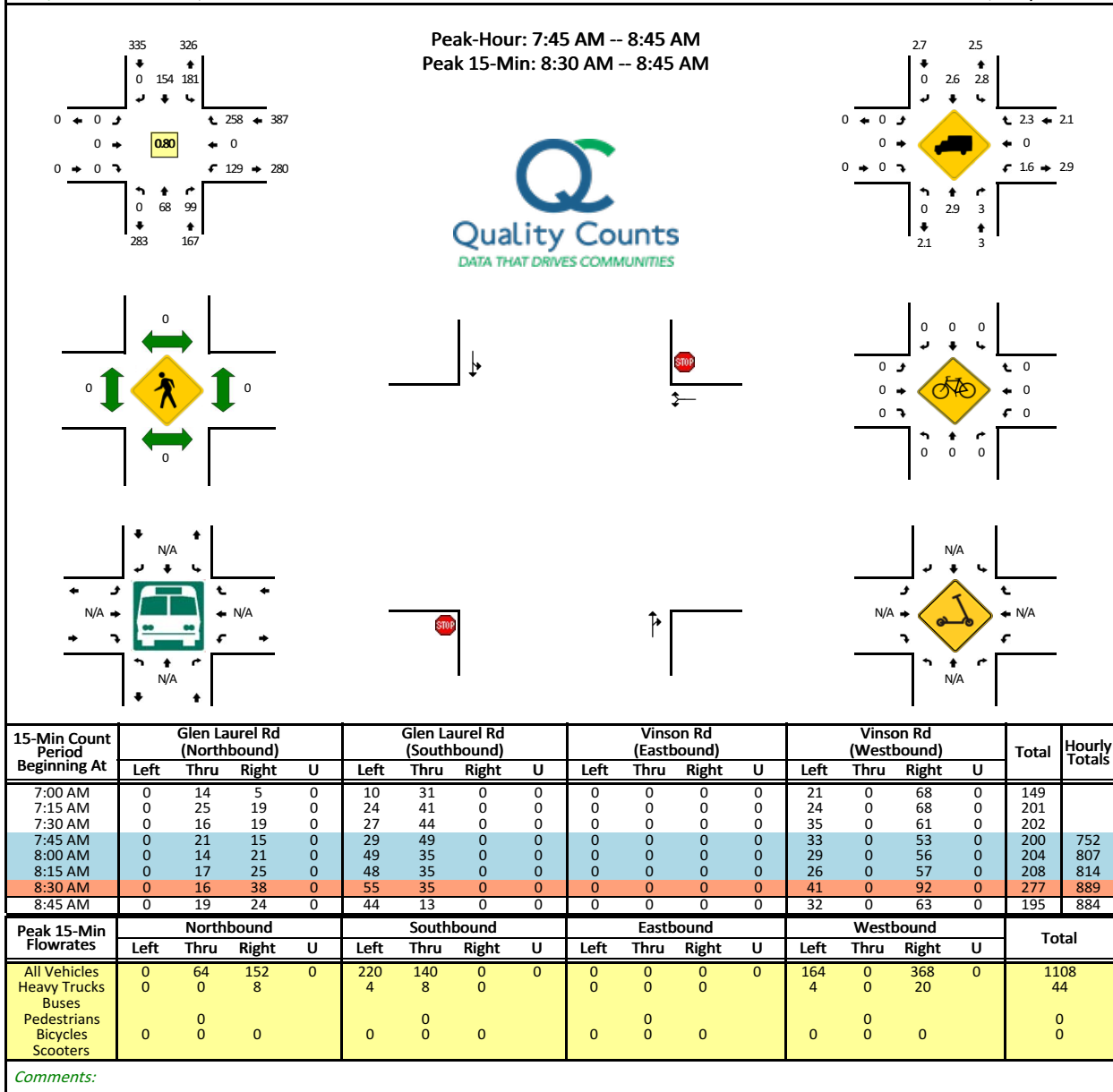
2022 TRAFFIC COUNT DATA

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Glen Laurel Rd -- Vinson Rd
CITY/STATE: Johnston, NC

QC JOB #: 15821001
DATE: Thu, May 12 2022



Report generated on 5/18/2022 1:31 PM

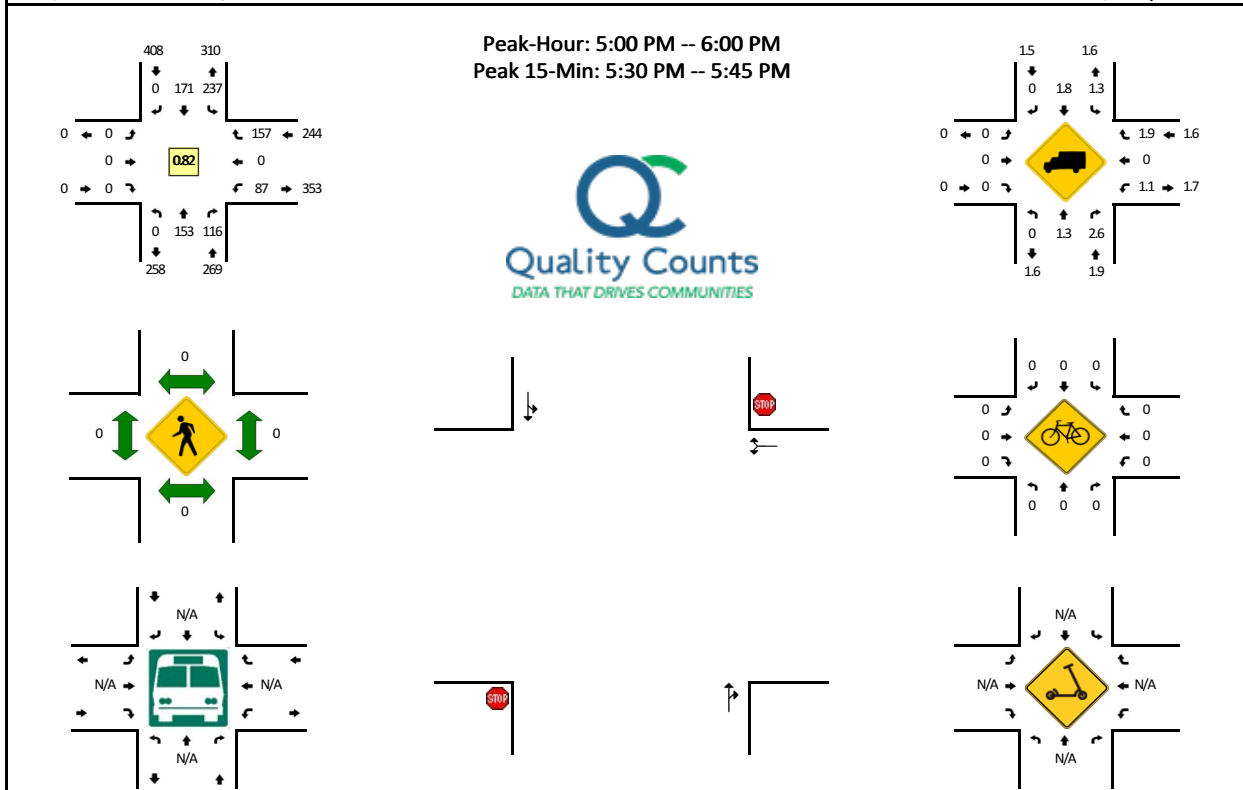
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Glen Laurel Rd -- Vinson Rd
CITY/STATE: Johnston, NC

QC JOB #: 15821002
DATE: Thu, May 12 2022



15-Min Count Period Beginning At	Glen Laurel Rd (Northbound)				Glen Laurel Rd (Southbound)				Vinson Rd (Eastbound)				Vinson Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	0	33	28	0	54	27	0	0	0	0	0	0	13	0	29	1	185	
4:00 PM	0	46	43	0	62	19	0	0	0	0	0	0	44	0	58	0	272	
4:15 PM	0	34	25	0	50	24	0	1	0	0	0	0	38	0	58	0	230	
4:30 PM	0	45	18	0	54	34	0	0	0	0	0	0	19	0	49	0	219	906
4:45 PM	0	38	19	0	52	34	0	0	0	0	0	0	12	0	30	0	185	906
5:00 PM	0	43	30	0	59	38	0	0	0	0	0	0	13	0	28	0	211	845
5:15 PM	0	42	32	0	60	41	0	0	0	0	0	0	20	0	37	0	232	847
5:30 PM	0	39	32	0	71	46	0	0	0	0	0	0	36	0	56	0	280	908
5:45 PM	0	29	22	0	47	46	0	0	0	0	0	0	18	0	36	0	198	921
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	156	128	0	284	184	0	0	0	0	0	0	144	0	224	0	1120	
Heavy Trucks	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

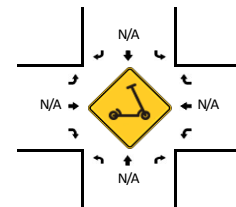
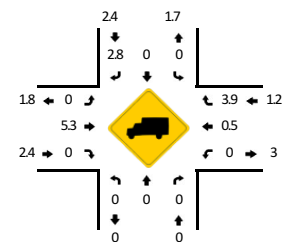
Comments:

Report generated on 5/18/2022 1:31 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Method for determining peak hour: Total Entering Volume

QC JOB #: 15821003
DATE: Thu, May 12 2022



Comments:

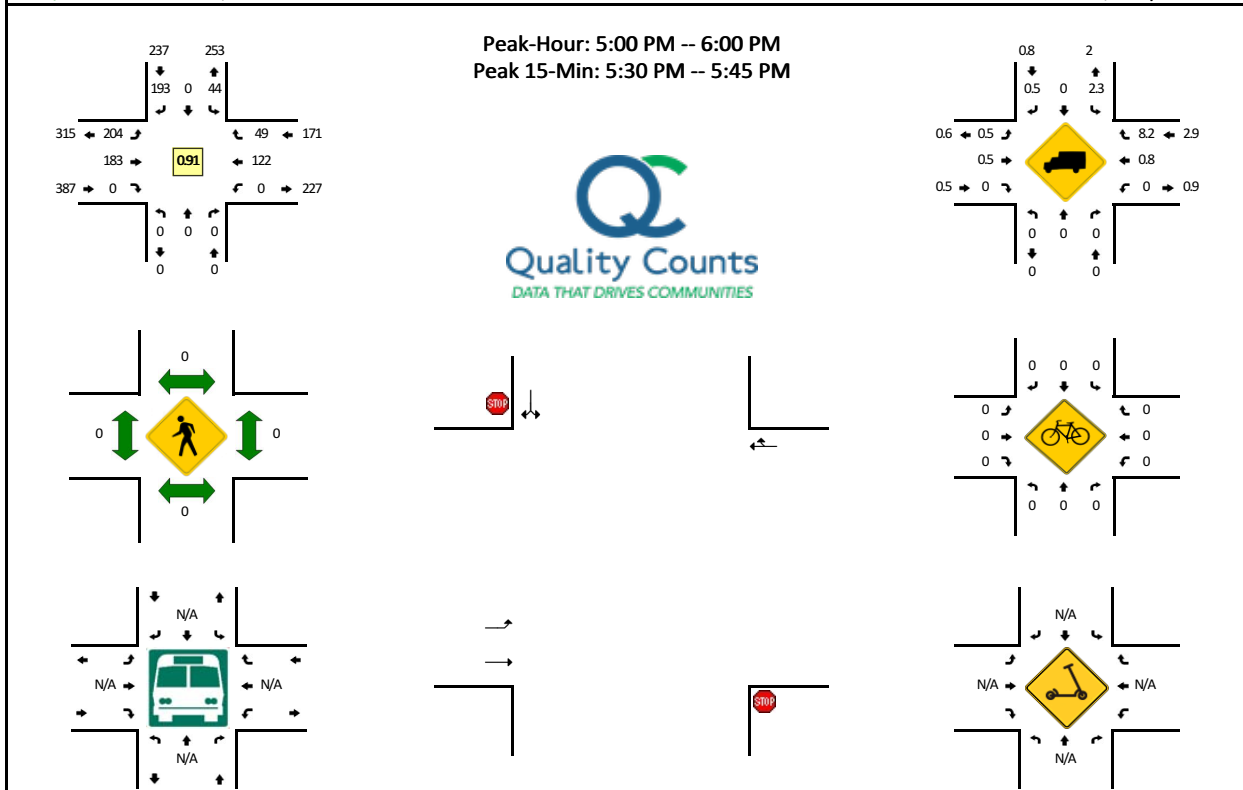
SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Glen Laurel Rd -- Powhatan Rd
CITY/STATE: Johnston, NC

QC JOB #: 15821004
DATE: Thu, May 12 2022



15-Min Count Period Beginning At	Glen Laurel Rd (Northbound)				Glen Laurel Rd (Southbound)				Powhatan Rd (Eastbound)				Powhatan Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	24	0	25	0	72	51	0	0	0	10	9	0	191	
4:15 PM	0	0	0	0	16	0	36	0	47	42	0	0	0	20	11	0	172	
4:30 PM	0	0	0	0	16	0	32	0	48	43	0	0	0	20	8	0	167	
4:45 PM	0	0	0	0	16	0	25	0	47	48	0	0	0	23	12	0	171	701
5:00 PM	0	0	0	0	13	0	30	0	53	55	0	0	0	29	12	0	192	702
5:15 PM	0	0	0	0	10	0	41	0	51	50	0	0	0	30	16	0	198	728
5:30 PM	0	0	0	0	14	0	65	0	61	44	0	0	0	24	11	0	219	780
5:45 PM	0	0	0	0	7	0	57	0	39	34	0	0	0	39	10	0	186	795
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	56	0	260	0	244	176	0	0	0	96	44	0	876	
Heavy Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

Report generated on 5/18/2022 1:31 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

SITE VISIT DATA COLLECTION

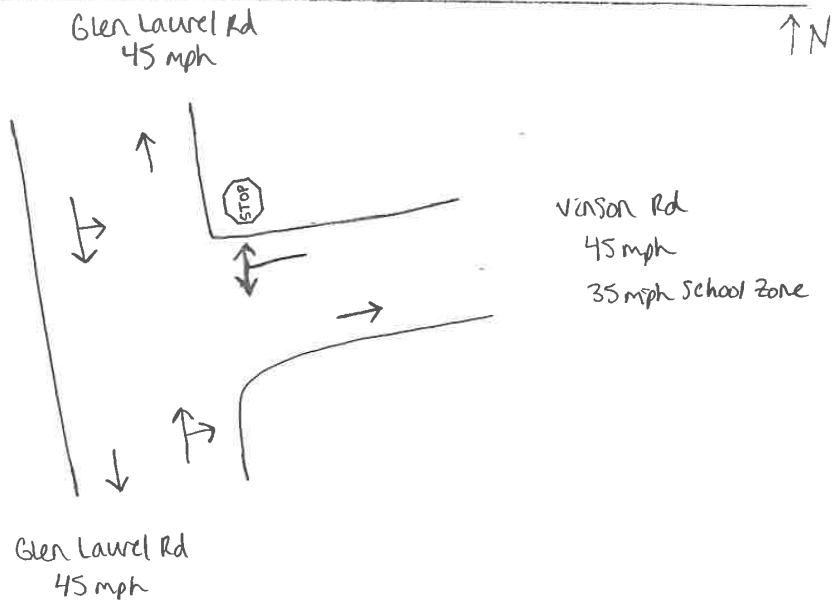
Project: Glen Laurel Traffic Due Diligence

Date: 5/16/22

Initials: TB

Intersection: Glen Laurel Rd @ Vinson Rd

Sketch:

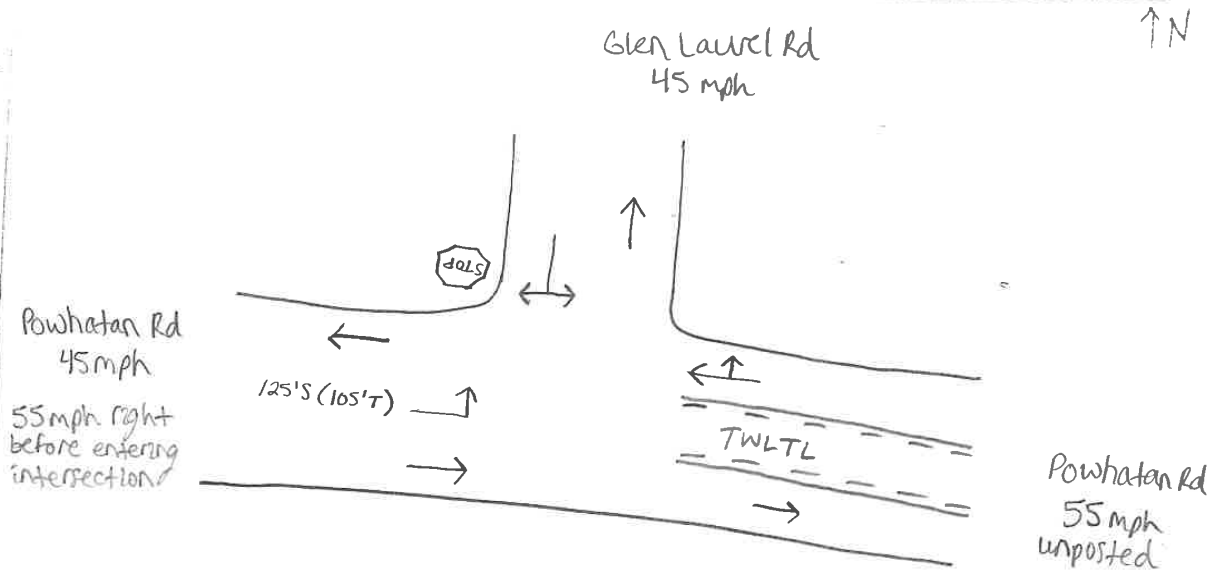


- Label: Street names, storage lengths, taper lengths, Speed limits, lane geometry, driveways
- Photos of all approaches & departures
- Signal Head / Phasing Information:
 - Northbound
 - Southbound
 - Eastbound
 - Westbound

Unsignalized
- Approximate cycle length:
- Problems Observed? Excessive Queues, etc.?

Project: Glen Laurel Traffic Due Diligence
 Date: 5/16/22
 Initials: TB
 Intersection: Glen Laurel Rd @ Powhatan Rd

Sketch:



- Label: Street names, storage lengths, taper lengths, Speed limits, lane geometry, driveways
- Photos of all approaches & departures
- Signal Head / Phasing Information:
 - Northbound
 - Southbound
 - Eastbound
 - Westbound
- Unsignalized
- Approximate cycle length:
- Problems Observed? Excessive Queues, etc.?

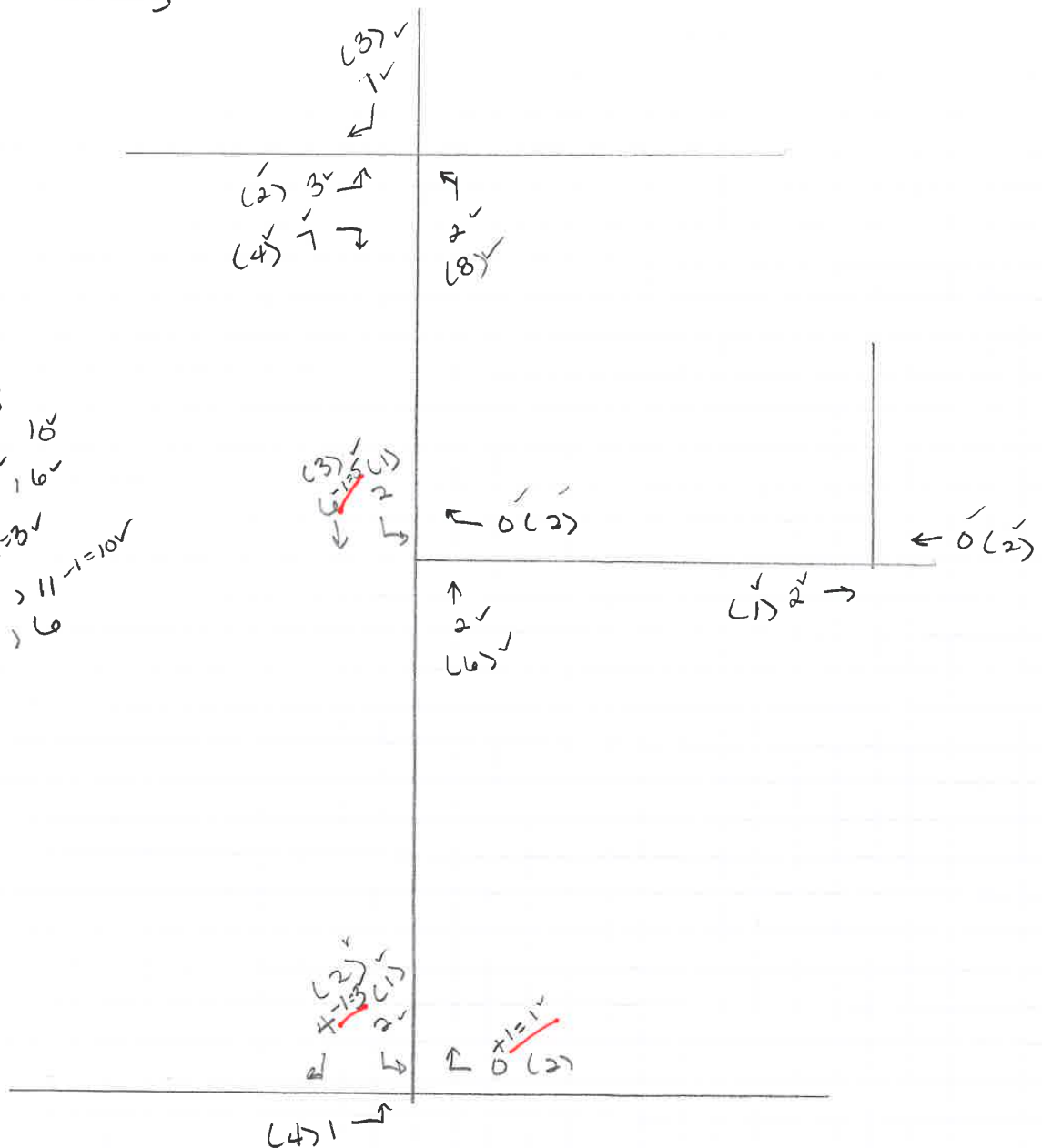
SITE TRAFFIC BALANCING

Western Portion
Site balancing

Am 3, 10
Pm 11, 6

@ driveways
Am - 3, 10
Pm - 11, 6

@ extents
Am - 2 + 1 = 3
Pm 11, 6
11 - 1 = 10





www.ExultEngineering.com

Date: 7-13-22 Sheet _____ of _____

Project: Summer Glen Task: _____

Engineer: _____

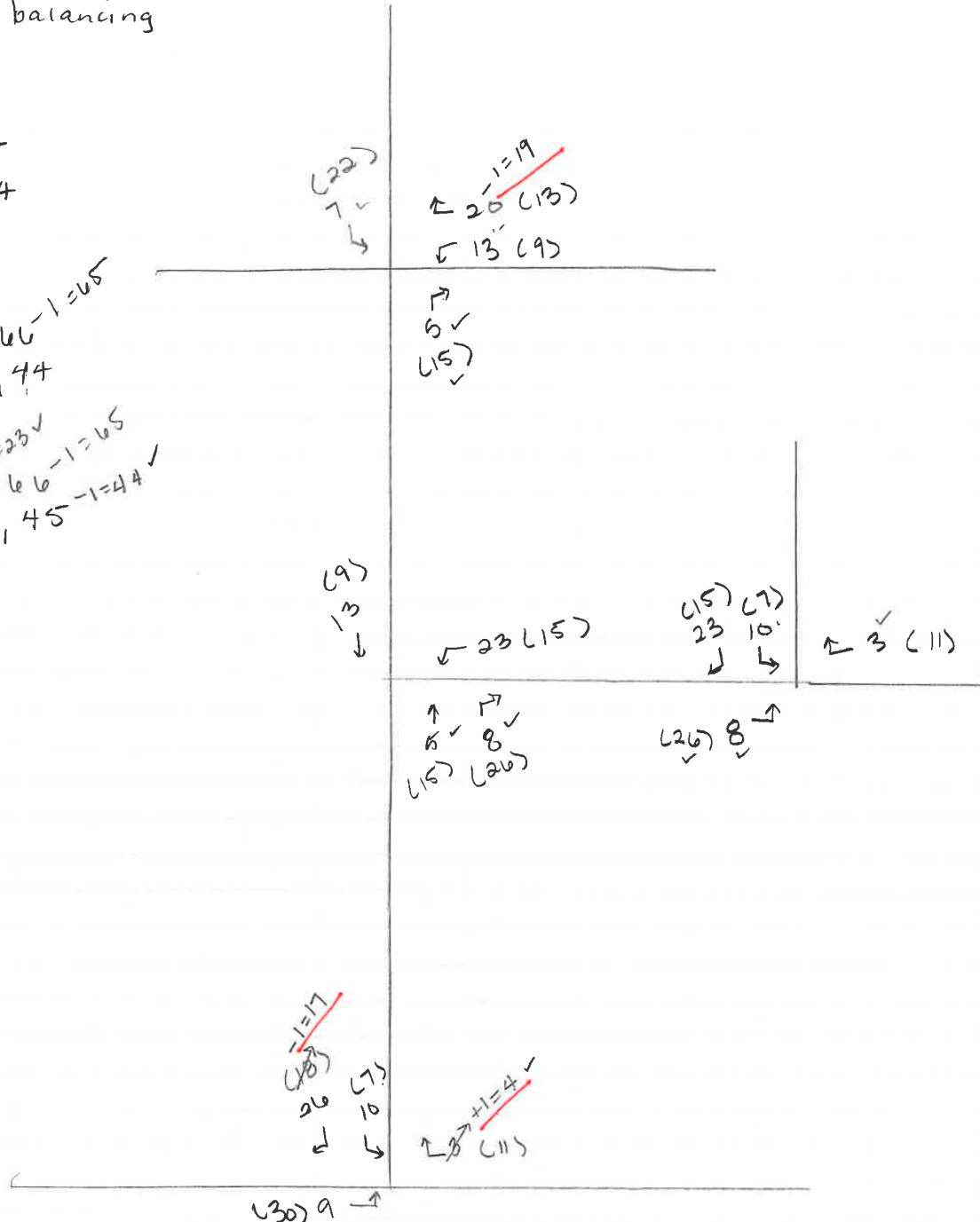
Serving our clients, communities, & team with excellence.

Eastern Portion
Site balancing

Am: 23, 65
Pm: 74, 44

@ driveways
Am - 23, 66 - 1 = 65
Pm - 74, 44

@ extents
Am - 22 + 1 = 23 ✓
Am - 22, 66 - 1 = 65 ✓
Pm - 74, 45 - 1 = 44 ✓



INTERSECTION VOLUME SPREADSHEETS

Intersection Development Worksheet Intersection #1 - Glen Laurel Road at Vinson Road																
AM PEAK HOUR																
	Northbound Glen Laurel Road				Southbound Glen Laurel Road				Eastbound Glen Laurel Road				Westbound Vinson Road			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count	68 99				181 154								129 258			
2022 Existing Traffic	0	68	99	0	181	154	0	0	0	0	0	0	129	0	258	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	7	10	0	17	15	0	0	0	0	0	0	12	0	24	0
2025 Background Traffic Due to Growth Factor	0	7	10	0	17	15	0	0	0	0	0	0	12	0	24	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	7	10	0	17	15	0	0	0	0	0	0	12	0	24	0
2025 No-Build Traffic	0	75	109	0	198	169	0	0	0	0	0	0	141	0	282	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	35%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	2	13	0	0	0	0	0	0	23	0	0	0
Inbound Assigned Percentage	0%	20%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	0	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	5	8	0	2	13	0	0	0	0	0	0	23	0	0	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Total Primary Site Trips	0	2	0	0	2	5	0	0	0	0	0	0	0	0	2	0
Total Project Traffic	0	7	8	0	2	18	0	0	0	0	0	0	23	0	0	0
2025 Buildout Volumes	0	82	117	0	200	187	0	0	0	0	0	0	164	0	282	0

PM PEAK HOUR																
	Northbound Glen Laurel Road				Southbound Glen Laurel Road				Eastbound Glen Laurel Road				Westbound Vinson Road			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count	153 116				237 171								87 157			
2022 Existing Traffic	0	153	116	0	237	171	0	0	0	0	0	0	87	0	157	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	15	11	0	22	16	0	0	0	0	0	0	9	0	15	0
2025 Background Traffic Due to Growth Factor	0	166	127	0	259	187	0	0	0	0	0	0	96	0	172	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	166	127	0	259	187	0	0	0	0	0	0	96	0	172	0
2025 No-Build Traffic	0	168	127	0	259	187	0	0	0	0	0	0	96	0	172	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	35%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	0	9	0	0	0	0	0	0	15	0	0	0
Inbound Assigned Percentage	0%	20%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	0	15	26	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	15	26	0	0	9	0	0	0	0	0	0	15	0	0	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	6	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Total Primary Site Trips	0	6	0	0	1	3	0	0	0	0	0	0	0	0	2	0
Total Project Traffic	0	21	26	0	1	12	0	0	0	0	0	0	16	0	2	0
2025 Buildout Volumes	0	189	153	0	260	199	0	0	0	0	0	0	111	0	174	0

Intersection Development Worksheet Intersection #2 - Glen Laurel Road at Powhatan Road																
AM PEAK HOUR																
	Northbound				Southbound				Eastbound				Westbound			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count*					44		247		69	57			200	51		
Balancing																
2022 Existing Traffic	0	0	0	0	44	0	247	0	69	57	0	0	0	200	51	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	0	0	0	5	0	23	0	7	6	0	0	0	18	5	0
2025 Background Traffic Due to Growth Factor	0	0	0	0	49	0	270	0	76	63	0	0	0	219	56	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	0	0	0	49	0	270	0	76	63	0	0	0	219	56	0
2025 No-Build Traffic	0	0	0	0	49	0	270	0	76	63	0	0	0	219	56	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	10	0	26	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	9	0	0	0	0	0	4	0
Total Primary Site Trips	0	0	0	0	10	0	26	0	9	0	0	0	0	0	4	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Total Primary Site Trips	0	0	0	0	2	0	3	0	1	0	0	0	0	0	1	0
Total Project Traffic	0	0	0	0	12	0	29	0	10	0	0	0	0	0	5	0
2025 Buildout Volumes	0	0	0	0	61	0	299	0	86	63	0	0	0	219	61	0

PM PEAK HOUR																
	Northbound				Southbound				Eastbound				Westbound			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count*					44		193		204	183			122	49		
Balancing																
2022 Existing Traffic	0	0	0	0	44	0	193	0	204	183	0	0	0	122	49	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	0	0	0	5	0	18	0	19	17	0	0	0	12	5	0
2025 Background Traffic Due to Growth Factor	0	0	0	0	49	0	211	0	223	200	0	0	0	134	54	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	0	0	0	49	0	211	0	223	200	0	0	0	134	54	0
2025 No-Build Traffic	0	0	0	0	49	0	211	0	223	200	0	0	0	134	54	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	7	0	17	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	30	0	0	0	0	0	11	0
Total Primary Site Trips	0	0	0	0	7	0	17	0	30	0	0	0	0	0	11	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	0
Total Primary Site Trips	0	0	0	0	1	0	2	0	4	0	0	0	0	0	2	0
Total Project Traffic	0	0	0	0	6	0	19	0	34	0	0	0	0	0	13	0
2025 Buildout Volumes	0	0	0	0	57	0	230	0	257	200	0	0	0	134	67	0

