AGENDA | REGULAR TOWN COUNCIL MEETING

April 23, 2024 at 6:00 PM
Council Chambers - Apex Town Hall, 73 Hunter Street
The meeting will adjourn when all business is concluded or 10:00 PM, whichever comes first

Town Council and Town Executive Leadership

Mayor: Jacques K. Gilbert | Mayor Pro Tempore: Edward Gray
Council Members: Audra Killingsworth, Arno Zegerman, Brett D. Gantt; Terry Mahaffey
Town Manager: Randy Vosburg
Deputy Town Manager: Shawn Purvis
Assistant Town Managers: Demetria John and Marty Stone
Town Clerk: Allen Coleman | Town Attorney: Laurie L. Hohe

COMMENCEMENT

Call to Order | Invocation | Pledge of Allegiance

CONSENT AGENDA

All Consent Agenda items are considered routine, to be enacted by one motion with the adoption of the Consent Agenda, and without discussion. If a Council Member requests discussion of an item, the item may be removed from the Consent Agenda and considered separately. The Mayor will present the Consent Agenda to be set prior to taking action on the following items:

CN1 Agreement - University of North Carolina at Chapel Hill School of Government Services (SOG Services) - Benchmarking Project – April 23, 2024 through December 31, 2026

Amanda Grogan, Director, Budget and Management Services Department

CN2 Agreement Amendment - Wake County, Town of Cary, and Town of Apex - Co-Locating Communication Equipment - Western Wake Regional Water Reclamation Facility

Michael Mote, Meter Services Supervisor, Water Resources Department

CN3 Annual Operating Budget FY2024-2025 – 2nd Public Hearing – Tuesday, May 14, 2024 – Set Public Hearing

Amanda Grogan, Director, Budget and Management Services Department

CN4 Budget Ordinance Amendment No. 15 - Electric System Expansion

Eric Neumann, Director, Electric Utilities Department

CN5 Capital Project Ordinance No. 2024-14 - Active Capital Project Allocations

Amanda Grogan, Director, Budget and Management Services Department

CN6 Capital Project Ordinance Amendment 2024-15 and 2024-16 - ARPA Project Funding Allocations

Amanda Grogan, Director, Budget and Management Services Department

CN7 Capital Project Ordinance Amendment No. 2024-17 - Beaver Creek Greenway Project

Angela Reincke, Parks Planning Project Manager, Parks, Recreation, and Cult. Res. Dept.

CN8 Fee-in-Lieu (FIL) of Land Dedication - The Preserve on Holt

Angela Reincke, Parks Planning Project Manager, Parks, Recreation, and Cult. Res. Dept.

CN9 Rezoning Case No. 24CZ01 – Veridea Expansion 2 – Statement and Ordinance

Amanda Bunce, Current Planning Manager, Planning Department

CN10 Rezoning Case No. 22CZ27 – Center City Townhomes – Statement of Denial

Lauren Staudenmaier, Planner II, Planning Department

PRESENTATIONS

PR1 Proclamation - Civilian Law Enforcement Professionals Week 2024 - April 21 through April 27, 2024

Mayor Jacques K. Gilbert

PR2 Proclamation - Small Business Week 2024 - April 28 through May 4, 2024

Mayor Jacques K. Gilbert

PR3 Proclamation - Think Apex Day 2024 - Saturday, April 27, 2024

Mayor Jacques K. Gilbert

PR2 Town of Apex Language Access Plan (LAP)

Linda Graham Jones, Director, Diversity, Equity, and Inclusion Department, and

Celeste Sherer, Coordinator, Diversity, Equity, and Inclusion Department

REGULAR MEETING AGENDA

Mayor Gilbert will call for additional Agenda items from Council or Staff and set the Regular Meeting Agenda prior to Council actions.

PUBLIC FORUM

Public Forum allows the public an opportunity to address the Town Council. The speaker is requested not to address items that appear as Public Hearings scheduled on the Regular Agenda. The Mayor will recognize those who would like to speak at the appropriate time. Large groups are asked to select a representative to speak for the entire group. Comments must be limited to 3 minutes to allow others the opportunity to speak.

PUBLIC HEARINGS

PH1 Annexation No. 777 – 2014 Lufkin Road – 2.208 acres

Dianne Khin, Director, Planning Department

PH2 Rezoning Case No. 24CZ02 – 5836 Old Smithfield Rd

Shelly Mayo, Planner II, Planning Department

PH3 Rezoning Case No. 23CZ22 – 1013 Olive Chapel Road

Joshua Killian, Planner I, Planning Department

PH4 Unified Development Ordinance (UDO) Amendments – April 2024

Robert Patterson, P.E., Senior Stormwater Engineer, Water Resources Department

NEW BUSINESS

UPDATES BY TOWN MANAGER

CLOSED SESSION

Council will enter into closed session pursuant to:

CS1 Laurie Hohe, Town Attorney

RE: Empire Contractors, Inc. v. Town of Apex.

NCGS § 143-318.11(a)(3)

"To consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body."

CS2 Laurie Hohe, Town Attorney

NCGS § 143-318.11(a)(6)

"To consider the qualifications, competence, performance, character, fitness, conditions of appointment, or conditions of initial employment of an individual public officer or employee or prospective public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee."

ADJOURNMENT

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Amanda Grogan, Director

Department(s): Budget & Performance Management

Requested Motion

Motion to approve an agreement between School of Government Services (SOG Services) and the Town of Apex, for participation in the NC Benchmarking Project, effective April 23, 2024 through December 31, 2026, and to authorize the Town Manager to execute on behalf of the Town.

Approval Recommended?

Yes

Item Details

The Town of Apex has participated in the School of Government Benchmarking Project since 2012. This is to establish a 3-year agreement for continued participation for FY 24, FY 25, FY 26 for $10,000 annually. The project includes:

Data Collection: The NC Benchmarking Project annually collects operational and performance data for 11 municipal services from North Carolina municipalities. This data is gathered via a Qualtrics survey.

Data Audit: The collected data undergoes a two-phase audit by the NC Benchmarking Project. The first phase involves comparing the submitted data with data from previous years. The second phase involves comparing normalized data with data from other partners.

Dashboard: All data is uploaded to an online dashboard for analysis. This dashboard enables flexible data analysis and comparison with past trends and peers. Additionally, raw data from all partners is shared with service departments to facilitate easy analysis.

Performance Strategy Sessions: The NC Benchmarking Project hosts performance strategy sessions for all 11 services. During these sessions, we discuss challenges, innovations, data, and best practices.

Report: The findings from the data analysis and strategy sessions are compiled and synthesized into a report.

Attachments

- CN1-A1: Agreement - University of North Carolina at Chapel Hill School of Government Services (SOG Services) - Benchmarking Project - April 23, 2024 through December 31, 2026


APEX
1873
NORTH CAROLINA

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SERVICE AGREEMENT

This is an agreement between the Town of Apex (Client) and the School of Government Services (SOG Services), an associated entity of the University of North Carolina at Chapel Hill for participation in the NC Benchmarking Project in 2024, 2025 and 2026.

1. Services. Participation in the NC Benchmarking Project includes:

Data Collection: The NC Benchmarking Project annually collects operational and performance data for 11 municipal services from North Carolina municipalities. This data is gathered via a Qualtrics survey.
Data Audit: The collected data undergoes a two-phase audit by the NC Benchmarking Project. The first phase involves comparing the submitted data with data from previous years. The second phase involves comparing normalized data with data from other partners.
Dashboard: All data is uploaded to an online dashboard for analysis. This dashboard enables flexible data analysis and comparison with past trends and peers. Additionally, raw data from all partners is shared with service departments to facilitate easy analysis.
Performance Strategy Sessions: The NC Benchmarking Project hosts performance strategy sessions for all 11 services. Each partner municipality can send up to three members to these sessions. During these sessions, we discuss challenges, innovations, data, and best practices.
Report: The findings from the data analysis and strategy sessions are compiled and synthesized into a report.

2. Duration of Services. For participation in the NC Benchmarking Project 2024-2026.

3. Term. The term of this agreement shall be for a period of three (3) years, commencing on January 1, 2024 and ending on December 31, 2026. Either party may terminate this agreement at any time by providing written notice to the other party. In the event of termination, the Client agrees to pay for all services performed by SOG Services up to the date of termination.

4. Compensation. The Client agrees to pay $10,000 to SOG Services for each year of participation, not to exceed $30,000 for the three year term.

4. Payments. Payments shall be made to the School of Government Services, upon invoicing from the SOG Services, payable within 60 days of the conclusion of each year of performance, structured as follows:

- Year 1 (January 1, 2024 to December 31, 2024): $10,000
- Year 2 (January 1, 2025 to December 31, 2025): $10,000
- Year 3 (January 1, 2026 to December 31, 2026): $10,000

6. Liaisons. Amanda Grogan shall serve as a liaison for issues concerning this work under this agreement for the Client. Obed Pasha shall serve as liaison for the SOG Services.

Obed Pasha
Associate Professor
Public Management
School of Government Services
#3330, Knapp-Sanders Building
Chapel Hill, NC 27599-3330
919-962-8109
pasha@sog.unc.edu

Amanda Grogan
Director of Budget & Performance Management
Town of Apex
73 Hunter Street, Town Hall
PO Box 250
Apex, NC 27502
919-249-1168
Amanda.Grogan@apexnc.org

7. Modification, Extension, and Termination.

a. This agreement represents the entire agreement between the parties. It may be modified, extended, or terminated by mutual written consent of the parties.
b. At any time prior to the termination of the term of this Agreement, either the Client or SOG Services may, with or without cause, terminate this Agreement upon giving thirty (30) days written notice to the other party. In that event, SOG Services will be compensated for all work performed up to the effective date of the termination in accordance with the terms of this Agreement. SOG Services recognizes that at any time, should the Client's funding be discontinued or unavailable, this Agreement may be terminated immediately.

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Town of Apex

By: _____ _____

Shawn Purvis
Interim Town Manager
shawn.purvis@apexnc.org

Date

School of Government Services

By: DocuSigned by: _____ 4/11/2024

83E45325AE6B462...

Lauren G. Partin
Executive Director, School of Government Services

Date

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Michael Mote, Meter Services Supervisor

Department(s): Water Resources

Requested Motion

Motion to approve an agreement for First Amendment of Ground Lease between the Town of Cary and Town of Apex and Wake County, for co-locating communication equipment on an existing radio tower at the Western Wake Regional Reclamation Facility, and to authorize the Mayor to execute on behalf of the Town.

Approval Recommended?

Yes

Item Details

On July 17, 2018, the Towns of Apex and Cary entered into a Ground Lease with Wake County for a radio communications facility located at 3500 Reclamation Road, Apex, North Carolina. Apex has a need to utilize the existing tower for co-locating new communication equipment to improve its metering system as part of the Town's Meter System Upgrade project. Wake County has reviewed and approved the plans and specifications while the Town of Cary is agreeable to allow access for its installation. Apex's Metering System Upgrade project will result in a direct benefit to the utility customers of Apex.

Attachments

- CN2-A1: First Amendment of Ground Lease - Agreement Amendment - Co-Locating Equipment - Western Wake Regional Water Reclamation Facility
- CN2-A2: Exhibit A - Agreement Amendment - Co-Locating Equipment - Western Wake Regional Water Reclamation Facility
- CN2-A3: Ground Lease 07.17.2018 - Agreement Amendment - Co-Locating Equipment - Western Wake Regional Water Reclamation Facility
- CN2-A4: Approved Construction Drawings and Specifications - Agreement Amendment - Co-Locating Equipment - Western Wake Regional Water Reclamation Facility

COUNTY OF WAKE

STATE OF NORTH CAROLINA

FIRST AMENDMENT OF GROUND LEASE

THIS FIRST AMENDMENT OF GROUND LEASE ("**Addendum**") is made and entered into as of this ____ day of _____, 2024, by and between **WAKE COUNTY** ("**Wake County**"), a body politic and corporate of the State of North Carolina, the **TOWN OF CARY** ("**Cary**"), a North Carolina municipal corporation, and the **TOWN OF APEX** ("**Apex**"), a North Carolina municipal Corporation. Apex, Cary, and Wake County may collectively be referred to as "**Parties**" hereinafter.

RECITALS

WHEREAS, Cary and Apex, as lessors, and Wake County, as lessee, entered into that certain Ground Lease dated July 17, 2018 (the "**Ground Lease**") regarding a portion of that certain tract of land located at 3500 Reclamation Road, Apex, North Carolina, which is the site of a radio communications facility (the "**Facility**") being more particularly described in the Ground Lease (the "**Premises**");

WHEREAS, subject to the terms and conditions of this Addendum, Wake County is agreeable to allow Apex to co-locate communication equipment (the "**Co-Location Equipment**") upon the Facility in accordance with the plans and specifications provided by Apex to Wake County, attached hereto as **Exhibit A**;

WHEREAS, Wake County has approved the plans and specifications in Exhibit A, determined that the co-location is structurally feasible, and determined that the radio frequency study provided by Apex indicates no interference and is acceptable;

WHEREAS, Apex will use the co-located equipment for a public purpose which is permitted by all applicable zoning and permitting regulations;

WHEREAS, improving the meter system for utilities with communications equipment in Apex shall result in a direct benefit to the residents of Apex; and

WHEREAS, pursuant to N.C.G.S. 160A-274, the Parties are authorized to enter into this Addendum to the Ground Lease upon the terms and conditions contained herein.

NOW THEREFORE, for and in consideration of the Recitals and the mutual promises and covenants contained in this Agreement, the Parties agree as follows:

1. Permitted Use. Apex may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement, and upgrade of the Co-Location Equipment. Exhibit A shall show the area(s) to be used for Co-Location Equipment and any height and width limitations applicable thereto. Apex has the right to modify, supplement, replace, upgrade, and expand the Co-Location Equipment during the term of the Ground Lease. Apex shall not do anything that compromises Wake County's ability to use the Premises for their intended purpose as set forth in the Ground Lease.

2. Co-Location Equipment Costs. Apex shall be responsible for all costs associated with the Co-Location Equipment, including design, engineering, review and approval of all plans and specifications, radio frequency study, permitting, construction, installation, maintenance, and repair.

3. No Assignment or Licensing of Co-Location Equipment. Apex shall not assign, license, or permit any further co-location on the permitted Co-Location Equipment as shown on Exhibit A. As set forth in the Ground Lease, additional co-locations by either Apex or Cary shall require an addendum to the Ground Lease, and any co-locations by private carriers shall only exist pursuant to a written amendment to the Ground Lease.

4. Access. Cary, as Lessors' Lead Agent under the Ground Lease, shall permit Apex, its designated employees, contractors, and agents reasonable access to the Premises to construct, install, operate, inspect, maintain, and repair the Co-Location Equipment. Access shall be permitted Monday through Friday, during normal business hours (8:00 am to 4:00 pm). In the event of an emergency requiring after-hours or emergency access to the Premises, Apex shall be permitted access and must contact the 24/7 after hours number for WWRWRF (919-535-5640).

5. Electrical Service. Apex shall separately meter the electricity usage of the Co-Located Equipment and shall be responsible for the costs of electrical power associated with the operation of the Co-Location Equipment.

6. All other terms, covenants, and agreements set forth in the Ground Lease shall continue in full force and effect, except as otherwise provided in this Addendum. Any capitalized terms used in this Addendum that are not defined or amended herein shall have the same meaning ascribed to them in the Ground Lease.

7. This Addendum shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

8. This Addendum may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Addendum shall be governed by and construed in accordance with the laws of the State of North Carolina.

IN ACCORDANCE WITH THE TERMS AGREED UPON IN THE AFOREMENTIONED LEASE, the following conditions must be met in order for Apex to co- locate communication equipment on the Facility: it shall provide complete engineer stamped plans and specifications to Lessee for approval. Lessee shall permit Cary and/or Apex to co-locate communication equipment at the Facility if 1) the use is for a public purpose permitted by the applicable zoning and permitting regulations; 2) the County determines that the co-location is structurally feasible; 3) a Radio Frequency (RF) study acceptable to County is performed and indicates no interference; 4) the requesting party does not assign, license, or permit further co-location on the permitted communication equipment; 5) the party requesting co-location is responsible for all costs associated with review, RF study, approval, permitting, construction, maintenance, and repair of the co-located equipment; 6) the party requesting co-location enters into an addendum to this Lease setting forth the terms and conditions of co-location.

9. Upon completion of the above-referenced, this Addendum may be executed simultaneously in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Addendum shall be governed by and construed in accordance with the laws of the State of North Carolina.

1. Notices. Unless otherwise provided, all notices provided for herein shall be in writing and shall be sent properly addressed by first class mail to the parties at the addresses shown below:

Town of Apex
PO Box 250
Apex, North Carolina 27502-0250
Attention: Randy Vosburg, Town Manager

Email address: Randy.vosburg@apexnc.org

With a copy to the Director of Water Resources:

Town of Apex
PO Box 250
Apex, North Carolina, 27502-0250
Attention: Michael Deaton, Director of Water Resources

Email address: Michael.deaton@apexnc.org

Town of Cary
PO Box 8005
Cary, North Carolina 27512-8005
Attention: Jamie Revels, Utilities Director

Email address: Jamie.revels@carync.gov

Town of Cary
PO Box 8005
Cary, North Carolina, 27512-8005
Attention: Nicole Coughlin, Information Technology Chief Information Officer

Email address: nicole.coughlin@carync.gov

Wake County
PO Box 550
Raleigh, North Carolina 27602
Attention: David Ellis, County Manager

Email address: David.Ellis@wake.gov

With a copy to the Information Technology Directory/Chief Technology Officer:

Wake County
PO Box 550
Raleigh, North Carolina 27602
Attention: Mike Bass

Email address: mike.bass@wake.gov

With a copy to the Facilities, Design and Construction Director:

Wake County
PO Box 550
Raleigh, North Carolina 27602
Attention: Mark Forestieri

Email address: Mark.Forestieri@wake.gov

All notices shall be effective three (3) days after having been deposited, properly addressed and postage prepaid, in the US Postal Service. Any party hereto may change the person to whom or the address to which notices should be provided by giving written notice to the other parties of the change.

[SIGNATURE PAGES TO FOLLOW]

IN WITNESS WHEREOF, the Parties, by authority duly given, have executed this Addendum as of the date first above written.

COUNTY OF WAKE,
a body politic and corporate
of the State of North Carolina

By: _____
Shinica Thomas
Chair, Wake County Board of Commissioners

ATTEST:

_____
Yvonne Gilyard
Clerk to the Board

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, _____, a Notary Public for Wake County, North Carolina, do hereby certify that Yvonne Gilyard either being personally known to me or proven by satisfactory evidence, personally came before me this day and acknowledged that she is the Clerk to the Board of Wake County, and that by authority duly given and as the act of the Board of Commissioners of Wake County, the foregoing instrument was voluntarily signed in its name by its Chair, Shinica Thomas, and attested by herself as its Clerk.

Witness my hand and notarial seal, this_____day of_____, 2023.

Notary Public
Printed/Typed Name:

My Commission Expires:

[AFFIX NOTARIAL STAMP OR SEAL]

TOWN OF APEX,
an incorporated municipality in
Wake County, North Carolina

By: _____
Jacques K. Gilbert
Mayor, Town of Apex

ATTEST:

_____
Allen L. Coleman, CMC, NCCCC
Town Clerk

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, _____, a Notary Public for Wake County, North Carolina, do hereby certify that Allen Coleman either being personally known to me or proven by satisfactory evidence, personally came before me this day and acknowledged that he is the Town Clerk of the Town of Apex, and that by authority duly given and as the act of the Town Council of the Town of Apex, the foregoing instrument was voluntarily signed in its name by its Mayor, Jacques Gilbert, and attested by himself as its Clerk.

Witness my hand and notarial seal, this_____day of_____, 2023.

Notary Public
Printed/Typed Name:

My Commission Expires:

[AFFIX NOTARIAL STAMP OR SEAL]

TOWN OF CARY,
an incorporated municipality in
Wake County, North Carolina

By: _____
Harold Weinbrecht, Jr.
Mayor, Town of Cary

ATTEST:

_____
Virginia Johnson
Town Clerk

STATE OF NORTH CAROLINA

COUNTY OF WAKE

I, _____, a Notary Public for Wake County, North Carolina, do hereby certify that Virginia Johnson either being personally known to me or proven by satisfactory evidence, personally came before me this day and acknowledged that she is the Town Clerk of the Town of Cary, and that by authority duly given and as the act of the Town Council of the Town of Cary, the foregoing instrument was voluntarily signed in its name by its Mayor, Harold Weinbrecht, Jr., and attested by herself as its Clerk.

Witness my hand and notarial seal, this_____day of_____, 2023.

Notary Public
Printed/Typed Name:

My Commission Expires:

[AFFIX NOTARIAL STAMP OR SEAL]

EXHIBIT A

(PLANS AND SPECIFICATIONS FOR CO-LOCATED EQUIPMENT)

NOTES:

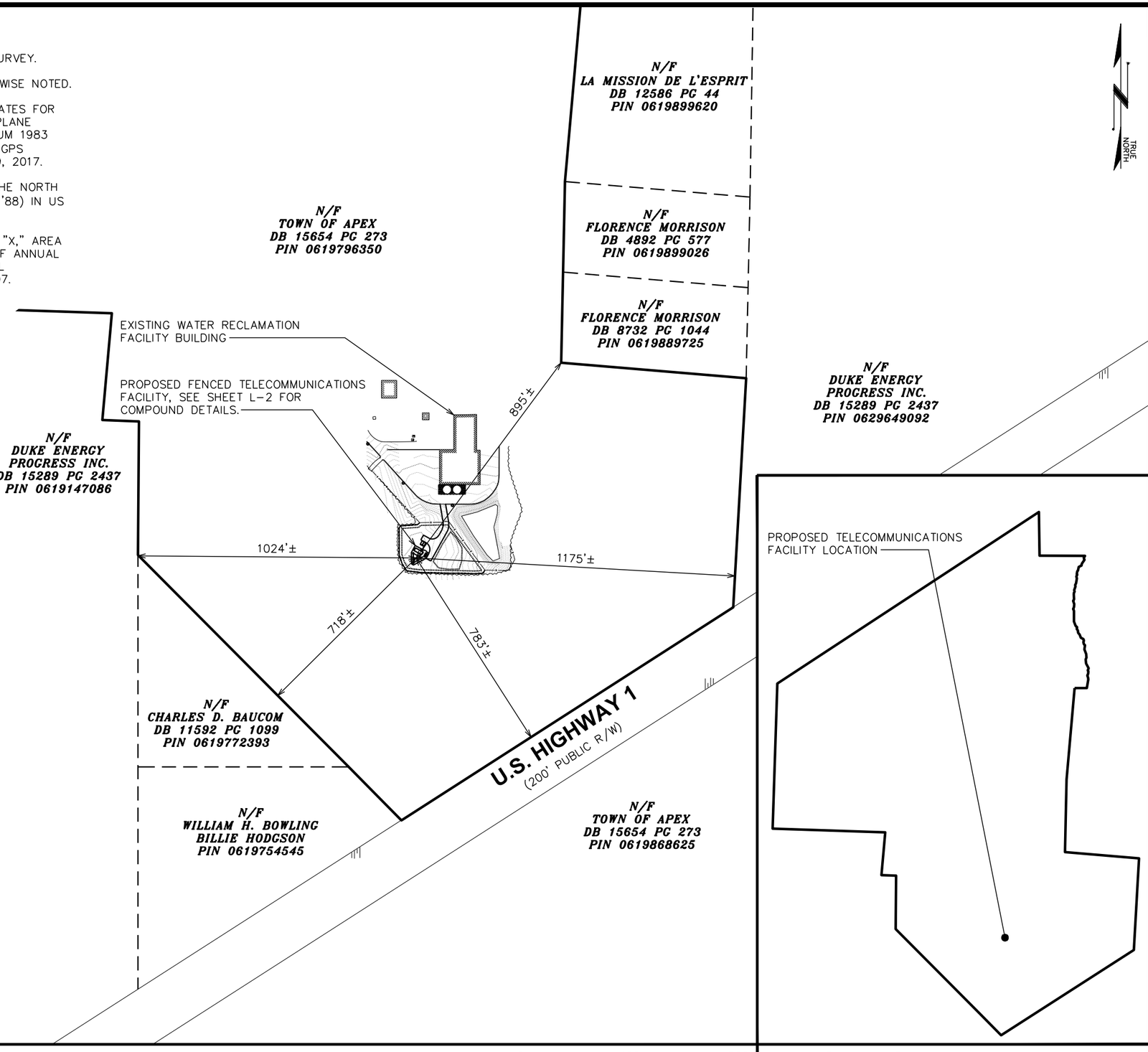
1. THIS PLAN DOES NOT REPRESENT A TITLE SURVEY.
2. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
3. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON DECEMBER 19, 2017.
4. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88) IN US FEET.
5. THIS PROPERTY IS LOCATED IN FLOOD ZONE "X," AREA DETERMINED TO BE OUTSIDE 0.2% CHANCE OF ANNUAL FLOOD BASED UPON FEMA COMMUNITY PANEL #3720060800K, EFFECTIVE FEBRUARY 2, 2007.
6. PROPERTY OWNER: TOWN OF APEX
7. TOTAL PARCEL ACREAGE: 207.3 ACRES

SURVEY NOTE:

INFORMATION SHOWN ON THIS PLAN IS TAKEN FROM A SURVEY BY TOWER ENGINEERING PROFESSIONALS, INC, DATED: 12-19-17. ALL INFORMATION SHOWN ON THIS PLAN IS FOR REFERENCE ONLY. ANY DISCREPANCIES SHOWN ON THIS PLAN SHALL BE SUPERCEDED BY THE ABOVE REFERENCED SURVEY.

LEGEND

- EXIST. PROPERTY LINE
- ADJ. PROPERTY LINE
- PROPERTY CORNER
- IRF — IRON ROD FOUND
- CM — CONCRETE MONUMENT
- EXIST. UTILITY POLE
- EXIST. TELCO PEDESTAL
- EXIST. POWER PEDESTAL
- ---200'--- EXIST. CONTOUR LINE
- EDGE OF PAVEMENT
- ---OHW--- OVERHEAD WIRE
- —— X —— CHAIN LINK FENCE
- EXISTING TREE LINE



SITE PLAN
SCALE: 1" = 400'

0 400 800
SCALE IN FEET

PARCEL INSET
SCALE: 1" = 1000'

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
OFFICE: (919) 856-6160

PROJECT INFORMATION:

W.W.R.W.R.F.

3500 RECLAMATION ROAD
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

LEASE EXHIBIT
DO NOT USE FOR CONSTRUCTION

REV	DATE	ISSUED FOR:
2	04-25-18	UPDATED LE
1	01-15-18	SHELTER & GENERATOR
0	01-05-18	LEASE EXHIBIT

DRAWN BY: CKB | CHECKED BY: JBG

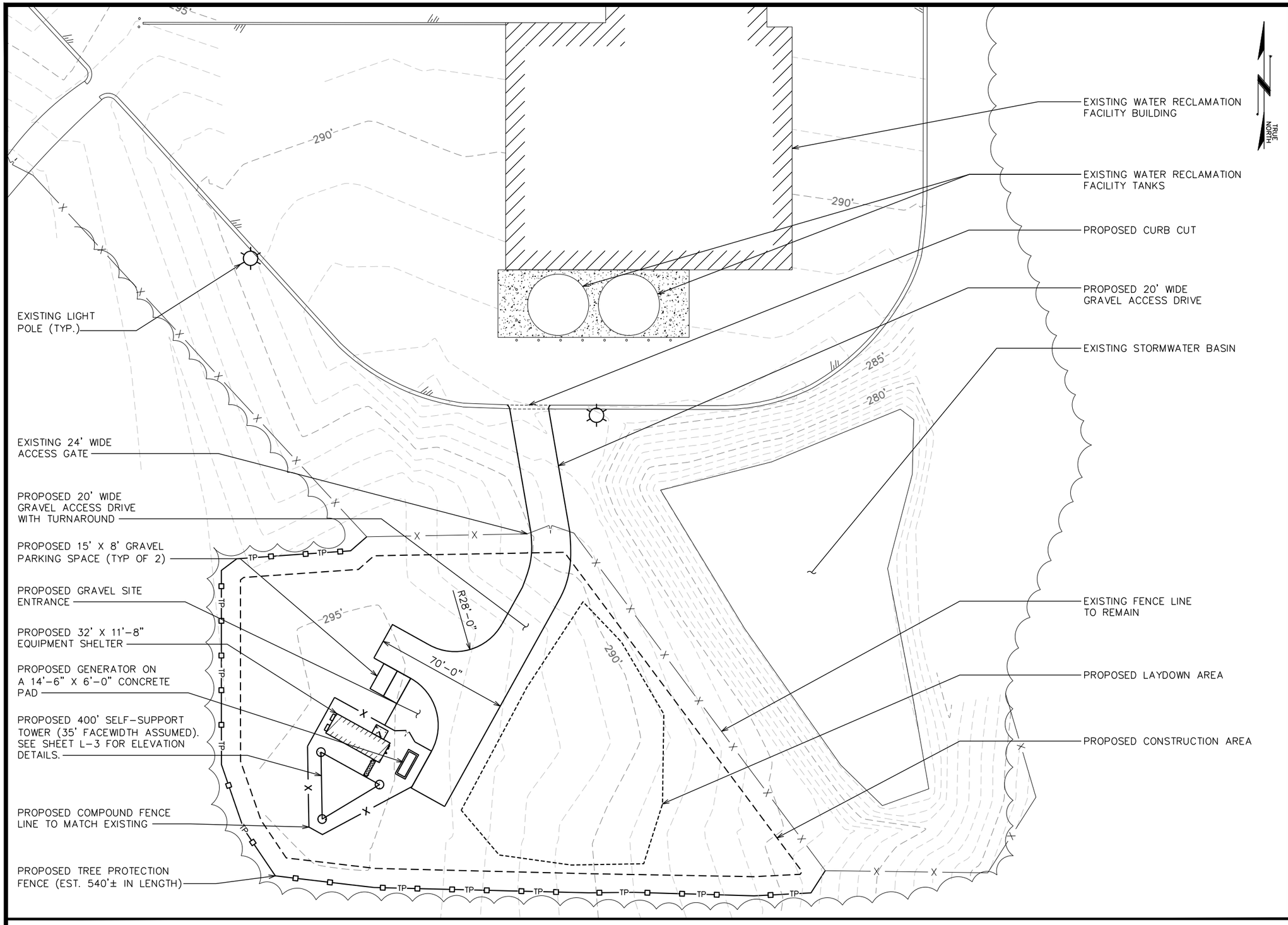
SHEET TITLE:

SITE PLAN

SHEET NUMBER: **L-1**

REVISION: 2

TEP#: 83137.149907



COMPOUND DETAIL

SCALE: 1" = 50'

0 50 100

SCALE IN FEET

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
OFFICE: (919) 856-6160

PROJECT INFORMATION:

W.W.R.W.R.F.

3500 RECLAMATION ROAD
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

LEASE EXHIBIT
DO NOT USE FOR CONSTRUCTION

REV	DATE	ISSUED FOR:
2	04-25-18	UPDATED LE
1	01-15-18	SHELTER & GENERATOR
0	01-05-18	LEASE EXHIBIT

DRAWN BY: CKB | CHECKED BY: JBG

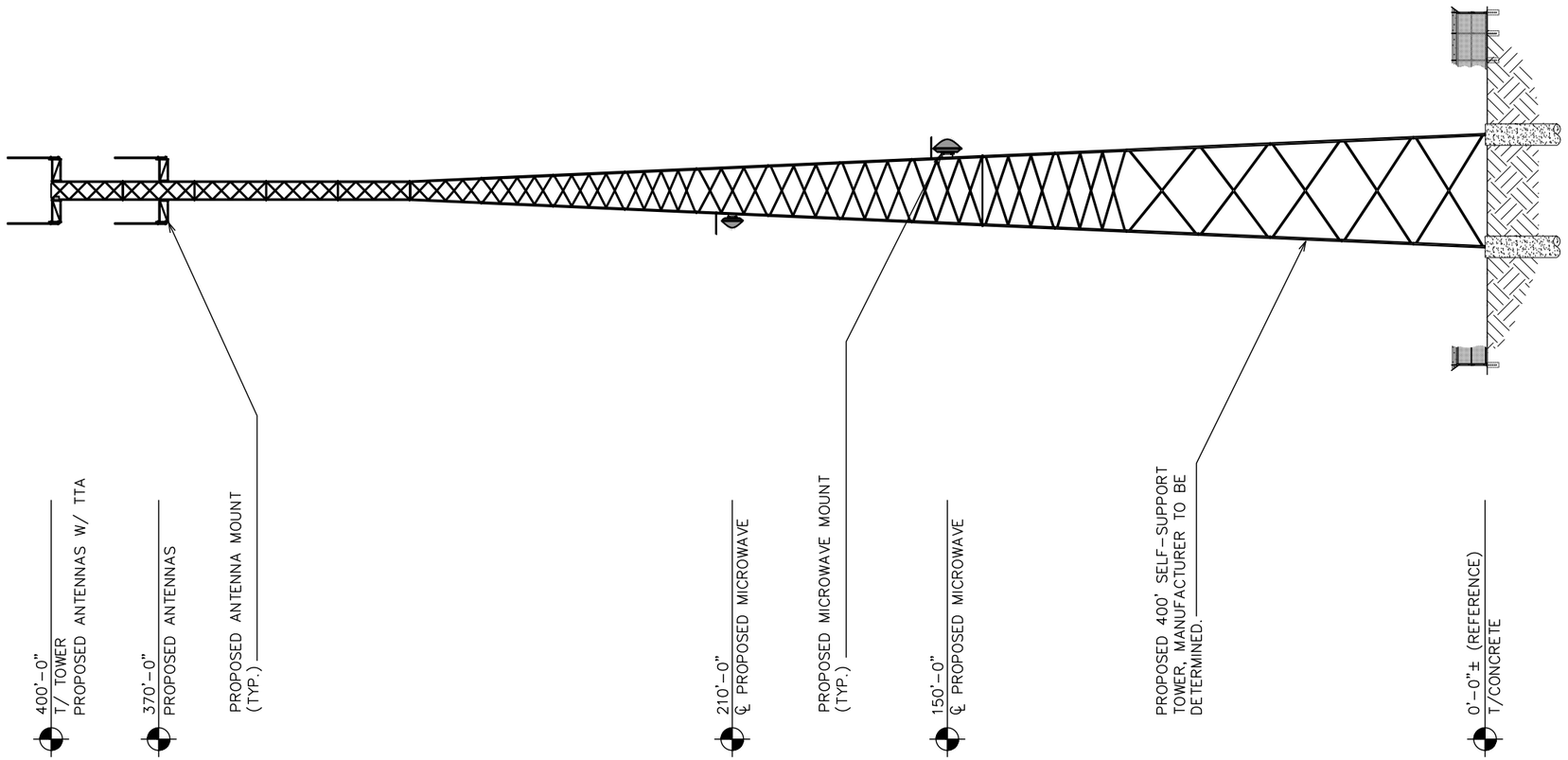
SHEET TITLE:

COMPOUND DETAIL

SHEET NUMBER: **L-2**

REVISION: **2**

TEP#: 83137.149907



TOWER ELEVATION

SCALE: 1" = 40'

80 40 0 SCALE IN FEET

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
OFFICE: (919) 856-6160

PROJECT INFORMATION:

W.W.R.W.R.F.

3500 RECLAMATION ROAD
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

LEASE EXHIBIT
DO NOT USE FOR CONSTRUCTION

REV	DATE	ISSUED FOR:
2	04-25-18	UPDATED LE
1	01-15-18	SHELTER & GENERATOR
0	01-05-18	LEASE EXHIBIT

DRAWN BY: CKB | CHECKED BY: JBG

SHEET TITLE:

TOWER ELEVATION

SHEET NUMBER: **L-3**

REVISION: **2**

TEP#: 83137.149907

COUNTY OF WAKE

STATE OF NORTH CAROLINA

CT20180829...11717

GROUND LEASE

This Ground Lease ("Lease") dated the 17th day of July, 2018 ("Agreement") between the Town of Apex ("Apex"), a North Carolina municipal corporation, the Town of Cary ("Cary"), a North Carolina municipal corporation (together "Lessors"), and Wake County, a body politic and corporate of the State of North Carolina ("County" or "Lessee"). Lessors and Lessee are sometimes referred to individually as "Party" and jointly as "Parties."

RECITALS

WHEREAS, Lessors jointly own a parcel of property located at 3500 Reclamation Road, Apex, North Carolina (PIN# 0619796350) which is the site of an improvement known as the Western Wake Regional Water Reclamation Facility (the "Property"); and

WHEREAS, pursuant to N.C.G.S. 153A-349.51A, the County may plan for and regulate the siting of wireless facilities based upon consideration of public safety; and

WHEREAS, the County has conducted an extensive infrastructure and needs assessment, as a result of which the County has identified the Property as a desirable location for construction of a radio communications facility ("Radio Communications Facility") which will improve public safety radio communications in southwestern Wake County and Lessors have determined that the portion of the Property identified by County for construction of Radio Communications Facility is not and will not be needed by Lessors for their operation of the water reclamation facility during the term of the proposed lease; and

WHEREAS, improving public safety communications in western Wake County shall result in a direct benefit to the residents of the Town of Cary and the Town of Apex; and

WHEREAS, pursuant to N.C.G.S. 160A-274, the Lessors are authorized to lease the Property to the County upon the terms and conditions contained herein.

NOW THEREFORE, for and in consideration of the Recitals and the mutual promises and covenants contained in this Agreement, the Parties agree as follows:

1. **Incorporation of Recitals and Purpose**. The Recitals are true and are incorporated into this Agreement. The purpose of this Agreement is to set forth the terms and conditions on which Lessors will lease a portion of the Property to County for the construction and operation of a Radio Communications Facility

which serves a public purpose for the County, in a manner that does not interfere with the operation of the Western Wake Regional Water Reclamation Facility ("WWRWRF"), which serves a public purpose for the Lessors.

2. **Lease of Premises.** Lessors hereby lease to County that portion of the Property as more specifically described in Exhibit A, Sheet L-1 and Sheet L-2, both attached hereto and made a part hereof (the "Premises") for the Permitted Use described in paragraph 4. Additionally, County is granted the right of access to and from the Premises along a gravel access drive, not to exceed 20-feet in width, to run from the Premises to the existing pavement shown as the "Access Road" on Exhibit "A" and to have utilities run to Premises in location or locations to which Lessors consent. County is responsible for installation and maintenance of the Access Road. Exhibit A, Sheet L-1 and Sheet L-2, illustrate the location of all improvements to the Premises necessary for the Permitted Use, all of which shall be made and maintained at County expense. County shall conduct all construction, operations and maintenance in a manner that does not interfere with Lessors' use and operation of the WWRWRF. County shall maintain Premises and Radio Communications Facility in a safe, neat and tidy condition for the entire Term.

3. **Effective Date; Term and Termination.**

A. Effective Date. This Agreement is conditioned upon proper authorization and execution by all the Parties and shall become effective upon the date it is executed by the last of all the Parties named in the introductory clause of this Agreement ("Effective Date").

B. Term. This Agreement shall have an initial term of Thirty (30) years, ending on the date which is 30 years from the Effective Date ("Initial Term") and unless written notice of non-renewal is provided by any of the Parties prior to the expiration of the Initial Term, shall automatically renew for two (2) successive 10-year renewal terms ("Renewal Term").

C. Termination.

a. *For Cause During Initial Term or Renewal Terms.* Lessors or Lessee may terminate this Ground Lease for cause based upon the failure of the other party to comply with the material terms and conditions of the Lease; provided that the party desiring to terminate shall give the other party ninety (90) days written or electronic notice of the cause for termination. After receipt of such notice, if the other party has not corrected such cause in 90 days, or in the case of cause which cannot be corrected in 90 days, begun in good faith to correct such cause and thereafter proceeded diligently to complete such correction, then the party desiring to terminate may declare the Lease terminated.

b. *Without Cause During Term.* After the Initial Term, this Agreement may be terminated by Lessors or Lessee at any time during a Renewal

Term by either Lessors or Lessee providing written or electronic notice of intent to terminate at least eighteen (18) months prior to the effective date of termination. The 18-month notice period is a material term of this Agreement in recognition of the time required to make other arrangements for critical public safety infrastructure in the event of a termination.

4. **Permitted Use.** County shall use the Premises for the sole purpose of constructing, maintaining, and operating Radio Communications Facility. Radio Communications Facility shall include substantially the following features, as modified or allowed by permitting authority:

   a. a free standing, self-supported lattice tower not greater in height than four hundred (400) feet ("Tower");

   b. an equipment shelter with a maximum size of 32-feet by 12-feet ("Equipment Shelter"). The Town managers, or their designees, may consent to additional Equipment Shelters;

   c. a standby generator with enclosure and fuel tank up to a maximum size of 14-feet by 6-feet to be located adjacent to the Tower structure and outfitted with sound attenuation equipment and enclosure necessary to meet the more stringent of standards of the Town of Apex or Town of Cary, with sound pressure level limited to 65 dB at 7 meters from generator;

   d. an 8ft, black vinyl coated perimeter fence with 3 strands of barb wire around the perimeter of the Premises enclosing the Tower, Equipment Shelter, generator and all appurtenances and accessories thereto. Said fence shall be constructed to match the existing fencing of WWRWRF; and

   e. such activities as are necessary for the installation, operation and maintenance of Radio Communications Facility by County, its employees, contractors and agents.

5. **Roles and Responsibilities of each Party**

   a. **Roles and Responsibilities of Apex and Cary.**

      i. **Town of Apex and Town of Cary.**

         1) The Town of Apex and the Town of Cary are joint Lessors of the Premises. Any action which may be taken by "Lessors" under this Lease requires the joinder of Town of Apex and Town of Cary.
         2) The Town of Cary and the Town of Apex must each assure that its respective employees, contractors, and agents comply with all federal, state and local laws and regulations

and possess insurance coverage required in paragraph 8 of this Agreement.

ii. **Town of Apex.** The Property is within the jurisdiction of Town of Apex. The County must obtain all required approvals for the construction of the Radio Communications Facility by submitting an application through the usual approval processes of the Town of Apex.

iii. **Town of Cary**. Cary shall be Lessors' Lead Agent ("Lead Agent") in administering this Agreement. As lead agency, Cary shall be the primary point of Lessors contact for County, its employees, contractors and agents. Lessors shall:

1) Permit Access to Premises. Lead Agent shall permit County, its designated employees, contractors and agents reasonable access to the Premises to construct, operate, inspect, and maintain the Radio Communications Facility (sometimes "Facility"). Access to the Premises shall be through the main entrance gate to the WWRWRF. Access shall be permitted Monday through Friday, during normal business hours (8:00 am to 4:00 pm). In the event of an emergency requiring after-hours or emergency access to the Property, the County shall be permitted access and must contact the 24/7 after hours number for WWRWRF (919-535-5640).

2) Deny Access at Certain Times. Lead Agent may deny access to the Premises if Lead Agent believes such denial is necessary in cases of emergency, or to ensure the safety of workers and the public; provided that Lead Agent shall provide Lessee with access equal to emergency access given to Lessors employees when necessary to immediately address a physical issue with the Radio Communications Facility.

3) Provide Temporary Construction Area. Lessee shall be granted the right to use a temporary construction area ("TCA") as depicted on Exhibit A, Sheet L-2, for uses reasonably necessary or incidental to the construction, installation, and inspection of Project. Said uses include but are not limited to the stockpiling or storing of materials, the ingress and egress of County's employees, contractors, and agents, the movement and storage of vehicles and equipment, construction staging, and other construction related purposes. Following completion of construction of the Facility, TCA shall be graded and restored by Lessee, in accordance with Lessors' conventional engineering and landscaping methods and practices.

6. **Wake County Role and Responsibilities.** Wake County, as lessee, shall:

   a. Construct Radio Communications Facility, which shall be made up of the improvements referenced in Section 4 Permitted Use and more particularly shown in the final site drawings and plans approved by the permitting authority. All improvements constructed or placed on Premises by County shall be and remain the property of County.

   b. Insure that Radio Communications Facility is constructed and abides by the technical requirements of the Apex UDO and the final site drawings and plans approved by the permitting authority.

   c. Commence construction within a reasonable time of obtaining all required permitting and approvals and thereafter diligently pursue completion of construction.

   d. Provide complete plans and specifications for the Facility to Lessors for review and approval, to provide final plans and specifications prior to commencement of construction, and to provide as-built information to Lessors for the purposes of updating their record drawings for the WWRWR Facility. Lessors approval of such plans and specifications under this Agreement shall be in their capacity as Lessors and not in their regulatory capacity. If modification or improvements are made by County to Facility, County shall submit updated plans and specifications to Lessors for review and approval and thereafter provide updated as-built information. All costs and expenses associated with preparation of plans and specifications and as-built information as provided herein shall be borne by County.

   e. Construct, operate and maintain the Radio Communications Facility on the Premises in accordance with all federal, state and local laws and regulations (including but not limited to all procurement and bidding laws and noise ordinances) and in strict accordance with this Agreement.

   f. Assure that its employees, contractors, and agents comply with all federal, state and local laws and regulations and possess insurance coverage required in paragraph 8 of this Agreement.

   g. Maintain Facility and Premises in a safe, neat and tidy condition, without interference with the WWRWRF and without unreasonable disturbance to Lessors' employees who work in proximity to the Premise, including:

      i. Operating Facility in compliance with applicable Town of Apex noise ordinances, and limiting noise generated from Facility equipment to less than 60 dB at the WWRWRF property line during daylight hours, and to less than 55 dB at the Property line at night. County shall provide exhaust

mufflers and sound-attenuating enclosures for Facility equipment at the request of Apex or Cary.

ii. Operate and maintain Facility in compliance with applicable WWRWRF lighting standards and Town of Apex lighting ordinances. County shall light Facility at night only as required for safety and security. All lighting shall be directional to minimize light pollution.

h. Respond immediately to notice from Cary or Apex that the Premises or Facility is in need of attention or repair and immediately repair damage to Facility or Premises. In the event that the Facility is damaged so that repairs would exceed 30% of its replacement value, the Lessee in its sole discretion may repair Facility within a reasonable amount of time to substantially the same condition as it existed prior to the casualty at its own expense or elect to terminate the Lease as of the date of the casualty.

i. Obtain separate electrical service for the Facility. The Premises is within the Apex's electrical service area. County shall contract directly with the Town of Apex to obtain electrical service for operation of Facility. Said service shall be entirely separate from the electrical service to the WWRWRF. Electrical service lines shall be below-ground and service line routing and installation shall be closely coordinated with and approved by Lessors and shall not interfere with WWRWRF. County is solely responsible for the costs of electrical power used at the Premises.

j. Not interfere with the operation of the WWRWRF. County shall not interfere with the daily or emergency operations of the WWRWRF and shall insure that its employees, contractors and agents cause no interference.

k. Assure that a structural inspection of the Tower acceptable to the County and Lessors is performed every three (3) years that is signed and sealed by North Carolina Professional Engineer and provide Lessors with copies upon request. Should any component of the Radio Communications Facility fail inspection, County shall make any necessary corrections, improvements, or repairs within twelve (12) months and pass re-inspection.

l. Obtain all necessary Federal, State, and local governmental approvals and licenses prior to commencing construction or operating the Radio Communications Facility. County shall be responsible for maintaining all required approvals and licenses for continuing operation of the Facility. County shall bear all costs associated with review and approval of all plans and specifications. County shall promptly provide Lessors with copies of all licenses and approvals.

7. **Co-location By Cary or Apex.** In the event that Cary or Apex desires to co-locate communication equipment on the Facility, it shall provide complete engineer stamped plans and specifications to Lessee for approval. Lessee shall permit Cary and/or Apex to co-locate communication equipment at the Facility if 1) the use is for a public purpose permitted by the applicable zoning and permitting regulations; 2) the County determines that the co-location is structurally feasible; 3) a Radio Frequency (RF) study acceptable to County is performed and indicates no interference; 4) the requesting party does not assign, license, or permit further co-location on the permitted communication equipment; 5) the party requesting co-location is responsible for all costs associated with review, RF study, approval, permitting, construction, maintenance, and repair of the co-located equipment; 6) the party requesting co-location enters into an addendum to this Lease setting forth the terms and conditions of co-location.

8. **Co-location by Private Carriers**. Lessors and Lessee agree that no private carriers shall be allowed to co-locate at the Facility without the agreement of the Lessors and Lessee and a written amendment to the Lease.

9. **Insurance.** Lessee and Lessors shall each procure and maintain for the Full Term insurance for claims arising from their respective use, improvement, operation, or maintenance of the Property in the following limits:

General Liability	$1,000,000 per occurrence
	$2,000,000 aggregate
Commercial Automobile Liability	$1,000,000 CSL
Commercial Excess Liability / Umbrella Policy	$1,000,000 per occurrence and aggregate
Workers Comp	Statutory Limits
Employer's Liability	$500,000 each accident

Lessee shall procure and maintain Property Insurance against all risks of loss, including fire, to any structures, improvements, or betterments, including course of construction, on the "Premises;" Lessors shall procure and maintain Property Insurance against all risks of loss, including fire, to any structures, improvements, or betterments, including course of construction, on that portion of the Property exclusive of the "Premises."

General Liability, Automobile Liability and Excess/Umbrella can be satisfied through a combination of primary, excess, or self-insured coverage.

Any party maintaining a funded reserve pursuant to N.C. law and resolution of its governing board may satisfy the requirements set forth herein by providing a letter of self-insurance to the other party. Failure by any party to obtain and maintain in force the above-referenced insurance coverage shall constitute a default under the terms of this Agreement.

10. Financial Responsibility.

a. County shall be solely responsible and liable for the construction, maintenance and operation of the Premises and shall be responsible for any losses, costs or damages that may result from County's use, improvement, operation and maintenance of the Premises and Facility. County shall be solely responsible and liable for the acts and omissions of its employees, contractors and agents to the extent permitted by law and consistent with the terms of the 2003 Resolution Regarding Limited Waiver of Sovereign Immunity.

b. Lessors shall be solely responsible and liable for the maintenance and operation of the Property exclusive of the Premises, and shall be responsible for any losses, costs or damages that may result to Premises or Property from Lessors' use, improvement, operation and maintenance of the Property. Lessors shall be solely responsible and liable for the acts and omissions of its respective Town of Cary or Town of Apex employees, contractors and agents to the extent permitted by law and any applicable resolution of their respective governing boards.

11. Rent. Lessors and Lessee acknowledge that this is a lease of government property entered into pursuant to N.C.G.S. 160A-274, and no consideration in the form of rent shall be due from Lessee to Lessors, or in the event of co-location, from Lessors to Lessee.

12. Removal of Communications Facility at Termination or Expiration of Agreement. Unless Cary or Apex provide written notice that they desire County's improvements to remain, upon termination or expiration of the Agreement for any reason, County shall completely disassemble and remove all of the improvements, including the Tower and its appurtenances, driveways, concrete foundations, fences and associated structures, without cost or expense to Cary or Apex. Such disassembly and removal shall be completed within a reasonable time of the termination of the Lease, not to exceed eighteen months, and this Agreement shall remain in effect for the duration of that disassembly and removal. County shall surrender the Premises to Lessors in the same condition as at the commencement of this Agreement, normal wear and tear excepted. County shall be responsible for repair of all damage resulting from its use of the Premises. In the event County fails or refuses to repair damage to Premises or to disassemble and remove its improvements, Lessors may undertake the same and County shall be responsible for all costs and expenses, which shall be due upon presentation of a bill.

In the event Cary and Apex provide written notice that they desire for the improvements to remain, disposition of the Communications Facility shall be as follows:

a. County shall remove all County owned electronics and electrical equipment.

b. County shall leave the steel tower structure and concrete building pad AS IS on the site for the use of the Lessors, at no additional cost to Lessors.
c. County at its sole option may:
    i. Completely disassemble and remove all of the other improvements ("Other Improvements"), including the building, generator, UPS system, any appurtenances previously used with the Communications Facility. Such disassembly and removal shall be without cost or expense to Cary or Apex and completed within a reasonable time of the termination of the Lease, not to exceed eighteen months.
    ii. If the County chooses not to retain the Other Improvements, the County may offer the Other Improvements for sale AS IS to Lessors using a straight-line method of depreciation to determine purchase price. The Lessee shall split the cost of appraisal 50/50 with Lessors, Lessee's share to be deducted from purchase price. If Lessors accept the County's offer, Cary and Apex shall determine how each shall split the costs at the time the offer is accepted. Cary and Apex shall be under no obligation to accept County's offer and, if the offer is rejected, County shall disassemble and remove the Other Improvements as outlined above.

13. **Holding Over**. If County remains in possession of the Premises after expiration of the term hereof, County shall be a tenant at sufferance and there shall be no renewal of this Agreement by operation of law.

14. **Lessors' Entry of Premises**. Lessors may enter the Premises upon prior notice to County at reasonable hours to inspect Premises. Lessors may enter the Premises at any time without prior notice, in the event of an emergency or to make emergency repairs to the Premises. Upon request of Lessors, County shall provide Lessors with a functioning key and/or valid entry codes to the Premises and shall replace such key or provide new codes if the locks to the Premises are changed.

15. **Environmental Laws**. Except as permitted herein, neither Lessors nor Lessee shall bring any Hazardous Materials onto Premises. The term Hazardous Materials means those substances, materials, and wastes, including, but not limited to those substances, materials and wastes (hereafter jointly "substances") listed in the United States Department of Transportation Hazardous Materials Table (49 CFR 172.101) or by the Environmental Protection Agency as hazardous substances (40 CFR Part 302) and amendments thereto, and such substances which are or become regulated under any applicable local, state or federal law, including, without limitation, any substance which is (I) petroleum (ii) asbestos (iii) polychlorinated biphenyls (iv) designated as a "Hazardous Substance " pursuant to Section 331 of the Clean water Act, 33 USC Sec. 1251, *et. seq* (33 USC Sec 1321) or listed pursuant to Section 307 of the Clean Water Act (33 USC Sec. 1371), (v) defined as a "hazardous waste" pursuant to Section 1004 of the Resource Conservation and Recovery Act, 42 USC Sec 6901, *et. seq.* (42 USC

Sec 6903) or (vi) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC Sec 9601 *et. seq.* (42 USC 9601).

Lessors covenants and warrants that no known Hazardous Substances are on the Premises at the execution of the Lease.

To the extent necessary for the construction or operation of Facility, County may bring necessary Hazardous Materials onto Premise upon the following conditions:

a. County shall comply with any and all federal, state or local laws, ordinances, rules, decrees, orders, regulations or court decisions relating to Hazardous Substances including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Resource Conservation and Recovery Act, the Hazardous Materials Transportation Act, any other legal requirement concerning Hazardous Materials, and any amendments to the foregoing (collectively, all such matters being "Hazardous Materials Requirements"). County shall remove from the Premises and the Property, all Hazardous Materials that were brought onto or placed on the Premises by County or County's employees, agents, invitees or contractors, at the earlier of completion of their use in construction or operations or upon the expiration or earlier termination of this Agreement. Such removal shall be in compliance with all Hazardous Materials Requirements.

b. County shall be responsible for obtaining all necessary permits in connection with its use, storage and disposal of Hazardous Materials, and shall develop and maintain, and where necessary file with the appropriate authorities, all reports, receipts, manifest, filings, lists and invoices covering those Hazardous Materials and County shall provide Lessors with copies of all such items upon request. County shall provide within five (5) days after receipt thereof, copies of all notices, orders, claims or other correspondence from any federal, state or local government or agency alleging any violation of any Hazardous Materials Requirements by County, or related in any manner to Hazardous Materials. In addition, County shall provide Lessors with copies of all responses to such correspondence at the time of the response.

In the event of a prohibited release of Hazardous Materials on Premises, the responsible party shall be responsible for all necessary clean up and mitigation. If said clean up or mitigation is regulated by a Federal, State, or Local regulation, the responsible party shall insure that all clean up and mitigation is done in compliance with any such regulation.

The warranties and indemnities contained in this paragraph shall survive the termination of this Agreement.

16. **Notices.** Unless otherwise provided, all notices provided for herein shall be in writing and shall be sent properly addressed by first class mail to the parties at the addresses shown below:

Town of Apex
PO Box 250
Apex, North Carolina 27502-0250
Attention: Drew Havens, Town Manager

Email address: drew.havens@apexnc.org

With a copy to the Director of Water Resources:

Town of Apex
PO Box 250
Apex, North Carolina 27502-0250
Attention: Marty Stone, Director of Water Resources

Email address: marty.stone@apexnc.org

Town of Cary
PO Box 8005
Cary, North Carolina 27512-8005
Attention: Jamie Revels, Utilities Director

Email address: jamie.revels@townofcary.org

Town of Cary
PO Box 8005
Cary, North Carolina 27512-8005
Attention: Nicole Raimundo, Information Technology Chief Information Officer

Email address: nicole.raimundo@townofcary.org

Wake County
P.O. Box 550
Raleigh, NC 27602
Attention: David Ellis, County Manager

Email address: david.ellis@wakegov.com

With a copy to the Information Technology Director/Chief Technology Officer:

Wake County
P.O. Box 550
Raleigh, NC 27602
Attention: John Higgins

Email address: john.higgins@wakegov.com

With a copy to the Facilities, Design and Construction Director:

Wake County
P.O. Box 550
Raleigh, NC 27602
Attention: Mark Forestieri

Email address: mforestieri@wakegov.com

All notices shall be effective three (3) days after having been deposited, properly addressed and postage prepaid, in the US Postal Service. Any party hereto may change the person to whom or the address to which notices should be provided by giving written notice to the other parties of the change.

17. **Entire Agreement/Amendments.** This Agreement constitutes the entire agreement between the Parties with respect to its general subject matter. This Agreement may not be changed except in writing signed by all the Parties. The managers of Apex and Cary and the manager of County are authorized to execute minor amendments to this Agreement unless such amendment constitutes a substantial change to the Agreement or such the law requires approval by the governing board. A substantial change shall be defined as a change requiring the appropriation of funding or a change in the Permitted Use of the Premises or Property.

18. **Representations and Warranties.** The Parties each represent, covenant and warrant for the other's benefit as follows:

    a. Each Party has all necessary power and authority to enter into this Agreement and to carry out the transactions contemplated by this Agreement, and this Agreement has been authorized by Resolution spread upon the minutes of each Party's governing body. This Agreement is a valid and binding obligation of each Party.

    b. Neither the execution and delivery of this Agreement, nor the fulfillment of or compliance with its terms and conditions, nor the consummation of the transactions contemplated by this Agreement, will result in a breach of the terms, conditions and provisions of any agreement or instrument to which a Party is now a party or by which either is bound, or constitutes a default under any of the foregoing.

    c. To the knowledge of each Party, there is no litigation or other court or administrative proceeding pending or threatened against such Party (or against any other person) affecting such Party's rights to execute or deliver this Agreement or to comply with its obligations under this Agreement. Neither such Party's execution and delivery of this Agreement, nor its compliance with its obligations under this Agreement, requires the approval of any regulatory body or any other entity the approval of which has not been obtained.

d. The Parties have not dealt with any real estate broker or brokerage firm regarding transactions relating to the Property, and no person or firm has a claim for real estate commissions arising out of the lease of Property.

e. To the best of Apex's and Cary's knowledge, there are no disputes concerning the boundaries of the Premises.

f. Quiet Enjoyment. So long as County observes and performs the covenants and agreements contained herein, it shall at all times during the full Term peacefully and quietly have and enjoy possession of the Premises, subject to the terms hereof.

19. **Dispute Resolution.** In the event of conflict or default that might arise for matters associated with this Agreement, the Parties agree to informally communicate to resolve the conflict. If any such dispute cannot be informally resolved, then such dispute, or any other matter arising under this Agreement, shall be subject to resolution in a court of competent jurisdiction. Such disputes, or any other claims, disputes or other controversies arising out of, and between the Parties shall be subject to and decided exclusively by the appropriate general court of justice of Wake County, North Carolina.

20. **No Waiver of Non-Compliance with Agreement.** No provision of this Agreement shall be deemed to have been waived by any Party hereto unless such waiver shall be in writing and executed by the same formality as this Agreement. The failure of any Party at any time to require strict performance by another of any provision hereof shall in no way affect the right of the other Party to thereafter enforce the same. In addition, no waiver or acquiescence by a Party hereto of any breach of any provision hereof by another Party shall be taken to be a waiver of any succeeding breach of such provision or as a waiver of the provision itself.

21. **Governing Law.** The Parties intend that this Agreement be governed by the law of the State of North Carolina. Proper venue for any action shall solely be Wake County.

22. **Assignment.** Neither Lessors nor Lessee may sell or assign any interest in or obligation under this Agreement without the prior express written consent of the other party.

23. **Liability of Officers and Agents.** No officer, agent or employee of any Party will be subject to any personal liability or accountability by reason of the execution of this Agreement or any other documents related to the transactions contemplated hereby. Such officers, agents or employees will be deemed to execute such documents in their official capacities only, and not in their individual capacities. This section will not relieve any such officer, agent or employee from the performance of any official duty provided by law.

24. **Execution in Counterparts/Electronic Version of Agreement.** This Agreement may be executed in any number of counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. A Party may convert a signed original of the Agreement, or any amendment hereto, to an electronic record pursuant to a North Carolina Department of Natural and Cultural Resources approved procedure and process for converting paper records to electronic records for record retention purposes. Such electronic record of the Agreement shall be deemed for all purposes to be an original signed Agreement.

25. **Verification of Work Authorization.** The Parties, and all contractors, shall comply with Article 2, Chapter 64, of the North Carolina General Statutes.

26. **No third-Party Beneficiaries.** There are no third-party beneficiaries to this Agreement.

27. **Time.** Time is of the essence in this Agreement and each and all of its provisions.

28. **Further Assurances/Corrective Instruments; Good Faith/Due Diligence.** The Parties agree that they will, from time to time, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such supplements hereto and such further instruments as may reasonably be required for carrying out the purpose of this Agreement. The Parties agree to work together in good faith and with all due diligence to provide for and carry out the purpose of this Agreement.

29. **Memorandum of Lease.** The parties agree that a Memorandum of Lease shall be signed by each party and duly recorded in the Wake County Registry.

IN TESTIMONY WHEREOF, the Parties pursuant to resolutions of their respective governing boards spread upon their minutes, have caused this Agreement to be executed and attested by their duly authorized officers and their official seals affixed.

ATTEST:

Virginia Johnson
Town Clerk

TOWN OF CARY:

Harold Weinbrecht, Jr.
Mayor, Town of Cary

ATTEST:

Donna Hosch, MMC, NCCMC
Town Clerk

TOWN OF APEX:

Lance Olive
Mayor, Town of Apex

Vance Holloman
Finance Officer, Town of Apex

ATTEST:

Denise Hogan

Denise Hogan

Clerk to the Board

COUNTY OF WAKE:

Jessica N. Holmes, Chair
Wake County Board of Commissioners

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

N/A

Emily Lucas
Interim Finance Officer, Wake County

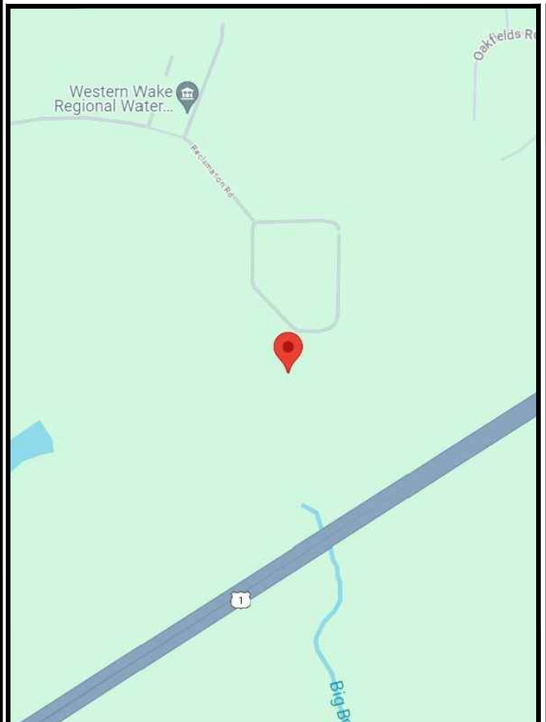
LESSEE SITE NAME:	WWRWRF
ASR #:	1306704
PROJECT TYPE:	ANTENNA COLLOCATION
PROJECT DESCRIPTION:	ANTENNA INSTALLATION
TOWER TYPE:	400' SELF-SUPPORT
JURISDICTION:	TOWN OF APEX
ZONING:	RA
PRESENT OCCUPANCY TYPE:	WATER RECLAMATION FACILITY
PARCEL ID:	0619796350

PROJECT INFORMATION

LATITUDE:	N 35° 40' 03.27" (NAD '83)*
LONGITUDE:	W 78° 56' 21.33" (NAD '83)*
GROUND ELEVATION:	295.2'± (NAVD '88)*

*INFORMATION TAKEN FROM 1A CERTIFICATION LETTER BY TEP, DATED JANUARY 25, 2018.

TOWER COORDINATES



LOCATION MAP

SITE DEVELOPER/APPLICANT:

WWRWRF
ANTENNA INSTALLATION

ASR #: 1306704
SITE NAME: WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

LESSEE:
NAME: WAKE COUNTY
ADDRESS: 300 SOUTH SALISBURY STREET
CITY, STATE, ZIP: RALEIGH, NC 27601
CONTACT: FRANK HALL

TOWER OWNER:
NAME: WAKE COUNTY
ADDRESS: 300 SOUTH SALISBURY STREET
CITY, STATE, ZIP: RALEIGH, NC 27601
CONTACT: FRANK HALL

STRUCTURAL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603-3530
CONTACT: AARON T. RUCKER, P.E.
PHONE: (919) 661-6351

CIVIL ENGINEER:
NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603-3530
CONTACT: SCOTT C. BRANTLEY, P.E.
PHONE: (919) 661-6351

PROPERTY OWNER:
NAME: TOWN OF APEX
ADDRESS: 73 HUNTER STREET/P.O. BOX 250
CITY, STATE, ZIP: APEX, NC 27502
CONTACT: DIANNE KHIN
PHONE: (919 249-3400

CONTACT INFORMATION

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. 2018 NORTH CAROLINA BUILDING CODE
2. LOCAL BUILDING CODE
3. CITY/COUNTY ORDINANCES
4. ANSI/TIA-222-H
5. 2020 NATIONAL ELECTRIC CODE

CODE COMPLIANCE

THE STRUCTURAL EVALUATION BY TOWER ENGINEERING PROFESSIONALS, DATED FEBRUARY 5, 2024, WAS PERFORMED IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE AND THE ARIZONA STATE BUILDING CODE, BASED UPON:

1. BASIC WIND SPEED = 120 MPH (3-SECOND GUST)
2. WIND SPEED W/ICE = 30 MPH (3-SECOND GUST) W/ 1.50" RADIAL ICE CONCURRENT

DESIGN CRITERIA

UTILITIES:
POWER COMPANY: APEX ELECTRIC
CONTACT: CUSTOMER SERVICE
PHONE: (919) 362-8676

FIBER COMPANY: AT&T
CONTACT: CUSTOMER SERVICE
PHONE: (800) 331-0500
PHONE # NEAR SITE: (919) 469-4000

SITE OWNER:

WAKE COUNTY
NORTH CAROLINA

300 SOUTH SALISBURY ST
RALEIGH, NC 27601
(919) 856-6160

SITE NAME:
WWRWRF

TOWER SCOPE OF WORK:

- INSTALL (1) PROPOSED AMPHENOL WPA-70090-6CF-2-850 ANTENNA @ 295' AND ASSOCIATED (1) 1-5/8" COAX CABLE.
- NO INCREASE IN HEIGHT.

GROUND SCOPE OF WORK:

- INSTALL (1) PROPOSED FLEXNET M400B2 BASE STATION ON A PROPOSED 3'-0" WIDE H-FRAME.

PROJECT SCOPE OF WORK

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	1
T2-T6	APPENDIX B	1
N1	GENERAL NOTES	1
C1	SITE PLAN	1
C2-C2A	TOWER ELEVATION & DETAIL	1
C3	ANTENNA PLAN & SCHEDULE	1
C4	ANTENNA SPECIFICATIONS	1
	APPENDIX	
	PROPOSED 2' STANDOFF MOUNT SPECIFICATIONS	
	PROPOSED BASE STATION SPECIFICATIONS	
	PROPOSED COAX CABLE SPECIFICATIONS	
	PROPOSED PIPE TO PIPE CLAMP SPECIFICATIONS	

INDEX OF SHEETS

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

NC LIC#: P-1403

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

SHEET NUMBER: **T-1**

REVISION: 1

TEP #: 83137.923890

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: WWRWRF

Address: 3500 RECLAMATION ROAD K, NEW HILL, NC Zip Code 27562

Owner/Authorized Agent: FRANK HALL Phone # (919) 856 - 5215 E-Mail FRANK.HALL@WAKEGOV.COM

Owned By: ☒ City/County ☐ Private ☐ State

Code Enforcement Jurisdiction: ☒ City TOWN OF APEX ☐ County _____ ☐ State

Tower Engineering Professionals

CONTACT: _____

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				( )	
Civil	Tower Engineering Professionals	Scott C. Brantley, P.E.	048226	(919) 661-6351	sbrantley@tepgroup.net
Electrical				( )	
Fire Alarm				( )	
Plumbing				( )	
Mechanical				( )	
Sprinkler-Standpipe				( )	
Structural				( )	
Retaining Walls >5' High				( )	
Other				( )	

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ☐ New Building ☐ Addition ☒ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____

RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3): _____

OCCUPANCY CATEGORY (Table 1604.5): **Current:** ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☒ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B

Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes

Special Inspections Required: ☒ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor	N/A		
2nd Floor	N/A		
Mezzanine	N/A		
1st Floor	N/A		
Basement	N/A		
TOTAL	N/A		

ALLOWABLE AREA

Primary Occupancy Classification(s): Select one Select one Select one Select one Select one Select one

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐
Educational ☐
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 Condition ☐ 1 ☐ 2
☐ I-2 Condition ☐ 1 ☐ 2
☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☒

Accessory Occupancy Classification(s): N/A

Incidental Uses (Table 509): N/A

Special Uses (Chapter 4 – List Code Sections): N/A

Special Provisions: (Chapter 5 – List Code Sections): N/A

Mixed Occupancy: ☒ No ☐ Yes Separation: _____ Hr.

☐ Non-Separated Use (508.3) - The required type of constr… shall be determined by applying the height and … of the applicable occupancies to the ent… restrictive type of construction, so do… the entire building.

☐ Separated Use (508.4) - See below for area … y, the area of the occupancy shall be such that the s… ctual floor area of each use divided by the allowable … hall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{…upancy B}}{\text{Occupancy B}} \leq 1$$

_____ + _____ + ….. = _____ ≤ 1.00

N/A NOT A BUILDING

2018 NC Administrative Code and Policies

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO CHECKED BY: BSE

SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-2**

REVISION: 1

TEP#: 83137.923890

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 5	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]

[1] Frontage area increases from Section 50
a. Perimeter which fronts a publ ving 20 feet minimum width = _____ (F)
b. Total Building Perimeter)
c. Ratio (F/P) = _____
d. W = Minimum width _____ (W)
e. Percent of frontage increase = [F/P – 0.25] x *W*/30 = _____ (%)

[2] Unlimited area applicable under co Section 507.

[3] Maximum Building Area = total numb stories in the building x D (maximum3 stories) (506.2).

[4] The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.

[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

N/A
NOT A BUILDING

ALLOWABL

	AL	WN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)			
Building Height in Stories (Table 504.4)			

[1] Provide code reference if the "Shown on Plans" qua .3 or 504.4.

N/A
NOT A BUILDING

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

N/A
NOT A BUILDING

N/A
NOT A BUILDING

* Indicate section number permitting reduction

2018 NC Administrative Code and Policies

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
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NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

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1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-3**

REVISION: 1

TEP#: 83137.923890

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

N/A
NOT A BUILDING

LM REQUIREMENTS

Emergency Lighting:
Exit Signs:
Fire Alarm: Yes
Smoke Detection Systems: Yes ☐ Partial _____
Panic Hardware: Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: _____

- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations (if not on the site plan)
- ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☐ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☐ Occupant loads for each area
- ☐ Exit access travel distances (1017)
- ☐ Common path of travel distances (Tables 1006.2
- ☐ Dead end lengths (1020.4)
- ☐ Clear exit widths for each exit door
- ☐ Maximum calculated occupant load c an accommodate based on egress width (1005.3)
- ☐ Actual occupant load for each exit
- ☐ A separate schematic plan indi oor/ceiling and/or roof structure is provided for purposes of occupancy sepa
- ☐ Location of doors with p 0)
- ☐ Location of doors with nd the amount of delay (1010.1.9.7)
- ☐ Location of doors with el gress locks (1010.1.9.9)
- ☐ Location of doors equipped w open devices
- ☐ Location of emergency escape w dows (1030)
- ☐ The square footage of each fire area (202)
- ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

N/A
NOT A BUILDING

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVID	PE B	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

N/A
NOT A BUILDING

ACC

LOT OR PARKING AREA	TOTAL # OF PARKING SP		CESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PR	ISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS /TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW										
	REQ'D										

SPECIAL

Special approval: (Local Jurisdiction, Departmen PI, DHHS, etc., describe below)

N/A
NOT A BUILDING

PLANS PREPARED FOR:

WAKE COUNTY
NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

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SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-4**

REVISION: 1

TEP#: 8313 7.923890

ENERGY SUMM

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any [illegible]quired to meet the energy code shall also be provided. Each Designer shall furnish the requir[illegible]t information for the plan data sheet. If performance method, state the annual energy cost f[illegible]e design vs annual energy cost for the proposed design.

Existing building envelope complies with [illegible] Yes (The remainder of this section is not applicable)

Exempt Building: ☐ No ☐ Ye[illegible]ference): _____

Climate Zone: ☐ 3[illegible]

Method of Compliance: [illegible] ☐ Performance ☐ Prescriptive
AS[illegible]1 ☐ Performance ☐ Prescriptive
(If [illegible]er" specify source here)_____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazi[illegible]
U-Value of assembly:
Solar heat gain coefficie[illegible]
projection factor:
Door R-Values:

Walls below grade (each asse[illegible]
Description of ass[illegible]
U-Value of tota[illegible]
R-Value of in[illegible]

Floors over unconditioned[illegible] assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/vertical requirement: _____
slab heated: _____

N/A
NOT A BUILDING

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) _____
Seismic (I_E) _____

Live Loads: Roof _____
Mezzanine _____
Floor _____

Ground Snow Load: _____ psf

Wind Load: Basic Wind Sp[illegible] (ASCE-7)
Exposure C[illegible]

SEISMIC DESIGN CATEGORY: [illegible] ☐ C ☐ D
Provide the following Seismic Design Par[illegible]
Risk Category (Table 1604.5) ☐ I[illegible] ☐ II ☐ III ☐ IV
Spectral Response Acceleration [illegible]Ss_____ %g S_1_____ %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system ☐ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☐

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity _____ psf
Pile size, type, and capacity _____

N/A
NOT A BUILDING

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

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NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

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0	01-30-24	PRELIMINARY

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SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-5**

REVISION: 1

TEP#: 83137.923890

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

N/A NOT A BUILDING

Thermal Zone

winter dry bulb: _____
summer dry bulb: _____

Interior design conditions

winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System

Unitary
- description of unit: _____
- heating efficiency: _____
- cooling efficiency: _____
- size category of unit: _____

Boiler
- Size category. If oversized, state reason.: _____

Chiller
- Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

N/A NOT A BUILDING

Method of Compliance: Energy Code ☐ Performa ☐ Prescriptive
ASHRAE 90.1 ☐ Perfor ☐ scriptive

Lighting schedule (each fixture type)

lamp type required in fixture
number of lamps in fixture
ballast type used in the fixt
number of ballasts in fix
total wattage per fixtu
total interior watta (whole building or space by space)
total exterior wattag wed

Additional Efficiency Package O
(When using the 2018 NCECC; not required for ASHRAE 90.1)

- ☐ C406.2 More Efficient HVAC Equipment Performance
- ☐ C406.3 Reduced Lighting Power Density
- ☐ C406.4 Enhanced Digital Lighting Controls
- ☐ C406.5 On-Site Renewable Energy
- ☐ C406.6 Dedicated Outdoor Air System
- ☐ C406.7 Reduced Energy Use in Service Water Heating

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

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0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

APPENDIX B

SHEET NUMBER: **T-6**

REVISION: 1

TEP#: 8313 7.923890

1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED WAKE COUNTY OR ITS DESIGNATED REPRESENTATIVE.

2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING TO HAVE SUFFICIENT EXPERIENCE AND ABILITY, IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED, AND IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF NORTH CAROLINA.

3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-H AND CONFORM TO THE REQUIREMENTS OF THE 2018 NORTH CAROLINA BUILDING CODE.

4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA BUILDING CODE.

5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.

6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.

7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE INSTALLATION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING INSTALLATION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.

8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.

9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE LICENSEE PROJECT MANAGER.

12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.

13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.

14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.

15. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

16. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

17. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH LICENSEE SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO LICENSEE PRIOR TO THE START OF THE WORK ON THE PROJECT.

18. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.

19. THE CONTRACTOR SHALL FURNISH AN ADEQUATELY SIZED DUMPSTER FOR TRASH, DEBRIS, ETC, TO BE PERIODICALLY REMOVED FROM SITE AS REQUIRED.

20. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.

21. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

PLANS PREPARED FOR:

WAKE COUNTY
NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

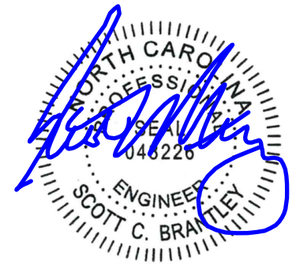
3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

NC LIC#: P-1403

SEAL:



February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

GENERAL NOTES

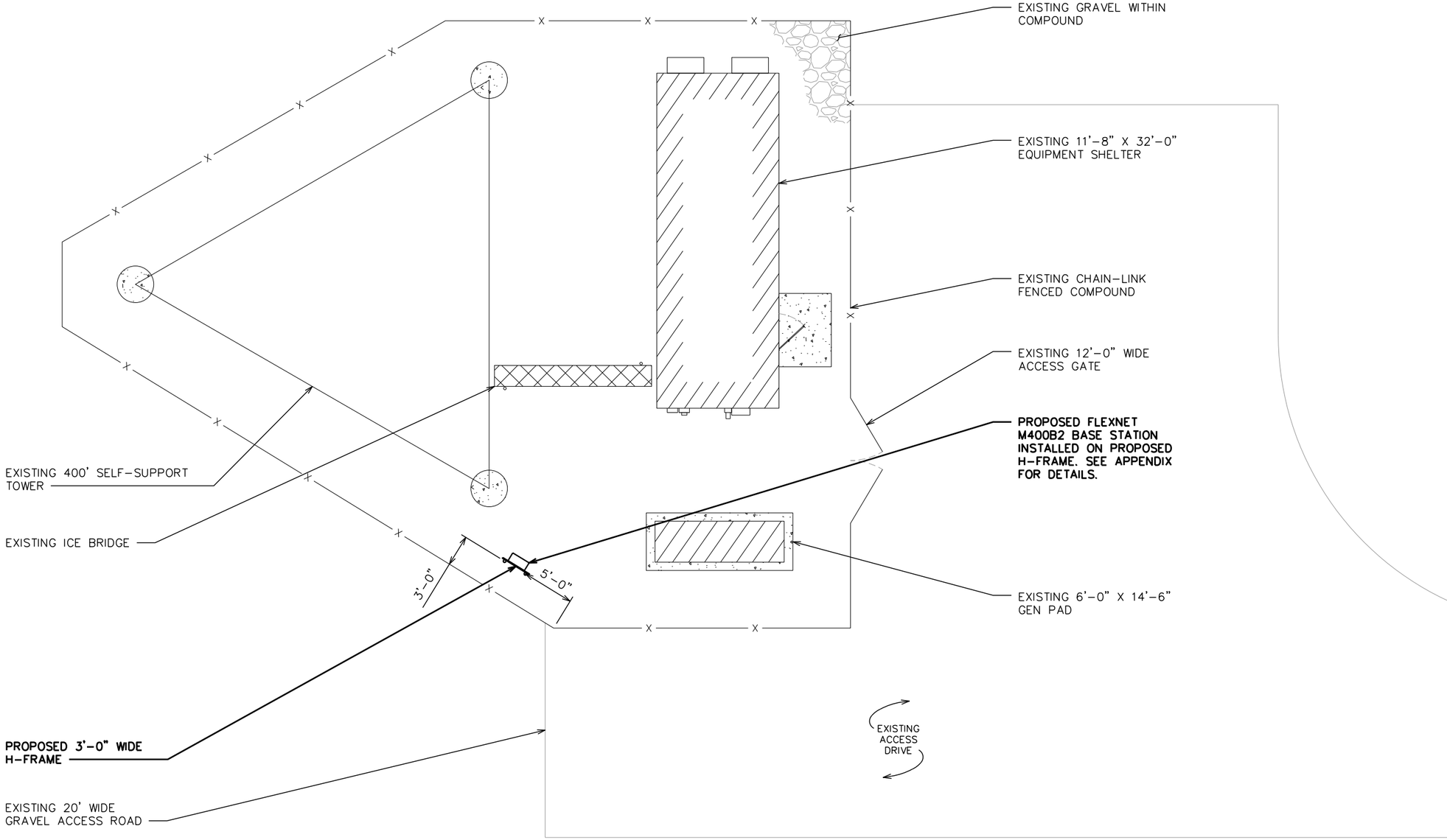
SHEET NUMBER: **N-1**

REVISION: 1

TEP#: 8137.923890

NOTE:

COMPOUND DETAIL SHOWN BELOW TAKEN FROM INFORMATION TAKEN FROM AS-BUILT DRAWINGS BY TEP, DATED MAY 9, 2019. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION IS AS INDICATED ON SITE PLAN. CONTRACTOR IS TO ESTABLISH THE EXISTENCE AND LOCATION OF ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES.



SITE PLAN

SCALE: 3/32" = 1'-0"

0 8 16

SCALE IN FEET

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

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NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

SITE PLAN

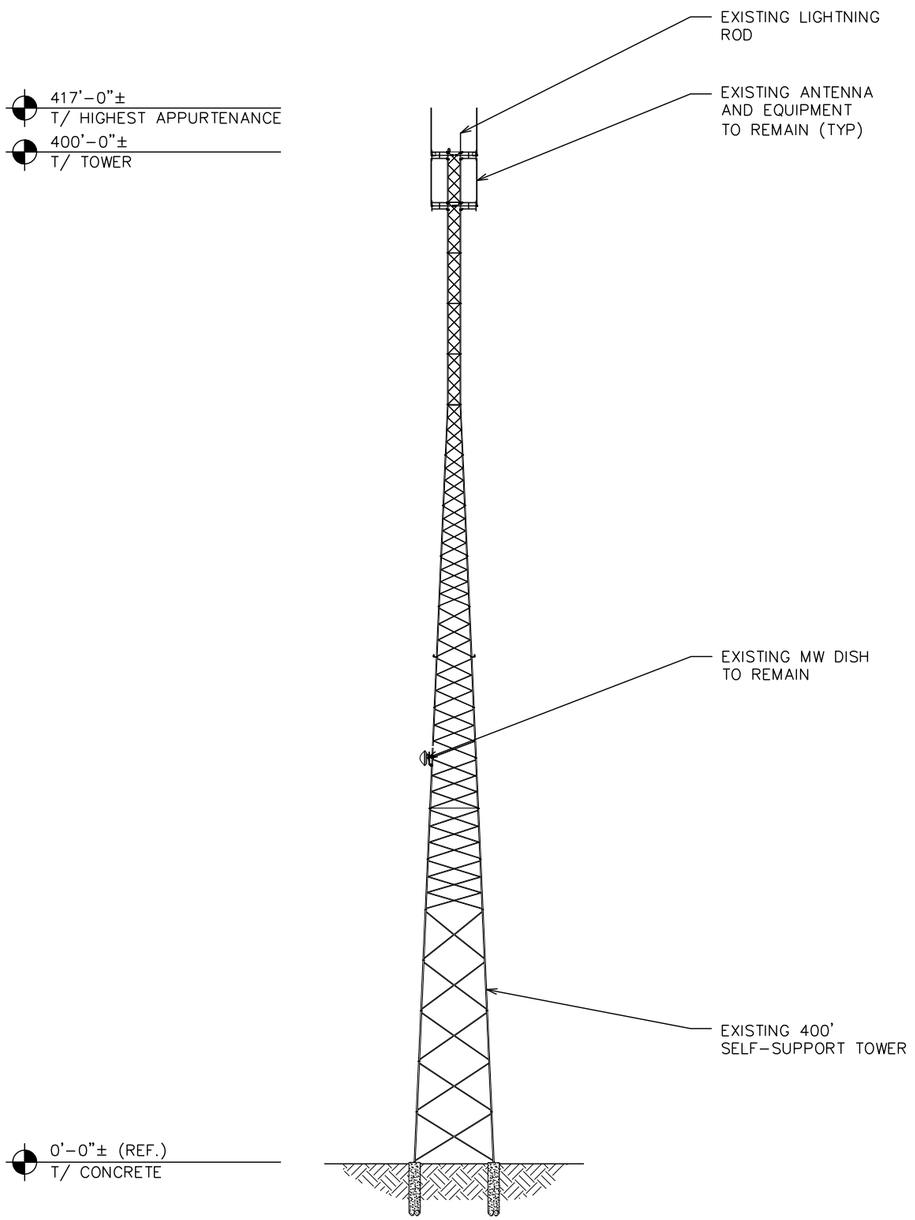
SHEET NUMBER: **C-1**

REVISION: 1

TEP#: 83137.923890

NOTES:

1. PROPOSED FEEDLINES TO BE ROUTED PER SPECIFICATIONS OF STRUCTURAL ANALYSIS
2. THE TOWER DRAWING IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. THE ACTUAL TOWER IN THE FIELD MAY VARY.
3. SEE PASSING STRUCTURAL ANALYSIS REPORT FOR COMPLETE TOWER LOADING.

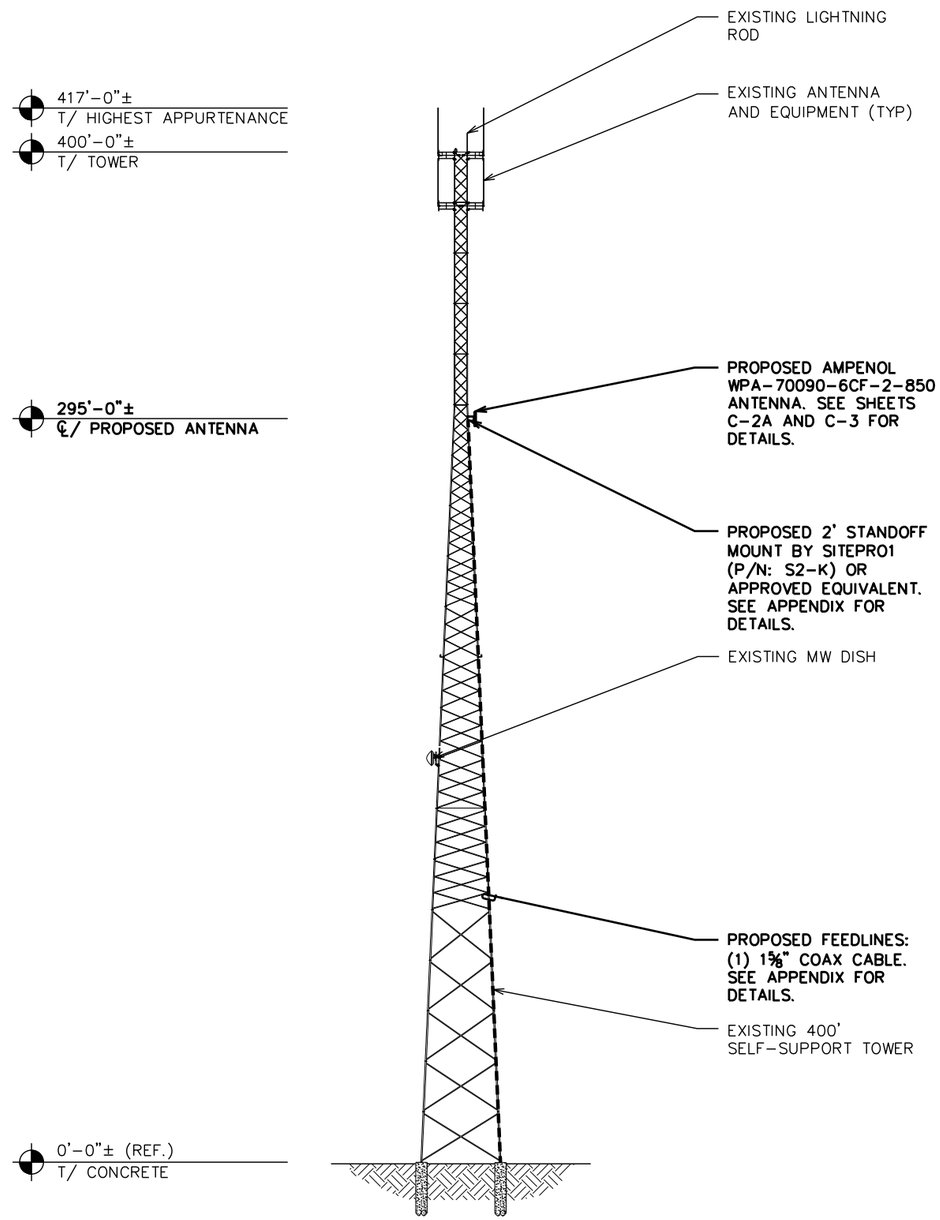


EXISTING TOWER ELEVATION

SCALE: 1" = 60'

0 60 120

SCALE IN FEET



PROPOSED TOWER ELEVATION

SCALE:

0 300 600

SCALE IN FEET

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

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NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 046226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

TOWER ELEVATION

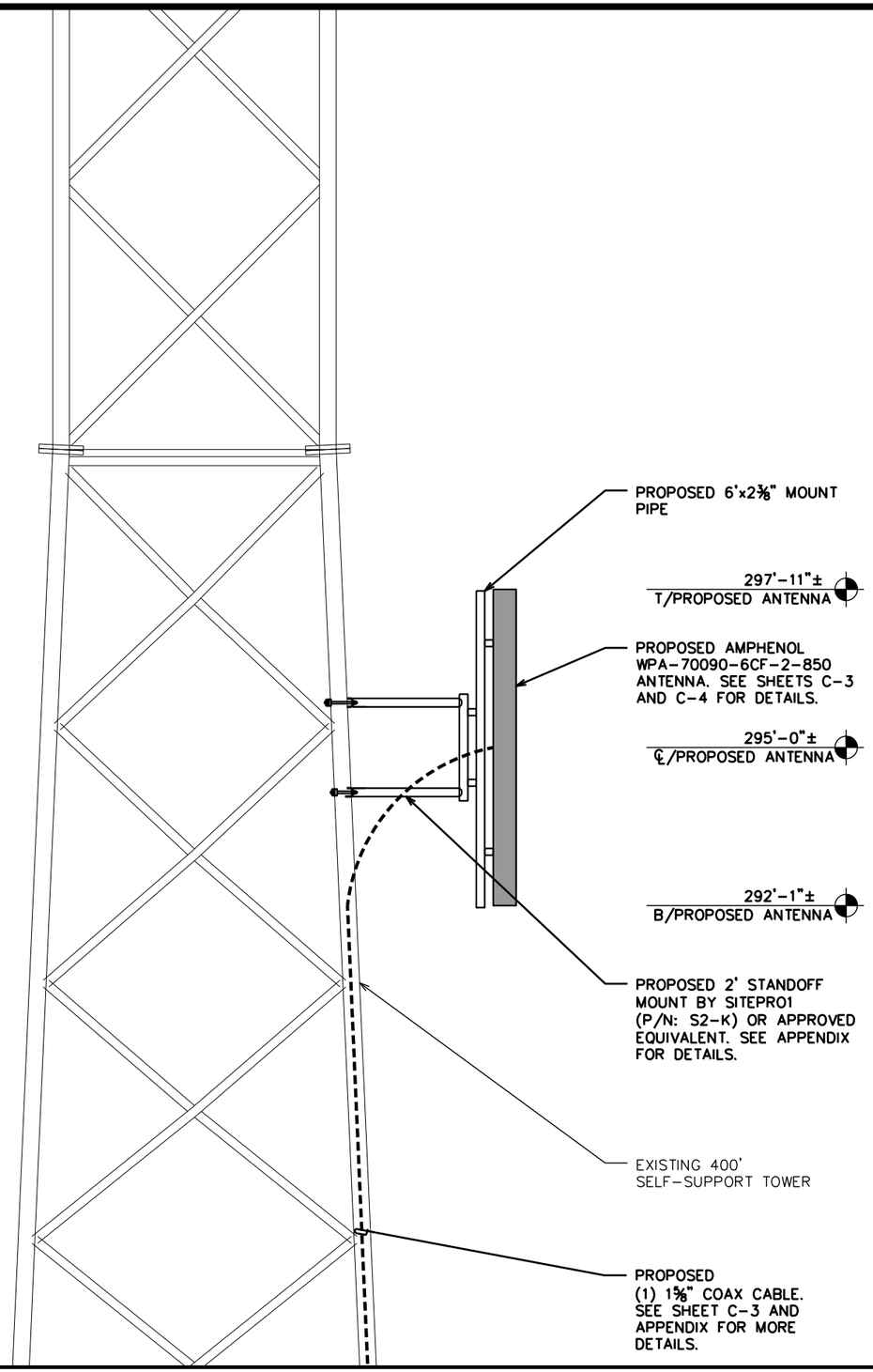
SHEET NUMBER: **C-2**

REVISION: 1

TEP#: 83137.923890

NOTE:

1. PROPOSED FEEDLINES TO BE ROUTED PER SPECIFICATIONS OF STRUCTURAL ANALYSIS
2. THE TOWER DRAWING IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. THE ACTUAL TOWER IN THE FIELD MAY VARY.
3. SEE PASSING STRUCTURAL ANALYSIS REPORT FOR COMPLETE TOWER LOADING.



PROPOSED ELEVATION DETAIL

SCALE: ⅜" = 1'-0"

0 2 4

SCALE IN FEET

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

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NC LIC#: P-1403

SEAL:

NORTH CAROLINA PROFESSIONAL SEAL 048226 ENGINEER SCOTT C. BRANTLEY

February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

TOWER ELEVATION DETAIL

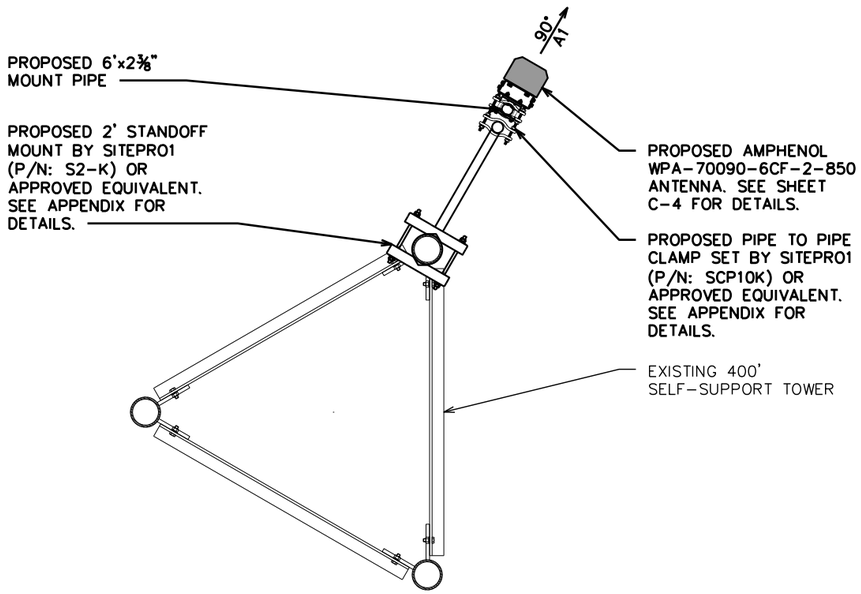
SHEET NUMBER: **C-2A**

REVISION: 1

TEP#: 83137.923890

NOTES:

1. PROPOSED ANTENNA TO BE MOUNTED PER MANUFACTURER'S SPECIFICATIONS.
2. THE ANTENNA PLAN IS ONLY A GRAPHIC REPRESENTATION OF THE STRUCTURE. THE ACTUAL TOWER IN THE FIELD MAY VARY.
3. TEP HAS NOT VERIFIED ANY EXISTING ANTENNA CONFIGURATION OR MOUNT CONFIGURATION. CONTRACTOR TO VERIFY MOUNT CONFIGURATION HAS SUFFICIENT SPACE FOR PROPOSED EQUIPMENT. (I.E. CLEARANCES, MOUNT PIPE OR SUFFICIENT LENGTH, ETC.) TEP DID NOT ANALYZE ANTENNA MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY PROPOSED LOADING.



PROPOSED ANTENNA PLAN @ 295'-0"

SCALE: N.T.S.

PROPOSED ANTENNA/CABLE SCHEDULE

ANTENNA #	MANUFACTURER (MODEL #)	MOUNTING HEIGHT	FEEDLINE SIZE	FEEDLINE LENGTH	AZIMUTH (TN)
A1	AMPHENOL WPA-70090-6CF-2-850	℄ @ 295'-0"±	(1) 1⅝"	*345'±	30°

*CONTRACTOR TO VERIFY FEEDLINE LENGTH BASED ON GROUND EQUIPMENT LOCATION PRIOR TO CONSTRUCTION.

PROPOSED ANTENNA SCHEDULE

SCALE: N.T.S.

PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

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NEW HILL, NC 27562
(WAKE COUNTY)

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NC LIC#: P-1403

SEAL:



February 22, 2024

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO | CHECKED BY: BSE

SHEET TITLE:

ANTENNA PLAN & SCHEDULE

SHEET NUMBER: **C-3**

REVISION: 1

TEP#: 83137.923890

Amphenol ANTENNA SOLUTIONS

696-960 MHz

WPA-70090-6CF-EDIN-X

Single Band | Panel Antenna | V-Pol | 90° | 15.1 dBi | Fixed Tilt

- Single band, panel antenna with fixed electrical tilt

Ordering Options				
When ordering, replace the "X" in the model number with the electrical downtilt. Select from the options listed in the Electrical Downtilt section below.				
Electrical Characteristics	**696-960 MHz**			
Frequency Bands	696-806 MHz	806-960 MHz		
Polarization	Vertical			
Horizontal Beamwidth	92°	90°		
Vertical Beamwidth	12°	10°		
Gain	14.6 dBi	15.1 dBi		
Electrical Downtilt	(X) 0, 2			
Impedance	50Ω			
IM3 (2x20W carrier)	-147 dBc			
Upper Sidelobe Suppression (0°)	-19.4 dB	-17.1 dB		
Front-to-Back Ratio (±30°)	-23.8 dB	-23.5 dB		
VSWR	1.5:1			
Null Fill	5% (-26.02 dB)			
Input Power	500 W			
Total Number of Connectors	Antenna has 1 connector located on the center (back) of the antenna			
Connectors Per Band 696-960 MHz	1 Connector, Elongated 7/16-DIN Female (EDIN)			
Lightning Protection	Direct Ground			
Mechanical Characteristics				
Dimensions (Length x Width x Depth)	1806 x 204 x 151	mm	71.1 x 8.0 x 5.9	in
Depth with z-brackets	191	mm	7.5	in
Weight without Mounting Brackets	8.2	kg	18	lbs
Wind Area – Front	0.37	m²	4.0	ft²
Wind Area – Side	0.27	m²	2.9	ft²
Survival Wind Speed	> 201	km/hr	> 125	mph
Wind Load (161 km/hr or 100 mph) – Front	542	N	122	lbf
Wind Load (161 km/hr or 100 mph) – Side	483	N	109	lbf



Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

Amphenol ANTENNA SOLUTIONS

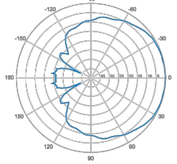
696-960 MHz

WPA-70090-6CF-EDIN-X

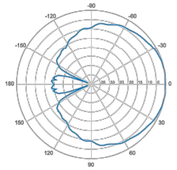
Single Band | Panel Antenna | V-Pol | 90° | 15.1 dBi | Fixed Tilt

Mounting Options	Part Number	Image	Fits Pipe Diameter	Weight
All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below.				
3-Point Mounting and Downtilt Bracket Kit	21700000		50-102 mm 2.0-4.0 in	8.2 kg 18.1 lbs
Lock-Down Brace	If the lock-down brace is used, the maximum diameter of the mounting pipe is 88.9 mm or 3.5 in.			

WPA-70090-6CF-EDIN-X

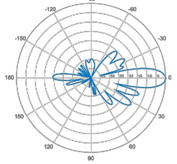


Horizontal | 750 MHz

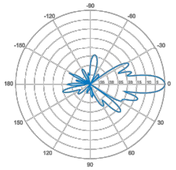


Horizontal | 850 MHz

WPA-70090-6CF-EDIN-0

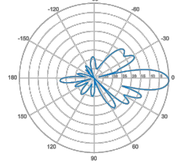


0° | Vertical | 750 MHz

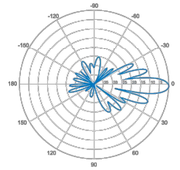


0° | Vertical | 850 MHz

WPA-70090-6CF-EDIN-2



2° | Vertical | 750 MHz



2° | Vertical | 850 MHz

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PLANS PREPARED FOR:

WAKE COUNTY NORTH CAROLINA

300 SOUTH SALISBURY STREET
RALEIGH, NC 27601
(919) 856-6160

PROJECT INFORMATION:

WWRWRF

3500 RECLAMATION ROAD K
NEW HILL, NC 27562
(WAKE COUNTY)

PLANS PREPARED BY:

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326 TRYON ROAD
RALEIGH, NC 27603-5263
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NC LIC#: P-1403

FOR REFERENCE ONLY

REV	DATE	ISSUED FOR:
1	02-22-24	CONSTRUCTION
0	01-30-24	PRELIMINARY

DRAWN BY: BJO CHECKED BY: BSE

SHEET TITLE:

ANTENNA SPECIFICATION

SHEET NUMBER: **C-4**

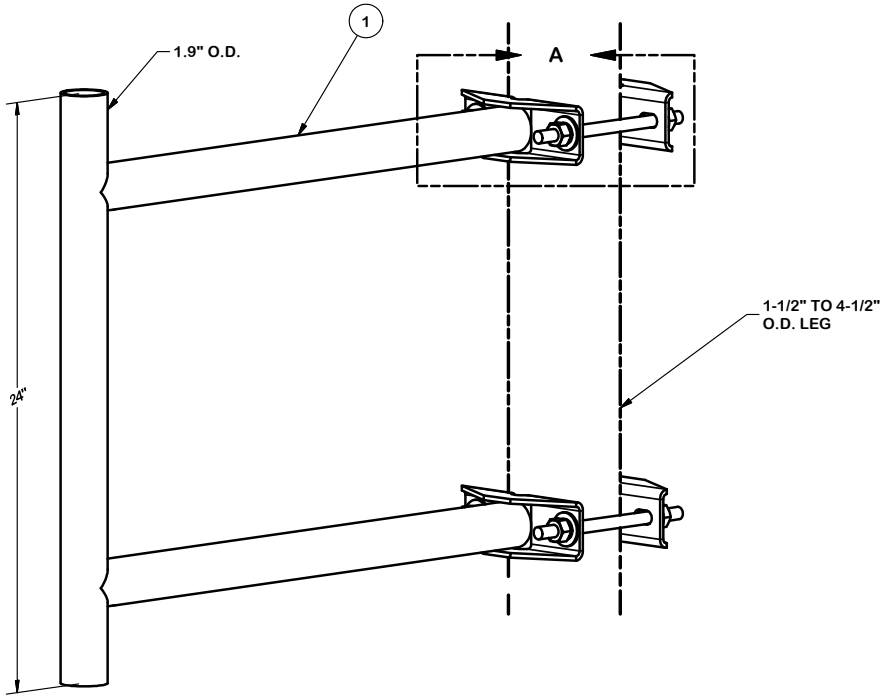
REVISION: 1

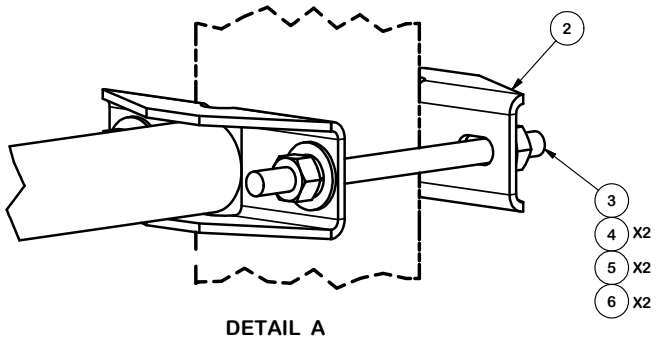
TEP#: 83137.923890

PROPOSED WPA-70090-6CF-2-850 ANTENNA SPEC SHEET

SCALE: N.T.S.

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	1	X-S2	2' ANTENNA STANDOFF WELDMENT		19.80	19.80
2	2	X-SBB-BP1	BACKING CLAMP FOR LIGHTWEIGHT STANDOFFS	12 in	1.28	2.56
3	4	G12R-8	1/2" x 8" THREADED ROD (HDG.)		0.45	1.78
4	8	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.27
5	8	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.11
6	8	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	0.57
					TOTAL WT. #	25.10





DETAIL A

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS AND ANGLES ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION: 2' LIGHTWEIGHT STANDOFF MOUNT

SITE PRO 1 — A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX; Tampa, FL

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.	PAGE
	CEK 8/9/2019		S2-K	1 OF 1

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 8/21/2019	S2-K



FlexNet M400B2 Base Station

Compact Point-to-Multipoint Base Station

The Sensus FlexNet® M400B2 Base Station offers a strategic communications option for public service providers with endpoints deployed in remote or densely populated areas.

The efficient transceiver can transmit and receive in a 200kHz band of spectrum. 200kHz enables more dedicated channels, resulting in higher network capacity, allowing more granular data and more channels of data. And the Sensus FlexNet communication network delivers double the transmit power of competitive systems over primary-use licensed spectrum – ensuring reliability for mission critical applications.

The tower-based architecture enables reliable communication of status and usage information with fewer access points than other network architectures. These compact, efficient base stations fit in space-constrained environments and require no air conditioning.

FEATURES

- GPS receiver for time synchronization
- Duplexer for single antenna
- IP-addressable power supply with hot-swap capability
- 8-hour battery backup
- Alarms and reporting capability
- Backhaul via Ethernet/IP
- Heated battery for cold weather environments
- Modular construction for easy serviceability

APPLICATIONS

- Two-way Advanced Meter Infrastructure (AMI)
- Distribution Automation (DA)
- Demand Response (DR)
- Home Area Networks (HAN)
- Sensus VantagePoint® Lighting Control

Licensed Radio Spectrum

In North America, FCC/IC protected primary-use spectrum avoids competition with other wireless services, interference from other radio devices and the risk of being taken over by emergency service providers.

Fewer Access Points

Our point-to-multipoint architecture directly connects base stations to endpoints over large geographic areas – greatly reducing the number of network backhaul connections as well as O&M costs.

Resilient Network Design

Sensus Base Stations continue to provide real time data during outages and emergencies because of eight hour plus battery backup – enabling better workforce management and faster service restoration.

Small Footprint

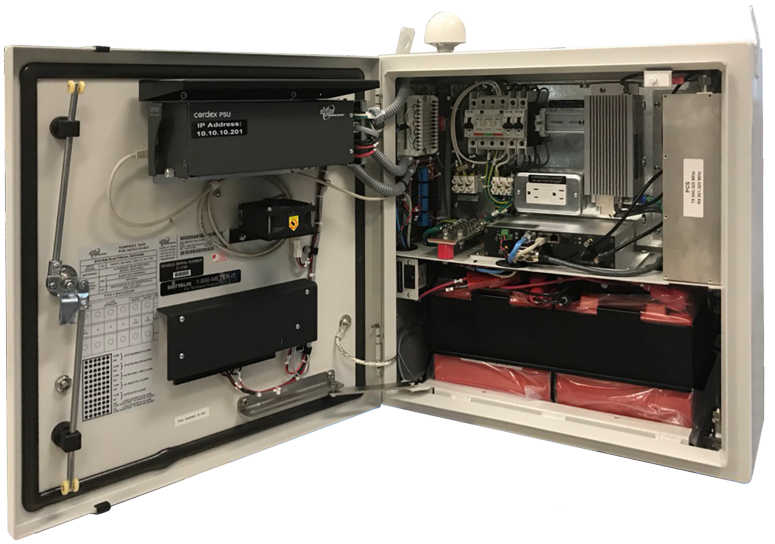
Flexible pole or wall-mounting options enable strategic deployment with a discreet appearance.

Industry Leading Security

Sensus has achieved GE/Wurldtech™ Achilles® communications certification for critical infrastructure security against cyber threats.

FlexNet® M400B2 Base Station

Compact Point-to-Multipoint Base Station



PROPERTIES

Receive bandwidth	200 KHz
Transceivers	Single
Spectrum	Licensed 900 MHz PCS/MAS
Duplexing	Single transmit Sixteen receivers - simultaneous/dedicated
Applications	Single
Expandability	No
Compatibility	SNMP
FlexNet	Requires RNI 3.x or newer

ENCLOSURES - OUTDOOR - POLE/WALL MOUNT

Height	22″ (55.9 cm)
Width x Depth	22″ (55.9 cm) x 10.5″ (26.7 cm)
Capacity	One transceiver
Temperature	-40° to +122° F (-40° to +50° C)
Voltage	120 VAC
Battery backup	8 hours
NEMA rating	4
Air conditioned	No

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AVA7-50



AVA7-50, HELIAX® Andrew Virtual Air™ Coaxial Cable, corrugated copper, 1-5/8 in, black PE jacket (Halogen free jacketing non-fire-retardant)

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	AVA7-50
Ordering Note	CommScope® standard product in Asia Pacific | CommScope® standard product in Europe, the Middle East, and Africa | CommScope® standard product in Mexico, Central America, and South America | CommScope® standard product in the United States and Canada

General Specifications

Flexibility	Standard
Jacket Color	Black

Dimensions

Diameter Over Dielectric	44.45 mm | 1.75 in
Diameter Over Jacket	51.054 mm | 2.01 in
Inner Conductor OD	18.161 mm | 0.715 in
Outer Conductor OD	46.355 mm | 1.825 in
Nominal Size	1-5/8 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	72.2 pF/m | 22.007 pF/ft
dc Resistance, Inner Conductor	1.435 ohms/km | 0.437 ohms/kft
dc Resistance, Outer Conductor	0.525 ohms/km | 0.16 ohms/kft
dc Test Voltage	15000 V
Inductance	0.187 µH/m | 0.057 µH/ft

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COMMSCOPE®

Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 2700 MHz
Peak Power	302 kW
Velocity	92 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680–800 MHz	1.13	24.3
806–960 MHz	1.13	24.3
1700–2170 MHz	1.13	24.3

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.062	0.019	117.56
1.5	0.076	0.023	95.88
2.0	0.088	0.027	82.96
10.0	0.197	0.06	36.78
20.0	0.281	0.086	25.84
30.0	0.346	0.105	21
50.0	0.45	0.137	16.14
85.0	0.593	0.181	12.25
88.0	0.603	0.184	12.03
100.0	0.645	0.197	11.26
108.0	0.672	0.205	10.81
150.0	0.798	0.243	9.09
174.0	0.864	0.263	8.41
200.0	0.93	0.284	7.81
204.0	0.94	0.287	7.72
300.0	1.156	0.352	6.28
400.0	1.351	0.412	5.37
450.0	1.441	0.439	5.04
460.0	1.459	0.445	4.98
500.0	1.527	0.465	4.76
512.0	1.547	0.471	4.69
600.0	1.689	0.515	4.3

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700.0	1.84	0.561	3.95
800.0	1.982	0.604	3.66
824.0	2.016	0.614	3.6
894.0	2.11	0.643	3.44
960.0	2.197	0.67	3.3
1000.0	2.249	0.685	3.23
1218.0	2.517	0.767	2.89
1250.0	2.554	0.779	2.84
1500.0	2.838	0.865	2.56
1700.0	3.053	0.93	2.38
1794.0	3.151	0.96	2.3
1800.0	3.157	0.962	2.3
2000.0	3.359	1.024	2.16
2100.0	3.457	1.054	2.1
2200.0	3.554	1.083	2.04
2300.0	3.649	1.112	1.99
2500.0	3.836	1.169	1.89
2700.0	4.017	1.224	1.81

Material Specifications

Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Corrugated copper tube
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	381 mm | 15 in
Minimum Bend Radius, single Bend	203.2 mm | 8 in
Number of Bends, minimum	15
Number of Bends, typical	50
Tensile Strength	181 kg | 399.036 lb
Bending Moment	47.5 N-m | 420.41 in lb
Flat Plate Crush Strength	1.6 kg/mm | 89.596 lb/in

Environmental Specifications

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Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F | 20 °C
Average Power, Ambient Temperature	104 °F | 40 °C
Average Power, Inner Conductor Temperature	212 °F | 100 °C
EN50575 CPR Cable EuroClass Fire Performance	Fca

Packaging and Weights

Cable weight	1.07 kg/m | 0.719 lb/ft

Regulatory Compliance/Certifications

Agency	**Classification**
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant

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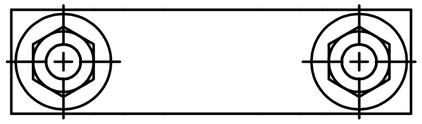
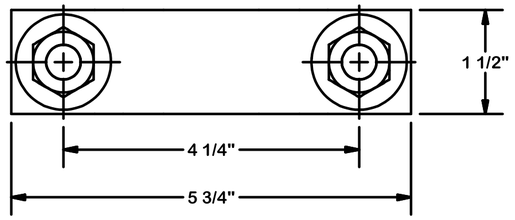
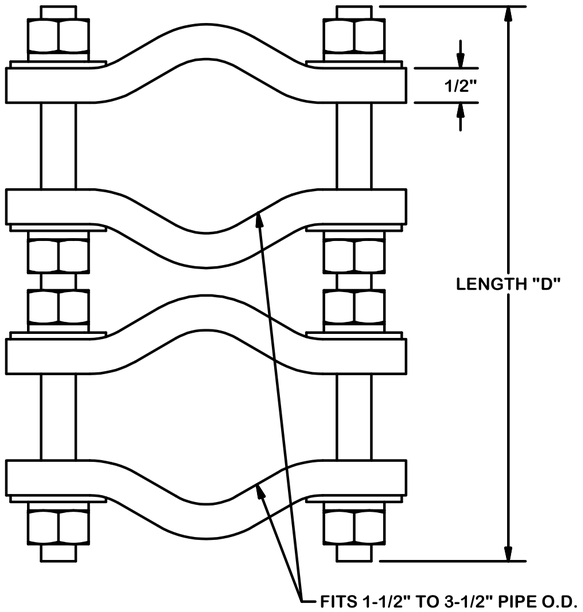
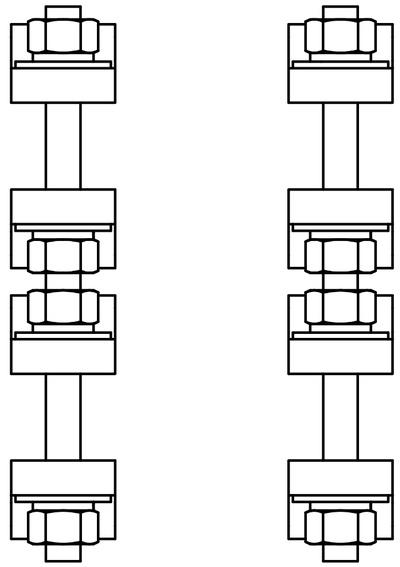


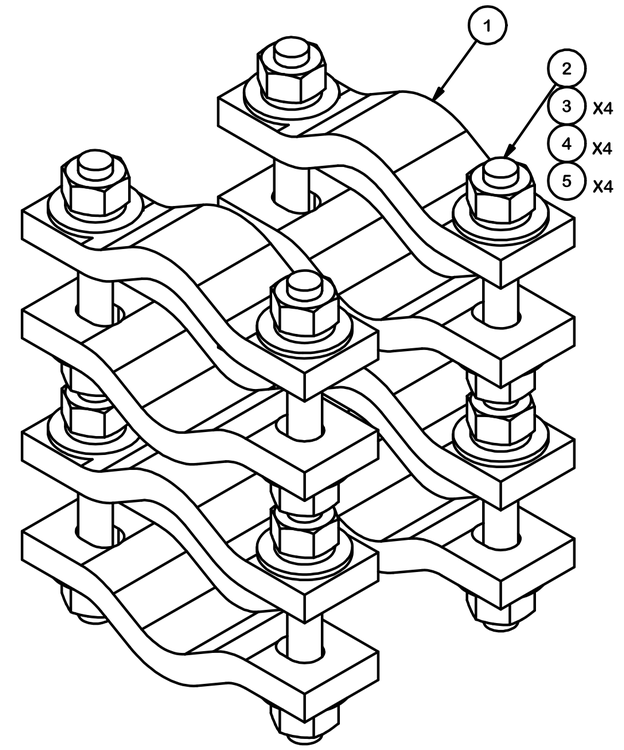






PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	8	SCP	CLAMP HALF, 1/2" THICK, 5-7/8"		1.29	10.34
2	B	C	1/2" THREADED ROD	D	E	F
3	16	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.15
4	16	G12LW	1/2" HDG LOCKWASHER		0.01	0.22
5	16	G12FW	1/2" HDG USS FLATWASHER		0.03	0.55

VARIABLE PARTS TABLE						
ASSEMBLY "A"	QTY "B"	PART "C"	LENGTH "D"	UNIT WT. "E"	NET WT. "F"	TOTAL WEIGHT
SCP08K	4	G12R-8	8"	.45	1.78	13.23
SCP10K	4	G12R-10	10"	.56	2.23	13.68



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
PIPE TO PIPE CLAMP SET
1-1/2" TO 3-1/2" PIPE
1/2" THICK CLAMP

SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.	PAGE
	KC8 8/21/2012		SEE ASSEMBLY "A"	1 OF 1
CLASS 81 / SUB 01	DRAWING USAGE: CUSTOMER	CHECKED BY: CEK 2/18/2013	DWG. NO.: SCPxxK	

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Amanda Grogan, Director

Department(s): Budget & Performance Management

Requested Motion

Motion to schedule a second budget public hearing for May 14, 2024 on the Annual Operating Budget including expenditures for Economic Development (pursuant to NCGS 158-7.1) for fiscal year 2024-2025.

Approval Recommended?

Yes

Item Details

Pursuant to NCGS 158-7.1 states each county and city in this State (North Carolina) is authorized to make appropriations for economic development purposes. These appropriations must be determined by the governing body of the city or county to increase the population, taxable property, agricultural industries, employment, industrial output, or business prospects of the city or county.

We are required to hold a public hearing to receive comments regarding the proposed budget, including expenditures for Economic Development (pursuant to NCGS 158-7.1), for the coming fiscal year that begins on July 1, 2024. The proposed budget and budget message will be posted to the Town's website and available for inspection in the office of the Town Clerk at least 10 days prior to the hearing.

Attachments

- N/A

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Eric Neumann, Director

Department(s): Electric Utilities

Requested Motion

Motion to approve Budget Ordinance Amendment 15 allocating additional funds for the expansion of Apex's electric utility distribution system

.Approval Recommended?

Yes

Item Details

The Electric Utilities Department is requesting additional funds for system expansion as approved development begins construction. Electric has forecasted potential expenses through June 30th with some offset from developer paid fees. The budget amendment revenues include increased allocations for developer fees already received.

Increased material costs and development progress has strained the budget. Warehouse staff has placed large orders for inventory and projects, all of which is coming in at post COVID prices. Large developments in the southern part of Apex have depleted much of our inventory due to project scope.

Attachments

- CN4-A1: Budget Ordinance Amendment No. 15 - Electric System Expansion

Town of Apex

Budget Ordinance Amendment No. 15

BE IT ORDAINED, by the Council of the Town of Apex that the following Budget Amendment for the Fiscal Year 2023-2024 Budget Ordinance be adopted:

Electric Utility Fund

Section 1. Revenues:

30-0000-35512: Underground Secondary	100,000
30-0000-35511: Underground Primary	1,000,000
Total Revenues	**$1,100,000**

Section 2. Expenditures:

30-8300-47300: Capital Outlay - Improvements	1,100,000
Total Expenditures	**$1,100,000**

Section 7. Within five (5) days after adoption, copies of this Amendment shall be filed with the Finance Officer and Town Clerk.

Adopted this the 23rd day of April, 2024.

Attest:

Jacques K. Gilbert, Mayor

Allen L. Coleman, CMC, NCCCC
Town Clerk

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Amanda Grogan, Director

Department(s): Budget and Performance Management

Requested Motion

Motion to approve Capital Project Ordinance Amendment No. 2024-14 appropriating funds already in capital project funds to active projects.

Approval Recommended?

Yes

Item Details

Budget & Finance Department worked together to determine the status of projects in the Capital Project Funds. These projects have now been closed out and these savings have been transferred to other active projects, which has allowed us to provide some relief to the annual budgets by reducing the amounts of transfers needed for projects. Capital Project Ordinance Amendment 2024-14 allocates the funds to active projects requiring additional funding.

Attachments

- CN5-A1: Capital Project Ordinance Amendment No. 2024-14

Town of Apex

CAPITAL PROJECT ORDINANCE AMENDMENT 2024-14

61 - General Capital Project Fund

BE IT ORDAINED, by the Council of the Town of Apex that the Capital Project Ordinance previously entitled "General Capital Project Fund" be amended as follows:

Section 1. The revenues anticipated for the projects are:

61-9225-0114-36100: Interest Earned	70,000
61-9225-0114-39710: Transfer from General Fund	436,129
Total ERP Conversion Revenues	**$506,129**
61-9225-0114-36100: Interest Earned	
67-9200-0003-39710: Transfer from General Fund	448,102
Total Fire Station 3 Renovation	**$448,102**

Section 2. The expenditures anticipated are:

61-9225-0114: ERP Conversion	506,129
61-9225-0118: Fire Station 3 Design	448,102
Total Expenditures	**$954,231**

63 - Street Improvements Capital Project Fund

BE IT ORDAINED, by the Council of the Town of Apex that the Capital Project Ordinance previously entitled "Street Improvements Capital Project Fund" be amended as follows:

Section 3. The revenues anticipated for the projects are:

63-9250-1004-36100: Interest Earned	45,400
63-9250-1004-36102: Interest Earned - Debt Proceeds	461
63-9250-1004-39106: Bond Premium	13,633
63-9250-1004-39710: Transfer from General Fund	125,500
Total Lake Pine Revenues	**$184,994**
63-9250-1012- 39710: Transfer from General Fund	745,000
63-9250-1012-36100: Interest Earned	30,000
Total School Infrastructure Cost Share Revenues	**$775,000**

Section 4. The expenditures anticipated are:

63-9250-1004: Lake Pine Improvements	184,994
63-9250-1012: School Infrastructure Cost Share	775,000
Total Expenditures	**$959,994**

Section 7. Within five (5) days after adoption, copies of this Amendment shall be filed with the Finance Officer and Town Clerk.

Adopted this the 23rd day of April, 2024.

Attest:

Jacques K. Gilbert, Mayor

Allen L. Coleman, CMC, NCCCC
Town Clerk

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Amanda Grogan, Director

Department(s): Budget & Performance Management

Requested Motion

Motion to adopt Capital Project Ordinance Amendment(s) No. 2024-15 and 2024-16 to allocate ARPA funds for identified projects.

Approval Recommended?

Yes

Item Details

The Town received American Rescue Plan "ARP" funds from the US Treasury and utilized the standard allowance option available per guidance found within the US Department of Treasury's Final Rule. Therefore, these funds no longer carry any restrictions for encumbering or expending and are essentially unrestricted general fund dollars. The ordinance amendment allocates the $5.2 million award, plus interest earned to date for the related Town Council identified projects.

The Town has chosen to keep in the spirit of the funding program and allocate these funds to projects. This ordinance amendment also reallocates funding received from the NC Pandemic Recovery Office (NCPRO) to ensure that the Town is able to meet the 2024 encumbrance and 2026 expenditure deadline restrictions.

Finally, please note that adjustments have been made to cover increased project costs and allocate interest earned in both project funds.

Project Title	Project Estimate	ARPA (NCPRO)	ARPA (UST)	Interest Earnings	Town Funds	Funding Total
West Street Park	1,790,000		1,457,681	192,319	140,000	1,790,000
Baucom Sewer Extension	320,000	250,000		70,000		320,000
1.5 MG Elevated Water Tank	8,650,000	5,100,000		241,500	639,900	5,981,400
Sunset Hills Pump Station (Contract Signed)	3,760,100	3,150,000			610,100	3,760,100
Affordable Housing Site Acquisition	TBD	3,000,000				3,000,000
Downtown Improvements	TBD		3,000,000			3,000,000
Non-Profit Funding	TBD		300,000			300,000
Housing Transition for Displaced Communities	TBD		500,000			500,000
Total Funding By Source		11,500,000	5,257,681	503,819	1,390,000	

** Includes interest earnings on funds of $503,819*

Attachments

- CN6-A1: Capital Project Ordinance Amendment 2024-15 - ARPA Project Funding Allocations
- CN6-A2: Capital Project Ordinance Amendment 2024-16 - ARPA Project Funding Allocations

Town of Apex

CAPITAL PROJECT ORDINANCE AMENDMENT 2024-15

28 - ARPA State Project Fund

BE IT ORDAINED, by the Council of the Town of Apex, that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following ARPA State project fund is hereby amended:

SECTION I: The projects authorized by this ordinance consists of general government & utility capital projects.

SECTION II: The officers of this unit are hereby directed to proceed with the capital project within the terms of the budget contained herein.

SECTION III: The following revenues are anticipated to be available to complete these projects:

State Grants	11,500,000
Interest Earned	311,500
Transfer from General Fund	140,000
Transfer from W/S Fund	1,250,000
Total Revenues	**$13,201,500**

SECTION IV: The following amounts are appropriated for the project fund:

ARPA - State Capital Project Expenditures	13,201,500
Total Expenditures	**$13,201,500**

SECTION V: The Finance Officer is hereby directed to maintain within the project funds detailed accounting records.

SECTION VI: The Budget Officer is directed to include a detailed analysis of the past and future costs and revenues on this capital project in every budget submission made to the Town Council.

SECTION VII: The Town Manager is authorized to amend expenditures within the fund for expenditures that are authorized per Section I of this ordinance that do not change the total appropriation within the fund.

SECTION VIII: Copies of this capital project ordinance shall be furnished to the Town Clerk, Budget Officer and the Finance Officer for direction in carrying out this project.

SECTION IX: All ordinances in conflict with this ordinance are hereby repealed or amended to reflect the controlling nature of this Ordinance.

Adopted this the 23rd day of April, 2024.

Attest:

Jacques K. Gilbert, Mayor

Allen L. Coleman, CMC, NCCCC

Town of Apex

CAPITAL PROJECT ORDINANCE AMENDMENT 2024-16

29 - ARP - Federal (Unrestricted) Project Fund

BE IT ORDAINED, by the Council of the Town of Apex, that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following ARPA Federal project fund "unrestricted" is hereby amended:

SECTION I: The project authorized by this ordinance consists of general government capital projects.

SECTION II: The officers of this unit are hereby directed to proceed with the capital project within the terms of the budget contained herein.

SECTION III: The following revenues are anticipated to be available to complete these projects:

Interest Earned	192,319
Transfer from General Fund	5,257,681
Total Revenues	**$5,450,000**

SECTION IV: The following amounts are appropriated for the project fund:

ARAP - Federal Unrestricted Capital Project Expenditures	5,450,000
Total Expenditures	**$5,450,000**

SECTION V: The Finance Officer hereby directed to maintain within the project funds detailed accounting records.

SECTION VI: The Budget Officer is directed to include a detailed analysis of the past and future costs and revenues on this capital project in every budget submission made to the Town Council.

SECTION VII: The Town Manager is authorized to amend expenditures within the fund for expenditures that are authorized per section I of this ordinance that do not change the total appropriation within the fund.

SECTION VIII: Copies of this capital project ordinance shall be furnished to the Town Clerk, Budget Officer and the Finance Officer for direction in carrying out this project.

SECTION IX: All ordinances in conflict with this ordinance are hereby repealed or amended to reflect the controlling nature of this Ordinance.

Adopted this the 23rd day of April, 2024.

Attest:

Jacques K. Gilbert, Mayor

Allen L. Coleman, CMC, NCCCC
Town Clerk

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Angela Reinke, Parks Planning Project Manager

Department(s): Parks, Recreation, and Cultural Resources

Requested Motion

Motion to approve Capital Project Ordinance Amendment 2024-17 appropriating an additional $3,632,629 in federal grant funds and interest earnings for the Beaver Creek Greenway Project.

Approval Recommended?

Yes

Item Details

Town Council approved the Supplemental Agreement with North Carolina Department of Transportation (NCDOT) for the EB-6021 Beaver Creek Greenway Project at the February 27, 2024 Regular meeting. This agreement provides an additional $3,442,629 in funding to the Beaver Creek project, to a combined project total of $4,495,510 in federal funding through the LAPP program.

As a result of the increased costs of the project, Parks, Recreation, and Cultural Resources (PRCR) staff took a request to Capital Area Metropolitan Planning Organization (CAMPO) for additional funding for the costs over the estimate in the original LAPP request. Capital Project Ordinance Amendment 2024-17 allocates the additional grant funding and interest earnings to the project.