Intersection Development Worksheet																
Intersection #3 - Glen Laurel Road at Proposed Full Movement Driveway																
AM PEAK HOUR																
	Northbound Glen Laurel Road				Southbound Glen Laurel Road				Eastbound Proposed Full Movement				Westbound Proposed Full Movement Driveway			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count	326				335											
Balancing	0	326	0	0	0	335	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic																
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	31	0	0	0	32	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic Due to Growth Factor	0	357	0	0	0	367	0	0	0	0	0	0	0	0	0	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	357	0	0	0	367	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	357	0	0	0	367	0	0	0	0	0	0	0	0	0	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	30%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	0	0	0	0	13	0	19	0
Inbound Assigned Percentage	0%	0%	20%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	0	0	5	0	7	0	0	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	5	0	7	0	0	0	0	0	0	0	13	0	19	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	70%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	3	0	7	0	0	0	0	0
Inbound Assigned Percentage	70%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	2	0	0	0	0	0	1	0	3	0	7	0	0	0	0	0
Total Project Traffic																
	2	0	5	0	7	0	1	0	3	0	7	0	13	0	19	0
2025 Buildout Volumes																
	2	357	5	0	7	367	1	0	3	0	7	0	13	0	19	0

PM PEAK HOUR																
	Northbound Glen Laurel Road				Southbound Glen Laurel Road				Eastbound Proposed Full Movement				Westbound Proposed Full Movement Driveway			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count	310				408											
Balancing	0	310	0	0	0	408	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic																
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	28	0	0	0	38	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic Due to Growth Factor	0	338	0	0	0	446	0	0	0	0	0	0	0	0	0	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total	0	338	0	0	0	446	0	0	0	0	0	0	0	0	0	0
2025 No-Build Traffic	0	338	0	0	0	446	0	0	0	0	0	0	0	0	0	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	30%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	0	0	0	0	9	0	13	0
Inbound Assigned Percentage	0%	0%	20%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	0	0	15	0	22	0	0	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	15	0	22	0	0	0	0	0	0	0	9	0	13	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	0%	70%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0
Inbound Assigned Percentage	70%	0%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Primary Site Trips	8	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	8	0	0	0	0	0	3	0	2	0	4	0	0	0	0	0
Total Project Traffic																
	8	0	15	0	22	0	3	0	2	0	4	0	9	0	13	0
2025 Buildout Volumes																
	8	338	15	0	22	446	3	0	2	0	4	0	9	0	13	0

Intersection Development Worksheet																
Intersection #4 - Vinson Road at Proposed Full Movement Driveway																
AM PEAK HOUR																
	Northbound				Southbound				Eastbound				Westbound			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count									280				387			
Balancing																
2022 Existing Traffic	0	0	0	0	0	0	0	0	0	280	0	0	0	387	0	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	0	0	0	0	0	0	0	0	28	0	0	0	38	0	0
2025 Background Traffic Due to Growth Factor	0	0	0	0	0	0	0	0	0	308	0	0	0	423	0	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total																
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	308	0	0	0	423	0	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	10	0	23	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	8	0	0	0	0	0	3	0
Total Primary Site Trips	0	0	0	0	10	0	23	0	8	0	0	0	0	0	3	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	10	0	23	0	8	2	0	0	0	0	3	0
2025 Buildout Volumes	0	0	0	0	10	0	23	0	8	308	0	0	0	423	3	0

PM PEAK HOUR																
	Northbound				Southbound				Eastbound				Westbound			
	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn
2022 Existing Traffic																
2022 Traffic Count*									353				244			
Balancing																
2022 Existing Traffic	0	0	0	0	0	0	0	0	0	353	0	0	0	244	0	0
Background Growth Calculation																
Growth Factor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
2025 Background Growth	0	0	0	0	0	0	0	0	0	33	0	0	0	23	0	0
2025 Background Traffic Due to Growth Factor	0	0	0	0	0	0	0	0	0	386	0	0	0	267	0	0
Approved Developments																
Total Approved Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Background Growth																
Background Growth Total																
2025 No-Build Traffic	0	0	0	0	0	0	0	0	0	386	0	0	0	267	0	0
Trip Assignment - Eastern Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	15%	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	7	0	15	0	0	0	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%	0%	0%	0%	15%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	26	0	0	0	0	0	11	0
Total Primary Site Trips	0	0	0	0	7	0	15	0	26	0	0	0	0	0	11	0
Trip Assignment - Western Portion																
Outbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%
Outbound Primary Site Trips	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Inbound Assigned Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%
Inbound Primary Site Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0
Total Project Traffic	0	0	0	0	7	0	15	0	26	1	0	0	0	2	11	0
2025 Buildout Volumes	0	0	0	0	7	0	15	0	26	387	0	0	0	269	11	0

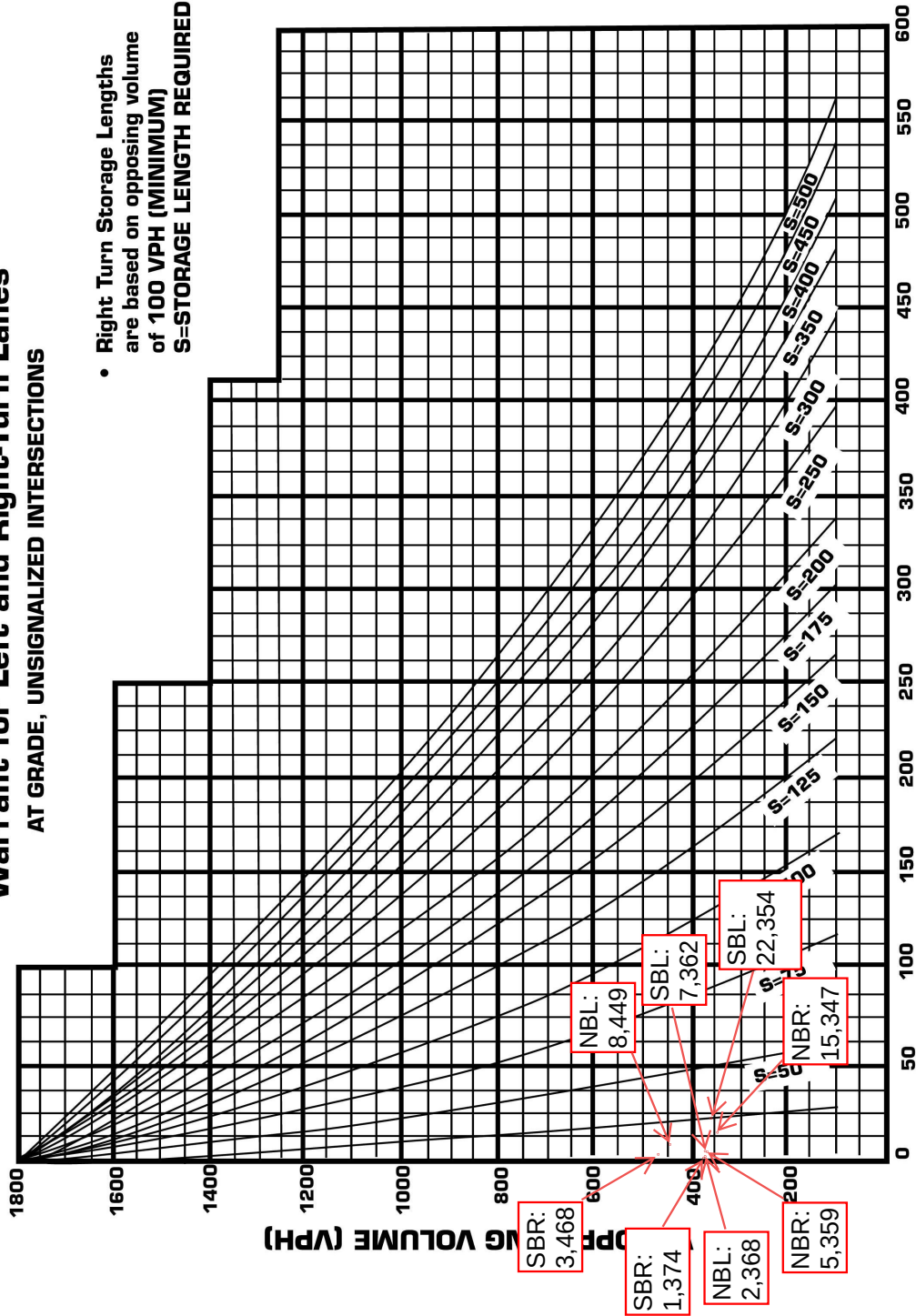
TURN LANE WARRANT INFORMATION

Glen Laurel at Proposed Site Driveway

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

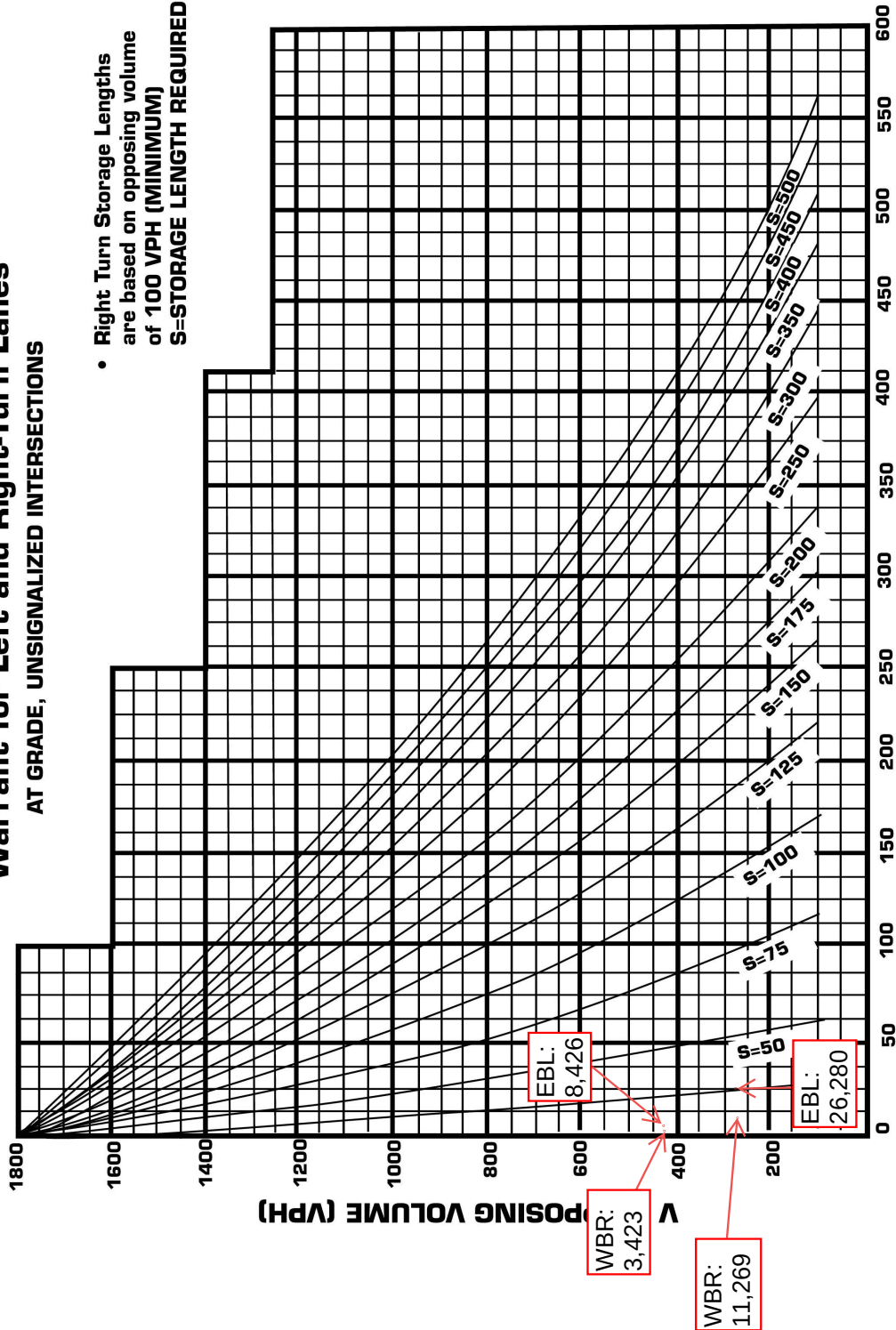
V: LEFT TURNING VOLUME (VPH)
VR: RIGHT TURNING VOLUME (VPH)

Vinson Road at Proposed Site Driveway

Warrant for Left and Right-Turn Lanes

AT GRADE, UNSIGNALIZED INTERSECTIONS

- Right Turn Storage Lengths are based on opposing volume of 100 VPH (MINIMUM)
- S=STORAGE LENGTH REQUIRED



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

V: LEFT TURNING VOLUME (VPH)
V_R: RIGHT TURNING VOLUME (VPH)

SYNCHRO REPORT PRINTOUTS

2022 EXISTING AM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Existing AM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	129	258	68	99	181	154
Future Volume (vph)	129	258	68	99	181	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1668	0	1697	0	0	1797
Flt Permitted	0.984					0.974
Satd. Flow (perm)	1668	0	1697	0	0	1797
Link Speed (mph)	45		45			45
Link Distance (ft)	1029		2524			1067
Travel Time (s)	15.6		38.2			16.2
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	2%	2%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	484	0	209	0	0	419
Enter Blocked Intersection	1 veh	1 veh	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	60.8%			ICU Level of Service B		
Analysis Period (min)	15					

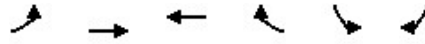
Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Existing AM
07/13/2022

Intersection						
Int Delay, s/veh	22.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	129	258	68	99	181	154
Future Vol, veh/h	129	258	68	99	181	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	161	323	85	124	226	193
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	792	147	0	0	209	0
Stage 1	147	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227	-
Pot Cap-1 Maneuver	358	900	-	-	1356	-
Stage 1	880	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	291	900	-	-	1356	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	48.5	0		4.4		
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	530	1356	-	
HCM Lane V/C Ratio	-	-	0.913	0.167	-	
HCM Control Delay (s)	-	-	48.5	8.2	0	
HCM Lane LOS	-	-	E	A	A	
HCM 95th %tile Q(veh)	-	-	10.9	0.6	-	

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Existing AM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	69	57	200	51	44	247
Future Volume (vph)	69	57	200	51	44	247
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Satd. Flow (prot)	1770	1863	1812	0	1637	0
Flt Permitted	0.950				0.993	
Satd. Flow (perm)	1770	1863	1812	0	1637	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	64	282	0	327	0
Enter Blocked Intersection	No	No	No	No	1 veh	1 veh
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.1%

ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Existing AM
07/13/2022

Intersection						
Int Delay, s/veh	6.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	69	57	200	51	44	247
Future Vol, veh/h	69	57	200	51	44	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	64	225	57	49	278
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	282	0	-	0	474	254
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	220	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1280	-	-	-	549	785
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1280	-	-	-	516	785
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	817	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.4	0		13.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1280	-	-	-	747	
HCM Lane V/C Ratio	0.061	-	-	-	0.438	
HCM Control Delay (s)	8	-	-	-	13.5	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.2	-	-	-	2.2	

2022 EXISTING PM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Existing PM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	87	157	153	116	237	171
Future Volume (vph)	87	157	153	116	237	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1670	0	1755	0	0	1811
Flt Permitted	0.982					0.972
Satd. Flow (perm)	1670	0	1755	0	0	1811
Link Speed (mph)	45		45			45
Link Distance (ft)	1029		2524			1070
Travel Time (s)	15.6		38.2			16.2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Lane Group Flow (vph)	297	0	328	0	0	498
Enter Blocked Intersection	1 veh	1 veh	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	61.7%			ICU Level of Service B		
Analysis Period (min)	15					

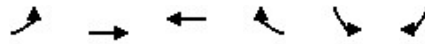
Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Existing PM
07/13/2022

Intersection						
Int Delay, s/veh	14.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	157	153	116	237	171
Future Vol, veh/h	87	157	153	116	237	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	106	191	187	141	289	209
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1045	258	0	0	328	0
Stage 1	258	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	253	781	-	-	1232	-
Stage 1	785	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	781	-	-	1232	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	46.4	0		5.1		
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	365	1232	-	
HCM Lane V/C Ratio	-	-	0.815	0.235	-	
HCM Control Delay (s)	-	-	46.4	8.8	0	
HCM Lane LOS	-	-	E	A	A	
HCM 95th %tile Q(veh)	-	-	7.2	0.9	-	

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Existing PM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	204	183	122	49	44	193
Future Volume (vph)	204	183	122	49	44	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Satd. Flow (prot)	1770	1863	1773	0	1643	0
Flt Permitted	0.950				0.991	
Satd. Flow (perm)	1770	1863	1773	0	1643	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	224	201	188	0	260	0
Enter Blocked Intersection	No	No	No	No	1 veh	1 veh
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.0% ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Existing PM
07/13/2022

Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	204	183	122	49	44	193
Future Vol, veh/h	204	183	122	49	44	193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	224	201	134	54	48	212
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	188	0	-	0	810	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	649	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1386	-	-	-	349	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	520	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1386	-	-	-	292	884
Mov Cap-2 Maneuver	-	-	-	-	403	-
Stage 1	-	-	-	-	727	-
Stage 2	-	-	-	-	520	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.3	0		12.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1386	-	-	-	724	
HCM Lane V/C Ratio	0.162	-	-	-	0.36	
HCM Control Delay (s)	8.1	-	-	-	12.7	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.6	-	-	-	1.6	

2025 NO-BUILD AM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

No Build AM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	282	75	109	198	169
Future Volume (vph)	141	282	75	109	198	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1668	0	1697	0	0	1797
Flt Permitted	0.984					0.695
Satd. Flow (perm)	1668	0	1697	0	0	1282
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		45			45
Link Distance (ft)	1029		2524			1071
Travel Time (s)	15.6		38.2			16.2
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	2%	2%	3%	3%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	529	0	230	0	0	459
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	7.0		12.0		12.0	12.0
Minimum Split (s)	14.0		19.0		19.0	19.0
Total Split (s)	41.0		49.0		49.0	49.0
Total Split (%)	45.6%		54.4%		54.4%	54.4%

Summer Glen TIA 05/16/2022 No Build AM
Exult Engineering

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Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

No Build AM
07/13/2022

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Maximum Green (s)	34.0		42.0		42.0	42.0
Yellow Time (s)	5.0		5.0		5.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0			-2.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Act Effct Green (s)	29.3		33.7			33.7
Actuated g/C Ratio	0.40		0.46			0.46
v/c Ratio	0.80		0.30			0.78
Control Delay	31.7		14.3			28.5
Queue Delay	0.0		0.0			0.0
Total Delay	31.7		14.3			28.5
LOS	C		B			C
Approach Delay	31.7		14.3			28.5
Approach LOS	C		B			C
Queue Length 50th (ft)	218		67			180
Queue Length 95th (ft)	324		105			264
Internal Link Dist (ft)	949		2444			991
Turn Bay Length (ft)						
Base Capacity (vph)	866		1077			813
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.61		0.21			0.56

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 73.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 27.2

Intersection LOS: C

Intersection Capacity Utilization 68.1%

ICU Level of Service C

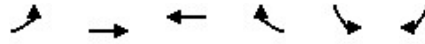
Analysis Period (min) 15

Splits and Phases: 1: Glen Laurel Rd & Vinson Rd



Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

No Build AM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	76	63	219	56	49	270
Future Volume (vph)	76	63	219	56	49	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Satd. Flow (prot)	1770	1863	1811	0	1637	0
Flt Permitted	0.950				0.992	
Satd. Flow (perm)	1770	1863	1811	0	1637	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	71	309	0	358	0
Enter Blocked Intersection	No	No	No	No	1 veh	1 veh
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.5%

ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

No Build AM
07/13/2022

Intersection						
Int Delay, s/veh	7.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	63	219	56	49	270
Future Vol, veh/h	76	63	219	56	49	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	71	246	63	55	303
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	309	0	-	0	519	278
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	241	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1252	-	-	-	517	761
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	799	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1252	-	-	-	482	761
Mov Cap-2 Maneuver	-	-	-	-	563	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	799	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.4	0		14.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1252	-	-	-	722	
HCM Lane V/C Ratio	0.068	-	-	-	0.496	
HCM Control Delay (s)	8.1	-	-	-	14.8	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.2	-	-	-	2.8	

2025 NO-BUILD PM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

No Build PM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	96	172	168	127	259	187
Future Volume (vph)	96	172	168	127	259	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1670	0	1755	0	0	1811
Flt Permitted	0.982					0.595
Satd. Flow (perm)	1670	0	1755	0	0	1108
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		45			45
Link Distance (ft)	1029		2524			1071
Travel Time (s)	15.6		38.2			16.2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Lane Group Flow (vph)	327	0	360	0	0	544
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			CI+Ex			CI+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	7.0		12.0		12.0	12.0
Minimum Split (s)	14.0		19.0		19.0	19.0
Total Split (s)	29.0		61.0		61.0	61.0
Total Split (%)	32.2%		67.8%		67.8%	67.8%
Maximum Green (s)	22.0		54.0		54.0	54.0

Summer Glen TIA 05/16/2022 No Build PM
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Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

No Build PM
07/13/2022

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Yellow Time (s)	5.0		5.0		5.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0			-2.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Act Effect Green (s)	20.4		42.8			42.8
Actuated g/C Ratio	0.28		0.58			0.58
v/c Ratio	0.71		0.35			0.85
Control Delay	36.6		9.2			27.3
Queue Delay	0.0		0.0			0.0
Total Delay	36.6		9.2			27.3
LOS	D		A			C
Approach Delay	36.6		9.2			27.3
Approach LOS	D		A			C
Queue Length 50th (ft)	143		84			199
Queue Length 95th (ft)	236		120			300
Internal Link Dist (ft)	949		2444			991
Turn Bay Length (ft)						
Base Capacity (vph)	578		1347			850
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.57		0.27			0.64

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 73.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 24.5

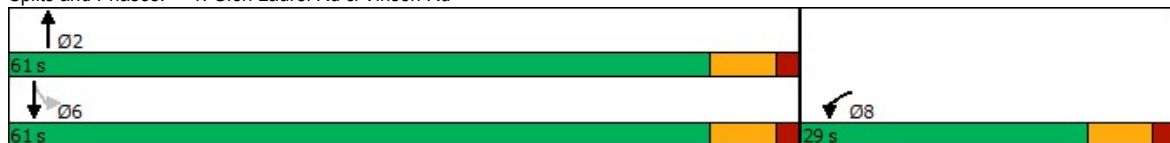
Intersection LOS: C

Intersection Capacity Utilization 69.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Glen Laurel Rd & Vinson Rd



Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

No Build PM
07/13/2022

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	223	200	134	54	49	211
Future Volume (vph)	223	200	134	54	49	211
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Satd. Flow (prot)	1770	1863	1773	0	1643	0
Flt Permitted	0.950				0.991	
Satd. Flow (perm)	1770	1863	1773	0	1643	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	248	222	209	0	288	0
Enter Blocked Intersection	No	No	No	No	1 veh	1 veh
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 48.4%				ICU Level of Service A		
Analysis Period (min) 15						

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

No Build PM
07/13/2022

Intersection						
Int Delay, s/veh	6.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	223	200	134	54	49	211
Future Vol, veh/h	223	200	134	54	49	211
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	248	222	149	60	54	234
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	209	0	-	0	897	179
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	718	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1362	-	-	-	310	864
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1362	-	-	-	254	864
Mov Cap-2 Maneuver	-	-	-	-	370	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	483	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.3	0		13.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1362	-	-	-	690	
HCM Lane V/C Ratio	0.182	-	-	-	0.419	
HCM Control Delay (s)	8.2	-	-	-	13.9	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.7	-	-	-	2.1	

2025 BUILDOUT AM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Buildout AM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	164	282	82	117	200	187
Future Volume (vph)	164	282	82	117	200	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr t	0.915		0.921			
Flt Protected	0.982					0.975
Satd. Flow (prot)	1674	0	1699	0	0	1799
Flt Permitted	0.982					0.678
Satd. Flow (perm)	1674	0	1699	0	0	1251
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		45			45
Link Distance (ft)	523		2524			533
Travel Time (s)	7.9		38.2			8.1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	2%	2%	3%	3%	3%	3%
Adj. Flow (vph)	205	353	103	146	250	234
Shared Lane Traffic (%)						
Lane Group Flow (vph)	558	0	249	0	0	484
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	7.0		12.0		12.0	12.0
Minimum Split (s)	14.0		19.0		19.0	19.0
Total Split (s)	42.0		48.0		48.0	48.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	35.0		41.0		41.0	41.0
Yellow Time (s)	5.0		5.0		5.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0			-2.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Act Effct Green (s)	31.7		36.4			36.4
Actuated g/C Ratio	0.40		0.46			0.46
v/c Ratio	0.83		0.32			0.84
Control Delay	34.2		15.2			34.2
Queue Delay	0.0		0.0			0.0
Total Delay	34.2		15.2			34.2
LOS	C		B			C
Approach Delay	34.2		15.2			34.2
Approach LOS	C		B			C
Queue Length 50th (ft)	273		83			225
Queue Length 95th (ft)	341		117			298

Summer Glen TIA 05/16/2022 Buildout AM
Exult Engineering

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Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Buildout AM
07/13/2022

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	443		2444			453
Turn Bay Length (ft)						
Base Capacity (vph)	825		973			716
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.68		0.26			0.68

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 78.6

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 30.6

Intersection LOS: C

Intersection Capacity Utilization 71.3%

ICU Level of Service C

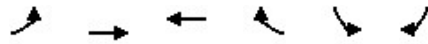
Analysis Period (min) 15

Splits and Phases: 1: Glen Laurel Rd & Vinson Rd



Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Buildout AM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	86	63	219	61	61	299
Future Volume (vph)	86	63	219	61	61	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.970		0.888	
Flt Protected	0.950				0.992	
Satd. Flow (prot)	1770	1863	1807	0	1641	0
Flt Permitted	0.950				0.992	
Satd. Flow (perm)	1770	1863	1807	0	1641	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	97	71	246	69	69	336
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	71	315	0	405	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.8%

ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Buildout AM
07/13/2022

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	86	63	219	61	61	299
Future Vol, veh/h	86	63	219	61	61	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	71	246	69	69	336
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	315	0	-	0	546	281
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1245	-	-	-	499	758
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1245	-	-	-	460	758
Mov Cap-2 Maneuver	-	-	-	-	547	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	779	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.7	0		16.5		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1245	-	-	-	711	
HCM Lane V/C Ratio	0.078	-	-	-	0.569	
HCM Control Delay (s)	8.1	-	-	-	16.5	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.3	-	-	-	3.6	

Summer Glen TIA
3: Glen Laurel Rd & Proposed Site Driveway

Buildout AM
07/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	4	7	13	4	19	4	357	5	7	367	4
Future Volume (vph)	4	4	7	13	4	19	4	357	5	7	367	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.932			0.927			0.998			0.999	
Flt Protected		0.988			0.982						0.999	
Satd. Flow (prot)	0	1715	0	0	1696	0	0	1859	0	0	1859	0
Flt Permitted		0.988			0.982						0.999	
Satd. Flow (perm)	0	1715	0	0	1696	0	0	1859	0	0	1859	0
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		415			452			533			541	
Travel Time (s)		11.3			12.3			8.1			8.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	4	8	14	4	21	4	397	6	8	408	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	39	0	0	407	0	0	420	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	33.8%											
Analysis Period (min)	15											
	ICU Level of Service A											

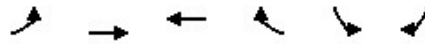
Summer Glen TIA
3: Glen Laurel Rd & Proposed Site Driveway

Buildout AM
07/13/2022

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	4	7	13	4	19	4	357	5	7	367	4
Future Vol, veh/h	4	4	7	13	4	19	4	357	5	7	367	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	8	14	4	21	4	397	6	8	408	4
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	847	837	410	840	836	400	412	0	0	403	0	0
Stage 1	426	426	-	408	408	-	-	-	-	-	-	-
Stage 2	421	411	-	432	428	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	282	303	642	285	303	650	1147	-	-	1156	-	-
Stage 1	606	586	-	620	597	-	-	-	-	-	-	-
Stage 2	610	595	-	602	585	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	267	299	642	276	299	650	1147	-	-	1156	-	-
Mov Cap-2 Maneuver	267	299	-	276	299	-	-	-	-	-	-	-
Stage 1	604	581	-	618	595	-	-	-	-	-	-	-
Stage 2	583	593	-	585	580	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	14.9			15			0.1			0.2		
HCM LOS	B			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1147	-	-	382	401	1156	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.044	0.1	0.007	-	-				
HCM Control Delay (s)	8.2	0	-	14.9	15	8.1	0	-				
HCM Lane LOS	A	A	-	B	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-				

Summer Glen TIA
4: Vinson Rd & Proposed Site Driveway

Buildout AM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (vph)	8	308	423	4	10	23
Future Volume (vph)	8	308	423	4	10	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.905	
Flt Protected		0.999			0.985	
Satd. Flow (prot)	0	1861	1861	0	1660	0
Flt Permitted		0.999			0.985	
Satd. Flow (perm)	0	1861	1861	0	1660	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		523	514		296	
Travel Time (s)		7.9	7.8		8.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	9	342	470	4	11	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	351	474	0	37	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.6%

ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
4: Vinson Rd & Proposed Site Driveway

Buildout AM
07/13/2022

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	308	423	4	10	23
Future Vol, veh/h	8	308	423	4	10	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	342	470	4	11	26
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	474	0	-	0	832	472
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1088	-	-	-	339	592
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1088	-	-	-	336	592
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	706	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		13.1		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1088	-	-	-	481	
HCM Lane V/C Ratio	0.008	-	-	-	0.076	
HCM Control Delay (s)	8.3	0	-	-	13.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

2025 BUILDOUT PM PEAK HOUR

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Buildout PM
07/13/2022

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	111	174	189	153	260	199
Future Volume (vph)	111	174	189	153	260	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t	0.918		0.939			
Flt Protected	0.981					0.972
Satd. Flow (prot)	1678	0	1749	0	0	1811
Flt Permitted	0.981					0.557
Satd. Flow (perm)	1678	0	1749	0	0	1038
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		45			45
Link Distance (ft)	523		2524			533
Travel Time (s)	7.9		38.2			8.1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	135	212	230	187	317	243
Shared Lane Traffic (%)						
Lane Group Flow (vph)	347	0	417	0	0	560
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	7.0		12.0		12.0	12.0
Minimum Split (s)	14.0		19.0		19.0	19.0
Total Split (s)	28.0		62.0		62.0	62.0
Total Split (%)	31.1%		68.9%		68.9%	68.9%
Maximum Green (s)	21.0		55.0		55.0	55.0
Yellow Time (s)	5.0		5.0		5.0	5.0
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	-2.0		-2.0			-2.0
Total Lost Time (s)	5.0		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Act Effct Green (s)	20.9		48.0			48.0
Actuated g/C Ratio	0.26		0.60			0.60
v/c Ratio	0.79		0.39			0.89
Control Delay	43.7		9.3			32.8
Queue Delay	0.0		0.0			0.0
Total Delay	43.7		9.3			32.8
LOS	D		A			C
Approach Delay	43.7		9.3			32.8
Approach LOS	D		A			C
Queue Length 50th (ft)	184		103			229
Queue Length 95th (ft)	#274		137			#347
Internal Link Dist (ft)	443		2444			453