Attachments

- CN7-A1: Capital Project Ordinance Amendment No. 2024-17

Town of Apex

CAPITAL PROJECT ORDINANCE AMENDMENT 2024-17

67 - Recreation Capital Project Fund

BE IT ORDAINED, by the Council of the Town of Apex that the Capital Project Ordinance previously entitled "Recreation Capital Project Fund" be amended as follows:

Section 1. The revenues anticipated for the projects are:

67-9200-0002-33250: Federal Grants	3,442,629
67-9200-0002-36100: Interest Earned	190,000
Total Revenues	**$3,632,629**

Section 2. The expenditures anticipated are:

67-9200-0002-46000: NC DOT Review Fees	820,000
67-9200-0002-47300: Capital Outlay Improvements	2,812,629
Total Expenditures	**$3,632,629**

Section 3. Within five (5) days after adoption, copies of this Amendment shall be filed with the Finance Officer and Town Clerk.

Adopted this the 23rd day of April, 2024.

Attest:

Jacques K. Gilbert, Mayor

Allen L. Coleman, CMC, NCCCC
Town Clerk

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Angela Reincke, Parks Planning Project Manager

Department(s): Parks, Recreation, and Cultural Resources

Requested Motion

Motion to approve a Fee-in-lieu (FIL) of land dedication, a public greenway easement, being offered by the applicat for a southern portion of the site to allow further design of the greenway alignment to tie into the existing greenway easement on the adjacent property provided by the Courtyard on Holt.

Approval Recommended?

Yes

Item Details

Per the Unified Development Ordinance Article 14, the Preserve on Holt Subdivision was exempt from review by the Parks, Recreation and Cultural Resources Advisory Commission as it has less than 30 single family detached dwelling units. The UDO also requires that Town Council take action for land dedication on Subdivisions at the time of Master Subdivision plan approval by the Technical Review Committee.

The Preserve on Holt is a rural residential property, located at 1305 Holt Road, and is proposing 3 single family detached lots. A greenway alignment for North Beaver Creek is shown on the Master Plan for Parks, Recreation, Cultural Resources Greenways and Open Space plan and the Town of Apex Transportation plan and a Public greenway easement is being offered by the applicant for the southern portion of the site, to allow further design of a greenway alignment to tie into the existing greenway easement on the adjacent property provided by the Courtyards on Holt.

Staff is supportive of the easement and will work with the applicant to ensure it is recorded with the first final subdivision plat. Due to the unit total, size and location of the property as it relates to the Master Plan for Parks, Recreation, Cultural Resources, Greenways and Open Space staff supports a fee-in-lieu of dedication at the 2024 rate of $4,165.28 per unit.

Attachments

- N/A

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Amanda Bunce, Current Planning Manager

Department(s): Planning

Requested Motion

Motion to approve the Statement of the Town Council and Ordinance for Rezoning Application No. 24CZ01, Todd Rechler, RXR Realty, petitioner, for the property located at 0 E Williams Street (PIN 0740992164).

Approval Recommended?

The Planning Department recommends approval.

Item Details

Rezoning Application No. 24CZ01 was approved at the April 9, 2024 Town Council meeting.

Attachments

- CN9-A1: Statement of the Town Council and Ordinance - Rezoning Case No. 24CZ01
- CN9-A2: Attachment A – Legal Description - Rezoning Case No. 24CZ01 Veridea
- CN9-A3: Attachment B – Sustainable Development Plan Veridea - Rezoning Case No. 24CZ01
- CN9-A4: Attachment C – ORD-2023-023 Veridea Environmental Enhancement Plan - Rezoning Case No. 24CZ01

STATEMENT OF TOWN COUNCIL AND ORDINANCE AMENDING THE OFFICIAL ZONING DISTRICT MAP OF THE TOWN OF APEX TO CHANGE THE ZONING OF APPROXIMATELY 0.17 ACRES LOCATED AT 0 E. WILLIAMS STREET FROM RESIDENTIAL AGRICULTURAL (RA) TO SUSTAINABLE DEVELOPMENT-CONDITIONAL ZONING (SD-CZ) FOR VERIDEA

#24CZ01

WHEREAS, RXR Len Apex Owner, LLC/Rebecca D'Eloia, RXR Realty, owner/applicant (the "Applicant"), submitted a completed application for a conditional zoning on the 2nd of January 2024 (the "Application"). The proposed conditional zoning is designated #24CZ01;

WHEREAS, the Planning Director for the Town of Apex, Dianne Khin, caused proper notice to be given (by publication and posting) of a public hearing on #24CZ01 before the Planning Board on the 11th day of March 2024;

WHEREAS, the Apex Planning Board held a public hearing on the 11th day of March 2024, gathered facts, received public comments and formulated a recommendation regarding the application for conditional zoning #24CZ01. A motion was made by the Apex Planning Board to recommend approval; the motion passed unanimously for the application for #24CZ01;

WHEREAS, pursuant to N.C.G.S. §160D-601 and Sec. 2.2.11.E of the Unified Development Ordinance, the Planning Director caused proper notice to be given (by publication and posting), of a public hearing on #24CZ01 before the Apex Town Council on the 9th day of April 2024;

WHEREAS, the Apex Town Council held a public hearing on the 9th day of April 2024. Amanda Bunce, Current Planning Manager, presented the Planning Board's recommendation at the public hearing;

WHEREAS, all persons who desired to present information relevant to the application for #24CZ01 were allowed to present evidence at the public hearing before the Apex Town Council. No one who wanted to speak was turned away;

WHEREAS, the Apex Town Council finds that the approval of the rezoning is consistent with the 2045 Land Use Plan and other adopted plans in that: The 2045 Land Use Map designates this area as Regional Mixed Use: Medium Density Residential/High Density Residential/Office Employment/Commercial Services/Industrial Employment. This designation on the 2045 Land Use Map includes the zoning district Sustainable Development-Conditional Zoning (SD-CZ) and the Apex Town Council has further considered that the proposed rezoning to Sustainable Development-Conditional Zoning (SD-CZ) will maintain the character and appearance of the area and provide the flexibility to accommodate the growth in population, economy, and infrastructure consistent with that contemplated by the 2045 Land Use Map;

WHEREAS, the Apex Town Council finds that the approval of the rezoning is reasonable and in the public interest in that: The rezoning will encourage more efficient and compatible development of the properties, provide for the same development standards as applicable to the undeveloped adjacent properties, and allow for uses that will generate jobs and increase the tax base; and

WHEREAS, the Apex Town Council by a vote of 4 to 0 approved Application #24CZ01 rezoning the subject tract located at 0 E. Williams Street from Residential Agricultural (RA) to Sustainable Development-Conditional Zoning (SD-CZ) for Veridea.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF APEX

Section 1: The lands that are the subject of the Ordinance are those certain lands described in Attachment "A" – Legal Description which is incorporated herein by reference, and said lands are hereafter referred to as the "Rezoned Lands."

Ordinance Amending the Official Zoning District Map #24CZ01

Section 2: The Town of Apex Unified Development Ordinance, including the Town of Apex North Carolina Official Zoning District Map which is a part of said Ordinance, is hereby amended by changing the zoning classification of the "Rezoned Lands" from Residential Agricultural (RA) to Sustainable Development-Conditional Zoning (SD-CZ) for Veridea, subject to the conditions stated herein.

Section 3: The Planning Director is hereby authorized and directed to cause the said Official Zoning District Map for the Town of Apex, North Carolina, to be physically revised and amended to reflect the zoning changes ordained by this Ordinance.

Section 4: The "Rezoned Lands" are subject to the conditions in Attachment "B" Veridea SD Plan which are imposed as part of this rezoning and Attachment "C" Veridea Environmental Enhancement Plan. At the request of the applicant and pursuant to UDO Sec. 2.3.16.D, the zoning of these parcels to the Veridea SD-CZ district shall not increase the number of residential units on a pro-rata basis, based on the size of the parcels added to the district.

Section 5: The "Rezoned Lands" shall be perpetually bound to the conditions imposed including the uses authorized, unless subsequently changed or amended as provided for in the Unified Development Ordinance. Site plans for any development to be made pursuant to this amendment to the Official Zoning District Map shall be submitted for site plan approval as provided for in the Unified Development Ordinance.

Section 6: This Ordinance shall be in full force and effect from and after its adoption.

Motion by Council Member_____

Seconded by Council Member_____

With ____ Council Member(s) voting "aye."

With ____ Council Member(s) voting "no."

This the _____ day of _____ 2024.

TOWN OF APEX

_____
Jacques K. Gilbert
Mayor

ATTEST:

_____
Allen Coleman, CMC, NCCCC
Town Clerk

APPROVED AS TO FORM:

_____
Town Attorney

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: 24CZ01 Submittal Date: January 2, 2024

Insert legal description below.

BEGINNING at an iron stake on the west side of Highway #55, comer of Lot #23, and runs thence in westemly direction with Lot #23 150 feet to an iron stake; thence in southerly direction 50 feet to an iron stake, comer of Lot #21; thence in easterly direction with Lot #21 150 feet to an iron stake on the west side of Highway #55; thence with Highway #55 50 feet to the point of BEGINNING, and being Lot #22 of the Johnie Mosley Subdivision as recorded in Book of Maps 1948, Page 18, Register of Deeds Office for Wake County, N.C.

ORDINANCE AMENDING THE OFFICIAL ZONING DISTRICT MAP
#09CZ07

WHEREAS, the application of Lookout Ventures, Inc., petitioner, for the rezoning of lands hereinafter described was duly filed with the office of the Planning Director and thereafter public hearings were held hereon on the 13th day of December, 2010 and the 13th day of January, 2011 before the Planning Board and the 18th day of January, 2011, the 1st day and 15th of February, 2011, the 15th day of March, 2011 and the 10th day of May, 2011, before the Town Council, respectively, pursuant to due notice mailed and published pursuant to G.S. § 160A-384. Thereafter, the Planning Board submitted its final report to the Town Council recommending approval of said application for the rezoning of the lands hereinafter described, all in accordance with the requirements of the Town of Apex Unified Development Ordinance and the provisions of Chapter 160A, Article 19, of the North Carolina General Statutes; **NOW, THEREFORE,**

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF APEX

Section 1: The Town of Apex Unified Development Ordinance, including the Town of Apex North Carolina Official Zoning District Map which is a part of said Ordinance, is hereby amended by changing the zoning classification of the lands hereinafter described from Planned Unit Development Conditional Zoning (PUD-CZ), Light Industrial (LI), Rural Residential (RR) and Residential Agricultural (RA) to SD-CZ (Sustainable Development Conditional Zoning) District, said lands so rezoned being described as follows:

See Attachement "A" (Legal Description)

Section 2: The Planning Director is hereby authorized and directed to cause the said Official Zoning District Map for the Town of Apex, North Carolina, to be physically revised and amended to reflect the zoning changes directed by this Ordinance.

Section 3: A request to amend the Official Zoning District Map is granted whereby the previously described property and the subject of the previously mentioned change in zoning classification is subject to the following limitations:

See Attachment "B" (SD Plan and UDO Amendments)

Section 4: This property shall be perpetually bound to the uses authorized, unless subsequently changed or amended as provided for in the Unified Development Ordinance. Site plans for any development to be made pursuant to this amendment to the Official Zoning District Map shall be submitted for site plan approval as provided for in the Unified Development Ordinance.

Section 5: This ordinance shall be in full force and effect from and after its adoption.

Motion by Council Member Jones

Seconded by Council Member Jensen

With 4 Council Member(s) voting "aye."
With 0 Council Member(s) voting "no."

This the 2nd day of August, 2011.

TOWN OF APEX, NORTH CAROLINA

Mayor

ATTEST:

Georgia A. Evangelista
Town Clerk

APPROVED AS TO FORM:

Town Attorney

STATEMENT OF THE APEX TOWN COUNCIL PURSUANT TO G.S. 160A-383 ADDRESSING ACTION ON ZONING PETITION #09CZ09

Lookout Ventures, Inc., owners/applicants (the "Applicant"), submitted a completed application for a conditional zoning on the 1st day of June, 2009 (the "Application"). The proposed conditional zoning is designated #09CZ07.

The Planning Director for the Town of Apex, Dianne Khin, caused proper notice to be given (by publication and posting) of a public hearing on #09CZ07 before the Planning Board held on the 13th day of December, 2010 and the 13th day of January, 2011.

Pursuant to G.S. §160A-384 and Sec. 2.2.11(E) of the Unified Development Ordinance, the Planning Director caused proper notice to be given (by publication and posting), of a public hearing on #09CZ07 before the Town Council on the 18th day of January, 2011, the 1st day and 15th of February, 2011, the 15th day of March, 2011 and the 10th day of May, 2011.

The Apex Planning Board held a public hearing on the 13th day of December, 2010 and the 13th day of January, 2011, gathered facts, received public comments and formulated a recommendation regarding the application for conditional zoning #09CZ07. A motion was made at the Apex Planning Board to recommend approval; the motion passed unanimously for the application for #09CZ07.

The Apex Town Council held a public hearing on the 18th day of January, 2011, the 1st day and 15th of February, 2011, the 15th day of March, 2011 and the 10th day of May, 2011. Dianne Khin presented the Planning Board's recommendation at the public hearing.

All persons who desired to present information relevant to the application for #09CZ07 and who were residents of Apex or its extraterritorial jurisdiction, or who owned property adjoining the property for which the conditional zoning is sought, were allowed to present evidence at the public hearing before the Apex Town Council. No one who wanted to speak was turned away.

The Town Council by a vote of 5 and 0 approved Application #09CZ07.

In zoning Application #09CZ07, Applicant seeks to rezone the subject tract located west of NC 55, south of US#1, north and adjacent to proposed 540 from Planned Unit Development Conditional Zoning (PUD-CZ), Light Industrial (LI), Rural Residential (RR) and Residential Agricultural (RA) to SD-CZ (Sustainable Development Conditional Zoning). After public hearing, Town Council approved the rezoning. This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness and affect on public interest.

Approval of the rezoning is in line with the mixed use development proposed on the 2025 Land Use Plan. The rezoning request includes amendments to the Unified Development Ordinance, the 2025 Land Use Plan, and the Official Zoning District Map. The changes being made are consistent with the long range vision to create a unified sustainable development in the requested area. The rezoning is compatible with the surrounding area, and should be of no detriment to immediate neighbors and the surrounding community.

Property Description

Tract 1 (Poe):

BEGINNING at a point which is the northeast corner of the 54.650 acre tract shown on Boundary Survey Prepared for Apex Land Assemblage, LLC by Riley Surveying, PA dated February 23, 2006 and recorded in Book of Maps 2006, Page 416, Wake County Registry; thence along the line of said 54.650 acre tract N 89° 54' 34" W 1794.53 feet to a point in the centerline of Big Branch; thence along the centerline of Big Branch, the following courses and distances denoted L87 through L156 on the following table:

CENTERLINE BIG BRANCH

LINE TABLE		
LINE	*BEARING*	*LENGTH*
L87	*N20° 48' 14" E*	*52.19*
L88	*N27° 36' 15" E*	*25.74*
L89	*N62° 55' 07" E*	*26.76*
L90	*N28° 59' 45" W*	*21.84*
L91	*N05° 57' 55" W*	*34.25*
L92	*N49° 54' 20" E*	*15.65*
L93	*N35° 51' 41" E*	*26.00*
L94	*N57° 55' 36" W*	*27.74*
L95	*S77° 58' 08" W*	*70.86*
L96	*N69° 24' 20" W*	*55.42*
L97	*N16° 11' 53" W*	*54.07*
L98	*N47° 25' 48" E*	*30.81*
L99	*S76° 51' 18" E*	*46.52*
L100	*N23° 56' 06" E*	*15.13*
L101	*N10° 54' 23" E*	*79.33*
L102	*N70° 46' 49" W*	*21.80*
L103	*N13° 56' 38" W*	*44.13*
L104	*N54° 44' 36" W*	*48.38*
L105	*S57° 22' 33" W*	*58.59*
L106	*S44° 34' 58" W*	*46.68*
L107	*N46° 23' 02" W*	*39.79*
L108	*N72° 28' 16" W*	*36.60*
L109	*S47° 16' 54" W*	*18.92*
L110	*N74° 34' 40" W*	*21.22*
L111	*N28° 53' 03" W*	*20.74*
L112	*N42° 52' 48" W*	*46.75*
L113	*N06° 56' 21" E*	*26.65*
L114	*N88° 28' 36" E*	*43.87*
L115	*N27° 02' 14" E*	*18.93*
L116	*N01° 17' 25" E*	*31.60*
L117	*N45° 56' 56" E*	*50.02*
L124	*N39° 28' 55" E*	*39.13*
L125	*N15° 03' 15" W*	*20.63*
L126	*N51° 44' 06" W*	*25.88*
L127	*N30° 05' 45" E*	*27.95*
L128	*S60° 15' 59" E*	*30.79*
L129	*S36° 33' 19" E*	*34.28*
L130	*S78° 44' 24" E*	*52.43*
L131	*N41° 37' 38" E*	*15.36*
L132	*N04° 45' 02" E*	*44.44*
L133	*N30° 38' 49" E*	*51.77*
L134	*N05° 02' 00" W*	*35.48*
L135	*S62° 06' 04" W*	*33.82*
L136	*N44° 56' 44" W*	*39.84*
L137	*N44° 38' 21" E*	*21.58*
L138	*N53° 06' 38 E*	*60.88*
L139	*N61° 14' 38" W*	*39.17*
L140	*N50° 48' 06" W*	*23.78*
L141	*N10° 02' 40" W*	*28.54*
L142	*N38° 49' 48" E*	*55.95*
L143	*N43° 06' 48" W*	*60.59*
L144	*N42° 29' 30" E*	*31.74*
L145	*N70° 52' 59" W*	*69.18*
L146	*N86° 33' 59" W*	*111.94*
L147	*N47° 57' 35" W*	*68.58*
L148	*N30° 54' 08" E*	*32.56*
L149	*N21° 23' 37" W*	*54.07*
L150	*N55° 27' 06" E*	*39.27*
L151	*N03° 24' 04" W*	*46.46*
L152	*N31° 43' 23" E*	*54.96*
L153	*N18° 31' 57" E*	*44.10*
L154	*N01° 09' 10" W*	*65.77*
L155	*N22° 16' 37" W*	*29.93*
L156	*N19° 16' 28" E*	*2.52*

L118	*N01° 25' 13" E*	*14.01*
L119	*N65° 15' 45" W*	*42.02*
L120	*N01° 22' 31" E*	*32.19*
L121	*N46° 17' 51" W*	*51.21*
L122	*N06° 49' 21" E*	*35.97*
L123	*N69° 35' 22" E*	*41.13*

Thence leaving the course of Big Branch, N 87° 20' 59" E 1317.72 feet to a point; thence N 00° 20' 59" E 1411.74 feet to a point; thence N 87° 17' 47" E 1396.96 feet to a point; thence S 02° 19' 40" W 527.05 feet to a point; thence S 90° 00' 00" W 750.13 feet to a point; thence S 00° 00' 00" W 967.73 feet to a point; thence N 77° 55' 24" E 389.22 feet to a point; thence N 01° 29' 14" E 148.65 feet to a point; thence N 65° 20' 41" E 538.98 feet to a point; thence S 02° 20' 59" W 179.73 feet to a point; thence S 02° 28' 41" W 1915.88 feet to a point; thence N 89° 11' 33" W 648.01 feet to the point and place of beginning and being all of Tract 3 containing 128.439 acres shown on a survey entitled "Exempt Division Survey – Property of Bobby and Elizabeth Poe" prepared by Riley Surveying, PA dated November 9, 2006.

Tract 2 (Poe):

BEING all of the 1.710 acre tract and the 0.042 acre tract shown as area in the right of way of Old Holly Springs – Apex Road shown on a map entitled "Property of Bobby W. and Elizabeth A. Poe, F.D. Prince, Sr, Trustee" recorded in Book of Maps 2002, Page 109, Wake County Registry, reference to which is hereby made for greater certainty of description and also being more particularly described as follows: Beginning at an existing nail in the northwest corner of the property of E.K. Huang, et. al. as described in Deed Book 6650, Page 866, Wake County Registry, and the southwest corner of the property of F.D. Prince, Sr. as described in Deed Book 8291, page 540, Wake County Registry, runs thence North 05 degrees 23 minutes 24 seconds East 64.21 feet to an iron pipe; thence North 74 degrees 31 minutes 24 seconds East 381.93 feet to an iron pipe; thence South 86 degrees 04 minutes 18 seconds East 863.27 feet to an iron pipe in the west right of way of SR 1153 (Old Holly Springs – Apex Road). Thence South 86 degrees 04 minutes 18 seconds East 30.32 feet to the centerline of SR 1153; thence along the centerline of SR 1153, South 12 degrees, 45 minutes 03 seconds West 60.72 feet to a point; thence with the north line of Huang, et. al., North 86 degrees 04 minutes 18 seconds West 30.32 feet to an existing iron pipe; thence North 86 degrees 04 minutes 18 seconds West 843.70 feet to an existing iron pipe; thence South 74 degrees 31 minutes 24 seconds West 394.54 feet to an existing iron pipe, the point and place of Beginning, and also being Tract 1 containing 1.754 acres shown on a survey entitled "Exempt Division Survey – Property of Bobby and Elizabeth Poe" prepared by Riley Surveying, PA dated November 9, 2006.

Tract 3 (Lyna):

BEGINNING at a point in the centerline of Old Holly Springs Apex Road, said point being calculated as follows: Beginning at a point in the line of Tract A shown on a map entitled "Proposed Subdivision and Recombination of Properties of Wake County" which is recorded in Book of Maps 1998, Page 782, Wake County Registry, said point also being North 45° 03' 47" East 1591.01 feet from the centerline of the intersection of Old Holly Springs Apex Road and

Woods Creek Road; thence North 09° 24' 42" East 362.56 feet to a point; thence North 85° 47' 44" West 162.21 feet to an iron pin in the centerline of Old Holly Springs Apex Road; thence along the centerline of Old Holly Springs Apex Road in an northerly direction along a left hand curve having a radius of 1963.49 feet an arc distance of 423.08 feet and chord bearing and distance of North 12° 12' 26" East 422.26 feet to the POINT AND PLACE OF BEGINNING: thence continuing along the centerline of said Old Holly Springs Apex Road in a northerly direction along a left hand curve having a radius of 1963.49 feet, an arc distance of 259.39 feet and a chord bearing and distance of North 02° 14' 59" East 259.20 feet; thence North 00° 00' 56" East 187.39 feet to a point; thence South 67° 20' 57" East 925.18 feet to a point; thence South 61° 30' 00" East 301.10 feet to a point; thence South 73° 33' 19" East 346.87 feet to a point; thence South 74° 36' 50" East 217.48 feet to a point; thence South 70° 39" 03" East 219.39 feet to a point; thence South 66° 06' 14" East 183.83 feet to a point; thence South 51° 10' 55" East 327.09 feet to a point in the centerline of White Oak Creek a/k/a Falls Branch Creek; thence along the centerline of said creek as follows: South 03° 23' 35" East 31.18 feet to a point; thence South 19° 58' 50" East 138.13 feet to a point; thence South 09° 01' 05" West 63.94 feet to a point; thence South 22° 49' 37" West 94.25 feet to a point; thence South 05° 19' 49" West 65.12 feet to a point; thence leaving the center line of said creek N 67° 48' 05" W 2481.26 feet to the point and place of BEGINNING and being all of Tract 1 containing 23.62 acres as shown on a survey entitled "Exempt Subdivision prepared for Apex Land Assemblage, LLC" by Riley Surveying, P.A. dated May 13, 2005.

Tract 4 (Reeves):

BEGINNING at a point in the line of Tract A shown on a map entitled "Proposed Subdivision and Recombination of Properties of Wake County" which is recorded in Book of Maps 1998, Page 782, Wake County Registry, said point also being North 45° 03' 47" East 1591.01 feet from the centerline of the intersection of Old Holly Springs Apex Road and Woods Creek Road, being the point and place of BEGINNING, thence North 09° 24' 42" East 362.56 feet to a point; thence North 85° 47' 44" West 162.21 feet to a point; thence North 85° 47' 44" West 30.48 feet to an iron pin in the centerline of Old Holly Springs Apex Road; thence along the centerline of Old Holly Springs Apex Road in an northerly direction along a left hand curve having a radius of 1963.49 feet, an arc distance of 423.08 feet and chord bearing and distance of North 12° 12' 26" East 422.26 feet to a point; thence leaving the centerline of said road South 67° 48' 05" East 2481.26 feet to a point in the centerline of White Oak Creek a/k/a Falls Branch Creek; thence along the centerline of said creek as follows South 05° 19' 49" West 39.71 feet to a point; thence South 17° 13' 42" West 52.16 feet to a point; thence South 63° 16' 26" West 25.88 feet to a point; thence South 17° 55' 39" West 68.74 feet to a point; thence leaving the line of said creek North 78° 00' 00" West 876.99 feet to a point; thence North 84° 10' 00" West 1370.01 feet to the point and place of BEGINNING, and being all of Tract 2 containing 23.62 acres as shown on a survey entitled "Exempt Subdivision prepared for Apex Land Assemblage, LLC" by Riley Surveying, P.A. dated May 13, 2005.

Tract 5 (Goodwin/ALAN):

BEING all that certain tract or parcel of land containing 54.650 acres, more or less, as shown on plat of survey entitled "Boundary Survey Prepared for Apex Land Assemblage, LLC" dated February 16, 2006 and revised February 23, 2006, prepared by Phillip W. Riley, professional Land Surveyor, of Riley Surveying, P.A. and recorded in Book of Maps 2006, Page 416, Wake County Registry, which plat is referenced for a more particular description.

Tract 6 (Adams):

BEING all that certain tract or parcel of land containing 86.334 acres as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 17, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Survey, P.A. and recorded in Book of Maps 2007, Page 2469, Wake County Registry, which plat is referenced for a more particular description.

Tract 7 (Cox):

BEING all that certain tract or parcel of land containing 65.210 acres as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 19, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Survey, P.A. and recorded in Book of Maps 2007, Page 2467, Wake County Registry, which plat is referenced for a more particular description.

Tracts 8 - 11 (Raymer):

BEING all those certain tracts or parcels of land designated as Tract I-A, containing 278.521 acres; Tract II, containing 2.134 acres; Tract III, containing 4.333 acres; and Tract 840' x 40', containing 0.626 acres, as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 20, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Surveying, P.A. and recorded in Book of Maps 2007, Page 2468, Wake County Registry, which plat is referenced for a more particular description.

Tract 12 (Apex Town Square):

Being all of that certain tract of land lying in the Town of Apex, Holly Springs Township, Wake County, North Carolina, and being more particularly described as follows:

BEGINNING at an existing iron pipe at the northeastern corner of the now or formerly EMC Corporation property described in Deed recorded Book 2791, Page 428, Wake County Registry, said pipe also being located in the western line of the now or formerly Cash and Maynard Tract 1-A as shown on plat of survey recorded in Book of Maps 2003, Page 398, Wake County Registry (the "Plat"), said pipe being located North 02° 14' 00" East 271.08 feet from a common corner with said Cash and Maynard Tract 1-A and the now or formerly Cor Bregman property in said EMC Corporation's eastern property line as shown on the Plat; thence with said EMC Corporation's northern property line, South 89° 33' 33" West 1,910.66 feet to an existing iron pipe; thence with EMC Corporation's interior eastern property line, North 02° 07' 56" East

543.28 feet to an existing iron pipe, the southeastern corner of the now or formerly Colon Hobby property; thence with the eastern property line of said Colon Hobby property, North 00° 59' 41" East 734.53 feet to a set iron pipe marking the southwest corner of the said Cash and Maynard Tract 1-A; thence with said Cash and Maynard's Tract 1-A's southern property line and passing over an existing iron pipe at a distance of 15.08 feet, South 87° 48' 34" East 1,905.24 feet (total) to an existing iron pipe; thence continuing with said Cash and Maynard's Tract 1-A's interior western property line, South 01° 15' 42" West 1,190.09 feet to the point or place of BEGINNING, containing 53.939 acres, more or less, including any deed/survey gaps that may exist along the western line of the property herein described, as shown on the Plat, which Plat is referenced for a more particular description and being all of the property conveyed to Apex Town Square, LLC, by deed dated January 6, 2006, and recorded in Book 11766, Page 242, Wake County Registry.

Tract 13 (Bregman):

Lying and being in Town of Apex, Holly Springs Township, Wake County, North Carolina, and being more particularly described as follows:

BEGINNING at an existing iron pipe at a corner of the property now or formerly owned by Heartland Raleigh Apex U.S. 1 Limited Partnership (Book 4454, Page 666, Wake County Registry ["WCR"]), said pipe being located at NC Grid Coordinates: N=707,936.09; E2,048,195.68, and also being located South 31° 57' 19" West a distance of 2,292.37 feet (Grid) from NCGS Monument "TANK" (N=709,881.08; E2,049,408.93); from said POINT OF BEGINNING, running thence along and with the western line of the aforesaid Heartland Raleigh property the following courses and distances:

- South 02° 41' 34" West a distance of 537.74 feet to an existing iron pipe;
- South 02° 41' 34" West a distance of 100.28 feet to an existing iron pipe;
- South 02° 41' 34" West a distance of 2.08 feet to an existing iron pipe;
- South 02° 39' 56" West a distance of 37.18 feet to an existing iron pipe in the northern right-of-way of Technology Drive;

running thence along and with the northern right-of-way of Technology Drive the following courses and distances:

- along and with the arc of a curve to the left having a radius of 411.97 feet (Chord Bearing: South 60° 59' 56" West; Chord Distance: 224.57 feet) a distance of 227.45 feet to an existing iron pipe;
- South 45° 37' 55" West a distance of 288.89 feet to an existing iron pipe;
- South 44° 59' 17" West a distance of 549.68 feet to an existing iron pipe;
- South 44° 59' 17" West a distance of 70.66 feet to an existing iron pipe;
- along and with the arc of a curve to the right having a radius of 351.97 feet (Chord Bearing: South 57° 36' 33" West; Chord Distance: 151.96 feet) a distance of 153.17 feet to an existing iron pipe;
- along and with the arc of a curve to the right having a radius of 351.97 feet (Chord Bearing: South 79° 30' 30" West; Chord Distance: 115.27 feet) a distance of 115.79 feet to an existing iron pipe;
- South 88° 51' 29" West a distance of 164.77 feet to a point in the eastern line of property

now or formerly owned by Data General (Book 2791, Page 428, WCR);

leaving the northern right-of-way of Technology Drive and running thence along and with the eastern line of the aforesaid Data General property, North 02° 16' 29" East a distance of 1,200.00 feet to an existing iron pipe; continuing with the eastern line of the Data General property and running thence North 02° 17' 20" East a distance of 416.31 feet to an existing iron pipe in the southern line of the aforesaid Heartland Raleigh property; running thence along and with the southern line of the Heartland Raleigh property, South 86° 16' 48" East a distance of 1,218.14 feet to the POINT AND PLACE OF BEGINNING, containing 34.0763 acres, more or less, and being all of Tract 4 north of the right-of-way of Technology Drive, as shown on that certain survey entitled "Recombination And Minor Subdivision of Technology Drive Property For Thomas H. Byrd, III", dated December 11, 1996, and prepared by Niall W. Gillespie, R.L.S. (No. L-2629) (File Name: BYRDTOPO), to which survey reference is hereby made for a more particular description, and being the same property conveyed to Cor S. Bregman by deed recorded in Book 7409, Page 255, Wake County Registry, and being the same property conveyed to Cornelius S. Bregman and Kandes K. Bregman, as Trustees of the Cornelius and Kandes Bregman Trust, under Agreement dated September 20, 1999 by deed recorded in Book 10856, Page 2786, Wake County Registry, LESS AND EXCEPT (i) the property conveyed to Thomas H. Byrd, IV, and wife Lisa W. Byrd, by deed recorded in Book 10129, Page 491, Wake County Registry, and (ii) the property conveyed to the Department of Transportation by deed recorded in Book 8128, Page 153, Wake County Registry.

Tracts 14 - 15 (EMC):

Being all those certain tracts or parcels of land containing approximately 47.419 acres and identified as portions of parcel identification numbers 0740672147 (containing approximately 46.61 acres) and 0740570471 (containing approximately 77.66 acres), and as generally shown as Tract 2 on the map attached hereto as Schedule 1.

Tract 16 (Whitehouse):

Being all that certain tract or parcel of land containing approximately 27.47 acres and identified as parcel identification number 0740287376 and being the same property conveyed to Brenda P. Whitehouse, individually, a 55% undivided interest, and Brenda P. Whitehouse as Trustee of the Irene F. Prince Family Trust dated February 19, 2004, a 45% undivided interest, by deed recorded in Book 10680, Page 477, Wake County Registry.

Tract 17 (F. Prince):

Being all that certain tract or parcel of land containing approximately 75.63 acres and identified as parcel identification number 0740191376 and being the same property conveyed to F.D. Prince, Sr., sole Trustee, or his successors in trust, under the Frank Dixon Prince, Sr. Living Trust, dated October 20, 1988, and any amendments thereto, by deed recorded in Book 8291, Page 540, Wake County Registry.

Tract 18 (F. Prince):

Being all that certain tract or parcel of land containing approximately 21.36 acres and identified as parcel identification number 0730996270 and being the same property conveyed to F.D. Prince, Sr., sole Trustee, or his successors in trust, under the Frank Dixon Prince, Sr. Living Trust, dated October 20, 1988, and any amendments thereto, by deed recorded in Book 8291, Page 540, Wake County Registry.

Tract 19 (B. Prince):

Being all that certain tract or parcel of land containing approximately 32.06 acres and identified as parcel identification number 0741207566 and being the same property conveyed to William Ira Prince, III, by deed recorded in Book 2673, Page 652, Wake County Registry.

Tract 20 (J. Prince):

Being all that certain tract or parcel of land containing approximately 1.80 acres and identified as parcel identification number 0740293940 and being the same property conveyed to William I. Prince and Jean P. Prince, by deed recorded in Book 6217, Page 146, Wake County Registry.

Tracts 21-38 (Stephens):

Being all of those certain tracts or parcels of land identified as parcel identification numbers 0740886966, 0740991702, 0740992565, 0740991337, 0740991237, 0740990140, 0740980647, 0740982309, 0740982534, 0740982635, 0740982769, 0740982866, 0740982964, 0740982929, 0740992024, 0740992069, 0740992169 and 0740982764.

Tract 39 (Tew):

Being all that certain tract or parcel of land containing approximately 1.84 acres and identified as parcel identification number 0741203157 and being the same property conveyed to Kim Prince Tew, and husband, David Wayne Tew, by deed recorded in Book 10633, Page 1741, Wake County Registry.

Tract 40 (Huang):

Being all that certain tract or parcel of land containing approximately 13.33 acres and identified as parcel identification number 0740180091 and being the same property conveyed to Ruey Shiue Huang, Co-Trustee, and Edward K. Huang, Co-Trustee, of The Huang Family Trust, dated September 30, 2005, by deed recorded in Book 10656, Page 33, Wake County Registry.

Sustainable Development Plan

for

VERIDEA

A Sustainable Mixed-Use Community
Apex, North Carolina

10 MAY 2011

Responsible Person:

Lookout Ventures, Inc.
P. O. Box 1166
Zebulon NC

SUSTAINABLE DEVELOPMENT PLAN

DEVELOPER AND RESPONSIBLE PERSON

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Contact: Tom Hendrickson
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Cary NC 27513

BBM Associates, Inc.
407 Gorman Street, Suite 101
Raleigh NC 27607

TRANSPORTATION

Kimley-Horn and Associates, Inc.
3001 Weston Parkway
Cary NC 27513

ENERGY PLANNING

Sanford Law Office, P.L.L.C
530 North Person Street
Raleigh NC 27604

SUSTAINABILITY AGENDA
BASED ON
PRINCIPLES AND GOALS
DEVELOPED BY

William McDonough + Partners
700 East Jefferson Street
Charlottesville VA 22902

LANDSCAPE ARCHITECTURE

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Raleigh NC 27601

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Raleigh NC 27603

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ARTICLE 1.0 DEFINITIONS OF CAPITALIZED TERMS USED IN THE SUSTAINABLE DEVELOPMENT (SD) PLAN

A-Grid: cumulatively, those Thoroughfares that by virtue of their pedestrian-supportive qualities, and their importance to pedestrian connectivity, are part of multi-modal transportation network that is vehicle tolerant and is linked to the contextual nature of the place. *See B-Grid.*

A-Grid Zones: areas of the Concept Map where A-Grids are required.

Accessory Structures: structures or buildings incidental to and appropriate to support a Function or use (i.e., ticket booths and storage for outdoor amphitheaters, and dugouts and storage for baseball and softball.)

Accessory Unit or Building: a dwelling not greater than 800 square feet sharing ownership and shared or separate utility connections with a Principal Building. *See Table 10 and Table 17.* (Syn: ancillary unit)

Advanced Materials: a broad technology category based on a rapidly evolving area of science, with applications ranging from aircraft to computer chips. Advanced structural materials can make products strong, lighter, and more effective as well as enable the development of totally new products. The materials can increasingly be designed and tailored to specific applications. A material is said to be "advanced" if it is a new material for the application. *See Table 12.*

Agricultural Plot: a parcel of land used for small-scale agricultural purposes such as the raising of agricultural products or poultry. *See Table 12 and Table 19.*

Alleé: a regularly spaced and aligned row or rows of trees usually planted along a Thoroughfare or Path.

Anticipatory Design: a development approach intended to predict and facilitate the use of innovative technology and other best development practices as they evolve and become practically and economically feasible over time.

Arcade: a Private Frontage conventional for Retail use wherein the Facade is a colonnade supporting habitable space that overlaps the Sidewalk, while the Facade at Sidewalk level remains at the Frontage Line.

Avenue ("**AV**"): a Thoroughfare designed for high vehicular capacity and low to moderate speed, acting as a short distance connector between Village Centers, and usually equipped with a landscaped median.

B-Grid: cumulatively, those Thoroughfares that by virtue of their use or location are vehicle supportive and pedestrian tolerant. *See A-Grid.*

B-Grid Zones: areas of the Concept Map where B-Grids are permitted.

Backbuilding: a single-Story structure connecting a Principal Building to an Outbuilding. *See Table 17.*

Bed and Breakfast: an owner or manager controlled Lodging type, permitted to serve breakfast in the mornings to guests in the Neighborhood General (NG) zone and at all times in other Sustainable Zones.

Bicycle Lane ("**BL**"): a dedicated lane for cycling within a moderate-speed vehicular Thoroughfare.

Bicycle Route ("**BR**"): a Thoroughfare suitable for the shared use of bicycles and automobiles moving at low speeds. These routes are signed as "bike route."

Bicycle Trail ("**BT**"): a bicycle and pedestrian way running independently of a vehicular Thoroughfare.

Biotechnology: the science of using living things and components of living things to produce goods and services. It involves manipulating and modifying organisms, often at the molecular level, to create new and practical applications for agriculture, medicine and industry. *See Table 12.*

Block: the aggregate of private Lots, Passages, Rear Alleys and Rear Lanes, circumscribed by Thoroughfares.

Boulevard ("**BV**"): a Thoroughfare designed for high vehicular capacity and moderate speed, traversing an urbanized area. Boulevards are usually equipped with Slip Streets buffering Sidewalks and buildings.

By Right: characterizing a proposal or component of a proposal for the Development that is allowed by the SD Plan.

Civic Building: a building primarily dedicated to public functions such as arts, culture, education, recreation, government, transit, and parking, or for other public purposes. Civic Buildings are primarily operated by public or not-for-profit entities.

Civic Space: land containing a Civic Building and/or an outdoor area dedicated for public use including Parks but not including street rights of way. Civic Space types are defined by the combination of certain physical constants including the relationships among their intended use, their size, their landscaping and their enfronting buildings. *See Table 13.*

Civic Use: Open Space that is designated for Civic Buildings and Civic Space and Public Space.

Commercial: the term collectively defining workplace, Office, Retail, and Lodging Functions.

Common Destination: an area of focused community activity. It may include, without limitation, one or more of the following: a Civic Space, a Civic Building, a Commercial center, or a transit station or stop, and may act as the social center of a neighborhood.

Community Garden: a grouping of garden plots available for small scale cultivation, generally to the residents of apartments and other dwelling types without private gardens, permitting individual storage sheds, and providing a locus of recreation and sociability greater than that of a private yard, thus being a Common Destination.

Concept Map: *See* Veridea **Sustainable Development Concept Map**.

Concessions: a place where food, drinks and incidental retail items are sold or rented.

Conference Center: a facility that is constructed for and devoted to meetings and meeting space. *See Table 12.*

Configuration: the form of a building, based on its massing, Private Frontage, and height or the geographic characteristics of an area of land.

Convention Center: a Facility designed to accommodate multiple groups or large groups and consisting of exhibit halls, meeting rooms, ballrooms or banquet space but not sleeping accommodations. *See Table 12.*

Corridor: a lineal geographic system incorporating transportation and/or Greenway trajectories.

Curb: the edge of the vehicular pavement that may be raised or flush to a Swale. It usually incorporates the drainage system. *See Table 4A and Table 4B.*

Density: the amount of development measured on the basis of a Gross Acre of land area expressed in the number of Dwelling Units Per Acre ("DUA") for residential or Floor Area Ratio ("FAR") for non-residential.

Design Speed: the velocity at which a Thoroughfare tends to be driven without the constraints of signage or enforcement. There are four ranges of speed: Very Low: (below 20 MPH); Low: (20-25 MPH); Moderate: (25-35 MPH); High: (above 35 MPH). Lane width is determined by desired Design Speed. *See Table 3A.*

Design Standards: all of the provisions of the SD Plan, other than authorized Density, related to the development of Veridea, including but not limited to standards, designs, criteria, illustrations and other elements and materials of both a descriptive and proscriptive nature.

Developable Areas: lands other than those in the OS Open Space Zone.

Development: refers to Veridea and the land encompassed by the Veridea Sustainable Development Plan as a whole.

Disposition: the placement of a building on its Lot. *See Table 9 and Table 17.*

Drive ("**DR**"): a Thoroughfare along the boundary between an urbanized and a natural condition, usually along a waterfront or Park. One side has the urban character of a Thoroughfare, with Sidewalk and building, while the other has the qualities of a Road or parkway, with naturalistic planting and rural details.

Dwelling Units Per Acre ("**DUA**"): the number of dwelling units per Gross Acre.

Driveway: a vehicular lane within a Lot, often leading to a garage. *See Article 5.8 and Table 3B.f.*

Effective Parking: the amount of parking required for Mixed Use after adjustment by the Shared Parking Factor. *See Table 11.*

Effective Turning Radius: the measurement of the inside Turning Radius taking parked cars into account. *See Table 17.*

Elevation: an exterior wall of a building not along a Frontage Line. *See Table 17.* See: **Facade.**

Encroach: to break the plane of a vertical or horizontal regulatory limit with a structural element so that it extends into a Setback, into an easement, into the Public Frontage, or above a height limit.

Encroachment: any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a Setback, into an easement, into the Public Frontage, or above a height limit.

Environmental Enhancement Plan: additional Sustainability Standards related to environmental enhancement required to be submitted to the Town Council for approval in accordance with UDO 2.3.16 F) 3) b).

Existing Communication Towers: towers that are currently in place within Veridea, including any and all guy wires, anchors, supporting cables, tower assembly, and ancillary buildings.

Expression Line: a line prescribed at a certain level of a building for the major part of the width of a Facade, expressed by a variation in material or by a limited projection such as a molding or balcony. *See Table 8.* (Syn: transition line.)

Facade: the exterior wall of a building that is set along a Frontage Line. *See* **Elevation.**

Farm: an active, usually commercial, agricultural operation, such as the raising of agricultural products, livestock, poultry and dairying at a scale requiring industrial sized machinery and farm buildings, consistent with the requirements and limitations of the UDO. *See Table 12 and Table 19.*

Floor Area Ratio ("**FAR**"): the ratio of total building floor area per Gross Acre.

Forecourt: a Private Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back. *See Table 7.*

Frontage: the area between a building Facade and the vehicular lanes, inclusive of its built and planted components. Frontage is divided into **Private Frontage** and **Public Frontage.** *See Table 4A and Table 7.*

Frontage Line: a Lot Line bordering a Public Frontage. Facades facing

Frontage Lines define the public realm and are therefore more regulated than the Elevations facing other Lot Lines. *See Table 17.*

Function: the use or uses accommodated by a building and its Lot, categorized as *Restricted, Limited,* or *Open*, according to the intensity of the use. *See Table 10 and Table 12.*

Gallery: a Private Frontage conventional for Retail use wherein the Facade is aligned close to the Frontage Line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk. *See Table 7.*

Goal(s): the desired result of Veridea's effort to achieve sustainability.

Green: a Civic Space type for unstructured recreation, spatially defined by landscaping rather than building Frontages. *See Table 13.*

Green Roof: a building roof partially or completely covered with vegetation and soil, or some other living medium, over a waterproofing membrane.

Green Technology: a continuously evolving group of methods and materials, including—but not limited to—environmentally-sound techniques for: generating energy, energy efficiency, chemistry, nanotechnology and construction. *See Table 12.*

Greenway: a Corridor in largely natural conditions, which shall include trails for bicycles or pedestrians.

Gross Acre: an acre of land within the Veridea Sustainable Development District used for the purpose of Density calculation.

Guiding Principles: the Principles used to develop Veridea.

High Performance Computing: the use of supercomputers and computer clusters to solve advanced computation problems. *See Table 12.*

Highway ("**HW**"): a rural and suburban Thoroughfare of high vehicular speed and capacity. This type is allocated to the more rural Sustainable Zones (OS and NG).

Home Occupation: non-Retail Commercial enterprises within or closely associated with a dwelling.

Impermeable Surface: surfaces constructed using materials that allow no infiltration of water into the soil. Impermeable surfaces include, but are not limited to, public and private Thoroughfares, sidewalks, driveways, rooftops, parking lots and patios constructed with asphalt, concrete, compacted aggregate base course or other impervious materials. The surface area of bodies of water (natural or man-made) and wooden decks shall be considered permeable and shall not be included in the calculation of built-upon area. Green Roofs, permeable pavements, and other surfaces constructed with uniformly graded gravel, porous materials or pervious materials and designed in accordance with the NC Division of Water Quality Stormwater Best Management Practices Manual to accommodate the infiltration of water shall not be considered impermeable surfaces and shall not be included in the

calculation of the built-upon area.

Independent Living: a Project, or a portion of a Project, consisting of residences of any type or various types primarily accommodating age targeted residents maintaining an independent lifestyle.

Industrial: the term collectively defining Manufacturing, warehousing and storage uses.

Information Technology: the application of computer, communications and software technology to the management, processing and dissemination of information. *See Table 12.*

Internal Trip Capture: a concept used in transportation modeling to define an automobile trip between different land uses within Veridea that would have required an automobile trip external to the site.

Layer: a range of depth of a Lot, measured from the Frontage Line, within which certain elements are permitted. *See Table 17.*

Lightwell: a Private Frontage type that is a below-grade entrance or recess designed to allow light into basements. *See Table 7.* (Syn: light court.)

Liner Building: a building specifically designed to mask a blank building wall, a service area, a parking lot, or a Parking Structure from a Frontage.

Live-Work: a Mixed Use unit consisting of a Commercial and Residential Function. *See Table 10.*

Lodging: premises available for daily and weekly renting of bedrooms. *See Table 10 and Table 12.*

Lot: a parcel of land accommodating a building or buildings of unified design. The size of a Lot is controlled by its width in order to determine the grain (i.e., fine grain, as characterized by a tight-knit Thoroughfare grid, or coarse grain, as characterized by a loose-knit street grid) of the urban fabric.

Lot Line: the boundary that legally and geometrically demarcates a Lot.

Lot Width: the length of the Principal Frontage Line of a Lot.

Manufacturing: all areas of manufacturing, including design, control, fabrication, and assembly for uses where activities are conducted and confined within a building or structure including, but are not limited to: electronics, computers/IT, instrumentation, industrial equipment, medical, pharmaceutical, telecom, aerospace, defense, government, appliances, food, beverage and consumer products.

Medical Devices: products used for medical purposes for patients, in diagnosis, therapy or surgery. *See Table 12.*

Mixed Use: multiple Functions within the same building through vertical integration or adjacency, or in multiple buildings by adjacency.

Mixed Use Block: See Mixed Use and Block. *See Table 12.*

Modular Construction: single-family, multi-family or mixed use building constructed on-site and composed of components substantially assembled in a manufacturing plant and transported to the building site for final assembly that complies with the requirements of the North Carolina State Building Code.

Nanotechnology: is an advanced technology involving the fabrication and use of devices so small that the convenient unit of measurement is the nanometer (one thousand-millionth of a meter); or, is the art of manipulating and exploiting the properties of matter at a molecular level. *See Table 12.*

Natatorium: a building containing a swimming pool. *See Table 12.*

NCDENR: The North Carolina Department of the Environment and Natural Resources, or any successor executive agency or agencies having the powers and authority of such department.

Neighborhood General: A Sustainable Zone. *See* Table 1.

Neighborhood Mixed-Use: A Sustainable Zone. *See* Table 1.

Non-residential Uses: uses and building functions other than residential. Vertically integrated residential and Non-residential uses will be considered non-residential for the purposes of the SD Plan and the UDO. *See Article 4.2.2 and Table 12.*

Office: premises available for the transaction of general business, lab and research uses but excluding Retail uses. *See Table 10.*

Open Space ("**OS**"): A Sustainable Zone. *See* Table 1.

Outbuilding: an Accessory Building, usually located toward the rear of the same Lot as a Principal Building, and sometimes connected to the Principal Building by a Backbuilding. *See Table 17.*

Park: a Civic Space type or type of Open Space used for active and/or passive recreation purposes or natural preserve available for unstructured recreation, including all examples in Table 13.

Parking Garage (deck): See Parking Structure.

Parking Management Plan: a plan setting forth various policies and programs intended to optimize the efficient use of parking resources.

Parking Structure: a building containing one or more Stories of parking at, above and/or below grade. A Parking Structure may be stand alone or may be connected to or integrated with other uses. *See Table 12.*

Passage ("**PS**"): a pedestrian connector, open or roofed, that passes between buildings to provide shortcuts through long Blocks and connect rear parking areas to Frontages.

Path ("**PT**"): a pedestrian and/or bicycle way traversing a Park or rural area, with landscape matching the contiguous Neighborhood General (NG) Zone, ideally connecting directly with the urban sidewalk network.

Pattern Book(s): a book or books of text, diagrams and illustrations setting forth the principles of design for Veridea or some portion thereof in order to provide consistencies in characteristic form, massing, composition, style, method, materials, lighting and signage while simultaneously allowing for architectural and aesthetic diversity.

Planter: the element of the Public Frontage, which accommodates street trees and other vegetation, whether continuous or individual.

Plaza: a Civic Space type designed for Civic purposes and Commercial activities in the more urban Sustainable Zones, generally paved and spatially defined by building Frontages.

Power Facility: A facility for the generation of electric or thermal power. *See Table 12.*

Principal Building: the main building on a Lot, usually located toward the Frontage. *See Table 17.*

Principal Entrance: the main point of access for pedestrians into a building.

Principal Frontage: on corner Lots, the Private Frontage designated to bear the address and Principal Entrance to the building, and the measure of minimum Lot width. *See* **Frontage.**

Principle(s): fundamental positions that serve as the foundation for the creation of Veridea.

Private Frontage: the privately held Layer between the Frontage Line and the Principal Building Facade. *See Table 7 and Table 17.*

Project: individual developments within the Veridea Sustainable Development District to which the Sustainable Development Plan applies.

Public Frontage: the area between the Curb of the vehicular lanes and the Frontage Line, possibly containing utility easements, for walkways. *See Table 4A and Table 4B.*

Public Parking Facility: a parking facility that may include decks, structures or lots that may be publicly or privately owned and contain shared spaces available for public use that are not allocated to other residential or non-residential uses within Veridea.

Public School: A school operated by the Wake County Public Schools System, a charter school, or other type of school sanctioned by the State of North Carolina for public instruction and wholly or partially funded by the State and/or Wake County.

Public Space: land accessible to the general public through dedication or easement, but not including street rights of way.

Rear Alley ("**RA**"): a vehicular way, either public or private, located to the rear of Lots providing access to service areas, parking, and Outbuildings and possibly containing utility easements. *See Table 4A and Table 4C.*

Rear Lane ("**RL**"): a vehicular way, either public or private, located to the rear of Lots providing access to service areas, parking, and Outbuildings and containing utility easements. *See Table 4A and Table 4C.*

Rearyard: a building that occupies the full Frontage Line, leaving the rear of the Lot as the sole yard. *See Table 9.* (Var: Townhouse, Apartment House)

Regional Public Transit System: a transit system operated by a public agency that serves a geographic area that extends beyond the jurisdictional limits of the Town of Apex that includes, as one of its elements, a fixed guideway or comparable transit technology.

Renewable Energy Facility: a facility that either: i) generates thermal and/or electric power primarily by the use of a Renewable Energy Resource; ii) uses heat derived primarily from a Renewable Energy Resource to produce electricity or useful, measurable thermal or mechanical energy; iii) is a solar thermal energy facility; iv) specifically allows for co-firing with non-renewable energy resources as long as non-renewable energy resources are not the primary energy source; or v) provides energy storage capacity.

Renewable Energy Resource: a solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy; or hydrogen derived from a renewable energy resource. Renewable Energy Resource does not include peat, a fossil fuel, or nuclear energy resource.

Responsible Person: that person identified in the SD Plan and appointed pursuant to UDO 2.3.16 D), or his successors or assigns, to make certain decisions with respect to the SD Plan and the zoning of Veridea. The Responsible Person is sometimes referred to in this SD Plan as the "Developer."

Retail: the sale, (other than wholesale), rental or repair of goods, merchandise and services and food and beverage service and sales.

Retail Kiosk: a place where merchandise and food and drink may be sold or rented. *See Table 12.*

Retail Storage within Retail Spaces: stock rooms and storage areas located within retail spaces. *See Table 12.*

Road ("**RD**"): a local, rural and suburban Thoroughfare of low-to-moderate vehicular speed and capacity. This type is allocated to the more rural, less dense Sustainable Zones (OS-NG). *See Table 3A and Table 4C.*

School Authority: The Wake County Public Schools System or other entity having state-sanctioned authority for public education.

School Dormitory: an educational building or a group of rooms in a building

used for institutional living and sleeping purposes for students. *See Table 12.*

Secondary Frontage: on corner Lots, the Private Frontage that is not the Principal Frontage. As it affects the public realm, its First Layer is regulated. *See Table 17.*

Setback: the area of a Lot measured from the Lot line to a building Facade or Elevation that is maintained clear of permanent structures, with the exception of Encroachments listed in *Article 5.5. See Table 14.g.* (Var: build-to-line.)

Shared Parking Factor: an accounting for parking spaces that are available to more than one Function. *See Table 11.*

Shopfront: a Private Frontage conventional for Retail use, with substantial glazing and sometimes an awning, wherein the Facade is aligned close to the Frontage Line with the building entrance at Sidewalk grade. *See Table 7.*

Shopping Center: a building or multiple buildings consisting of a complex of shops, with interconnecting walkways along with associated parking. *See Table 12.*

Slip Street: an outer vehicular lane or lanes of a Thoroughfare, designed for slow speeds while inner lanes carry higher speed traffic, and that may be separated from them by a planted median. (Syn: access lane, service lane)

Smart Power: the system of generation, transmission, distribution and use of energy through means that both increase efficiency throughout the system and reduce the environmental impact of the cycle of production, delivery and use. The referenced means include development, manufacture and deployment of information technology, engineering, manufacturing, construction techniques, building science, controls, and HVAC and lighting systems. *See Table 12.*

Square: a Civic Space type designed for unstructured recreation and Civic purposes, spatially defined by building Frontages and consisting of Paths, lawns and trees, formally disposed. S*ee Table 13.*

Stoop: a Private Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk for privacy, with an exterior stair and landing at the entrance. *See Table 7.*

Story: a habitable level within a building, excluding an attic, mezzanine, or raised basement. *See Table 8.* Regardless of the number of stories, maximum height of a multi-story building shall not exceed 400 feet.

Strategy: general approach to achieve desired goals for Veridea.

Street ("**ST**"): a local urban Thoroughfare of low speed and capacity. *See Table 3B and Table 4B*.

Streetscreen: a freestanding wall or a free standing or attached trellis system for supporting plants along the Frontage Line, or coplanar with the Facade. It may mask a parking lot from the Thoroughfare, provide privacy to a side yard, and/or strengthen the spatial definition of the public realm. (Syn:

streetwall.) *See Article 5.5.5f.*

Sustainability: the process and ultimately the benefits of implementing a sustainable development program.

Sustainable: as used within the context of "sustainable development," and as derived from the 1987 Brundtland report: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". In practice, to develop sustainably is to integrate the economic, social and environmental dimensions to create human habitats that contribute to a quality life now, and in the future based upon an evolution of society, knowledge and technology.

Sustainable Zone: one of several areas described in the SD Plan and shown on the Sustainable Development Concept Map (and thereafter more clearly delineated in subdivision and site plans) analogous to Zoning Districts established under the UDO. Allowable land uses and development regulations applicable to such zones shall be as provided in the SD Plan.

Swale: a low or slightly depressed natural area for drainage.

Thoroughfare: a way for use, including a street, by vehicular and pedestrian traffic and to provide access to Lots and Open Space, consisting of vehicular lanes and the Public Frontage. *See Table 3A, Table 3B, Table 4C and Table 17a.*

Town Standards: any statement, codification or other document setting forth standards, designs, directives or plans for the construction of roads, utilities, parks, public facilities or infrastructure of any nature adopted by the Town of Apex and regulating the development of property and the construction of improvements and infrastructure within the jurisdiction of the Town. Town Standards shall include, but shall not be limited to, the Town of Apex Code of Ordinances, the Apex Unified Development Ordinance, Apex Comprehensive Plan, Apex Watershed Overlay District, Apex 2025 Land Use Plan, Apex Transportation Plans, NC 540 Land Use Plan, the Apex Standard Specifications and Standard Details, Wastewater Master Plan, Water Distribution Master Plan, and the Apex Parks and Recreation Master Plan.

Townhouse: a building that occupies the full Frontage Line, leaving the rear of the Lot as the sole yard. *See* **Rearyard Building.**

Transit Oriented Development ("**TOD**"): those areas within an average 1/2 mile radius or 2640 feet of a transit stop (bus or rail) present or proposed as a Common Destination, as set forth in *Article 5.7.2d.*

Transportation Demand Management ("**TDM**"): is a general term for strategies that result in more efficient use of transportation resources. The strategies include developing comprehensive plans for bus and rail transit, bike/transit integration, car sharing, flex cars, and park and ride resources.

Turning Radius: the curved edge of a Thoroughfare at an intersection, measured at the inside edge of the vehicular tracking. The smaller the Turning

Radius, the shorter the pedestrian crossing distance and the more slowly the vehicle is forced to make the turn. *See Table 3B and Table 17.*

Unified Development Ordinance ("**UDO**"): The Apex Unified Development Ordinance.

Urban Farm: agricultural land used for the production of fruits and vegetables, livestock, poultry or other agricultural products, or some combination thereof, consistent with the requirements and limitations of the UDO**.** *See Table 12 and Table 19.*

Urbanism: collective term for the condition of a compact, Mixed Use settlement, including the physical form of its development and its environmental, functional, economic, and socio-cultural aspects.

Urban Core ("**UC**"): A Sustainable Zone. *See Table 1.*

Vegetable Garden: private agricultural land dedicated to food production to be locally consumed, restricted to back yards. *See Table 12 and Table 19.*

Veridea Sustainable Development Concept Map: the map or set of maps that depicts a concept for the development of a community and the conceptual location of Sustainable Zones and Thoroughfares within it. *See Table 2.*

Veridea Sustainable Development District: the zoning district as depicted by the Veridea Sustainable Development Concept Map and developed in accordance with this SD Plan.

Vertical Farm: agricultural production in buildings not primarily within yards, but as a part of or incidental to inhabited buildings, or as a stand alone feature, utilizing container gardens or boxes, which may be associated with windows, balconies and terraces, or roof gardens.

Village Center ("**VC**"): A Sustainable Zone. *See Table 1.*

Yield: characterizing a Thoroughfare that has two-way traffic but only one effective travel lane because of parked cars, necessitating slow movement and driver negotiation. Also, characterizing parking on such a Thoroughfare.

ARTICLE 2.0 THE DISTRICT

2.1 INTRODUCTION

This Sustainable Development Plan (the "SD Plan") is submitted by the Responsible Person and approved by the Town Council pursuant to UDO 2.3.16 of the Town of Apex (the "Town" or "Apex") with respect to the proposed rezoning of property within the Town for the Sustainable, mixed-use development to be known as "Veridea." The SD Plan and its standards and applicable provisions of the UDO and other Town Ordinances and Town Standards shall authorize, regulate, and control the development of land within Veridea and shall establish the design and form for such development. To the extent that the SD Plan varies from the provisions of the UDO, other Town Ordinances, Town Standards or any document or policy referenced or incorporated therein as they exist on the date of approval of the SD Plan and as they may be amended from time to time by the Town Council, the SD Plan shall control.

2.2 CHANGE OF THE RESPONSIBLE PERSON

Pursuant to UDO 2.3.16 D), the Petition to Amend the Official Zoning District Map requesting the rezoning of Veridea to Sustainable Development Conditional Zoning District SD-CZ identified and appointed Lookout Ventures, Inc. as the Responsible Person for the district. Any successor corporation to Lookout Ventures, Inc. by way of merger or other reorganization shall become Responsible Person for the district, and written notice of such succession shall be provided to the Planning Director. At any time following the rezoning of Veridea as requested, Lookout Ventures, Inc. (or its successor corporation) may appoint another person as the Responsible Person for the district by providing notice of such change in writing to the Planning Director of the Town. In the event of the death, incapacity or dissolution of the Responsible Person without its appointment of a new Responsible Person, a new Responsible Person shall be appointed by the owners of fifty-one percent (51%) of the land comprising Veridea at the time of such appointment and written notice of such appointment shall be provided to the Planning Director.

2.3 AUTHORIZED DEVELOPMENT

No development shall occur within Veridea, or any parcel added to Veridea, except as is specifically authorized by this SD Plan with reference, when appropriate, to the UDO.

2.4 MASTER PROPERTY OWNERS' ASSOCIATION

Prior to the Developer's conveyance of any of the Properties within Veridea by the Developer or its assigns, a Master Property Owners' Association ("MPOA") will be established. Membership in the MPOA will be mandatory for any property owner. The MPOA will be funded by dues to be established in the Declaration or other duly recorded document. The MPOA will be responsible for the enforcement of recorded restrictive covenants and for the maintenance of certain common areas within Veridea, including private Thoroughfares. Subassociations of property owners may be established for individual development tracts within Veridea, which will be responsible for the maintenance of the common area within that specific tract, unless otherwise provided in documents relating to the respective subassociation. Should any subassociation fail to perform its maintenance obligations, the MPOA shall be responsible for such performance within a commercially reasonable timeframe. The Town will maintain all Thoroughfares and any other real property that is properly dedicated to and accepted by the Town.

2.5 DECLARATION OF RESTRICTIVE COVENANTS

Prior to the Developer's conveyance of any property within Veridea subsequent to its rezoning, the Developer shall record in the Wake County Registry with respect to the Development a Declaration of Restrictive Covenants (the "Declaration"), duly executed by the record owner or owners of each parcel included within the Development, stating that the Development is within the zoning jurisdiction of the Town of Apex and is zoned Sustainable Development Conditional Zoning ("SDCZ") District and that (i) the Development and the use of property therein are therefore subject to regulations applicable to the SDCZ District described in Section 2.3.16 of the UDO and other provisions of such Ordinance, a copy of which is available in the Planning Department of the Town of Apex (the "Planning Department") at the Apex Town Hall, 73 Hunter Street, Apex, North Carolina 27502; (ii) the Development and the use of land within the Development are also subject to the terms and provisions of a Sustainable Development Plan approved upon the rezoning of the Development to SDCZ District, a copy of which is available in the Planning Department; (iii) under applicable provisions of the UDO and the aforementioned SD Plan, the Developer, its successors and assigns, as Responsible Person, has the sole authority to make certain decisions with regard to property comprising the Development; and (iv) upon acceptance and recordation of any deed conveying property within Veridea, the grantee or grantees of such deed shall become a member of the Master Property Owners' Association for Veridea established pursuant to Section 2.4 of this Plan and any subassociation established pursuant to such section that relates to the property conveyed in the respective deed. The Declaration shall further provide that (i) each deed conveying land within Veridea recorded subsequent to the recordation of the Declaration shall state that the respective conveyance is subject to the Declaration, but that the failure to include such statement in a deed shall not affect the enforceability of the Declaration with respect to the property conveyed or invalidate the respective conveyance; and (ii) no rezoning petition shall be submitted or proposed with regard to the Development, or any portion thereof, without the written consent of the Developer.

ARTICLE 3.0 GENERAL SUSTAINABILITY STANDARDS AND FURTHER DEVELOPMENT APPROVALS

3.1 PURPOSE OF THE PLAN

3.1.1 The SD Plan has been adopted to facilitate the development of Veridea as a community of safe, healthy, resource efficient and transit-oriented mixed-use Projects planned and developed in accordance with Principles promoting Sustainability. Accordingly, Veridea will be developed in view of the following Guiding Principles:

a. Create economic value
b. Eliminate the concept of waste
c. Insist on a renewable future
d. Create delightful urban places
e. Integrate nature throughout the community

The Guiding Principles for Veridea have been developed in accordance with The Hannover Principles, Design for Sustainability, which was authored by William McDonough and Michael Braungart. The Hannover Principles are as follows:

1. **Insist on rights of humanity and nature to co-exist** in a healthy, supportive, diverse and Sustainable condition.

2. **Recognize interdependence**. The elements of human design interact with and depend upon the natural world, with broad and diverse implications at every scale. Expand design considerations to recognizing even distant effects.

3. **Respect relationships between spirit and matter**. Consider all aspects of human settlement including community, dwelling, industry and trade in terms of existing and evolving connections between spiritual and material consciousness.

4. **Accept responsibility for the consequences of design** decisions upon human well-being, the viability of natural systems and their right to co-exist.

5. **Create safe objects of long-term value**. Do not burden future generations with requirements for maintenance or vigilant administration of potential danger due to the careless creation of products, processes or standards.

6. **Eliminate the concept of waste**. Evaluate and optimize the full life-cycle of products and processes, to approach the state of natural systems, in which there is no waste.

7. **Rely on natural energy flows**. Human designs should, like the living world, derive their creative forces from perpetual solar income. Incorporate this energy efficiently and safely for responsible use.

8. **Understand the limitations of design**. No human creation lasts forever and design does not solve all problems. Those who create and plan should practice humility in the face of nature. Treat nature as a model and mentor, not as an inconvenience to be evaded or controlled.

9. **Seek constant improvement by the sharing of knowledge**. Encourage direct and open communication between colleagues, patrons, manufacturers and users to link long term Sustainable considerations with ethical responsibility, and re-establish the integral relationship between natural processes and human activity.

In addition, the Guiding Principles are grounded in the belief that they can only be achieved through a flexible development plan which recognizes the reality of the time in which elements of the plan are developed. The Guiding Principles will be pursued in an anticipatory manner, one which acknowledges that Veridea will be developed over a sustained period of time and according to evolving criteria that define accepted and attainable Sustainable development practices. The SD Plan establishes a flexible framework of development standards (collectively, the "Sustainability Standards") that, by its very nature, seeks to anticipate future trends and technologies and acknowledges that future technologies and practices are, by definition, evolutionary. Accordingly, an Anticipatory Design process shall be used in the planning and design of Veridea and in the design of specific Projects within Veridea.

3.1.2 In order to achieve these Guiding Principles, Veridea shall be developed as Sustainable Zones, as described in Table 1, in accordance with the SD Plan and the Sustainability Standards. In accordance with UDO 2.3.16 F) 2), Sustainability Standards include natural and cultural resource standards, transportation infrastructure standards, utility infrastructure standards, energy standards, community design standards, and building standards. Additional, modified or elective Sustainability Standards shall be adopted in accordance with UDO 2.3.16 F) 3). Sustainability Standards contemplated for Veridea shall include an Environmental Enhancement Plan and may include additional plans as follows:

Sustainability Standards	Authority	When Adopted
SD Plan	UDO 2.3.16	Rezoning
Environmental Enhancement Plan	UDO 2.3.16 F) 3) b)	Prior to first site plan or subdivision plan
Pattern Book	UDO 2.3.16 F) 3) a)	With first site plan
Transportation Demand Management Plan	UDO 2.3.16 F) 3) a)	With first site plan that deviates from UDO standards related to parking
Parking Management Plan	UDO 2.3.16 F) 3) a)	With first site plan that deviates from UDO standards related to parking

Additional Sustainability Standards	UDO 2.3.16 F) 3) a)	As appropriate, subsequent to rezoning
Elective Sustainability Standards	UDO 2.3.16 F) 3) c)	

Figure 1. Sustainability Standards in Veridea

3.1.3 In addition to the total authorized development authorized by this SD Plan, a minimum of 250 acres of land, in varying locations and varying scales and forms, shall be designated by the Responsible Person during the site plan and subdivision approval process as follows:

a. 100 acres shall be designated for Resource Conservation Area.
b. Sufficient acreage shall be designated to accommodate the recreation requirements specifically set forth in Article 3.4.2.2; and
c. 150 acres less the acreage sufficient to accommodate the recreation requirements of Article 3.4.2.2 shall be designated for Open Space, Public Space, and Civic Space. Civic Buildings dedicated to government, transit or parking and any portion of the respective lot not routinely accessible to the public shall not be included in the acreage designated pursuant to this subsection. Civic Buildings dedicated to arts, culture, education and social activity and any portion of the respective lot routinely accessible to the public shall be included in the acreage designated pursuant to this subsection. Any privately-owned or operated buildings located in an Open Space zone and any portion of the respective lot not routinely accessible to the public shall not be included in the acreage designated pursuant to this subsection.

3.2 SUSTAINABLE FRAMEWORK

3.2.1 The Veridea Sustainable Development District is utilized for Veridea to create a framework for compact and connected Sustainable Urbanism. In view of its scale and the Guiding Principles, the Veridea Sustainable Development District is distinguished from the other districts within the UDO and offers an additional lifestyle choice to Apex for current and future residents. Because technology and the laws and regulations affecting sustainability are evolutionary, the SD Plan recognizes the need to enable Anticipatory Design and to maintain flexibility in order to incorporate and adapt to future best practices.

3.2.2 In view of the Guiding Principles, the Goals of Veridea are intended to capture the spirit and intent of sustainability in order to achieve the following desired results:

a. Economic Value
    i. Create a model community of Sustainable design.

ii. Create a framework for the next generation version of the Research Triangle Park that is a vibrant, urban, mixed-use transit-oriented community.

b. Energy
   i. Pursue renewably sourced energy supplies.
   ii. Maximize energy efficiency.
   iii. Pursue energy opportunities presented by the evolving regulatory landscape and emerging renewable energy technologies.

c. Water
   i. Release to the ecosystem only water that is clean and healthy.
   ii. Treat water as a precious resource by conserving and reusing it to the maximum extent practicable.

d. Community
   i. Create a world class model of a safe, healthy, delightful, Sustainable mixed-use urban environment that enables the community to live, work and play.
   ii. Facilitate a mix of housing types, sizes and tenure options that allow all members of society to remain part of the community throughout the human life cycle.
   iii. Establish a full-service pedestrian-friendly transit-oriented community that respects and encourages wellness and safety.
   iv. Establish a community that respects the history of Apex and compliments and expands its existing community infrastructure.
   v. Set aside Open Space and Civic Space throughout the community.
   vi. Reduce, re-use and recycle construction and demolition materials whenever practicable.

3.3 DEVELOPMENT APPROVALS

3.3.1 Site Plans

a. The approval of site plans within the Development shall comply with the procedures and standards of UDO 2.3.6 except as modified in the SD Plan.

b. Within the Development, notwithstanding any provision of UDO 2.3.6 D) 2), only those individual site plans that propose 100,000 square feet or more of nonresidential floor area or 200 residential units or more shall be considered Major Site Plans and shall be processed and reviewed in accordance with UDO 2.3.6 D) 3). Notwithstanding UDO 2.3.6 D) 2) a), multiple site plan applications within any three year period for one property, or portions of the same property, or neighboring properties if owned by the same entity, shall be considered as individual site plans for the determination of the existence of a Major Site Plan and shall not be considered cumulatively for any purpose. All other site plans within the Development, shall be considered Minor Site Plans and shall be processed and reviewed in accordance with UDO 2.3.6 D) 1).

3.3.2 Subdivision Plans

The approval of subdivision plans shall comply with the procedures and standards of UDO 2.3.7 except as modified in the SD Plan. A minor Subdivision Plan, for the purposes of UDO 2.3.7 G), shall be defined as a division of a tract or parcel into fewer than 200 lots. In approving a major Subdivision Plan, the Town Council shall find that the area of the proposed subdivision will be adequately served by public fire and law enforcement personnel.

3.3.3 Written Statement from Responsible Person Required; Noncompliance

Any site plan or Subdivision Plan submitted to the Town for approval for a Project to be undertaken by a party other than the Responsible Person must be accompanied by a written statement from the Responsible Person indicating its approval of the Project. Such written statement shall also state the authorized development allocated to the Project (i.e., number of dwelling units and/or square feet of non-residential Retail, Office and/or Industrial Uses) as well as the development fee credits, if any, other credits, and/or liabilities and responsibilities assigned to or assumed by the Project.

Any event of non-compliance with any requirement of this SD Plan or the UDO that relates solely to a Project or Projects within Veridea shall not be attributed to Veridea as a whole, but rather shall be attributed only to that Project or Projects, such that any enforcement action taken by the Town shall be limited to the Project or Projects at issue.

In addition to any other remedy that may be available to the Town, if a violation of this SD Plan, Town Standards, Sustainability Standards applicable to Veridea or the UDO remains in existence with respect to a Project or Projects or a distinct area within Veridea after the Town complies with the procedures of UDO 11.5, the Town may withhold the issuing, approving or granting of grading permits, building permits, certificates of compliance or occupancy, site plans, subdivision plans or plats and other permits or approvals for the Project or Projects or distinct area in issue until the non-compliance is corrected and cured.

In addition to any other remedy that may be available to the Town, if a violation of this SD Plan, Town Standards, Sustainability Standards applicable to Veridea or the UDO which applies to Veridea as a whole remains in existence after the Town complies with the procedures of UDO 11.5, the Town may withhold the issuing, approving or granting of grading permits, site plans and subdivision plans or plats throughout Veridea until the non-compliance is corrected and cured.

3.3.4. Additional, Modified and Elective Sustainability Standards

All of the provisions of the SD Plan, including those related to development approvals, may be affected by any standards applicable to SD-CZ districts that may be adopted at any time or from time to time by the Town Council in accordance with UDO 2.3.16 F) 3). Upon the consent of the Responsible Person, any Sustainability Standards adopted or modified by the Town

Council in accordance with the provisions of UDO 2.3.16 F) 3) a), b) or c) shall apply to subsequent site plans and Subdivision Plans and be incorporated into the SD Plan. The Environmental Enhancement Plan shall be the sole required additional Sustainability Standard under this SD Plan and shall be adopted pursuant to UDO 2.3.16 F) 3) b).

3.3.5. Encroachment Agreements

Notwithstanding any other provision in this SD Plan, any encroachment into a Town of Apex right-of-way or easement requires an encroachment and maintenance agreement with the Town before such encroachment is made.

3.4 RESOURCE CONSERVATION – NATURAL AND CULTURAL RESOURCE STANDARDS

3.4.1 General

The natural and cultural resource standards set forth herein, as a component of the Sustainability Standards, provide certain community resources and conserve and protect natural and cultural resources and the quality of the water, land, and air within Veridea.

As set forth in Article 3.1.1 of the SD Plan, Veridea will be developed in view of the Guiding Principles over time according to evolving criteria that will define accepted and attainable sustainable development practices at the time of site plan or Subdivision Plan submission. As set forth in Article 3.1.2 and elsewhere within the SD Plan, Veridea shall include both Open Space, as an independent zone, and Developable Areas, generally identified as Sustainable Development Zones. Accordingly, Environmental and Natural Resource Protection Standards and Community Resource Standards shall vary as to those that apply within the Open Space zones, and those that apply within the Sustainable Development Zones. Further, due to the different levels of development within each Sustainable Development Zone, the Environmental and Natural Resource Protection Standards and Community Resource Standards shall vary with the level of development intensity within each zone. Also as set forth in Article 3.1.1 of the SD Plan, development standards are intended to be flexible in order to anticipate future trends and technologies, and yet acknowledge that future technologies and practices are unknown.

The provisions of Section 9 (d) of Session Law 2006-246, which provide a landward setback of 30 feet for built upon areas adjacent to certain surface waters, shall be applicable to Veridea except to the extent exceptions are granted by the Town Council in accordance with Section 11 (a) of such Session Law. Otherwise, UDO 6.1 shall apply until the Environmental Enhancement Plan is adopted by Town Council in accordance with UDO 2.3.16. F) 3) b).

3.4.2 Community Resource Standards

Veridea will achieve intensity of development within an environment of Sustainability.

3.4.2.1. Parks, Recreation and Open Space

All of the landscape that comprises Veridea will be purposefully designed to achieve a wide range of Goals to achieve Sustainability. The scale of Veridea's Parks will vary from small urban greens and squares, to active recreation areas with playfields, to natural preserve areas conducive to passive recreation. Within each Park, recreation, and open space site setting, appropriate human activity, from the passive to the most active, will be accommodated. Parks may be publicly or privately owned as determined at the time of site plan or Subdivision Plan approval, however only public parks will count toward recreation requirements. As Veridea is developed, land shall be dedicated for parks, recreation, and open space or fees in-lieu paid with respect thereto as contemplated by UDO 7.3.1 and 7.5.9 B). At any time, the Town Council and the Responsible Person may agree upon a plan or plans that deal with parks, recreation and open space for all or any portion of Veridea.

3.4.2.2. Specific Recreation Requirements

In accordance with the above and consistent with other requirements of the SD Plan, the Developer shall, at a minimum, dedicate land parcels to accommodate the following: i) four (4) lighted regulation softball fields in keeping with the standards of the American Softball Association (ASA) Men's Slow-Pitch Open Division; ii) six (6) lighted tennis courts in keeping with the standards of the United States Tennis Association (USTA); iii) a 22,500 square foot community center consistent with phase 1 of the existing community center at 53 Hunter Street, Apex, North Carolina; and iv) a dog park of at least one (1) acre. The Responsible Person shall have the discretion to disperse items i – iv and any part of items i or ii. No later than at the time 1000 residential units have received building permits, the Responsible Person shall submit to the Town Council for approval a Master Parks Plan depicting the location of the land parcels associated with items i, ii, iii and iv. The land parcels for items i, ii, iii, and iv shall be dedicated to the Town no later than at the time 2000 residential units have received building permits. Once the Master Parks Plan has been approved, any portion of the remaining obligation under Article 3.4.2.1. may be satisfied, at the election of the Responsible Person, by the payment of fees in lieu pursuant to UDO 7.3.1, which shall be utilized by the Town as soon as practicable for the foregoing construction of items i, ii, iii and iv.

The Responsible Person shall receive credits from the Town Council against fees in lieu payable under UDO 7.3.1 for the value of any historic or

cultural resource sites or facilities dedicated to and accepted by the Town and for amounts which it expends in developing and improving land for parks, recreation and open space pursuant to the recommendation of the Parks, Recreation and Cultural Resources Advisory Commission and approval by Town Council. Notwithstanding the foregoing sentence, any dedicated historic or cultural resource sites or facilities for which the Responsible Person receives credits against fees in lieu cannot be credited toward the RCA requirement set forth in Article 3.4.3 hereof.

3.4.2.3. Greenways

The Development will provide easements for Town of Apex greenways generally consistent with the current Parks and Recreation Master Plan. To the extent practicable, greenways will be constructed to Town Standards and located along stream corridors and within Open Space and easements. In cases where greenways generally follow public rights-of-way, greenways may be either constructed as a multi-use trail in lieu of a sidewalk, or when located within more urban areas, as pedestrian-oriented streetscapes containing both hardscape elements (including but not limited to sidewalks, decorative lighting, street furniture, and fountains) and street tree plantings which do not have to meet typical island widths or sizes. Greenways may be located within existing and future utility easements. Greenways may be publicly or privately owned as determined at the time of site plan or Subdivision Plan approval. Greenways may be dedicated to the Town as linear Parks, subject to the Town's approval.

3.4.2.4 Public Schools

The Development shall make available for purchase or lease by a School Authority three (3) Public School sites within Veridea, each having a minimum size of five (5) acres. Unless earlier purchased or leased by a School Authority, one (1) of such school sites shall be reserved by the Responsible Person upon the issuance of the 2,000th residential building permit within Veridea, and a similar reservation shall occur on the issuance of each of the 4,000th and 6,000th residential building permit within Veridea. Each area reserved should meet site design standards of a School Authority. Each such reservation shall exist for a period of ten (10) years, and during such period no permanent construction shall occur within the area reserved. The Public Schools constructed upon the areas so reserved shall be of a compact urban form and design appropriate for Veridea and meeting the standards of the State or the School Authority. There may be arrangements with the Town for the shared use of recreational facilities.

3.4.3 Resource Conservation – Environmental and Natural Resource Protection Standards

3.4.3.1 Resource Conservation Area ("RCA")

UDO 8.1, Resource Conservation, and other provisions of the UDO dealing with RCA not otherwise specifically dealt with in this SD Plan shall apply to the Development until the Environmental Enhancement Plan is adopted by Town Council in accordance with UDO 2.3.16.F) 3) b), except as follows:

a. UDO 8.1.2 A) shall apply to the Development as a whole as opposed to individual site plans or Subdivision Plans.

b. UDO 8.1.2 B) 2) f) shall not apply.

c. The maximum impermeable surface area shall be as listed in Table 14.

d. Notwithstanding UDO 8.1.3, Tree and Vegetation Conservation, the requirements for conservation of existing trees and vegetation and new landscaping requirements are set forth in Article 5.9 of the SD Plan.

e. Not including the land parcels to be dedicated to the Town pursuant to SD Plan 3.4.2.2, both: i) Open Space, excluding Civic Buildings and all associated parking, municipal parking lots, and parking associated with Open Space that exceeds the direct needs of such Open Space; and ii) recreation area provided in Public Space or Civic Space within the Development including, but not limited to, open space, pools, tennis courts, tot lots, ball fields, and village greens shall be allowed to be counted as partial credit toward the RCA requirement. The credit for such area shall be 50% of the area provided. (For example, 1 acre of area shall count as 0.5 acres of RCA) In order to qualify as RCA, the area must be located on a lot 0.5 acre or larger in size.

f. Notwithstanding UDO 8.1.2 A) 1) d), the provision of off-site RCA shall be provided at the same rate as the on-site RCA, and off-site RCA may be provided in lieu of on-site RCA.

3.4.3.2 Water

a. Stormwater Management

The Goals of Stormwater Management within Veridea are as follows:

i. Reducing pollutants to protect surface water bodies;
ii. Promoting recharge of ground water resources;
iii. Eliminating flooding within the Development and downstream;
iv. Enhancing safety and aesthetics for the public; and
v. Creating wildlife habitats and educational opportunities.

Specific stormwater management standards, technologies, devices and control structures for the Development shall work interdependently and holistically with the built and natural environment both on-site and off-site. The standards for Veridea's stormwater management shall be in

accordance with Town Standards. Further, to the extent practicable, low impact development ("LID") techniques such as bio-swales, vegetated channels, pervious pavement where appropriate, rainwater harvesting and "green" roofs to convey and treat runoff, may be used within the Development to the maximum extent practicable, based on the best available technology and research at the time of site plan and/or Subdivision Plan submission.

b. Water Conservation

The Goals of water conservation within Veridea are as follows:

i. Reducing per capita water use while retaining attractive landscapes;
ii. Protecting ground and surface water supplies from unsustainable depletion;
iii. Eliminating unnecessary waste in water use practices;
iv. Reducing wastewater treatment volume and associated municipal expenditures; and
v. Promoting the increased use of re-use water for irrigation.

Water conservation standards within the Development shall be in accordance with the Town of Apex Water Conservation Ordinance. Landscape plant materials shall be in accordance with NCDENR or North Carolina Cooperative Extension standards for drought tolerant, native species. Only re-use water, where practicably available, shall be used for landscape irrigation; however, where re-use water is not available, potable water use for landscape irrigation shall be used in accordance with the Town of Apex Water Conservation Ordinance.

c. Surface Water Enhancement

Encroachment on streams and associated riparian buffers will be unavoidable in some places in order to accomplish the Goals in light of the Guiding Principles. However, the Environmental Enhancement Plan, in accordance with 3.4.1 of the SD Plan, will be developed to provide for the protection and enhancement of the aquatic function of the surface water resources within the Development.

The Environmental Enhancement Plan will address surface water enhancement with the following objectives:

i. Maintaining water quality by capturing or controlling sediment, nutrients, and other pollutants to an extent that is equal to or better than would be the case if the encroachments did not occur;
ii. Maintaining the hydraulic conditions downstream to ensure that post-development peak flows do not exceed pre-development flows for the 1-year, 24-hour and 10-year, 24-hour storms, stream

channel stability is maintained or improved, increased sedimentation of the stream bed is avoided, and no increase in downstream flooding occurs;

iii. Maintaining or enhancing the aquatic ecosystem in order to restore or improve biodiversity;
iv. Augmenting low flow in order to improve downstream aquatic habitat;
v. Providing space and ecological conditions that maintain or enhance wildlife habitat and travel corridors;
vi. Constructing wetlands or enhancing naturally occurring wetlands; and
vii. Enhancing public use and enjoyment of the natural systems will be considered during the planning process.

3.4.3.3 Land

a. Sedimentation and Erosion Control

The Goals for sedimentation and erosion control are as follows:

i. Minimize disturbance to vegetation and soils;
ii. Minimize runoff and diversion;
iii. Minimize the need for additional storm drainage facilities;
iv. Reduce sedimentation; and
v. Prompt restoration after land clearing and grading.

Land disturbing activity within the Development shall comply with the Town of Apex Soil Erosion and Sedimentation Control Ordinance, as amended from time to time. The Town's standards related to the design of erosion and sedimentation collection devices for the 25-year storm and for the provision for 3,600 cubic feet per disturbed acre in sediment basins shall be implemented in the Development unless alternative design standards that are the functional equivalent or better are proposed by the Developer and approved by the TRC.

b. Waste Minimization

The Goals of waste minimization within Veridea are as follows:

i. Minimize the volume of demolition and construction waste generated in the Development;
ii. Distinguish between useful or reusable resources in demolition materials and waste materials from demolished buildings; and
iii. Expand the market for recycled construction and demolition materials.

The waste minimization standards shall support the following solid waste goals identified in the Wake County Environmental Stewardship Agenda, adopted by the Wake County Board of Commissioners February 21, 2005

and as may be amended from time to time:

i. Ensuring a solid waste management system for waste reduction, reuse and recycling to the maximum extent practicable;
ii. Providing convenient opportunities for residents, institutions, and businesses to recycle a full range of marketable materials (including yard debris), and to properly dispose of waste requiring special handling (e.g., used motor oil, household hazardous wastes, pesticide containers, automobile batteries, electronic waste, and others);
iii. Offering incentives, disincentives, and policies that motivate residents, businesses, and institutions to reduce and recycle waste, including institution of a countywide construction and demolition debris mandatory recycling ordinance;
iv. Devising an efficient recovery and processing infrastructure with the capacity to collect and divert from disposal all recyclable materials that have reliable market outlets;
v. Supplying accessible, user-friendly information to all citizens on how to reduce and recycle waste in their homes, places of work, and places of learning;
vi. Devising an expanded recycled products purchasing program with formal policies on procurement of products with recycled content and other "green" products by participating Wake local governments; and
vii. Working with Environmental Education and Environmental Information Providers to develop effective programs and services for a variety of County audiences on the importance of reducing, reusing, and recycling solid waste; buying recycled products and creating new and local markets; and reducing personal consumption and/or disposal of material goods and/or packaging.

Specifications of building and site work material may include recycled content requirements consistent with industry standards, including but not limited to, aggregate base and sub-base materials, asphalt, concrete, and finishes.

3.4.3.4 Air

The SD Plan for Veridea is grounded in the belief that the most effective planning Strategy to reduce greenhouse gas emissions is the pursuit of a dense, mixed-use, walkable and ultimately transit-oriented development. Greenhouse gas emissions are associated with both transportation and the total energy demands of the built environment. By targeting the expected growth within an area that can be served best by the municipality's ability to provide and afford municipal services, by balancing the land uses within the community, and by designing the community in conjunction with multi-modal transportation, a walkable, livable community such as Veridea can be created as a model of Sustainability.

Further, the creation of such a community concentrates development and attracts development that otherwise would occur outside of Veridea in a

sprawl-like manner that is inherently less Sustainable.

The SD Plan recognizes that the technologies and practices associated with the reduction of greenhouse gas emissions are evolving. Accordingly, in recognition of the impacts of greenhouse gas emissions and in an effort to minimize such emissions, transportation planning at all scales shall be approached and implemented in a manner that encourages the pattern of development defined within the Sustainable Development Plan.

The Goals for Air Quality within Veridea are as follows:

a. Establish a connected circulation plan that uses an integrated network of Thoroughfares, sidewalks, and paths linked to land uses with convenient access to alternative modes of travel including rail, bus, and walking to increase community internal trip capture and reduce vehicular trip generation and vehicle miles traveled in order to lower overall emissions and traffic congestion in otherwise heavily traveled areas.

b. Incorporate Transit Oriented Development in conjunction with a parking management Strategy within a mixed-use community, linked to a growth area to increase pedestrian and bicycle traffic, and transit share while reducing vehicle miles traveled.

c. Provide open space and landscaping within the Development to maintain a significant carbon absorbing medium.

d. To the extent practicable, comply with applicable EPA emission goals for the operation of non-road diesel engines.

3.5 TRANSPORTATION INFRASTRUCTURE STANDARDS

3.5.1 General

The transportation infrastructure standards set forth herein, a component of the Sustainability Standards, shall adhere to the Principles described and depicted throughout this Sustainable Development Plan.

Transit Oriented Development in conjunction with a parking management Strategy within a mixed-use community, linked to a growth area, has been proven to be very effective in increasing pedestrian and bicycle traffic and transit share while reducing vehicle trips and vehicle miles traveled. By establishing a connected circulation plan that uses an integrated network of Thoroughfares, sidewalks, and paths linked to land uses with convenient access to alternative modes of travel including rail, bus, and walking, community internal trip capture is significantly increased. One significant advantage of Sustainable Urbanism is that it reduces sprawl and the need to drive. Reduction in vehicular trip

generation and vehicle miles traveled lowers overall emissions and limits traffic congestion in otherwise heavily traveled areas. A second significant advantage of a connected circulation plan is that public safety is enhanced when the plan is based upon an integrated network of Thoroughfares that provides alternative routes from one destination to another, and that is designed to industry recognized criteria to reduce the performance speed of Thoroughfares and provides enhanced pedestrian safety.

a. Transportation Demand Management Plan

The SD Plan incorporates TDM strategies into the plan. The SD Plan provides for a compact mixed-use development with an efficient, connected multi-modal transportation network, key components of any TDM plan. The integration of land use and transportation decisions increases travel efficiencies and change travel behavior. This results in less auto dependence and an increase in use of other modes of transportation. TDM strategies will be applied to all levels of the land development process including long-range actions implemented after the land is developed. The Responsible Person shall prepare a Transportation Demand Management Plan outlining transportation options and incentives to be reviewed and, if feasible, developed, and setting the strategic framework for implementation. The options to be reviewed include:

i) Ridesharing;

ii) Telecommuting/flex time;

iii) Bicycle and pedestrian planning;

iv) Park and ride facilities;

v) Parking management;

vi) Shuttle bus;

vii) Bus/bus rapid transit;

viii) Car sharing; and

ix) Regional public transit.

The TDM Plan shall be submitted by the Responsible Person for approval by the Town, in accordance with UDO 2.3.16 F) 3) a) prior to or concurrent with the submittal of the first site plan that varies any standards related to parking set forth in the UDO. In accordance with UDO 2.3.16 F) 3) a) and the provisions of UDO 2.3.2 applicable to amendment to text, the TDM Plan may be updated or modified as the build-out of the Development occurs. Because preparation of the TDM Plan is triggered by the occurrence of development within Veridea, the TDM Plan is not required for the purposes of UDO 2.3.16 F) 3) b).

Parking planning and management refers to various policies and programs that result in more efficient use of parking resources. It recognizes that too much parking supply can be as damaging as too little and seeks to provide an optimal parking supply. A Parking Management Plan will be utilized in the B-Grid and

NG Zones. The plan shall address spillover parking for Commercial uses when located near single family development. The plan shall be submitted or updated as needed for site plans in the B-Grid and NG Zones.

3.5.2 Alternative Thoroughfare Standards

a. Thoroughfares shall conform to the *Apex Transportation Plan* to provide for the appropriate projection of principal streets in surrounding areas to permit reasonable access for surrounding properties. The exact placement of the streets and Thoroughfares within the plan may be adjusted. In areas within the Development, Thoroughfares shall be designed and located in proper relation to existing and proposed streets, to the topography of the area, and to natural features.
b. Thoroughfares in their construction shall conform to Town Standards except as noted within the SD Plan. Exceptions to Town Standards set forth in the SD Plan may be used by right, as an alternative to the Town Standards available. Exceptions are as listed hereafter or as provided elsewhere in this SD Plan:

    i. Section 3 *Streets of the Standard Specifications* shall apply except for the dimensional and other standards of 3.02b *Pavement & Right-of-Way Widths*, 3.02d *Radii of Curvature* and 3.02e Tangents, all of which shall be modified by the SD Plan, including but not limited to Tables 3A, 3B, 4A, 4B, and 4C, subject to TRC review and approval as to their application within the site plans or Subdivision Plans.
    ii. The dimensional standards of Standard Detail Number 3.01 *Street Typical Sections*, Sheets 1 through 4 shall be modified by this Sustainable Development Plan and Tables 3A, subject to TRC review and approval as to their application within the site plans or Subdivision Plans.
    iii. The location of utilities as shown on Standard Detail Number 3.10 *Standard Street Cross Section Showing Utility Locations* may be adjusted to permit street trees and utility locations in the Rear Alleys and Rear Lanes. Due to the anticipatory nature of the design of the Development, additional utilities, both public and private, may be incorporated into the right-of-way as the technology becomes available. Regulated utilities shall be permitted within the Thoroughfare right-of-way to include the District Utility Zone as illustrated in Table 4D.
c. In the event that Thoroughfares as identified in Table 4C do not meet the approval of the North Carolina Department of Transportation (“NCDOT”) for the design of thoroughfares under NCDOT’s jurisdiction, an alternative acceptable to the Responsible Person, the TRC and NCDOT may be utilized.
d. Thoroughfares shall be included as part of each Sustainable Zone.

e. Thoroughfares should be laid out in such manner as to encourage the flow of vehicle traffic at very low to low design speed, except upon major Thoroughfares, and to encourage pedestrian circulation. Public Sidewalks shall be required along all public streets except when the TRC approves an alternative plan during the site plan and construction plan review process upon its determination that the alternative plan, viewed in the context of surrounding development, adequately accommodates pedestrian connectivity. The street classifications shown on Tables 4B and 4C shall be used as guidance for sidewalk placement when possible. If determined by the TRC to provide an equal or better pedestrian system, Bicycle Trails may be allowed in lieu of some sidewalks within the Development. In addition to the requirements of Articles 3.5.1 and 3.5.2.b, the layout of thoroughfares and intersections will reasonably allow for emergency vehicle access. This may require an evaluation of emergency routes and turning radii during the site and construction plan review process. The TRC may consider alternative design elements and refer to third party published sources of information in order to minimize impacts to the intended character of the Development while accommodating emergency vehicles.

f. Private Thoroughfares and sidewalks may be allowed for Commercial, Manufacturing, and multi-family residential uses that conform to widths shown in Tables 4B and 4C, provided however that a five (5) foot public access easement will be provided on all private sidewalks fronting public Thoroughfares.

g. Rear Alleys and Rear Lanes shall be allowed that conform to widths shown in Tables 4B and 4C. Where required for public access and public utilities, continuous and/or crossing easements shall be provided for private Thoroughfares and/or sidewalks.

h. Right-of-way widths may be adjusted to the back of curbs during the site plan and construction plan review process. If the right-of-way does not extend beyond the back of curbs, public access and utility easements shall be provided to cover areas along the public street and Thoroughfare that allow for safe and adequate pedestrian flow and maintenance areas.

i. Design Standards for thoroughfare assemblies with reverse curves shall comply with the AASHTO Policy on Geometric Design of Highways and Streets, latest edition.

j. Thoroughfare standards may, at the election of the Responsible Person, include additional or elective regulations and standards, if any, adopted at any time and from time to time by Town Council in accordance with UDO 2.3.16 F) 3) a) or 2.3.16 F) 3) c).

3.5.3 Traffic

a. The Development and each Project will be designed to:
    i. Reduce vehicle miles traveled;
    ii. Increase share of alternative modes of transportation;
    iii. Reduce external trips; and

iv. Facilitate and encourage pedestrian and bicycle traffic.

b. Master Traffic Impact Analysis: A Master Traffic Impact Analysis ("Master TIA") will be prepared for Veridea. The Master TIA will address the maximum densities and allowable building square footage of various uses in the SD Plan along with recommended off-site thoroughfare improvements at the build-out of Veridea. Thoroughfare and associated improvements beyond those recommended in the Master TIA that are outside of the study area will be the responsibility of other developers or entities. Thoroughfare and associated improvements required as a direct result of other developments or background growth outside the scope of the Master TIA shall not be the responsibility of the Developer. However, internal improvements needed to serve site plans within Veridea will be identified when additional analyses are conducted.

The Developer shall provide Thoroughfare and associated improvements as recommended in the Master TIA. Additional traffic impact analyses ("TIAs") will be conducted for each major site plan or major Subdivision Plan required to serve Veridea, and Section 13.19 of the UDO shall be used as a guide for preparing the TIAs. TIAs shall be performed only for projects meeting the major site or subdivision plan threshold set forth in Article 3.3.1.b hereof. The study area of each TIA shall encompass all necessary street intersections internal to the Development but shall rely on the Master TIA for improvements along NC 55 and the proposed interchanges on the Triangle Expressway and US 1 external to the Development.

The Town shall have no obligation to provide financial assistance for the planning, design, permitting, acquisition of right of way, or construction of the following roadway improvements: i) those identified in the Master TIA; ii) those identified in the Article 3.5.5.a-g hereof; and iii) those identified in subsequent TIAs for each major site plan or major Subdivision Plan. Notwithstanding the foregoing, it is acknowledged that the Town may provide right of way that it currently owns for the new US 1 Interchange identified in the Master TIA and shown on the Town's Thoroughfare Plan.

c. Public Transit: A Regional Public Transit System may be accommodated and encouraged within the Development. Bus circulation shall be accommodated and encouraged within the Development. Optimally, the pedestrian network will provide direct pedestrian links from the proposed residential units, Offices and other commercial buildings to designated transit stops. Triangle Transit standards for bus stop amenities shall serve as a guideline. Access to the Regional Public Transit System by the adjacent pedestrian and bicycle network and park and ride facilities is an important component of the transit system. As noted in SD Plan 3.5.1.a, the TDM Plan will address bicycle and pedestrian planning as well as park and ride facilities.

d. Land Reservation: Land shall be reserved for the future Regional Public Transit System within Veridea. With regard to the Regional Public Transit System alignment and associated rights of way ("ROW") outside of Veridea, the location along Veridea's perimeter where the Regional Public Transit System will enter and exit Veridea in the vicinity of the interchange of US 1 with the Triangle Expressway will be determined by Triangle Transit, and/or other regional transit organization, and/or the Town. As Veridea is developed, site plans and Subdivision Plans will be shared with Triangle Transit, and/or other relevant regional transit organization, to assist such entities in the planning for and selection of the final alignment of the Regional Public Transit System.

The reservation of land to accommodate the Regional Public Transit System will be made as follows:

i. Land shall be reserved in a manner consistent with the development pattern of the Sustainability Zone in which it resides, and may overlap dedications made for other public uses such as Thoroughfares and utilities as long as the overlap is not contrary to sound planning and engineering practice that ensures that the reservation and dedication are sufficient for all planned infrastructure;
ii. Reservation shall include an area for transit station functions which shall be located within a UC zone, and shall be reserved in a manner that is in keeping with an urban development pattern of that zone as defined by the SD Plan, and may overlap reservations and, dedications made for other public uses such as Thoroughfares and utilities as long as the overlap is not contrary to sound planning and engineering practice that ensures that the reservation and dedication are sufficient for all planned infrastructure;
iii. Determination of the form, character, location, and relationship to adjacent development, relationship to other reservations and/or dedications and dimensions shall occur during site planning jointly by the Responsible Person, the TRC or Town Council, as appropriate.
iv. The reservation of land will prohibit permanent development within the designated reserve area until 2035 at which time, if there are no plans that financially commit the Triangle Transit, and/or other regional transit organization, and/or the Town to implement a regional rail plan that includes the Development, the Responsible Person may consider the reservation null and void.
v. Land reserved hereunder will be dedicated to Triangle Transit, and/or other regional transit organization, and/or the Town once the applicable entity secures funding and commits to construct the Regional Public Transit System within the Development.

vi. Buildout of any of single land use of the three (3) uses identified in Article 4.2.2.b.i-iii shall not exceed 85% of the total authorized development for the respective use, unless Town Council otherwise approves in accordance with UDO 2.3.16 F) 3) a), until the commencement of a Regional Public Transit System that will serve Veridea.

3.5.4 Schedule of Installation

Transportation infrastructure shall be completed in accordance with UDO 7.5.9. For the purposes of UDO 7.5.9, vertically-integrated residential and non-residential uses will be considered non-residential.

3.5.5 Phasing of Traffic Infrastructure

Traffic infrastructure shall be developed as build-out of Veridea occurs, as set forth herein. Percent build-out of "any single land use" refers to a percentage of building permits for residential dwelling units or certificates of occupancy for non-residential uses for the three (3) different uses identified in Article 4.2.2.b.i– iii hereof.

a. NC 55 at US 1 Northbound Ramps

Veridea shall not exceed 10% build-out of any single land use until the northbound inside right turn lane on NC 55 at US 1 is extended back to the intersection with Lufkin Road.

b. NC 55 at Lufkin Road

Veridea shall not exceed 10% build-out of any single land use until the third (3rd) northbound through lane on NC 55, starting at least 500 feet in advance of Lufkin Road, is constructed.

c. NC 55 at Lufkin Road Connector (Pristine Water Drive)/Site Access 1

Access shall not be granted to NC 55 through the fourth leg of the intersection across from the Lufkin Road Connector/Pristine Water Drive (Site Access 1) until the Lufkin Road Connector and Pristine Water Drive are complete and open to traffic. The Lufkin Road Connector includes a new location extension to Lufkin Rd and paving of Pristine Water Dr with improvements according to the Master Traffic Impact Analysis (Master TIA) including a landscaped median-divided cross section on NC 55 with a traffic signal.

d. Site Access 2, 3, 4, 5, 6, and 7

Access shall not be granted to NC 55 through Site Access 2, 3, 4, 5, 6, or 7 until improvements according to the Master TIA at the corresponding access are constructed including a landscaped median-divided cross section on NC 55.

e. NC 55 at Jessie Drive Extension

Access shall not be granted to NC 55 through Jessie Drive extension until improvements for Veridea according to the Master TIA are constructed including a landscaped median-divided cross section on NC 55 and a traffic signal.

f. NC 55 at Technology Drive

Access shall not be granted to NC 55 through Technology Drive until Technology Drive is widened to four-lane divided roadway and the departing second (2nd) eastbound through lane along NC 55 Business is constructed for a minimum of 1000 feet prior to the lane drop. In addition, access shall not be granted to NC 55 through Technology Drive until a second (2nd) northbound left turn lane and second (2nd) southbound left turn lane on NC 55 is open to traffic.

g. Perry Road at US 1 Interchange and Old Holly Springs Apex Road at Triangle Expressway Interchange

i. Veridea shall not exceed 15% build-out of any single land use until either the interchange of Perry Road at US 1 or the interchange of Old Holly Springs Apex Road at Triangle Expressway is open to traffic.

ii. Veridea shall not exceed 50% build-out of any single land use until both the interchange of Perry Road at US 1 and the interchange of Old Holly Springs Apex Road at Triangle Expressway are open to traffic.

iii. The Responsible Person shall coordinate with the NC Department of Transportation (NCDOT) and the Town of Apex to determine the appropriate phasing of completion of the ultimate lane geometry and signalization at the ramp termini as recommended in the Master TIA. The phasing plan for the ultimate build-out of improvements shall be determined through subsequent site plan and subdivision plan TIAs referenced by 3.5.3.b.

3.6 UTILITY INFRASTRUCTURE STANDARDS

3.6.1 General

Water and sanitary sewer lines with connections to municipal systems, adequate drainage system for the proper drainage of all surface water, and dry utilities, including but not limited to, electrical distribution, natural gas, and telecommunication lines shall be provided in accordance with the Town Standards, unless otherwise noted in Article 3.6.2. Dry utilities, wherever practicable, shall be installed underground.

3.6.2 Alternative Utility Standards

a. At the election of the Responsible Person, standards and requirements applicable to utilities in the Development may include any additional Sustainability Standards adopted by the Town Council in accordance with UDO 2.3.16 F) 3) a) or 2.3.16 F) 3) c).
b. Easement encroachments and shared use easements shall be allowed with the approval of the Town Council to minimize land disturbance and Thoroughfare sections, to encourage joint trenching agreements, and to maximize the beneficial use of easements for greenway trails at the time of site plan and Subdivision Plan submittal.

3.6.3 Schedule of Installation

Utility infrastructure shall be completed in accordance UDO 7.5.9. For the purposes of UDO 7.5.9, vertically-integrated residential and non-residential uses will be considered non-residential.

3.6.4 Regional Utility Standards

a. Potable Water
It is anticipated that off-site extension of existing potable water mains will be required. Within the Development, a network of potable water mains will be required. Potable water infrastructure for the Development shall be in accordance with the Town's Water Distribution System Master Plan and Cross Connection Control Ordinance (Sec. 12-156 through 166), as amended from time to time.
b. Reclaimed Water
The Developer may request that the Town apply to NCDENR for conjunctive systems permit in order to modify the Middle Creek Water Reclamation Facility ("WRF") to provide a source of reclaimed water for use within the Development. If such permit is issued, then water re-use distribution infrastructure may be provided within the Development to provide a circulation network of water for non-potable uses, including fire suppression. Standards and specifications related to reclaimed water shall comply with rules and regulations as promulgated, established and interpreted by NCDENR and Town Standards, if any. It is anticipated that any reclaimed water that is not consumed in the reuse options available will be discharged within the Development in accordance with applicable law and regulation.

If and when the Town adopts standards for the permitting, construction, modification and operation of reclaimed water distribution lines, the Town shall work cooperatively with Veridea to ensure that the standards allow for all actual or planned for uses within the Development. Should public reuse water become available to the Development through the Town of Apex, the Town specifications and details will be the authority for design, ownership and maintenance issues within Town right-of-way.

c. Sanitary Sewer
In all cases, Veridea shall follow the Town's Wastewater Master Plan, as may be amended from time to time. If a conjunctive systems permit is issued for the Middle Creek WRF as set forth in 3.6.4.b hereof, then the Town's Wastewater Master Plan may be amended to allow for wastewater generated within the Development to discharge to the Middle Creek WRF. If a conjunctive systems permit is not issued for the Middle Creek WRF, then wastewater generated within the Development shall be treated in accordance with the Town's Wastewater Master Plan.

d. Electric and Thermal
If a Renewable Energy Facility is available, distribution lines may be provided to provide an alternate source to meet power and thermal demands within the Development.

3.7 ENERGY STANDARDS

3.7.1 Renewable Energy

The Goals for the use of Renewable Energy Facilities and Renewable Energy Resources within Veridea are as follows:

i. Removing regulatory obstacles and adopting streamlined processes for the installation and safe interconnection of renewable energy technologies;
ii. Creating a receptive environment for innovative uses of Renewable Energy Facilities;
iii. Providing for use of shared non-polluting Renewable Energy Resources to reduce climate change and greenhouse gas emissions; and,
iv. Enhancing the opportunity for increased development of Renewable Energy Facilities and Renewable Energy Resources in the future to increase energy independence;

The use of Renewable Energy Facilities shall be allowed. Renewable energy standards, a component of the Sustainability Standards, shall be consistent with generally accepted industry standards and best practices, recognizing that relevant technology and standards are evolving. Such standards include, but are not limited to, priorities, standards, and practices developed by entities such as the American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE"), Environmental Protection Agency ("EPA"), and the Department of Energy ("DOE"), and requirements for interconnection and other associated safety metrics.

3.7.2 Energy Efficiency

The goals for energy efficiency within Veridea are as follows:

i. Encourage the use of energy efficient technologies and design to fully maximize the use of existing generation capacity;
ii. Encourage environmental stewardship through reduction in energy use;
iii. Encourage local investment in efficiency as a substitute for out-of-state resources;
iv. Promote an overall reduction in energy demand to ensure reliability of supply in the face of increased population and to preserve affordability in the face of rising costs imposed by carbon constraints; and
v. The improvement of energy performance by 20% compared to baseline building performance ratings per ASHRAE/ IESNA Standard 90.1-2004.

The use of technologies and designs intended to maximize energy efficiency shall be consistent with generally accepted industry standards and best practices, recognizing that relevant technology and standards are evolving. Such standards include, but are not limited to guidelines developed by the US Green Building Council (USGBC), ASHRAE, EPA, and DOE.

3.8 NO OBLIGATION

3.8.1 No Obligation

Nothing in this SD Plan obligates the Town to provide any financial assistance with respect to any infrastructure or improvements referenced herein, nor shall it prohibit the Town from doing so.

ARTICLE 4.0 COMMUNITY DESIGN STANDARDS

4.1 GENERAL

4.1.1 Development shall comply with the community design standards, a component of the Sustainability Standards, set forth in this Article.

4.1.2 Subdivision Plans and site plans shall be prepared in accordance with the SD Plan.

4.1.3 Site plans and Subdivision Plans shall designate areas and elements as follows:

a. Sustainable Zones:
   i. **OS** Open Space
   ii. **NG** Neighborhood General
   iii. **NM** Neighborhood Mixed-Use
   iv. **VC** Village Center
   v. **UC** Urban Core
b. Civic Uses; and
c. Thoroughfares.

The respective Sustainable Zones are described in Table 1.

4.1.4 It is possible that as the build out of the Development occurs, the Town Council may adopt elective regulations and standards applicable to SD-CZ districts pursuant to UDO 2.3.16 F) 3) c).

4.1.5 Open Space is one of the Sustainable Zones, and will exist both as an independent Zone as well as being integrated into and completely surrounded by other Sustainable Zones.

4.2 VERIDEA SUSTAINABLE DEVELOPMENT CONCEPT MAP

4.2.1 Veridea Sustainable Development Concept Map

Table 2 contains the Veridea Sustainable Development Concept Map (Concept Map), which depicts a concept for the development of Veridea and the conceptual location of its Sustainable Zones. The Concept Map depicts the configuration of land uses believed to be appropriate for Veridea. However, based on future planning, market and demographic conditions, the Sustainable Zones may be located anywhere within the Development as determined by the Responsible Person. The Responsible Person may revise the Concept Map from time to time and shall provide the TRC with a copy of each revision. The development of Veridea shall include the following minimum acreages with respect to the Sustainable Zones noted:

NG	Neighborhood General	75 acres
NM	Neighborhood Mixed-Use	50 acres
VC	Village Center	215 acres
UC	Urban Core	135 acres

The VC and UC Zones shall contain a minimum of 150 acres allocated as A-Grid Zones. Further, a minimum of 250 acres within Veridea shall be designated as provided in Article 3.1.3 hereof.

4.2.2 Land Use Locations and Densities

a. Land uses and Densities allowed in each Sustainable Zone are set forth in Article 7 Tables. Such land uses can be located anywhere within the respective Sustainable Zones.
b. For purposes of the SD Plan, Density is expressed in terms of housing units per acre for residential uses and as FAR for other uses as specified for the area of each respective Sustainable Zone in Table 14. The FAR for each Sustainable Zone is set as an average Density for the zone. Areas designated for Open Space, utilities infrastructure, Thoroughfares and other transportation infrastructure, such as a Regional Public Transit System, may be allocated from time to time by the Responsible Person to any other area or areas for the purpose of calculating authorized Density for the area or areas receiving the allocation. The Responsible Person shall have the authority to reallocate the authorized square footage numbers of the Non-residential Uses within Article 4.2.2.b.ii and iii on a square foot-for-square foot basis; provided, however, that the Responsible Person may only increase or decrease the Retail square footage by up to 20% subject to the limitation that the reallocation shall not result in a total daily vehicular trip generation for Veridea that exceeds the maximum daily vehicular trip generation that served as the basis for the Master TIA. Any further increase related to retail must be approved by Town Council in accordance with UDO 2.3.16 F) 3) a. In addition to the total authorized development provided below, Public, Civic, Utilities, Recreational and Lodging Uses are authorized to support the total authorized development set forth in Article 4.2.2.b.i, ii, and iii. In the event that additional parcels are incorporated into the Veridea Sustainable Development District, the total authorized development hereinafter provided shall be adjusted in accordance with UDO 2.3.16 D).

The total authorized development for the Development shall be as follows:

i.	Authorized Number of Dwelling Units (all types)	8,000
ii.	Authorized Retail Uses (gross leasable area)	3,500,000 Square Feet
iii.	Authorized Office and Industrial Uses (gross floor area)	12,000,000 Square Feet

4.2.3 The Sustainable Development Concept Map designates VC and UC zones as being either A-Grid or B-Grid. Subsequent approved site plans and Subdivision Plans shall confirm or modify such zones as called for in the SD Plan, and shall designate Thoroughfares within the VC and UC zones as being either A-Grid or B-Grid.

a. Buildings and frontages along the A-Grids shall reflect multi-modal and pedestrian standards of the SD Plan supporting pedestrian activity.

Thoroughfares within an A-Grid Zone may be developed according to B-Grid standards subject to the following special and limiting conditions:

i. Transition conditions within A-Grid Zones to adjacent B- Grid Zones; and

ii. Small internal Thoroughfares of limited length to respond to a specific condition of the site or a use. Notwithstanding these special and limiting conditions, no more than 15% of the aggregate length of Thoroughfares within an A-Grid Zone may be designated as a B-Grid and follow B-Grid standards. Location and other specifics of such B-Grid Thoroughfares shall be addressed within site plans.

b. Buildings and frontages along the B-Grids may reflect automobile- oriented standards. B-Grids may be developed in whole or in part to A-Grid standards. It is the goal that B-Grid zones eventually become redeveloped as A-Grids. Therefore, site plans for B-Grids shall reflect in their planning and site engineering this goal by:

i. Establishing a B-Grid Thoroughfare grid and therefore a block layout that can be redeveloped into smaller blocks exhibiting the characteristics of an A-Grid;
ii. Establishing the B-Grid Thoroughfares in such a manner that they can be redeveloped into A-Grid Thoroughfares and frontages; and
iii. Locating utilities and site features so that they will not prohibit the establishment of an A-Grid development pattern, and do so without significant redesign or cost impacts. Site plans for B- Grid zones shall depict both the B-Grid configuration, and conceptually reflect how the B-Grid configuration may be redeveloped into an A-Grid.

4.2.4. Development Thresholds

In order to create and maintain a mix of uses as the buildout of Veridea occurs, the following requirements shall be applicable to development within Veridea, unless otherwise provided by the Town Council at the request of the Responsible Person:

Threshold 1: Certificates of Occupancy shall not be issued for more than 10% (1,200,000 sf) of the total authorized Office and/or Industrial square footage or more than 20% (700,000 sf) of the total authorized Retail square footage unless and until building permits have been issued for dwelling units. Similarly, building permits for no more than 20% (1,600 units) of the total authorized dwelling units can be issued until Certificates of Occupancy have been issued for at least 2% (70,000 sf) of the total authorized retail square footage and 2% (240,000 sf) of the total authorized Office and/or Industrial square footage.

Threshold 2: Certificates of Occupancy shall not be issued for more than 25% (3,000,000 sf) of the total authorized Office and/or Industrial square footage or more than 50% (1,750,000 sf) of the total authorized Retail square footage until building permits have been issued for at least 5% (400 units) of the total authorized dwelling units. Similarly, building permits for no more than 37.5%(3,000 units) of the total authorized dwelling units can be issued until Certificates of Occupancy have been issued for at least 10% (350,000 sf) of the total authorized Retail square footage and 5% (600,000 sf) of the total authorized Office and/or Industrial square footage.

Threshold 3: Certificates of Occupancy shall not be issued for more than 50% (6,000,000 sf) of the total authorized Office and/or Industrial square footage or more than 60% (2,100,000 sf) of the total authorized Retail square footage until building permits have been issued for at least 15% (1,200 units) of the total authorized dwelling units. Similarly, building permits for no more than 60% (4,800 units) of the total authorized dwelling units can be issued until Certificates of Occupancy have been issued for at least 25% (875,000 sf) of the total authorized Retail square footage and 10% (1,200,000 sf) of the total authorized Office and/or Industrial square footage.

Threshold 4: Certificates of Occupancy shall not be issued for more than 70% (8,400,000 sf) of the total authorized Office and/or Industrial square footage or more than 80% (2,800,000 sf) of the total authorized Retail square footage until building permits have been issued for at least 40% (3,200 units) of the total authorized dwelling units. Similarly, building permits for no more than 80% (6,400 units) of the total authorized dwelling units can be issued until Certificates of Occupancy have been issued for at least 40% (1,400,000 sf) of the total authorized Retail square footage and 25% (3,000,000 sf) of the total authorized Office and/or Industrial square footage.

Threshold 5: Certificates of Occupancy shall not be issued for more than 85% (10,200,000 sf) of the total authorized Office and/or Industrial square footage (or more than 85% (2,975,000 sf) of the total authorized Retail square footage until building permits have been issued for at least 50% (4,000 units) of the total authorized dwelling units. Similarly, building permits for no more than 85% (6,800 units) of the total authorized dwelling units can be issued until Certificates of Occupancy have been issued for at least 50% (1,750,000 sf) of the total authorized Retail square footage and 40% (4,800,000 sf) of the total authorized Office and/or Industrial square footage.

Threshold 6: See the requirements set forth in SD Plan 3.5.3.d.vi and 4.2.2.b.

The foregoing requirements are illustrated by the tables below:

RESIDENTIAL CONTROL

	Minimum Required	
DU BP's	**Retail SF C/O's**	**O&I SF C/O's**
1 - 1,600	0	0
1,601 - 3,000	70,000	240,000
3,001 - 4,800	350,000	600,000
4,801 - 6,400	875,000	1,200,000
6,401 - 6,800	1,400,000	3,000,000
6,801 - 8,000	1,750,000	4,800,000

RETAIL CONTROL

	Minimum Required	
Retail SF C/O's	**DU BP's**	**O&I SF C/O's**
0 - 700,000	0	0
700,001 - 1,750,000	1	0
1,750,001 - 2,100,000	400	0
2,100,001 - 2,800,000	1,200	0
2,800,001 - 2,975,000	3,200	240,000
2,975,001 - 3,500,000	4,000	240,000

O&I CONTROL

	Minimum Required	
O&I SF C/O's	**DU BP's**	**Retail SF C/O's**
0 - 1,200,000	0	0
1,200,001 - 3,000,000	1	0
3,000,001 - 6,000,000	400	0
6,000,001 - 8,400,000	1,200	0
8,400,001 - 10,200,000	3,200	70,000
10,200,001 - 12,000,000	4,000	70,000

Although the foregoing tables are intended to illustrate the preceding text, the text shall control the construction of this Article 4.2.4.

4.3 SUSTAINABLE ZONES

4.3.1 Sustainable Zones, as shown on the Sustainable Development Concept Map shall have the character described in Table 1.

4.3.2 Open Space (OS) consists of lands approximating or reverting to a natural condition and farmland, parks, greenways, Civic Uses, utility corridors and easements, and waterways or water bodies, including lands unsuitable for development due to topography, hydrology and/or vegetation.

a. Open Space includes areas protected by law or regulation, as well as land designated for conservation.
b. Open Space shall be identified in site and Subdivision Plans approved for the Development. Upon the approval of a subdivision or site plan designating an area Open Space, such area may be conveyed in fee or by easement to (i) an entity created by law to hold interests in property designated for conservation purposes, or (ii) to a property owners association formed, in part, for such purpose, or (iii) to a public entity.
c. Land area within Open Space may be used in calculating the Density of a Project.
d. Open Space is an independent Sustainable Zone and will also be integrated into other Sustainable Zones.

4.3.3 Neighborhood General (NG) consists of low Density residential areas, adjacent to higher Density zones that consist of some Mixed Use. Home occupations and Outbuildings are allowed. Planting is naturalistic and Setbacks are relatively deep. Blocks may be large and the Thoroughfares irregular to accommodate natural conditions.

4.3.4 Neighborhood Mixed-Use (NM) consists of Mixed Uses within a medium to high Density residential urban fabric. It may have a wide range of building types: single, sideyard, rowhouses, and apartments. Setbacks and landscaping are variable. Thoroughfares with curbs and sidewalks define medium-sized blocks.

4.3.5 Village Center – A-Grid (VC A-Grid) consists of higher Density Mixed Use buildings that accommodate retail, Office, rowhouses and apartments. It has a tight network of Thoroughfares, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.

4.3.6 Village Center – B-Grid (VC B-Grid) consists of larger block sizes, and larger format uses supporting regional users. It has a coarse network of Thoroughfares, with sidewalks and steady street tree planting.

4.3.7 Urban Core – A-Grid (UC A-Grid) consists of the highest Density and height, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; Thoroughfares have steady street tree planting and buildings are set close to wide sidewalks.

4.3.8 Urban Core – B-Grid (UC B-Grid) consists of the highest Density and height, with predominantly Office, lab, and research uses. It may have larger blocks; streets have steady street tree planting and buildings may be set back from the sidewalks.

4.4 CIVIC USES

4.4.1 General

a. Space for Civic Uses shall be designated on the Sustainable Development Concept Map as Civic Space (CS) and Civic Building (CB) as Subdivision Plans and site plans are approved for the Development.
b. Civic Space (CS) shall denote public sites supportive of or ancillary to Civic Buildings or sites permanently dedicated to Open Space.
c. Civic Building (CB) shall denote sites for buildings primarily operated by governmental or not-for-profit organizations dedicated to Functions such as culture, education, religion, government, transit and municipal parking.

4.4.2 Civic Space (CS) Specific to NG, NM, VC, and UC Zones

a. Civic Spaces shall be designed as generally described in Table 13 and distributed throughout Sustainable Zones as described in Table 14e.

4.5 THOROUGHFARE STANDARDS

4.5.1 General

a. Thoroughfares are intended for use by vehicular and pedestrian traffic and to provide access throughout the Development.
b. Thoroughfares shall consist of vehicular lanes and Public Frontages. Walkways shall be in accordance with Table 4B.
c. Thoroughfares shall be designed in context with the desired vehicular design speed of the Sustainable Zones through which they pass. The Public Frontages of Thoroughfares that pass from one Sustainable Zone to another shall be adjusted accordingly or, alternatively, the Sustainable Zone may follow the alignment of the Thoroughfare to the depth of one Lot, retaining a single Public Frontage throughout its course.
d. Within areas designated as B-Grid Zones, pedestrian use shall be a secondary consideration of the Thoroughfare. Design conflict(s) between vehicular and pedestrian traffic generally shall be decided in favor of the vehicle. Within the more urban A-Grid Zones, pedestrian use shall be a primary consideration of the Thoroughfare. Design conflict(s) between vehicular and pedestrian movement generally shall be decided in favor of the pedestrian.
e. The Thoroughfare network shall be designed to define Blocks not exceeding the size indicated in Table 14. The perimeter shall be measured as the sum of Lot Frontage Lines.

f. Street trees shall satisfy traffic calming measures required within the Development.
g. Thoroughfares shall terminate at other Thoroughfares, forming a network. Internal Thoroughfares shall connect wherever practicable to those on adjacent sites. Cul-de-sacs may be permitted to accommodate unusual site conditions subject to UDO 7.2.1 G).
h. Each Lot shall be bounded by a vehicular Thoroughfare, except that 20% of the Lots within each Sustainable Zone may be bounded by a Passage, so long as the Thoroughfare assembly behind such Lots is constructed to Rear Alley standards, will meet emergency vehicle access requirements and is public.
i. Thoroughfares within designated B-Grid Zones and designated as B-Grid Thoroughfares may follow the specified B-Grid Public Frontage and Private Frontage requirements in Tables 4A and 4B, and Table 7.
j. B-Grid Thoroughfares are permitted within A-Grid Zones for Thoroughfares necessary to support vehicular traffic and that enhance the pedestrian network per Article 4.2.3. These Thoroughfares shall be addressed on the individual site plans and may follow the standards for B-Grid.
k. The B-Grid Zones may abut freeways and conventional commercial arteries that are pedestrian intolerant. B-Grid Zones are used to transition into the more multi-modal and pedestrian supportive environments. B-Grid Zones may be developed in whole or in part to A-Grid standards and may evolve into A-Grid Zones over time.

4.5.2 Vehicular lanes

a. The standards for vehicular lanes shall follow the guidance in Table 3A or the Town Standards, or may follow other additional or elective regulations and standards adopted by the Town Council in accordance with UDO 2.3.16 F) 3) a) or 2.3.16 F) 3) c).
b. A bicycle network consisting of Bicycle Trails, Bicycle Routes and Bicycle Lanes shall be permitted as set forth in Table 14d.

4.5.3 Public Frontages

a. General to all zones OS, NG, NM, VC, UC
    i. The Public Frontage contributes to the character of the Sustainable Zone, and includes the requisite types of Sidewalk, Curb, Planter, bicycle parking, and street trees.
    ii. Public Frontages shall be designed as shown in Table 4A and Table 4B and allocated within Sustainable Zones as specified in Table 14d.
    iii. Within the Public Frontages, the types of Public Planting and Public Lighting shall be as shown in Table 4A, Table 4B, Table 5 and Table 6.
b. Specific to OS and NG Zones
    i. The Public Frontage may include trees of various species, naturalistically clustered, as well as understory.
    ii. The landscape may consist primarily of native species requiring minimal irrigation, fertilization and maintenance.

c. Specific to NM, VC and UC Zone
   i. The landscape shall consist primarily of durable species tolerant of soil compaction.
d. Specific to NM Zone
   i. The Public Frontage shall include trees planted in a regularly-spaced and aligned pattern of single or alternated species with shade canopies of a height that, at maturity, clears at least one Story. Various street tree species shall be used within the NM Zone.
e. Specific to VC and UC Zone
   i. The Public Frontage shall include trees planted in a regularly-spaced and aligned pattern of single species with shade canopies of a height that, at maturity, clears at least one Story. Various street tree species shall be used within the VC and UC Zones. At Retail Frontages, the spacing of the trees may be irregular, to avoid visually obscuring the Shopfronts.
   ii. Streetscape solar panels as shown in Table 18 may be used in the place of street trees where required. This section shall provide design flexibility in the creation of a public statement in the form of either art or symbolic statements of sustainability, but shall not allow the wholesale replacement of mandatory street trees with solar-powered streetlights or prohibit the installation of larger solar panel assemblages elsewhere within the Development.
   iii. Thoroughfares with Galleries, Arcades, or a right-of-way width of 40 feet or less shall be exempt from the tree planting requirement.

ARTICLE 5.0 BUILDING STANDARDS

5.1 TABLES AND PLAN

5.1.1 It is possible that the evolution of technology, building materials and lifestyle may result in the future in the Town Council's adoption of elective Sustainability Standards for SD-CZ districts pursuant to UDO 2.3.16 F) 3) c).

5.1.2 B-Grid Zones within the Development shall comply with UDO 9.2 and 9.3, except that the requirements of UDO 9.2 and 9.3 may be varied, in accordance with UDO 2.3.16 F) 3) a), by the standards set forth in the Pattern Book.

5.2 CIVIC BUILDINGS

5.2.1 Civic Buildings ("CB")

a. Civic Buildings shall be subject to the requirements of this Article.

5.3 OPEN SPACE ("OS") ZONES

5.3.1 Buildings shall not be allowed in an OS Zone, except as listed in Table 12 and for accessory structures incidental to and necessary to support the permitted Functions and uses.

5.4 BUILDING DISPOSITION

5.4.1 Specific to OS, NG, NM, VC and UC Zones

a. Newly platted Lots shall be dimensioned according to Table 14f and Table 15.
b. Building Disposition shall be as shown in Table 9 and Table 14i.
c. Buildings shall be disposed in relation to the boundaries of their Lots according to Table 14g, Table 14h, and Table 15.
d. One Principal Building at the Frontage and one Outbuilding to the rear of the Principal Building may be built on each Lot as shown in Table 17c.
e. Lot coverage by buildings shall not exceed that specified in Table 14f and Table 15.
f. Facades shall be built parallel to a rectilinear Principal Frontage Line or to the tangent of a curved Principal Frontage Line, and along a minimum percentage of the Frontage width at the Setback, as specified as Frontage Buildout on Table 14g and Table 15.
g. Setbacks for Principal Buildings shall be as shown in Table 14g and Table 15.
h. Adequate access to and clearance around utilities and HVAC units shall be provided.

5.4.2 Specific to UC Zone

a. The Principal Entrance shall be on a Frontage Line.

5.4.3 Specific to NM, VC and UC Zones

a. Farmers Markets may be located on unbuffered Lots of any size.
b. Diagonal parking on commercial streets shall be as set forth in the SD Plan.