Summer Glen TIA 05/16/2022 Buildout PM
Exult Engineering

Synchro 10 Report
Page 1

Summer Glen TIA
1: Glen Laurel Rd & Vinson Rd

Buildout PM
07/13/2022

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)						
Base Capacity (vph)	506		1284			762
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.69		0.32			0.73

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 79.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 28.3

Intersection LOS: C

Intersection Capacity Utilization 73.5%

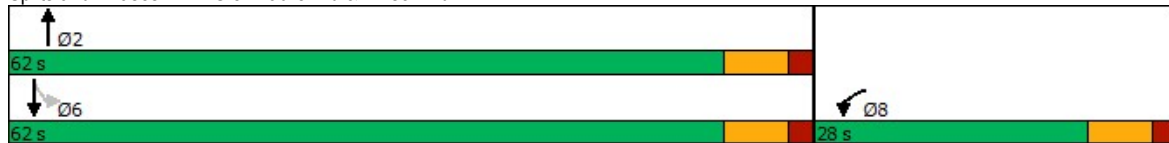
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Glen Laurel Rd & Vinson Rd



Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Buildout PM
07/13/2022

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	257	200	134	67	57	230
Future Volume (vph)	257	200	134	67	57	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	105				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.955		0.892	
Flt Protected	0.950				0.990	
Satd. Flow (prot)	1770	1863	1762	0	1645	0
Flt Permitted	0.950				0.990	
Satd. Flow (perm)	1770	1863	1762	0	1645	0
Link Speed (mph)		55	55		45	
Link Distance (ft)		1328	1366		2524	
Travel Time (s)		16.5	16.9		38.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	286	222	149	74	63	256
Shared Lane Traffic (%)						
Lane Group Flow (vph)	286	222	223	0	319	0
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.7%			ICU Level of Service A		
Analysis Period (min)	15					

Summer Glen TIA
2: Powhatan Rd & Glen Laurel Rd

Buildout PM
07/13/2022

Intersection						
Int Delay, s/veh	7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	257	200	134	67	57	230
Future Vol, veh/h	257	200	134	67	57	230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	125	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	286	222	149	74	63	256
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	223	0	-	0	980	186
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	794	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1346	-	-	-	277	856
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	445	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1346	-	-	-	218	856
Mov Cap-2 Maneuver	-	-	-	-	337	-
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	445	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.7	0		15.6		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1346	-	-	-	656	
HCM Lane V/C Ratio	0.212	-	-	-	0.486	
HCM Control Delay (s)	8.4	-	-	-	15.6	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.8	-	-	-	2.7	

Summer Glen TIA
3: Glen Laurel Rd & Proposed Site Driveway

Buildout PM
07/13/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	4	4	9	4	13	8	339	15	22	446	4
Future Volume (vph)	4	4	4	9	4	13	8	339	15	22	446	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.955			0.932			0.994			0.999	
Flt Protected		0.984			0.982			0.999			0.998	
Satd. Flow (prot)	0	1750	0	0	1705	0	0	1850	0	0	1857	0
Flt Permitted		0.984			0.982			0.999			0.998	
Satd. Flow (perm)	0	1750	0	0	1705	0	0	1850	0	0	1857	0
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		415			452			533			541	
Travel Time (s)		11.3			12.3			8.1			8.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	4	4	10	4	14	9	377	17	24	496	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	28	0	0	403	0	0	524	0
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 44.7%	ICU Level of Service A											
Analysis Period (min) 15												

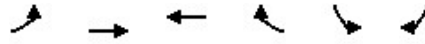
Summer Glen TIA
3: Glen Laurel Rd & Proposed Site Driveway

Buildout PM
07/13/2022

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	4	9	4	13	8	339	15	22	446	4
Future Vol, veh/h	4	4	4	9	4	13	8	339	15	22	446	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	4	10	4	14	9	377	17	24	496	4
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	959	958	498	954	952	386	500	0	0	394	0	0
Stage 1	546	546	-	404	404	-	-	-	-	-	-	-
Stage 2	413	412	-	550	548	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	237	257	572	238	259	662	1064	-	-	1165	-	-
Stage 1	522	518	-	623	599	-	-	-	-	-	-	-
Stage 2	616	594	-	519	517	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	222	247	572	226	249	662	1064	-	-	1165	-	-
Mov Cap-2 Maneuver	222	247	-	226	249	-	-	-	-	-	-	-
Stage 1	516	503	-	616	592	-	-	-	-	-	-	-
Stage 2	591	587	-	496	502	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	18			16.4			0.2			0.4		
HCM LOS	C			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1064	-	-	291	344	1165	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.046	0.084	0.021	-	-				
HCM Control Delay (s)	8.4	0	-	18	16.4	8.2	0	-				
HCM Lane LOS	A	A	-	C	C	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-				

Summer Glen TIA
4: Vinson Rd & Proposed Site Driveway

Buildout PM
07/13/2022



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	387	269	11	7	15
Future Volume (vph)	26	387	269	11	7	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.908	
Flt Protected		0.997			0.984	
Satd. Flow (prot)	0	1857	1853	0	1664	0
Flt Permitted		0.997			0.984	
Satd. Flow (perm)	0	1857	1853	0	1664	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		523	514		296	
Travel Time (s)		7.9	7.8		8.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	29	430	299	12	8	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	459	311	0	25	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.0%

ICU Level of Service A

Analysis Period (min) 15

Summer Glen TIA
4: Vinson Rd & Proposed Site Driveway

Buildout PM
07/13/2022

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	387	269	11	7	15
Future Vol, veh/h	26	387	269	11	7	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	430	299	12	8	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	311	0	-	0	793	305
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	488	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1249	-	-	-	358	735
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	617	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1249	-	-	-	347	735
Mov Cap-2 Maneuver	-	-	-	-	347	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	617	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		12		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1249	-	-	-	542	
HCM Lane V/C Ratio	0.023	-	-	-	0.045	
HCM Control Delay (s)	8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

SIMTRAFFIC PRINTOUTS

SimTraffic Simulation Summary
Existing AM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1131	1199	1167	1166	1144	1144	1144
Vehs Exited	1138	1197	1167	1169	1136	1150	1140
Starting Vehs	31	24	25	31	22	25	22
Ending Vehs	24	26	25	28	30	19	26
Travel Distance (mi)	828	868	868	851	829	831	825
Travel Time (hr)	24.4	25.4	25.0	24.6	23.9	24.1	23.4
Total Delay (hr)	3.0	2.9	2.7	2.7	2.5	2.7	2.2
Total Stops	778	767	743	757	707	733	701
Fuel Used (gal)	28.1	29.0	29.1	28.8	28.0	28.0	27.6

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1224	1135	1139	1159
Vehs Exited	1216	1134	1146	1160
Starting Vehs	20	22	38	26
Ending Vehs	28	23	31	23
Travel Distance (mi)	891	846	838	847
Travel Time (hr)	26.2	24.4	24.2	24.6
Total Delay (hr)	3.1	2.7	2.7	2.7
Total Stops	795	765	733	746
Fuel Used (gal)	30.4	28.5	28.1	28.6

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
Existing AM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1131	1199	1167	1166	1144	1144	1144
Vehs Exited	1138	1197	1167	1169	1136	1150	1140
Starting Vehs	31	24	25	31	22	25	22
Ending Vehs	24	26	25	28	30	19	26
Travel Distance (mi)	828	868	868	851	829	831	825
Travel Time (hr)	24.4	25.4	25.0	24.6	23.9	24.1	23.4
Total Delay (hr)	3.0	2.9	2.7	2.7	2.5	2.7	2.2
Total Stops	778	767	743	757	707	733	701
Fuel Used (gal)	28.1	29.0	29.1	28.8	28.0	28.0	27.6

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1224	1135	1139	1159
Vehs Exited	1216	1134	1146	1160
Starting Vehs	20	22	38	26
Ending Vehs	28	23	31	23
Travel Distance (mi)	891	846	838	847
Travel Time (hr)	26.2	24.4	24.2	24.6
Total Delay (hr)	3.1	2.7	2.7	2.7
Total Stops	795	765	733	746
Fuel Used (gal)	30.4	28.5	28.1	28.6

Queuing and Blocking Report
Existing AM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	175	15	64
Average Queue (ft)	76	1	24
95th Queue (ft)	135	7	58
Link Distance (ft)	995	2443	1017
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	45	4	103
Average Queue (ft)	12	0	51
95th Queue (ft)	36	3	83
Link Distance (ft)		1337	2443
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Simulation Summary
Existing PM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1185	1227	1292	1267	1182	1226	1237
Vehs Exited	1191	1227	1284	1269	1179	1229	1234
Starting Vehs	32	30	21	25	27	32	28
Ending Vehs	26	30	29	23	30	29	31
Travel Distance (mi)	890	933	974	956	899	940	934
Travel Time (hr)	24.7	26.7	27.7	26.7	25.4	26.9	26.2
Total Delay (hr)	2.4	3.1	3.1	2.8	2.6	3.1	2.8
Total Stops	563	642	621	608	584	662	580
Fuel Used (gal)	29.8	30.7	32.6	32.2	30.1	31.6	31.1

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1245	1249	1274	1239
Vehs Exited	1242	1254	1275	1239
Starting Vehs	24	24	27	28
Ending Vehs	27	19	26	26
Travel Distance (mi)	948	946	956	937
Travel Time (hr)	27.0	26.9	26.9	26.5
Total Delay (hr)	3.1	3.1	2.9	2.9
Total Stops	654	607	597	611
Fuel Used (gal)	32.2	31.3	32.1	31.4

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
Existing PM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1185	1227	1292	1267	1182	1226	1237
Vehs Exited	1191	1227	1284	1269	1179	1229	1234
Starting Vehs	32	30	21	25	27	32	28
Ending Vehs	26	30	29	23	30	29	31
Travel Distance (mi)	890	933	974	956	899	940	934
Travel Time (hr)	24.7	26.7	27.7	26.7	25.4	26.9	26.2
Total Delay (hr)	2.4	3.1	3.1	2.8	2.6	3.1	2.8
Total Stops	563	642	621	608	584	662	580
Fuel Used (gal)	29.8	30.7	32.6	32.2	30.1	31.6	31.1

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1245	1249	1274	1239
Vehs Exited	1242	1254	1275	1239
Starting Vehs	24	24	27	28
Ending Vehs	27	19	26	26
Travel Distance (mi)	948	946	956	937
Travel Time (hr)	27.0	26.9	26.9	26.5
Total Delay (hr)	3.1	3.1	2.9	2.9
Total Stops	654	607	597	611
Fuel Used (gal)	32.2	31.3	32.1	31.4

Queuing and Blocking Report
Existing PM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	171	26	115
Average Queue (ft)	61	1	44
95th Queue (ft)	121	12	86
Link Distance (ft)	995	2443	1020
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	54	7	109
Average Queue (ft)	21	0	48
95th Queue (ft)	47	4	85
Link Distance (ft)		1337	2443
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Simulation Summary
No Build AM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1257	1281	1281	1248	1266	1187	1305
Vehs Exited	1279	1276	1269	1251	1261	1197	1288
Starting Vehs	47	31	26	35	31	37	21
Ending Vehs	25	36	38	32	36	27	38
Travel Distance (mi)	914	925	927	906	916	854	943
Travel Time (hr)	30.3	30.6	31.0	29.7	30.4	28.2	31.4
Total Delay (hr)	6.8	6.7	7.1	6.4	6.8	6.2	7.1
Total Stops	981	976	1025	959	1001	906	1032
Fuel Used (gal)	32.3	32.3	32.8	31.9	32.4	30.1	33.3

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1317	1252	1295	1271
Vehs Exited	1313	1251	1299	1269
Starting Vehs	25	30	39	32
Ending Vehs	29	31	35	32
Travel Distance (mi)	935	916	947	918
Travel Time (hr)	31.6	30.6	31.9	30.6
Total Delay (hr)	7.3	6.8	7.2	6.8
Total Stops	1022	983	1042	993
Fuel Used (gal)	33.3	32.3	33.3	32.4

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
No Build AM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1257	1281	1281	1248	1266	1187	1305
Vehs Exited	1279	1276	1269	1251	1261	1197	1288
Starting Vehs	47	31	26	35	31	37	21
Ending Vehs	25	36	38	32	36	27	38
Travel Distance (mi)	914	925	927	906	916	854	943
Travel Time (hr)	30.3	30.6	31.0	29.7	30.4	28.2	31.4
Total Delay (hr)	6.8	6.7	7.1	6.4	6.8	6.2	7.1
Total Stops	981	976	1025	959	1001	906	1032
Fuel Used (gal)	32.3	32.3	32.8	31.9	32.4	30.1	33.3

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1317	1252	1295	1271
Vehs Exited	1313	1251	1299	1269
Starting Vehs	25	30	39	32
Ending Vehs	29	31	35	32
Travel Distance (mi)	935	916	947	918
Travel Time (hr)	31.6	30.6	31.9	30.6
Total Delay (hr)	7.3	6.8	7.2	6.8
Total Stops	1022	983	1042	993
Fuel Used (gal)	33.3	32.3	33.3	32.4

Queuing and Blocking Report
No Build AM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	273	136	237
Average Queue (ft)	148	59	122
95th Queue (ft)	241	107	202
Link Distance (ft)	995	2443	1022
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	46	2	119
Average Queue (ft)	15	0	59
95th Queue (ft)	39	2	98
Link Distance (ft)		1337	2443
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Simulation Summary
No Build PM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1324	1385	1436	1412	1310	1344	1336
Vehs Exited	1329	1382	1433	1411	1321	1331	1329
Starting Vehs	38	33	32	30	43	34	29
Ending Vehs	33	36	35	31	32	47	36
Travel Distance (mi)	994	1040	1085	1056	994	1003	999
Travel Time (hr)	31.8	33.5	36.1	34.1	31.5	32.4	31.7
Total Delay (hr)	6.7	7.3	8.7	7.6	6.3	6.9	6.5
Total Stops	917	980	1085	1018	934	970	924
Fuel Used (gal)	35.0	36.3	38.1	37.4	34.9	35.0	35.0

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1351	1403	1322	1363
Vehs Exited	1355	1407	1325	1363
Starting Vehs	39	30	32	34
Ending Vehs	35	26	29	35
Travel Distance (mi)	1029	1047	1003	1025
Travel Time (hr)	33.6	34.2	31.9	33.1
Total Delay (hr)	7.4	7.8	6.8	7.2
Total Stops	1024	996	926	975
Fuel Used (gal)	36.3	36.5	35.2	36.0

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
No Build PM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1324	1385	1436	1412	1310	1344	1336
Vehs Exited	1329	1382	1433	1411	1321	1331	1329
Starting Vehs	38	33	32	30	43	34	29
Ending Vehs	33	36	35	31	32	47	36
Travel Distance (mi)	994	1040	1085	1056	994	1003	999
Travel Time (hr)	31.8	33.5	36.1	34.1	31.5	32.4	31.7
Total Delay (hr)	6.7	7.3	8.7	7.6	6.3	6.9	6.5
Total Stops	917	980	1085	1018	934	970	924
Fuel Used (gal)	35.0	36.3	38.1	37.4	34.9	35.0	35.0

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1351	1403	1322	1363
Vehs Exited	1355	1407	1325	1363
Starting Vehs	39	30	32	34
Ending Vehs	35	26	29	35
Travel Distance (mi)	1029	1047	1003	1025
Travel Time (hr)	33.6	34.2	31.9	33.1
Total Delay (hr)	7.4	7.8	6.8	7.2
Total Stops	1024	996	926	975
Fuel Used (gal)	36.3	36.5	35.2	36.0

Queuing and Blocking Report
No Build PM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	237	152	289
Average Queue (ft)	113	71	137
95th Queue (ft)	200	125	235
Link Distance (ft)	995	2443	1022
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	61	7	99
Average Queue (ft)	25	0	50
95th Queue (ft)	52	4	83
Link Distance (ft)		1337	2443
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Simulation Summary
Buildout AM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1383	1426	1429	1415	1345	1416	1418
Vehs Exited	1392	1428	1422	1407	1335	1408	1411
Starting Vehs	40	37	25	31	21	25	31
Ending Vehs	31	35	32	39	31	33	38
Travel Distance (mi)	951	993	987	957	910	964	973
Travel Time (hr)	32.1	34.0	33.5	32.1	30.6	34.1	34.7
Total Delay (hr)	7.7	8.6	8.2	7.5	7.2	9.1	9.5
Total Stops	1178	1192	1215	1133	1096	1242	1245
Fuel Used (gal)	34.9	36.7	36.3	34.9	33.4	35.7	36.3

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1383	1415	1328	1396
Vehs Exited	1378	1434	1320	1394
Starting Vehs	33	42	29	31
Ending Vehs	38	23	37	32
Travel Distance (mi)	935	982	911	956
Travel Time (hr)	32.0	33.9	30.7	32.8
Total Delay (hr)	8.0	8.7	7.2	8.2
Total Stops	1174	1253	1109	1183
Fuel Used (gal)	34.4	35.9	33.3	35.2

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
Buildout AM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1383	1426	1429	1415	1345	1416	1418
Vehs Exited	1392	1428	1422	1407	1335	1408	1411
Starting Vehs	40	37	25	31	21	25	31
Ending Vehs	31	35	32	39	31	33	38
Travel Distance (mi)	951	993	987	957	910	964	973
Travel Time (hr)	32.1	34.0	33.5	32.1	30.6	34.1	34.7
Total Delay (hr)	7.7	8.6	8.2	7.5	7.2	9.1	9.5
Total Stops	1178	1192	1215	1133	1096	1242	1245
Fuel Used (gal)	34.9	36.7	36.3	34.9	33.4	35.7	36.3

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1383	1415	1328	1396
Vehs Exited	1378	1434	1320	1394
Starting Vehs	33	42	29	31
Ending Vehs	38	23	37	32
Travel Distance (mi)	935	982	911	956
Travel Time (hr)	32.0	33.9	30.7	32.8
Total Delay (hr)	8.0	8.7	7.2	8.2
Total Stops	1174	1253	1109	1183
Fuel Used (gal)	34.4	35.9	33.3	35.2

Queuing and Blocking Report
Buildout AM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	310	153	294
Average Queue (ft)	157	65	144
95th Queue (ft)	257	122	239
Link Distance (ft)	467	2444	483
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	48	2	159
Average Queue (ft)	16	0	70
95th Queue (ft)	42	2	121
Link Distance (ft)		1337	2444
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Glen Laurel Rd & Proposed Site Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	36	49	32	41
Average Queue (ft)	13	22	1	2
95th Queue (ft)	38	47	14	18
Link Distance (ft)	386	424	483	485
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Buildout AM

Summer Glen TIA
07/13/2022

Intersection: 4: Vinson Rd & Proposed Site Driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	44	46
Average Queue (ft)	4	22
95th Queue (ft)	26	47
Link Distance (ft)	467	267
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Simulation Summary
Buildout PM

Summer Glen TIA
07/13/2022

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	1440	1482	1561	1484	1494	1446	1473
Vehs Exited	1425	1466	1564	1478	1497	1456	1482
Starting Vehs	30	33	32	32	48	51	39
Ending Vehs	45	49	29	38	45	41	30
Travel Distance (mi)	1027	1055	1118	1061	1094	1035	1050
Travel Time (hr)	34.2	35.3	38.3	34.6	36.3	34.4	34.8
Total Delay (hr)	8.1	8.8	10.3	8.1	8.8	8.2	8.2
Total Stops	1139	1134	1231	1136	1173	1103	1139
Fuel Used (gal)	38.0	38.5	41.5	39.1	40.0	38.1	38.6

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	1463	1483	1436	1478
Vehs Exited	1445	1475	1447	1473
Starting Vehs	22	38	47	39
Ending Vehs	40	46	36	37
Travel Distance (mi)	1048	1075	1041	1060
Travel Time (hr)	34.4	35.5	33.8	35.2
Total Delay (hr)	8.1	8.3	7.6	8.4
Total Stops	1053	1182	1142	1145
Fuel Used (gal)	37.9	39.6	37.8	38.9

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
Buildout PM

Summer Glen TIA
07/13/2022

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	10	2	3	4	5	6
Vehs Entered	1440	1482	1561	1484	1494	1446	1473
Vehs Exited	1425	1466	1564	1478	1497	1456	1482
Starting Vehs	30	33	32	32	48	51	39
Ending Vehs	45	49	29	38	45	41	30
Travel Distance (mi)	1027	1055	1118	1061	1094	1035	1050
Travel Time (hr)	34.2	35.3	38.3	34.6	36.3	34.4	34.8
Total Delay (hr)	8.1	8.8	10.3	8.1	8.8	8.2	8.2
Total Stops	1139	1134	1231	1136	1173	1103	1139
Fuel Used (gal)	38.0	38.5	41.5	39.1	40.0	38.1	38.6

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	7	8	9	Avg
Vehs Entered	1463	1483	1436	1478
Vehs Exited	1445	1475	1447	1473
Starting Vehs	22	38	47	39
Ending Vehs	40	46	36	37
Travel Distance (mi)	1048	1075	1041	1060
Travel Time (hr)	34.4	35.5	33.8	35.2
Total Delay (hr)	8.1	8.3	7.6	8.4
Total Stops	1053	1182	1142	1145
Fuel Used (gal)	37.9	39.6	37.8	38.9

Queuing and Blocking Report
Buildout PM

Summer Glen TIA
07/13/2022

Intersection: 1: Glen Laurel Rd & Vinson Rd

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	263	166	312
Average Queue (ft)	123	82	148
95th Queue (ft)	212	145	254
Link Distance (ft)	467	2444	483
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Powhatan Rd & Glen Laurel Rd

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	71	15	149
Average Queue (ft)	29	1	59
95th Queue (ft)	58	9	110
Link Distance (ft)		1337	2444
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	125		
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 3: Glen Laurel Rd & Proposed Site Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	42	39	48	59
Average Queue (ft)	11	18	4	6
95th Queue (ft)	36	43	24	33
Link Distance (ft)	386	424	483	485
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report
Buildout PM

Summer Glen TIA
07/13/2022

Intersection: 4: Vinson Rd & Proposed Site Driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	55	40
Average Queue (ft)	7	15
95th Queue (ft)	33	41
Link Distance (ft)	467	267
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0



Town of Clayton
Planning Department
111 E. Second Street, Clayton, NC 27520
P.O. Box 879, Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

August 18, 2023

Wakefield Development
Attn: Bret Mangum
3100 Smoktree Court
Suite 210
Raleigh, NC 27604
bret@lmssi.com

Re: 2022-125-CZM Summer Glen Conditional Zoning District and Master Plan

To Whom It May Concern,

The Town of Clayton Planning staff is recommending to the Planning Board and Town Council that conditions of approval be placed upon the above referenced application, which proceeds to the Planning Board on August 28, 2023 and Town Council (dependent on outcome of Planning Board meeting) on September 18, 2023. These recommended conditions of approval are outlined on the back of this letter.

Please read through these potential conditions of approval, and sign below if you are in agreement with the conditions as proposed. If you are not in agreement please respond accordingly in writing. This will be included within the agenda packet for Planning Board and Town Council review.

Thank you.

Sincerely,

Ben Howell, AICP, CZO
Planning Director

Recommend Conditions of Approval (2022-125-CZM, Summer Glen Conditional Zoning District and Master Plan):

1. Following Town Council approval, an electronic copy of the Master Plan and Narrative including the Conditions of Approval shall be submitted to the Planning Department for final approval.
2. The Development shall meet all adopted Town of Clayton Unified Development Code (UDC) requirements, Town of Clayton Engineering and Stormwater design standards, and the North Carolina Fire Code and NFPA Fire standards, except where specifically modified by the approved master plan.
3. The Development shall be constructed in substantial conformance with the Master Plan and Master Plan Narrative as approved by the Clayton Town Council.
4. All parcels subject to the Conditional Zoning and Master Plan shall be annexed into the Town prior to any subsequent development approvals.
5. The developer will be required to pay their proportional share of the Wilsons Mills Fire District Capital Debt to the Town prior to the effective date of the Annexation.
6. Uses in the development shall be limited to single-family detached residential homes, and any allowed residential accessory uses within the Town of Clayton Unified Development Code.
7. The following standards shall apply to the Development:
 - Maximum Residential Units: 139
 - Maximum Density: 2.6 Dwelling Units per Acre
 - Total Site Impervious Surface Area: 36%
 - Minimum Lot Size: 6,500 Square Feet
 - Minimum Building Setbacks:
 - Front Setback: 21.5 Feet
 - Setback from Sidewalk: 25 Feet
 - Side Setback: 6 Feet
 - Corner Side Setback: 10 Feet
 - Rear Setback: 15 Feet
 - Maximum Building Height: 35 Feet
8. The Town of Clayton shall be the electric provided for this project.
9. Tree protection fencing must be installed at the clearing limits to maximize preservation of existing vegetation.
10. A gated emergency access with a Knox Box meeting Town of Clayton Fire Department standards connecting the Cul-De-Sac on Summer Loop to Glen Laurel Road shall be provided.

11. Required frontage improvements along Glen Laurel Road and Vinson Road will be made in phases that correlate with the driveway connections to those existing roadways in the respective phase.
12. The following transportation improvements, in accordance with the recommendation in the TIA and approval by NCDOT, shall be constructed prior to the approval of the final plat for the first phase of the development:

Glen Laurel and Vinson Road Intersection

- According to NCDOT Congestion Management Section, the signal improvement at this intersection will be completed by NCDOT. The development team will discuss the timing of these improvements with NCDOT.

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and northbound and southbound left-turn lanes on Glen Laurel Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

Vinson Road and Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and an eastbound left-turn lane on Vinson Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

13. The following Architectural Standards shall be required to be met for the Single-Family Homes:

- All units to be 1 and 2 story with a variety of Craftsman, Colonial and Transitional themed elevations. Home plans of the same elevation shall not be side by side or directly across from one another.
- Exterior color packages will enhance variety of color throughout the neighborhood and will not be duplicated side by side.
- Siding elements to include a mix of premium vinyl siding with varying patterns such as lap siding, shake, and board and batten materials per architectural elevations.
- All build facades to include a variety of craftsman columns with masonry, square and round columns per elevation.
- Each home will have either a front porch or covered stoop element with a front lead walk that connects to the driveway.
- Four vehicular parking spaces to be provided on each lot, two-car front loaded garage spaces (decorative garage door with glass windows and carriage details) with two parking spaces on the driveway.
- Side roof eaves to be a minimum 10" overhang.
- All front building facades to require a goal of 25% masonry elements such as Stone/brick accents of the portion of the house excluding the garage door(s).
- Architectural style shingles to be used.
- Side or rear patios to be provided on all units for outdoor living as well as optional covered porches available per plan.

14. To the extent of any conflict between the Master Plan, Master Plan Narrative and these conditions, these conditions shall control.

APPLICANT AFFIDAVIT

I/We, the undersigned, do hereby certify that I have reviewed the recommended conditions of approval and am in agreement with the conditions as they are outlined within this letter.

Raymond L. Gottlieb

Print Name


Signature of Applicant

8/23/2023
Date

Wakefield Development, LLC

By: TMPR, LLC, Manager

By: Raymond L. Gottlieb, Manager, TMPR, LLC

	TOWN OF CLAYTON POLICY	
	Department: Public Services	Effective: January 21, 2020
Policy Title: Water & Wastewater Allocation Policy Version #02 (V.02)	Supersedes: TC Action 2010-026	
	Prepared By: Richard D. Cappola Jr., PE Public Services Director	
	Approved By: Town Council Date: January 21, 2020	

I. Purpose

The Town of Clayton has invested substantial capital in the infrastructure necessary to support a growing, prosperous, and healthy community. Water supply and wastewater treatment capacities are among the most important elements of this infrastructure. The intent of this policy is to provide for the judicious allocation of these resources in conformity with adopted goals and priorities in an effort to shape the community consistent with the articulated vision to become the "Premier Community for Active Families." This policy is intended to manage the remaining capacity available until additional capacity is developed through construction of a new Water Reclamation Facility, and should be reviewed periodically to ensure it is achieving the intended purpose.

II. Scope

The Town Council for the Town of Clayton has adopted the Comprehensive Plan 2040 which is a useful tool to successfully evaluate applications for allocation of public resources so that the character of the community shall be consistent with its vision, values, and plans. In accordance with the "Town of Clayton Strategic Growth Plan", utility allocation reservations should support and maximize the concept of increasing the Town's property tax based revenues by the expansion and improvement of higher valued land use development, emphasizing a balance of Residential, commercial, and industrial uses.

III. Policy

The Town of Clayton seeks to grant utility allocations such that the existing character of the Town's utility customer base does not become more residential than is practical to achieve the intent of the Strategic Growth Plan, and seeks to increase the diversity of the customer base by increasing the percentage of resources devoted to industrial, commercial, and mixed use development.

The total amount of available capacity and each incremental increase in capacity should generally be allocated based on the following parameters:

- No more than fifty percent (50%) of the total available capacity may be allocated to projects that include solely residential development.
- At least thirty percent (30%) of the total available capacity shall be reserved for allocation to commercial/industrial projects.
- Projects encompassing mixed use (residential and commercial) elements may be considered for allocation even if such an allocation will exceed the limit established above for residential use.
Note: These percentages may be reviewed and adjusted by the Town Council at their discretion.

Due to weather related factors, the regulatory environment, and the dynamic nature of wastewater flow and treatment, accounting of available utility capacity is, by its very nature, inexact. The Town of Clayton shall track allocation reservations granted and the amount of capacity available. Such reports do not constitute a policy statement, commitment or guarantee on the amount of capacity available for allocation.

The following hierarchy shall apply to evaluation of utility allocation requests:

- Commercial properties with quality development projects
- Development projects with a mixed-use element
- Industrial projects and other major employer entities
- Additional phases attached to residential projects with a proven record of quality product and economic success
- Residential projects that include tangible, high quality community amenities
- Residential projects that include diverse products and opportunities
- Residential projects not otherwise described above

Evaluation of projects will be based on the scoring rubric attached hereto as Exhibit A, which is incorporated in this Agreement by reference. A project must meet or exceed 50 points to receive an allocation. Proposed projects can gain BONUS POINTS by the applicant offering to provide items listed on the rubric as part of their development proposal. Examples of these items may include such things as additional amenities (fire pits, community gardens, etc.) or offering to provide “Minimum of 25% of building façades will be made of masonry materials.”

The Town of Clayton may allocate utility service capacity to competing projects based on a demonstrated intent and ability of the applicant to meet adopted Town goals and plans for character and quality of development. The Town of Clayton reserves the right to deny a utility allocation request if the applicant fails to adequately demonstrate that the project meets adopted Town goals or plans, or in the case that the project is deemed to be less supportive of Town goals or plans of a competing project.

IV. Procedure

The owner or developer of any project requiring water or wastewater utility service from the Town of Clayton shall submit a written application, in the application form provided by Town Staff, for an allocation reservation. The application shall include detailed information on the amount of capacity necessary to serve the project, the nature of the project, project schedule in relation to demand of utility capacity, and other supporting information demonstrating how the project serves the needs and interests of the Town of Clayton. In the case of Industrial flows, additional information associated with the constituents shall be required and may be subject to other ordinances or policies of the Town.