5.5 BUILDING CONFIGURATION

5.5.1 General to OS, NG, NM, VC and UC Zones
a. The Private Frontage of buildings shall conform to and be allocated in accordance with Table 7 and Table 14j.
b. Buildings on corner Lots shall have two Private Frontages as shown in Table 17. Prescriptions for the second and third Layers pertain only to the Principal Frontage. Prescriptions for the first Layer pertain to both Frontages.
c. All Facades shall be glazed with clear glass no less than 30% of the first Story, however glazing shall be no less than 50% in the VC Zone A-Grid and UC Zone A-Grid areas.
d. Building stories, Stepbacks, and Expression Lines shall conform to Table 8 and Table 14j.
e. In a Parking Structure or garage, each above-ground level counts as a single Story regardless of its relationship to habitable Stories.
f. Story limits do not apply to attics or raised basements, masts, belfries, clock towers, chimney flues, water tanks, cupolas or elevator bulkheads.
g. Prescriptions for the parking Layers pertain only to the Principal Frontage. Prescriptions for the first Layer pertain to both Frontages of a corner Lot.
h. Public access requirements shall comply with UDO 7.5.4 E) except that the requirements of UDO 7.5.4 E) may be varied in accordance with UDO 2.3.16 F) 3) a), by the standards set forth in the Pattern Book.

5.5.2 Specific to NG, NM and VC Zones
a. The habitable area of an Accessory Unit within a Principal Building or an Outbuilding shall not exceed 800 square feet, excluding any enclosed parking area.

5.5.3 Specific to NG Zone
a. No portion of the Private Frontage may Encroach into the Sidewalk.
b. Open porches may Encroach into the first Layer 50% of its depth. (Table 17d)
c. Balconies, cantilevers, and bay windows may Encroach into the first Layer up to 25% of the depth defined for the first Layer. In addition, porches including balconies on porch roofs may Encroach into the first Layer up to 50% of the depth defined for the first Layer.
d. A first level Residential or Lodging Function shall be raised a minimum of three steps from average Sidewalk grade, except as required for accessibility under applicable federal and state laws or to accommodate single-family senior housing units.

5.5.4 Specific to NM Zone
a. Balconies, open porches, cantilevers and bay windows may Encroach into the first Layer 50% of its depth. (Table 17d)

5.5.5 Specific to OS, VC and UC Zones

a. Arcades, awnings, and Galleries may Encroach into the Sidewalk to within 2 feet of the Curb but must clear the Sidewalk vertically by at least 9 feet. Arcades and Galleries within public rights-of-way require encroachment and maintenance agreements with the Town.
b. Maximum Encroachments for Arcades shall be as shown on Table 8.
c. Stoops, Lightwells, balconies, bay windows, cantilevers and terraces may Encroach into the first Layer for 100% of its depth. (Table 17d)
d. Loading docks and service areas shall be permitted along/within Frontages.
e. In the absence of a building Facade along any part of a Frontage Line, a Streetscreen may be built co-planar with the Facade or adjacent Facades.
f. Streetscreens shall be between 3.5 and 8 feet in height. The Streetscreen may be in the form of a hedge, fence or wall. Walls may be constructed of masonry, stone, stucco, EIFS or may match the building materials of the adjacent buildings. Fences shall be constructed of wood or wrought iron (or products created to resemble these materials) and shall be finished on the side facing the public right-of way. Streetscreens shall have openings no larger than reasonably necessary to allow vehicular and pedestrian access.
g. Arena, auditorium or stadium uses shall be located a minimum of 500 feet from any NG or NM Zone and may be located in Mixed Use Blocks, in Mixed Use buildings or on Lots of sufficient size and with sufficient Frontage to support the use and comply with the egress requirements of the North Carolina State Building Code.
h. Outdoor entertainment areas such as small amphitheaters may be incorporated without enclosure into Open Space, Public Space, or Civic Space or on an individual Lot as long as there is sufficient Frontage to support the use and comply with the egress requirements of the North Carolina State Building Code.
i. Drive-through facilities associated with financial institutions and pharmacies may be integrated into multi-story buildings.

5.5.6 Specific to NM, VC and UC Zones

a. Lodging Functions may be located in Mixed Use Blocks, in Mixed Use buildings or on Lots of any size to support the use and comply with the egress requirements of the North Carolina State Building Code when the use is located 100 feet or more from NG Zones.

5.6 BUILDING FUNCTION

5.6.1 General to OS, NG, NM, VC and UC Zones

a. Buildings in each Sustainable Zone shall comply with Article 7 Tables.
b. Historic Sites may be used for residential, lodging, food and beverage, Office or retail sales and service use.

5.6.2 Specific to NG Zone

a. Accessory Functions of Lodging or Office shall be permitted within an Accessory Building. See Table 10.

5.6.3 Specific to NM Zones

a. Commercial Functions shall be permitted.

5.6.4 Specific to VC and UC Zones

a. Commercial Functions shall be permitted.
b. Manufacturing Functions may be permitted.
c. Utilities such as communication towers and water towers may be integrated into building structures without the need for screening. See Article 5.5.2 for existing cell towers.
d. Electrical Power Facilities shall be set back a minimum of 20 feet from property lines or easement lines and may be screened or buffered by architectural means or located internally within a block to permit integration into an urban fabric.

5.7 PARKING AND DENSITY STANDARDS

5.7.1 Specific to NG Zone

a. Buildable Density on a Lot shall be determined by the actual parking provided as applied to the Functions permitted in Table 10 and Table 11.

5.7.2 Specific to OS, NM, NG, VC and UC Zones

a. As provided in Tables 10 and 11, buildable Density on a Lot shall be determined by the sum of the actual parking calculated as that provided (1) within the Lot (2) along the parking lane corresponding to the Lot Frontage, and (3) by purchase, lease, allocation, dedication, reservation or assignment from a public or private parking structure or lot within 1,200 feet of any entrance for customer, patron, or resident parking and within 1,200 feet of any entrance of the principal use for employee parking, if available.
b. The actual parking may be adjusted downward according to the Shared Parking Factor of Table 11 to determine the Effective Parking. The Shared Parking Factor is available for any two Functions within any block, any pair of adjacent Blocks or within any area contained within a single site plan submittal. Further adjustment is permitted for areas controlled by a comprehensive parking plan in accordance with Article 5.7.3.
c. Based on the Effective Parking available, the Density of the projected Function may be determined according to Table 10.
d. Within the area of a Transit Oriented Development (“TOD”) the Effective Parking may be further adjusted downward by 30% and the distances listed in 5.7.2.a are permitted to be increased by 20%.
e. Accessory Units do not factor into Density calculations.
f. Liner Buildings less than 30 feet deep and up to the first two Stories shall be exempt from parking requirements.
g. Retail spaces of 1,500 square feet or less of net floor area shall be exempt from the parking requirements.
h. In accordance with SD Plan 3.1.2, a Parking Management Plan, subject to review and approval by the Town Council in accordance with UDO 2.3.16 F) 3) a), shall be submitted with the first site plan that deviates from applicable UDO standards related to parking and shall be updated as necessary for subsequent site plans.

5.7.3 Off-Street Parking: Further reduction in off-street parking beyond those otherwise allowed by the SD Plan is permitted for the Veridea Sustainable Development District or portions thereof within the area of a TOD in conjunction with a TDM plan.

5.7.4 Off-Street and On-Street Loading: The Veridea Sustainable Development District or portions thereof are permitted to have comprehensive loading plans to include on-street loading in Thoroughfares during non-peak hours, on side streets and/or in non-dedicated parking areas of parking lots for all or portions of the site.

5.7.5 A portion of the parking spaces provided in any public or private parking lots or parking deck may be compact spaces if such spaces are: a) assigned and/or private spaces; b) assigned to a car-share program; c) specifically designated for electric cars; or d) approved by the TRC upon its determination that then current market data support the use by compact vehicles of the number of compact spaces proposed. A compact space will be a space of at least 8.5 feet by 14 feet, and a compact vehicle shall be a vehicle that can safely park in the area of the compact space proposed.

5.8 PARKING LOCATION STANDARDS

5.8.1 General to OS, NG, NM, VC and UC Zones

a. Parking shall be accessed by Rear Alleys or Rear Lanes, when available.
b. Open parking areas and Parking Structures shall be masked from the Frontage by a Building or Streetscreen.
c. For buildings on B-Grids, open parking areas and Parking Structures are allowed unmasked on the Frontage in the front Layer, except for corner Lots at intersections with the A-Grid.
d. Bicycle parking locations at Common Destinations shall be determined at the time of site plan approval for all Sustainable Zones including OS Zones.
e. Commercial Parking Garages may be incorporated into Mixed Use Blocks or in Mixed Use buildings on the same Lot to allow for internal block parking.

5.8.2 Specific to NG Zone

a. Open parking areas shall be located at the second and third Lot Layers, except that Driveways, drop-offs and unpaved parking areas may be located at the first Lot Layer. (Table 17d)
b. Garages shall be located at the second or third Layer except that side- or rear-entry types may be allowed in the first Layer by the TRC.
c. Driveways at Frontages shall be no wider than 24 feet in the first Layer. (Table 3B.f)

5.8.3 Specific to NM Zone

a. All parking areas and garages shall be located at the second or third Layer except for lots located on designated B-Grids. (Table 17d)
b. Driveways at Frontages shall be no wider than 24 feet in the first Layer. (Table 3B.f)

5.8.4 Specific to VC and UC Zones

a. All parking lots, garages, and Parking Structures shall be located at the second or third Layer except along B-Grids where parking may be located in the first layer. (Table 17d)
b. Vehicular entrances to parking lots, garages, and Parking Structures shall be no wider than 24 feet at the Frontage for A-Grid Thoroughfares. Driveways at Frontages for B-Grid Thoroughfares shall be no wider than necessary to accommodate the straight and turn lanes in the first Layer. (Table 3B.f)
c. Parking Structures on the A-Grid shall have Liner Buildings lining the first and second Stories.

5.9 LANDSCAPE STANDARDS

5.9.1 General to OS, NG, NM, VC and UC Zones

a. The landscape plantings shall consist of native or naturalized species requiring minimal irrigation, fertilization and maintenance as shown on Table 6.
b. Street trees and landscape planted in public rights-of-way shall require maintenance agreements with the Town.
c. Public utility locations, placement and accessibility shall be laid out and engineered so that trees and landscaping and utility conflicts are eliminated or substantially minimized.
d. Trees shall not be required in the first Layer where Setbacks are less than 12 feet.
e. Planting selection in the first Layer shall be appropriate for the scale of the space and located so as to avoid conflicts with buildings, walls and utilities.
f. Street trees shall be planted within the Public Frontage as illustrated in Table 7 and listed in Table 4C. Street trees may be shifted or eliminated along any Thoroughfares as long as the average number of trees based upon the Public Frontage is met for the site plan or Subdivision Plan. Tree preservation areas located in Open Space Zones shall be exempt from the street tree planting requirements. Public Frontages on Thoroughfares that are exempt from the tree planting requirement and Thoroughfare Assemblies for Rear Lanes, Rear Alleys, or where the landscape type is listed as trees clustered shall not be used in the calculation of the average number of trees.
g. In order to accommodate the intended density, connectivity and integration of uses, the landscape requirements set forth in UDO 7.2.5 C) 9) and UDO 7.2.5 C) 12) through UDO 7.2.5. C) 14) shall not apply within the Development.
h. Screening shall comply with UDO 8.2.8. Notwithstanding the foregoing, HVAC and other mechanical units shall not be required to be screened from adjacent properties when not visible from the public street.
i. Veridea shall comply with UDO 8.2.1, 8.2.2 and 8.2.3, except that, in order to accommodate the intended density, connectivity and integration of uses, the landscape buffer requirements of UDO 8.2 shall not apply.

j. Fences, walls and berms shall comply with UDO 8.2.7, except to the extent modified by Articles 5.5.5.e, 5.5.5.f. and 5.8.1.b. hereof.

5.9.2 Specific to NG and NM Zones

a. The first Layer may not be paved, with the exception of Driveways as specified in Article 5.8. (Table 17d)

5.9.3 Specific to NG Zone

a. One appropriately sized tree at maturity per Lot shall be planted within the first Layer. (Table 17d)
b. Trees shall be of single or multiple native or naturalized species as shown on Table 6.
c. Trees shall be naturalistically clustered.
d. Lawn shall be permitted upon site plan approval. Only re-use water, where available, may be used for Lawn irrigation.

5.9.4 Specific to NM Zone

a. One appropriately sized tree at maturity per Lot shall be planted within the first Layer. (Table 17d)
b. Trees should not be of a single species throughout large areas. Tree species selected are permitted to alternate along blocks. Selection of plant material shall be appropriate for the scale of the space.
c. Lawn shall be permitted. Only re-use water, where available, may be used for Lawn irrigation.

5.9.5 Specific to VC and UC Zones

a. Trees shall not be required in the first Layer.
b. The first Layer may be paved to match the pavement of the Public Frontage.
c. A minimum of one shade tree is required for every two thousand (2,000) square feet of vehicular surface area located within or adjacent to the parking area. Parking Structures are excluded from this requirement.
d. A minimum of 1 shrub is required for every five hundred (500) square feet of vehicular surface area. Selection of the plant material shall be appropriate for the scale of the space. Parking Structures are excluded from this requirement.
e. All vehicular surface areas within fifty (50) feet of any right-of-way that are visible from a Thoroughfare (street) are required to be screened from off-site view to a minimum height of thirty-six (36) inches. Plants, closed fences, walls, earthen berms or a combination thereof may be used to satisfy this requirement. Plants must be a minimum of thirty-six (36) inches at maturity or used in combination with earthen berms to satisfy this requirement. Screening material other than plants and earthen berms shall be harmonious with surrounding architecture and shall accommodate pedestrian and vehicular ingress and egress where applicable.
f. No vehicular parking space shall be located farther than fifty (50) feet from the back of curb in a planting area with one shade tree, or seventy five (75) feet from the back of curb in a planting area with two or more shade trees. Parking Structures are excluded from this requirement.

5.10 SIGNAGE

5.10.1 General to All Sustainable Zones

Signage shall comply with UDO 8.6, Signs, except that the requirements of UDO 8.6 may be varied by the standards set forth in the Pattern Book(s).

5.11 COMMUNICATION TOWERS

5.11.1 General to All Sustainable Zones

a. Communication Towers are exempt from the standards set forth in UDO 4.4.3 B).
b. Existing Communication Towers will be contained on a Lot.
c. Existing Communication Towers may be located a Lot that contains other uses.
d. Existing Communication Towers, or a portion thereof, may occupy a leased parcel on the Lot in which it is located.
e. New or relocated Communication Towers shall be located in accordance with Table 12.
f. New rooftop communication towers and devices may be allowed within UC and VC Zones.

5.12 EXTERIOR LIGHTING

5.12.1 General to All Sustainable Zones

Exterior lighting shall comply with UDO 8.7, Exterior Lighting, except that the requirements of UDO 8.7 may be varied by the standards set forth in the Pattern Book(s).

5.13 PATTERN BOOK(S)

A Pattern Book(s) may be submitted for approval from time to time in accordance with UDO 2.3.16 F) 3) a). Each site plan submitted with respect to Veridea shall designate the existing Pattern Book, or portion thereof, which shall be applicable to the site plan, or a Pattern Book applicable thereto shall be submitted with the site plan for approval pursuant to UDO 2.3.16 F) 3) a).

ARTICLE 6.0 TABLES

6.1 TABLES

6.1.1. The Tables which follow shall establish, together with the foregoing provisions of the SD Plan and applicable provisions of the UDO, other Town Ordinances and Town Standards, the standards and regulations which shall govern all development and land use within the Development.

6.1.2. If the Responsible Person so determines, as with the other provisions of the SD Plan, specific portions of the Tables may be affected by additional or elective regulations and standards hereafter adopted by the Town Council in accordance with UDO 2.3.16 F) 3) a) or 2.3.16 F) 3) c).

6.1.3. Design Standards contained in one or more of the Articles, Sections, or Tables of the Plan that pertain to the same aspect of development may be implemented independently or in conjunction with one another.

6.1.4. The text and numerical descriptions in the Tables are an integral part of this SD Plan. However, the graphics that accompany them represent guidelines. Where in conflict, the text and numerical descriptions shall take precedence over graphics.

6.2 TOWN STANDARDS

6.2.1 The Town and the Responsible Person may enter into a Development Agreement providing that the Town Standards applicable to the Development shall be those in existence as of the date of the adoption of this SD Plan. However, notwithstanding the foregoing, the Apex Standard Specifications and Standard Details, as modified and amended from time to time, shall be applicable to the Development, except to the extent otherwise specifically provided in this SD Plan or where the modified Apex Standard Specifications and Standard Details are specifically inapplicable to Veridea.

TABLE 1. SUSTAINABLE ZONE DESCRIPTIONS

TABLE 1A: Sustainable Zone Descriptions. This table provides descriptions of the character of each Sustainable Zone.

OS



OS - OPEN SPACE

OS Open Space Zone consists of lands approximating or reverting to a natural condition and farmland, parks, Civic Uses, RCA, utility corridors, non-street easements, greenways, waterways or water bodies, including lands unsuitable for settlement due to topography, hydrology or vegetation.

General Character:	Natural landscape and parkland (active and passive parks) with some civic and agricultural use
Building Placement:	Variable front and side setbacks for park structures, civic structures, agricultural and maintenance buildings
Frontage Types:	Variable
Building Height:	1- to 2-Story
Type of Civic Space:	Parks, Greenways, Civic Buildings

NG



NG - NEIGHBORHOOD GENERAL

NG Neighborhood General Zone consists of low density residential areas, adjacent to higher zones that consists of some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and the Thoroughfares irregular to accommodate natural conditions.

General Character:	Lawns, and landscaped yards surrounding predominantly detached single-family houses with some mix of Townhouses; pedestrians occasionally
Building Placement:	Medium and variable front and side yard Setbacks
Frontage Types:	Porches, fences, naturalistic tree planting
Building Height:	1- to 3-Story with some 4-Story
Type of Civic Space:	Parks, Greenways

NM

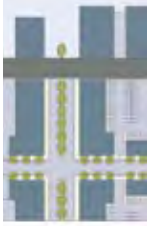


NM - NEIGHBORHOOD MIXED-USE

NM Neighborhood Mixed-Use Zone consists of mixed uses within a medium to high density residential urban fabric. It may have a wide range of building types: single, sideyard, rowhouses, and apartments. Setbacks and landscaping are variable. Thoroughfares with curbs and sidewalks define medium-sized blocks.

General Character:	Mix of Houses, Townhouses & Apartment buildings, with moderate Commercial activity; balance between landscape and buildings; presence of pedestrians
Building Placement:	Shallow to medium front and side yard Setbacks
Frontage Types:	Porches, fences, Dooryards
Building Height:	1-to 4-Story with a few taller Mixed Use buildings up to 7 stories adjacent to Village Center Zones and major transportation corridors
Type of Civic Space:	Squares, Greens

VC A-GRID



VC - VILLAGE CENTER - A-GRID

VC Village Center Zone consists of higher density mixed use buildings that accommodate retail, offices, rowhouses and apartments. It has a tight network of Thoroughfares, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.

General Character:	Shops mixed with Townhouses, larger Apartment houses, Offices, workplace, and Civic buildings; predominantly attached buildings; trees within the public right-of-way; substantial pedestrian activity
Building Placement:	Shallow Setbacks or none; buildings oriented to the street defining a street wall. See the Concept Map for locations
Frontage Types:	Stoops, Shopfronts, Galleries
Building Height:	1- to 10-Story with some variation up to 15 stories adjacent to Urban Center Zones,
Type of Civic Space:	Parks, Plazas and Squares, median landscaping

UC A-GRID



UC - URBAN CORE - A-GRID

UC Urban Core Zone consists of the highest density and height, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; Thoroughfares have steady street tree planting and buildings are set close to wide sidewalks.

General Character:	Medium-high to high-Density Mixed Use buildings, entertainment, Civic and cultural uses. Attached buildings forming a continuous street wall; trees within the public right-of-way; highest pedestrian and transit activity
Building Placement:	Shallow Setbacks or none; buildings oriented to street, defining a street wall.
Frontage Types:	Stoops, Dooryards, Forecourts, Shopfronts, Galleries, and Arcades
Building Height:	4- to 20-Story with a few shorter buildings including some 1 story uses
Type of Civic Space:	Parks, Plazas and Squares; median landscaping

TABLE 1. SUSTAINABLE ZONE DESCRIPTIONS

VC B-GRID



VC - VILLAGE CENTER - B-GRID

VC Village Center Zone consisting of larger block sizes, and larger format uses supporting regional users. It has a coarse network of Thoroughfares, with sidewalks, regular street tree planting.

General Character:	Larger single-use retail, office, and manufacturing formats with out-parcels permitted, transitioning to shops mixed with Townhouses, and larger Apartment houses towards A-Grid Zones; trees within the public right-of-way; substantial automobile activity
Building Placement:	Larger setbacks with parking permitted in the setback for any Layer except along adjacent A-Grids
Frontage Types:	Common Yard, Shopfronts,
Building Height:	Predominantly 1- to 4-Story with some increased variation up to 7 stories
Type of Civic Space:	Not required

UC B-GRID



UC - URBAN CORE - B-GRID

UC Urban Core Zone consists of the highest density and height, with predominantly office, lab, and research uses. It may have larger blocks; a coarse network of Thoroughfares, regular street tree planting and may have buildings set back from the sidewalks.

General Character:	High-density single and Mixed Use buildings. Attached and detached buildings forming a continuous street wall or set-back from the street; trees within the public right-of-way; highest pedestrian activity near the building and substantial automobile activity at the parking
Building Placement:	Shallow setbacks or none along A-Grid Thoroughfares with buildings oriented to streets transitioning to larger setbacks with parking permitted in the setback for any Layer
Frontage Types:	Common Yards, Stoops, Dooryards, Forecourts, Shopfronts, Galleries, and Arcades
Building Height:	1- to 20-Story with a few shorter buildings including some 1 story uses
Type of Civic Space:	None required

TABLE 2. VERIDEA SUSTAINABLE DEVELOPMENT CONCEPT MAP

Sustainable Zones

OS	Open Space and Civic Use
NG	Neighborhood General
NM	Neighborhood Mixed Use
VC-A	Village Center - A Grid
VC-B	Village Center - B Grid
UC-A	Urban Core - A Grid
UC-B	Urban Core - B Grid

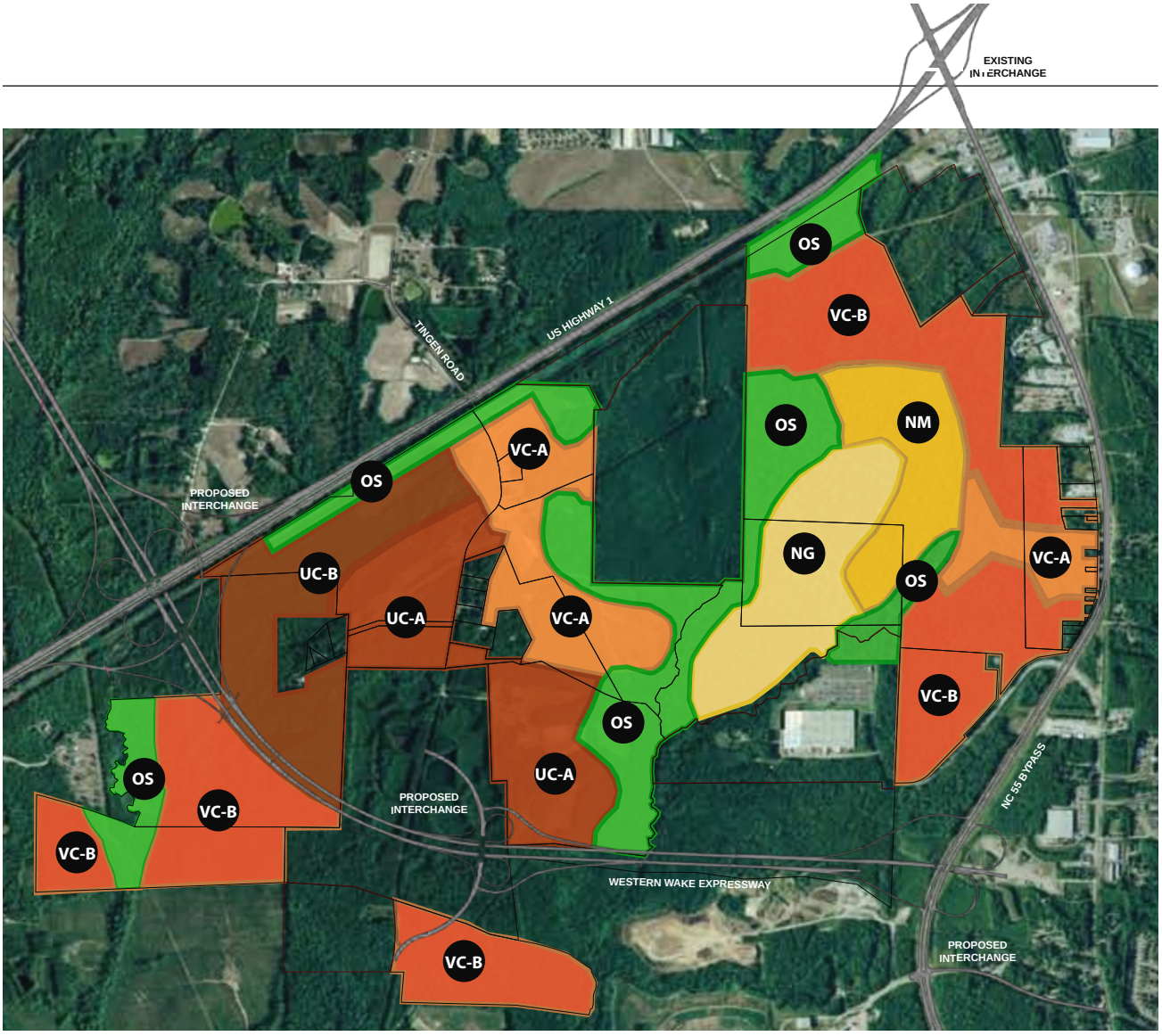


TABLE 3A. VEHICULAR LANE DIMENSIONS

TABLE 3A: Vehicular Lane Dimensions. This table assigns lane widths to Sustainable Zones. The Design ADT (Average Daily Traffic) is the determinant for each of these sections. The assemblies are shown in Table 3B. Design Speeds shown in these Tables represent desired speeds for traffic flow based on typical sections. Thoroughfare alignments (excluding Rear Lanes and Rear Alleys) shall be based on a minimum 25 mile per hour design speed. Design exceptions to otherwise posted regulatory speed, if approved by the TRC will require warning signs.

DESIGN SPEED	TRAVEL LANE WIDTH	OS	NG	NM	VC	UC
Below 20 mph	10 feet	■	■	▫		
20-25 mph	10 feet	■	■	■	▫	▫
25-35 mph	10 feet	■	■	■	■	■
25-35 mph	11 feet	■			■	■
Above 35 mph	12 feet	■			■	■

DESIGN SPEED	PARKING LANE WIDTH					
20-25 mph	(Angle) 16 to18 feet				■	■
20-25 mph	(Parallel) 7 to 8 feet		■	■	■	
25-35 mph	(Parallel) 8 feet		■	■	■	■
Above 35 mph	(Parallel) 9 feet				■	■

DESIGN SPEED	EFFECTIVE TURNING RADIUS					(See Table 17b)
Below 20 mph	5-10 feet		■	■	■	■
20-25 mph	10-15 feet	■	■	■	■	■
25-35 mph	15-20 feet	■	■	■	■	■
Above 35 mph	20-30 feet	■			▫	▫

■ BY RIGHT

▫ BY THE TRC

TABLE 3B. VEHICULAR LANE & PARKING ASSEMBLIES

TABLE 3B: Vehicular Lane/Parking Assemblies. The projected design speeds determine the dimensions of the vehicular lanes and Turning Radii assembled for Thoroughfares. All dimensions listed are minimums. Design Speeds shown in these Tables represent desired speeds for traffic flow based on typical sections. Thoroughfare alignments (excluding Rear Lanes and Rear Alleys) shall be based on a minimum 25 mile per hour design speed. Design exceptions to otherwise posted regulatory speed, if approved by the TRC will require warning signs.

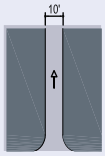
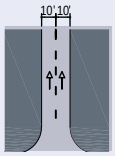
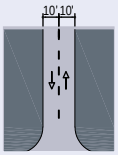
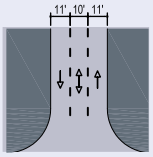
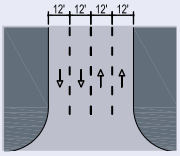
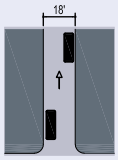
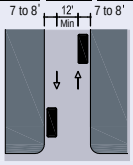
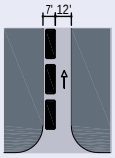
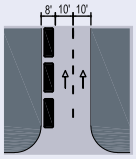
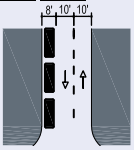
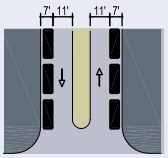
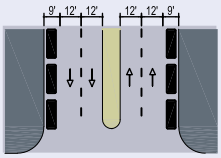
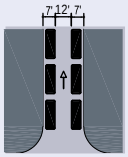
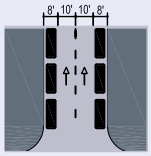
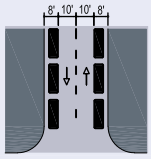
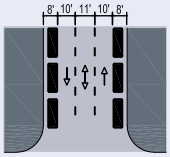
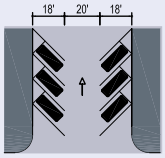
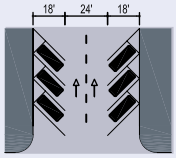
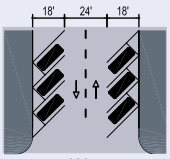
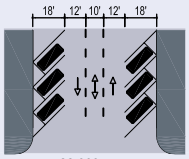
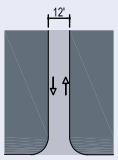
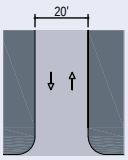
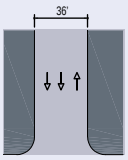
	ONE WAY MOVEMENT →		TWO WAY MOVEMENT →		
a. NO PARKING	OS NG	OS	OS NG	OS	OS
					
Design ADT	300 VPD	600 VPD	2,500 VPD	22,000 VPD	36,000 VPD
Pedestrian Crossing	3 Seconds	5 Seconds	5 Seconds	9 Seconds	13 Seconds
Design Speed	20 - 30 MPH	Below 20 MPH	20-25 MPH		35 MPH and above
b. YIELD PARKING	OS NM		NG NM VC UC		
					
Design ADT	1,000 VPD		1,000 VPD		
Pedestrian Crossing	5 Seconds		7 Seconds		
Design Speed					
c. PARKING ONE SIDE PARALLEL	OS NG NM VC	NG NM VC	NG NM VC	NG NM VC UC	NG NM VC UC
					
Design ADT	5,000 VPD	18,000 VPD	16,000 VPD	15,000 VPD	32,000 VPD
Pedestrian Crossing	5 Seconds	8 Seconds	8 Seconds	11 Seconds	13 Seconds
Design Speed	20-30 MPH		25-30 MPH	25-30 MPH	
d. PARKING BOTH SIDES PARALLEL	NG NM VC UC	NM VC UC	NM VC UC	VC UC	
					
Design ADT	8,000 VPD	20,000 VPD	15,000 VPD	22,000 VPD	
Pedestrian Crossing	7 Seconds	10 Seconds	10 Seconds	13 Seconds	
Design Speed	Below 20 MPH	25-30 MPH	25-30 MPH	25-30 MPH	
e. PARKING BOTH SIDES DIAGONAL	VC UC	VC UC	VC UC	VC UC	
					
Design ADT	18,000 VPD	20,000 VPD	15,000 VPD	22,000 VPD	
Pedestrian Crossing	15 Seconds	17 Seconds	17 Seconds	20 Seconds	
Design Speed	Below 20 MPH	20-25 MPH	20-25 MPH	25-30 MPH	
f. PARKING ACCESS			NG NM	NG NM VC UC	NM VC UC
					
Design ADT					
Pedestrian Crossing			3 Seconds	6 Seconds	10 Seconds
Design Speed					

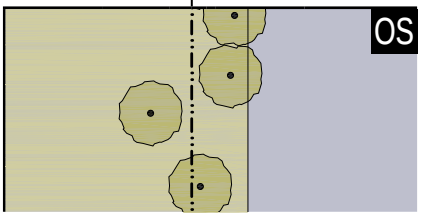
TABLE 4A. PUBLIC FRONTAGES - GENERAL

TABLE 4A: Public Frontages - General. The Public Frontage is the area between the private Lot line and the edge of the vehicular lanes. Dimensions are given in Table 4B. Note:

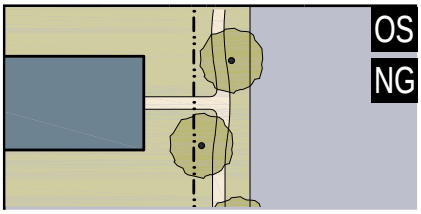
PLAN

LOT ▶ ◀ R.O.W.
PRIVATE FRONTAGE ▶ ◀ PUBLIC FRONTAGE

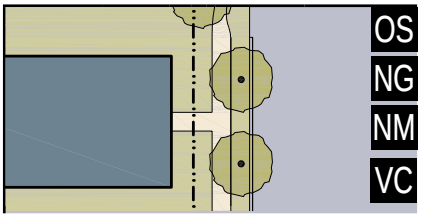
a. (HW) Highway: This Frontage has open Swales, Bicycle Trails and no parking. The landscaping consists of the natural condition or multiple species arrayed in naturalistic clusters. Buildings are buffered by distance or berms.



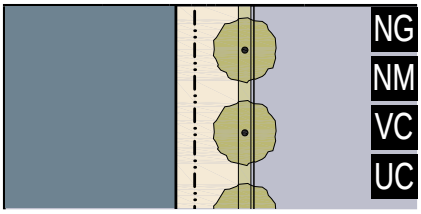
b. (RD) Road: This Frontage has open Swales and a Sidewalk walking Path or Bicycle Trail and Yield parking. The landscaping consists of multiple species arrayed in naturalistic clusters.



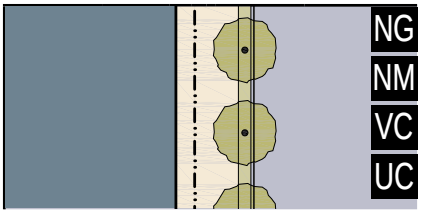
c. (ST) Street: This Frontage has raised Curbs drained by inlets and Sidewalks separated from the vehicular lanes by individual or continuous Planters, with parking on one or both sides. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced Allee, with the exception that Streets with a right-of-way (R.O.W.) width of 40 feet or less are exempt from tree requirements.



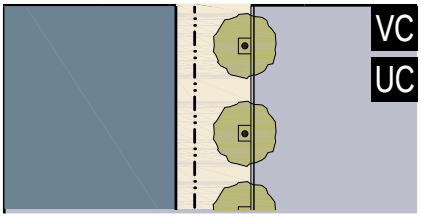
d. (DR) Drive: This Frontage has raised Curbs drained by inlets and a wide Sidewalk or paved Path along one side, related to a Greenway or waterfront. It is separated from the vehicular lanes by individual or continuous Planters. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced Allee.



e. (AV) Avenue: This Frontage has raised Curbs drained by inlets and wide Sidewalks separated from the vehicular lanes by a narrow continuous Planter with parking on both sides. The landscaping consists of a single tree species aligned in a regularly spaced Allee.



f. (CS) (AV) Commercial Street or Avenue: This Frontage has raised Curbs drained by inlets and very wide Sidewalks along both sides separated from the vehicular lanes by separate tree wells and parking on both sides. The landscaping consists of a single tree species aligned with regular spacing where possible, but clears the storefront entrances.



g. (BV) Boulevard: This Frontage may have Slip Streets on both sides. It consists of raised Curbs drained by inlets and Sidewalks along both sides, separated from the vehicular lanes by Planters. The landscaping consists of double rows of a single tree species aligned in a regularly spaced Allee.

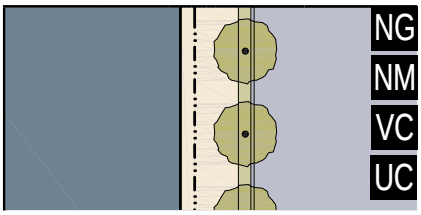


TABLE 4B. PUBLIC FRONTAGES - SPECIFIC

Table 4B: Public Frontages - Specific. This table assembles prescriptions and dimensions for the Public Frontage elements - Curbs, walkways and Planters – relative to specific Thoroughfare types within Sustainable Zones. Table 4B-a assembles all of the elements for the various street types. Public Frontages also include bicycle parking where applicable.

R U R A L I I I I I I I I I I I I I I I I I Z O N E S I I I I I I I I I I I I I I I I I U R B A N

B - G R I D I I I I I I I I I I I I A - G R I D

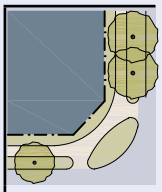
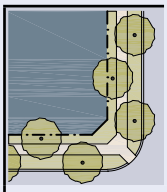
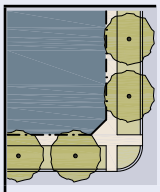
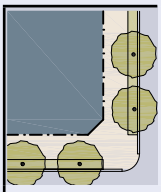
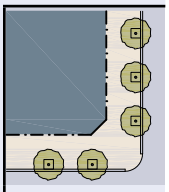
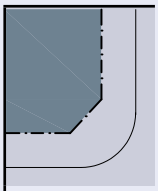
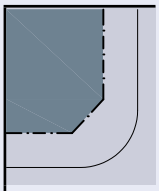
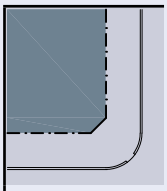
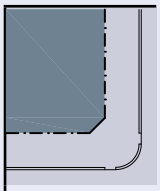
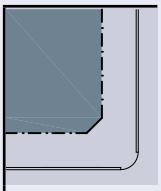
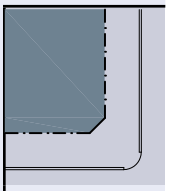
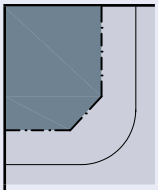
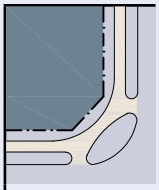
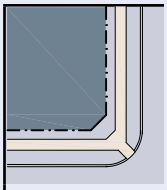
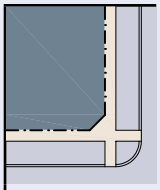
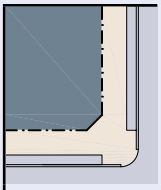
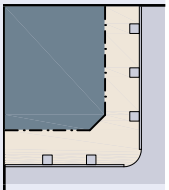
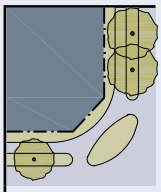
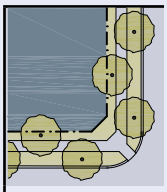
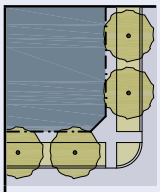
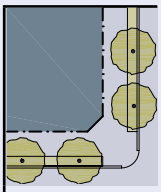
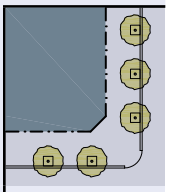
SUSTAINABLE ZONE Public Frontage Type	OS HW	OS NG RD & ST	NG NM VC ST-DR-AV	NM VC UC ST-DR-AV-BV	VC UC CS-DR-AV-BV	VC UC CS-DR-AV-BV
a. **Assembly:** The principal variables are the type and dimension of Curbs, walkways, Planters and landscape. Total Width	 16-24 feet	 12-24 feet	 12-18 feet	 12-18 feet	 18-24 feet	 18-30 feet
b. **Curb:** The detailing of the edge of the vehicular pavement, incorporating drainage. Type Radius	 Open Swale 10-30 feet	 Open Swale or Curb 10-30 feet	 Raised Curb 5-20 feet	 Raised Curb 5-20 feet	 Raised Curb 5-20 feet	 Raised Curb 5-20 feet
c. **Walkway:** The pavement dedicated exclusively to pedestrian activity. Type Width	 Path Optional n/a	 Path, Sidewalk, or BT 5-8 feet	 Sidewalk 5-8 feet	 Sidewalk 5-8 feet	 Sidewalk 12-20 feet	 Sidewalk 12-30 feet
d. **Planter:** The layer which accommodates street trees and other landscape. Arrangement Species Planter Type Planter Width	 Clustered Multiple Continuous Swale 8 feet-16 feet	 Clustered Multiple Continuous Swale 8 feet-16 feet	 Regular Alternating Continuous Planter 8 feet-12 feet	 Regular Single Continuous Planter 8 feet-12 feet	 Regular Single Continuous Planter 4 feet-6 feet	 Opportunistic Single Tree Well 4 feet-6 feet
e. **Landscape:** The recommended plant species. (See Table 6)						
f. **Lighting:** The recommended Public Lighting. (See Table 5)						

TABLE 4C. THOROUGHFARE ASSEMBLIES

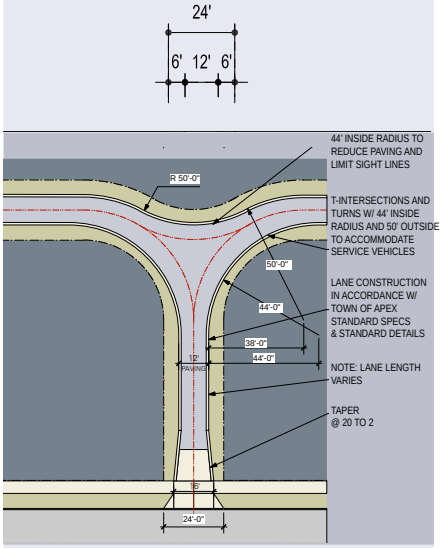
TABLE 4C: Thoroughfare Assemblies. These Thoroughfares are assembled from the elements that appear in Tables 3A and 3B and incorporate the Public Frontages of Table 4A. The key gives the Thoroughfare type followed by the right-of-way width, followed by the pavement width, and in some instances followed by specialized transportation capability. All dimensions listed are minimums. Design Speeds shown in these Tables represent desired speeds for traffic flow based on typical sections. Thoroughfare alignments (excluding Rear Lanes and Rear Alleys) shall be based on a minimum 25 mile per hour design speed. Design exceptions to otherwise posted regulatory speed, if approved by the TRC will require warning signs.

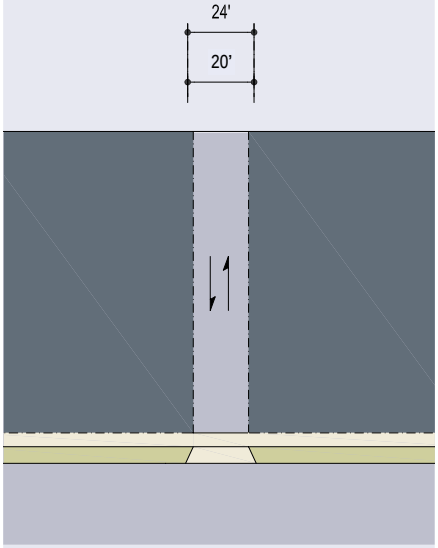
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	RL-24-12	RA-24-20
Thoroughfare Type	Rear Lane	Rear Alley
Sustainable Zone Assignment	OS, NG, NM	NG, NM, VC, UC
Right-of-Way Width	24 feet	24 feet min
Pavement Width	12 feet	20 feet min
Movement	Yield Movement	Slow Movement
Design Speed	10 MPH	10 MPH
Pedestrian Crossing Time	3.5 seconds	7 seconds
Traffic Lanes	n/a	n/a
Parking Lanes	None	None
Curb Radius	Flared section with driveway apron	Driveway apron
Walkway Type	None	None
Planter Type	None	None
Curb Type		
Landscape Type	None	None
Transportation Provision	None	None

Note: Rear Lanes may be public or private. If Rear Lanes are public, the minimum pavement width shall be 16 feet. Private maintenance shall be required for private Rear Lanes and the maintenance shall be adequately funded by a Veridea property owners' association.

Note: Rear Alleys may be public or private. If Rear Alleys are private, then private maintenance shall be required and the maintenance shall be adequately funded by a Veridea property owners' association.

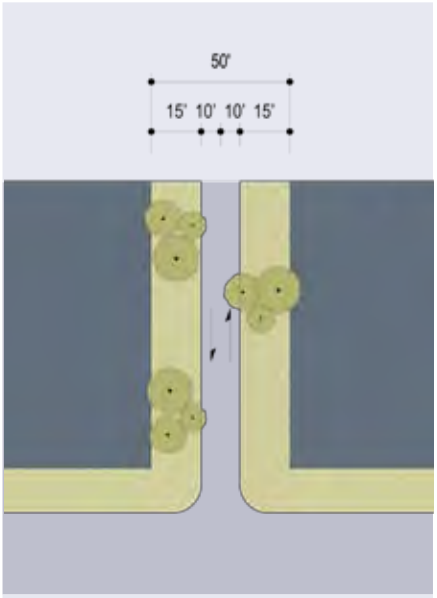
TABLE 4C THOROUGHFARE ASSEMBLIES

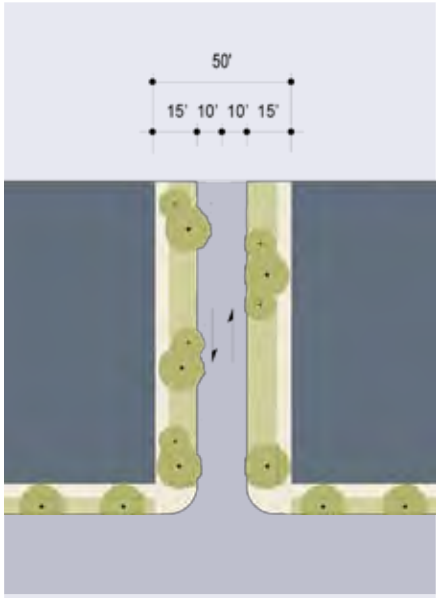
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	RDOS-50-20	RD-50-20
Thoroughfare Type	Road	Road
Sustainable Zone Assignment	OS	OS, NG
Right-of-Way Width	50 feet	50 feet
Pavement Width	16 feet	18 feet
Movement	Slow Movement	Slow Movement
Design Speed	15 MPH	15 MPH
Pedestrian Crossing Time	5.1 seconds	5.1 seconds
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	None	None
Curb Radius	25 feet	25 feet
Walkway Type	Path, Sidewalk or BT	Path, Sidewalk or BT
Planter Type	Continuous Swale	Continuous Swale
Curb Type	Swale or Curb	Swale or Curb
Landscape Type	Trees clustered	Trees clustered
Transportation Provision	BT	BT

Note: Requires approval of TRC

Note: Curb radius to be high-strength / reinforced

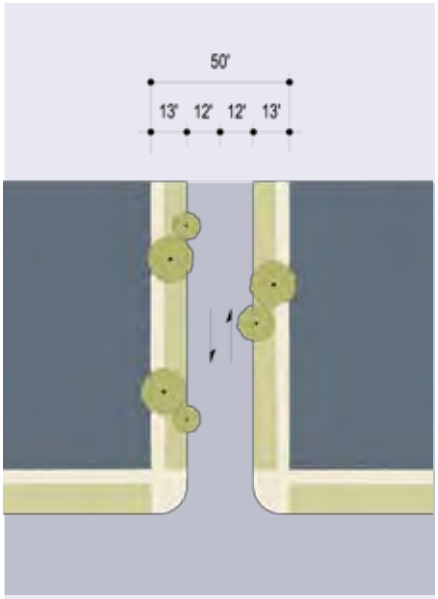
TABLE 4C THOROUGHFARE ASSEMBLIES

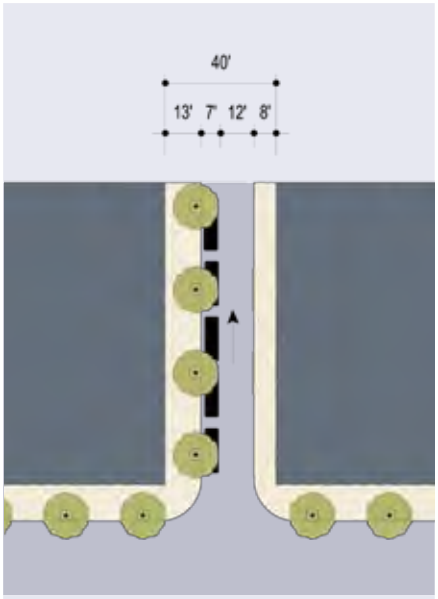
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	RD-50-24	ST-40-19
Thoroughfare Type	Road	Street
Sustainable Zone Assignment	OS, NG	OS, NG, NM, VC
Right-of-Way Width	50 feet	40 feet
Pavement Width	24 feet	19 feet
Movement	Slow Movement	Slow Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	6.8 seconds	5.4 seconds
Traffic Lanes	2 lanes	1 lane
Parking Lanes	None	One side @ 7 feet marked
Curb Radius	25 feet	15 feet
Walkway Type	Path, Sidewalk or BT	13/8 foot Sidewalk
Planter Type	Continuous Swale	Tree well (Permitted but not required per 4.5.3 e. ii.)
Curb Type	Swale or Curb	Curb
Landscape Type	Trees clustered	Trees at 50' o.c. Avg. (Permitted but not required per 4.5.3 e. ii.)
Transportation Provision	BL optional, BT optional	

Note: Requires approval of TRC
Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

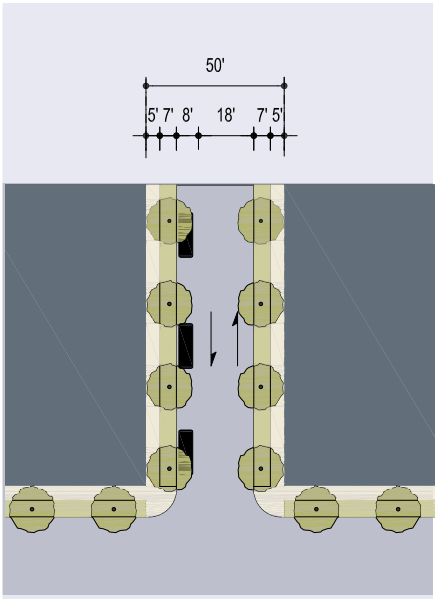
TABLE 4C THOROUGHFARE ASSEMBLIES

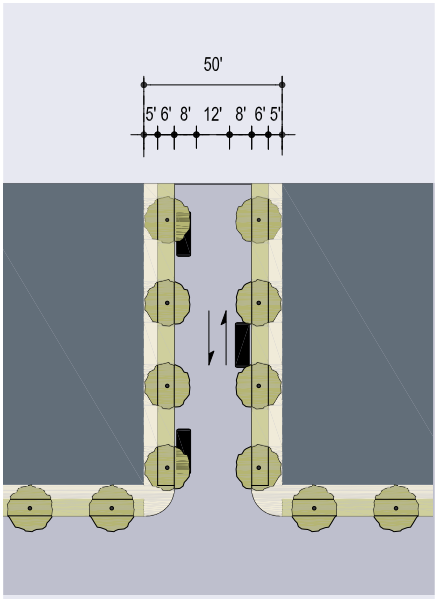
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	ST-50-26	ST-50-28
Thoroughfare Type	Street	Street
Sustainable Zone Assignment	NG, NM, VC, UC	NG, NM, VC, UC
Right-of-Way Width	50 feet	50 feet
Pavement Width	26 feet	28 feet
Movement	Free Movement	Yield Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	7.4 seconds	7.6 seconds
Traffic Lanes	2 lanes	2 lane
Parking Lanes	One side @ 8 feet marked	Both sides @ 8 feet unmarked
Curb Radius	10 feet	10 feet
Walkway Type	5 foot Sidewalk	5 foot Sidewalk
Planter Type	7 foot continuous Planter	6 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision	BL optional	BL optional

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

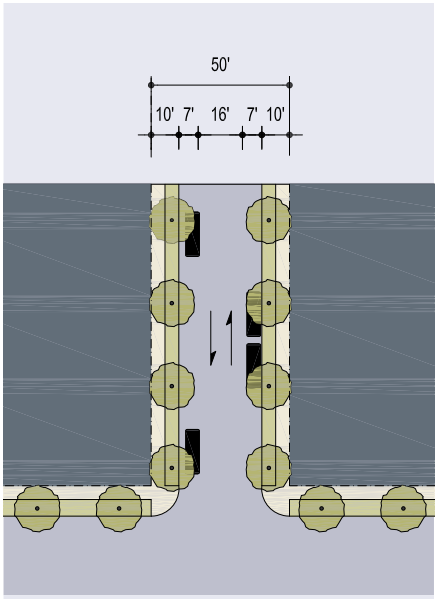
TABLE 4C THOROUGHFARE ASSEMBLIES

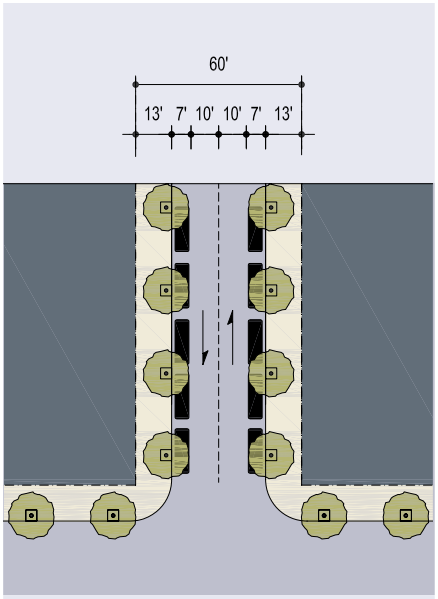
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	ST-50-30	ST-60-34
Thoroughfare Type	Street	Street
Sustainable Zone Assignment	NG, NM, VC	NG, NM, VC, UC
Right-of-Way Width	50 feet	60 feet
Pavement Width	30 feet	34 feet
Movement	Slow Movement	Slow Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	8.5 seconds	9.7 seconds
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides @ 7 feet unmarked	Both Sides @ 7 feet marked
Curb Radius	10 feet	15 feet
Walkway Type	5 foot Sidewalk	6 foot Sidewalk
Planter Type	5 foot continuous Planter	Tree well or 7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision	BL optional	BR

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

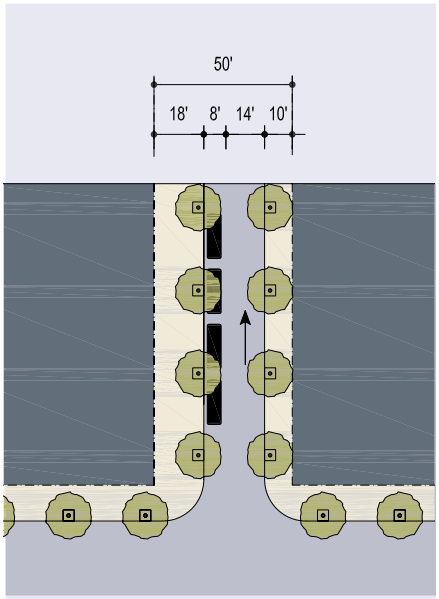
TABLE 4C THOROUGHFARE ASSEMBLIES

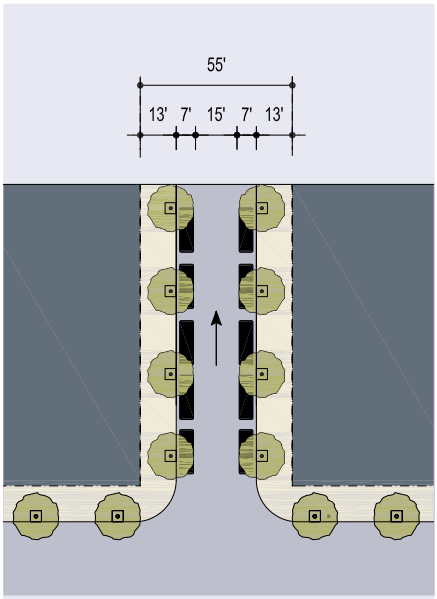
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	CS-50-22	CS-55-29
Thoroughfare Type	Commercial Street	Commercial Street
Sustainable Zone Assignment	NG, NM, VC, UC	NG, NM, VC, UC
Right-of-Way Width	50 feet	55 feet
Pavement Width	22 feet	29 feet
Movement	Slow Movement	Slow Movement
Design Speed	20 MPH	20 MPH
Pedestrian Crossing Time	6.2 seconds	8.2 seconds
Traffic Lanes	1 lane	1 lane
Parking Lanes	One side @ 8 feet marked	Both sides @ 7 feet marked
Curb Radius	15 feet	15 feet
Walkway Type	18/10 foot Sidewalk	13 foot Sidewalk
Planter Type	Tree well	Tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision		

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

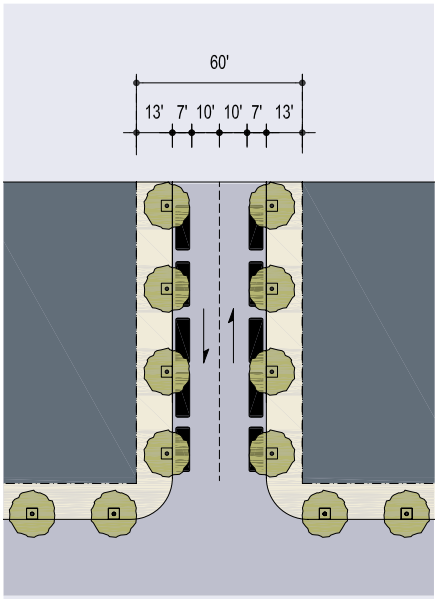
TABLE 4C THOROUGHFARE ASSEMBLIES

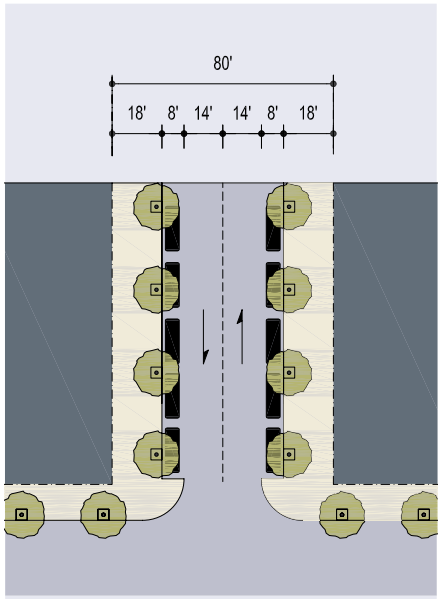
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	CS-60-34	CS-80-44
Thoroughfare Type	Commercial Street	Commercial Street
Sustainable Zone Assignment	NM, VC, UC	VC, UC
Right-of-Way Width	60 feet	80 feet
Pavement Width	34 feet	44 feet
Movement	Slow Movement	Free Movement
Design Speed	20 MPH	25 MPH
Pedestrian Crossing Time	9.7 seconds	8 seconds at corners
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides @ 7 feet marked	Both sides @ 8 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	13 foot Sidewalk	18 foot Sidewalk
Planter Type	Tree well	Tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision		

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

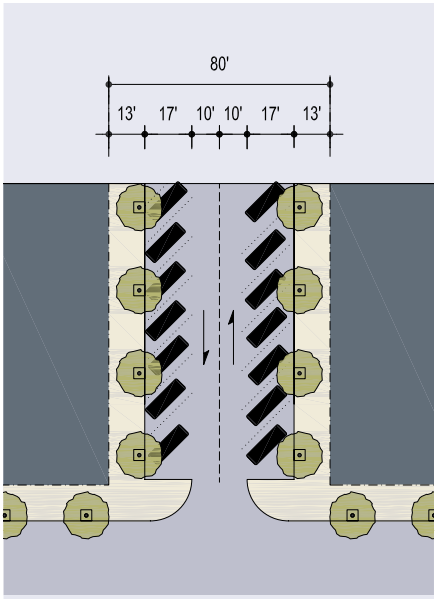
TABLE 4C THOROUGHFARE ASSEMBLIES

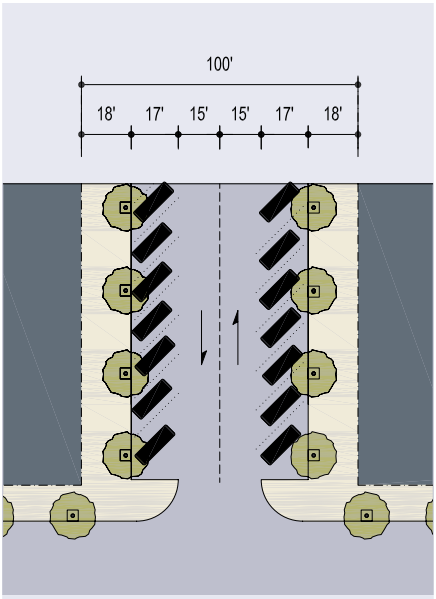
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	CS-80-54	CS-100-64
Thoroughfare Type	Commercial Street	Commercial Street
Sustainable Zone Assignment	VC, UC	VC, UC
Right-of-Way Width	80 feet	100 feet
Pavement Width	54 feet	64 feet
Movement	Slow Movement	Slow Movement
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	5.7 seconds at corners	8.5 seconds at corners
Traffic Lanes	2 lanes	2 lanes
Parking Lanes	Both sides angled @ 17 feet marked	Both sides angled @ 17 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	13 foot Sidewalk	18 foot Sidewalk
Planter Type	Tree well	Tree well
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision		

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

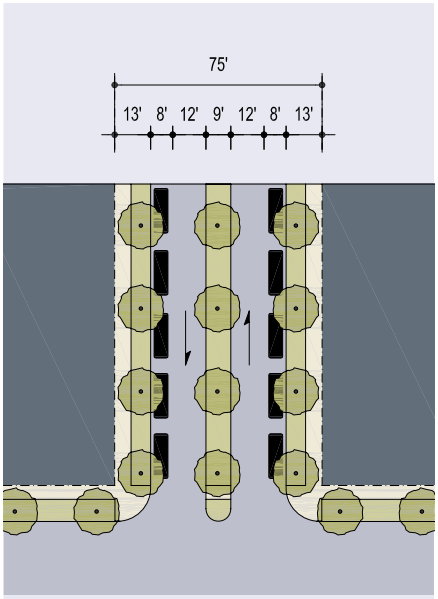
TABLE 4C THOROUGHFARE ASSEMBLIES

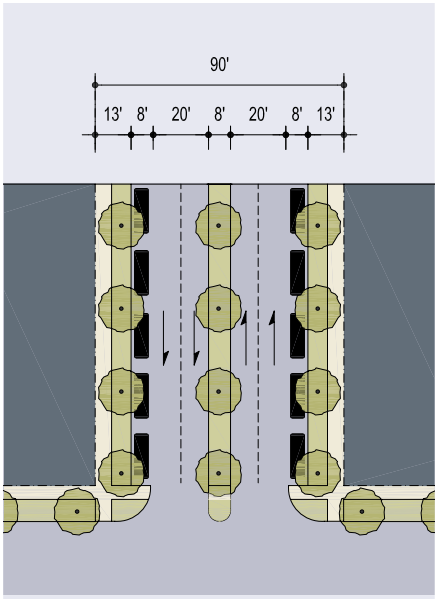
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	AV-75-40	AV-90-56
Thoroughfare Type	Avenue	Avenue
Sustainable Zone Assignment	NG, NM, VC, UC	NG, NM, VC, UC
Right-of-Way Width	75 feet	90 feet
Pavement Width	40 feet total	56 feet total
Movement	Slow Movement	Slow Movement
Design Speed	25 MPH	25 MPH
Pedestrian Crossing Time	5.7 seconds - 5.7 seconds	5.7 seconds - 5.7 seconds at corners
Traffic Lanes	2 lanes	4 lanes
Parking Lanes	Both sides @ 8 feet marked	Both sides @ 8 feet marked
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb or Swale	Curb or Swale
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision	BR, TR	BR, TR

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

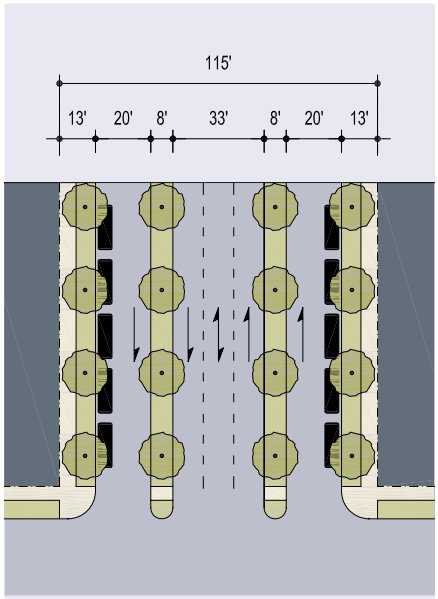
TABLE 4C THOROUGHFARE ASSEMBLIES

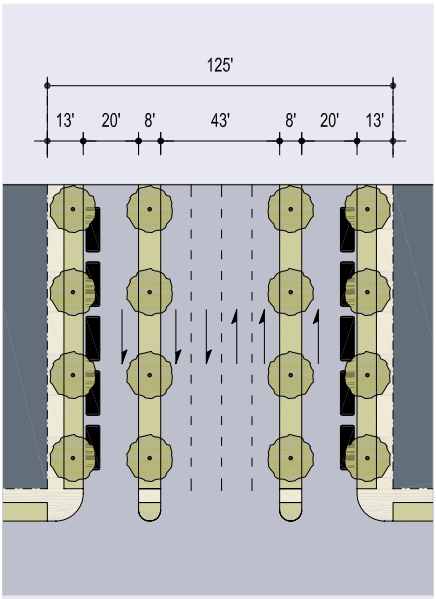
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





KEY	BV-115-33	BV-125-43
Thoroughfare Type	Boulevard	Boulevard
Sustainable Zone Assignment	VC, UC	VC, UC
Right-of-Way Width	115 feet	125 feet
Pavement Width	20 feet - 33 feet - 20 feet	20 feet - 43 feet - 20 feet
Movement	Free Movement (inner lanes)	Free Movement (inner lanes)
Design Speed	35 MPH	35 MPH
Pedestrian Crossing Time	5.7 seconds - 9.4 seconds - 5.7 seconds	5.7 seconds - 12.2 seconds - 5.7 seconds
Traffic Lanes	3 lanes, one turning lane & two one-way slip roads	4 lanes & two one-way slip roads
Parking Lanes	8 feet	8 feet
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision	BR, TR	BR, TR

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

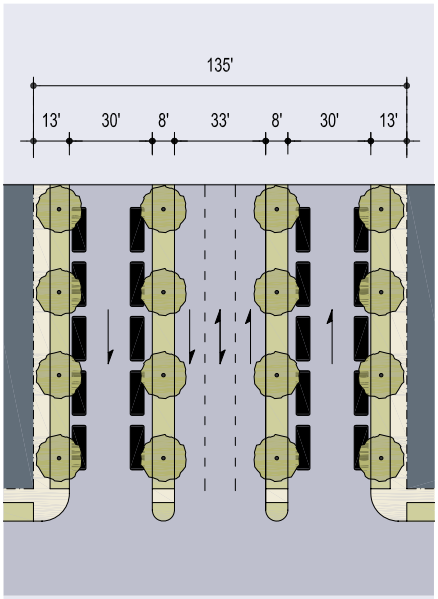
TABLE 4C THOROUGHFARE ASSEMBLIES

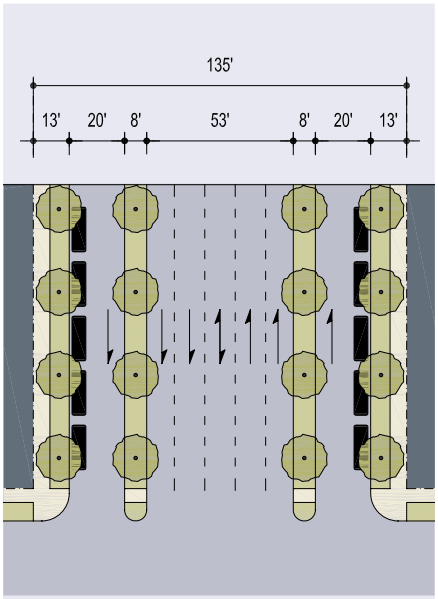
KEY ST-57-20-BL

- Thoroughfare Type
- Right of Way Width
- Pavement Width
- Transportation Provisions

THOROUGHFARE TYPES

Highway:	HW
Boulevard:	BV
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Road:	RD
Rear Alley:	RA
Rear Lane:	RL
Bicycle Trail:	BT
Bicycle Lane:	BL
Bicycle Route:	BR
Path:	PT
Passage:	PS
Transit Route:	TR





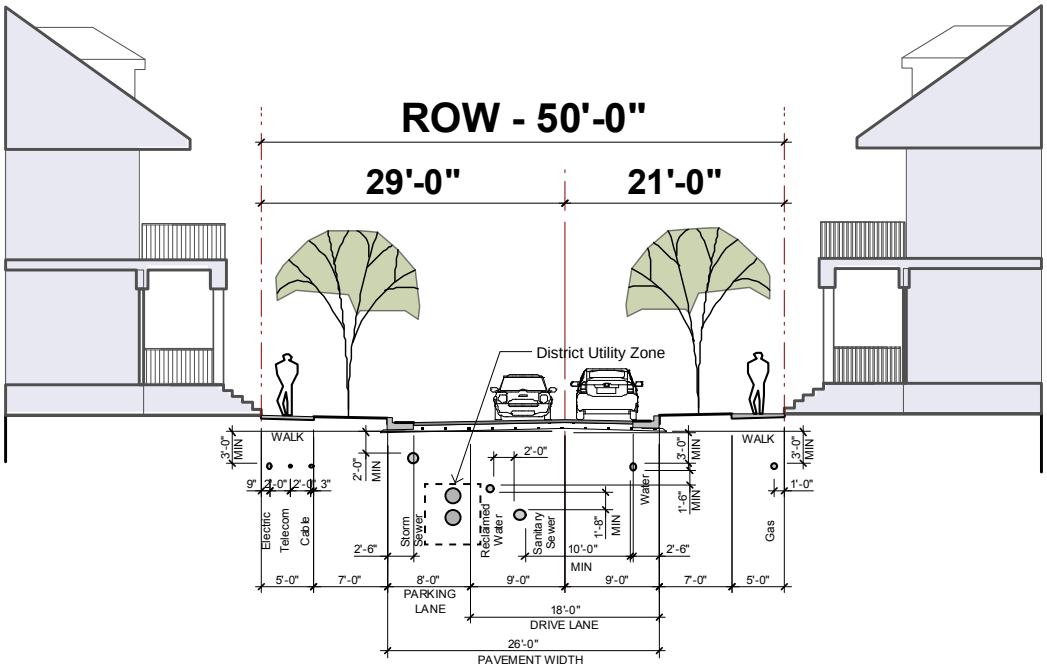
KEY	BV-135-33	BV-135-53
Thoroughfare Type	Boulevard	Boulevard
Sustainable Zone Assignment	VC, UC	VC, UC
Right-of-Way Width	135 feet	135 feet
Pavement Width	30 feet - 33 feet - 30 feet	20 feet - 53 feet - 20 feet
Movement	Free Movement	Free Movement
Design Speed	35 MPH	35 MPH
Pedestrian Crossing Time	8.5 seconds - 9.4 seconds - 8.5 seconds	5.7 seconds - 15.1 seconds - 5.7 seconds
Traffic Lanes	3 lanes, one turning lane & two one-way slip roads	5 Lanes, one turning lane & two one-way slip roads
Parking Lanes	8 feet	8 feet
Curb Radius	10 feet	10 feet
Walkway Type	6 foot Sidewalk	6 foot Sidewalk
Planter Type	7 foot continuous Planter	7 foot continuous Planter
Curb Type	Curb	Curb
Landscape Type	Trees at 50' o.c. Avg.	Trees at 50' o.c. Avg.
Transportation Provision	BR, TR	BR, TR

Note: Curb radius to be high-strength / reinforced

Note: Curb radius to be high-strength / reinforced

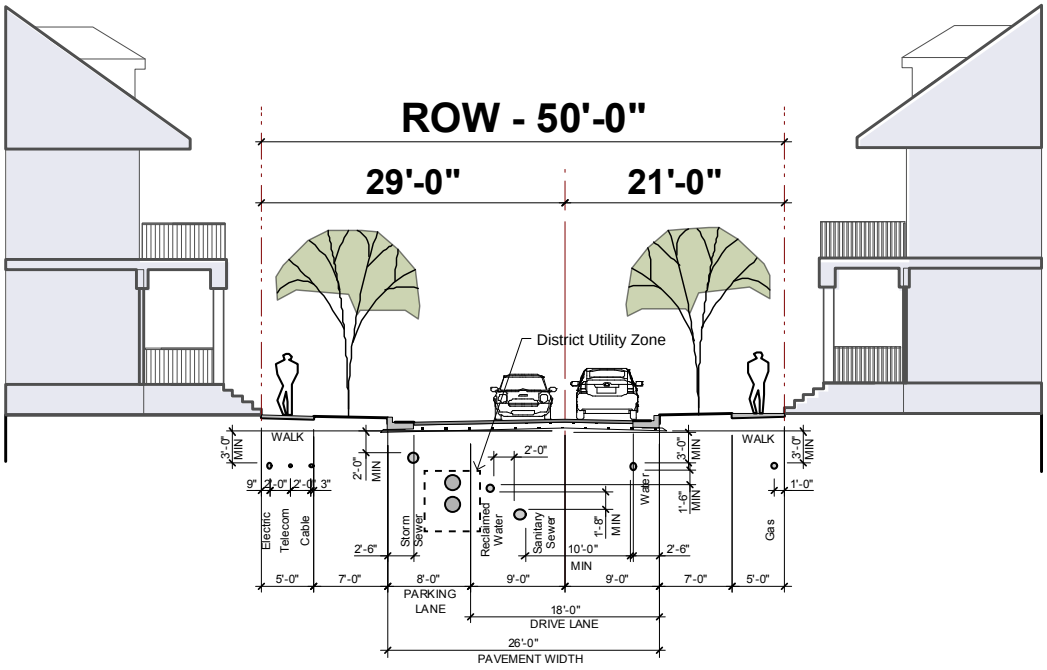
TABLE 4D. THOROUGHFARE CROSS SECTIONS

TABLE 4D: Thoroughfare Cross Sections. These Thoroughfares Cross Sections are assembled from the some of the typical Thoroughfares that appear in Table 4C and represent Standard Street Cross Sections Showing Utilities.



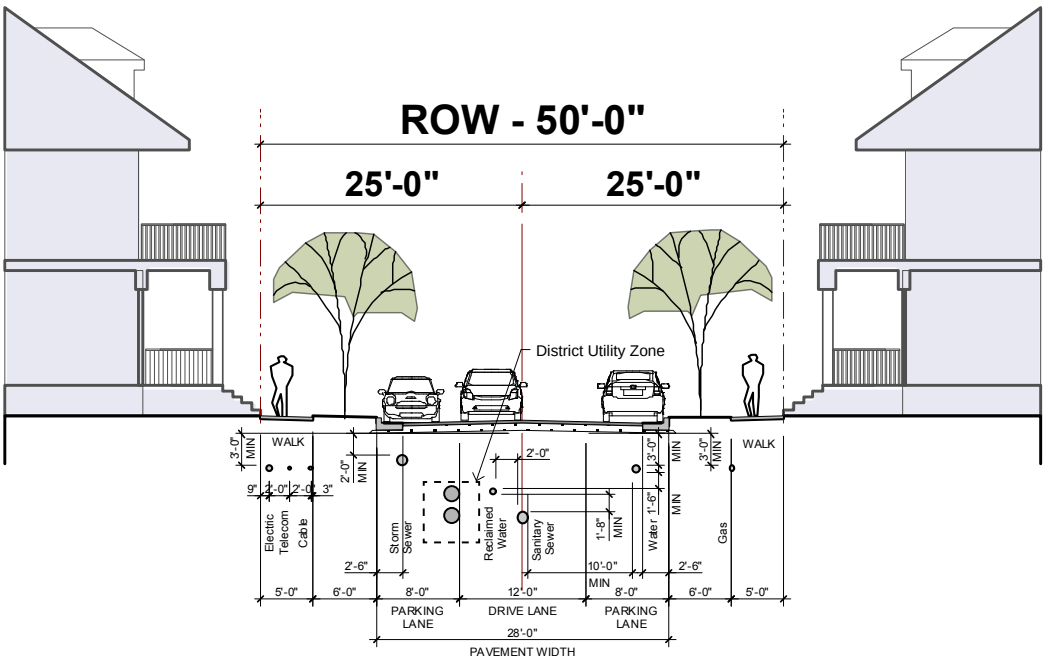
ST-50-26 without Rear Lane

Thoroughfare Sections with Utilities



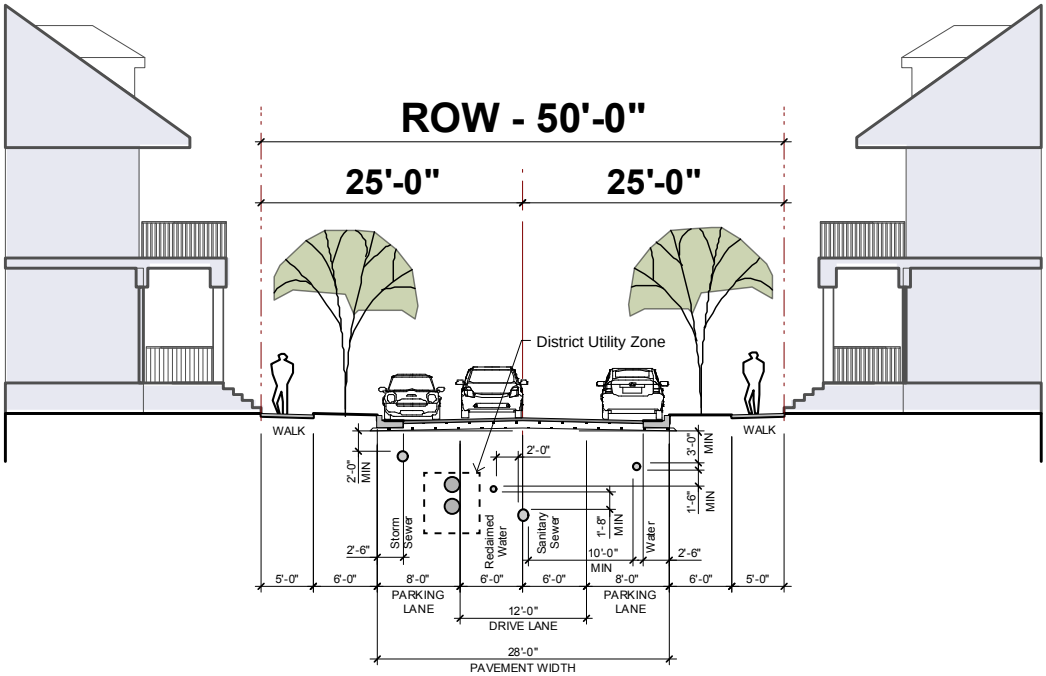
ST-50-26 with Rear Lane

Thoroughfare Sections with Utilities



ST-50-28 without Rear Lane

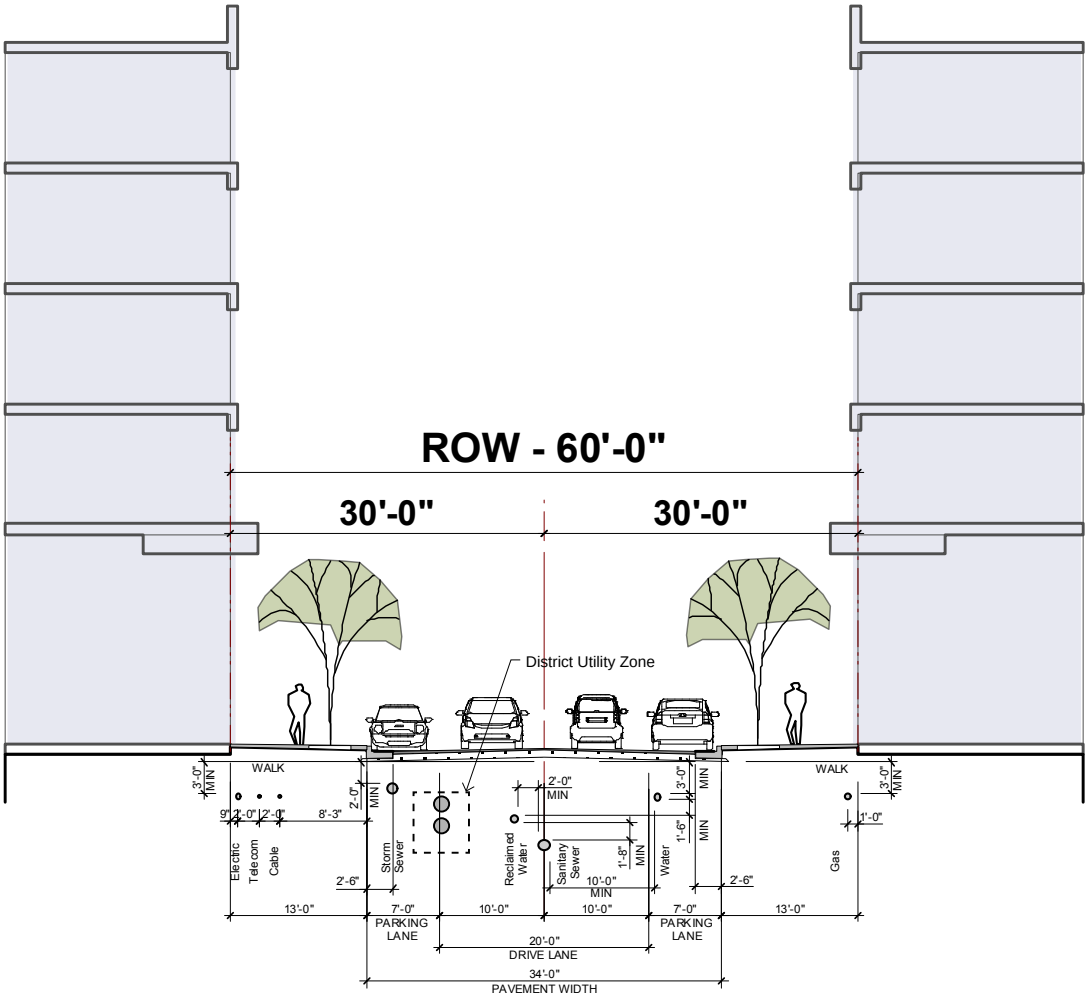
Thoroughfare Sections with Utilities



ST-50-28 with Rear Lane

Thoroughfare Sections with Utilities

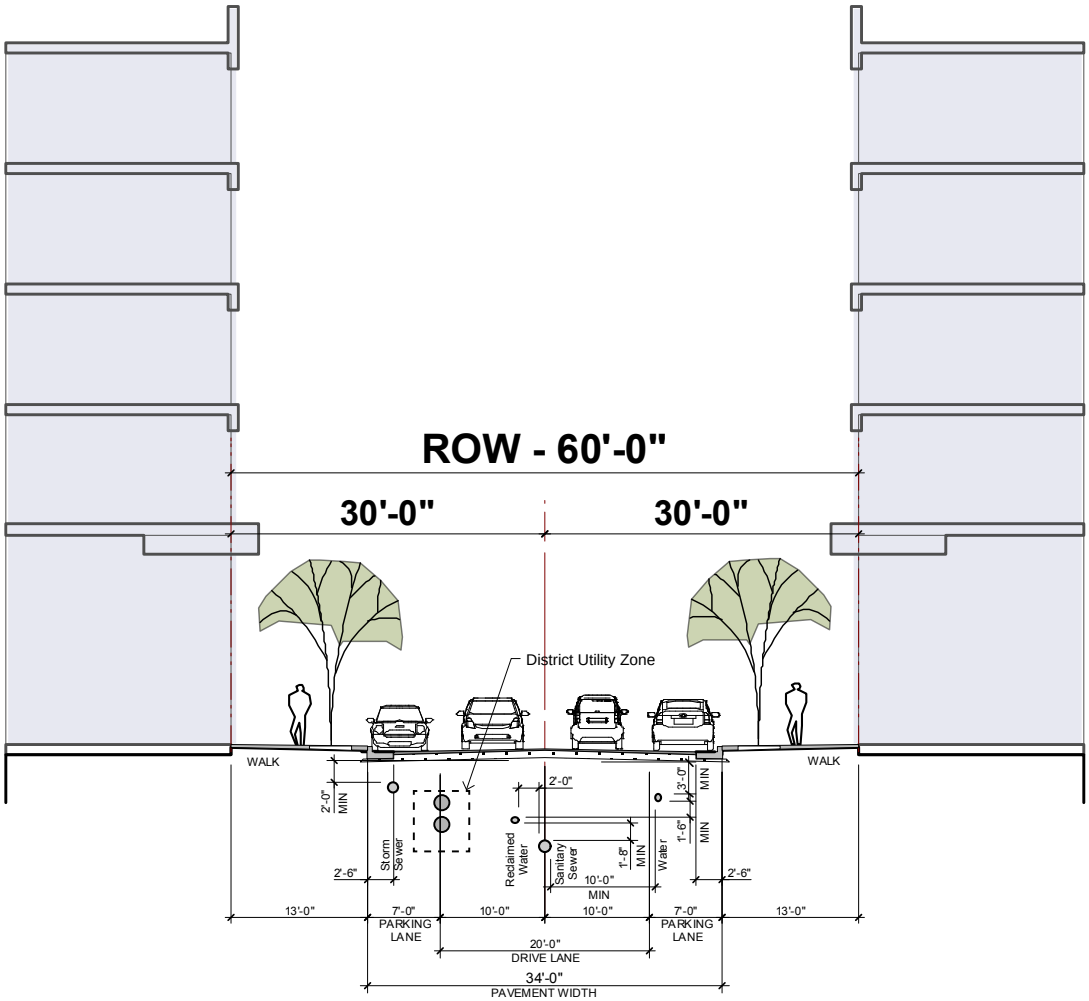
TABLE 4D. THOROUGHFARE CROSS SECTIONS



CS-60-34 without Rear Alley

Thoroughfare Sections with Utilities

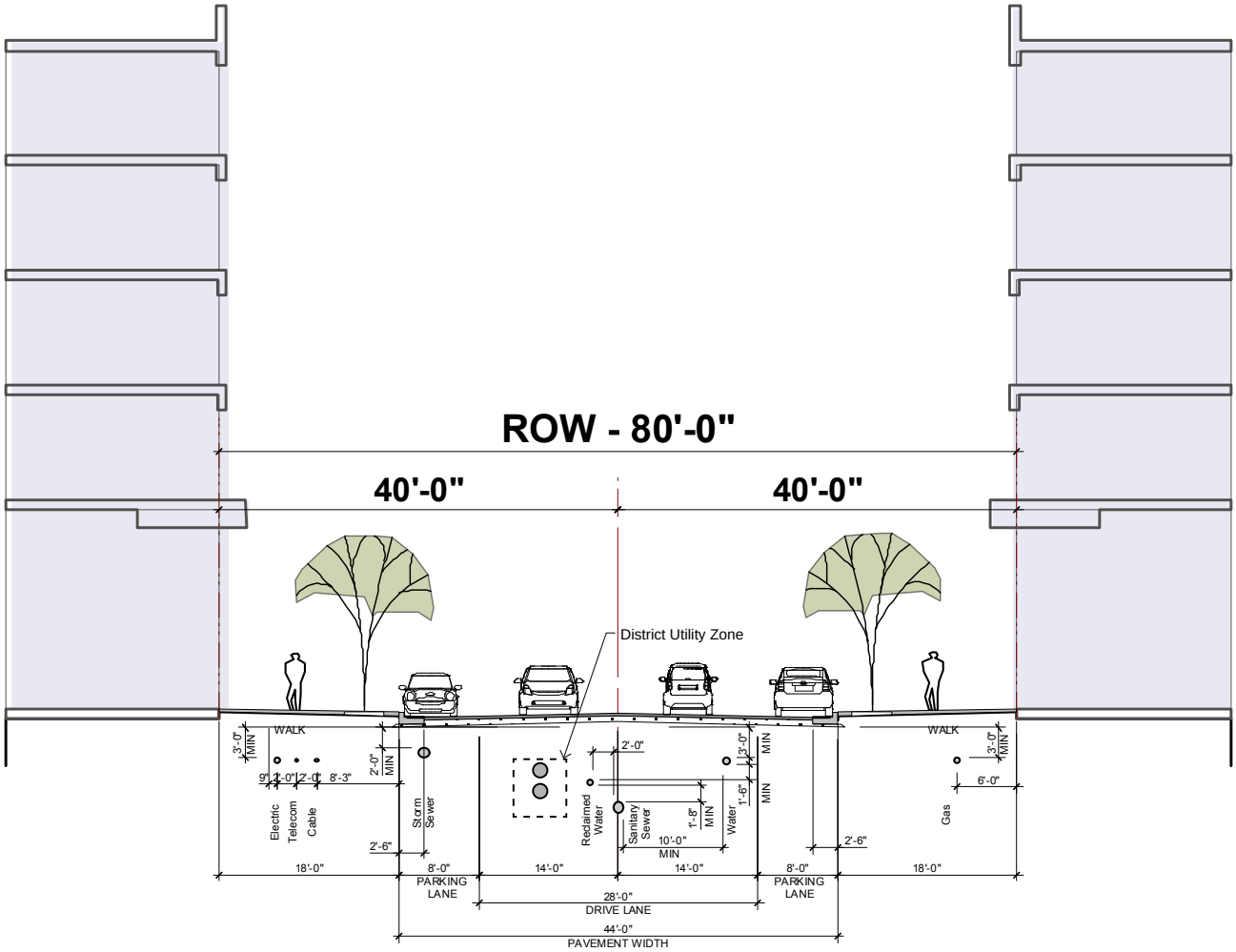
TABLE 4D. THOROUGHFARE CROSS SECTIONS



CS-60-34 with Rear Alley

Thoroughfare Sections with Utilities

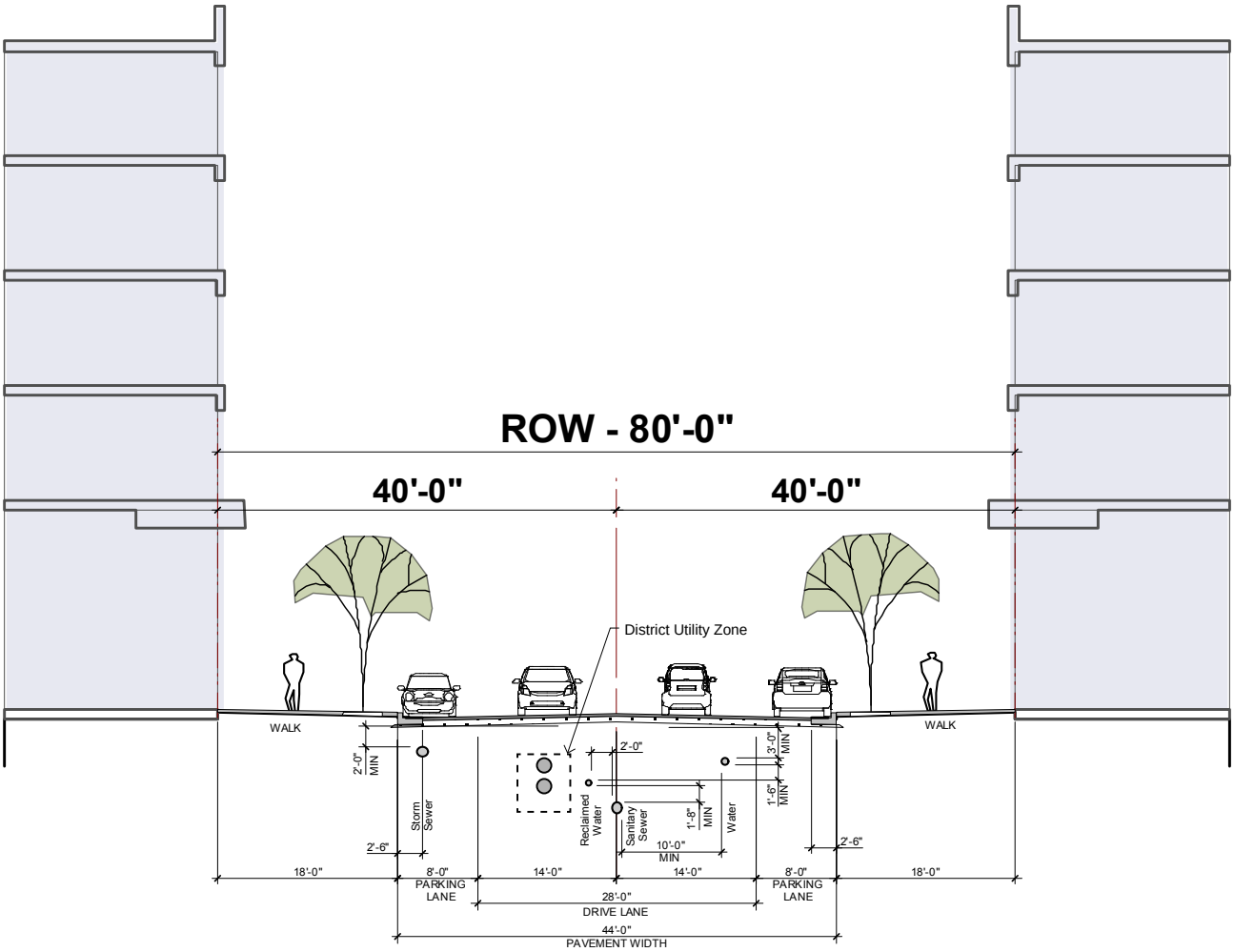
TABLE 4D. THOROUGHFARE CROSS SECTIONS



CS-80-44 without Rear Alley

Thoroughfare Sections with Utilities

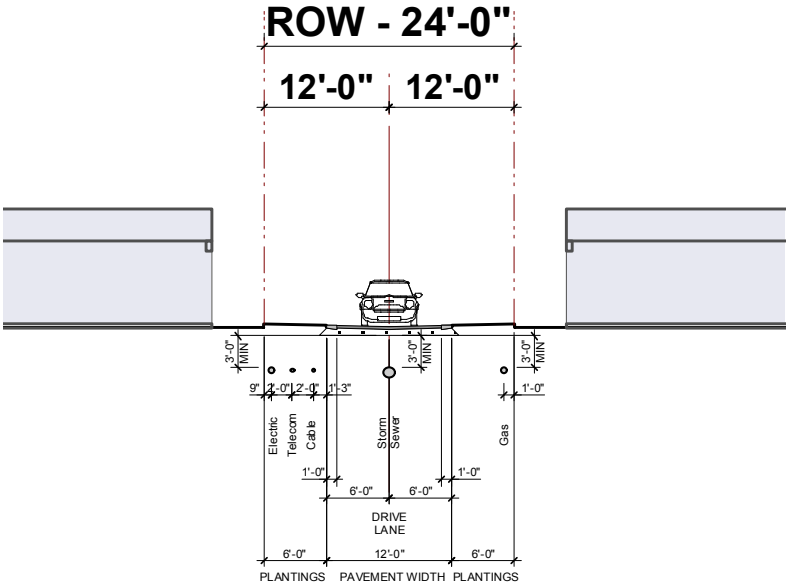
TABLE 4D. THOROUGHFARE CROSS SECTIONS



CS-80-44 with Rear Alley

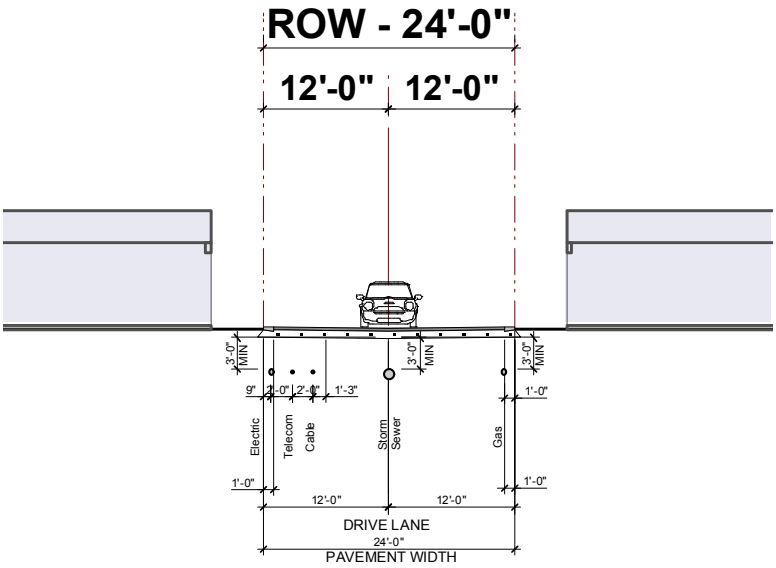
Thoroughfare Sections with Utilities

TABLE 4D. THOROUGHFARE CROSS SECTIONS



RL-12-24 Rear Lane

Thoroughfare Sections with Utilities



RA-24-24 Rear Alley

Thoroughfare Sections with Utilities

TABLE 6. PUBLIC PLANTING

TABLE 6: Public Planting. This table shows five common types of street tree shapes and their appropriateness within the Sustainable Zones. Provide adequate soil volumes for street trees set within hardscape. A registered professional shall prepare a landscape plan and provide planting details to ensure adequate soil preparation for the size and species proposed on the plan.

	OS	NG	NM	VC	UC	Native and Naturalized Plant List Table Page 27
Oval 	▪	▪	▪	▪	▪	
Ball 	▪	▪	▪	▪	▪	
Pyramid 	▪	▪	▪	▪	▪	
Umbrella 	▪	▪	▪	▪	▪	
Vase 	▪	▪	▪	▪	▪	

TABLE 6. PUBLIC PLANTING

TABLE 6: Public Planting. This table shows a list of native and naturalized trees divided in five common types of street tree shapes and their appropriateness within the Sustainable Zones. Other types of hardy plant material are allowed with TRC approval.

Oval Shape (OS, NG, NM, VC, UC)		Tree Size*
Acer campestre	Hedge Maple	L
Acer truncatum	Purpleblow Maple	M
Carpinus caroliniana	American Hornbeam	M
Pistacia chinensis cultivar “Keith Davey”	Chinese Pistache	M
Tilia americana	American Linden	L
Tilia cordata	Littleleaf Linden	M
Ball Shape (OS, NG, NM, VC, UC)		
Acer barbatum	Southern Sugar Maple	M
Acer buergeranum	Trident Maple	S
Acer ginnala	Amur Maple	M
Amelanchier arborea	Downy Serviceberry	M
Platanus X acerifolia	London Planetree	L
Quercus coccinea	Scarlet Oak	L
Quercus lyrata	Overcup Oak	L
Quercus phellos	Willow Oak	L
Qurcus shumardii	Shumard Oak	L
Quercus virginiana	Live Oak	L
Pyramid Shape (OS, NG, NM)		
Carpinus betulus	European Hornbeam	M
Cryptomeria japonica	Japanese Cryptomeria	M
Ginkgo biloba (Male only)	Ginkgo	L
Ilex opaca	American Holly	L
Juniperus virginiana	Eastern Redcedar	L
Magnolia grandifolia	Southern Magnolia	L
Metasequoia glyptostroboides	Dawn Redwood	L
Nyssa sylvatica	Black Gum	L
Umbrella Shape (OS, NG, NM)		
Celtis laevigata	Sugar Hackberry	L
Cornus florida	Flowering Dogwood	S
Gleditsia triacanthos var.inermis	Thornless Honey Locust	M
Koelreuteria paniculata	Golden Rain Tree	M
Ostrya virginiana	Ironwood	L
Ulmus parvifolia	Lacebark Elm	L
Vitex agnus-castus	Chaste Tree	S
Zelkova serrata	Japanese Zelkova	L
Vase Shape (OS, NG, NM)		
Acer ginnala	Amur Maple	M
Cercis canadensis	Eastern Redbud	S
Chionanthus virginicus	Fringetree	S
Lagerstroemia indica	Crape Myrtle	S/M
Styrax japonica	Japanese Snowbell	S

* Tree Size

Small Tree (S): Trees with a mature height of less than 20 feet tall. Small trees shall be planted in permeable areas no less than 6’ x 8’ and 3’ minimum depth of soil preparation per Town of Apex standards.

Medium Tree (M): Trees with mature height between 20 and 30 feet tall. Medium trees shall be planted in permeable areas no less than 6’ x 8’ and 3’ minimum depth of soil preparation per Town of Apex standards

Large Trees (L): Trees with mature height above 30 feet tall. Large trees shall be planted in permeable areas no less than 10’ x 12’ and 3’ minimum depth of soil preparation per Town of Apex standards

TABLE 7. PRIVATE FRONTAGES

TABLE 7: Private Frontages. The Private Frontage is the area between the building Facade and the Lot line. Note that buildings in B-Grid Zones reflect automobile-oriented standards with parking permitted in front and larger building setbacks.

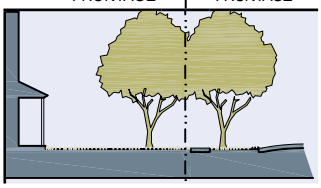
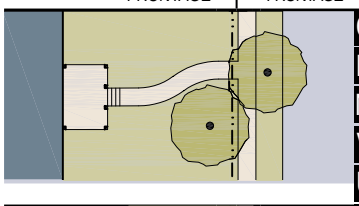
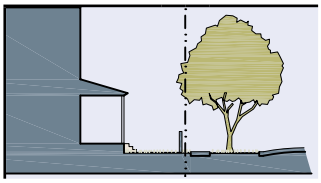
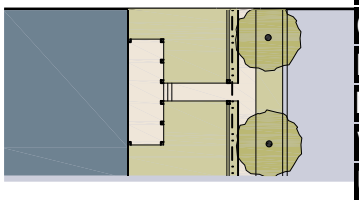
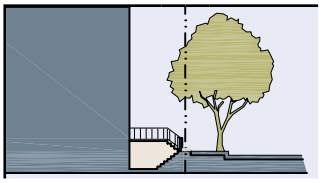
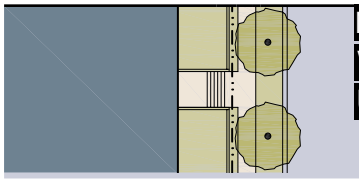
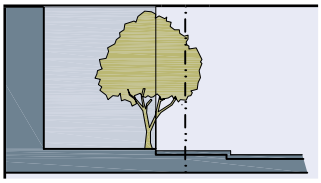
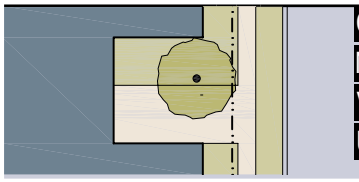
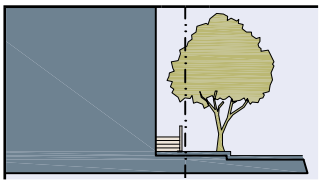
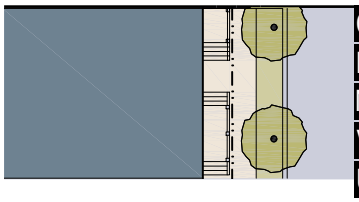
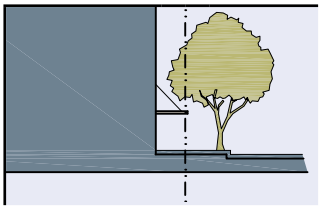
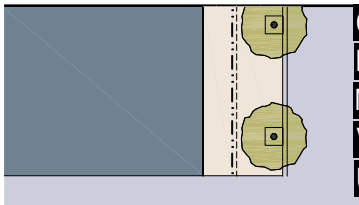
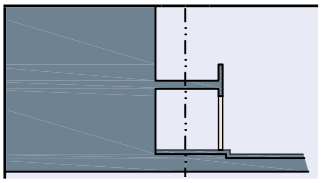
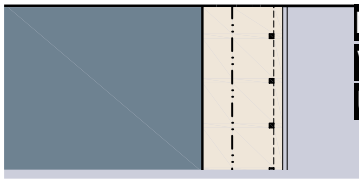
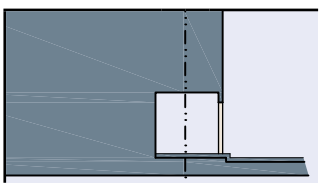
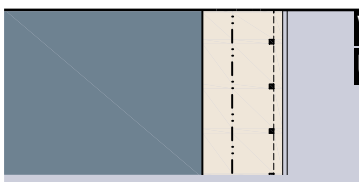
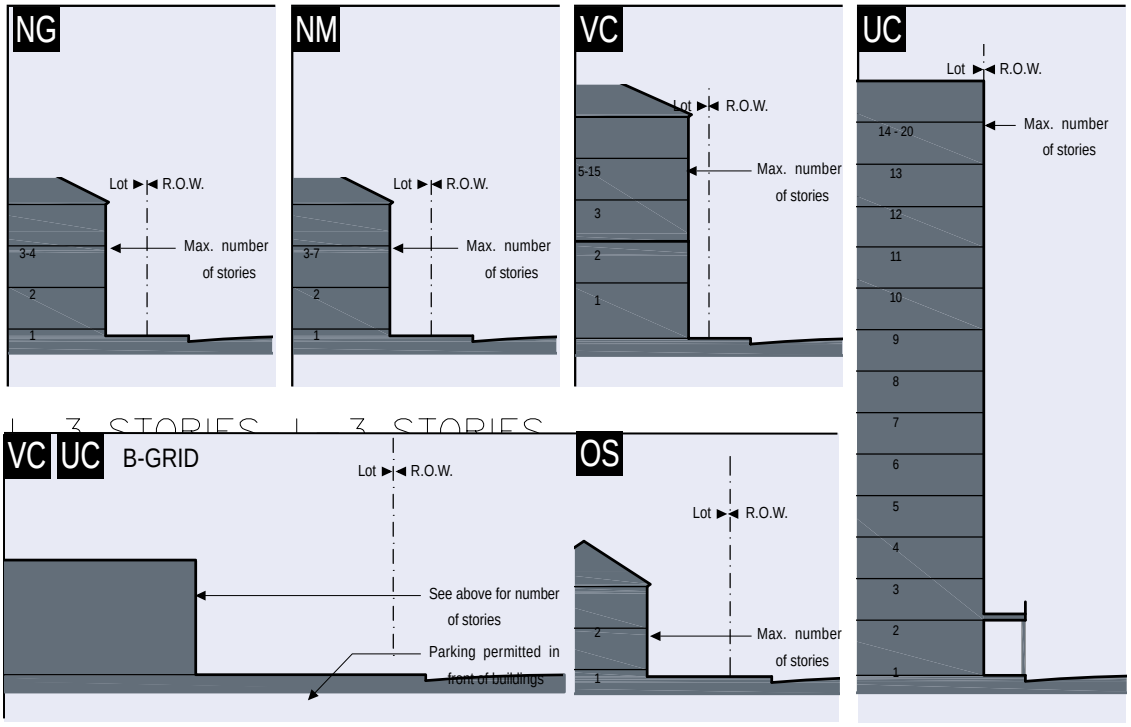
	SECTION	PLAN	
	LOT ► PRIVATE ► FRONTAGE ◄ R.O.W. ◄ PUBLIC FRONTAGE	LOT ► PRIVATE ► FRONTAGE ◄ R.O.W. ◄ PUBLIC FRONTAGE	
a. Common Yard - A-Grid: a planted Frontage wherein the Facade is set back from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. Common Yard - B-Grid: a Frontage that permits parking in the front Layer with perimeter landscaping			OS NG NM VC UC
b. Porch: a planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence, low wall or slope at the Frontage Line may be used to maintain street spatial definition. Porches shall be no less than 8 feet deep.			OS NG NM VC UC
c. Terrace or Lightwell: a Frontage wherein the Facade is set back from the Frontage line by an elevated terrace and/or a sunken Lightwell. This type buffers Residential use from urban Sidewalks and removes the private yard from public Encroachment. Terraces are suitable for conversion to outdoor cafes. Syn: Dooryard.			NM VC UC
d. Forecourt: a Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back. The Forecourt created is suitable for vehicular drop-offs. This type should be allocated in conjunction with other Frontage types. Large trees within the Forecourts may overhang the Sidewalks.			OS NM VC UC
e. Stoop: a Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing. This type is recommended for ground-floor Residential use.			OS NG NM VC UC
f. Shopfront - A-Grid: a Frontage wherein the Facade is aligned close to the Frontage Line with the building entrance at Sidewalk grade. This type is conventional for Retail use. It has a substantial glazing on the Sidewalk level and may have awning or canopies that may overlap the Sidewalk to within 2 feet of the Curb. Syn: Retail Frontage. Shopfront- B-Grid: a Frontage that permits parking in the front Layer with perimeter landscaping			OS NG NM VC UC
g. Gallery: a Frontage wherein the Facade is aligned close to the Frontage line with an attached cantilevered shed or a lightweight colonnade overlapping the Sidewalk. This type is conventional for Retail use. The Gallery shall be no less than 10 feet wide (clear) and should overlap the Sidewalk to within 2 feet of the Curb.			NM VC UC
h. Arcade: a colonnade supporting habitable space that overlaps the Sidewalk, while the Facade at Sidewalk level remains at or behind the Frontage Line. This type is conventional for Retail use. The Arcade shall be no less than 12 feet wide (clear) and should overlap the Sidewalk to within 2 feet of the Curb. See Table 8.			VC UC

TABLE 8. BUILDING CONFIGURATION

TABLE 8: Building Configuration. This table shows the Configurations for different building heights for each Sustainable Zone. Maximum number of stories specified in Table 14k. Regardless of the number of stories, maximum height of a multi-story building shall not exceed 400 feet.



* UC not in excess of 20 stories without specific site plan review and approval by Council.

Stepbacks/Arcade/Gallery Heights. The diagrams below show Arcade and Gallery Frontages. Diagrams above apply to all other Frontages.

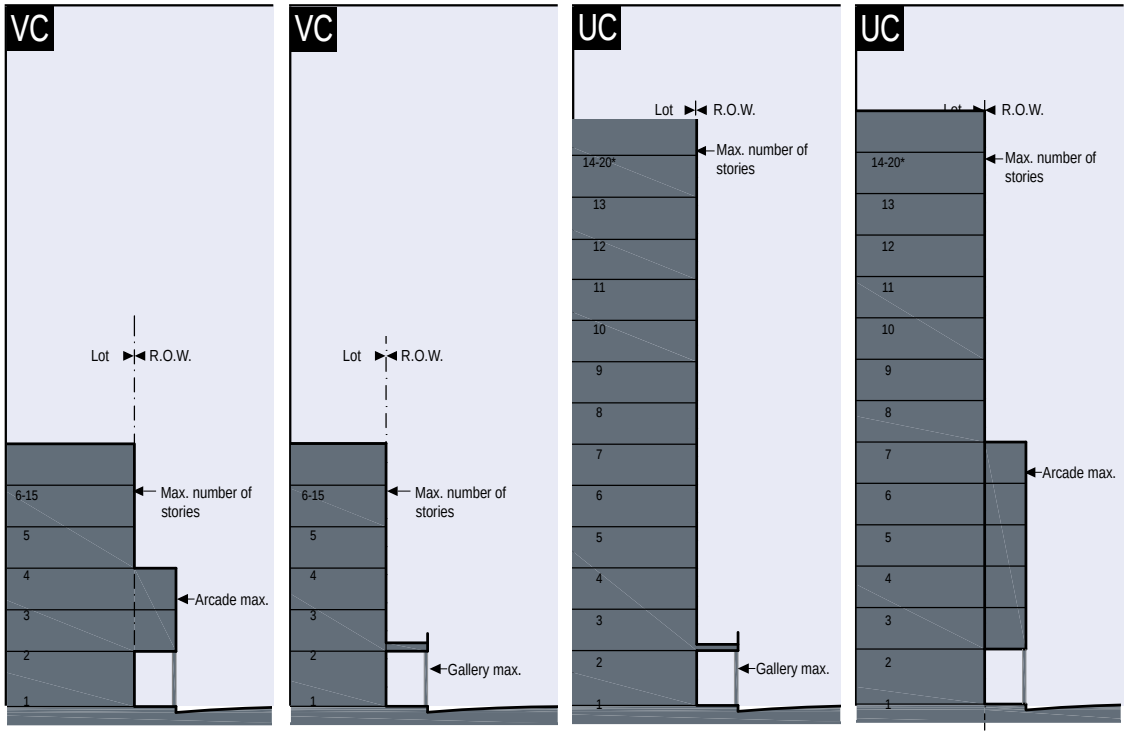
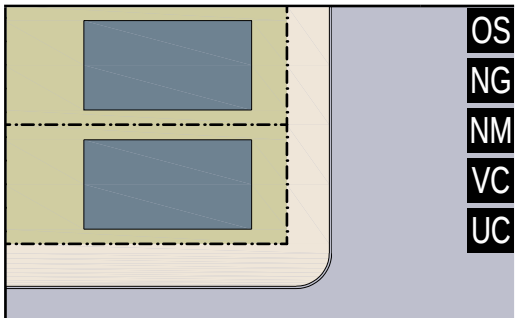


TABLE 9. BUILDING DISPOSITION

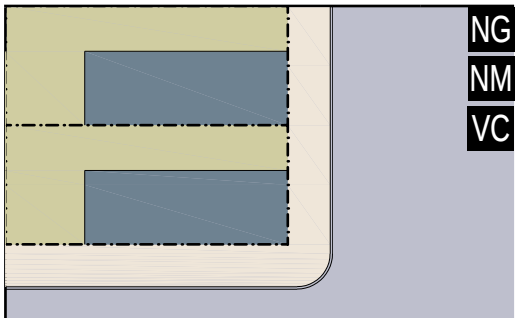
TABLE 9: Building Disposition. This table depicts the location of the structure relative to the boundaries of each individual Lot, establishing suitable basic building types for each Sustainable Zone.

a. Edgeyard - A-Grid: A building that occupies the center of its Lot with Setbacks on all sides. The front yard is visually continuous with the yards of adjacent buildings. The rear yard can be secured for privacy by fences and a well-placed Backbuilding and/or Outbuilding.

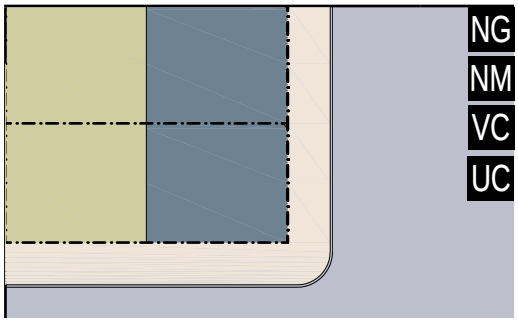
Edgeyard - B-Grid (VC & UC Zones): A building that occupies the center of its Lot with Setbacks on all sides. The front Layer side and rear yards may be used for parking. This is the least urban of types as the building Facade sets back from the Frontage. The rear yard can be used for truck access and may secured for privacy by fences.



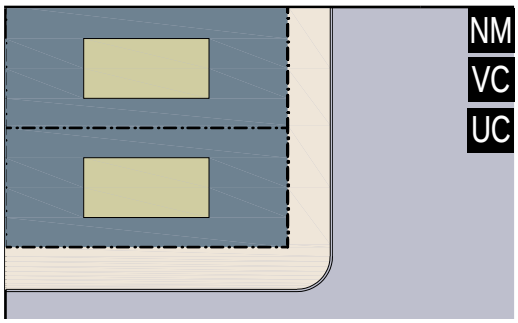
b. Sideyard: A building that occupies one side of the Lot with the Setback to the other side. A shallow Frontage Setback defines a more urban condition. If the adjacent building is similar with a blank side wall, the yard can be quite private. This type permits systematic climatic orientation in response to the sun or the breeze.



c. Rearyard: A building that occupies the full Frontage, leaving the rear of the Lot as the sole yard for residential and as building, sole yard or structured parking for other uses. This is a very urban type as the continuous Facade steadily defines the public Thoroughfare. The rear Elevations may be articulated for functional purposes. In its Residential form, this type is the Townhouse. For its Commercial form, the rear yard can accommodate substantial parking.



d. Courtyard: A building that occupies the boundaries of its Lot while internally defining one or more private spaces. This is the most urban of types, as it is able to shield the private realm from all sides while strongly defining the public Thoroughfare. Because of its ability to accommodate incompatible activities, masking them from all sides.



TABLES 10 & 11. BUILDING FUNCTION & PARKING CALCULATIONS

TABLE 10: Building Function. This table categorizes Building Functions within Sustainable Zones. Parking requirements are correlated to functional intensity. For Specific Function and Use permitted By Right or by Administrative Approval, see Table 12. The Commercial Function of a Live-Work unit may be anywhere in the unit. It may be occupied by a business operator who lives in the same structure that contains the Commercial activity or industry.

	OS NG	NM	VC UC
a. RESIDENTIAL	Residential: The number of single family dwellings on each Lot is restricted to one within a Principal Building and one within an Accessory Building. Both dwellings shall be under single ownership. The habitable area of the Accessory Unit shall not exceed 800 sf, excluding the enclosed parking area. See Table 11A for required parking.	Residential: The number of dwellings on each Lot is calculated by the minimum requirement of parking places for each dwelling, a ratio which may be reduced according to the shared parking standards (See Table 11). See Table 11A for required parking.	Residential: The number of dwellings on each Lot is calculated by the minimum requirement of 1.0 parking places per dwelling, a ratio which may be reduced according to the shared parking standards (See Table 11). Parking requirements may be satisfied off-site per Section 5.7. Parking is calculated by the minimum requirement of 0.75 parking places per dwelling for Independent Living.
b. LODGING	Lodging: The number of bedrooms available on each Lot for lodging is calculated by the requirement of 1.0 assigned parking place for each bedroom, up to five, in addition to the parking requirement for the dwelling. Food service may be provided in the a.m. Not applicable for OS.	Lodging: The number of bedrooms available on each Lot for lodging is calculated by the minimum requirement of 1.0 assigned parking places for each bedroom, up to twelve, in addition to the parking requirement for the dwelling. Food service may be provided at all times.	Lodging: The number of bedrooms available on each Lot for lodging is calculated by the minimum requirement of 0.5 assigned parking places for each bedroom. Food service may be provided at all times. The area allocated for food service shall be calculated and provided with parking according to Retail Function. Parking requirements may be satisfied off-site per Section 5.7.
c. OFFICE / MANUFACTURING	**Office/Manufacturing:** The building area available for office use on each Lot is restricted to the first Story of the Principal or the Accessory Building and by the minimum requirement of 3.0 assigned parking places per 1000 square feet of gross office space in addition to the parking requirement for any dwellings. The specific use shall be further limited to 8,000 SF for any single tenant use. Not applicable for OS.	Office/Manufacturing: The building area available for office may include the Accessory building, and by the minimum requirement of 3.0 assigned parking places per 1000 square feet of gross office space in addition to any parking requirement for other uses.	**Office/Manufacturing:** The building area available for office use on each Lot is calculated by the minimum requirement of 1.6 assigned parking places per 1000 square feet of gross office space. Parking requirements may be satisfied off-site per Section 5.7.
d. RETAIL	Retail: The building area available for Retail use is calculated by the minimum requirement of 3.0 assigned parking places per 1000 square feet of gross Retail space in addition to the parking requirement of any dwellings. The specific use shall be further limited to 8,000 SF for any single tenant use, or food service seating no more than 100.	Retail: The building area available for Retail use is calculated by the minimum requirement of 3.0 assigned parking places per 1000 square feet of gross Retail space in addition to any parking requirement for other uses. The specific use shall be further limited by Table 12 to include, but not be limited to neighborhood stores, or food service seating no more than 120.	Retail: The building area available for Retail use is calculated by the minimum requirement of 2.5 assigned parking places per 1000 square feet of gross Retail space. Retail spaces under 1500 square feet are exempt from parking requirements. Parking requirements may be satisfied off-site per Section 5.7.
e. CIVIC	See Table 12	See Table 12	See Table 12
f. OTHER	See Table 12	See Table 12	See Table 12

TABLE 11: Parking Calculations. The Shared Parking Factor for two Functions, when divided into the sum of the two amounts as listed on the Required Parking table below, produces the Effective Parking needed for each site involved in sharing. Conversely, if the Sharing Factor is used as a multiplier, it indicates the amount of building allowed on each site given the parking available. Within the overlay area of a Transit Oriented Development (TOD) the Effective Parking may be further adjusted downward by 30%.

REQUIRED PARKING (See Table 10)

	OS NG	NM	VC UC
RESIDENTIAL	See Table 11A	See Table 11A	1.0 / dwelling
LODGING	1.0 / bedroom	1.0 / bedroom	0.5 / bedroom
OFFICE	3.0 / 1000 sq. ft.	3.0 / 1000 sq. ft.	1.6 / 1000 sq. ft.
RETAIL	3.0 / 1000 sq. ft.	3.0 / 1000 sq. ft.	2.5 / 1000 sq. ft.
CIVIC	Determined by the Planning Director or Planning Director's designee		
OTHER	Determined by the Planning Director or Planning Director's designee		

SHARED PARKING FACTOR

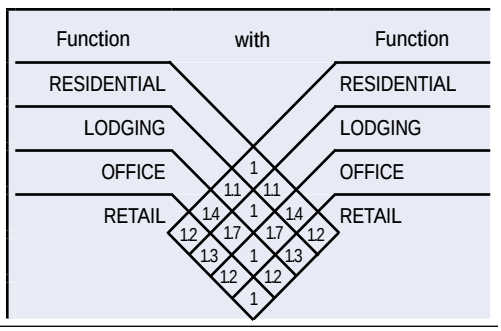


TABLE 11A. PARKING

Single Family Residential Building Types. This parking diagram illustrates the parking locations for on and off street parking for the various residential building types within the Neighborhood General and Neighborhood Mixed-Use Zones. Parking is calculated by the minimum requirement of 0.75 parking places per dwelling for Independent Living.

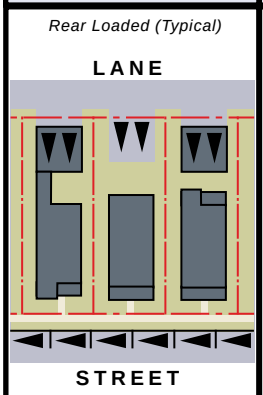
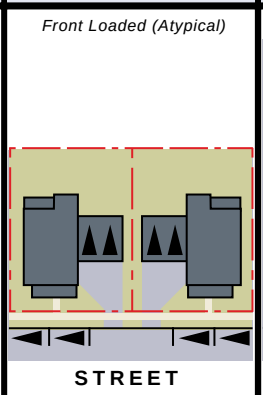
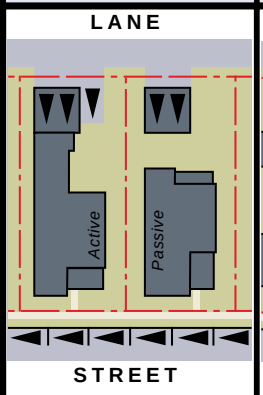
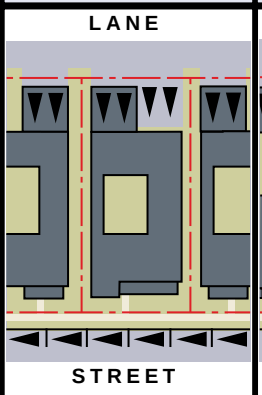
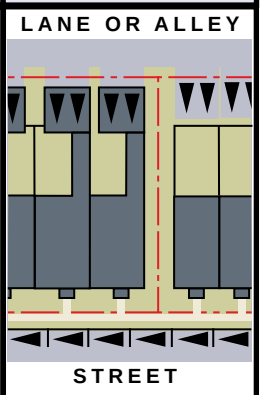
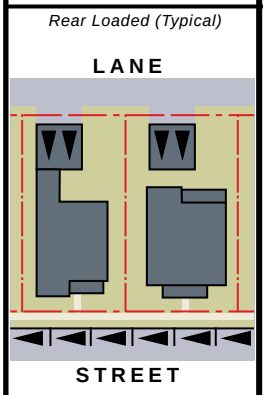
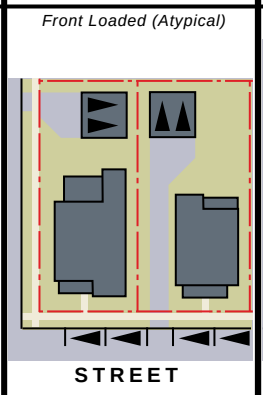
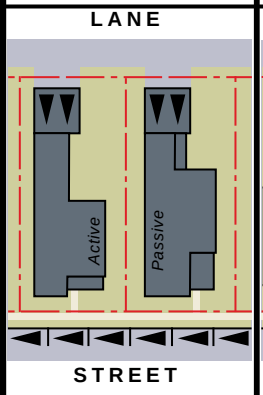
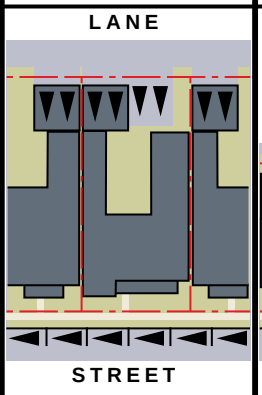
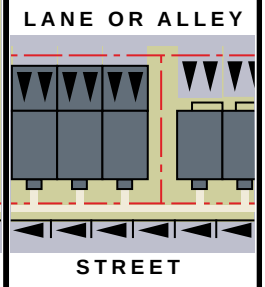
NG NM	NG NM	NG NM	NM	NG NM
Detached House	Detached House	Sideyard House	Courtyard House	Townhouse
				
				
Detached House: an edge yard building type. A single-family dwelling on small to large lots, shared with an accessory building in the rear yard.	**Detached House:** an edge yard building type. A single-family dwelling on medium to large lots, shared with an accessory building in the rear yard and front or side driveway where alley is not available (atypical condition).	**Sideyard House:** a sideyard building type. A single-family dwelling which occupies one side of the lot, with the primary yard to the other side, shared with ancillary building in the rear yard.	**Courtyard House:** a courtyard building type which surrounds one or more private yards. This is a functionally flexible type as it is able to shield the private open space from a public realm of great intensity.	**Townhouse:** a rear yard building type. A single family dwelling with common walls on the side lot lines, the facades forming a continuous frontage line. Rowhouses are the highest density type able to provide private yards..
NG **Required Parking:** 2 Off-Street	NG **Required Parking:** 2 Off-Street	NG **Required Parking:** 2 Off-Street	NM **Required Parking:** 2 Off-Street	NG **Required Parking:** 2 Off-Street
NM **Required Parking:** 2 Off-Street Table 11 Shared Parking Factor does not apply to this use.	NM **Required Parking:** 2 Off-Street Table 11 Shared Parking Factor does not apply to this use.	NM **Required Parking:** 2 Off-Street Table 11 Shared Parking Factor does not apply to this use.	NM **Required Parking:** 2 Off-Street Table 11 Shared Parking Factor does not apply to this use.	NM **Required Parking:** 2 Off-Street Table 11 Shared Parking Factor does not apply to this use.

TABLE 11A. PARKING

Townhome and Multi-Family Residential Building Types. This parking diagram illustrates the parking locations for on and off street parking for the various residential building types within the Neighborhood General and Neighborhood Mixed-Use Zones. Parking is calculated by the minimum requirement of 0.75 parking places per dwelling for Independent Living.

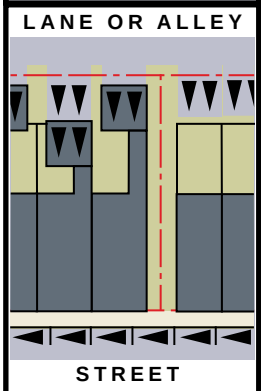
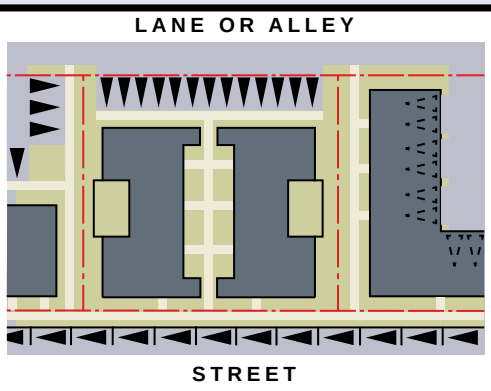
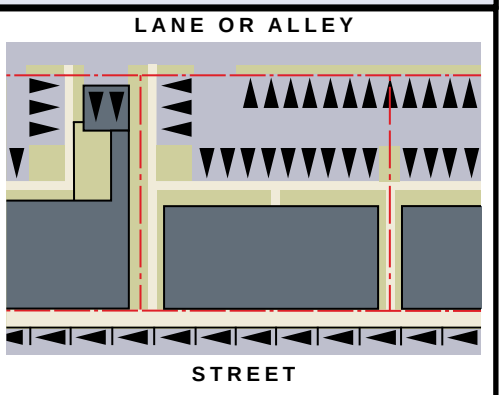
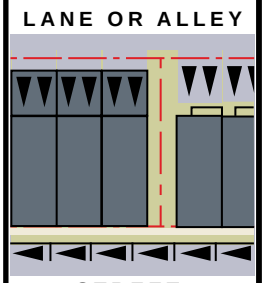
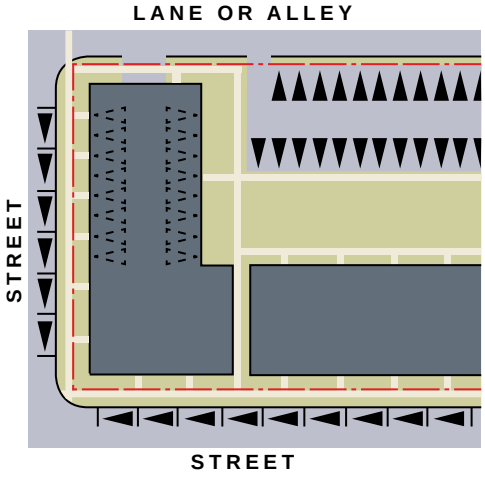
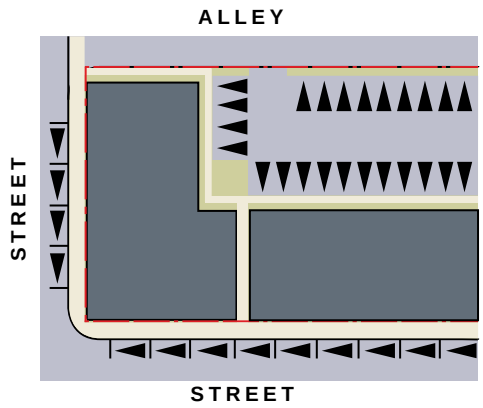
NG NM	NM	NG NM
Live-Work	Multi-Family or Apartment	Mixed Use
		
		
Live-Work: a rear yard, fully mixed use building type with one dwelling above or behind a commercial space. NG **Required Parking:** 2 Off-Street 1 On-Street NM **Required Parking:** 2 Off-Street 1 On-Street Table 11 Shared Parking Factor does not apply to this use.	**Multi-Family or Apartment:** a rear yard residential building type accommodating multiple dwellings disposed above and beside each other, with individual or sharing entries. Parking may be on the surface, structured or underground. NM **Required Parking:** 1.25 Parking Spaces per Unit	**Mixed Use Building or Mixed Use Block:** a rear yard, flexible commercial building type with residential uses above. Commercial buildings may have floor plates deeper than residential ones. NG **Required Parking (Residential):** 1.50 Off-Street Spaces per Unit NM **Required Parking (Residential):** 1.25 Off-Street Spaces per Unit

TABLE 12. SPECIFIC FUNCTION & USE

TABLE 12: Specific Function & Use. This table expands the categories of Table 10 to delegate specific Functions and uses within Sustainable Zones. Table 12 has been customized for local character and requirements. The Sustainable Development District provides for the following uses to be permitted within the Sustainable Zones.