- The Town Council shall review for approval all allocations which require or may require a daily flow allocation of ten thousand gallons or more (> 10,000 GPD)
 - The Town Council shall incorporate the evaluation of utility allocation requests into the decision-making process associated with Subdivisions, Mixed-use Planned Developments, and Special Use Permits. The criteria contained herein for evaluation of utility allocation requests shall be included as elements within the review processes for the accompanying land use application with regard to conformity with Town of Clayton policies and ordinances, planning practices, and consistency with adopted long-range and strategic plans.
 - For allocations requiring Town Council approval, but which do not require other land use regulatory reviews or approvals, the applicant shall provide a full description of how their project supports the goals and priorities established within this and related policies and plans in their application for allocation reservation.

- The Town Manager or their designee shall review for approval all applications for utility capacity which require a daily flow allocation of less than ten thousand gallons (< 10,000 GPD).
 - In addition to the scoring rubric, the Town Manager or their designee shall consider the goals articulated by this and related Town policies when reviewing applications for utility allocations. If an application is denied, the Town Manager or their designee shall state in writing the reasons for denial of the request.

V. General Conditions

- This policy shall replace any previous policies on water and wastewater allocations adopted by the Town Council.
- An allocation will expire if a project has not progressed in construction plan approval, building permit approval, or on-site construction within 12 months of award of the allocation.
- Upon request by the applicant and at the discretion of the Town Engineer, an allocation may be extended for one twelve (12) month period.
- If a project is unsuccessful in obtaining any required Federal, State, or local government permit or approval the reservation shall be retracted. The Town of Clayton shall bear no liability for any costs incurred by the applicant, nor bare further responsibility in the matter.
- Granting of a utility allocation does not imply or confer approval of any other applications or reviews as may be required by Town Ordinance or policy and does not imply or create any vested right.
- Public water may be utilized for irrigation purposes so long as the Primary Use associated with the site has previously gained a water allocation through the Town.
- This policy shall be reviewed annually and, when appropriate, readjusted by the Town Council. The Town's overall progress on policy goals will be considered and the multipliers and/or point thresholds readjusted accordingly.

V. Appeals Process

- Appeal of any provision of this policy shall be made to the Town Council.
- Appeal of any decision on a utility allocation by the Town Manager or their designee shall be made to the Town Council for final decision. Any such appeal shall be placed on the agenda of a regularly scheduled Town Council meeting.



WATER & WASTEWATER ALLOCATION CRITERIA				
		TOTAL POINTS =	55	MINIMUM 50 POINTS REQUIRED
	Category	Points	Calc.	Notes
DEVELOPMENT TYPE ¹ (Choose 1 from this category)	Government/Public Admin./Public Safety	50		
	Non-residential (Commercial) - Retail & Restaurant	30		
	Non-residential (Commercial) - Office	20		
	Non-residential (Commercial) - Warehouse	15		
	Non-residential (Commercial) - Medical	25		
	Non-residential (Commercial) - Hotel/Motel	35		
	Industrial/Manufacturing	30		
	Institutional	15		
	Residential Existing Lot- Single Family Detached	40		Individual Existing Lot construction
	Residential Subdivision - Single Family Detached (> 0.25 Acre Lots)	20		Single Family Homes on Individual Lots greater than 0.25 acres
	Residential Subdivision - Single Family Detached (< 0.25 Acre Lots)	15		Single Family Homes on Individual Lots less than 0.25 Acres
	Residential Subd.- Single Family Attached (> 1,500 SF Heated Space)	10		Townhomes with heated square-footage greater than 1,500 SF
	Residential Subd.- Single Family Attached (< 1,500 SF Heated Space)	5		Townhomes with heated square-footage less than 1,500 SF
	Residential - Multifamily (Apartments)	10		
	Mixed-Residential	25		Mix of various lot sizes of Single-family, Townhomes, and Apartments
	Mixed-Use Commercial & Residential	30		Mix of Residential and Non-residential (Commercial) uses
	Downtown Redevelopment	30		
	Infill Development	25	25	Utilities already exist within 300 Feet of property
FUTURE TAX STATUS (Choose 1 from this category)	Exempt	0		
	Residential	5	5	
	Non-residential	10		
	Industrial	10		
COMMUNITY BENEFIT BONUS POINTS (Choose All that apply from this category)	Cultural Arts/Entertainment for Public	10		
	Sports/Recreation for Public	10		
	Town Electric Customer	20	20	
	Expansion of existing non-residential use	10		
	Re-development of an existing property	5		Must result in increased property value
	Residential Subdivision - Additional amenities included	5 - 15		Pool, Clubhouse, sports courts, etc. - 5 pts per, max 15 pts
	Job Creation - 10 to 25 new jobs	5		
	Job Creation - 26 to 100 new jobs	10		
	Job Creation - 100+ new jobs	15		
	Job creation - Jobs created will have salaries at or above median income	5		Must be greater than 50% of jobs added with documentation to confirm
	Residential - Multiple-Car Garages provided	5	5	
	Residential - Overflow Parking provided	5		Subject to Planning and Engineering support
	Masonry Elements included in Building Construction	10		
	Sustainable/High Efficiency Products and appliances used	5 - 15		5 pts per, max 15 pts
	Private trail connection to Public Greenway	10		
COMMUNITY IMPACT DEDUCT POINTS (Choose All that apply from this category)	Pump Station Improvements required ²	-10		Subject to Town policy and standards
	New Pump Station Required ²	-20		Subject to Town policy and standards
	Out-of Town Status (After construction)	-10		
	Outside Fire District	-5		
	Inconsistent with Comp Plan	-5		
CLARIFICATIONS	1	Any Development Type Category not listed is subject to Town Council discretion with staff recommendation.		
	2	The Town Engineer may waive these deductions if the improvements are consistent with Future utility service plans, replace/offline an aging station, or are in the best interest of the Town.		



TOWN OF CLAYTON
Engineering & Inspections Department
111 E. Second Street, Clayton, NC 27520
P.O. Box 879, Clayton, NC 27528
Phone: 919-553-5002
Fax: 919-553-1720

WASTEWATER ALLOCATION REQUEST

The Town of Clayton, in an effort to manage and maintain the sewer and water capacity for the Town, requires that this application be completed and submitted to the Town for consideration of a utility allocation. Review fee is due upon submittal of request.

Wastewater Allocation Request Review Fee: \$50

Application MUST be completed and sealed by a registered engineer unless otherwise approved by staff.

SITE INFORMATION

Name of Project: Wakefield Assemblage Acreage of Property: 53.06
County Tag Number: Multiple, See Next Page. NC PIN: Multiple, See Next Page.
Address/Location: 584 Glen Laurel Road
Clayton, NC 27527
Zoning District: Proposed CZM
Town Limits / ETJ: ☐ Town Limits ☒ ETJ (Extra-Territorial Jurisdiction)

APPLICANT INFORMATION – Applicant must be a registered engineer unless otherwise approved by Town Engineer

Applicant: Stocks Engineering PA for Wakefield Development
Mailing Address: PO Box 1108 Nashville, NC 27856
Phone Number: 252.459.8196 Fax: 252.459.8197
Contact Person: Andrew Stocks, PE
Email Address: astocks@stocksengineering.com

PROPERTY OWNER INFORMATION

Name: Multiple, See Next Page
Mailing Address: _____
Phone Number: _____ Fax: _____
Email Address: _____

FOR OFFICE USE ONLY

Date Received: _____ File Number: _____ Associated Project Number: _____



*** DISCLAIMER ***

Johnston County assumes no legal responsibility for the information represented here.

Result 0

id: 05I04010A
Tag: 05I04010A
Owner Name 1: TGS PROPERTIES LLC
Owner Name 2:
Mail Address 1: 514 DANIELS ST STE 414
Mail Address 2:
Mail Address 3: RALEIGH, NC 27605-0000
Book: 03962
Page: 0691

Result 0

id: 05I04203F
Tag: 05I04203F
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2:
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 01154
Page: 0409

Result 0

id: 05I04203G
Tag: 05I04203G
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2:
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 01154
Page: 0409

Result 0

id: 05I04200S
Tag: 05I04200S
Owner Name 1: GORDON, CHARLES B JR
Owner Name 2: GORDON, ERIC B
Mail Address 1: 276 BENNING CIR
Mail Address 2:
Mail Address 3: CLAYTON, NC 27527-5286
Book: 04205
Page: 0161

Result 0

id: 05I04010
Tag: 05I04010
Owner Name 1: TGS PROPERTIES LLC
Owner Name 2:
Mail Address 1: 514 DANIELS ST STE 414
Mail Address 2:
Mail Address 3: RALEIGH, NC 27605-0000
Book: 03962
Page: 0691

PROJECT INFORMATIONUse: ☒ New ☐ Expanded ☐ ChangeUse Type: ☒ Residential ☐ Non-ResidentialProposed Use(s): Residential Existing Use(s): Vacant/Agriculture

Invoice shall be mailed to the following:

Developer Name: Wakefield Development (Matthew Danielson)Mailing Address: 3100 Smoketree Ct. Suite 210 Raleigh, NC 27604Phone Number: 919.556.4310 Fax Number: _____Email Address: matthew@lmssi.com**ALLOCATION REQUEST**

The following is required:

- For non-residential construction, submit a floor plan of proposed building.
- Use additional sheets if necessary.
- Provide any documentation supporting/justifying the request as an attachment (using a comparable use is recommended).
- If a phasing / take-down schedule is proposed, include as an attachment.

Residential:

Gross Acreage: 53.06

Single Family	# of Units	GPD per Unit	Total Requested GPD
1-2 Bedroom Units			
3 Bedroom Units			
>3 Bedroom Units	138	250	34,500
Total		-----	34,500

Multi-Family	# of Units	GPD per Unit	Total Requested GPD
1-2 Bedroom Units			
3 Bedroom Units			
>3 Bedroom Units			
Total		-----	

Non-Residential: (Design Flow Guideline provided as Appendix A)*

**If design flow deviates from the flow rates presented in Appendix A, provide supporting documentation/justification as an attachment in the form of 12 months of water bills demonstrating gallons per day utilized.*

Gross Acreage: _____

Use	Measurement Unit	# of Units	GPD per Unit	Total Requested GPD
Total			-----	

TOTAL REQUESTED GALLONS PER DAY: 34,500

NOTE TO APPLICANT:

Invoicing:

Invoices are generated on the following schedule:

Non-Residential:

Generated with the application for a Zoning Compliance Permit.

Residential:

Multi-Family / Apartments:

Generated with the application for a Zoning Compliance Permit.

Subdivision / Subdivided Lots:

Generated at Final Plat submittal.

Fee Development:

Development Fees are calculated and invoiced based on the Town of Clayton adopted [Comprehensive List of Fees and Charges](#). Invoiced fees include acreage fees, capacity fees, nutrient offset fees, recreation fees, fees-in-lieu, and electric department lot deposit. Please speak with Town staff with questions.

Approval:

Requests over 10,000 GPD are approved by the Town Council, by resolution. All other requests are approved by the Town Manager.

APPLICANT AFFIDAVIT

I/We, the undersigned, do hereby make application and petition to the Town of Clayton to approve the subject Wastewater Allocation. I hereby certify that I have full legal right to request such action and that the statements or information made in any paper or plans submitted herewith are true and correct to the best of my knowledge. I understand this application, related material and all attachments become official records of the Planning Department of the Town of Clayton, North Carolina, and will not be returned.

J. ANDREW STOCKS

Print Name



[Signature]
Signature of Applicant

7-6-22

Date

Engineer Seal:

TOWN OF CLAYTON OFFICE USE ONLY:

Approved by: ☐ Town Manager

☐ Town Council (*requests of 10,000 GPD or more require Council approval by resolution*)

The **Town Manager / Town Council (circle one)** has authorized the allocation of _____

gallons per day for project # _____.

Date of Approval: _____

Signed:

Town Manager

If approved by Town Council:

Attach a copy of the resolution and any associated documentation.

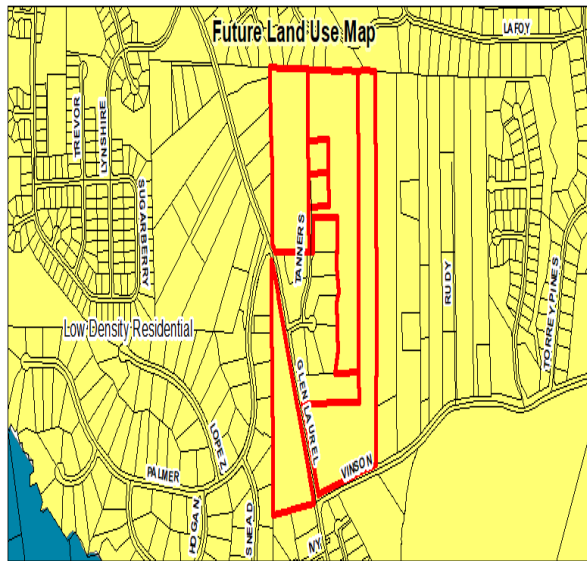
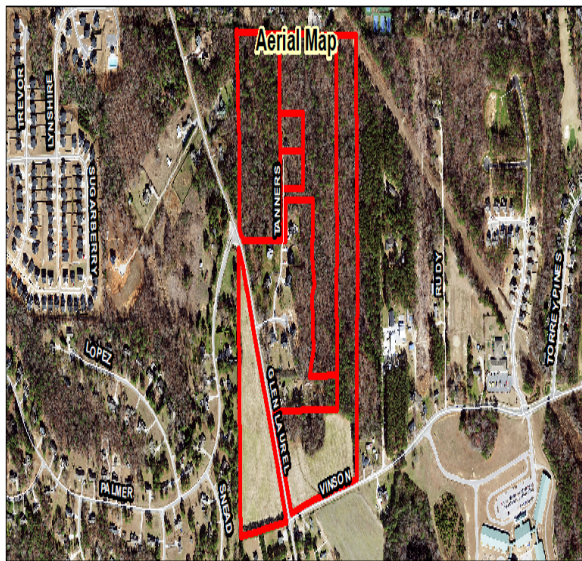
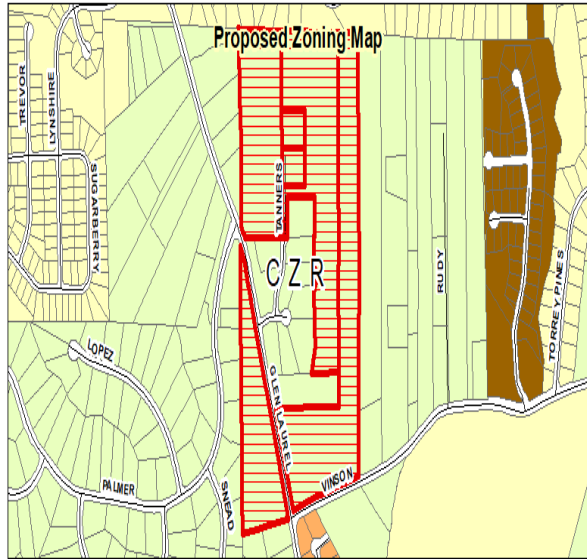
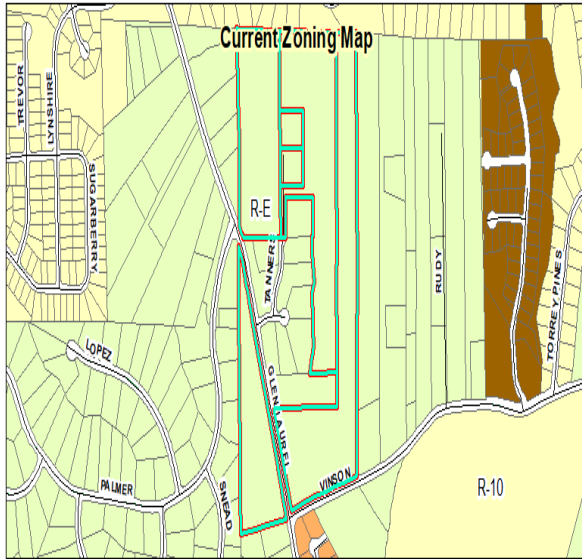
APPENDIX A: DESIGN FLOW RATES

The following table from the North Carolina Administrative Code 02T.0114 shall be used to determine the minimum allowable design daily flow of wastewater facilities. Alternatively, the Town in its sole and absolute discretion may calculate the customer's initial average daily wastewater flow based on data from the customer's operations (or from similarly situated customers) with a comparable sanitary sewer system, where such data are available and reasonably current.

Establishment Type	Daily Flow Rate
Barber and Beauty Shops	
Barber Shops	50 gal/chair
Beauty Shops	125 gal/booth or bowl
Businesses, Offices and Factories	
General business and office facilities	25 gal/employee/shift
Factories, excluding industrial waste	25 gal/employee/shift
Factories or businesses with showers or food preparation	35 gal/employee/shift
Warehouse	100 gal/loading bay
Warehouse – self storage (not including caretaker residence)	1 gal/unit
Churches	
Churches without kitchens, day care or camps	3 gal/seat
Churches with kitchen	5 gal/seat
Churches providing day care or camps	25 gal/person (child & employee)
Fire, Rescue and Emergency Response	
Fire or rescue stations without on-site staff	25 gal/person
Fire or rescue stations with on-site staff	50 gal/person/shift
Food and Drink Facilities	
Banquet, dining hall	30 gal/seat
Bars, cocktail lounges	20 gal/seat
Caterers	50 gal/100 sq. ft. floor space
Restaurant, full Service	40 gal/seat
Restaurant, single service articles	20 gal/seat
Restaurant, drive-in	50 gal/car space
Restaurant, carry out only	50 gal/100 sq. ft. floor space
Institutions, dining halls	5 gal/meal
Deli	40 gal/100 sq. ft. floor space
Bakery	10 gal/100 sq. ft. floor space
Meat department, butcher shop or fish market	75 gal/100 sq. ft. floor space
Specialty food stand or kiosk	50 gal/100 sq. ft. floor space
Hotels and Motels	
Hotels, motels and bed & breakfast facilities, without in-room cooking facilities	120 gal/room
Hotels and motels, with in-room cooking facilities	175 gal/room
Resort hotels	200 gal/room
Cottages, cabins	200 gal/unit
Self-service laundry facilities	500 gal/machine
Medical, Dental and Veterinary Facilities	
Medical or dental offices	250 gal/practitioner/shift
Veterinary offices (not including boarding)	250 gal/practitioner/shift
Veterinary hospitals, kennels, animal boarding facilities	20 gal/pen, cage, kennel or stall
Hospitals, medical	300 gal/bed
Hospitals, mental	150 gal/bed
Convalescent, nursing, rest homes without laundry facilities	60 gal/bed
Convalescent, nursing, rest homes with laundry facilities	120 gal/bed
Residential care facilities	60 gal/person
Parks, Recreation, Camp Grounds, R-V Parks and other Outdoor Activity Facilities	
Campgrounds with comfort station, without water or sewer hookups	75 gal/campsite

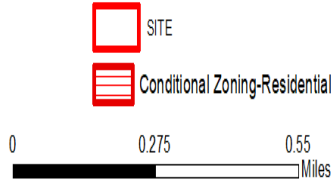
Establishment Type	Daily Flow Rate
Campgrounds with water and sewer hookups	100 gal/campsite
Campground dump station facility	50 gal/space
Construction, hunting or work camps with flush toilets	60 gal/person
Construction, hunting or work camps with chemical or portable toilets	40 gal/person
Parks with restroom facilities	250 gal/plumbing fixture
Summer camps without food preparation or laundry facilities	30 gal/person
Summer camps with food preparation and laundry facilities	60 gal/person
Swimming pools, bathhouses and spas	10 gal/person
Public access restrooms	325 gal/plumbing fixture
Schools, Pre-school and Day Care	
Day care and preschool facilities	25 gal/person (child & employee)
Schools with cafeteria, gym and showers	15 gal/student
Schools with cafeteria	12 gal/student
Schools without cafeteria, gym or showers	10 gal/student
Boarding schools	60 gal/person (student & employee)
Service Stations and Car Wash Facilities	
Service stations, gas stations	250 gal/plumbing fixture
Car wash facilities	1200 gal/bay
Sports Centers	
Bowling center	50 gal/lane
Fitness, exercise, karate or dance center	50 gal/100 sq. ft.
Tennis, racquet ball	50 gal/court
Gymnasium	50 gal/100 sq. ft.
Golf course with only minimal food service	250 gal/plumbing fixture
Country clubs	60 gal/member or patron
Mini golf, putt-putt	250 gal/plumbing fixture
Go-kart, motocross	250 gal/plumbing fixture
Batting cages, driving ranges	250 gal/plumbing fixture
Marinas without bathhouse	10 gal/slip
Marinas with bathhouse	30 gal/slip
Video game arcades, pool halls	250 gal/plumbing fixture
Stadiums, auditoriums, theaters, community centers	5 gal/seat
Stores, Shopping Centers, Malls and Flea Markets	
Auto, boat, recreational vehicle dealerships/showrooms with restrooms	125 gal/plumbing fixture
Convenience stores, with food preparation	60 gal/100 sq. ft.
Convenience stores, without food preparation	250 gal/plumbing fixture
Flea markets	30 gal/stall
Shopping centers and malls with food service	130 gal/1000 sq. ft.
Stores and shopping centers without food service	100 gal/1000 sq. ft.
Transportation Terminals	
Air, bus, train, ferry, port and dock	5 gal/passenger

Source: North Carolina Administrative Code 02T.0114, January 1, 2007



Request: Rezoning from R-E to CZ-R
Project Name: SUMMRE GLEN
Project Number: 2022-125-CZM

Applicant: WAKEFIELD DEVELOPMENT
 Property Owner: WAKEFIELD DEVELOPMENT
 Tag #: 05104010, 05104010A, 05104200S, 05104203F, and 05104203G



Staff Report Map
 Prepared by: TOC Planning Department
AUGUST 23, 2023

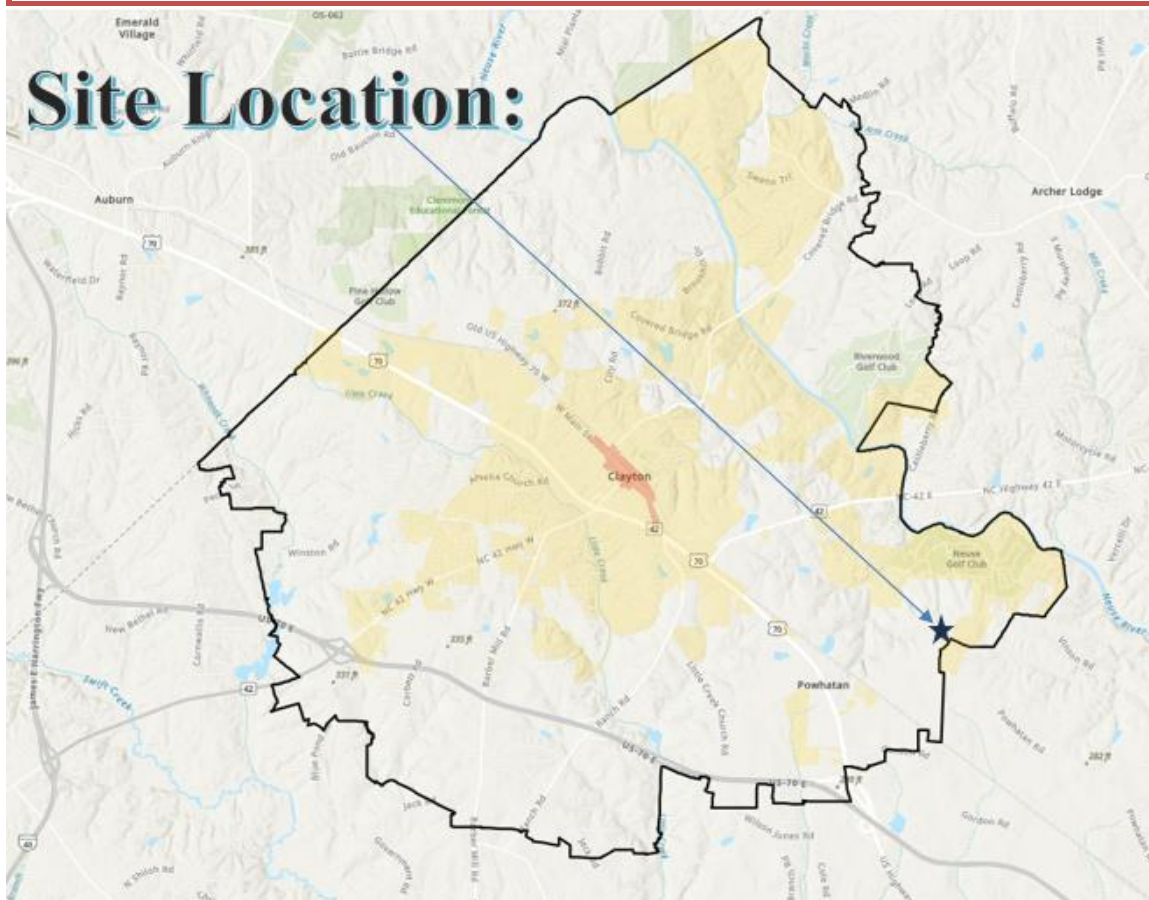
Disclaimer: Town of Clayton assumes no legal responsibility for the quality of the data represented here.

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SUMMER GLEN CZM

Project #:	2022-125-CZM	Location:	Glen Laurel Road and Vinson Road
Applicant:	Wakefield Development	Project Type:	Conditional Zoning with Master Plan
Property Owner:	Wakefield Development	Proposed Use:	Residential
Staff Planner:	Bruce Venable, Planner I	TAG #(s):	05I04010, 05I04010A, 05I04200S, 05I04203F, and 05I04203G



PROJECT SUMMARY

The site is located off Glen Laurel Road and Vinson Road within the Town's ETJ. The applicant has requested to rezone the above referenced parcel from Residential-Estate Zoning (R-E) to Conditional Zoning-Residential Zoning District (CZ-R), which is approximately +/- 53.06 acres in size. The Conditional Zoning District would allow for up to 139 units, or a density of 2.60 units per acre. This site is located within the Watershed Protection Overlay District.

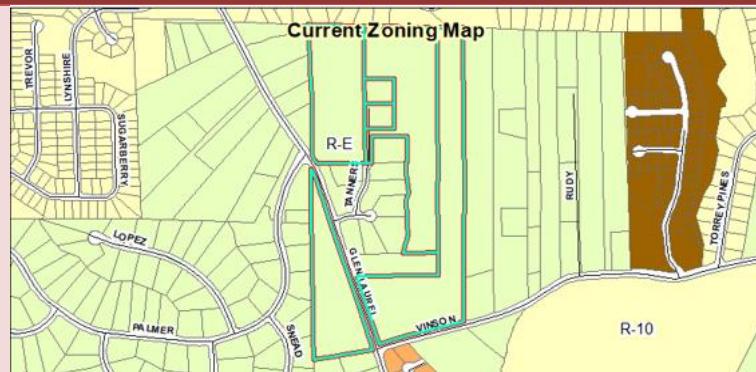
LAND USE REVIEW

SITE DATA:

Acreage: +/- 53.06 acres

Existing Use: Residential/Vacant

CURRENT ZONING MAP



PROPOSED ZONING MAP



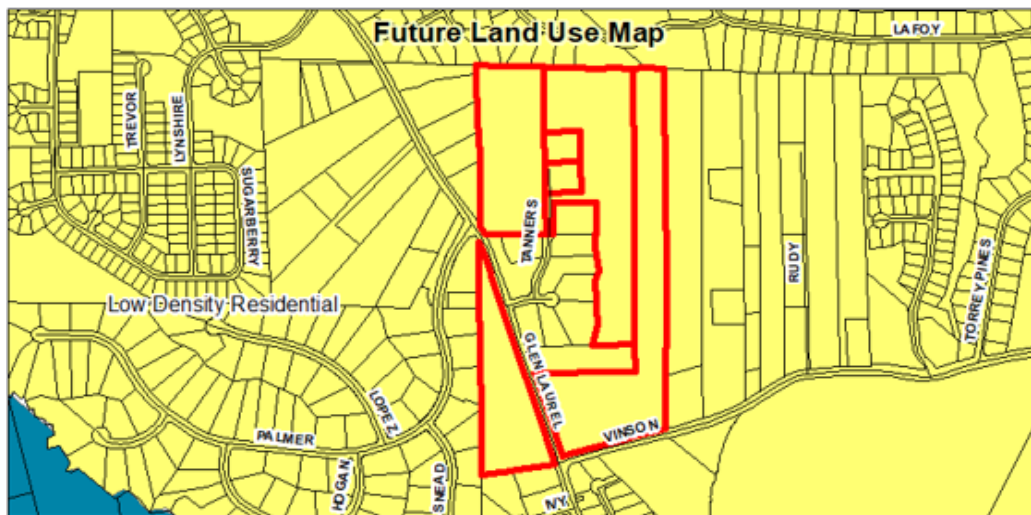
AERIAL MAP



TABLE 1: COMPARISON OF SURROUNDING PROPERTIES

Direction	Zoning	Existing Use
North	R-E (Residential-Estate)	Residential
South	R-E (Residential-Estate)	Residential
East	R-E (Residential-Estate)	Residential
West	R-E (Residential-Estate)	Residential.

Consistency with the 2045 Comprehensive Growth Plan



Future Land Use

The Future Land Use Map identifies this area as “Low Density Residential” (see map above). The condition rezoning request would be consistent with the Low Density Residential future land use designation.

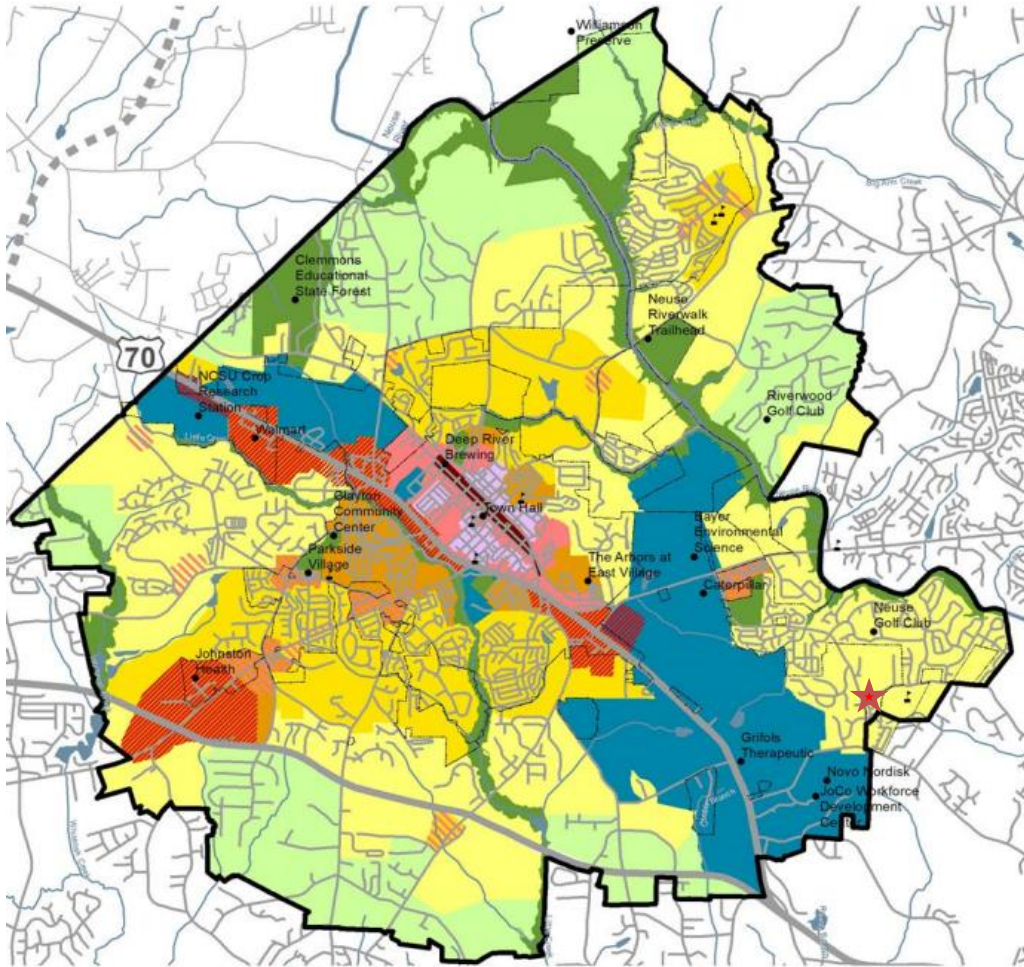
LDR

Low Density Residential (LDR)



Areas designated as Low-Density Residential are intended to remain predominantly suburban in character and provide for low-density, single-family residential development on smaller lots than those in Rural Residential areas. However, a mix of residential housing types may occur under a conditional zoning district to support conservation of open space, as long as a gross density of 3 units per acre is not exceeded.

- **Gross Residential Density*:** ≤3 units/acre
- **Unit Type:** Mostly single family detached homes, generally less than 25% attached units
- **Open Space:** Minimum of 25%**. Open space should be a mix of preserved natural features with passive recreation such as greenways and trails and more formal or developed open space such as common greens, playgrounds or sports fields.



DEVELOPMENT DATA:

Proposed Uses:	Residential (single-family homes)
Proposed Density:	Up to 139 units are proposed at an overall proposed residential density of 2.6 units/acre for the development.
Fire Protection:	Wilson Mills (Current)
Access/Streets:	3 Access points will be provided from along Glen Laurel Rd (1) and Vinson Rd (1) and 1 emergency access point located off of Glen Laurel
Water/Sewer Provider:	Town of Clayton
Electric Provider:	Town of Clayton

Lot Dimensional Standards:

	Current Zoning			Proposed Zoning
	R-E	R-10	R-8	CZM
Minimum Lot Size	12,000 SF	8,000 SF	6,000 SF	6,500 SF (Allowed in Open Space Sub.)
Minimum Lot Width	48 FT	50 FT	42 FT	60 FT
Maximum Lot Coverage	35%	35%	35%	70%
Maximum Impervious Area	50%	50%	55%	70% (per lot) 36% (full site)
Density (Units/Acre)	3.7	5	7	2.6
Front Setback	25	25	25	21.5
Side Setback	9	6	6	6
Side Street Setback	15	15	10	10
Rear Setback	18	15	15	15

Landscape Buffer Requirement:

The proposed master plan includes a 15' landscape buffer around the perimeter of the project boundary as required per 155.203.L.1.i. Existing vegetation may be used to satisfy the Class C buffer requirement. Tree and Shrub study will be coordinated with Town Staff during construction to verify the remaining vegetation meets the criteria of the required buffer planting ratios for every 100' of lineal buffer. If the existing vegetation does not meet the minimum planting requirements, more plantings will be installed to supplement the existing vegetation. If there is no existing vegetation or grading activity that requires the existing vegetation to be removed, then a Class "C" - 15' buffer will be planted. The existing vegetation may also provide the screening of the required wall, opaque fence, evergreen hedge, berm, or combination thereof. If the existing vegetation does not provide adequate screening, then supplemental plantings will be added to increase the screening. One of the goals of this development is to leave as much existing vegetation as possible within the 15' buffer and to minimize the disturbed area, however, this may not be possible for entire perimeter buffer. During the construction process, the site perimeter buffers will be evaluated and considered for potential areas to increase the landscape buffers. The buffers will meet the minimums as described in the ordinance.

Transportation Improvements:

The proposed site is to be developed within three years by the year 2025. The proposed development will be accessed by one full-movement driveway on each side of Glen Laurel Road and one full-movement driveway on Vinson Road. Table 1 shows the projected trip generation for the proposed development. Trips were calculated for the portion of the site east of Glen Laurel Road (120 homes) and the portion of the site west of Glen Laurel Road (15 homes). The trip generation was based on rates published in the ITE Trip Generation Manual, 11th Edition.

Table 1: Trip Generation

Land Use			Daily	AM Peak Hour			PM Peak Hour		
				Total	Enter	Exit	Total	Enter	Exit
210: Single-Family Detached Housing	120	d.u.	1,194	88	23	65	118	74	44
210: Single-Family Detached Housing	15	d.u.	176	13	3	10	17	11	6
Total Site Trips			1,370	101	26	75	135	85	50

References: *Trip Generation Manual*, 11th Edition, Institute of Transportation Engineers, September 2021

Based on the existing traffic patterns, surrounding opportunities to access retail and office developments, and access to commuter roadways, the proposed trip distribution for the site is as follows:

- 30% to/from the north on Glen Laurel Road
- 15% to/from the east on Vinson Road
- 15% to/from the east on Powhatan Road
- 40% to/from the west on Powhatan Road

Required Transportation Improvements:

Glen Laurel Road at Vinson Road:

- Install a traffic signal (Currently committed by NCDOT)
If the traffic signal is not constructed and in operation at the time of construction, the applicant will be required to construct the traffic signal.

Glen Laurel Road at Proposed Site Driveways:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway.
- Provide a dedicated left-turn lane, one for each proposed site driveway, providing a minimum of 100' full-width storage with appropriate deceleration lane and tapers.

Vinson Road at Proposed Site Driveway:

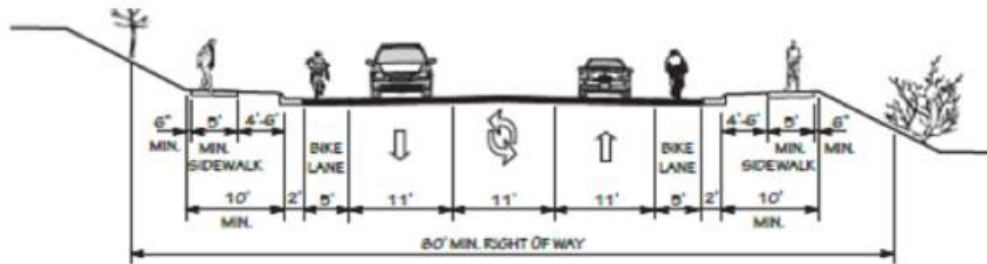
- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway.
- Provide a dedicated east-bound left-turn lane, providing a minimum of 100' full-width storage with appropriate deceleration lane and tapers.

Other Improvements and Notes by NCDOT:

- All driveways for this site on NCDOT ROW must be spaced 600' on secondary and 1,000' on primary routes. This is measured along the ROW line between the tangent projection of the inside edges of adjacent driveways apart measuring the distance between the radiuses of both driveways.
- If there are any turn lane overlaps with any existing or proposed middle-turn lanes, or tapers, the entire roadway section shall be widened to three-full lanes, with the middle-lane as a two-way left-turn lane.

Frontage Improvements:

- The applicant is responsible for the construction and right-of-way dedication of ½ the roadway typical section for Glen Laurel Road and Vinson Road as identified on the Transportation Plan (shown below) along all frontages along the public right-of-way.



Public Utilities:

The project will connect to the existing Town of Clayton Utility System which exists within the proximity of the project area. The Town has an existing 8" waterline in Vinson Road as well as a 10" waterline maintained by Johnston County (within the Town's service area) located on Glen Laurel Road. Public Sewer will be accessed through an offsite sewer extension to tie into the existing Town of Clayton Utility System along Birkdale Drive.

As required by the Engineering Department, a preliminary analysis of the Glen Laurel #1 Pump Station and Summerlyn Pump Stations was performed by Stocks Engineering utilizing data provided by the Town. A copy of the "Preliminary Pump Station Calcs" and the emails noting the Engineering Departments confirmation of the available capacity has been added as Exhibit H following the Water and Wastewater Allocation Criteria.

Allocation of wastewater for the proposed development will come from Town Council action following consideration of the Conditional Zoning District. The Wastewater Allocation Policy requires a project score of a minimum of 50 points from the provided Allocation Criteria worksheet. The proposed project will exceed the 50-point minimum from a combination of being an infill development type (25 pts), a residential future tax status (5 pts), a Town Electric customer (20 pts) and by providing multiple car garages (5 pts) from the community benefit bonus points section.

The proposed development will request consideration of a total wastewater allocation of 34,500 GPD from Town Council and the Water and Wastewater Allocation Request has been submitted to run parallel with this application. This flow will not be available until the new Sam's Branch Water Reclamation Facility comes online in 2025.

The Town of Clayton also has Electricity adjacent to this property and the developer has been in communication with the Electric Department about being an electric customer. Included in the next two exhibits are a map showing the approximate locations of the existing utilities and the Town of Clayton Water and Wastewater Allocation Criteria.

Streets:

The proposed master plan proposes six (6) new public streets, two (2) intersections with existing State Roads, and one (1) emergency access easement to Glen Laurel Road. Per UDO Sec. 155.400(i) and comment from the master plan review, a stub road to an adjacent property has been added. Approximately 6,420 Linear Feet of new streets will be constructed and dedicated to the Town as Public Streets. A typical cross section of the proposed streets is provided below.

During the TRC review process, there were two street layout comments worth noting and discussing in this document: the emergency access from the cul-de-sac to Glen Laurel Road and a connection to Tanners Way. The layout was revised based on a meeting with the Engineering Department between the pre-application meeting and the first CZM submittal. It was recommended by Town of Clayton Engineering that any connection to Tanners Way be avoided due to Tanners Way being a private street, and a Knox box gated emergency access connect the cul-de-sac to Glen Laurel Road. The development team discussed eliminating the cul-de-sac and providing a connection to Glen Laurel Road across from Palmer Drive with Town staff and NCDOT however this development does not own the land that would be required to properly align a new driveway with Palmer Drive. Since this would create an offset intersection on Glen Laurel, NCDOT was unsupportive of a driveway at this location due to safety concerns with the road alignments. In the place of a full drive the NCDOT will allow gated emergency access with Knox box to be installed in this location.

Architectural Standards:

1. All units to be 1 and 2 story with a variety of Craftsman, Colonial and Transitional themed elevations. Home plans of the same elevation shall not be side by side or directly across from one another.
2. Exterior color packages will enhance variety of color throughout the neighborhood and will not be duplicated side by side.
3. Siding elements to include a mix of premium vinyl siding with varying patterns such as lap siding, shake, and board and batten materials per architectural elevations.
4. All building facades to include a variety of craftsman columns with masonry, square and round columns per elevation.
5. Each home will have either a front porch or covered stoop element with a front lead walk that connects to the driveway.
6. Four vehicular parking spaces to be provided on each lot, two-car front loaded garage spaces (decorative garage door with glass windows and carriage details) with two parking spaces on the driveway.
7. Side roof eaves to be a minimum 10" overhang.
8. All front building facades to require a goal of 25% masonry elements such as Stone/brick accents of the portion of the house excluding the garage door(s).
9. Architectural style shingles to be used.
10. Side or rear patios to be provided on all units for outdoor living as well as optional covered porches available per plan.

*Renderings of the Architectural Elevations can be found pgs. 30-37 of the Summer Glen Master Plan Narrative Document include in this packet.

Conditional Rezoning Approval Criteria:

See Master Plan Narrative for Applicant Responses.

In connection with its legislative decision on a conditional zoning district request, the Town Council may consider factors including, but not limited to, the following:

1. Consistency with the adopted plans of the Town.

Staff Commentary: The 2045 Comprehensive Growth Plan Future Land Use Map labels this area as Low Density Residential (LDR), and the current zoning is Residential Estate (R-E). The Growth Plan represents LDR as equal to or less than 3 units per acre and a minimum required open space of 25%. The proposed Summer Glen Project has a proposed density of 2.6 units per acre which is achievable by conditional rezoning with master plan and will provide approximately 34% open space. The project will provide any required infrastructure/utility improvements to accommodate the development by extending water, sewer, electricity, public roads, and by following any recommendation from the TIA and the North Carolina Department of Transportation. The proposed rezoning meets the intent of the growth plan.

2. Suitability of the subject for uses permitted by the current vs. the proposed conditional district.

Staff Commentary: The proposed development consists of single-family detached residential homes which are allowed in the current R-E zoning. The approval of the conditional rezoning would allow a higher density than allowed in the current zoning, however, the use is consistent with the current zoning and the proposed density is consistent with the 2045 Comprehensive Growth Plan.

3. Whether the proposed change tends to improve the balance of uses or meets specific demand in the Town.

Staff Commentary: Being consistent with the 2045 Comprehensive Growth Plan, the proposed development is cohesive with development in close proximity to the project area. There is a high demand for residential development in and around the Town of Clayton and this project helps meet the demand within the Town and increases the Town Limits.

4. The capacity of adequate public facilities and services including schools, roads, recreation facilities, wastewater treatment, water supply facilities and stormwater drainage facilities are available for the proposed conditional district.

Staff Commentary:

Schools: The proposed development will be served by Powhatan Elementary School (<1 mile), Riverwood Middle School (8.8 miles), and Clayton High School (5.2 miles).

Roads: A traffic impact analysis (TIA) has been performed by Exult Engineering and has been reviewed by Town staff and the North Carolina Department of Transportation (NCDOT) to determine if there is adequate roadway infrastructure to serve the proposed development. The developer will be required to construct any required road improvements resulting from the TIA and subsequent review by NCDOT.

Recreation Facilities: The proposed development will provide community flex open space and is located approximately 1.5 miles from East Clayton Community Park. The developers have also discussed with The Neuse Country Club the option of pursuing their facilities as an amenity to the residents. Negotiations regarding this agreement are currently underway.

Wastewater: The applicant has been working with the Town of Clayton Engineering Department and determined that the downstream sewer lift station in Glen Laurel Subdivision has adequate capacity for allocation of additional tributary flow from the proposed development.

Water Supply: The proposed development has proposed connection to the Town of Clayton's existing water on Glen Laurel Road and Vinson Road creating an additional loop in the water system.

Stormwater Drainage Facilities: The proposed development is within the Neuse River Basin and will require stormwater management for water quantity and quality before leaving the site. Stormwater runoff will be collected by street curb and gutter and above ground swales and will be directed into an underground pipe system that will route stormwater to proposed stormwater control facilities (SCM). Approximate locations of these facilities are included on the master plan. The final location, size, and detail of these devices will be provided during the construction drawing submittal process. All stormwater management will be designed to meet the requirements set by the Town of Clayton Stormwater Ordinance and the North Carolina Department of Environmental Quality (NCDEQ).

5. It has been determined that the legal purposes for which zoning exists are not violated.

Staff Commentary: The applicant has followed the procedure as outlined in Section 155.203 Part 3 and 155.705. All Town of Clayton process and procedures have been and will be followed throughout the rezoning process.

6. It has been determined that there will be no adverse effect upon adjoining property owners unless such effect can be justified by the overwhelming public good or welfare.

Staff Commentary: It is our understanding that there will be no adverse effect upon adjoining property owners by this project further the proposed development will be expanding the public utility system providing additional loops in the water system which has the potential to increase water quality in the water lines and increase water pressure.

7. It has been determined that no one property owner or small group of property owners will benefit materially from the change to the detriment of the general public.

Staff Commentary: It is our understanding that this project produced no detriment to the general public and the public improvements will benefit the Town of Clayton and the adjacent property owners.

Master Plan Approval Criteria

The master plan shall include, and the applicant shall be responsible for successfully addressing the following:

- Compliance with § 155.203(L) and all other applicable requirements of this chapter, or analysis and justification if it deviates from the requirements of this chapter;
- Consistency with the Clayton General Design Guidelines;
- Conformance of the proposal with the stated purpose of the requested conditional zoning district;
- Compatibility of the proposed development with the adjacent community;

- The quality of design intended for each component of the project and the ability of the overall development plan to ensure a unified, cohesive environment at full build-out;
- Compatible relationships between each component of the overall project;
- Self-sufficiency of each phase of the overall project;
- The fiscal impact of the proposal and the proposed financing of required improvements;
- The success of the proposal in providing adequate pedestrian and bicycle links within the development and with the adjacent community; and
- The effectiveness with which the proposal protects and preserves the ecologically sensitive areas within the development.

Staff Commentary: The applicant has provided a Master Plan Narrative providing details of the proposal. Through the Master Plan, Narrative and proposed conditions, staff believes that the applicant has successfully met the criteria.

Considerations:

- The Town Council shall consider the recommendation of the Planning Board and the Interim Planning Director.
- The Town Council shall approve, approve with conditions, or disapprove the conditional zoning district. Any additional, revised, or deleted conditions from those below must be signed or declined by the applicant prior to the Council rendering a decision.
- Concurrently with adopting, denying or remanding any conditional zoning district, the Town Council shall adopt a statement describing whether its action is consistent with the adopted plans and policies of the Town and explaining why the Town Council considers the action taken to be reasonable and in the public interest.
- If the conditional zoning district is not consistent with the 2045 Comprehensive Growth Plan and is approved, the 2045 Comprehensive Growth Plan Future Land Use Map will be considered amended to match the proposed conditional zoning district.
- If approved, the conditional zoning district, master plan and narrative will be recorded with the Johnston County Register of Deeds and shall guide future development for this land. The conditional zoning district, master plan, and narrative shall not expire, and will run with the land.

Staff Recommendation

Staff recommends that the Planning Board recommend approval of the Conditional Zoning District, subject to the 14 conditions listed below to the Town Council.

PLANNING BOARD RECOMMENDATION:

The Planning Board held a Public Meeting Session on August 28, 2023, for the project. The Planning Board unanimously voted to recommend approval of the Conditional Zoning District subject to the 14 Conditions included below and the provided Statement of Reasonableness and Consistency.

Recommended Conditions of Approval (2022-125-CZM, Summer Glen, Conditional Zoning and Master Plan):

1. Following Town Council approval, an electronic copy of the Master Plan and Narrative including the Conditions of Approval shall be submitted to the Planning Department for final approval.
2. The Development shall meet all adopted Town of Clayton Unified Development Code (UDC) requirements, Town of Clayton Engineering and Stormwater design standards, and the North Carolina Fire Code and NFPA Fire standards, except where specifically modified by the approved master plan.
3. The Development shall be constructed in substantial conformance with the Master Plan and Master Plan Narrative as approved by the Clayton Town Council.
4. All parcels subject to the Conditional Zoning and Master Plan shall be annexed into the Town prior to any subsequent development approvals.
5. The developer will be required to pay their proportional share of the Wilsons Mills Fire District Capital Debt to the Town prior to the effective date of the Annexation.
6. Uses in the development shall be limited to single-family detached residential homes, and any allowed residential accessory uses within the Town of Clayton Unified Development Code.
7. The following standards shall apply to the Development:
 - Maximum Residential Units: 139
 - Maximum Density: 2.6 Dwelling Units per Acre
 - Total Site Impervious Surface Area: 36%
 - Minimum Lot Size: 6,500 Square Feet
 - Minimum Building Setbacks:
 - Front Setback: 21.5 Feet
 - Setback from Sidewalk: 25 Feet
 - Side Setback: 6 Feet
 - Corner Side Setback: 10 Feet
 - Rear Setback: 15 Feet
 - Maximum Building Height: 35 Feet
8. The Town of Clayton shall be the electric provider for this project.
9. Tree protection fencing must be installed at the clearing limits to maximize preservation of existing vegetation.
10. A gated emergency access with a Knox Box meeting Town of Clayton Fire Department standards connecting the Cul-De-Sac on Summer Loop to Glen Laurel Road shall be provided.

11. Required frontage improvements along Glen Laurel Road and Vinson Road will be made in phases that correlate with the driveway connections to those existing roadways in the respective phase.
12. The following transportation improvements, in accordance with the recommendation in the TIA and approval by NCDOT, shall be constructed prior to the approval of the final plat for the first phase of the development:

Glen Laurel and Vinson Road Intersection

- According to NCDOT Congestion Management Section, the signal improvement at this intersection will be completed by NCDOT. The development team will discuss the timing of these improvements with NCDOT.

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and northbound and southbound left-turn lanes on Glen Laurel Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

Vinson Road and Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and an eastbound left-turn lane on Vinson Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

13. The following Architectural Standards shall be required to be met for the Single-Family Homes:

- All units to be 1 and 2 story with a variety of Craftsman, Colonial and Transitional themed elevations. Home plans of the same elevation shall not be side by side or directly across from one another.
- Exterior color packages will enhance variety of color throughout the neighborhood and will not be duplicated side by side.
- Siding elements to include a mix of premium vinyl siding with varying patterns such as lap siding, shake, and board and batten materials per architectural elevations.
- All build facades to include a variety of craftsman columns with masonry, square and round columns per elevation.
- Each home will have either a front porch or covered stoop element with a front lead walk that connects to the driveway.
- Four vehicular parking spaces to be provided on each lot, two-car front loaded garage spaces (decorative garage door with glass windows and carriage details) with two parking spaces on the driveway.
- Side roof eaves to be a minimum 10" overhang.
- All front building facades to require a goal of 25% masonry elements such as Stone/brick accents of the portion of the house excluding the garage door(s).
- Architectural style shingles to be used.
- Side or rear patios to be provided on all units for outdoor living as well as optional covered porches available per plan.

14. To the extent of any conflict between the Master Plan, Master Plan Narrative and these conditions, these conditions shall control.

-
- 1) Application
 - 2) Master Plan Narrative
 - 3) Master Plan
 - 4) Neighborhood Meeting Materials
 - 5) Transportation Impact Analysis (TIA)
 - 6) NCDOT TIA Review
 - 7) TIA APPENDIX
 - 8) Conditions of Approval - Signed (8/23/2023)
 - 9) Wastewater Allocation Request
 - 10) Staff Report Map
 - 11) Staff Report

**AN ORDINANCE AMENDING THE ZONING ORDINANCE
AND ZONING MAP
OF THE TOWN OF CLAYTON, NORTH CAROLINA**

WHEREAS a petition has been filed with the Town Council of the Town of Clayton requesting an amendment to the Zoning Ordinance and Zoning Map of the Town of Clayton to include in the Conditional Zoning – Residential (CZ-R) zone the property described below, said property formerly being zoned Residential-Estate (R-E); and

WHEREAS said property is owned by Wakefield Development; and

WHEREAS the Planning Board of the Town of Clayton has reviewed the proposed change(s) and made a recommendation thereupon; and

WHEREAS the requested Zoning Map Amendment was advertised in accordance with all requirements of the law; and

WHEREAS a notice of the proposed zoning classification action was mailed to the owner(s) of the parcel(s) of land involved, as shown on the County Tax Listings, and to the owners of all parcels of land abutting that (those) parcel(s) of land and within 100 feet of the subject parcel(s) of land, as shown on the County Tax Listings, by depositing a copy of the same in the United States Mail, first class postage paid, as required by Section 155.702(D) of the Zoning Ordinance of the Town of Clayton and by Section 160D-602 of the General Statutes; and

WHEREAS the said public hearing was actually conducted at 6:00 p.m. on September 18, 2023, wherein a reasonable opportunity was given to all those in attendance to speak either in favor or against the said change or to make relevant comments; and

THEREFORE, after duly considering the matter, THE TOWN COUNCIL OF THE TOWN OF CLAYTON DOES HEREBY ORDAIN:

SECTION 1. That the Unified Development Code of the Town of Clayton is hereby amended to include in the Conditional Zoning – Residential (CZ-R) zone the following described property:

General Description:

Land located at the intersection of Glen Laurel Road and Vinson Road .

Specific Description:

NC Parcel TAG Numbers: 05I04010, 05I04010A, 05I04200S, 05I04203F, and 05I04203G

SECTION 2. That the official Town of Clayton Zoning Map is hereby amended to include in the Conditional Zoning – Residential (CZ-R) zone the above-described property and will be so marked.

SECTION 3. That if any section, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.

SECTION 4. The applicant is requesting these recommended Conditions of Approval (2022-125-CZM, Summer Glen, Conditional Zoning and Master Plan):

1. Following Town Council approval, an electronic copy of the Master Plan and Narrative including the Conditions of Approval shall be submitted to the Planning Department for final approval.
2. The Development shall meet all adopted Town of Clayton Unified Development Code (UDC) requirements, Town of Clayton Engineering and Stormwater design standards, and the North Carolina Fire Code and NFPA Fire standards, except where specifically modified by the approved master plan.
3. The Development shall be constructed in substantial conformance with the Master Plan and Master Plan Narrative as approved by the Clayton Town Council.
4. All parcels subject to the Conditional Zoning and Master Plan shall be annexed into the Town prior to any subsequent development approvals.
5. The developer will be required to pay their proportional share of the Wilsons Mills Fire District Capital Debt to the Town prior to the effective date of the Annexation.
6. Uses in the development shall be limited to single-family detached residential homes, and any allowed residential accessory uses within the Town of Clayton Unified Development The Planning Director may administratively approve up to 10% modification to the mix of residential units through an Administrative Amendment. Any change in the mix of residential units above 10%, or any increase in the number of seats in the Assembly use or any increase in the number of rooms for overnight guests shall require approval by Town Council, following the Conditional Zoning process.
7. The following standards shall apply to the Development:
 - Maximum Residential Units: 139
 - Maximum Density: 2.6 Dwelling Units per Acre
 - Total Site Impervious Surface Area: 36%
 - Minimum Lot Size: 6,500 Square Feet
 - Minimum Building Setbacks:
Front Setback: 21.5 Feet
Setback from Sidewalk: 25 Feet

- Side Setback: 6 Feet
- Corner Side Setback: 10 Feet
- Rear Setback: 15 Feet
- Maximum Building Height: 35 Feet

8. The Town of Clayton shall be the electric provider for this project.

9. Tree protection fencing must be installed at the clearing limits to maximize preservation of existing vegetation.

10. A gated emergency access with a Knox Box meeting Town of Clayton Fire Department standards connecting the Cul-De-Sac on Summer Loop to Glen Laurel Road shall be provided.

11. Required frontage improvements along Glen Laurel Road and Vinson Road will be made in phases that correlate with the driveway connections to those existing roadways in the respective phase.

12. The following transportation improvements, in accordance with the recommendation in the TIA and approval by NCDOT, shall be constructed prior to the approval of the final plat for the first phase of the development:

Glen Laurel and Vinson Road Intersection

- According to NCDOT Congestion Management Section, the signal improvement at this intersection will be completed by NCDOT. The development team will discuss the timing of these improvements with NCDOT.

Glen Laurel Road at Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and northbound and southbound left-turn lanes on Glen Laurel Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

Vinson Road and Proposed Site Driveway:

- Provide one ingress and one egress lane on the eastbound and westbound approaches of the Proposed Site Driveway with 100 feet of internal protected stems and an eastbound left-turn lane on Vinson Road consisting of a minimum of 100-foot full width storage and the appropriate deceleration and taper lengths as prescribed by the NCDOT Geometric Turn Lane detail 12.0.

13. The following Architectural Standards shall be required to be met for the Single-Family Homes:

- All units to be 1 and 2 story with a variety of Craftsman, Colonial and Transitional themed elevations. Home plans of the same elevation shall not be side by side or directly across from one another.
- Exterior color packages will enhance variety of color throughout the neighborhood and will not be duplicated side by side.
- Siding elements to include a mix of premium vinyl siding with varying patterns such as lap siding, shake, and board and batten materials per architectural elevations.
- All build facades to include a variety of craftsman columns with masonry, square and round columns per elevation.
- Each home will have either a front porch or covered stoop element with a front lead walk that connects to the driveway.
- Four vehicular parking spaces to be provided on each lot, two-car front loaded garage spaces

(decorative garage door with glass windows and carriage details) with two parking spaces on the driveway.

- Side roof eaves to be a minimum 10" overhang.
- All front building facades to require a goal of 25% masonry elements such as Stone/brick accents of the portion of the house excluding the garage door(s).
- Architectural style shingles to be used.
- Side or rear patios to be provided on all units for outdoor living as well as optional covered porches available per plan.

14. To the extent of any conflict between the Master Plan, Master Plan Narrative and these conditions, these conditions shall control.

SECTION 5. That this ordinance shall become effective immediately upon its adoption.

Duly adopted this 18th day of September 2023, while in regular session.

Jody L. McLeod
Mayor

ATTEST:

APPROVED AS TO FORM:

Heidi L. Holland, CMC and NCCMC
Town Clerk

Jim Cauley
Town Attorney

**APPROVAL OF A RESOLUTION GRANTING WASTEWATER TREATMENT CAPACITY
2022-125-CZM: SUMMER GLEN**

WHEREAS, the Town of Clayton operates a wastewater treatment plant known and permitted as the "Little Creek Water Reclamation Facility"; and,

WHEREAS, said facility is permitted to treat a maximum average of 2.5 million gallons daily; and,

WHEREAS, the Town of Clayton holds several interlocal agreements which secure additional wastewater treatment capacity from other available sources; and,

WHEREAS, the Town of Clayton is constructing a new wastewater treatment facility (Sam's Branch Water Reclamation Facility) permitted to treat up to 6 million gallons daily and expected to be completed in 2025; and

WHEREAS, the North Carolina Department of Environment Quality (NCDEQ) regulates, reviews, and permits flow tributary to newly extended or installed wastewater treatment collection facilities tributary to the Town of Clayton system; and,

WHEREAS, flow from sanitary sewer customers tributary to existing lines owned and operated as part of the Town of Clayton is bound to abide by the permitted average daily flow at the Little Creek Water Reclamation Facility, or Sam's Branch Water Reclamation Facility, in conjunction with other available sources and consistent with interlocal agreements regarding wastewater treatment.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE TOWN COUNCIL FOR THE TOWN OF CLAYTON that the following is found:

1. The Town of Clayton has, according to the most recent accounting, sufficient excess, and unallocated treatment capacity to approve additional allocation subject to the completion the Sam's Branch Wastewater Reclamation Facility.
2. Such available capacity may be made available to users in accordance with regulatory and legal parameters established to ensure satisfactory treatment plant operation.
3. A total allocation for wastewater treatment capacity is granted in the amount of 34,750 gallons per day (GPD) to Summer Glen (2022-125-CZM).
4. The allocation for wastewater treatment capacity **will not be immediately available**. The Town of Clayton will not consider the public utility system for Summer Glen for acceptance or maintenance, or any portion thereof, until November 1, 2024.
5. The Town Council will only consider acceptance of the public utility system at the recommendation of the Engineering Director, or their designee, following a satisfactory

inspection, certification by the applicable regulatory agencies, and approval of as-built drawings.