Permitted (P): The permitted uses for the District

Permitted (b): The permitted uses for the District on B-Grid Thoroughfares and within B-Grid Zones only

SUSTAINABLE ZONE	OS	NG	NM	VC	UC
a. RESIDENTIAL					
Accessory Unit or Building		P	P	P	
Condominium			P	P	P
Congregate living facility *			P	P	P
Duplex		P	P		
Family care home *		P	P		
Farm residence	P	P	P		
Historic Site, Adaptive Use	P	P	P	P	P
Independent living		P	P	P	P
Multi-family or apartment			P	P	P
Nursing or convalescent facility *			P	P	P
Single-family		P	P	P	
Townhouse		P	P	P	P
Townhouse, detached		P			
Triplexes or quadplexes			P	P	
Live-Work		P	P	P	P
Modular Construction		P	P	P	P
Mixed Use Block		P	P	P	P
b. PUBLIC/CIVIC USES					
Ambulatory healthcare facility				P	P
Amphitheater **	P	P	P	P	P
Assembly hall, nonprofit			P	P	P
Church, or place of worship		P	P	P	P
Cemetery	P	P	P	P	P
Day care facility		P	P	P	P
Government service		P	P	P	P
Heliport or helipad	P		P	P	P
Hospital				P	P
Natatorium **	P		P	P	P
Restrooms	P	P	P	P	P
Picnic Shelter **	P	P	P	P	P
School, public or private **		P	P	P	P
Transportation facility				P	P
Veterinary clinic or hospital			P	P	P
c. UTILITIES					
Communication tower, (Commercial; Stealth)	P	P	P	P	P
Communication or water tower Integrated Into building or structure (Camouflage Stealth)	P	P	P	P	P
Utility, Minor	P			P	P
Power facility	P			P	P
Renewable Energy Facilities	P	P	P	P	P
d. RECREATIONAL USES					
Arena, auditorium, or stadium **	P			P	P
Entertainment, indoor **				P	P
Entertainment, outdoor **	P		P	P	P
Greenway	P	P	P	P	P
Horse boarding and riding stable **	P				
Park, active	P	P	P	P	P
Park, passive	P	P	P	P	P
Recreation facility, private	P	P	P	P	P
e. COMMUNICATIONS					
Broadcast station (radio and television)				b	P
Radio and television recording studio				b	P

TABLE 12. SPECIFIC FUNCTION & USE

SUSTAINABLE ZONE	OS	NG	NM	VC	UC
f. FOOD AND BEVERAGE SERVICE					
Concessions	P		P	P	P
Restaurant, drive-through				P	b
Restaurant, general	P		P	P	P
Bar or nightclub			P	P	P
g. OFFICE LAB AND RESEARCH					
Dispatching office				P	P
Historic site – adaptive use	P	P	P	P	P
Medical or dental clinic or office			P	P	P
Medical or dental laboratory				P	P
Office, business or professional			P	P	P
Publishing office			P	P	P
Research facility				P	P
h. PARKING, COMMERCIAL					
Parking Garage (deck), commercial			P	P	P
Parking Garage (deck) private			P	P	P
Parking lot, commercial				P	P
Parking lot, surface	P	P	P	P	P
i. LODGING					
Bed and breakfast (up to 5 rooms)		P	P	P	P
Bed and breakfast (up to 12 rooms)			P	P	P
Hotel or motel			P	P	P
Conference Center				P	P
Convention Center					P
School Dormitory				P	P
j. RETAIL SALES AND SERVICE					
Barber and beauty shop		P	P	P	P
Bookstore		P	P	P	P
Building Supplies, Retail				b	b
Convenience store			P	P	P
Convenience store with gas sales			P	P	P
Dry cleaners and laundry service		P	P	P	P
Farmer's market	P	P	P	P	P
Financial institution			P	P	P
Floral shop		P	P	P	P
Funeral home			P	P	P
Gas and fuel, retail				P	P
Greenhouse or nursery, retail			P	P	P
Grocery, general				P	P
Grocery, specialty		P	P	P	P
Health/fitness center or spa			P	P	P
Kennel, indoor				P	P
Laundromat			P	P	P
Newsstand or gift shop		P	P	P	P
Personal service			P	P	P
Pharmacy			P	P	P
Printing and copying service			P	P	P
Real estate sales		P	P	P	P
Retail Kiosk	P		P	P	P
Retail sales, bulky goods				b	b
Retail sales, general		P	P	P	P
Studio for art		P	P	P	P
Tailor shop		P	P	P	P
Theater				P	P
Shopping Center				P	P
k. VEHICLE REPAIR AND SERVICE					
Automotive paint or body shop					
Automotive parts				P	P
Automotive service station				P	P
Car wash or auto detailing				P	P
Repair services limited				P	P
Vehicle inspection center				P	P

TABLE 12. SPECIFIC FUNCTION & USE

SUSTAINABLE ZONE	OS	NG	NM	VC	UC
l. INDUSTRY, MANUFACTURING, STORAGE					
Biotechnology and Medical Devices				P	P
Information Technology and High					
Performance Computing				P	P
Manufacturing				P	P
Nanotechnology and Advanced Materials				P	P
Retail Storage within Retail spaces		P	P	P	P
Smart Power and Green Technology	P			P	P
Self-service storage			P	P	P
Warehousing				b	b
m. FOOD PRODUCTION (SEE TABLE 19)					
Farm	P				
Agricultural plots	P	P			
Vegetable gardens		P	P	P	P
Urban farms	P	P	P	P	
Community gardens	P	P	P	P	P
Green roofs		P	P	P	P
Vertical farms			P	P	P

If an application is submitted for a use type that is not permitted by Table 12 in one or more of the Sustainable Zones and the use type is not one prohibited by the UDO, the Planning Director shall be authorized to make a similar use interpretation based on the use categories Listed in Table 12. If the Planning Director determines that the proposed use does not fit any of the use categories, no similar use interpretation shall be made and the use shall not be permitted.

Any land uses not specially dealt with in this Table but otherwise permitted by the UDO and not excluded by any provision of this SD Plan are subject to a similar use interpretation by the Planning Director and if found to be similar to a use permitted by this Table shall be allowed within all sustainable zones in which the similar use is allowed.

* For the purposes of density and parking, dwelling rooms shall be treated as 0.2 dwelling units with parking per the multi-family requirements.

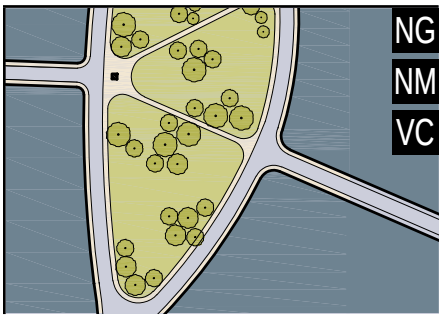
** The building and any portion of the lot routinely accessible to the public shall be included in the acreage designated pursuant to SD Plan 3.1.3.c.

TABLE 13. CIVIC SPACE

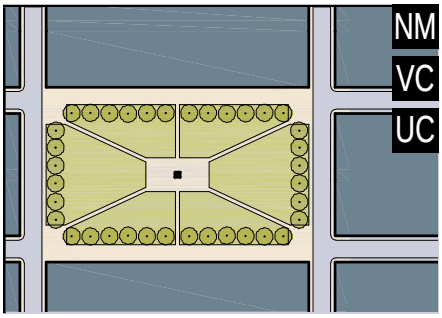
a. Park: A natural preserve available for unstructured recreation or a park for active recreation. A park may be independent of surrounding building Frontages. Its landscape shall consist of Paths and trails, meadows, waterbodies, woodland and open shelters, all naturalistically disposed. Parks may be lineal, following the trajectories of natural corridors.



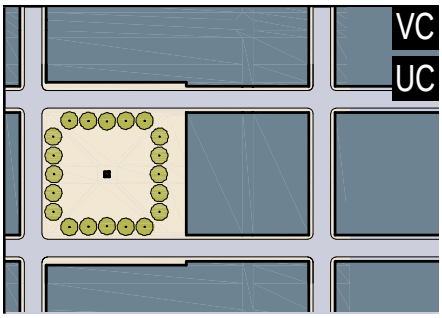
b. Green: An Open Space, available for unstructured recreation. A Green may be spatially defined by landscaping rather than building Frontages. Its landscape shall consist of lawn and trees, naturalistically disposed. The minimum size shall be 1/4 acre and the maximum shall be 8 acres.



c. Square: An Open Space available for unstructured recreation and Civic purposes. A Square is spatially defined by building Frontages. Its landscape shall consist of paths, lawns and trees, formally disposed. Squares shall be located at the intersection of important Thoroughfares. The minimum size shall be 1/2 acre and the maximum shall be 5 acres.



d. Plaza: A public or private Open Space available for Civic purposes and Commercial activities. A Plaza shall be spatially defined by building Frontages. Its landscape shall consist primarily of pavement. Trees are optional. Plazas should be located at the intersection of important streets. The minimum size shall be 1/8 acre and the maximum shall be 2 acres.



e. Playground: An Open Space designed and equipped for the recreation of children. A playground may be fenced and may include an open shelter. Playgrounds shall be interspersed within Residential areas and may be placed within a Block. Playgrounds may be included within Parks and Greens. There shall be no minimum or maximum size.

Dog Parks: An Open Space designed as a safe place where dogs may play and get exercise while not on a leash. Dog Parks shall be fenced and may be interspersed within Residential areas. They may be placed within a Block or included within Parks and Greens. There shall be no minimum or maximum size.

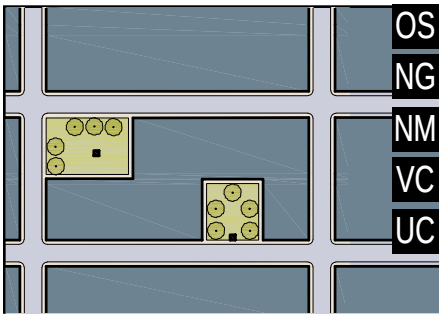
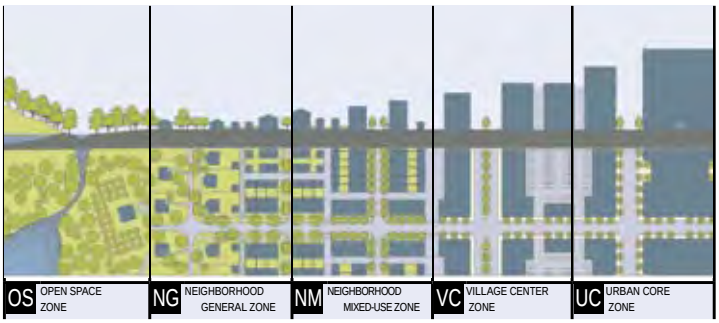


TABLE 14. FORM-BASED CODE SUMMARY



OS	NG	NM	VC	UC
OPEN SPACE ZONE	NEIGHBORHOOD GENERAL ZONE	NEIGHBORHOOD MIXED-USE ZONE	VILLAGE CENTER ZONE	URBAN CORE ZONE

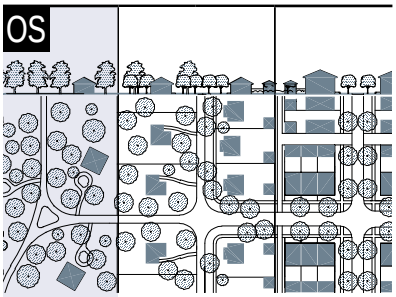
a. ALLOCATION OF ZONES						
Minimum Acres	not applicable	75 acres	50 acres	215 acres	135 acres	
Min Acres for Non-Residential	variable	3 acres	7 acres	120 acres	75 acres	
b. DENSITY (see Sustainable Development Concept Map						
By Right - DUA	not applicable	20 units / ac. gross	40 units / ac. gross	80 units / ac. gross	100 units / ac. gross	
By Right - Other Uses - FAR	permitted	2.00 / ac. gross	4.00 / ac. gross	6.00 / ac. gross	12.00 / ac. gross	
Maximum Impermeable Surface	30%	65%	75%	90%	100%	
c. BLOCK SIZE						
Block Perimeter: A-Grids	no maximum	3000 ft. max	2400 ft. max	2000 ft. max *	2000 ft. max *	
Block Perimeter: B-Grids	not applicable	not applicable	not applicable	* 3500 ft max with parking structures		
d. THOROUGHFARES (see Table 3 and Table 4)						
Highway (HW)	permitted	permitted	not permitted	not permitted	not permitted	
Boulevard (BV)	not permitted	not permitted	not permitted	permitted	permitted	
Avenue (AV)	not permitted	permitted	permitted	permitted	permitted	
Commercial Street (CS)	not permitted	not permitted	not permitted	permitted	permitted	
Drive (DR)	not permitted	permitted	permitted	permitted	permitted	
Street (ST)	permitted	permitted	permitted	permitted	not permitted	
Road (RD)	permitted	permitted	not permitted	not permitted	not permitted	
Rear Lane (RL)	permitted	permitted	permitted	not permitted	not permitted	
Rear Alley (RA)	not permitted	permitted	required	required	required	
Path (PT)	permitted	permitted	permitted	not permitted	not permitted	
Passage (PS)	not permitted	permitted	permitted	permitted	permitted	
Bicycle Trail (BT)	permitted	permitted	not permitted *	not permitted *	not permitted *	
Bicycle Lane (BL)	permitted	permitted	permitted	permitted	permitted	
Bicycle Route (BR)	permitted	permitted	permitted	permitted	permitted	
e. CIVIC SPACES (see Table 13)					* permitted within Open Spaces	
Park	permitted	permitted	permitted	permitted	permitted	
Green	not permitted	permitted	permitted	permitted	permitted	
Square	not permitted	not permitted	permitted	permitted	permitted	
Plaza	not permitted	not permitted	not permitted	permitted	permitted	
Playground	permitted	permitted	permitted	permitted	permitted	
f. LOT OCCUPATION						
Lot Width: A-Grids	variable	25 ft. min 120 ft. max	18 ft. min 400 ft. max	18 ft. min 600 ft. max	18 ft. min 700 ft. max	
Lot Width: B-Grids	not applicable	not applicable	not applicable	no max	no max	
g. SETBACKS - PRINCIPAL BUILDING (see Table 15)						
(g.1) Front Setback (Principal)	10 ft. min	15 ft. min	6 ft. min	0 ft. min	0 ft. min	
(g.2) Front Setback (Secondary)	5 ft. min	12 ft. min	6 ft. min	0 ft. min	0 ft. min	
(g.3) Side Setback	5 ft. min	0 ft. min.	0 ft. min	0 ft. min	0 ft. min	
(g.4) Rear Setback	5 ft. min	12 ft. min	3 ft. min	3 ft. min	0 ft. min	
h. SETBACKS - OUTBUILDING (see Table 15)						
(h.1) Front Setback	not applicable	20 ft. min +bldg setback	20 ft. min +bldg setback	40 ft. max from rear prop	not applicable	
(h.2) Side Setback	not applicable	0 ft. or 3 ft. min	0 ft. or 3 ft. min	0 ft. min	not applicable	
(h.3) Rear Setback	not applicable	3 ft. min	3 ft. min	3 ft. min	not applicable	
i. BUILDING DISPOSITION (see Table 9)						
Edgeyard	permitted	permitted	permitted	permitted	permitted	
Sideyard	not permitted	permitted	permitted	permitted	not permitted	
Rearyard	not permitted	permitted	permitted	permitted	permitted	
Courtyard	not permitted	not permitted	permitted	permitted	permitted	
j. PRIVATE FRONTAGES (see Table 7)						
Common Yard	permitted	permitted	permitted	permitted	permitted	
Porch & Fence	permitted	permitted	permitted	permitted	permitted	
Terrace or Lightwell	not permitted	not permitted	permitted	permitted	permitted	
Forecourt	permitted	not permitted	permitted	permitted	permitted	
Stoop	permitted	permitted	permitted	permitted	permitted	
Shopfront	permitted	permitted	permitted	permitted	permitted	
Gallery	not permitted	permitted	permitted	permitted	permitted	
Arcade	not permitted	not permitted	permitted	permitted	permitted	
k. BUILDING CONFIGURATION (see Table 8)						
Principal Building	1 to 2 Stories	4 Stories max	7 Stories max, 1 min	15 Stories, Note 2, 1 min	20 Stories, Note 1, 1 min	
Outbuilding	not applicable	2 Stories max	2 Stories max	2 Stories max	not applicable	

ZONE
LOT
DISPOSITION
CONFIGURATION
ARTICLE 5
ARTICLE 2, 3, 4

Note 1: Not in excess of 20 stories without specific site plan review and approval by Town Council.
Note 2: Not in excess of 15 stories without specific site plan review and approval by Town Council.
Note 3: Accessory Structures shall be treated as Principal Buildings.

TABLE 15A. FORM-BASED CODE GRAPHICS - OS - OPEN SPACE

OS



(see Table 1)

k. BUILDING CONFIGURATION (see Table 8)	
Principal Building	2 stories max.
Outbuilding	not applicable.
f. LOT OCCUPATION (see Table 14f)	
Lot Width	variable
i. BUILDING DISPOSITION (see Table 9)	
Edgeyard	permitted
Sideyard	not permitted
Rearyard	not permitted
Courtyard	not permitted
g. SETBACKS - PRINCIPAL BUILDING (see Table 14g)	
(g.1) Front Setback Principal	10 ft. min
(g.2) Front Setback Secondary	5 ft. min
(g.3) Side Setback	5 ft. min
(g.4) Rear Setback	5 ft. min
h. SETBACKS - OUTBUILDING (see Table 14h)	
(h.1) Front Setback	not applicable
(h.2) Side Setback	not applicable
(h.3) Rear Setback	not applicable
j. PRIVATE FRONTAGES (see Table 7)	
Common Lawn	permitted
Porch	permitted
Terrace or Lightwell.	not permitted
Forecourt	permitted
Stoop	permitted
Shopfront	permitted
Gallery	not permitted
Arcade	not permitted

Refer to Summary Table 14

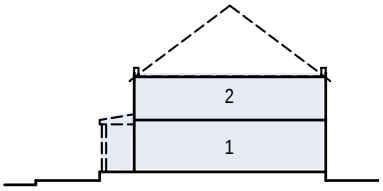
PARKING PROVISIONS
See Table 10 & Table 11

*or 15 ft. from center line of alley

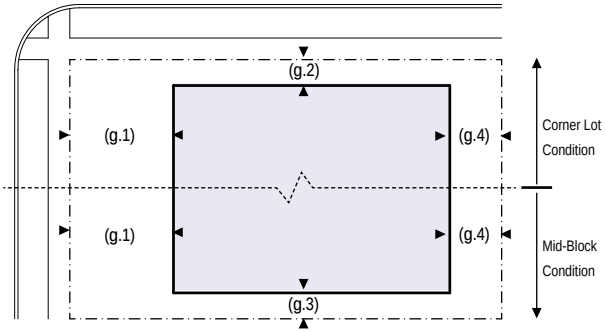
"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums

Vinyl Siding Notes:
1. Vinyl exterior material may be used in areas not in view of the public, such as service areas.
2. Elements such as vinyl trim, vinyl windows, decorative vents, and the like are permitted.

BUILDING CONFIGURATION
1. Stories exclude Attics and raised basements.



SETBACKS - PRINCIPAL BLDG
1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.
2. Facades shall be built along the Principal Frontage.
3. Accessory Structures shall be treated as Principal Buildings.



SETBACKS - OUTBUILDING
1. Not applicable

PARKING PLACEMENT
1. Uncovered parking spaces may be provided within the second and third Layer as shown in the diagram (see Table 17d).
2. Covered parking shall be provided within the second or third Layer as shown in the diagram (see Table 17d). .
3. Trash containers shall be stored within the third Layer.

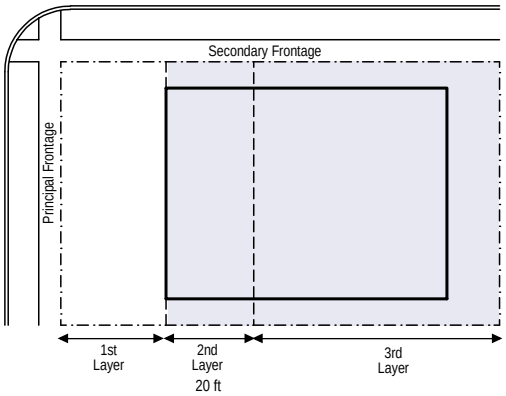
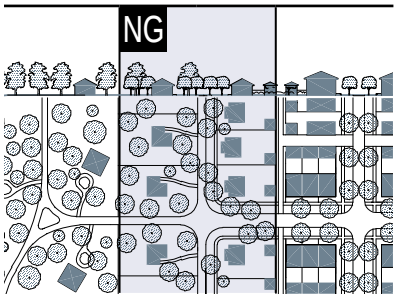


TABLE 15B. FORM-BASED CODE GRAPHICS - NG - NEIGHBORHOOD GENERAL



(see Table 1)

k. BUILDING CONFIGURATION (see Table 8)	
Principal Building	4 stories max.
Outbuilding	2 stories max.
f. LOT OCCUPATION (see Table 14f)	
Lot Width (Note 1)	25 ft. min 120 ft. max
i. BUILDING DISPOSITION (see Table 9)	
Edgeyard	permitted
Sideyard	permitted
Rearyard	permitted
Courtyard	not permitted
g. SETBACKS - PRINCIPAL BUILDING (see Table 14g)	
(g.1) Front Setback Principal	15 ft. min
(g.2) Front Setback Secondary	12 ft min.
(g.3) Side Setback	0 ft min.
(g.4) Rear Setback	12 ft min.
h. SETBACKS - OUTBUILDING (see Table 14h)	
(h.1) Front Setback	20 ft. min. + bldg setback
(h.2) Side Setback	0 ft. or 3 ft at corner
(h.3) Rear Setback	3 ft. min
j. PRIVATE FRONTAGES (see Table 7)	
Common Lawn	permitted
Porch	permitted
Terrace or Lightwell.	not permitted
Forecourt	not permitted
Stoop	permitted
Shopfront	permitted
Gallery	permitted
Arcade	not permitted

Refer to Summary Table 14

PARKING PROVISIONS
See Table 10 & Table 11

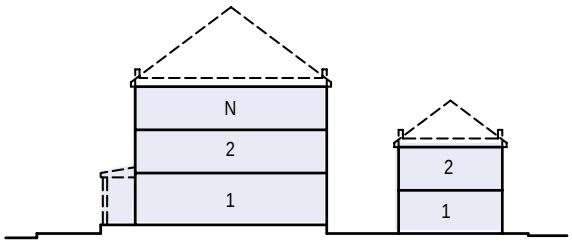
*or 15 ft. from center line of alley

"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums

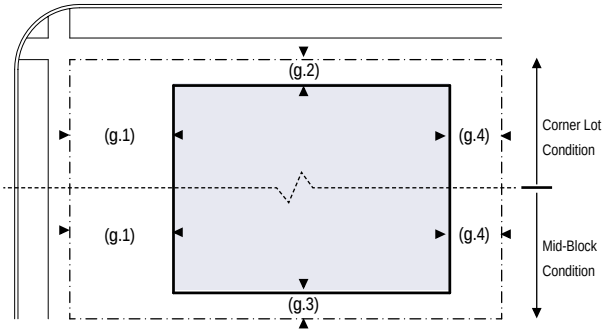
Note 1: Lot width reductions to 20' for single family and 18' for townhomes require specific site plan review and approval by Town Council.

Vinyl Siding Notes:
1. Vinyl siding is not permitted on single family homes and Townhouses except as permitted in vinyl siding note 3 below.
2. Vinyl exterior material may be used above the second story of an apartment, condominium or Mixed Use buildings and in areas not in view of the public, such as service areas.
3. Elements such as vinyl trim, vinyl windows, decorative vents, and the like are permitted.

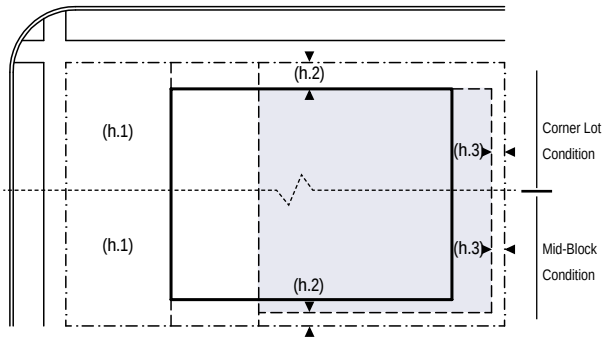
BUILDING CONFIGURATION
1. Stories exclude Attics and raised basements.



SETBACKS - PRINCIPAL BLDG
1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.
2. Facades shall be built along the Principal Frontage



SETBACKS - OUTBUILDING
1. The Elevation of the Outbuilding shall be distanced from the Lot lines as shown.



PARKING PLACEMENT
1. Uncovered parking spaces may be provided within the second and third Layer as shown in the diagram (see Table 17d).
2. Covered parking shall be provided within the second or third Layer as shown in the diagram (see Table 17d). Side-entry garages are permitted on corner lots and front-entry garages may be allowed.
3. Trash containers shall be stored within the third Layer.

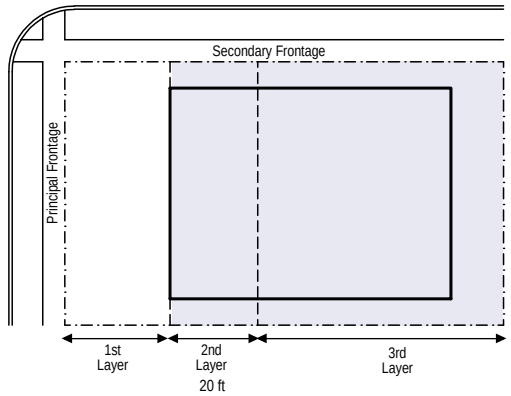
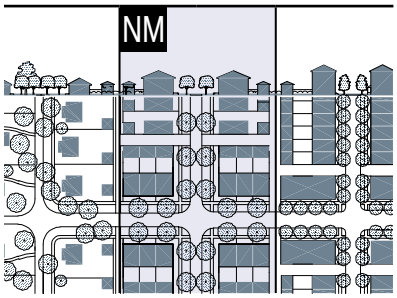


TABLE 15C. FORM-BASED CODE GRAPHICS - NM - NEIGHBORHOOD MIXED-USE



(see Table 1)

k. BUILDING CONFIGURATION (see Table 8)	
Principal Building	7 stories max, 1 min
Outbuilding	2 stories max.
f. LOT OCCUPATION (see Table 14f)	
Lot Width	18 ft min 400 ft max
i. BUILDING DISPOSITION (see Table 9)	
Edgeyard	permitted
Sideyard	permitted
Rearyard	permitted
Courtyard	permitted
g. SETBACKS - PRINCIPAL BUILDING (see Table 14g)	
(g.1) Front Setback Principal	6 ft. min.
(g.2) Front Setback Secondary	6 ft. min.
(g.3) Side Setback	0 ft. min.
(g.4) Rear Setback	3 ft. min.*
h. SETBACKS - OUTBUILDING (see Table 14h)	
(h.1) Front Setback	20 ft. min. + bldg. setback
(h.2) Side Setback	0 ft. min. or 3 ft at corner
(h.3) Rear Setback	3 ft. min
j. PRIVATE FRONTAGES (see Table 7)	
Common Lawn	permitted
Porch & Fence	permitted
Terrace or Lightwell.	permitted
Forecourt	permitted
Stoop	permitted
Shopfront	permitted
Gallery	permitted
Arcade	permitted
	Refer to Summary Table 14
PARKING PROVISIONS	
See Table 10 & Table 11	

*or 15 ft. from center line of alley

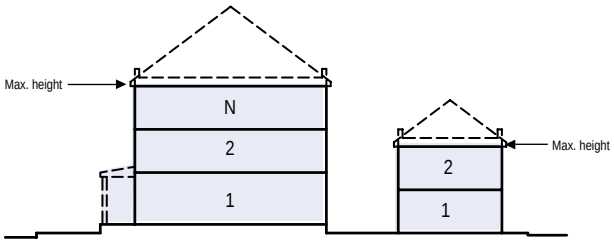
"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums

Vinyl Siding Notes:

1. Vinyl siding is not permitted on single family homes and Townhouses except as permitted in vinyl siding note 3 below.
2. Vinyl exterior material may be used above the second story of an apartment, condominium or Mixed Use buildings and in areas not in view of the public, such as service areas.
3. Elements such as vinyl trim, vinyl windows, decorative vents, and the like are permitted.

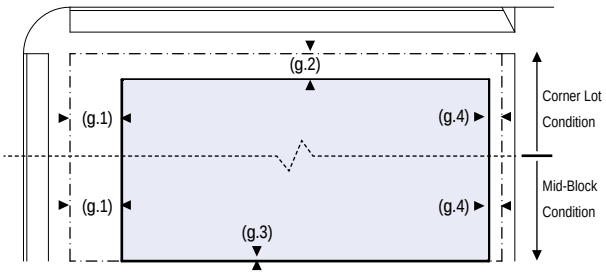
BUILDING CONFIGURATION

1. Stories exclude Attics and raised basements.



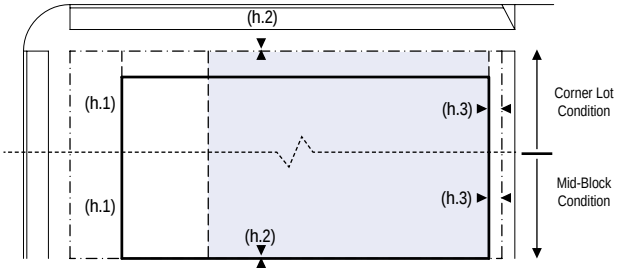
SETBACKS - PRINCIPAL BLDG

1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.
2. Facades shall be built along the Principal Frontage.



SETBACKS - OUTBUILDING

1. The Elevations of the Outbuilding shall be distanced from the Lot lines as shown.



PARKING PLACEMENT

1. Uncovered parking spaces may be provided within the third Layer as shown in the diagram (see Table 17d).
2. Covered parking shall be provided within the third Layer as shown in the diagram (see Table 17d).
3. Trash containers shall be stored within the third Layer.

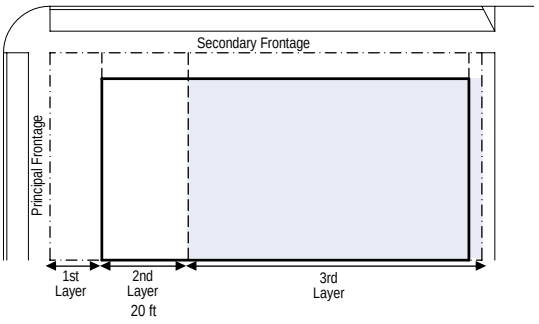
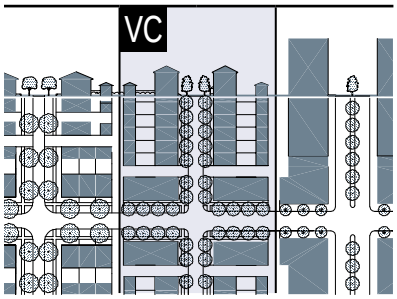


TABLE 15D. FORM-BASED CODE GRAPHICS - VC - VILLAGE CENTER



(see Table 1)

k. BUILDING CONFIGURATION (see Table 8)	
Principal Building	15 stories, Note 2, 1 min.
Outbuilding	2 stories max.
f. LOT OCCUPATION (see Table 14f)	
Lot Width: A-Grids	18 ft min 700 ft max
Lot Width: B-Grids	no max
i. BUILDING DISPOSITION (see Table 9)	
Edgeyard	permitted
Sideyard	permitted
Rearyard	permitted
Courtyard	permitted
g. SETBACKS - PRINCIPAL BUILDING (see Table 14g)	
(g.1) Front Setback Principal	0 ft. min.
(g.2) Front Setback Secondary	0 ft. min.
(g.3) Side Setback	0 ft. min.
(g.4) Rear Setback	3 ft. min.*
h. SETBACKS - OUTBUILDING (see Table 14h)	
(h.1) Front Setback	40 ft. max. from rear prop.
(h.1) Front Setback	40 ft. max. from rear prop.
(h.2) Side Setback	0 ft. min. or 2 ft at corner
(h.3) Rear Setback	3 ft. max.
j. PRIVATE FRONTAGES (see Table 7)	
Common Lawn	permitted
Porch	permitted
Terrace or Lightwell	permitted
Forecourt	permitted
Stoop	permitted
Shopfront	permitted
Gallery	permitted
Arcade	permitted
	Refer to Summary Table 14
PARKING PROVISIONS	
See Table 10 & Table 11	

*or 15 ft. from center line of alley

"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums.

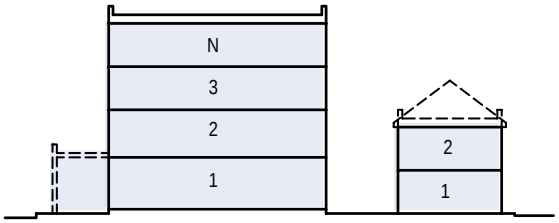
Note 2: Not in excess of 15 stories without specific site plan review and approval by Town Council.

Vinyl Siding Notes:

1. Vinyl siding is not permitted on single family homes and Townhouses except as permitted in vinyl siding note 3 below.
2. Vinyl exterior material may be used above the second story of an apartment, condominium or Mixed Use buildings and in areas not in view of the public, such as service areas.
3. Elements such as vinyl trim, vinyl windows, decorative vents, and the like are permitted.

BUILDING CONFIGURATION

1. Stories, exclude Attics mezzanines and basements.



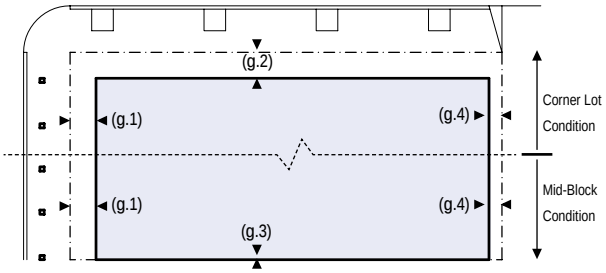
SETBACKS - PRINCIPAL BLDG

A-GRIDS

1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.
2. Facades shall be built along the Principal Frontage.

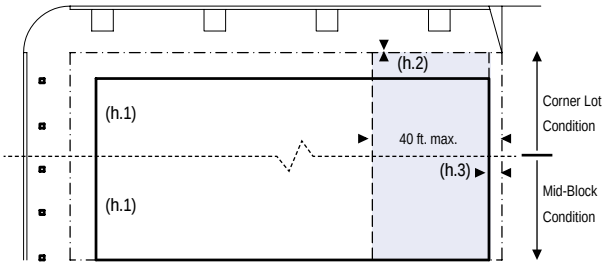
B-GRIDS

1. Multiple Buildings may be located on the same Lot.



SETBACKS - OUTBUILDING

1. The Elevations of the Outbuilding shall be distanced from the Lot lines as shown.



PARKING PLACEMENT

A-GRIDS

1. Uncovered parking spaces may be provided within the third Layer as shown in the diagram (see Table 17d).
2. Covered parking shall be provided within the third Layer as shown in the diagram (see Table 17d) except as noted above.
3. Trash containers shall be stored within the third Layer.

B-GRIDS

1. Uncovered parking spaces may be provided within any Layer as shown in the diagram (see Table 17d).
2. Trash containers shall be stored within the third Layer.

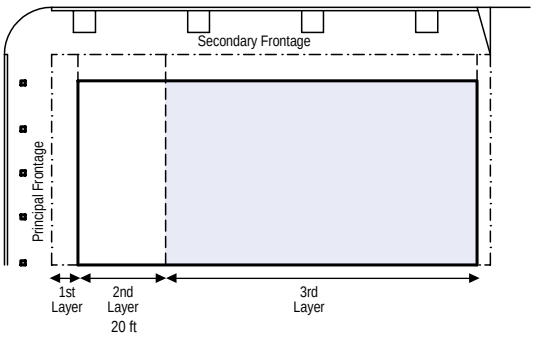
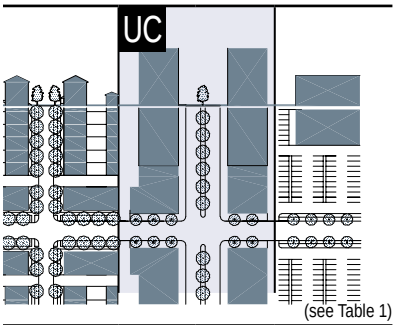


TABLE 15E. FORM-BASED CODE GRAPHICS - UC - URBAN CORE



(see Table 1)

k. BUILDING CONFIGURATION (see Table 8)	
Principal Building	20 stories, Note 1, 1 min.
Outbuilding	N/A
f. LOT OCCUPATION (see Table 14f)	
Lot Width: A-Grids	18 ft. min 700 ft. max
Lot Width: B-Grids	no max
i. BUILDING DISPOSITION (see Table 9)	
Edgeyard	permitted
Sideyard	not permitted
Rearyard	permitted
Courtyard	permitted
g. SETBACKS - PRINCIPAL BUILDING (see Table 14g)	
(g.1) Front Setback Principal	0 ft. min.
(g.2) Front Setback Secondary	0 ft. min.
(g.3) Side Setback	0 ft. min.
(g.4) Rear Setback	0 ft. min.
h. SETBACKS - OUTBUILDING (see Table 14h)	
Front Setback	N/A
Side Setback	N/A
Rear Setback	N/A
j. PRIVATE FRONTAGES (see Table 7)	
Common Lawn	permitted
Porch	permitted
Terrace or Lightwell	permitted
Forecourt	permitted
Stoop	permitted
Shopfront	permitted
Gallery	permitted
Arcade	permitted
	Refer to Summary Table 14
PARKING PROVISIONS	
See Table 10 & Table 11	

*or 15 ft. from center line of alley

"N" stands for any Stories above those shown, up to the maximum. Refer to metrics for exact minimums and maximums

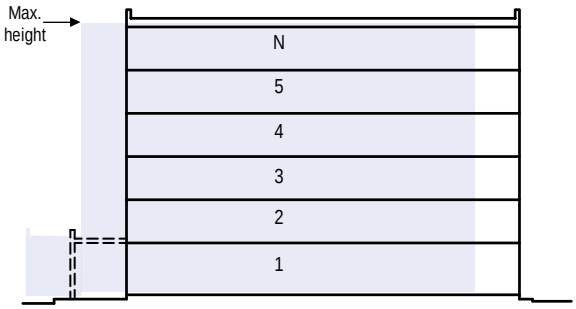
Note 1: Not in excess of 20 stories without specific site plan review and approval by Town Council.

Vinyl Siding Notes:

1. Vinyl siding is not permitted on single family homes and Townhouses except as permitted in vinyl siding note 3 below.
2. Vinyl exterior material may be used above the second story of an apartment, condominium or Mixed Use buildings and in areas not in view of the public, such as service areas.
3. Elements such as vinyl trim, vinyl windows, decorative vents, and the like are permitted.

BUILDING CONFIGURATION

1. Stories, exclude Attics mezzanines and basements.



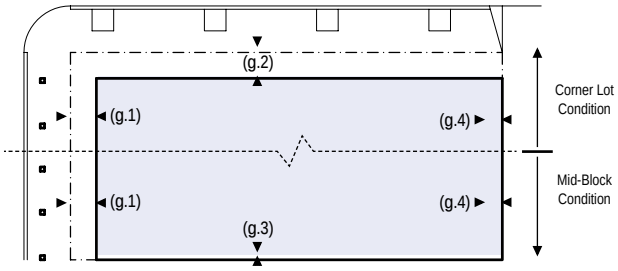
SETBACKS - PRINCIPAL BLDG

A-GRIDS

1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.
2. Facades shall be built along the Principal Frontage.

B-GRIDS

1. Multiple Buildings may be located on the same Lot



PARKING PLACEMENT

A-GRIDS

1. Uncovered parking spaces may be provided within the third Layer as shown in the diagram (see Table 17d).
2. Covered parking shall be provided within the third Layer as shown in the diagram (see Table 17d) except as noted above.
3. Trash containers shall be stored within the third Layer.

B-GRIDS

1. Uncovered parking spaces may be provided within any Layer as shown in the diagram (see Table 17d).
2. Trash containers shall be stored within the third Layer.

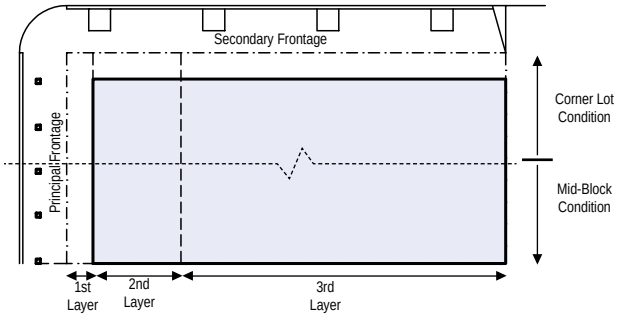
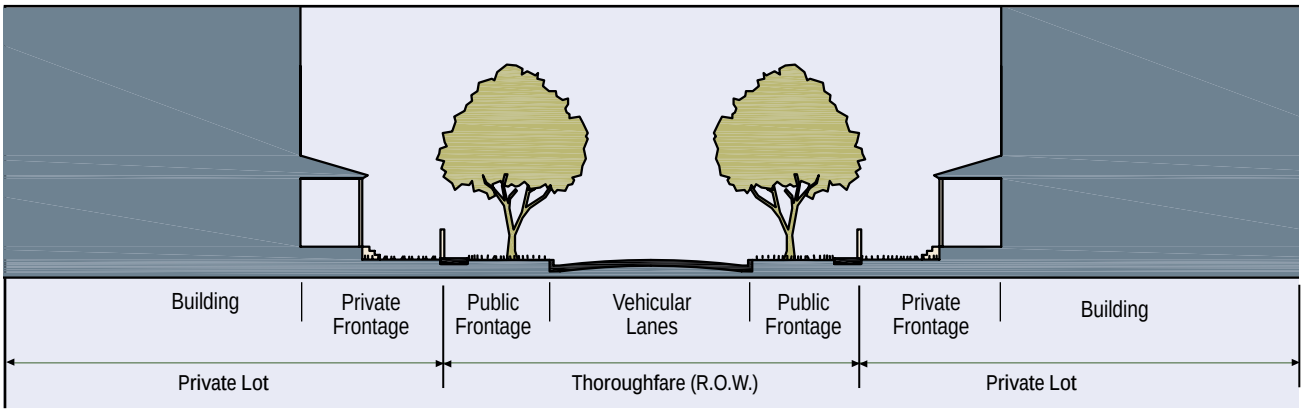
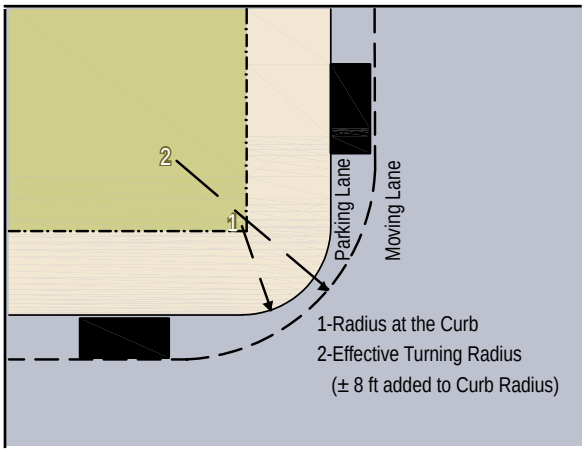


TABLE 17. DEFINITIONS ILLUSTRATED

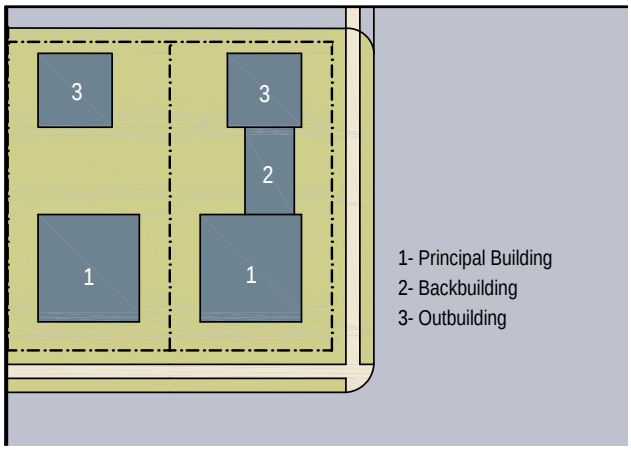
a. THOROUGHFARE & FRONTAGES



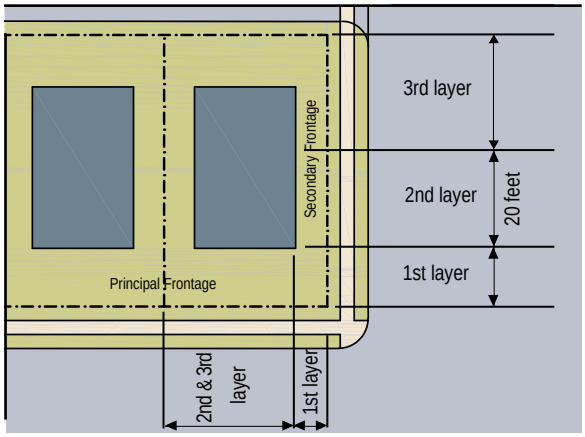
b. TURNING RADIUS



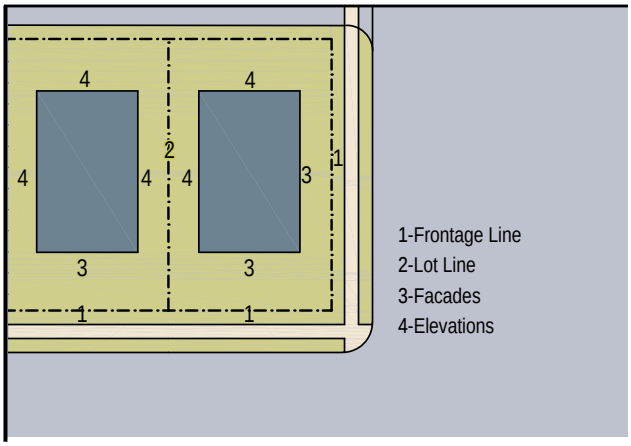
c. BUILDING DISPOSITION



d. LOT LAYERS



e. FRONTAGE & LOT LINES



f. SETBACK DESIGNATIONS

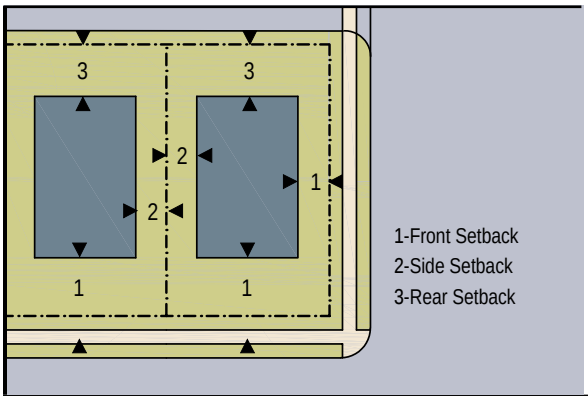


TABLE 18. SUSTAINABILITY - SOLAR ENERGY

Sustainability - Solar Energy. This table shows opportunities for the placement of types of solar-powered devices within the Sustainable Zones.

	OS	NG	NM	VC	UC	Specifics
Solar Farm 	.		.	.	.	
Roof Mounted Solar Panels 	.	.	.	.	.	
Streetscape Solar Panels 	.	.	.	.	.	Streetscape solar panels may be used in place of street trees

TABLE 19. SUSTAINABILITY - FOOD PRODUCTION

Sustainability - Food Production. This table shows ways of incorporating types of food production along the Sustainable Zones.

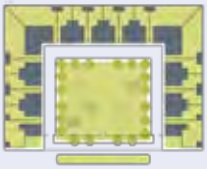
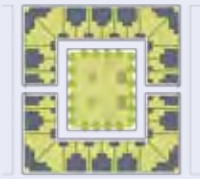
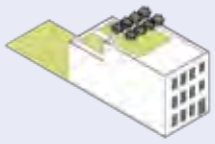
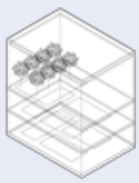
	OS	NG	NM	VC	UC	Specific
Farm 	▪					
Agricultural Plots 	▪	▪				
Vegetable Garden 		▪	▪	▪	▪	
Urban Farm 	▪	▪	▪	▪		
Community Garden 	▪	▪	▪	▪	▪	
Green Roof 		▪	▪	▪	▪	
Vertical Farm 			▪	▪	▪	

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TABLE 20. SUSTAINABILITY - COMPOSTING AND RECYCLING

	OS	NG	NM	VC	UC
On-Site Organics Processing	▪	▪			
Self-Drop Collection Systems					
Optional/Competitive Collection		▪			
Mandatory Curbside Collection			▪	▪	▪
Centralized Composting Systems	▪				
Smaller Regional Composting	▪	▪			
On-Site Processing		▪			
Re-Use Centers		▪	▪	▪	▪
Recycling Processing Centers		▪	▪	▪	▪
Once-Used Materials Storage		▪			
Transfer Stations		▪	▪	▪	▪
Disposal Facilities	Prohibited				

I. Article 2 / Administration
Sec. 2.3 / DEVELOPMENT APPROVALS

2.3.16 Sustainable Development Conditional Zoning District

A) ***General***

This Section establishes the procedures and standards applicable to the Town's Sustainable Development Conditional Zoning District SD-CZ.

B) ***General Applicability***

Before any development shall be designated as a Sustainable Development Conditional Zoning District SD-CZ on the Official Zoning District Map, it shall receive approval pursuant to the terms of this Section and Section 2.3.3 of this Ordinance.

C) ***Location***

A Sustainable Development Conditional Zoning District SD-CZ designation may be established on any land located in the Town and its ETJ that complies with all of the applicable standards of this Section and Section 3.3.4B), including the requirement that a Sustainable Development Conditional Zoning District SD-CZ include a minimum of 500 contiguous acres. An SD-CZ District may include other parcels of any size within 2000 feet of such parcel of at least 500 contiguous acres.

D) ***Unified Ownership or Control***

One person shall have all the responsibility and authority to make all the developer land use planning decisions for all land that is part of a Sustainable Development Conditional Zoning District SD-CZ. A person shall be considered to have such responsibility and authority for all lands in the Sustainable Development Conditional Zoning District SD-CZ either through ownership or by written agreement by and between such person and each owner of parcels comprising said lands agreeing to the conditions and standards of the adopting ordinance and the Sustainable Development Conditional Zoning District SD-CZ and granting the person such responsibility and authority. This one person, who shall be identified in the Sustainable Development Conditional Zoning District SD-CZ Re-Zoning Application as the "Responsible Person," will be the sole person from whom the Town will accept decisions regarding the Sustainable Development (SD) Plan and Sustainable Development Conditional Zoning District SD-CZ, including amendments, modifications or supplements thereof or the addition of lands thereto. The SD Plan shall provide the process for effecting a change or succession of Responsible Person for the purposes of a specific district. A parcel or parcels (the "Parcel") of any size may be added to an existing Sustainable Development Conditional Zoning District if (i) any portion of the Parcel is within two thousand (2000) feet of such existing district, (ii) the

Responsible Person of the existing district consents in writing and (iii) the Town Council approves a rezoning of the Parcel to Sustainable Development Conditional Zoning District SD-CZ in accordance with Sections 2.3.3 and 2.3.16. In such event the SD Plan approved for the existing SD-CZ District shall be applicable to the Parcel(s) added to such existing district, and the development densities authorized in the existing SD Plan (including number of residential units and authorized square footage of other land uses) shall be increased on a pro-rata basis based on the size of the Parcel(s) added to the district, unless the Town Council provides otherwise with the consent of the Responsible Person.

E) ***Procedures***

1) *Overview.* Approval of a Sustainable Development Conditional Zoning District SD-CZ shall constitute an amendment to the Official Zoning District Map. It shall be controlled by an SD Plan that is approved as part of the Sustainable Development Conditional Zoning District SD-CZ designation and that designates the appropriate form and scale of development within the Sustainable Development Conditional Zoning District SD-CZ. The procedure requires review and recommendation of approval or disapproval by the Planning Board and approval, approval with conditions, or disapproval by the Town Council.

2) *General.* The procedures for initiation of the application, the application contents, fees, submission and review by Town staff and/or consulting firms on retainer, public notification, review by the Planning Board and then approval, approval with conditions, or disapproval by the Town Council at a public hearing(s) shall comply with the requirements of Sec. 2.2 *Common Review Procedures,* Sec 2.2.7 *Neighborhood Meeting* and Sec. 2.3.16 (F) *Sustainability Standards*.

F) ***Standards***

1) In return for greater flexibility in site design requirements, the Sustainable Development Conditional Zoning District SD-CZ is expected to deliver exceptional quality designs on a large-scale basis that:

a) facilitate the integration of a broad array of uses;

b) preserve and enhance critical environmental and natural resources, including water resources and ecosystem services in the stream network flowing through the district;

c) incorporate creativity in the design and configuration of buildings, roads, public space and infrastructure; and

d) employ innovative techniques and practices aimed at maximizing efficiency in the use of energy and materials.

In short, the Sustainable Development Conditional Zoning District SD-CZ is expected to provide a high quality of life through the creation of a healthy, living landscape within a high-intensity mixed-used community.

2) The purpose, intent and scale of the Sustainable Development Conditional Zoning District SD-CZ are unique from the other districts established in Sec. 3.2. Thus, the unique nature of the Sustainable Development Conditional Zoning District SD-CZ necessitates alternative standards, regulations, specifications, details, designs, and criteria (the "Sustainability Standards") to meet the spirit and intent of this Ordinance. These Sustainability Standards, which shall be set forth in the SD Plan and may be established pursuant to paragraph 3) hereafter, may:

a) specify the nature, density, maximums on development, minimums on development, development thresholds, and design characteristics proposed for the Sustainable Development Conditional Zoning District SD-CZ;

b) address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks;

c) facilitate a full diversity of building types, thoroughfare types, and public space types with appropriate characteristics for their respective locations;

d) facilitate the restoration and enhancement of the environment and natural resources through both accepted practice and innovative practices; and

e) modify and supersede the provisions of this Ordinance or any land development document referenced or incorporated therein, or other land development ordinances or policies of the Town. However, an SD Plan and development pursuant thereto shall conform to all applicable Town ordinances and policies, including the UDO, except to the extent that ordinances or policies, including the UDO, are varied in the approved SD Plan or in Sustainability Standards adopted pursuant to paragraph 3) hereafter. An SD Plan and the Sustainability Standards may not modify the requirements that an SD-CZ District include a minimum of 500 contiguous acres.

3) The Sustainability Standards and other provisions of the SD Plan, as well as Sustainability Standards established pursuant to this paragraph F) 3), shall form the basis for a development of exceptional quality and innovation that is an

enhancement to the welfare of the Town's citizens. At any time, and from time to time:

a) with the consent of the Responsible Person, the Town Council may adopt additional or modified Sustainability Standards for an approved SD-CZ District following review and recommendation by the Planning Board;

b) where an SD Plan requires additional or modified Sustainability Standards for an approved SD-CZ District, site plan approval, subdivision approval, construction or grading shall not commence within such SD-CZ District unless and until the required Sustainability Standards are adopted as provided in the SD Plan; with the consent of the Responsible Person, the Town Council shall review and consider and may adopt such additional and modified Sustainability Standards following review and recommendation by the Planning Board;

c) as an amendment to this Ordinance, the Town Council may adopt elective Sustainability Standards for SD-CZ districts, which may, at the election of a Responsible Person, (i) be incorporated, in whole or in part, into an approved SD Plan for an existing SD-CZ district or (ii) be included within an SD Plan for a proposed SD-CZ district. In the case of an approved SD Plan, the elective Sustainability Standards so incorporated may provide that they serve as a supplement to the provisions of the SD Plan and serve as an alternative to the application of any inconsistent provisions of the Plan;

d) actions by the Town Council under the foregoing subsections 2.3.16 F) 3) a), b) and c) shall be taken in accordance with the provisions of Sec. 2.3.2 applicable to Amendments to the Text of this Ordinance. It is provided, however, that such actions may be proposed only by the Town Council, the Planning Director, or the Responsible Person; and

e) this Subsection 2.3.16 does not reduce any authority that the Town otherwise has to amend its UDO or an approved SD-CZ rezoning and SD Plan; the vested rights applicable to a SD-CZ rezoning and SD Plan shall be determined by other applicable law and by the provisions of a developer agreement if any.

G) ***SD Plan***

To the degree necessary and appropriate, the SD Plan and the Sustainability Standards shall include, but shall not be limited to, requirements related to:

1) standards a) through d) set forth in the foregoing Section 2.3.16 F) 1);

2) design guidelines;

3) parks, open space and greenways;

4) water resources and ecosystem services;

5) comprehensive signage;

6) landscaping conditions;

7) parking requirements; and

8) public infrastructure improvements and public facilities.

The SD Plan shall also include a map depicting the concept for the development of the property. To the extent that provisions of the SD Plan or Sustainability Standards vary the provisions of this Ordinance, or other ordinances or policies of the Town, the provisions of the SD Plan or Sustainability Standards shall be applicable.

H) ***Placement of Sustainable Development Conditional Zoning District SD-CZ Designation on Official Zoning District Map***

After final approval of the adopting ordinance for the Sustainable Development Conditional Zoning District SD-CZ designation and the SD Plan, the Planning Director shall amend the Official Zoning District Map to show a Sustainable Development Conditional Zoning District SD-CZ designation.

I) ***Effect***

Approval of an adopting ordinance for Sustainable Development Conditional Zoning District SD-CZ designation and the SD Plan shall constitute an Official Zoning District Map designation and recognition by the Town that the landowner may proceed, consistent with the SD Plan, to develop the land. The next appropriate development approval for the land is a site plan or subdivision plan.

J) ***Deviation to SD Plan***

When appropriate to further the goals of an approved SD-CZ District and its SD Plan, the Planning Director may approve deviations of up to ten percent (10%) with respect to any standard, design, configuration, disposition, or matter established or quantified in an SD Plan or the Sustainability Standards, except that this authority shall not apply to density, maximums on development minimums on development or thresholds. Any other modification, revision or supplementation of an SD Plan or the Sustainability Standards shall require the approval of the Town Council following review by the Planning Board.

K) ***Amendment to Sustainable Development Conditional Zoning District SD-CZ***

An amendment to the Official Zoning District Map for a Sustainable Development Conditional Zoning District SD-CZ may be made only pursuant to the procedures and standards for its original approval, and specifically Sec. 2.3.16 (D) *Unified Ownership or Control*.

II. Article 3 / Zoning Districts
Sec. 3.2 / ZONING DISTRICTS ESTABLISHED

3.2.8 Conditional Zoning Other Districts

A) *CB-CZ Conservation Buffer District; and*

B) *SD-CZ Sustainable Development Conditional Zoning District.*

III. Article 3 / Zoning Districts
Sec. 3.3 / DISTRICT PURPOSES

3.3.4 Other Districts

B) ***Sustainable Development Conditional Zoning District***
The purpose and intent of the Sustainable Development Conditional Zoning District SD-CZ is to encourage the design of a sustainable community through the application of design approaches that allow and encourage flexibility, an intensity of uses, integration among uses, restoration and enhancement of the environment and natural resources, transit-oriented development, pedestrian-oriented development and the efficient use of resources, energy and materials. This shall be accomplished by allowing design flexibility and innovative approaches to environmental stewardship incorporated in a plan for development that:

1) addresses the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks;

2) facilitates a full diversity of building types, thoroughfare types, and public space types with appropriate characteristics for their respective locations; and

3) facilitates the restoration and enhancement of the environment and natural resources.

Further, because the aforementioned design standards are best implemented on a large-scale basis, a purpose and intent of the Sustainable Development Conditional Zoning District SD-CZ is to provide sufficient lands for such implementation. To this end, the Sustainable Development Conditional Zoning District SD-CZ must include a minimum of 500 contiguous acres. An SD-CZ

District may include other parcels of any size within 2000 feet of such parcel of at least 500 contiguous acres.

The unique purpose and intent, and the scale and standards to which the development plan must adhere, distinguish the Sustainable Development Conditional Zoning District SD-CZ from the other districts established in Sec. 3.2. Therefore, the specific procedures and standards for the review of the Sustainable Development Conditional Zoning District SD-CZ are found in Sec. 2.3.16, *Sustainable Development Conditional Zoning District SD-CZ.*

IV. Article 4 / Use Regulations
Sec.4.2 / USE TABLE
Sec.4.2.2 / Use Table

The Use Table in Section 4.2.2 shall be amended to include among the Zoning Districts shown at the top of the table "SD" to denote the **Sustainable Development Conditional Zoning District** as a Zoning District in the "Other" category and to place a double asterisk (**) in the block under SD for each use listed within all of the Use Types, with the exception of the following uses: Adult Establishment; Airplane Landing Strip; Airport; Sanitary Landfill; Land Clearing and Inert Debris Landfill; Mobile Homes; and Asphalt or Concrete Plant. Further, the following shall be inserted below the table:

"**Uses allowed as a matter-of-right in a Sustainable Development Conditional Zoning District shall be those uses authorized in the Sustainable Development Plan approved for such district. Standards applicable to each such use shall be as provided in this Use Table unless modified by the respective Sustainable Development Plan."

V. Article 4 / Use Regulations
Sec.4.3 / Use Classifications
Sec.4.3.1 / Residential Uses

A) ***Accessory Apartment***

A secondary dwelling unit either (1) inside of or added to an existing single-family dwelling, (2) in an accessory structure on the same lot as the principal single-family dwelling, (3) on any floor except for the ground floor of a commercial use in the B1 Neighborhood Business District, B2 Downtown Business District, MEC-CZ Major Employment Center District, TND-CZ Traditional Neighborhood District, PUD-CZ Planned Unit Development District, or (4) on any floor of a commercial use in the SD-CZ Sustainable Development Conditional Zoning District. An accessory apartment is a complete, independent living facility equipped with a kitchen and with provisions for sanitation and sleeping. An accessory structure may include a loft.

VI. Article 5 / Measurements

Sec.5.1 / TABLE OF INTENSITY AND DIMENSIONAL STANDARDS
Sec.5.1.4 / Other Development Districts

The table for "Other Development Districts" in Section 5.1.4 shall be amended to include "SD" to denote the **Sustainable Development Conditional Zoning District** under "Use" and below "*See Sec. 6.1, Watershed Protection Overlay Districts." "All uses" shall be inserted below "SD" and to the right thereof shall be inserted "All Intensity and Dimensional Standards shall be as set forth in the Sustainable Development Plan approved for the respective Sustainable Development Conditional Zoning District."

VII. TECHNICAL AMENDMENTS

A) Each of the following Sections shall be amended to insert "SD-CZ" immediately after "PUD-CZ" at each place in the respective Section at which "PUD-CZ" appears:

2.1.1 A) 2) b)
2.1.2 A) 2) b)
2.1.7 A) 2)
2.2.11 E)
2.3.15 B)
4.1.2 A)
4.5.6
4.5.6 A)
4.5.6 D)
4.5.6 F)
4.6.1 C) 1) a)
5.2.2 A) 2)
8.2.6
8.3.6 B) 5)
8.4.2
9.1.2

B) Section 2.3.1 shall be amended to insert within the Table under "Development Permit" and following "Traditional Neighborhood District (TND-CZ) (Sec. 2.3.4)" the words "Sustainable Development Conditional Zoning District (SD-CZ) (Sec. 2.3.16)"; to place the letter "R" under each of "Planning Director/Technical Review Committee" and "Planning Board"; and to place the letter "D" under "Town Council."