6. No public utility system shall be put into service prior to acceptance by the Town Council and any applicable regulatory requirements.
7. Allocation for wastewater treatment capacity will be allotted accordingly unless otherwise modified by the Engineering Director due to treatment capacity availability and regulatory requirements at time of request for public utility acceptance. In the event treatment capacity is unavailable at time of request for public utility acceptance, the Engineering Director will make a good faith effort to execute the project as soon as capacity is available.
8. Said allocation is approved subject to and conditioned upon review and approval of all required regulatory processes.
9. Said allocation is non-transferable, non-assignable, and made for the projects as described and for the noted location unless explicitly approved by the Town of Clayton.
10. Said allocation may be revoked or reclaimed in accordance with the policies of the Town of Clayton as adopted or amended now or in the future. No property right is conferred with the granting of an allocation except as otherwise explicitly allowed by policy, ordinance, or action of the Town of Clayton.
11. Said allocation is subject to payment of applicable fees in accordance with adopted ordinances, policies, and fee schedules of the Town of Clayton.
12. Said allocation is subject to expiration if the project has not progressed in construction plan approval, building permit approval, or on-site construction within 12 months of award of the allocation. Upon request of the applicant and at the discretion of the Engineering Director, an allocation may be extended for one twelve (12) month period.

Duly adopted this 18th day of September 2023, while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi L. Holland, CMC, NCCMC
Town Clerk



Regular Town Council Meeting Agenda Cover Sheet

Meeting Date

September 18, 2023

Agenda Location

NEW BUSINESS

Item Title

Clayton to Raleigh Pump Station Improvements Project Bid Award

Presenter(s)

Shannon Poole - Engineering Technician

Suggested Action

Approval of Bid Award

Suggested Action (2): Adoption of Resolution

Strategic Priorities Alignment



☐
Think Clayton
(Administrative)



☐
Think Arts &
Culture



☐
Think
Downtown



☐
Think
Economic
Development



☐
Think Land
Use &
Housing



☐
Think
Mobility



☐
Think Parks,
Recreation
& Natural
Resources



☒
Think Public
Services &
Infrastructure

Public Hearing: No

If Approved, Will Document Require Recordation? Yes

Does This Item Require a Communication Plan?

- ☐ Public Hearing (Required by GS)
- ☐ Newspaper Notice (Required by GS)
- ☐ Public Forum/Input Session
- ☐ E-News Distribution
- ☐ Social Media

- ☐ Public Hearing (Not Required by GS)
- ☐ Newspaper Notice (Not Required by GS)
- ☐ Press Release
- ☐ Website
- ☐ Survey

☐ Special Mailing

☐ None Required

Summary

On August 16, 2023, staff received sealed bids for Clayton to Raleigh Pump Station Improvements project. This project includes expanding the Clayton to Raleigh pump station to convey a portion of the Town's raw wastewater flow to the City of Raleigh's Neuse River Resource Recovery Facility. This pump station is located directly adjacent to the Sam's Branch WRF site. The capacity expansion will allow the Town to fully utilize its contractual treatment capacity with the City of Raleigh and manage wastewater flows until the Sam's Branch WRF comes online. The project improvements will include mechanical, electrical and structural components. Three bids were received, Thalle Construction Company, TA Loving Company and Carolina Civilworks Inc. The lowest bidder, Carolina Civilworks, Inc. bid was incomplete and was deemed non-responsive, therefore was rejected. Carolina Civilworks, Inc. was notified in writing. Thalle Construction Company was the next lowest, responsive/responsible bidder with a bid in the amount of \$2,217,919.04

Recommendation

Per Town of Clayton Purchasing Policies and North Carolina General Statutes, Construction projects over \$500,000 require formal bid procedures, which includes award of the contract from Town Council. Town staff and consultant HDR have verified all the necessary documents are in order and recommend awarding the contract to Thalle Construction Co for a total contract of \$2,217,919.04. Proposed contract is based on standard Town construction contract and has been reviewed by the Town Procurement Manager. Contract time is 330 calendar days to substantial completion. Staff request Town Council to authorize Town Manager or designee to execute construction contract and any change orders required to deliver the project within budget.

Funding Source

N/A

Corresponding Documentation

[Clayton to Raleigh Pump Station Improvements Bid Award Recommendation Letter 2023-09-05](#)

[CRPS Certified Bid Tab issued 2023-08-18](#)

[Thalle Construction Bid](#)

[sMizell MWBE Approval Letter](#)

[Clayton to Raleigh Award of Bid Resolution](#)

Submitted By: Shannon Poole, Engineering

Reviewed By:

Joshua Baird, Engineering Director

Rich Cappola, Town Manager

Heidi Holland, Town Clerk

Approved - Sep 13 2023

Approved - Sep 14 2023

Approved - Sep 14 2023



September 5, 2023

Mr. Joshua Baird, P.E.
Engineering Director
Town of Clayton
Engineering Department
111 East Second Street, Clayton, North Carolina 27520

Reference: Clayton to Raleigh Pump Station Improvements
Town of Clayton Bid # 700-ENG-2023-16
HDR Project No. 10301351

Dear Mr. Baird:

On August 16, 2023, at 2:00 p.m., three bids were received, opened, and publicly read aloud for the Clayton to Raleigh Pump Station Improvements project. The project was bid as a single prime general contract with a Total Bid Price consisting of the sum of all Lump Sum, Cash Allowance and Unit Price Bid Items described in the bid documents. The attached bid tabulation summarizes the results of this bid.

Bid Analysis

The apparent low bidder, Carolina Civilworks, Inc., upon review of their bid submittal by both HDR and the Town of Clayton, was found to be non-responsive to the requirements of the bid documents, including:

- Non-Collusive affidavit was not provided.
- Section 1.02 of the Qualification Statement was incomplete.
- Safety Certifications were incomplete.
- Minority Business Enterprise/Women Business Enterprise supplements were not fully provided.
- Unit Price Bids were submitted with values of zero.

The next lowest bidder, whose bid was found to be responsive and comply with the prescribed bid requirements, was Thalle Construction Co., Inc.

We find the bids to have been competitively solicited and received. The Town is in possession of the original bid documents and we have attached a copy of the certified bid tabulation. A copy of the certified bid tabulation has also been provided to the bidders.

Conclusion/Recommendation

Thalle Construction Co., Inc.'s bidder's license number was verified and appears to be in good standing.

We recommend that the Town of Clayton's legal counsel review the information provided to confirm these assessments from the legal perspective. We also recommend the Town confirm with any funding source or agency that this project and procurement process comply with any funding requirements.

hdrinc.com 555 Fayetteville Street, Suite 900, Raleigh, NC 27601-3034
(919) 232-6600



Mr. Joshua Baird, P.E.
September 5, 2023
Page 2

We recommend award of the Clayton to Raleigh Pump Station Improvements project to Thalle Construction Co., Inc. for the Total Bid Price of \$2,217,919.04.

The bidders, per the bidding documents, are required to honor their bids for 60 days after closing time from receipt of bids. Thus, the bid remains open until October 15, 2023.

Please let us know if you have any questions.

Sincerely,

HDR Engineering, Inc. of the Carolinas

A handwritten signature in blue ink, appearing to read 'Stephen J. Brown', written over a horizontal line.

Stephen J. Brown, PE
Project Manager

cc: Shaun Mizell, CLGPO, CPCM, Procurement, Contracts and MWBE Manager, Town of Clayton

Enclosures: Bid Tabulation dated August 18, 2023, prepared by HDR

Town of Clayton, North Carolina
Clayton to Raleigh Pump Station Improvements

Bid # 700-ENG-2023-16

HDR Project No. 10301351

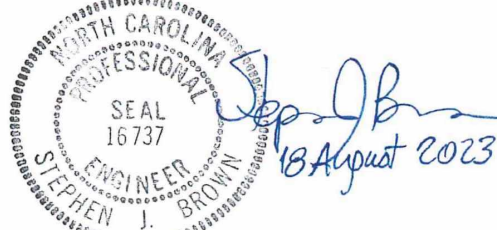
Bid Tabulation - Bid Date: August 16, 2023

Certification: THIS TABULATION OF BIDS IS CERTIFIED TO BE AN ACCURATE TABULATION OF BIDS RECEIVED FOR THE ABOVE REFERENCED PROJECT.

Bidder	TA Loving Company		Thalle Construction Co., Inc.		Carolina Civilworks, Inc.	
Lump Sum Price						
Lump Sum Bid Price -Pump Station Improvements Complete	\$1,438,401.59		\$1,354,230.11		\$1,475,524.45	
Lump Sum for Pumps and Variable Frequence Drives-Vendor Proposal	\$435,565.86		\$435,565.86		\$435,565.86	
Total of all Lump Sum Bid Items	\$1,873,967.45		\$1,789,795.97		\$1,911,090.31	
Cash Allowances						
Lump Sum for Cash Allowance 1 - SCADA Integration	\$77,427.55		\$77,427.55		\$77,427.55	
Lump Sum for Cash Allowance 2 - Owner's Contingency	\$100,000.00		\$100,000.00		\$100,000.00	
Total of all Cash Allowance Bid Items	\$177,427.55		\$177,427.55		\$177,427.55	
Unit Price Bids						
	Unit Price	Total	Unit Price	Total	Unit Price	Total
Influent Bypass Pumping- per week for 8 weeks	\$60,400.00	\$483,200.00	\$29,836.79	\$238,694.32	\$0.00	\$0.00
Backup Pumping - per day for 15 Days	\$6,027.00	\$90,405.00	\$800.08	\$12,001.20	\$0.00	\$0.00
Total of All Unit Price Bid Items	-	\$573,605.00	-	\$250,695.52	-	\$0.00
Total Bid Price (Lump Sum + Cash Allowance + Unit Prices)						
Total Bid Price	\$2,625,000.00		\$2,217,919.04		\$2,088,517.86	

This Bid Tabulation does not represent a recommendation of award.

HDR Engineering, Inc. of the Carolinas
Stephen J. Brown, PE
Project Manager



Bid # 700-ENG-2023-16, Clayton to Raleigh Pump Station Improvements

Bid Tabulation

Town of Clayton, North Carolina
Clayton to Raleigh Pump Station Improvements

Bid # 700-ENG-2023-16

HDR Project No. 10301351

Bid Tabulation - Bid Date: August 16, 2023

Certification: THIS TABULATION OF BIDS IS CERTIFIED TO BE AN ACCURATE TABULATION OF BIDS RECEIVED FOR THE ABOVE REFERENCED PROJECT.

Bidder	TA Loving Company		Thalle Construction Co., Inc.		Carolina Civilworks, Inc.	
Lump Sum Price						
Lump Sum Bid Price -Pump Station Improvements Complete	\$1,438,401.59		\$1,354,230.11		\$1,475,524.45	
Lump Sum for Pumps and Variable Frequency Drives-Vendor Proposal	\$435,565.86		\$435,565.86		\$435,565.86	
Total of all Lump Sum Bid Items	\$1,873,967.45		\$1,789,795.97		\$1,911,090.31	
Cash Allowances						
Lump Sum for Cash Allowance 1 - SCADA Integration	\$77,427.55		\$77,427.55		\$77,427.55	
Lump Sum for Cash Allowance 2 - Owner's Contingency	\$100,000.00		\$100,000.00		\$100,000.00	
Total of all Cash Allowance Bid Items	\$177,427.55		\$177,427.55		\$177,427.55	
Unit Price Bids						
	Unit Price	Total	Unit Price	Total	Unit Price	Total
Influent Bypass Pumping- per week for 8 weeks	\$60,400.00	\$483,200.00	\$29,836.79	\$238,694.32	\$0.00	\$0.00
Backup Pumping - per day for 15 Days	\$6,027.00	\$90,405.00	\$800.08	\$12,001.20	\$0.00	\$0.00
Total of All Unit Price Bid Items	-	\$573,605.00	-	\$250,695.52	-	\$0.00
Total Bid Price (Lump Sum + Cash Allowance + Unit Prices)						
Total Bid Price	\$2,625,000.00		\$2,217,919.04		\$2,088,517.86	

This Bid Tabulation does not represent a recommendation of award.

HDR Engineering, Inc. of the Carolinas
Stephen J. Brown, PE
Project Manager



Bid # 700-ENG-2023-16, Clayton to Raleigh Pump Station Improvements

Bid Tabulation

Addendum No. 1



July 26, 2023

Clayton to Raleigh Pump Station Improvements

Bid # 700-ENG-2023-16

Addendum No. 1

Please note that this addendum is for changes and/or clarifications to the Bid Documents.

Bid Changes

See Attachment 1 - Revisions, Additions and Clarifications to the Bid Documents.

This addendum has been acknowledged and signed by an authorized representative of the firm and must be returned with your bid. **Failure to do so will cause your bid to be rejected:**

By: 
(Signature)

Name: Larry A. Fantozzi
(Printed)

Title: Executive Vice President

Date: 8/16/2023

Addendum No. 2



August 8, 2023

Clayton to Raleigh Pump Station Improvements

Bid # 700-ENG-2023-16

Addendum No. 2

Please note that this addendum is for changes and/or clarifications to the Bid Documents.

Bid Changes

See Attachment 1 - Revisions, Additions and Clarifications to the Bid Documents.

This addendum has been acknowledged and signed by an authorized representative of the firm and must be returned with your bid. **Failure to do so will cause your bid to be rejected:**

By: 
(Signature)

Name: Larry A. Fantozzi
(Printed)

Title: Executive Vice President

Date: 8/16/2023

Addendum No. 3



August 14, 2023

Clayton to Raleigh Pump Station Improvements

Bid # 700-ENG-2023-16

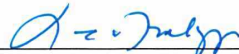
Addendum No. 3

Please note that this addendum is for changes and/or clarifications to the Bid Documents.

Bid Changes

See Attachment 1 - Revisions, Additions and Clarifications to the Bid Documents.

This addendum has been acknowledged and signed by an authorized representative of the firm and must be returned with your bid. **Failure to do so will cause your bid to be rejected:**

By: 
(Signature)

Name: Larry A. Fantozzi
(Printed)

Title: Executive Vice President

Date: 8/16/2023

BID FORM

FOR CONSTRUCTION CONTRACT

CLAYTON-TO-RALEIGH PUMP STATION IMPROVEMENTS
TOWN OF CLAYTON, NORTH CAROLINA
HDR PROJECT NO. 10301351

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Town of Clayton, North Carolina
111 E Second Street
Clayton, NC 27520

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. List of Proposed Subcontractors;
- C. List of Proposed Suppliers;
- D. Non-Collusive Affidavit
- E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
- F. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- G. Attach a copy of the bidders North Carolina General Contractors License;
- H. Required Bidder Qualification Statement with supporting data;
- I. Identification of Minority Business Participation form;
- J. Town of Clayton "Listing of the Good Faith Effort" Affidavit A or "Intention to Perform Contract with Own Workforce" Affidavit B, as applicable – Town of Clayton Minority Participation (00 44 13);
- K. E-Verify Affidavit (00 45 13);
- L. NC Division of Water infrastructure MBE/WBE (DBE) Compliance Supplement (00 73 50A); and

M. American Iron and Steel Certification (00 73 50E).

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

3.01 Lump Sum Bids

A. Bidder will complete the Work in accordance with the Contract Documents for the following lump sum (stipulated) price(s), together with any unit prices indicated in Paragraph 3.02:

1. Lump Sum Price (Single Lump Sum)

Lump Sum Bid Price – Pump Station Improvements Complete	\$ 1,354,230.11
Lump Sum for Pumps and Variable Frequency Drives (VFDs) – Vendor Proposal (See Appendix A)	\$ 435,565.86
Total of all Lump Sum Bid Items	\$ 1,789,795.97

Xylem has been selected to provide the Pumps and Variable Frequency Drives (VFDs). Xylem's scope of work is included in Appendix A. The Contractor is responsible for providing a fully functioning project.

B. All specified cash allowance(s) are included in the price(s) set forth below, and have been computed in accordance with Paragraph 13.02 of the General Conditions.

Lump Sum for Cash Allowance 1 – SCADA Integration (See Appendix B)	\$ 77,427.55
Lump Sum for Cash Allowance 2 – Owner's Contingency	\$ 100,000.00
Total of all Cash Allowance Bid Items	\$ 177,427.55

3.02 Unit Price Bids

A. Bidder will perform the following Work at the indicated unit prices:

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Amount
1	Influent Bypass Pumping	Week	8	\$ 29,836.79	\$ 238,694.32
2	Backup Pumping	Day	15	\$ 800.03	\$ 12,001.20
Total of All Unit Price Bid Items					\$ 250,695.52

B. Bidder acknowledges that:

- each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
- the estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

3.03 *Total Bid Price (Lump Sum, Cash Allowance and Unit Prices)*

Total Bid Price (Total of all Lump Sum, Cash Allowance and Unit Price Bid Items)	\$ 2,217,919.04
--	--------------------

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of days indicated in the Agreement.
- 4.02 Bidder agrees that the Work will be substantially complete within **330 calendar days** after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **365 calendar days** after the date when the Contract Times commence to run. This time of completion includes equipment procurement lead time.
- 4.03 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 *Bid Acceptance Period*
- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 5.02 *Instructions to Bidders*
- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 5.03 *Receipt of Addenda*
- A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date
1	July 26, 2023
2	August 8, 2023
3	August 14, 2023

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

- 6.01 *Bidder's Representations*
- A. In submitting this Bid, Bidder represents the following:
1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.

2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

Thalle Construction Co., Inc.

(typed or printed name of organization)

By:



(individual's signature)

Name:

Larry A. Fantozzi

(typed or printed)

Title:

Executive Vice President

(typed or printed)

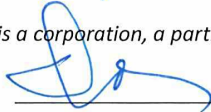
Date:

8/16/2023

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:



(individual's signature)

Name:

Dennis Brian Parces

(typed or printed)

Title:

Assistant Secretary, Assistant Vice President

(typed or printed)

Date:

8/16/2023

(typed or printed)

Bidder's Address for giving notices:

900 NC Hwy 86 North
Hillsborough, NC 27278

Bidder's Contact Person:

Name:

Stephen E. Kohler

(typed or printed)

Title:

President and COO

(typed or printed)

Phone:

919-245-1490

Email:

skohler@thalle.com

Address:

900 NC Hwy 86 North
Hillsborough, NC 27278

State of Incorporation: NEW YORK

Bidder's Contractor License No.: (if applicable) 35203

EJCDC® C-410, Bid Form for Construction Contract.

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and American Society of Civil Engineers. All rights reserved.

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THALLE
CONSTRUCTION COMPANY
A TULLY GROUP COMPANY

BOARD OF DIRECTORS CORPORATE RESOLUTION

THALLE CONSTRUCTION CO., INC.
900 NC Highway 86 North
Hillsborough, NC 27278

March 3, 2023

A duly constituted meeting of the Board of Directors of Thalle Construction Co., Inc., a corporation organized under the laws of the State of New York was held on March 3, 2023, at which meeting a quorum was present and voting throughout.

WHEREAS, Peter K. Tully is the CEO of Thalle Construction Co., Inc., Stephen E. Kohler is the President and COO of Thalle Construction Co., Inc., Larry A. Fantozzi is the Executive Vice President of Thalle Construction Co., Inc., and Dennis Brian Parces is the Assistant Secretary and Assistant Vice President of Thalle Construction Co., Inc.

IT IS HEREBY RESOLVED that Peter K. Tully, Stephen E. Kohler, Larry A. Fantozzi, and Dennis Brian Parces of Thalle Construction Co., Inc. are authorized, empowered, and directed to execute on behalf of Thalle Construction Co., Inc. for bid and contract documents.

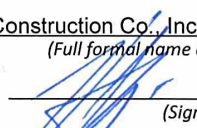
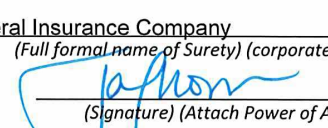
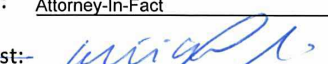
In witness whereof, I have hereunto set my hand and affixed the seal of the Corporation.



THALLE CONSTRUCTION CO., INC.

Dennis Brian Parces
Assistant Secretary
Assistant Vice President

BID BOND (PENAL SUM FORM)

Bidder Name: Thalle Construction Co., Inc. Address (principal place of business): 900 NC Highway 86 North Hillsborough, NC 27278	Surety Name: Federal Insurance Company Address (principal place of business): 202B Hall's Mill Road Whitehouse Station, NJ 08889
Owner Name: Town of Clayton, N.C. Address: 111 E Second Street Clayton, NC 27520	Bid Project: Clayton-to-Raleigh Pump Station Improvements Bid Due Date: August 2, 2023
Bond Penal Sum: Five Percent Of The Total Amount Bid (5%) Date of Bond: August 2, 2023	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder <u>Thalle Construction Co., Inc.</u> (Full formal name of Bidder)	Surety <u>Federal Insurance Company</u> (Full formal name of Surety) (corporate seal)
By:  (Signature)	By:  (Signature) (Attach Power of Attorney)
Name: <u>Peter K. Tully</u> (Printed or typed)	Name: <u>Jaelyn Thomas</u> (Printed or typed)
Title: <u>Chief Executive Officer</u>	Title: <u>Attorney-In-Fact</u>
Attest:  (Signature)	Attest:  (Signature)
Name: <u>Kenneth W. Tully</u> (Printed or typed)	Name: <u>William A. Drayton Jr.</u> (Printed or typed)
Title: <u>Secretary</u>	Title: <u>Witness as to Surety</u>
Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

EJCDC® C-430, Bid Bond (Penal Sum Form).

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and American Society of Civil Engineers. All rights reserved.

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ACKNOWLEDGEMENT OF CONTRACTOR - IF A CORPORATION

STATE OF NEW YORK
COUNTY OF QUEENS

ON THE 2nd DAY OF August, 2023 BEFORE ME PERSONALLY APPEARED Peter K. Tully TO ME KNOWN, WHO, BEING BY ME DULY SWORN, DID DEPOSE AND SAY; THAT (S)HE IS THE CHIEF EXECUTIVE OFFICER OF Thalle Construction Co., Inc. THE CORPORATION THAT EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT SUCH CORPORATION EXECUTED THE SAME.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL, AT MY OFFICE IN THE ABOVE COUNTY, THE DAY AND YEAR WRITTEN ABOVE.



Notary Public

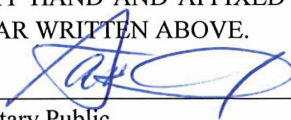
CAROL R. GORDON
Notary Public, State of New York
No. 01GO4680187
Qualified in Queens County
Commission Expires April 30, 2026

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF NEW JERSEY
COUNTY OF MORRIS

ON THE 2nd DAY OF August, 2023 BEFORE ME PERSONALLY APPEARED Jaclyn Thomas TO ME KNOWN, WHO BEING BY ME DULY SWORN, DID DEPOSE AND SAY; THAT (S)HE IS THE ATTORNEY-IN-FACT OF Federal Insurance Company, THE CORPORATION THAT EXECUTED THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT SUCH CORPORATION EXECUTED THE SAME.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL, AT MY OFFICE IN THE ABOVE COUNTY, THE DAY AND YEAR WRITTEN ABOVE.



Notary Public

Sandy S. James-Brown
Notary Public
State of New Jersey
My commission expires September 19, 2028

FEDERAL INSURANCE COMPANY
STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS
Statutory Basis
December 31, 2022
(in thousands)

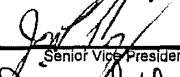
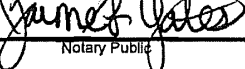
ASSETS		LIABILITIES AND SURPLUS TO POLICYHOLDERS	
Cash and Short Term Investments	\$ 123,147	Outstanding Losses and Loss Expenses	\$ 9,263,034
United States Government, State and Municipal Bonds	3,769,695	Reinsurance Payable on Losses and Expenses	1,723,796
Other Bonds	5,964,508	Unearned Premiums	2,632,590
Stocks	245,498	Ceded Reinsurance Premiums Payable	380,182
Other Invested Assets	<u>1,979,194</u>	Other Liabilities	<u>471,528</u>
TOTAL INVESTMENTS	<u>12,082,042</u>	TOTAL LIABILITIES	<u>14,471,130</u>
Investments in Affiliates		Capital Stock	20,980
Great Northern Ins. Co.	422,405	Paid-In Surplus	2,711,474
Vigilant Ins. Co.	361,723	Unassigned Funds	<u>1,545,403</u>
Chubb Indemnity Ins. Co.	185,044	SURPLUS TO POLICYHOLDERS	<u>4,277,857</u>
Chubb National Ins. Co.	194,379		
Other Affiliates	124,046		
Premiums Receivable	1,859,933		
Other Assets	<u>3,519,415</u>		
TOTAL ADMITTED ASSETS	<u>\$ 18,748,987</u>	TOTAL LIABILITIES AND SURPLUS	<u>\$ 18,748,987</u>

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners. At December 31, 2022, investments with a carrying value of \$512,747,632 were deposited with government authorities as required by law.

STATE OF PENNSYLVANIA
COUNTY OF PHILADELPHIA

John Taylor, being duly sworn, says that he is Senior Vice President of Federal Insurance Company and that to the best of his knowledge and belief the foregoing is a true and correct statement of the said Company's financial condition as of the 31 st day of December, 2022.

Sworn before me this March 16, 2023


Senior Vice President

Notary Public

September 19, 2023
My commission expires

Commonwealth of Pennsylvania - Notary Seal
Jaime L. Yates, Notary Public
Philadelphia County
My commission expires September 19, 2023
Commission number 1357070
Member, Pennsylvania Association of Notaries

CHUBB

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Thomas MacDonald, Marisol Mojica, Edward Reilly, Krystal L. Stravato, Jaclyn Thomas and Kevin T. Walsh Jr. of Whippany, New Jersey; Andrea E. Gorbett of Jericho, New York; Neil C. Donovan, and Gerard Leib of Berwyn, Pennsylvania -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 6th day of April, 2022.

Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney

Stephen M. Haney, Vice President



STATE OF NEW JERSEY
County of Hunterdon

SS.

On this 6th day of April, 2022 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 16, 2024

Katherine J. Adelaar

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this August 2, 2023.



Dawn M. Chloros

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

2.01B List of Proposed Subcontractors;

Subcontractors

<i>Company Name:</i>	<i>Operation(s) of Work:</i>
Crumb Construction	Pump Watch
Bitting Electric	Electrical

2.01C. List of Proposed Suppliers;

Suppliers

<i>Company Name:</i>	<i>Operation(s) of Work:</i>
Knight Chow Construction	Pipe and Fittings
Xylem	Pump and VFD
Custom Controls Unlimited	Controls

NON-COLLUSIVE AFFIDAVIT

State of NORTH CAROLINA)
County of ORANGE) ss.

Larry A. Fantozzi being first duly sworn,
deposes and says that:

- (1) He/she is the Executive Vice President
(Owner, Partner, Officer, Representative or Agent)
of Thalle Construction Co., Inc., the BIDDER that has submitted the
attached BID PROPOSAL;
- (2) He is fully informed respecting the preparation and contents of the attached BID PROPOSAL and of
all pertinent circumstances respecting such BID PROPOSAL;
- (3) Such BID PROPOSAL is genuine and is not a collusive or sham BID PROPOSAL;
- (4) Neither the said BIDDER nor any of its officers, partners, owners, agents, representatives, employees
or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed,
directly or indirectly, with any other BIDDER, firm, or person to submit a collusive or sham BID
PROPOSAL in connection with the Contract for which the attached BID PROPOSAL has been
submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly
or indirectly, sought by agreement or collusion, or communication, or conference with any BIDDER,
firm, or person to fix the price or prices in the attached BID PROPOSAL or of any other BIDDER, or to
fix any overhead, profit, or cost elements of the BID PROPOSAL price or the BID PROPOSAL price of
any other BIDDER, or to secure through any collusion, conspiracy, connivance, or unlawful agreement
any advantage against The Town of Clayton, or any person interested in the proposed Contract;
- (5) The price or prices quoted in the attached BID are fair and proper and are not tainted by any collusion,
conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents,
representatives, owners, employees or parties in interest, including this affidavit.

Thalle Construction Co., Inc.

BIDDER

BY *[Signature]*

ITS Executive Vice President

(Title)

Subscribed and sworn to before me this 16 day of August, 2023

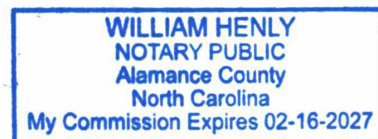
[Signature]
Notary Public

ALAMANCE

County

My commission expires 02-16-2027

END OF AFFIDAVIT



Town of Clayton Bidder Documents



NORTH CAROLINA

Department of the Secretary of State

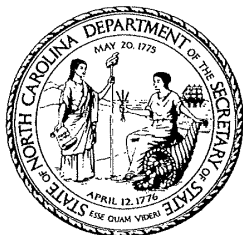
CERTIFICATE OF AUTHORIZATION

I, ELAINE F. MARSHALL, Secretary of State of the State of North Carolina, do hereby certify that

THALLE CONSTRUCTION CO., INC.

a corporation organized under the laws of New York was authorized to transact business in the State of North Carolina by issuance of a certificate of authority on the 16th day of March, 1995.

I FURTHER certify that the said corporation's certificate of authority is not suspended for failure to comply with the Revenue Act of the State of North Carolina; that the said corporation's certificate of authority is not revoked for failure to comply with the provisions of the North Carolina Business Corporation Act; that its most recent annual report required by G.S. 55-16-22 has been delivered to the Secretary of State; and that a certificate of withdrawal has not been issued in the name of the said corporation as of the date of this certificate.



Scan to verify online.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Raleigh, this 14th day of August, 2023.

Elaine F. Marshall

Secretary of State

Certification# 117469485-1 Reference# 20364518- Page: 1 of 1
Verify this certificate online at <https://www.sosnc.gov/verification>

Expiration Date

12/31/2023

License No.

35203

North Carolina

Licensing Board for General Contractors

This is to Certify That:

Thalle Construction Co., Inc.

Hillsborough, NC

is duly registered and entitled to practice

General Contracting

Limitation: Unlimited

Classification: Unclassified

until

December 31, 2023

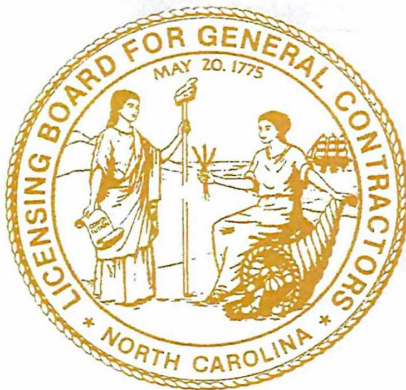
when this Certificate expires.

Witness our hands and seal of the Board.

Dated, Raleigh, N.C.

01/01/2023

This certificate may not be altered.



Lisa Piercy
Chairman

C. Frank Wiesner
Secretary-Treasurer

00 43 33

PROPOSED MAJOR EQUIPMENT FORM

PART 1 - LANGUAGE FOR THE INSTRUCTIONS TO BIDDERS

11.02 Submit, in accordance with Paragraph 11.03.C hereof, the following:

- A. Completed "Proposed Major Equipment Form" for the materials and equipment required thereon.
- B. A list of the Subcontractors proposed for the following portions of the Work: Electrical, Instrumentation and Controls.

PART 2 - LANGUAGE FOR BID FORM

PART 3 - LANGUAGE OF THE OWNER-CONTRACTOR AGREEMENT

PART 4 - LANGUAGE OF THIS DOCUMENT 00 43 33

- 1) Bidder shall complete and submit this form in accordance with the instructions below and as required by Paragraph 11.02 of the Instructions to Bidders.
- 2) In the table below, Bidder shall indicate the proposed manufacturer and local representative of the associated item(s) proposed for use in the Work, should Bidder be awarded the Contract.
- 3) Indicate on this form only proposed manufacturers that are expressly indicated by name in the Bidding Documents. Owner has the right to consider the Bid non-responsive and may reject the Bid if Bidder indicates: (a) a manufacturer other than those expressly named in the Bidding Documents for that item; (b) no proposed manufacturer and associated local representative for one or more items; or (c) more than one proposed manufacturer or local representative for a given item. However, Owner is not obligated to reject any Bid for the benefit of any Bidder, prospective Supplier, or other individual or entity.
- 4) Owner's right to reject proposed Suppliers is established in Article 11 of the Instructions to Bidders and Paragraph 7.07 of the General Conditions (as may be modified by the Supplementary Conditions).

TABLE OF PROPOSED SUPPLIERS FOR MAJOR ITEMS			
General Description	S p e c i f i c a t i o n s S e c t i	Proposed Manufacturer	Proposed Local Representative
50 Ton RT		Local Rental Provider	Local Rental
320 Excavator		CAT	

HDR Project No. 10301351

Town of Clayton
Clayton to Raleigh Pump Station Improvements
PROPOSED MAJOR EQUIPMENT FORM
00 43 33 - 1

June 28, 2023
Issued for Bid

	o n n o .		
Submersible Wastewater Pumps Xylem Submersible Pump	A p p e n d i x A	Xylem	Rob Tiffin
Variable Frequency Drives (VFD's) Xylem Pump VFD	A p p e n d i x A	Xylem	Rob Tiffin

END OF DOCUMENT

QUALIFICATIONS STATEMENT

ARTICLE 1—GENERAL INFORMATION

1.01 Provide contact information for the Business:

Legal Name of Business:	Thalle Construction Co., Inc.		
Corporate Office			
Name:	Stephen E. Kohler	Phone number:	919-245-1490
Title:	President and COO	Email address:	skohler@thalle.com
Business address of corporate office:	900 NC Hwy 86 North		
	Hillsborough, NC 27278		
Local Office			
Name:	Stephen E. Kohler	Phone number:	919-245-1490
Title:	President and COO	Email address:	skohler@thalle.com
Business address of local office:	10110 FM917, Alvarado, TX 76009		

1.02 Provide information on the Business's organizational structure:

Form of Business:	☐ Sole Proprietorship ☐ Partnership ☒ Corporation		
☐ Limited Liability Company ☐ Joint Venture comprised of the following companies:			
1.			
2.			
3.			
Provide a separate Qualification Statement for each Joint Venturer.			
Date Business was formed:	02/14/1947	State in which Business was formed:	NY
Is this Business authorized to operate in the Project location?		☒ Yes ☐ No ☐ Pending	

1.03 Identify all businesses that own Business in whole or in part (25% or greater), or that are wholly or partly (25% or greater) owned by Business:

Name of business:	Tully Industries, Inc.	Affiliation:	(Parent Company) owns 100% of Thalle Construction Co., Inc.
Address:	127-50 Northern Blvd Flushing, NY 11368		
Name of business:		Affiliation:	
Address:			

EJCDC C-451, Qualifications Statement.

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Name of business:		Affiliation:	
Address:			

1.04 Provide information regarding the Business's officers, partners, and limits of authority.

Name:	PETER K. TULLY	Title:	CEO
Authorized to sign contracts:	☒ Yes ☐ No	Limit of Authority:	\$ UNLIMITED
Name:	STEPHEN E. KOHLER	Title:	PRESIDENT AND COO
Authorized to sign contracts:	☒ Yes ☐ No	Limit of Authority:	\$ UNLIMITED
Name:	LARRY A. FANTOZZI	Title:	EXECUTIVE VICE PRESIDENT
Authorized to sign contracts:	☒ Yes ☐ No	Limit of Authority:	\$ UNLIMITED
Name:	DENNIS B. PARCES	Title:	ASSISTANT SECRETARY/ VICE PRESIDENT

ARTICLE 2—LICENSING

2.01 Provide information regarding licensure for Business:

Name of License:	Thalle Construction Co., Inc.		
Licensing Agency:	NORTH CAROLINA GENERAL CONTRACTING		
License No:	35203	Expiration Date:	12/31/2023
Name of License:			
Licensing Agency:			
License No:		Expiration Date:	

ARTICLE 3—DIVERSE BUSINESS CERTIFICATIONS

3.01 Provide information regarding Business's Diverse Business Certification, if any. Provide evidence of current certification.

Certification	Certifying Agency	Certification Date
☐ Disadvantaged Business Enterprise		
☐ Minority Business Enterprise		
☐ Woman-Owned Business Enterprise		
☐ Small Business Enterprise		
☐ Disabled Business Enterprise		
☐ Veteran-Owned Business Enterprise		
☐ Service-Disabled Veteran-Owned Business		
☐ HUBZone Business (Historically Underutilized) Business		

☐ Other			
☒ None			

ARTICLE 4—SAFETY

4.01 Provide information regarding Business's safety organization and safety performance.

Name of Business's Safety Officer:	William Ryan, Vice President of Risk Management		
Safety Certifications			
Certification Name	ICR 59	Issuing Agency	Expiration
Certified Safety Consultant	ICR 59	New York State Dept of Labor	4/2025
Construction Safety Specialist	ICR 60	NYSDOL	4/2025
Return to Work Specialist	ICR 60	NYSDOL	4/2025
Drug & Alcohol Pren Plan	ICR 60	NYSDOL	4/2025

4.02 Provide Worker's Compensation Insurance Experience Modification Rate (EMR), Total Recordable Frequency Rate (TRFR) for incidents, and Total Number of Recorded Manhours (MH) for the last 3 years and the EMR, TRFR, and MH history for the last 3 years of any proposed Subcontractor(s) that will provide Work valued at 10% or more of the Contract Price. Provide documentation of the EMR history for Business and Subcontractor(s).

Year	2023			2022			2021		
Company	EMR	TRFR	MH	EMR	TRFR	MH	EMR	TRFR	MH
Thalle Construction Co., Inc.	0.82	--	--	0.62	0.45	1,787,160.33	0.62	0.64	1,249,186

ARTICLE 5—FINANCIAL

5.01 Provide information regarding the Business's financial stability. Provide the most recent audited financial statement, and if such audited financial statement is not current, also provide the most current financial statement.

Financial Institution:	Morgan Stanley Wealth Management RC Group		
Business address:	Philip C. Ressa, Managing Director 855 Franklin Avenue, Garden City, NY 11530 Email: Philip.ressa@morganstanley.com, Direct: 516-227-2929		
Date of Business's most recent financial statement:	Confidential not for public or to be published	☒ Attached	
Date of Business's most recent audited financial statement:		☒ Attached	
Financial indicators from the most recent financial statement			
Contractor's Current Ratio (Current Assets ÷ Current Liabilities)	1.93		
Contractor's Quick Ratio ((Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities)	1.58		



May 4th, 2023

Thalle Construction Co., Inc.
900 NC 86 North
Hillsborough, NC 27278

RE: Workers Compensation Experience Modification Rate

To Whom It May Concern:

Please see the following Experience Modification Rates as respects Thalle Construction Co., Inc.:

Effective Date	EMR
3/31/23-24	.82
3/31/22-23	.62
3/31/21-22	.61
3/31/20-21	.73
3/31/19-20	.79

Should you have any questions please contact our office.

Thank you,

Robert Watson

Robert Watson
Account Executive

New York City
450 7th Avenue
Suite 400
New York, NY 10123
Telephone 646.625.7100

Contact us
info@constructionriskpartners.com
constructionriskpartners.com

ARTICLE 6—SURETY INFORMATION

- 6.01 Provide information regarding the surety company that will issue required bonds on behalf of the Business, including but not limited to performance and payment bonds.

Surety Name:	Federal Insurance Company		
Surety is a corporation organized and existing under the laws of the state of:	Indiana		
Is surety authorized to provide surety bonds in the Project location?	☒ Yes ☐ No		
Is surety listed in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" published in Department Circular 570 (as amended) by the Bureau of the Fiscal Service, U.S. Department of the Treasury?			
☒ Yes ☐ No			
Mailing Address (principal place of business):	15 Mountain View Road Warren, NJ 07059		
Physical Address (principal place of business):	15 Mountain View Road Warren, NJ 07059		
Phone (main):	Bonding Agent: American Global LLC Krystal L. Stravato	862-777-8193	Phone (claims): 1-800-CLAIMS-0

ARTICLE 7—INSURANCE

- 7.01 Provide information regarding Business's insurance company(s), including but not limited to its Commercial General Liability carrier. Provide information for each provider.

Name of insurance provider, and type of policy (CLE, auto, etc.):	
Insurance Provider	Type of Policy (Coverage Provided)
Arch Insurance Co	please see the attached COI
Are providers licensed or authorized to issue policies in the Project location?	
☒ Yes ☐ No	
Does provider have an A.M. Best Rating of A-VII or better?	
☒ Yes ☐ No	
Mailing Address (principal place of business):	One Liberty Plaza, 53rd Fl, New York, NY 10006
Physical Address (principal place of business):	One Liberty Plaza, 53rd Fl, New York, NY 10006

EJCDC C-451, Qualifications Statement.

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
08/14/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Construction Risk Partners Campus View Plaza 1250 Route 28, Suite 201 Branchburg, NJ 08876	1-908-566-1010	CONTACT NAME: Robert Watson PHONE (A/C, No, Ext): 646-625-7100 FAX (A/C, No): 646-625-7099 E-MAIL ADDRESS: certs@constructionriskpartners.com
INSURED Thalle Construction Co., Inc. 900 Highway 86 N Hillsborough, NC 27278		INSURER(S) AFFORDING COVERAGE INSURER A: ARCH INS CO 11150 INSURER B: NAVIGATORS INS CO 42307 INSURER C: GREENWICH INS CO 22322 INSURER D: MARKEL AMER INS CO 28932 INSURER E: INSURER F:

COVERAGES

CERTIFICATE NUMBER: 68452912

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☒ LOC OTHER:		11PKG8899912	03/31/23	03/31/24	EACH OCCURRENCE \$ 4,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 250,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 4,000,000 GENERAL AGGREGATE \$ 8,000,000 PRODUCTS - COMP/OP AGG \$ 8,000,000 \$
A	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☒ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY		11PKG8899912	03/31/23	03/31/24	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	☒ UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION \$		MR23EXC724286IV	03/31/23	03/31/24	EACH OCCURRENCE \$ 3,000,000 AGGREGATE \$ 3,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☒ N/A	11WCI8899812 (FL, PA)	03/31/23	03/31/24	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Pollution/Professional		PEC001957717	03/31/23	03/31/24	Each Condition/Agg 10M/10M
D	Excess Liability #1		MKLM1EUE100772	03/31/23	03/31/24	Occurrence/Agg 5M/5M

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Evidence of Coverage.

CERTIFICATE HOLDER

Thalle Construction Co., Inc.

900 Highway 86 N

Hillsborough,, NC 27278

USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD

Sbunsco
68452912

SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
04/18/2023

NAME OF INSURED: Thalle Construction Co., Inc.

Additional Description of Operations/Remarks from Page 1:

Additional Information:

XS2, Policy #: UXP3000001-02, Term: 03/31/23-03/31/24, Carrier: ARCH INC CO,
Limit: Occurrence/Aggregate: \$5M/\$5M

XS3, Policy #: 1000586982231, Term: 03/31/23-03/31/24, Carrier: STARR IND & LIAB CO,
Limit: Occurrence/Aggregate: \$12M/\$12M

SUPP (05/04)

Phone (main):	888-411-2832	Phone (claims):	888-411-2832
---------------	--------------	-----------------	--------------

ARTICLE 8—CONSTRUCTION EXPERIENCE

8.01 Provide information that will identify the overall size and capacity of the Business.

Average number of current full-time employees:	930
Estimate of revenue for the current year:	380M
Estimate of revenue for the previous year:	377M

8.02 Provide information regarding the Business's previous contracting experience.

Years of experience with projects like the proposed project: 76			
As a general contractor:	76	As a joint venturer:	N/A
Has Business, or a predecessor in interest, or an affiliate identified in Paragraph 1.03:			
Been disqualified as a bidder by any local, state, or federal agency within the last 5 years? ☐ Yes ☒ No			
Been barred from contracting by any local, state, or federal agency within the last 5 years? ☐ Yes ☒ No			
Been released from a bid in the past 5 years? ☐ Yes ☒ No			
Defaulted on a project or failed to complete any contract awarded to it? ☐ Yes ☒ No			
Refused to construct or refused to provide materials defined in the contract documents or in a change order? ☐ Yes ☒ No			
Been a party to any currently pending litigation or arbitration? ☒ Yes ☐ No			
Provide full details in a separate attachment if the response to any of these questions is Yes.			

[See attached current claims and litigation.](#)

8.03 List all projects currently under contract in Schedule A and provide indicated information.

8.04 List a minimum of three and a maximum of six projects completed in the last 5 years in Schedule B and provide indicated information to demonstrate the Business's experience with projects similar in type and cost of construction.

8.05 In Schedule C, provide information on key individuals whom Business intends to assign to the Project. Provide resumes for those individuals included in Schedule C. Key individuals include the Project Manager, Project Superintendent, Quality Manager, and Safety Manager. Resumes may be provided for Business's key leaders as well.

ARTICLE 9—REQUIRED ATTACHMENTS

9.01 Provide the following information with the Statement of Qualifications:

- A. If Business is a Joint Venture, separate Qualifications Statements for each Joint Venturer, as required in Paragraph 1.02.
- B. Diverse Business Certifications if required by Paragraph 3.01.
- C. Certification of Business's safety performance if required by Paragraph 4.02.

THALLE

CONSTRUCTION COMPANY

A TULLY GROUP COMPANY

Current Claims and Litigation

Thalle Construction Company v City of Waco, in the 414th Judicial District, McLennan County, Texas.

This is an action by Thalle to recover on various unresolved Requests for Equitable Adjustment (REA arising under Package 1 and Package 2 projects.)

- The Discovery phase of the case is ongoing and there is a tentative trial date to be set for February, 2024.

Should you desire more information, please don't hesitate to reach out to the undersigned directly at 919-245-1490.

Regards,



Dennis B. Parces
Assistant Vice President
Thalle Construction Co., Inc.

- D. Financial statements as required by Paragraph 5.01.
- E. Attachments providing additional information as required by Paragraph 8.02.
- F. Schedule A (Current Projects) as required by Paragraph 8.03.
- G. Schedule B (Previous Experience with Similar Projects) as required by Paragraph 8.04.
- H. Schedule C (Key Individuals) and resumes for the key individuals listed, as required by Paragraph 8.05.
- I. Additional items as pertinent.

This Statement of Qualifications is offered by:

Business: Thalle Construction Co., Inc.
(typed or printed name of organization)

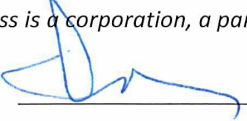
By: 
(individual's signature)

Name: Larry A. Fantozzi
(typed or printed)

Title: Executive Vice President
(typed or printed)

Date: 8/16/2023
(date signed)

(If Business is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: 
(individual's signature)

Name: Dennis Brian Parces
(typed or printed)

Title: Assistant Secretary, Assistant Vice President
(typed or printed)

Address for giving notices:
900 NC Hwy 86 North
Hillsborough, NC 27278

Designated Representative:

Name: Stephen E. Kohler
(typed or printed)

Title: President and COO
(typed or printed)

Address: 900 NC Hwy 86 North
Hillsborough, NC 27278

Phone: 919-245-1490

Email: skohler@thalle.com

Schedule A—Current Projects

Name of Organization	Thalle Construction Co., Inc.				
Project Owner	Town of Clayton	Project Name	Sam's Branch Water Reclamation Facility		
General Description of Project	Wastewater Treatment Facility				
Project Cost	\$179,062,606.17	Date Project Completed	7/8/2025		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Brett Schneider	Danny Linscombe	John Burgin	John Piscitelli	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Louis Duffy	Project Manager	Town of Clayton	919-695-1042	lduffie@townofclaytonnc.org
Designer	Lolita Spencer	Project Administrator	Gannett Fleming, Inc	919-999-3632	lspencer@gfnet.com
Construction Manager	n/a	n/a	n/a	n/a	n/a
Project Owner	Johnston County, NC		Project Name	JC Landfill - Phase 4A and Area 2 Closure	
General Description of Project	Landfill - Phase 4a & Area 2 Closure				
Project Cost	\$12,518,815.00	Date Project Completed			
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Reinaldo Gonzalez	Ryan Coward	John Burgin	Travis Ross	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Brian Beasley	Director	Department of Solid Waste Services	919-938-4752	brian.beasley@johnsonnc.com
Designer	Pieter Scheer, P.E.	Vice President	Smith Gardner, Inc.	(919) 828-0577 x123	pieter@smithgardnerinc.com
Construction Manager	n/a	n/a	n/a	n/a	n/a
Project Owner	City of Round Rock		Project Name	Brushy Creek Emergency Repair of 36-inch Underwater Pipeline	
General Description of Project	Emergency Repairs				
Project Cost	\$1,601,668.35	Date Project Completed	9/3/2023		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Robert Farrow	Paul Donnino	Rox Anna Limon / Viviana Mata	Shayne Childers	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	David Freireich	Chief Utility Engineer	City of Round Rock	512-671-2756	dfreireich@roundrocktexas.gov
Designer	Josh Frisinger	Project Manager	Plummer Associates, Inc	817-806-1700	jfrisinger@plummer.com
Construction Manager	n/a	n/a	n/a	n/a	n/a

Schedule B—Previous Experience with Similar Projects

Name of Organization	Thalle Construction Co., Inc.				
Project Owner	City of Round Rock		Project Name	Brushy Creek Wastewater System East Plant Expansion	
General Description of Project	Wastewater Treatment Plant				
Project Cost	\$108,726,648.42		Date Project Completed	2/13/2023	
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Lance Dixon	Gary Dowdy /Robert Bonner	Viviana Mata	Shayne Childers	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	David Freireich	Chief Utility Engineer	City of Round Rock	512-671-2756	dfreireich@roundrocktexas.gov
Designer	Brian Beach	Project Manager	Plummer Associates, Inc	210-837-2476	bbeach@plummer.com
Construction Manager	n/a	n/a	n/a	n/a	n/a
Project Owner	Orlando Utilities Commission		Project Name	Orlando Utilities Commission SEC Lined Pond	
General Description of Project	Recycle Basin Expansion Pond including: SEC Scrubber Supply Pipeline & (3) large, vertical turbine pumps				
Project Cost	\$25,877,030.55		Date Project Completed	9/30/2019	
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Reinaldo Gonzalez	Ryan Coward	John Burgin	Mike Phillips	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Garfield Blair	Project Engineer	Orlando Utilities Commission	407-434-4288	gblair@ouc.com
Designer	Mohamad Al Hawaree	Engineer	Ardaman & Associates, Inc.	407-855-3860	Malhawaree@ardaman
Construction Manager	n/a	n/a	n/a	n/a	n/a
Project Owner	US Army Corps of Engineers, Fort Worth District		Project Name	USACE Oxbow Valley Storage Sites A&C	
General Description of Project	installation of a wet well in a concrete vault at approximately 42 foot depth, irrigation pump system, temporary river crossing, two weir structures, and storm drainage structures.				
Project Cost	\$29,677,835.68		Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Josh Molina	Roger Williams	n/a	n/a	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Aloysia Brown	Project Manager	USACE	817-504-2527	n/a
Designer	n/a	n/a	n/a	n/a	n/a
Construction Manager	n/a	n/a	n/a	n/a	n/a

Schedule B—Previous Experience with Similar Projects

Name of Organization	Thalle Construction Co., Inc.				
Project Owner	Loudoun Water		Project Name	Beaverdam Creek Dam Modifications and Transfer Pump Station	
General Description of Project	Replacement of existing spillway, extension of existing discharge line and replacement of existing impact basin, construction of new transfer pump station				
Project Cost	\$17,648,465.55		Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Dan Lessy	Josh Davis	n/a	n/a	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Brian Stone	Manager	Loudoun Water	571-291-7700	capitalconstruction@loudounwater.org
Designer	Thomas B. Pursel	Vice President and Northeast Region Construction Services Area Manager for Water/Wastewater	Gannett Fleming Inc.	717.763.7211	tpursel@gfnet.com
Construction Manager					
Project Owner	Indian River County		Project Name	Indian River County Landfill	
General Description of Project	Landfill with lift station, , potable water lines, landfill gas collection wells, pumps and piping, compressor skid and cover, and emergency generator.				
Project Cost	\$13,375,132.86		Date Project Completed	11/4/2019	
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name	Reinaldo Gonzalez	Ben Coward	n/a	Ryan Coward	
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner	Himanshu Mehta	Managing Director	Indian River County	772-770-5111	hmehta@irc.gov
Designer	Kevin Vann, PE	Engineer	CDM Smith	772-231-4301	vannkn@cdmsmith.com
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule C—Key Individuals

Project Manager			
Name of individual		Brett Schneider, P.E.	
Years of experience as project manager		10+	
Years of experience with this organization		7	
Number of similar projects as project manager		4	
Number of similar projects in other positions		2	
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Sam's Branch Water Reclamation Facility		100%	7/8/2025
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name	Louis Duffy	Name	Sheila Baker
Title/Position	Project Manager	Title/Position	Principal Project Manager
Organization	Town of Clayton	Organization	TVA
Telephone	919-695-1042	Telephone	423-802-2454
Email	lduffie@townofclaytonnc.org	Email	sdbaker@tva.gov@tva.gov
Project	Sam's Branch Water Reclamation Facility	Project	TVA WIDOWS CREEK D4 SITE RESTORATION
Candidate's role on project	Project Manager	Candidate's role on project	Project Manager
Project Superintendent			
Name of individual		Danny R. Linscombe, Jr.	
Years of experience as project superintendent		30+	
Years of experience with this organization		1	
Number of similar projects as project superintendent		5+	
Number of similar projects in other positions		n/a	
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Sam's Branch Water Reclamation Facility		100%	7/8/2025
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name	Louis Duffy	Name	
Title/Position	Project Manager	Title/Position	
Organization	Town of Clayton	Organization	
Telephone	919-695-1042	Telephone	
Email	lduffie@townofclaytonnc.org	Email	
Project	Sam's Branch Water Reclamation Facility	Project	
Candidate's role on project	Project Manager	Candidate's role on project	

Safety Manager			
Name of individual		John Burgin	
Years of experience as project manager		10+	
Years of experience with this organization		10+	
Number of similar projects as project manager		5	
Number of similar projects in other positions		n/a	
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Sam's Branch Water Reclamation Facility		100%	7/8/2025
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name	Juan SanMartin	Name	Denys Purdy
Title/Position	Site Manager	Title/Position	n/a
Organization	Polk County Waste & Recycling Division	Organization	South Florida Water
Telephone	863-284-4319	Telephone	561-682-2091
Email	n/a	Email	dpurdy@sfwmd.gov
Project	Polk County Landfill	Project	STA 1 East.
Candidate's role on project	Safety	Candidate's role on project	Safety
Quality Control Manager			
Name of individual		John F. Piscitelli	
Years of experience as project superintendent		40+	
Years of experience with this organization		5+	
Number of similar projects as project superintendent		18+	
Number of similar projects in other positions		10+	
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Sam's Branch Water Reclamation Facility		100%	7/8/2025
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name	Dusty Brannum	Name	Richard L Postma
Title/Position	Assistant Manager	Title/Position	Construction Management Services Manager
Organization	Trinity River Authority	Organization	Trinity River Authority
Telephone	682-808-2691	Telephone	817-366-6420
Email	brannumd@trinityra.org	Email	postmar@trinityra.org
Project	Red Oak Creek Peak Flow Storage & Flood Improvements	Project	Bear Creek Interceptor
Candidate's role on project	Project Manager	Candidate's role on project	Project Manager



Brett Schneider, P.E.
Project Manager

THALLE
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PROFESSIONAL SUMMARY

Brett is an experienced professional with a diverse background in Engineering, construction and mining industries. his experiences including engineering design, construction management, operation management and project administration. Brett is also an intermediate level Spanish Language Speaker.

EXPERIENCE

16 Years

EDUCATION

MS Civil Engineering,
University of
Colorado, Denver

BS Civil Engineering,
University of
Colorado, Boulder

BS Construction
Management,
Arizona State
University

CERTIFICATES & LICENSES

USACE - CQM-C

Registered Professional
Engineer in TN, CO

MSHA Part 48 Certified
Instructor

PROJECT EXPERIENCE

- + **Sam's Branch Water Reclamation Facility – Clayton, North Carolina; (01/2023 - present); \$179M; Project Manager:**
Thalle Construction is currently building the new 6 million gallons per day ("MGD") water reclamation facility for The Town of Clayton. The infrastructure scope includes providing land surveying, permitting, construction, and startup/commissioning services.
- + **Taxiway F Extension Charlotte Douglas International Airport – Charlotte, North Carolina; (03/2021 - 09/2022); \$51.7M; Project Manager:**
This project consisted of site preparation required for future development at the Airport, including constructing the Coffey Creek culvert, the reconstruction and relocation of the Coffey Creek interceptor sanitary sewer line, the construction of a regional detention basin, the construction of a Duke Energy duct bank, earthwork operations consisting of approximately 1.7 million cubic yards of embankment, and installation of an enclosed storm drainage system for a future Deicing Pad, Taxiway F Extension, and South Crossfield Taxiway, to be constructed under separate contract.
- + **TVA Widows Creek D4 Site Restoration – Stevenson, Alabama; (09/2020 - 04/2021); \$8.7M; Project Manager:**
The following design and operational issues were addressed as part of the D4 Site Restoration Project: Placement of soil fill within the footprint of the demolished plant, including within the basement areas; Grading the site to direct stormwater into ditches that convey stormwater offsite into the Tennessee River; Demolition of miscellaneous structures including, but not limited to, asphalt, concrete, chain-link fencing, storm water piping, catch basins, etc.
- + **USACE Center Hill Auxiliary Dam Reinforcing Berm and Left Rim Stabilization – DeKalb County, TN; (09/2016 - 11/2019); \$49.7M; Project Manager:**
Responsible for assisting the Project Manager at the Center Hill Dam and Reservoir project, a RCC dam project. The RCC berm scope of work consists of controlled blasting and excavation of foundation rock, dental concrete, blanket grouting, and construction of the RCC berm immediately downstream of the project's existing water-retaining earthen auxiliary dam. The Left Rim Stabilization scope of work contains drilling, blasting, scaling, and stabilization of rock and overburden material in the Left Rim just west of the main dam embankment.

PREVIOUS EXPERIENCE

- + **Orica Mining Services – Site Team Leader, (2013 - 2017)**
Responsible for management of operations in the Middle Tennessee and Western Kentucky region. Duties included chief responsibility for technical, safety, and financial performance in the region. Geotechnical analysis of surface and subsurface conditions, rock mechanics, blast design, and seismic engineering. Operation included 18 employees working in the mining, quarry, and construction industries providing explosive delivery and shot service.
- + **Orica Mining Services – Project Manager, North American Engineering, (2012 - 2013)**
Project Manager for the design and construction of engineering projects related to corporate capital investment in Orica facilities. Projects included manufacturing and storage facilities as well as expansion and modifications to existing facilities. Responsibilities included design, estimating, scheduling, construction management, and commissioning. Promoted to Operations Group in 2013.
- + **RJH Consultants, Inc. – Staff Engineer, (2007 - 2012)**
Experience included design and construction management for numerous heavy/civil, geotechnical, and water resource projects ranging in cost from <\$500,000 to >\$150 million.



Danny R. Linscombe, Jr.
Project Superintendent

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PROFESSIONAL SUMMARY

Danny is a seasoned professional with 40 years of extensive experience in project management, quality assurance, quality control, and construction within diverse industries, including petrochemical plants, oil and gas plants, highways, and bridges. With over three decades of supervision expertise, Danny possesses a deep understanding of supervision principles, management techniques, and administration. He excels in planning, organizing, and directing teams' work while maintaining a strong commitment to safety protocols.

EXPERIENCE

40+ Years

EDUCATION

Southwest Texas
State University
(8 Credit Hours)

Jennings Louisiana
Welding Trade School

Franklin Mallick
School of Radiation
(40 Credit Hours)

CERTIFICATES & LICENSES

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PROJECT EXPERIENCE

+ Sam's Branch Water Reclamation Facility – Clayton, North Carolina; (01/2023 - present); \$179M; Project Manager:

Thalle Construction is currently building the new 6 million gallons per day ("MGD") water reclamation facility for The Town of Clayton. The infrastructure scope includes providing land surveying, permitting, construction, and startup/commissioning services.

PREVIOUS EXPERIENCE

+ Wood Group – Superintendent, (01/2022 - 05/2023)

Plan and direct the work activities of all involved crafts for assigned construction crafts in alignment with available engineering deliverables, tools, construction equipment, and materials. Approve or authorize the coordination of craft personnel, material, and equipment needed to meet schedules.

+ Zachry Group – Superintendent, (02/2021 - 01/2022)

Directly support project and construction management with planning and utilization of proper means and methods for all construction activities. Analyze situations, identify, and forecast pertinent problems and evaluate realistic options; and recommend/implement appropriate course of action. Adhere to and support Zachry's Health, Safety & Environmental and Sustainability Policies. Other duties as assigned/

+ Kestrel Field Services – Civil Superintendent, (2007 - 2012)

+ TxDot Chief IH-69 - AECOM – Superintendent/Project Manager, (04/2018 - 12/2018),

Provided inspection for drilled shafts, excavations, backfill, bond breaker being placed. Inspection of bridges and all that is related. Set up lab to perform necessary testing. Inspect girders, beams and bridge decking. Perform daily safety meetings, handle pay items for contractor to ensure payment is made on time. Responsible for field and office management of projects, field audits on technicians. Report to Project Management Team and/or Contractor whenever there was belief that any work was unsatisfactory, faulty, and defective, did not conform to contract documents or did not meet the requirements of the plans and specifications. Schedule and plan weekly activities. Attend monthly progress meetings, reviewing all concerns for the project. Have storm water and sediment control certifications.

+ Pasadena Refinery - Velosi MTIS/Kinder Morgan – Superintendent/Project Manager, (01/2018 - 04/2018), ;

Provided client services for civil, structural and documentation turnover review activities, assist contractors in developing Inspection and test plans, work closely with the Project Team and construction advisors to ensure that requirements are met and attend weekly and daily project team meetings to communicate requirements and schedules for upcoming activities. Schedule and plan weekly activities. Pasadena Terminal (Pit 11)– Managed the construction of Pit 11's twelve 167,000-barrel tanks and a 15,000-barrel transmix tank. Rolled over to serve mechanical needs post tank construction. 42" & 16" interconnecting underground tank lines, 30' deep concrete containment for a pit manifold which feeds 5 vertical pumps and an aboveground wing manifold. Managed installation of GMT's 16" & 12" pipelines. Audits, assessments of preplacement, and post placement of concrete, dirt berm, concrete dike walls, grouting, soils activities. Observed Holiday testing on coated pipe. Hydro-Testing inspection. Reviewed plans and specifications of assigned projects with



PREVIOUS EXPERIENCE (Con't)

construction supervisors. Reviewed documents materials for identification as conforming to specifications and plans gradations, Conferred with project management team about project schedule, hazards and potential issues. Prepared daily activity records and reports. Attended all required project meetings. Sign contractor time sheets. Walked down packages and developed detailed punch lists for the client and contractors.

+ Shintech Heater Cracker Plant - Toyo USA – Superintendent, (04/2018 - 12/2018),

Provided client services for Civil, Structural, Mechanical and documentation turnover review activities, assist contractors in developing Inspection and test plans, work closely with the Project Team and construction advisors to ensure that quality requirements are met and attend weekly project team meetings to communicate requirements and schedules for upcoming activities. As a construction team, we held weekly meetings with contractor personnel to discuss areas of concern. Performed documentation reviews and work with our construction crew to compile complete and correct turnover documentation. Walked down packages and developed detailed punch lists for the client and contractors.

+ P66 Liquid Propane Export Terminal Project – Zachry Construction, Superintendent, (01/2014 - 03/2015),

+ Tolunay-Wong Engineering – Quality Control Manager/Project Manager, (04/2012 - 01/2014),

Conducted field and laboratory Inspection of concrete as made cylinders, beams, tiltwall, soils, gradations, asphalt, silt fencing, batch plant inspections both concrete and asphalt, and pile driving. Performed reinforcing steel and welding inspections. Structural Steel and bolt inspections on bridges, buildings and piping for city, commercial and TX Dot projects. Reviewed plans and specifications of assigned projects with construction supervisors. Inspected materials for identification as conforming to specifications and plans. Recorded amounts of materials used, and work performed daily, prepared necessary reports for progress daily. Inspected signs, barricades, and silt fencing per specifications. Conferred with project management team regarding project schedule, hazards and potential issues. Prepared daily activity records and reports and conducted Power Point presentations for clients as needed.

+ Fugro Engineering – Quality Control Manager/Project Manager, (03/2011 - 04/2012),

Performance of in-process inspection of soils, concrete, batch plant inspection both concrete and asphalt (pre-placement, placement, and post- placement), and structural steel erection in accordance with job specifications and procedures. Also performed inspections on drill shaft and pile driving operations and surveillance on concrete and soils testing company. I worked with engineering, construction, subcontractors, and the client daily and performed Power Point presentations as needed.

+ Coastal Testing Lab – Quality Control Manager/Project Manager, (03/2011 - 04/2012),

Performed civil engineering activities which including managing contracts, daily diaries, scheduling, coordinating work between contractors, silt fencing, traffic control day and night, contract payments, and inspection of construction activities to assure compliance with contracts, specifications, and procedures for city and TxDot projects. Conducted Power Point presentations when needed.

+ GS2 Engineering – Quality Control Manager/Project Manager, (01/2002 - 006/2009),

Reviewed plans and specifications of assigned projects with construction supervisors; attended preconstruction meetings. Conducted field and laboratory testing of concrete, soils, asphalt, and pile load testing. Performed reinforcing steel inspection per plans and specifications, steel deck, bolt testing, girders columns, a mechanical and welding inspections. Inspected all phases of construction of TX Dot, public works, and private development projects. Performed daily records for paid items. Conferred and inspected with supervisors about the project schedule, barricades, hazards, and potential issues for day and night shifts. Prepared daily activity records and reports and conducted PowerPoint presentations for clients as needed.



John F. Piscitelli

QA/QC

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PROFESSIONAL SUMMARY

Experienced Quality Control / Quality Assurance Manager with a demonstrated history of working on Wastewater treatment projects. He is skilled/certified in Inspection, Quality Assurance, and Quality Management. Piscitelli's strong communication and leadership skills have set the standards for a true team environment in the Thalle workplace. His 40 years of construction knowledge gained by operational experience positively influences his project teams and is a personal "go-to" in difficult situations on a project.

EXPERIENCE

40+ Years

CERTIFICATES & LICENSES

USACE Construction
Quality Control
Management
(CQCM)

FSESCI Qualified
Stormwater
Management
Inspector (#24761)
Lifetime Certificate

OSHA 10

USACE
Bronze Certificate
for Outstanding
Achievement

USACE
Letter of
Appreciation

USACE
Certificate of
Appreciation

PROJECT EXPERIENCE

+ Sam's Branch Water Reclamation Facility – Clayton, North Carolina; (01/2023 - present); \$179M; QA/QC:

Thalle Construction is currently building the new 6 million gallons per day ("MGD") water reclamation facility for The Town of Clayton. The infrastructure scope includes providing land surveying, permitting, construction, and startup/commissioning services.

+ Red Oak Creek Interceptor (Trinity River Authority); Red Oak, Texas; \$11.1M; (12/2021 - Present); Project Manager:

Phase 2 pipeline project consists of installing approximately 6,652 linear feet of sanitary sewer pipe via open cut (5,450 lf of 48-inch, 55 lf of 42-inch, 55 lf of 30-inch, 45 lf of 27-inch). Project includes installation of two triple-barrel siphons across red oak creek, installation of a new meter station, a double-barrel siphon across a tributary to red oak creek, approximately 160 lf of tunnel liner plate, and demolition of portions of the existing 27-inch interceptor system and filling of pipe and manholes to be removed from service.

+ Bear Creek Interceptor, Phase 2 (Trinity River Authority); Tarrant County, Texas; \$9.7M; (12/2021 - Present); Project Manager:

Construction of sanitary sewer gravity interceptor pipe, manholes and converting flows from existing interceptor to the new one. The work includes one pedestrian bridge relocation, two tunnels under TXDOT highways, large diameter frp manholes, and flow diversion.

+ DCURD Outfall 002 Improvements (Trinity River Authority); Dallas, Texas; \$2M; (06/2021 - Present); Project Manager:

The project scope included: relocate diversion point for outfall 002 and install a new pipeline, install two (2) 30" motor actuated butterfly valves, demolish and remove all carbon adsorption equipment and media, retrofit bed 9 with all hydraulic and structural modifications to convert to post aeration basin. Install one (1) new positive displacement blower with a fine-bubble membrane diffuser system, install one (1) sulfonator. Furnish and install one (1) sulfur dioxide ejector and injection quill, electrical and instrumentation and process control system (pcs) programming and testing.

+ CRWS Regional Wastewater System Phase IIIB (Trinity River Authority); Dallas, Texas; \$15.5M; (01/2021 - Present); Project Manager:

This project included demolition of backwash gravity filters and associated electrical and instrumentation. Decommission filters (effluent) installation of 30" butterfly valves. New cloth-media diamond filter installation, monorail installation, and canopy installation.

+ USACE HHD K1 & (K2W912EP-17-R-0006); Okeechobee, Florida; \$31.9M; (2018 -2020); Project Manager:

The work included in-place abandonment and removal of the existing Herbert Hoover Dike Culverts KI-1 and KI-2, respectively, and the construction of new water control structures S-266 and S-265 at the respective adjacent or existing locations. The structures included cast-in-place reinforced concrete foundations, headwalls, and box culverts. Combination flap/slide gates were installed at the lakeside headwall of each structure and dual leaf gates on the landside headwall of S-265 and S-266. The existing canal at KI-1 was grouted and abandoned in place upon completion of S-266. S-266 consisted of two (2) 7-foot by 7-foot culverts with a barrel lengths of 100 feet. Demolition/reconstruction for S-265 required installation of earthen cofferdams on both lakeside and landside. S-265 consisted of one (1) 6-foot by 6-foot culvert with a barrel length of 100 feet. A control building was installed on the lakeside work platform at each structure. Work also included operation of the by-pass structure (at KI-1), operation of by-pass pumping (at S-265), grassing and turbidity monitoring.



John Burgin
Safety Manager

THALLE
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PROFESSIONAL SUMMARY

John's experience in the environmental construction industry consists of oversight management within the safety and quality control realms. He has spent the majority of his career on government projects and understands the expectations of OSHA, USACE, USCG, and Federal and State regulations.

EXPERIENCE

40+ Years

CERTIFICATES & LICENSES

OSHA 30 Hour

OSHA Supervisory Training

CPR/First Aid Training

Confined Space Entry

Excavation Competent Person

Radioactive Material Transportation Training

Root Cause Analysis Training

OSHA Rigging and Material Handling

Fall Arrest System

NFPA 70E

PROJECT EXPERIENCE

+ Sam's Branch Water Reclamation Facility – Clayton, North Carolina; (01/2023 - present); \$179M; Safety:

Thalle Construction is currently building the new 6 million gallons per day ("MGD") water reclamation facility for The Town of Clayton. The infrastructure scope includes providing land surveying, permitting, construction, and startup/commissioning services.

+ Polk County Landfill Project# 550033; Winter Haven, Florida; \$22M; (07/2021 - Present); Safety Manager:

North Central Landfill Phase VI Expansion. The construction of a horizontal and vertical Class I landfill expansion, including : liner system, leachate collection and removal system, gas collection and control system modifications, stormwater management system, earthwork, and associated construction.

+ South Florida Water Management - Western Flow; Palm Beach County, Florida; \$14M; (04/2022 - 10/2021); Safety Manager:

The purpose of this project was to improve water quality discharges to the Everglades Protection Area. This standard operation will be accomplished in Western Flow-way by regrading the Western Flow-way treatment cells. The ground surface of Cell 5 were regraded using existing soil within Cell 5, and Cell 7 were raised and regraded using imported soil.

+ Orange County Landfill Class III Cell I Closure; Orlando, Florida; \$25M; (02/2016 - 09/2019); Safety Manager:

The work consisted of constructing the Recycle Basin Expansion Pond (RB-E), a complete replacement with the specified improvement modifications and associated infrastructure of three of the lined ponds in the Lined Pond Storage System: the NCRP, SCRP, and the RB; all specified piping, pumps, inlet & outlet structures, and distribution boxes; a new common scrubber pump pad and the specified infrastructure for the transfer of water from the RB & RB-E to the SEC Scrubber Supply Pipeline with the exception of the three (3) large, vertical turbine pumps which will be supplied by OUC.

+ USACE HHD Rehabilitation Structure Replacement - S-281(C5A) & S-282(C5); Glades County, Florida; \$34.5M; (12/2013 - 12/2020); Safety Manager:

The work included demolition and removal of the existing Herbert Hoover Dike Culverts 5A and 5 and the construction of new water control structures S-281 and S-282 at the existing locations of culverts 5A and 5. The demolition and reconstruction efforts required the installation of an earthen cofferdam within Lake Okeechobee and a steel sheet pile cofferdam at the landside of each culvert in order to dewater the construction sites. Work also included the placement of surcharge fill, by-pass pumping, grassing and turbidity monitoring.

AFFIDAVIT A

**Town of Clayton
County of Johnston**

Listing of the Good Faith Effort

Affidavit of: Thalle Construction Co., Inc.

(Name of Bidder)

I have made a good faith effort to comply under the following areas checked:
(A minimum of 50 points must be earned from the following list in order to have achieved a "good faith effort")

- ☒ **1 - (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid or proposal date and notified them of the nature and scope of the work to be performed.
- ☒ **2 - (10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or provided these documents to them at least 10 days before the bid or proposals are due.
- ☒ **3 - (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- ☒ **4 - (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- ☒ **5 - (10 pts)** Attended pre-bid meetings scheduled by the public owner.
- ☐ **6 - (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- ☐ **7 - (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- ☐ **8 - (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses establish credit.
- ☐ **9 - (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- ☐ **10 - (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

The undersigned, if apparent low bidder, will enter into a formal agreement with the firms listed in the Identification of Minority Business Participation schedule conditional upon scope of contract to be executed with the Owner. Substitution of contractors must be in accordance with GS 143-128.2(d). Failure to abide by this statutory provision will constitute a breach of the contract.

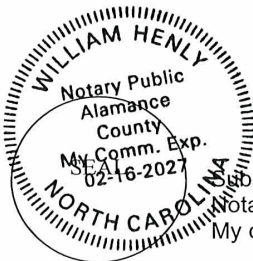
The undersigned hereby certifies that he or she has read the terms of the minority business commitment and is authorized to bind the bidder to the commitment herein set forth.

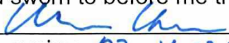
Date: 8/16/2023

Name of Authorized Officer: Larry A. Fantozzi,

Signature: 

Title: Executive Vice President



Subscribed and sworn to before me this 16 day of August 20 23
Notary Public 
My commission expires 02-16-2027

Attach To Bid

Attach To Bid

Attach To Bid

Attach To Bid

Attach To Bid

Attach To Bid

Attach To Bid

"N/A"

AFFIDAVIT B

**Town of Clayton
County of Johnston**

Intent to Perform Contract with Own Workforce

Affidavit of: _____
(Name of Bidder)

I hereby certify that it is our intent to perform 100% of the work required for the _____ contract.
(Name of Project)

In making this certification, the Bidder states that the Bidder does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform all elements of the work on this project with his/her own current work forces; and

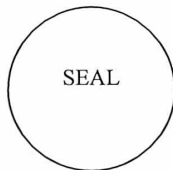
The Bidder agrees to provide any additional information or documentation requested by the owner in support of the above statement.

The undersigned hereby certifies that he or she has read this certification and is authorized to bind the Bidder to the commitments herein contained.

Date: _____ Name of Authorized Officer: _____

Signature: _____

Title: _____



Subscribed and sworn to before me this _____ day of _____ 20____
Notary Public _____
My commission expires _____

SECTION 00 45 13
E-VERIFY AFFIDAVIT

STATE OF NORTH CAROLINA

TOWN OF CLAYTON

AFFIDAVIT

I, Larry A. Fantozzi (the individual attesting below), being duly authorized by and on behalf of

Thalle Construction Co., Inc (the entity bidding on project hereinafter "Employer") after first being duly

Sworn hereby swears or affirms as follows:

1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS§64-25(5).
2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS§64-25(5).
3. Employer is a person, business entity, or other organization that transacts business in this State and that employs 25 or more employees in this State. (Mark Yes or No.)
 - a. YES X, or
 - b. No
4. Employer's subcontractors comply with E-Verify, and if Employer is the winning bidder on this project.
Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer.

This 16 day of August, ~~2018~~, ²⁰²³



Signature of Affiant

Print or Type Name: Larry A. Fantozzi, Executive Vice President

State of North Carolina County of Johnston

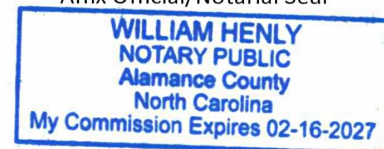
Signed and sworn to (or affirmed) before me, this the 16

Day of August, 2023.

My Commission Expires: 02-16-2027

 William Henly
Notary Public

Affix Official/Notarial Seal



SECTION 00 73 50A

NC Division of Water Infrastructure MBE/WBE (DBE) Compliance Supplement Instructions

(This package combines the various aspects of State of NC HUB program requirements and Federal DBE requirements into a single compliance supplement in order to eliminate redundancy and ambiguity)

Item	What to do with it
Good Faith Efforts Form	Provided by all bidders to be responsive Only low bidder's form is submitted to the State
Table A (Summary of firms on job)	Provided by all bidders to be responsive Only low bidder's form is submitted to the State
Table B (per item being subbed)	Provided by low bidder if SRF project or SRP/SEL* that obtains less than 10% M/WBE utilization (see page 2)
Provide documentation of anything you did that is mentioned later in this supplement	- Proof of trade paper advertisement - Printouts of DBE sources used - Solicitation emails and/or letters
Additional Forms for SRF Projects (these forms are currently not applicable)	
6100-3 (per M/WBE firm)	Provided by low bidder if SRF project
6100-2	Distributed to M/WBE firms if SRF project
Subs submit concerns on 6100-2 forms to:	Michael Pigram Region 4, Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

NOTES on this Compliance Supplement

Verifiable Goals

- EPA MBE/WBE participation goals: MBE 10.9%
WBE 10.4%

These are goals that the State reports against and are not quotas. The good faith efforts must be adhered to and all forms provided regardless of what percentage utilization is achieved.

- State of NC MBE/WBE participation goal: 10% (combined)

Table B is not required for SRP and SEL projects if you achieve 10% utilization.

DBE (MBE or WBE) Certification

In order for a firm to count towards the goals, a firm must be properly certified. Table A and Table B both provide spaces to note who certified the firm. The North Carolina Department of Administration and North Carolina Department of Transportation are the most common certifications we see listed. Division of Water Infrastructure staff verify all certifications listed.

For SRF projects, please note the EPA's six Good Faith Efforts found in 40 CFR 33

Filling out the Good Faith Efforts Form and providing Table B (if subcontracting is achieved) constitutes compliance with EPA's six good faith efforts.

- (1) Ensure MBE/WBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and local Government recipients, this will include placing MBE/WBEs on solicitation lists and soliciting them whenever they are potential sources.
- (2) Make information of forthcoming opportunities available to MBE/WBEs and arrange time for contracts and establish delivery schedules, where requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- (3) Consider in the contracting process whether firms competing for large contracts could subcontract with MBE/WBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities in order to increase opportunities for participation by MBE/WBEs in the competitive process.
- (4) Encourage contracting with a consortium of MBE/WBEs when a contract is too large for one of these firms to handle individually.
- (5) Use the services and assistance of the SBA and the MBDA.
- (6) If the prime contractor awards subcontracts, require the prime contractor to take the steps in subparagraphs (1)-(5) of this section.

Pertinent State of North Carolina Administrative Code Regarding M/WBE Compliance. The provisions in this Compliance Supplement constitute compliance with the Rules below.

Owner Requirements	01 NCAC 30I .0306
Contractor Requirements	01 NCAC 30I .0308

Resources

Some sources for identifying MBE/WBE (DBE) firms

- <https://www.ips.state.nc.us/vendor/SearchVendor.aspx>. (NCDOA)
- <https://www.ebs.nc.gov/VendorDirectory/default.html>. (NCDOT)
- http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm. (US SBA)

Some sources for finding minority trade papers for potential solicitation advertisements and Federal advertising options

- <http://web.sba.gov/subnet/>. (US SBA Subnet advertising website)
- <https://www.mbda.gov/>. (US Dept. of Commerce)
- <https://ncadmin.nc.gov/businesses/hub>. (NC HUB Office)

Good Faith Efforts Form

Attempts to provide subcontracting opportunities for MBE/WBE firms.

Per 01 NCAC 30I .0101, 50 points must be claimed below by the bidder.

(This is identical to State of NC Affidavit A)

- ☒ **1 – (10 pts)** Contacted minority businesses that reasonably could have been expected to submit a quote and that were known to the contractor, or available on State or local government maintained lists, at least 10 days before the bid date and notified them of the nature and scope of the work to be performed.
- ☒ **2 – (10 pts)** Made the construction plans, specifications and requirements available for review by prospective minority businesses, or providing these documents to them at least 10 days before the bids are due.
- ☒ **3 – (15 pts)** Broken down or combined elements of work into economically feasible units to facilitate minority participation.
- ☒ **4 – (10 pts)** Worked with minority trade, community, or contractor organizations identified by the Office of Historically Underutilized Businesses and included in the bid documents that provide assistance in recruitment of minority businesses.
- ☒ **5 – (10 pts)** Attended prebid meetings scheduled by the public owner.
- ☐ **6 – (20 pts)** Provided assistance in getting required bonding or insurance or provided alternatives to bonding or insurance for subcontractors.
- ☐ **7 – (15 pts)** Negotiated in good faith with interested minority businesses and did not reject them as unqualified without sound reasons based on their capabilities. Any rejection of a minority business based on lack of qualification should have the reasons documented in writing.
- ☐ **8 – (25 pts)** Provided assistance to an otherwise qualified minority business in need of equipment, loan capital, lines of credit, or joint pay agreements to secure loans, supplies, or letters of credit, including waiving credit that is ordinarily required. Assisted minority businesses in obtaining the same unit pricing with the bidder's suppliers in order to help minority businesses in establishing credit.
- ☐ **9 – (20 pts)** Negotiated joint venture and partnership arrangements with minority businesses in order to increase opportunities for minority business participation on a public construction or repair project when possible.
- ☐ **10 – (20 pts)** Provided quick pay agreements and policies to enable minority contractors and suppliers to meet cash-flow demands.

Results of Good Faith Efforts Undertaken (you must check one box below)

- ☐ No subcontractors are being used for this contracted work. Fill out Table A listing only the Prime Contractor. (This statement takes the place of State of NC Affidavit B)
- ☒ Subcontractors are being used. Fill out Table A and B for each trade. **Each Table B lists 3.**
- ☐ Subcontractors are being used. If any Table B has fewer than 3 solicitations you must also advertise in an M/WBE trade paper and indicate what source of M/WBE firms you used (*must list at least one*). Some possible papers and sources of M/WBE firms are listed in the Instructions of this Supplement.

Name of the Trade Paper: CONSTRUCTCONNECT

Submit proof of advertisement with package

M/WBE Sources: Source: NC POT DBE Source: DOA - NC - HUBS

Submit printouts from M/WBE source(s)

Certification Statement and Affidavit of Contractor.

The below affidavit constitutes compliance with 01NCAC 30I .0308(7)(a) and (b) and takes the place of State of North Carolina Affidavits C and D.

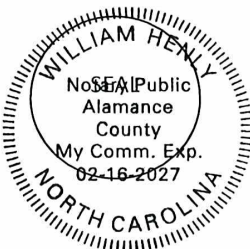
I have read the information in this compliance supplement and all information provided to the State in this package is accurate and true to the extent of my knowledge including the calculated percentages and the good faith efforts presented herein.

Thalle Construction Co., Inc.

Prime Contractor Company Name (Print)

[Signature]

Prime Contractor Representative (Sign & Date)



State of NORTH CAROLINA, County of ALAMANCE

Subscribed and sworn to before me this 16 day of August, 2023

Notary Public [Signature]

My Commission Expires 02/16/2027

Larry A. Fantozzi, Executive Vice President

Applicant Name (Print)

x [Signature] DATE: 8/16/2023
Applicant Authorized Representative (Sign & Date)

Division of Water Infrastructure Project Number

Table A: Prime Contractor and list of selected subcontractors

List Prime and ALL of the selected subcontractors (both DBE's and non-DBE's) being used on the project. Each Trade listed on this sheet should have a completed Table B: Subcontract Solicitation List showing the DBE firms contacted and given opportunities to bid.

Company Name (list prime first then subs)	Company Address and Phone	Trade (Above) and Price (Below)	MBE or WBE and certifying agency if applicable	(State use only) Listed in EPLS as Debarred?
Thalle Construction Company Inc	900 NC-86, Hillsborough, NC 27278 919-245-1490	Prime	N/A	
		\$ 1,988,930.58		
Crumb Construction LLC	1050 Black Jack Simpson Road Greenville NC 27858 252-917-7825	PUMP WATCH	DBE	
		\$ 127,920.24		
Knight Chow Construction Services LLC	1924 Cherri Drive Falls Church Road VA 22043 336-933-1888	Pipe and Fittings	DBE	
		\$ 101068.22		
		\$		

Calculate M/WBE utilization as a percent (00.00%) of the prime contract. Limited to 100% even if the Prime is a DBE.

MBE and WBE subs total	\$ 228,988.46	10.33 %
Prime Contract Price	\$ 2,217,919.04	

Note: Table A substitutes for both the State of NC "Identification of Minority Participation" form and EPA Form 6100-4.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Pump Watch (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
Sunbelt Rentals	4901 Unicorn DR Wake Forest NC 27587 919-418-7930	N/A	Phone/ Email resulting in conversations and quote
United Rentals	4901 Unicorn DR Wake Forest NC 27587 919-418-7930	N/A	Phone/ Email resulting in conversations and quote
Crumb Construction LLC	1050 Black Jack Simpson Road Greenville NC 27858 252-917-7825	MBE	Phone/ Email resulting in conversations and quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Pipe and Fittings (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
Knight Chow Construction Services LLC	1924 Cherri Drive Falls Church Road VA 22043 336-933-1888	MBE	Phone/ Email resulting in conversations and quote
Ferguson Waterworks	1044 Taylors Creek Dr Greenville NC 27834-1044 252-321-1132	n/a	Phone/ Email resulting in conversations and quote
Core and Main	2212 Warehouse Court Wilson NC 27893 252-237-5914	n/a	Phone/ Email resulting in conversations and quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Bypass Pumping (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
Sunbelt Rentals	4901 Unicorn DR Wake Forest NC 27587 919-418-7930	N/A	Phone/ Email resulting in conversations and quote
United Rentals	4901 Unicorn DR Wake Forest NC 27587 919-418-7930	N/A	Phone/ Email resulting in conversations and quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Electrical (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
Roberts	176 Laurie Ellis RD Winterville NC 28590 252-355-9353	N/A	Phone/ Email resulting in conversations and quote
M & W	PO Box 67, Red Springs, North Carolina, Robeson, United States, 28377 9108439811	MBE	Phone/ Email resulting in conversations and quote
Cooper	1706 E Wendover Avenue, Greensboro, North Carolina, Guilford, United States, 3362758439	MBE	Phone/ Email resulting in conversations and quote
Bitting Electric	1000 Northgate CT Morrisville NC 27560 9193699838	MBE	Phone/ Email resulting in conversations and quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Concrete Coring/ Demo (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
DM Collins/ Dan Kel	1821 Ruffin Mill Circle South Chesterfield Va, 23834 804-486-0329	MBE	Phone/ Email resulting in conversations and quote
Advance Concrete	4500 Waterfield Dr Garner NC 27529 919-747-9713	N/A	Phone/ Email resulting in conversations and quote
Concrete Technology Services	2501 Capital BLVD Suite 104 Raleigh NC 919-817-3968	N/A	Phone/ Email resulting in conversations and quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

Table B: Subcontract Solicitation List

Table B is required if:

- 1) Project is Federally funded (SRF) OR;
- 2) Project is a State Reserve Project or State Emergency Loan (SRP or SEL) and Utilization % on Table A is less than 10%
- 3)

Trade: Erosion Control (enter the trade being solicited, paving, hauling etc.)

List the firm being used on the project first. If three MBE or WBE firms are not listed, additional information must be provided showing advertisements and/or sources used to identify MBE/WBE subs.

Use as many of these sheets as are necessary to cover every trade being subbed out.

Company Name	Company Address and Phone	MBE or WBE and certifying agency if applicable.	How was this firm contacted (email, letter, phone) and what was the result of the solicitation?*
Canady's Landscape and Erosion Control	256 Fairview Aces Rd Lexington, NC 27259 336-236-1182	HUB WBE	Phone call/ and email communication, resulted in quote

*Must submit copies of emails or letters. If phone calls were made this sheet can serve as documentation of calls.

American Iron and Steel (AIS)

Guidance for SRF Projects in North Carolina

This state guidance **summarizes** the requirements under Subsection 436 (a)(2) of the Consolidated Appropriations Act of 2014 that SRF recipients only use iron and steel products produced in the United States. The Environmental Protection Agency provides full guidance on the requirements at the following website:

http://water.epa.gov/grants_funding/aisrequirement.cfm.

Recipients of subject SRF awards must submit the executed **Certification for SRF Projects** and any waiver requests with their Bid Package. The recipient cannot receive a promissory note without these items.

Manufacturers can use the template “Compliance Certification” to document that materials are “produced in the United States.”

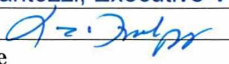
Contents

1. Certification for SRF Projects
2. AIS Waiver Instructions
3. Materials covered by AIS
4. Template *Compliance Certification* for Materials Covered by AIS
5. Template *De Minimis* list

American Iron and Steel (AIS)
Certification for SRF Projects

Recipients of subject SRF awards must submit **this executed form and any waiver requests** with their Bid Information package to the State SRF program in order to receive funding.

The Thalle Construction Co., Inc. certifies that their contractors performing construction, alteration, maintenance and repair of the public treatment works under project number ^{Clayton to Raleigh Pump Station Improvements} HDR Project No. 10301351 will comply with subsection 436 (a)(2) of the Consolidated Appropriations Act of 2014 and only use iron and steel products produced in the United States.

Contractor Representative (print) <u>Larry A. Fantozzi, Executive Vice President</u> (sign and date) <u> 8/16/2023</u> Company Name <u>Thalle Construction Co., Inc.</u>	Project Applicant/Owner Representative (print) _____ (sign and date) _____ Applicant/Owner Name and Project No. _____
---	---

MAYOR
Jody L. McLeod
TOWN MANAGER
Richard D. Cappola, Jr.
TOWN ATTORNEY
Cauley Pridgen, P.A.



MAYOR PRO TEM
Jason Thompson
COUNCIL MEMBERS
Andria Archer
Porter Casey
Avery Everett
Michael Sims

To: Project Manager, Engineering Department

From Shaun Mizell, Procurement, Contracts and MWBE Manager

Date: September 7, 2023

Subject: Clayton to Raleigh Pump Station Improvements

The Procurement office has reviewed documents from Thalle Construction Company, the apparent low bidder for the Clayton to Raleigh Pump Station Improvements Project (\$2,217,919.04).

Thalle Construction Company proposes to subcontract the following MWBE firm(s): Crumb Construction LLC, \$127,920.24; Knight Chow Construction Services LLC, \$101,068.22. The proposed MWBE subcontractor(s) is/are certified firms with the offices of NC DOA/HUB and/or NC DOT/DBE.

Name	Main Contact Name	Main Contact Email	Main Contact Phone	Main Location Address	NC eProcurement	HUB	NCSBE	Small Business	DBE	NPWC
Crumb Construction, LLC	phillip crumb	phillip@crumbconstruction.com	2529177825	1050 BLACKJACK SIMPSON ROAD, GREENVILLE, North Carolina, Pitt, United States, 27858	Not Applicable	Certified	Certified	true	false	false

Name	Main Contact Name	Main Contact Email	Main Contact Phone	Main Location Address	NC eProcurement	HUB	NCSBE	Small Business	DBE	NPWC
Knight Chow Construction Services, LLC	J Knight	jknight@knightchow.com	3369331888	7517 Fisher Drive, Falls Church, Virginia, , United States, 22043	Not Applicable	Certified		true	false	false

The Total certified minority participation is \$228,988.46, or 10.33%. This meets or exceeds the 10% certified minority participation goal.

The Procurement Contracts and MWBE Manager acknowledges this participation.

Please proceed with the award of contract.

Do not hesitate to contact me if you have any questions 919-359-9359.

cc: Bid File

**RESOLUTION OF AWARD OF BID FOR CLAYTON TO RALEIGH PUMP
STATION IMPROVEMENTS PROJECT**

WHEREAS, the Town of Clayton publicly advertised an invitation for bids to be received for the Clayton to Raleigh Pump Station Improvements Project on June 30, 2023; and

WHEREAS, a public bid opening was held on August 16, 2023, and a total of three-bids were received; and

WHEREAS, the lowest responsive/responsible bidder was Thalle Construction Co. for the base bid amount of \$2,217,919.04

WHEREAS, Thalle Construction Co., is properly licensed and experienced in the type of construction involved in this project; and

WHEREAS, based on review of the bids received it is the recommendation that award of the construction contract be granted to Thalle Construction Co.; and

WHEREAS, the Town of Clayton intends to construct said project in accordance with the approved plans and specifications,

NOW THEREFORE BE IT RESOLVED, BY THE CLAYTON TOWN COUNCIL THAT:

The Town of Clayton award the construction of Clayton to Raleigh Pump Station Improvements Project to Thalle Construction Co. in the amount of \$2,217,919.04

Duly adopted this the 18th day of September, 2023, while in regular session.

Jody L. McLeod
Mayor

ATTEST:

Heidi Holland, CMC, NCCMC
Town Clerk