C) Section 2.3.3 J) 2) shall be amended to insert "or Section 2.3.16 J) *Minor Deviation to a SD Plan* or Section 2.3.16 K) *Modification of SD Plan*" following "2.3.4(M) *Minor Deviations*".

D) Section 2.3.16, **Site Work Prior to Development Approvals**, shall be re-numbered to "Section 2.3.17".

E) Section 2.3.17, **Utility Service**, shall be re-numbered to "Section 2.3.18".

F) Sections 4.3.1 A), 4.4.5 F), and 4.6.1 C) 3) shall each be amended to insert ", SD-CZ Sustainable Development Conditional Zoning District," immediately following "TND-CZ Traditional Neighborhood District" at each place where "TND-CZ Traditional Neighborhood District" appears.

G) Section 5.2.2 F) shall be amended to insert at the beginning of the paragraph "Except in Sustainable Development Conditional Zoning District (SD-CZ)," and to replace "I" with "i" in "internal."

H) Section 8.3.6 B) 5) shall be amended to substitute "Section 8.4.4" for "Section 8.5.3."

I. Article 2 / Administration
Sec. 2.3 / DEVELOPMENT APPROVALS

2.3.16 Sustainable Development Conditional Zoning District

A) ***General***

This Section establishes the procedures and standards applicable to the Town's Sustainable Development Conditional Zoning District SD-CZ.

B) ***General Applicability***

Before any development shall be designated as a Sustainable Development Conditional Zoning District SD-CZ on the Official Zoning District Map, it shall receive approval pursuant to the terms of this Section and Section 2.3.3 of this Ordinance.

C) ***Location***

A Sustainable Development Conditional Zoning District SD-CZ designation may be established on any land located in the Town and its ETJ that complies with all of the applicable standards of this Section and Section 3.3.4B), including the requirement that a Sustainable Development Conditional Zoning District SD-CZ include a minimum of 500 contiguous acres. An SD-CZ District may include other parcels of any size within 2000 feet of such parcel of at least 500 contiguous acres.

D) ***Unified Ownership or Control***

One person shall have all the responsibility and authority to make all the developer land use planning decisions for all land that is part of a Sustainable Development Conditional Zoning District SD-CZ. A person shall be considered to have such responsibility and authority for all lands in the Sustainable Development Conditional Zoning District SD-CZ either through ownership or by written agreement by and between such person and each owner of parcels comprising said lands agreeing to the conditions and standards of the adopting ordinance and the Sustainable Development Conditional Zoning District SD-CZ and granting the person such responsibility and authority. This one person, who shall be identified in the Sustainable Development Conditional Zoning District SD-CZ Re-Zoning Application as the "Responsible Person," will be the sole person from whom the Town will accept decisions regarding the Sustainable Development (SD) Plan and Sustainable Development Conditional Zoning District SD-CZ, including amendments, modifications or supplements thereof or the addition of lands thereto. The SD Plan shall provide the process for effecting a change or succession of Responsible Person for the purposes of a specific district. A parcel or parcels (the "Parcel") of any size may be added to an existing Sustainable Development Conditional Zoning District if (i) any portion of the Parcel is within two thousand (2000) feet of such existing district, (ii) the

Responsible Person of the existing district consents in writing and (iii) the Town Council approves a rezoning of the Parcel to Sustainable Development Conditional Zoning District SD-CZ in accordance with Sections 2.3.3 and 2.3.16. In such event the SD Plan approved for the existing SD-CZ District shall be applicable to the Parcel(s) added to such existing district, and the development densities authorized in the existing SD Plan (including number of residential units and authorized square footage of other land uses) shall be increased on a pro-rata basis based on the size of the Parcel(s) added to the district, unless the Town Council provides otherwise with the consent of the Responsible Person.

E) ***Procedures***

1) *Overview.* Approval of a Sustainable Development Conditional Zoning District SD-CZ shall constitute an amendment to the Official Zoning District Map. It shall be controlled by an SD Plan that is approved as part of the Sustainable Development Conditional Zoning District SD-CZ designation and that designates the appropriate form and scale of development within the Sustainable Development Conditional Zoning District SD-CZ. The procedure requires review and recommendation of approval or disapproval by the Planning Board and approval, approval with conditions, or disapproval by the Town Council.

2) *General.* The procedures for initiation of the application, the application contents, fees, submission and review by Town staff and/or consulting firms on retainer, public notification, review by the Planning Board and then approval, approval with conditions, or disapproval by the Town Council at a public hearing(s) shall comply with the requirements of Sec. 2.2 *Common Review Procedures,* Sec 2.2.7 *Neighborhood Meeting* and Sec. 2.3.16 (F) *Sustainability Standards*.

F) ***Standards***

1) In return for greater flexibility in site design requirements, the Sustainable Development Conditional Zoning District SD-CZ is expected to deliver exceptional quality designs on a large-scale basis that:

a) facilitate the integration of a broad array of uses;

b) preserve and enhance critical environmental and natural resources, including water resources and ecosystem services in the stream network flowing through the district;

c) incorporate creativity in the design and configuration of buildings, roads, public space and infrastructure; and

d) employ innovative techniques and practices aimed at maximizing efficiency in the use of energy and materials.

In short, the Sustainable Development Conditional Zoning District SD-CZ is expected to provide a high quality of life through the creation of a healthy, living landscape within a high-intensity mixed-used community.

2) The purpose, intent and scale of the Sustainable Development Conditional Zoning District SD-CZ are unique from the other districts established in Sec. 3.2. Thus, the unique nature of the Sustainable Development Conditional Zoning District SD-CZ necessitates alternative standards, regulations, specifications, details, designs, and criteria (the "Sustainability Standards") to meet the spirit and intent of this Ordinance. These Sustainability Standards, which shall be set forth in the SD Plan and may be established pursuant to paragraph 3) hereafter, may:

a) specify the nature, density, maximums on development, minimums on development, development thresholds, and design characteristics proposed for the Sustainable Development Conditional Zoning District SD-CZ;

b) address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks;

c) facilitate a full diversity of building types, thoroughfare types, and public space types with appropriate characteristics for their respective locations;

d) facilitate the restoration and enhancement of the environment and natural resources through both accepted practice and innovative practices; and

e) modify and supersede the provisions of this Ordinance or any land development document referenced or incorporated therein, or other land development ordinances or policies of the Town. However, an SD Plan and development pursuant thereto shall conform to all applicable Town ordinances and policies, including the UDO, except to the extent that ordinances or policies, including the UDO, are varied in the approved SD Plan or in Sustainability Standards adopted pursuant to paragraph 3) hereafter. An SD Plan and the Sustainability Standards may not modify the requirements that an SD-CZ District include a minimum of 500 contiguous acres.

3) The Sustainability Standards and other provisions of the SD Plan, as well as Sustainability Standards established pursuant to this paragraph F) 3), shall form the basis for a development of exceptional quality and innovation that is an

enhancement to the welfare of the Town's citizens. At any time, and from time to time:

a) with the consent of the Responsible Person, the Town Council may adopt additional or modified Sustainability Standards for an approved SD-CZ District following review and recommendation by the Planning Board;

b) where an SD Plan requires additional or modified Sustainability Standards for an approved SD-CZ District, site plan approval, subdivision approval, construction or grading shall not commence within such SD-CZ District unless and until the required Sustainability Standards are adopted as provided in the SD Plan; with the consent of the Responsible Person, the Town Council shall review and consider and may adopt such additional and modified Sustainability Standards following review and recommendation by the Planning Board;

c) as an amendment to this Ordinance, the Town Council may adopt elective Sustainability Standards for SD-CZ districts, which may, at the election of a Responsible Person, (i) be incorporated, in whole or in part, into an approved SD Plan for an existing SD-CZ district or (ii) be included within an SD Plan for a proposed SD-CZ district. In the case of an approved SD Plan, the elective Sustainability Standards so incorporated may provide that they serve as a supplement to the provisions of the SD Plan and serve as an alternative to the application of any inconsistent provisions of the Plan;

d) actions by the Town Council under the foregoing subsections 2.3.16 F) 3) a), b) and c) shall be taken in accordance with the provisions of Sec. 2.3.2 applicable to Amendments to the Text of this Ordinance. It is provided, however, that such actions may be proposed only by the Town Council, the Planning Director, or the Responsible Person; and

e) this Subsection 2.3.16 does not reduce any authority that the Town otherwise has to amend its UDO or an approved SD-CZ rezoning and SD Plan; the vested rights applicable to a SD-CZ rezoning and SD Plan shall be determined by other applicable law and by the provisions of a developer agreement if any.

G) ***SD Plan***

To the degree necessary and appropriate, the SD Plan and the Sustainability Standards shall include, but shall not be limited to, requirements related to:

1) standards a) through d) set forth in the foregoing Section 2.3.16 F) 1);

2) design guidelines;

3) parks, open space and greenways;

4) water resources and ecosystem services;

5) comprehensive signage;

6) landscaping conditions;

7) parking requirements; and

8) public infrastructure improvements and public facilities.

The SD Plan shall also include a map depicting the concept for the development of the property. To the extent that provisions of the SD Plan or Sustainability Standards vary the provisions of this Ordinance, or other ordinances or policies of the Town, the provisions of the SD Plan or Sustainability Standards shall be applicable.

H) ***Placement of Sustainable Development Conditional Zoning District SD-CZ Designation on Official Zoning District Map***

After final approval of the adopting ordinance for the Sustainable Development Conditional Zoning District SD-CZ designation and the SD Plan, the Planning Director shall amend the Official Zoning District Map to show a Sustainable Development Conditional Zoning District SD-CZ designation.

I) ***Effect***

Approval of an adopting ordinance for Sustainable Development Conditional Zoning District SD-CZ designation and the SD Plan shall constitute an Official Zoning District Map designation and recognition by the Town that the landowner may proceed, consistent with the SD Plan, to develop the land. The next appropriate development approval for the land is a site plan or subdivision plan.

J) ***Deviation to SD Plan***

When appropriate to further the goals of an approved SD-CZ District and its SD Plan, the Planning Director may approve deviations of up to ten percent (10%) with respect to any standard, design, configuration, disposition, or matter established or quantified in an SD Plan or the Sustainability Standards, except that this authority shall not apply to density, maximums on development minimums on development or thresholds. Any other modification, revision or supplementation of an SD Plan or the Sustainability Standards shall require the approval of the Town Council following review by the Planning Board.

K) ***Amendment to Sustainable Development Conditional Zoning District SD-CZ***

An amendment to the Official Zoning District Map for a Sustainable Development Conditional Zoning District SD-CZ may be made only pursuant to the procedures and standards for its original approval, and specifically Sec. 2.3.16 (D) *Unified Ownership or Control*.

II. Article 3 / Zoning Districts
Sec. 3.2 / ZONING DISTRICTS ESTABLISHED

3.2.8 Conditional Zoning Other Districts

A) *CB-CZ Conservation Buffer District; and*

B) *SD-CZ Sustainable Development Conditional Zoning District.*

III. Article 3 / Zoning Districts
Sec. 3.3 / DISTRICT PURPOSES

3.3.4 Other Districts

B) ***Sustainable Development Conditional Zoning District***
The purpose and intent of the Sustainable Development Conditional Zoning District SD-CZ is to encourage the design of a sustainable community through the application of design approaches that allow and encourage flexibility, an intensity of uses, integration among uses, restoration and enhancement of the environment and natural resources, transit-oriented development, pedestrian-oriented development and the efficient use of resources, energy and materials. This shall be accomplished by allowing design flexibility and innovative approaches to environmental stewardship incorporated in a plan for development that:

1) addresses the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks;

2) facilitates a full diversity of building types, thoroughfare types, and public space types with appropriate characteristics for their respective locations; and

3) facilitates the restoration and enhancement of the environment and natural resources.

Further, because the aforementioned design standards are best implemented on a large-scale basis, a purpose and intent of the Sustainable Development Conditional Zoning District SD-CZ is to provide sufficient lands for such implementation. To this end, the Sustainable Development Conditional Zoning District SD-CZ must include a minimum of 500 contiguous acres. An SD-CZ

District may include other parcels of any size within 2000 feet of such parcel of at least 500 contiguous acres.

The unique purpose and intent, and the scale and standards to which the development plan must adhere, distinguish the Sustainable Development Conditional Zoning District SD-CZ from the other districts established in Sec. 3.2. Therefore, the specific procedures and standards for the review of the Sustainable Development Conditional Zoning District SD-CZ are found in Sec. 2.3.16, *Sustainable Development Conditional Zoning District SD-CZ.*

IV. Article 4 / Use Regulations
Sec.4.2 / USE TABLE
Sec.4.2.2 / Use Table

The Use Table in Section 4.2.2 shall be amended to include among the Zoning Districts shown at the top of the table "SD" to denote the **Sustainable Development Conditional Zoning District** as a Zoning District in the "Other" category and to place a double asterisk (**) in the block under SD for each use listed within all of the Use Types, with the exception of the following uses: Adult Establishment; Airplane Landing Strip; Airport; Sanitary Landfill; Land Clearing and Inert Debris Landfill; Mobile Homes; and Asphalt or Concrete Plant. Further, the following shall be inserted below the table:

"**Uses allowed as a matter-of-right in a Sustainable Development Conditional Zoning District shall be those uses authorized in the Sustainable Development Plan approved for such district. Standards applicable to each such use shall be as provided in this Use Table unless modified by the respective Sustainable Development Plan."

V. Article 4 / Use Regulations
Sec.4.3 / Use Classifications
Sec.4.3.1 / Residential Uses

A) ***Accessory Apartment***

A secondary dwelling unit either (1) inside of or added to an existing single-family dwelling, (2) in an accessory structure on the same lot as the principal single-family dwelling, (3) on any floor except for the ground floor of a commercial use in the B1 Neighborhood Business District, B2 Downtown Business District, MEC-CZ Major Employment Center District, TND-CZ Traditional Neighborhood District, PUD-CZ Planned Unit Development District, or (4) on any floor of a commercial use in the SD-CZ Sustainable Development Conditional Zoning District. An accessory apartment is a complete, independent living facility equipped with a kitchen and with provisions for sanitation and sleeping. An accessory structure may include a loft.

VI. Article 5 / Measurements

Sec.5.1 / TABLE OF INTENSITY AND DIMENSIONAL STANDARDS
Sec.5.1.4 / Other Development Districts

The table for "Other Development Districts" in Section 5.1.4 shall be amended to include "SD" to denote the **Sustainable Development Conditional Zoning District** under "Use" and below "*See Sec. 6.1, Watershed Protection Overlay Districts." "All uses" shall be inserted below "SD" and to the right thereof shall be inserted "All Intensity and Dimensional Standards shall be as set forth in the Sustainable Development Plan approved for the respective Sustainable Development Conditional Zoning District."

VII. TECHNICAL AMENDMENTS

A) Each of the following Sections shall be amended to insert "SD-CZ" immediately after "PUD-CZ" at each place in the respective Section at which "PUD-CZ" appears:

2.1.1 A) 2) b)
2.1.2 A) 2) b)
2.1.7 A) 2)
2.2.11 E)
2.3.15 B)
4.1.2 A)
4.5.6
4.5.6 A)
4.5.6 D)
4.5.6 F)
4.6.1 C) 1) a)
5.2.2 A) 2)
8.2.6
8.3.6 B) 5)
8.4.2
9.1.2

B) Section 2.3.1 shall be amended to insert within the Table under "Development Permit" and following "Traditional Neighborhood District (TND-CZ) (Sec. 2.3.4)" the words "Sustainable Development Conditional Zoning District (SD-CZ) (Sec. 2.3.16)"; to place the letter "R" under each of "Planning Director/Technical Review Committee" and "Planning Board"; and to place the letter "D" under "Town Council."

C) Section 2.3.3 J) 2) shall be amended to insert "or Section 2.3.16 J) *Minor Deviation to a SD Plan* or Section 2.3.16 K) *Modification of SD Plan*" following "2.3.4(M) *Minor Deviations*".

D) Section 2.3.16, **Site Work Prior to Development Approvals**, shall be re-numbered to "Section 2.3.17".

E) Section 2.3.17, **Utility Service**, shall be re-numbered to "Section 2.3.18".

F) Sections 4.3.1 A), 4.4.5 F), and 4.6.1 C) 3) shall each be amended to insert ", SD-CZ Sustainable Development Conditional Zoning District," immediately following "TND-CZ Traditional Neighborhood District" at each place where "TND-CZ Traditional Neighborhood District" appears.

G) Section 5.2.2 F) shall be amended to insert at the beginning of the paragraph "Except in Sustainable Development Conditional Zoning District (SD-CZ)," and to replace "I" with "i" in "internal."

H) Section 8.3.6 B) 5) shall be amended to substitute "Section 8.4.4" for "Section 8.5.3."

ORD · 2023 (5)
023

AN ORDINANCE TO ADOPT ADDITIONAL SUSTAINABILITY STANDARDS FOR VERIDEA

BE IT ORDAINED by the Town Council of the Town of Apex as follows:

Section 1. The Environmental Enhancement Plan for Veridea is hereby adopted in accordance with Section 2.3.16.F.3.b of the Unified Development Ordinance and Section 3.1.2 of the Sustainable Development Plan adopted for Veridea by Rezoning #09CZ07 ("Veridea SD Plan").

Section 2. The lands that are the subject of the Ordinance are those certain lands described in Attachment "A" – Legal Description which is incorporated herein by reference.

Section 3. Pursuant to Section 3.3.4 of the Veridea SD Plan, the Environmental Enhancement Plan in Attachment "B" is hereby incorporated into the Veridea SD Plan and is applicable to the land described in Attachment "A" and to any lands subsequently rezoned to be included in the Veridea SD Plan.

Section 4. The ordinance shall be effective upon enactment on the 28th day of February 2023.

Introduced by Council Member Gantt

Seconded by Council Member Gray

Attest:

Allen Coleman, CMC, NCCCC
Town Clerk

TOWN OF APEX

Jacques K. Gilbert
Mayor

Approved As To Form:

Laurie L. Hohe
Town Attorney

APEX 1873 NORTH CAROLINA

Attachment A

Property Description

Tract 1 (Poe):

BEGINNING at a point which is the northeast corner of the 54.650 acre tract shown on Boundary Survey Prepared for Apex Land Assemblage, LLC by Riley Surveying, PA dated February 23, 2006 and recorded in Book of Maps 2006, Page 416, Wake County Registry; thence along the line of said 54.650 acre tract N 89° 54' 34" W 1794.53 feet to a point in the centerline of Big Branch; thence along the centerline of Big Branch, the following courses and distances denoted L87 through L156 on the following table:

CENTERLINE BIG BRANCH

LINE TABLE		
LINE	*BEARING*	*LENGTH*
L87	*N20° 48' 14" E*	*52.19*
L88	*N27° 36' 15" E*	*25.74*
L89	*N62° 55' 07" E*	*26.76*
L90	*N28° 59' 45" W*	*21.84*
L91	*N05° 57' 55" W*	*34.25*
L92	*N49° 54' 20" E*	*15.65*
L93	*N35° 51' 41" E*	*26.00*
L94	*N57° 55' 36" W*	*27.74*
L95	*S77° 58' 08" W*	*70.86*
L96	*N69° 24' 20" W*	*55.42*
L97	*N16° 11' 53" W*	*54.07*
L98	*N47° 25' 48" E*	*30.81*
L99	*S76° 51' 18" E*	*46.52*
L100	*N23° 56' 06" E*	*15.13*
L101	*N10° 54' 23" E*	*79.33*
L102	*N70° 46' 49" W*	*21.80*
L103	*N13° 56' 38" W*	*44.13*
L104	*N54° 44' 36" W*	*48.38*
L105	*S57° 22' 33" W*	*58.59*
L106	*S44° 34' 58" W*	*46.68*
L107	*N46° 23' 02" W*	*39.79*
L108	*N72° 28' 16" W*	*36.60*
L109	*S47° 16' 54" W*	*18.92*
L110	*N74° 34' 40" W*	*21.22*
L111	*N28° 53' 03" W*	*20.74*
L112	*N42° 52' 48" W*	*46.75*
L113	*N06° 56' 21" E*	*26.65*
L114	*N88° 28' 36" E*	*43.87*
L115	*N27° 02' 14" E*	*18.93*
L116	*N01° 17' 25" E*	*31.60*
L117	*N45° 56' 56" E*	*50.02*
L124	*N39° 28' 55" E*	*39.13*
L125	*N15° 03' 15" W*	*20.63*
L126	*N51° 44' 06" W*	*25.88*
L127	*N30° 05' 45" E*	*27.95*
L128	*S60° 15' 59" E*	*30.79*
L129	*S36° 33' 19" E*	*34.28*
L130	*S78° 44' 24" E*	*52.43*
L131	*N41° 37' 38" E*	*15.36*
L132	*N04° 45' 02" E*	*44.44*
L133	*N30° 38' 49" E*	*51.77*
L134	*N05° 02' 00" W*	*35.48*
L135	*S62° 06' 04" W*	*33.82*
L136	*N44° 56' 44" W*	*39.84*
L137	*N44° 38' 21" E*	*21.58*
L138	*N53° 06' 38 E*	*60.88*
L139	*N61° 14' 38" W*	*39.17*
L140	*N50° 48' 06" W*	*23.78*
L141	*N10° 02' 40" W*	*28.54*
L142	*N38° 49' 48" E*	*55.95*
L143	*N43° 06' 48" W*	*60.59*
L144	*N42° 29' 30" E*	*31.74*
L145	*N70° 52' 59" W*	*69.18*
L146	*N86° 33' 59" W*	*111.94*
L147	*N47° 57' 35" W*	*68.58*
L148	*N30° 54' 08" E*	*32.56*
L149	*N21° 23' 37" W*	*54.07*
L150	*N55° 27' 06" E*	*39.27*
L151	*N03° 24' 04" W*	*46.46*
L152	*N31° 43' 23" E*	*54.96*
L153	*N18° 31' 57" E*	*44.10*
L154	*N01° 09' 10" W*	*65.77*
L155	*N22° 16' 37" W*	*29.93*
L156	*N19° 16' 28" E*	*2.52*

L118	*N01° 25' 13" E*	*14.01*
L119	*N65° 15' 45" W*	*42.02*
L120	*N01° 22' 31" E*	*32.19*
L121	*N46° 17' 51" W*	*51.21*
L122	*N06° 49' 21" E*	*35.97*
L123	*N69° 35' 22" E*	*41.13*

Thence leaving the course of Big Branch, N 87° 20' 59" E 1317.72 feet to a point; thence N 00° 20' 59" E 1411.74 feet to a point; thence N 87° 17' 47" E 1396.96 feet to a point; thence S 02° 19' 40" W 527.05 feet to a point; thence S 90° 00' 00" W 750.13 feet to a point; thence S 00° 00' 00" W 967.73 feet to a point; thence N 77° 55' 24" E 389.22 feet to a point; thence N 01° 29' 14" E 148.65 feet to a point; thence N 65° 20' 41" E 538.98 feet to a point; thence S 02° 20' 59" W 179.73 feet to a point; thence S 02° 28' 41" W 1915.88 feet to a point; thence N 89° 11' 33" W 648.01 feet to the point and place of beginning and being all of Tract 3 containing 128.439 acres shown on a survey entitled "Exempt Division Survey – Property of Bobby and Elizabeth Poe" prepared by Riley Surveying, PA dated November 9, 2006.

Tract 2 (Poe):

BEING all of the 1.710 acre tract and the 0.042 acre tract shown as area in the right of way of Old Holly Springs – Apex Road shown on a map entitled "Property of Bobby W. and Elizabeth A. Poe, F.D. Prince, Sr, Trustee" recorded in Book of Maps 2002, Page 109, Wake County Registry, reference to which is hereby made for greater certainty of description and also being more particularly described as follows: Beginning at an existing nail in the northwest corner of the property of E.K. Huang, et. al. as described in Deed Book 6650, Page 866, Wake County Registry, and the southwest corner of the property of F.D. Prince, Sr. as described in Deed Book 8291, page 540, Wake County Registry, runs thence North 05 degrees 23 minutes 24 seconds East 64.21 feet to an iron pipe; thence North 74 degrees 31 minutes 24 seconds East 381.93 feet to an iron pipe; thence South 86 degrees 04 minutes 18 seconds East 863.27 feet to an iron pipe in the west right of way of SR 1153 (Old Holly Springs – Apex Road). Thence South 86 degrees 04 minutes 18 seconds East 30.32 feet to the centerline of SR 1153; thence along the centerline of SR 1153, South 12 degrees, 45 minutes 03 seconds West 60.72 feet to a point; thence with the north line of Huang, et. al., North 86 degrees 04 minutes 18 seconds West 30.32 feet to an existing iron pipe; thence North 86 degrees 04 minutes 18 seconds West 843.70 feet to an existing iron pipe; thence South 74 degrees 31 minutes 24 seconds West 394.54 feet to an existing iron pipe, the point and place of Beginning, and also being Tract 1 containing 1.754 acres shown on a survey entitled "Exempt Division Survey – Property of Bobby and Elizabeth Poe" prepared by Riley Surveying, PA dated November 9, 2006.

Tract 3 (Lyna):

BEGINNING at a point in the centerline of Old Holly Springs Apex Road, said point being calculated as follows: Beginning at a point in the line of Tract A shown on a map entitled "Proposed Subdivision and Recombination of Properties of Wake County" which is recorded in Book of Maps 1998, Page 782, Wake County Registry, said point also being North 45° 03' 47" East 1591.01 feet from the centerline of the intersection of Old Holly Springs Apex Road and

Woods Creek Road; thence North 09° 24' 42" East 362.56 feet to a point; thence North 85° 47' 44" West 162.21 feet to an iron pin in the centerline of Old Holly Springs Apex Road; thence along the centerline of Old Holly Springs Apex Road in an northerly direction along a left hand curve having a radius of 1963.49 feet an arc distance of 423.08 feet and chord bearing and distance of North 12° 12' 26" East 422.26 feet to the POINT AND PLACE OF BEGINNING: thence continuing along the centerline of said Old Holly Springs Apex Road in a northerly direction along a left hand curve having a radius of 1963.49 feet, an arc distance of 259.39 feet and a chord bearing and distance of North 02° 14' 59" East 259.20 feet; thence North 00° 00' 56" East 187.39 feet to a point; thence South 67° 20' 57" East 925.18 feet to a point; thence South 61° 30' 00" East 301.10 feet to a point; thence South 73° 33' 19" East 346.87 feet to a point; thence South 74° 36' 50" East 217.48 feet to a point; thence South 70° 39" 03" East 219.39 feet to a point; thence South 66° 06' 14" East 183.83 feet to a point; thence South 51° 10' 55" East 327.09 feet to a point in the centerline of White Oak Creek a/k/a Falls Branch Creek; thence along the centerline of said creek as follows: South 03° 23' 35" East 31.18 feet to a point; thence South 19° 58' 50" East 138.13 feet to a point; thence South 09° 01' 05" West 63.94 feet to a point; thence South 22° 49' 37" West 94.25 feet to a point; thence South 05° 19' 49" West 65.12 feet to a point; thence leaving the center line of said creek N 67° 48' 05" W 2481.26 feet to the point and place of BEGINNING and being all of Tract 1 containing 23.62 acres as shown on a survey entitled "Exempt Subdivision prepared for Apex Land Assemblage, LLC" by Riley Surveying, P.A. dated May 13, 2005.

Tract 4 (Reeves):

BEGINNING at a point in the line of Tract A shown on a map entitled "Proposed Subdivision and Recombination of Properties of Wake County" which is recorded in Book of Maps 1998, Page 782, Wake County Registry, said point also being North 45° 03' 47" East 1591.01 feet from the centerline of the intersection of Old Holly Springs Apex Road and Woods Creek Road, being the point and place of BEGINNING, thence North 09° 24' 42" East 362.56 feet to a point; thence North 85° 47' 44" West 162.21 feet to a point; thence North 85° 47' 44" West 30.48 feet to an iron pin in the centerline of Old Holly Springs Apex Road; thence along the centerline of Old Holly Springs Apex Road in an northerly direction along a left hand curve having a radius of 1963.49 feet, an arc distance of 423.08 feet and chord bearing and distance of North 12° 12' 26" East 422.26 feet to a point; thence leaving the centerline of said road South 67° 48' 05" East 2481.26 feet to a point in the centerline of White Oak Creek a/k/a Falls Branch Creek; thence along the centerline of said creek as follows South 05° 19' 49" West 39.71 feet to a point; thence South 17° 13' 42" West 52.16 feet to a point; thence South 63° 16' 26" West 25.88 feet to a point; thence South 17° 55' 39" West 68.74 feet to a point; thence leaving the line of said creek North 78° 00' 00" West 876.99 feet to a point; thence North 84° 10' 00" West 1370.01 feet to the point and place of BEGINNING, and being all of Tract 2 containing 23.62 acres as shown on a survey entitled "Exempt Subdivision prepared for Apex Land Assemblage, LLC" by Riley Surveying, P.A. dated May 13, 2005.

Tract 5 (Goodwin/ALAN):

BEING all that certain tract or parcel of land containing 54.650 acres, more or less, as shown on plat of survey entitled "Boundary Survey Prepared for Apex Land Assemblage, LLC" dated February 16, 2006 and revised February 23, 2006, prepared by Phillip W. Riley, professional Land Surveyor, of Riley Surveying, P.A. and recorded in Book of Maps 2006, Page 416, Wake County Registry, which plat is referenced for a more particular description.

Tract 6 (Adams):

BEING all that certain tract or parcel of land containing 86.334 acres as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 17, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Survey, P.A. and recorded in Book of Maps 2007, Page 2469, Wake County Registry, which plat is referenced for a more particular description.

Tract 7 (Cox):

BEING all that certain tract or parcel of land containing 65.210 acres as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 19, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Survey, P.A. and recorded in Book of Maps 2007, Page 2467, Wake County Registry, which plat is referenced for a more particular description.

Tracts 8 - 11 (Raymer):

BEING all those certain tracts or parcels of land designated as Tract I-A, containing 278.521 acres; Tract II, containing 2.134 acres; Tract III, containing 4.333 acres; and Tract 840' x 40', containing 0.626 acres, as shown on plat of survey entitled "Boundary Survey, Prepared for HH Trinity Apex Investments, LLC, Holly Springs Township, Wake County, NC" dated September 20, 2007, prepared by Phillip W. Riley, Professional Land Surveyor, of Riley Surveying, P.A. and recorded in Book of Maps 2007, Page 2468, Wake County Registry, which plat is referenced for a more particular description.

Tract 12 (Apex Town Square):

Being all of that certain tract of land lying in the Town of Apex, Holly Springs Township, Wake County, North Carolina, and being more particularly described as follows:

BEGINNING at an existing iron pipe at the northeastern corner of the now or formerly EMC Corporation property described in Deed recorded Book 2791, Page 428, Wake County Registry, said pipe also being located in the western line of the now or formerly Cash and Maynard Tract 1-A as shown on plat of survey recorded in Book of Maps 2003, Page 398, Wake County Registry (the "Plat"), said pipe being located North 02° 14' 00" East 271.08 feet from a common corner with said Cash and Maynard Tract 1-A and the now or formerly Cor Bregman property in said EMC Corporation's eastern property line as shown on the Plat; thence with said EMC Corporation's northern property line, South 89° 33' 33" West 1,910.66 feet to an existing iron pipe; thence with EMC Corporation's interior eastern property line, North 02° 07' 56" East

543.28 feet to an existing iron pipe, the southeastern corner of the now or formerly Colon Hobby property; thence with the eastern property line of said Colon Hobby property, North 00° 59' 41" East 734.53 feet to a set iron pipe marking the southwest corner of the said Cash and Maynard Tract 1-A; thence with said Cash and Maynard's Tract 1-A's southern property line and passing over an existing iron pipe at a distance of 15.08 feet, South 87° 48' 34" East 1,905.24 feet (total) to an existing iron pipe; thence continuing with said Cash and Maynard's Tract 1-A's interior western property line, South 01° 15' 42" West 1,190.09 feet to the point or place of BEGINNING, containing 53.939 acres, more or less, including any deed/survey gaps that may exist along the western line of the property herein described, as shown on the Plat, which Plat is referenced for a more particular description and being all of the property conveyed to Apex Town Square, LLC, by deed dated January 6, 2006, and recorded in Book 11766, Page 242, Wake County Registry.

Tract 13 (Bregman):

Lying and being in Town of Apex, Holly Springs Township, Wake County, North Carolina, and being more particularly described as follows:

BEGINNING at an existing iron pipe at a corner of the property now or formerly owned by Heartland Raleigh Apex U.S. 1 Limited Partnership (Book 4454, Page 666, Wake County Registry ["WCR"]), said pipe being located at NC Grid Coordinates: N=707,936.09; E2,048,195.68, and also being located South 31° 57' 19" West a distance of 2,292.37 feet (Grid) from NCGS Monument "TANK" (N=709,881.08; E2,049,408.93); from said POINT OF BEGINNING, running thence along and with the western line of the aforesaid Heartland Raleigh property the following courses and distances:

- South 02° 41' 34" West a distance of 537.74 feet to an existing iron pipe;
- South 02° 41' 34" West a distance of 100.28 feet to an existing iron pipe;
- South 02° 41' 34" West a distance of 2.08 feet to an existing iron pipe;
- South 02° 39' 56" West a distance of 37.18 feet to an existing iron pipe in the northern right-of-way of Technology Drive;

running thence along and with the northern right-of-way of Technology Drive the following courses and distances:

- along and with the arc of a curve to the left having a radius of 411.97 feet (Chord Bearing: South 60° 59' 56" West; Chord Distance: 224.57 feet) a distance of 227.45 feet to an existing iron pipe;
- South 45° 37' 55" West a distance of 288.89 feet to an existing iron pipe;
- South 44° 59' 17" West a distance of 549.68 feet to an existing iron pipe;
- South 44° 59' 17" West a distance of 70.66 feet to an existing iron pipe;
- along and with the arc of a curve to the right having a radius of 351.97 feet (Chord Bearing: South 57° 36' 33" West; Chord Distance: 151.96 feet) a distance of 153.17 feet to an existing iron pipe;
- along and with the arc of a curve to the right having a radius of 351.97 feet (Chord Bearing: South 79° 30' 30" West; Chord Distance: 115.27 feet) a distance of 115.79 feet to an existing iron pipe;
- South 88° 51' 29" West a distance of 164.77 feet to a point in the eastern line of property

now or formerly owned by Data General (Book 2791, Page 428, WCR);

leaving the northern right-of-way of Technology Drive and running thence along and with the eastern line of the aforesaid Data General property, North 02° 16' 29" East a distance of 1,200.00 feet to an existing iron pipe; continuing with the eastern line of the Data General property and running thence North 02° 17' 20" East a distance of 416.31 feet to an existing iron pipe in the southern line of the aforesaid Heartland Raleigh property; running thence along and with the southern line of the Heartland Raleigh property, South 86° 16' 48" East a distance of 1,218.14 feet to the POINT AND PLACE OF BEGINNING, containing 34.0763 acres, more or less, and being all of Tract 4 north of the right-of-way of Technology Drive, as shown on that certain survey entitled "Recombination And Minor Subdivision of Technology Drive Property For Thomas H. Byrd, III", dated December 11, 1996, and prepared by Niall W. Gillespie, R.L.S. (No. L-2629) (File Name: BYRDTOPO), to which survey reference is hereby made for a more particular description, and being the same property conveyed to Cor S. Bregman by deed recorded in Book 7409, Page 255, Wake County Registry, and being the same property conveyed to Cornelius S. Bregman and Kandes K. Bregman, as Trustees of the Cornelius and Kandes Bregman Trust, under Agreement dated September 20, 1999 by deed recorded in Book 10856, Page 2786, Wake County Registry, LESS AND EXCEPT (i) the property conveyed to Thomas H. Byrd, IV, and wife Lisa W. Byrd, by deed recorded in Book 10129, Page 491, Wake County Registry, and (ii) the property conveyed to the Department of Transportation by deed recorded in Book 8128, Page 153, Wake County Registry.

Tracts 14 - 15 (EMC):

Being all those certain tracts or parcels of land containing approximately 47.419 acres and identified as portions of parcel identification numbers 0740672147 (containing approximately 46.61 acres) and 0740570471 (containing approximately 77.66 acres), and as generally shown as Tract 2 on the map attached hereto as Schedule 1.

Tract 16 (Whitehouse):

Being all that certain tract or parcel of land containing approximately 27.47 acres and identified as parcel identification number 0740287376 and being the same property conveyed to Brenda P. Whitehouse, individually, a 55% undivided interest, and Brenda P. Whitehouse as Trustee of the Irene F. Prince Family Trust dated February 19, 2004, a 45% undivided interest, by deed recorded in Book 10680, Page 477, Wake County Registry.

Tract 17 (F. Prince):

Being all that certain tract or parcel of land containing approximately 75.63 acres and identified as parcel identification number 0740191376 and being the same property conveyed to F.D. Prince, Sr., sole Trustee, or his successors in trust, under the Frank Dixon Prince, Sr. Living Trust, dated October 20, 1988, and any amendments thereto, by deed recorded in Book 8291, Page 540, Wake County Registry.

Tract 18 (F. Prince):

Being all that certain tract or parcel of land containing approximately 21.36 acres and identified as parcel identification number 0730996270 and being the same property conveyed to F.D. Prince, Sr., sole Trustee, or his successors in trust, under the Frank Dixon Prince, Sr. Living Trust, dated October 20, 1988, and any amendments thereto, by deed recorded in Book 8291, Page 540, Wake County Registry.

Tract 19 (B. Prince):

Being all that certain tract or parcel of land containing approximately 32.06 acres and identified as parcel identification number 0741207566 and being the same property conveyed to William Ira Prince, III, by deed recorded in Book 2673, Page 652, Wake County Registry.

Tract 20 (J. Prince):

Being all that certain tract or parcel of land containing approximately 1.80 acres and identified as parcel identification number 0740293940 and being the same property conveyed to William I. Prince and Jean P. Prince, by deed recorded in Book 6217, Page 146, Wake County Registry.

Tracts 21-38 (Stephens):

Being all of those certain tracts or parcels of land identified as parcel identification numbers 0740886966, 0740991702, 0740992565, 0740991337, 0740991237, 0740990140, 0740980647, 0740982309, 0740982534, 0740982635, 0740982769, 0740982866, 0740982964, 0740982929, 0740992024, 0740992069, 0740992169 and 0740982764.

Tract 39 (Tew):

Being all that certain tract or parcel of land containing approximately 1.84 acres and identified as parcel identification number 0741203157 and being the same property conveyed to Kim Prince Tew, and husband, David Wayne Tew, by deed recorded in Book 10633, Page 1741, Wake County Registry.

Tract 40 (Huang):

Being all that certain tract or parcel of land containing approximately 13.33 acres and identified as parcel identification number 0740180091 and being the same property conveyed to Ruey Shiue Huang, Co-Trustee, and Edward K. Huang, Co-Trustee, of The Huang Family Trust, dated September 30, 2005, by deed recorded in Book 10656, Page 33, Wake County Registry.

Attachment B

Environmental Enhancement Plan
Veridea
Apex, NC

November 1, 2022

Revised: December 1, 2022

2nd Revision: January 31, 2023

3rd Revision: February 3, 2023

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INTRODUCTION

On May 10, 2011, the Town of Apex adopted the Veridea Sustainable Development Plan ("SD Plan"). As set forth in the SD Plan, Veridea will be planned and developed as a safe, healthy, resource efficient, pedestrian and transit-oriented mixed-use community in accordance with these Guiding Principles:

- Create economic value;
- Eliminate the concept of waste;
- Insist on a renewable future;
- Create delightful urban places; and
- Integrate nature throughout the community.

The SD Plan is intended to encourage a pattern of high density, pedestrian-friendly development in some areas of Veridea and the conservation or enhancement of natural space in other areas. This Environmental Enhancement Plan ("EEP"), required by SD Plan Article 3.1.2, sets forth specific environmental Sustainability Standards applicable to Veridea to guide the development of Veridea in accordance with the SD Plan pursuant to Article 2.3.16 F) 3) b) of the Apex Unified Development Ordinance ("UDO"). The Sustainability Standards set forth in this EEP are intended to protect natural resources and the environment in light of this development pattern and to address secondary and cumulative impacts associated with the infrastructure required for Veridea. Unless otherwise defined herein, capitalized terms used in this EEP have the same meaning assigned to them in the UDO and in the SD Plan.

A. Purpose of the Environmental Enhancement Plan (EPP)

Taken as a whole, the Sustainability Standards set forth in the SD Plan and the EEP will provide a level of environmental protection that equals or exceeds the traditional metrics set forth in the Apex UDO, State and federal laws. A development project of Veridea's scale affords a rare opportunity to meaningfully plan for a more resilient future, by implement best practices in diversifying land use, building design, waste avoidance, energy optimization, water conservation and protection, transportation and open space. The EEP provides a framework for sustainable development principles over the lifespan of this multi-phase project.

B. Balancing Growth and Environmental Protection

In an effort to provide a holistic review of the Town's growth projections and infrastructure planned to support that growth, the Town of Apex has prepared a Secondary and Cumulative Impact Master Mitigation Plan (the "SCIMMP"), which examines the potential secondary and cumulative impacts throughout the Town's Planning Area associated with planned infrastructure. The SCIMMP acknowledges that sprawling development—the secondary and cumulative impacts associated with water, sewer and transportation infrastructure—will result in adverse environmental impacts and points out that Apex has taken progressive steps to balance the competing goals of growth and environmental protection. As noted in the SCIMPP, Apex has implemented mitigation measures that limit sprawl by encouraging areas of higher density development, such as is represented by Veridea.

While the SCIMMP served as a point of reference, this EEP sets forth alternative standards as an enhancement and mitigation strategy to address the potential secondary and cumulative impacts noted in the SCIMMP that may occur within Veridea. Specifically, the EEP, like the measures noted in the SCIMPP, is intended to balance the goals of growth and environmental protection, by facilitating

compact, dense, development that, in certain respects, is inherently less impactful than automobile-oriented low density residential development and that also lends itself to innovative environmental protection measures. The compact urban spaces in Veridea will allow for the use of both structural and non-structural SCMs, including innovative techniques for urban areas, for water quality protection that meets or exceeds that required by the measures noted in the SCIMPP. Similarly, the compact urban spaces in Veridea will be pedestrian- bicycle- and transit-oriented and, for this reason, will result in decreased automobile use and vehicle miles traveled. The decreased dependence on automobiles within Veridea will, in turn, improve air quality through the reduction of vehicular traffic and mobile energy consumption. In combination, the SD Plan and the EEP will result in the creation of compact, walkable, vibrant, and interconnected community that balances the goals of development and environmental protection and offers residents and visitors a high quality of life.

C. Organization of the Environmental Enhancement Plan

The EEP is organized into the following sections:

1. Building Standards
2. Environmental and Natural Resource Protection
3. Stormwater & Surface Water Management
4. Land Management
5. Air Quality Protections

I. BUILDING STANDARDS

A. Energy

1. Non-Residential and Mixed-Use Buildings Energy Efficiency

a. In furtherance of the goals set forth in SD Plan 3.7.2, all non-residential and mixed-use buildings in Veridea shall provide plan analysis demonstrating improvement of energy performance by 20% compared to baseline building performance ratings per ASHRAE/ IESNA Standard 90.1-2010 Appendix G. (Note: 2010 ASHREA is being referenced here, consistent with current LEED Rating System benchmark standard)

b. At build-out of Veridea, a minimum of 50% of non-residential buildings within Veridea shall be certified under one of these 3rd Party Certification Program options:
   i. LEED Rating System
   ii. Green Globes
   iii. Fitwel
   iv. Similar alternative standard as determined by the Responsible Party

   Responsible Party will ensure the ability to meet this 50% commitment at the time of each non-residential building permit application to the Town of Apex.

c. Solar facilities may be installed on the roofs of building occupied by industrial uses. Installation of solar facilities will be subject to a Return of Investment Analysis consistent with industry practices.

d. Solar facilities will be installed in the open space required to be dedicated per the SD Plan.

e. Documentation
   i. For all buildings, a letter of compliance shall be provided to the Town with the submittal of building permits for that building by a Professional Engineer (PE) licensed to practice in North Carolina, an architect licensed in North Carolina, OR a qualified third-party certifier stating that, in his or her opinion, the building design demonstrates improvement of energy performance by 20% compared to baseline building performance ratings per ASHRAE/ IESNA Standard 90.1-2010 Appendix G.

   ii. For each building that is developed to meet the standards for certification under one of the 3rd Party Certification Options, a letter of building certification from the selected program shall be provided to the Town at building completion.

2. Residential Buildings Energy Efficiency

a. All single-family, townhomes, multi-family, and condominium residential dwelling units to be constructed in Veridea must meet at least one of the following options (or similar alternative standard as determined by the Responsible Party).
   i. Energy Star Program Certification
   ii. ecoSelect Program Certification
   iii. Clear Program Certification
   iv. Passive House Institute US Certification
   v. DOE Zero Energy Ready Home (ZERH) Program

vi. National Green Building Standards (NGBS Program) Certification
vii. LEED for Homes Program Certification
viii. Similar alternative standard as determined by the Responsible Party

b. Certification Program Approval – Prior to the recordation of any final plat for single-family, townhome, or condo lots Town of Apex staff shall review and approve the selected residential energy efficiency program for compliance with this Plan.

3. Renewable Energy

a. Veridea will create a receptive environment for solar energy technologies. Panels will be allowed on any roof orientation while also maintaining compliance with architectural design guidelines
b. Conduit for wiring of solar panels shall be provided in all single-family and townhome residential units.

B. Water Efficiency

All water fixtures and appliances shall be rated, and design of buildings shall incorporate water-saving measures. Proof of compliance with the provisions below will be per I.A.1.c hereof.

1. Bathroom Fixtures
   a. 100% of showerheads, lavatory faucets and toilets/urinals shall be WaterSense rated fixtures.

2. Water Using Appliances
   a. Dishwashers and clothes washers installed by builder must be Energy Star qualified.

3. Water Efficient Design for Residential Plumbing Systems
   a. To reduce water wasted while waiting for hot water to be delivered to a fixture, the hot water pipe length shall be no more than 50 feet when measured from the water heater to the furthest fixture for all residential units, where practicable. For units with recirculation systems installed, demand-initiated controls should be encouraged.

4. Landscape Practices
   a. Landscape plantings shall be drought tolerant, native, and locally adaptive species (including turf); at minimum 80% of plantings. Such plantings shall be presented on plans submitted to the Town of Apex for review.

   b. When installed, irrigation systems shall be equipped with weather-based or soil moisture sensor-based controllers. Spray heads shall be limited to turf areas only. Reclaimed water should be used if available.

C. Indoor Air Quality

Residential (single-family, townhome, multi-family, and condominium) designs and construction within Veridea shall include practices that enhance indoor air quality. Proof of compliance with provisions below will be provided per I.A.1.c and I.A.2.b hereof.

1. Building Envelope
    a. Smoking restrictions implemented AND ETS transfer pathways minimized for commercial and multi-unit residential buildings.

2. Mechanicals
    a. Equipment designed and selected to keep relative humidity < 60% for conditioned space.
    b. Minimum MERV 8 filter on forced air HVAC systems
    c. All fireplaces within conditioned space are direct vented with gasketed doors. NO UNVENTED/VENT FREE FIREPLACES allowed within conditioned space.

3. Materials
    a. Interior paints and finishes certified low emission (Zero or less than 50g/l VOC content).
    b. Carpet, carpet adhesives, and carpet cushion certified low emission per the Carpet and Rug Institute (CRI) Indoor Air Quality Program (CRI Green Label Plus).

D. Material Management

Proof of compliance with provisions below will be provided per I.A.1.c and I.A.2.b hereof.

1. Storage and Collection of Recyclables
    a. Within every mixed-use or nonresidential project, recycling containers adjacent to other waste receptacles or recycling containers integrated into the design of the receptacle shall be provided.

2. Recycled Content
    a. To increase demand for building products that incorporate recycled content materials, special consideration must be given to contractors proposing to use materials with recycled content.

3. Regional Materials
    a. To increase demand for building materials and products that are extracted and manufactured locally, and in doing so supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation, special consideration must be given to contractors proposing to use building materials or products which have been extracted, harvested or recovered, as well as manufactured, within 500 miles of Veridea.

II. ENVIRONMENTAL AND NATURAL RESOURCE PROTECTION

A. Resource Conservation Area – SD Plan Article 3.4.3.1.

From its inception, Veridea has been conceived of and planned as a place in harmony with its natural surroundings. The standards contained herein and in the SD Zoning Plan encourage and require site design techniques that preserve the natural and cultural environment, thereby enhancing the developed environment.

1. Standards

a. Resource Conservation Area (RCA) - Apex has recognized that compliance with the Town's existing RCA requirements set forth in the UDO would prevent certain highly desirable development characteristics, such as density and connectivity, and has exempted areas intended for dense activity centers from the requirement of RCA. In keeping with this precedent, and to achieve the vision of Veridea, as set forth in SD Plan Article 3.1.3, notwithstanding UDO Article 8.1.2.C), 100-acres of land within Veridea shall be established as RCA.

b. Establishment of RCA - Notwithstanding UDO Article 8.1.2.A), RCA shall be established in Veridea according to the criteria set forth in III.A.2 hereof. RCA shall be shown on Master Subdivision Plans and Site Plans where applicable.

2. Criteria for Establishing Resource Conservation Area in Veridea

A. Categories of RCA

1. UDO 8.1.2.B.1 shall apply within Veridea.

2. Restoration Areas – restored, repaired and/or stabilized degraded stream channels, restored or re-vegetated stream buffers, constructed wetlands areas that are restored using innovative techniques authorized in accordance with IV.A.1 hereof, and SCMs that are amenities in accordance with IV.A.2.d hereof may be established as RCA.

3. In addition, any land within the Veridea SD zoned area placed in a conservation easement and deeded to the Master Property Owners' Association, or sub-associations within Veridea, or a qualified land management agency, such as but not limited to the Triangle Land Conservancy, may qualify as RCA.

4. In addition, as set forth in SD Plan 3.4.3.1.e, both:
   a. Open Space, excluding Civic Buildings and all associated parking, municipal parking lots, and parking associated with Open Space that exceeds the direct needs of such Open Space; and
   b. Recreation area provided in Public Space or Civic Space within the Development including, but not limited to, open space, pools, tennis courts, tot lots, ball fields, and village greens shall be allowed to be counted as partial credit toward the RCA requirement. The credit for such area shall be 50% of the area provided. (For example, 1 acre of area shall count as 0.5 acres of RCA.) In order to qualify as RCA, the area must be located on a lot 0.5 acre or larger in size.

5. Land utilized for renewable energy generating facilities qualifies as RCA.

6. Existing or proposed private easements that are also utilized for a trail, for a pedestrian walkway, as a passive recreational amenity, through environmentally sensitive areas, or as community gardens for public educational, recreational, or shared community use shall qualify as RCA.

B. Site and Tree Survey Required
   1. UDO 8.1.2.B.2 shall apply within Veridea.

   2. Notwithstanding the foregoing, consistent with IV.C.1 hereof and Section 3.4.3.1 of the Veridea SD Plan, UDO 8.1.2.B.2.f shall not apply within Veridea.

C. Ownership of RCA in Subdivisions
   The RCA within a subdivision shall be designated so that the RCA may not be removed, modified, or damaged. The RCA shall be a separate Lot(s) and be owned in common by the Lot owners or owned by a separate entity or entities (e.g. property owner's association, development corporation, building lot owner or owners, land management agency or non-profit such as a land trust or conservancy, etc.) In no case shall the RCA for one subdivision be owned by more than 3 entities.

D. Designation of RCA
   Though RCA shall be calculated for Veridea cumulatively, approved RCA shall be shown on the Site Plan or Subdivision Plan for each development site. The RCA shall be shown on the final plat with metes and bounds, to be preserved in perpetuity.

F. Standards for Protection During Construction
   The standards set forth in UDO 8.1.2.G shall apply within Veridea except to the extent that such standard is inconsistent with the provisions of this EEP or SD Plan.

G. Development Restrictions on Steep Slopes
   UDO 8.1.4 shall apply within Veridea.

III. STORMWATER & SURFACE WATER MANAGEMENT

A. Stormwater Management – SD Plan 3.4.3.2.a.

As set forth in SD Plan 3.4.3.2.a, the objectives for stormwater management within Veridea are:

i. Reducing pollutants to protect surface water bodies;
ii. Promoting recharge of ground water resources;
iii. Reduce / minimize flooding within the Development and downstream;
iv. Enhancing safety and aesthetics for the public; and
v. Creating wildlife habitats and educational opportunities.

All SCMs implemented within Veridea shall comply with the NC Department of Environmental Quality (NC DEQ) Stormwater Design Manual Considerations for selecting and using SCMs within Veridea will include, but are not limited to: site applicability, public safety, spatial requirements, soil characteristics, hydrologic benefits, slope, existing land use conditions, and maintenance requirements. In addition to the items listed above, it is the goal to make stormwater features amenities within Veridea and assets to the overall aesthetics of Veridea and the Town.

1. Approved SCMs

The following SCMs are approved for implementation in Veridea.

a. Detention systems that capture a volume of runoff and temporarily detain that volume for release over several days.

b. Constructed wetland systems that are similar to retention and detention systems, except that a major portion of the SCM water surface area (in pond systems) or bottom (in meadow-type systems) contains wetland vegetation.

c. Filtration systems that use some combination of a granular filtration media such as sand, soil, organic material, carbon or a membrane to remove typical pollutants found in runoff.

d. Vegetated systems (biofilters) such as green roofs, green walls, swales, filter strips that are designed to convey and treat either shallow flow or sheet flow runoff.

e. Innovative systems, as defined by 15A NCAC 02H.1003(6), or proprietary systems, may be approved by the Town on a case-by-case basis.

f. Regional stormwater management facilities, to augment, and/or in lieu of, on-site treatment and detention for stormwater management that is implemented on a Lot by Lot or Project by Project basis, to the extent allowed by applicable Federal and North Carolina law and regulation.

2. SCM Standards

a. SCM's will be designed to provide a minimum of 85% TSS removal from stormwater runoff from their contributory drainage area.

b. Downstream of Veridea: post-development peak flows shall not exceed pre-development peak flows for the 25-, 10-, and 1-year storms. Roadway projects shown on the Thoroughfare and Collector Street Plan of the Town of Apex and undertaken in public rights-of-way within Veridea shall be deemed exempt from these requirements.

c. Storage volumes shall be provided such that the runoff from the required water quality storm event (1.0-inch of rainfall) does not draw down in less than two days and that the volume is drawn down completely within five days.

d. To enhance the overall aesthetics of Veridea and the Town, SCMs that are amenities within Veridea may receive credit toward the Open Space requirement per SD Plan 3.1.3 or Resource Conservation Area per SD Plan 3.4.3. For a SCM to receive credit toward the Open Space requirement, it shall be designed to provide at least five (5) of the following features:
   i. Pedestrian access by way of an installed soft or hard surface path from the nearest pedestrian pathway;
   ii. Use of similar plant materials as those used in adjacent and surrounding planting beds;
   iii. Limit rip rap to 15% of the total surface area of the stormwater facility used for stabilization;
   iv. Plant pallet comprised of native and adaptive plant material that provides for visual interest and diversity, while attracting wildlife;
   v. Curvilinear forms that define the limits of the facility to avoid simple shapes that are incongruent with the natural topography of the site;
   vi. Active water feature;
   vii. Elements that provide opportunities for passive recreation including site furnishings, overhead shelter, and pleasant views;
   viii. Educational opportunities in the form of educational signage;
   ix. Fitness opportunities added along a pathway; and

e. SCM's meeting the standards of III.A.2.a.2 hereof, exclusive of riprap areas, may receive credit as Resource Conservation Area.

f. Structural SCMs shall be designed in accordance with UDO 6.1.12 and other applicable Town standards.

g. Described area containing each structural SCM shall be depicted on the site plan or Subdivision Plan and on the final plat in accordance with UDO 6.1.12.C.

h. For all structural SCMs approved, the owner of such SCM shall have an operation and maintenance agreement in accordance with UDO 6.1.12.D. An operation and maintenance agreement shall not be required for non-structural SCMs. For the purposes of this EEP, non-structural SCMs shall be defined as practices implemented in single family residential or commercial applications that are less than one-acre of disturbed area and generally include but are not limited to: disconnecting downspouts and other runoff features, limiting impervious surface and land disturbance, and other non-structural practices as approved by the Town.

i. Performance guarantees, maintenance and maintenance guarantees and inspection requirements for SCMs shall comply with UDO 6.1.12.G), H), and I).

j. SCMs located in a public right-of-way or easement require an encroachment and maintenance agreement with the Town before such encroachment is made, in accordance with SD Plan 3.3.5.

k. Storm drainage easements shall be recorded to identify the locations of SCMs on a Lot(s). The owner of the Lot shall not remove or structurally alter such SCM without prior written approval from the Town.

3. Floodplain

a. FEMA regulated floodplain is located in the southwestern portion of the parcel. Local floodplain will be determined through the definition of a base flood elevation by means of a detailed hydraulic report for streams with a drainage area greater than 100-acres. Per allowances in the UDO 6.2.16.B, non-residential buildings shall be allowed in the floodplain, and there shall be no over-riding requirement to preserve floodplain as RCA.

b. Notwithstanding UDO 6.2.3, stormwater management, detention and retention facilities may encroach within potential on-site flood hazard areas where a base flood elevation has been established pursuant to UDO 6.2.17.B. Where proposed, the detailed hydraulic analysis revising the base flood elevation will be provided at the time of site plan or subdivision submittal.

c. Revisions / modifications to the base flood elevation, including but not limited to fill and grading, may be submitted at the time of site plan or subdivision plan submittal in the event that the flow within a stream is changed and will impact the base flood elevation. Any modifications to FEMA regulated floodplain will be permitted in accordance with local and federal regulations.

B. Water Conservation – SD Plan 3.4.3.2.b.

The careful stewardship of the use of water within Veridea is set forth in the SD Plan goals for water conservation are:

- Reducing per capita water use while retaining attractive landscapes;
- Protection of ground and surface water supplies from unsustainable depletion;
- Eliminating unnecessary waste in water use practices;
- Reducing wastewater treatment volume and associated municipal expenditures;
- Promoting the increased use of re-use water for irrigation.

To achieve these goals water conservation standards in Veridea will include:

1. Water Efficient Landscape Practices

a. Planting
   i. The planting of landscape materials shall be in accordance with the Town of Apex, NCDEQ, or North Carolina Cooperative Extension standards for drought tolerant, native, and locally adaptive species.
   ii. Plant materials shall be chosen to thrive based on their exposure to sun, wind, and soil conditions.
   iii. Landscape beds shall provide a 3" layer of mulching material.
   iv. Plants shall be grouped according to water needs, or "hydrozones," to limit overwatering.

b. Irrigation
   i. Irrigation systems shall be equipped with weather-based or soil moisture sensor-based controllers.
   ii. Installation of spray heads shall be limited to turf areas only.

2. Storm Water Re-use

a. Re-use of stormwater for non-potable applications such as irrigation, vehicle washing, cooling tower make-up water, etc. will be encouraged, for both commercial and residential applications. Stormwater reuse will be utilized in the portions of Veridea approved for multi-family uses. Installation of stormwater reuse facilities will be subject to the design teams review of the viability on each building. Landscaped areas within the multifamily residential development will be irrigated with stormwater reuse where practicable. Where re-use water is not available, potable water may be used for irrigation in accordance with the Town of Apex Water Conservation Ordinance.

b. Re-use water may be used for irrigation in areas of public or private lawns, landscaping or recreation area.

c. Where a centralized chiller plant is utilized, and where practical, re-use water may provide cooling tower make-up water.

C. Surface Water Enhancement – SD Plan 3.4.3.2.c.

As set forth in SD Plan 3.4.3.2.c, the objectives for surface water enhancement within Veridea are:

- Maintaining water quality by capturing or controlling sediment, nutrients, and other pollutants per the minimum requirements of the Town of Apex;
- Ensure that post-development peak flows do not exceed pre-development flows for the 25-year storm event;
- Augmenting low flow from SCM's to improve downstream aquatic habitat;
- Enhancing public use and enjoyment of the natural system; and
- Install signage prohibiting pet waste and use of fertilizers near environmentally sensitive areas.

1. Stream Protection Buffers -

Veridea is located in the Secondary Watershed Protection District per the Town of Apex Watershed Protection Overlay District dated May 2022 and will utilize the High-Density Development Option. All perennial and intermittent streams have been field verified by the Town of Apex; verification is included as Appendix A to this Plan. Stream buffers will be maintained pursuant to 6.1.7.B of the Town of Apex UDO.

As provided in 6.1.7.b.2 of the Town of Apex UDO, a vegetative buffer an average width of not less than 100' shall be maintained along each side of a perennial stream and at no point shall the buffer width be less than 50'. While buffer widths may vary from the map included as Appendix B of this Plan, final buffer area provided within Veridea shall not be less than 166.87 acres.

The Town of Apex verification of the perennial and intermittent streams shall be valid for the period of the validity of any Army Corps of Engineers Individual / Nationwide Permit.

a. Future buffer authorizations within Veridea shall be in accordance with process in Section 6.1.11 of the Town of Apex UDO.

b. Impacts to the established stream protection areas established herein shall be mitigated per Section 6.1.13 of the Town of Apex UDO.

c. For the purposes of this EEP, "stream protection areas" shall refer to protected areas including floodways and floodplains Buffer widths shall be as described in Appendix B.

2. Mitigation

With a project the size and density of Veridea some unavoidable impacts are necessary to accommodate the required vehicular and pedestrian transportation improvements and utility infrastructure. The EEP proposes specific mitigation options to address these impacts. These impacts will be limited, yet necessary to address:

- Vehicular and pedestrian transportation improvements and interconnectivity

- Utility infrastructure that will serve Veridea as well as adjacent lands which are yet to be developed.

- Non-erosive outlets for stormwater management facilities

- Intermittent streams and isolated wetland pockets as needed to create developable land areas to support the proposed densities.

a. Mitigation for impacts to wetlands will be accomplished per the regulations of the United States Army Corps of Engineers and North Carolina Division of Environmental Quality.

b. Mitigation for impacts to streams will be performed, as required by any applicable federal or state law or regulation. The appropriate parameter to use in establishing the required mitigation, length or area, will be selected based on the type of stream area impacted and the proposed mitigation measure selected.

c. In all cases where mitigation is required for impacts to the buffer, a Plan shall be submitted with each site plan or subdivision plan depicting the proposed mitigation for those impacts. The mitigation requirement may be met through one of the following options, which are consistent with mitigation alternatives set forth in UDO 6.1.14.C:
   i. Construction of an alternative measure or combination of measures that reduce nutrient loading equal to or better than the setback that is lost and that is approved by the Town. Such measures may include stormwater SCMs, including LID applications, and other means of capturing and controlling nutrients and other pollutants and shall be located on the site of the riparian buffer that is lost, if practicable, or as close to that location as is practicable;
   ii. Payment of compensatory mitigation fee to a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently set out at http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890;
   iii. Donation of real property or of an interest in real property pursuant to Sec. 6.1.14.F; or
   iv. Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Sec. 6.1.14.G.

d. Any and all mitigation performed pursuant to this EEP shall be available for use as mitigation credit against a federal or North Carolina mitigation requirement.

e. The following two documents, along with the Veridea Guiding Principles, will be used as guidance in the preparation of the mitigation measures:
   i. "Stream Mitigation Guidelines, April 2003", published by the US Army Corps of Engineers, as may be amended or updated from time to time, attached as Appendix 8, in particular Section 10.A Flexible Stream Mitigation, Urban Watershed Management; and
   ii. "EEP Mitigation Plan Template, Version 2.0 03-27-08", prepared by the North Carolina Ecosystem Enhancement Program, as may be amended from time to

time.

f. The TRC or Town Council, as applicable, in the event of an exception granted in as contemplated by SD Plan 3.4.1, shall approve the mitigation measures upon finding that the plan provides for:
   i. The option chosen for meeting the mitigation requirement and the required area of mitigation;
   ii. Consistency with the standards set forth in IV.C.2.c hereof;
   iii. Engineering feasibility;
   iv. Operation and maintenance, if any is required hereunder; and
   v. The offset payment amount, as applicable.

IV. LAND MANAGEMENT

A. Sedimentation & Erosion Control Standards

The goals for sedimentation and erosion control set forth in the SD Plan 3.4.3.3.a are:

i. Minimize disturbance to vegetation and soils
ii. Minimize runoff and diversion;
iii. Minimize the need for additional storm drainage facilities;
iv. Reduce sedimentation; and
v. Prompt stabilization after land clearing and grading

The most effective sedimentation and erosion control prevention is born from careful planning of grading activities, continuous inspection of the installed erosion control devices and ongoing maintenance of the devices to insure optimal performance.

a. Design - The Town's standards for design for the 25-year storm event and 3,600 cubic feet of volume per disturbed acres shall be implemented in Veridea.

b. Shared facilities – To minimize grading, where stormwater management devices are proposed those devices may first serve as erosion control sediment basins or traps and be converted to permanent stormwater management devices as soon as the contributing drainage area is sufficiently stabilized.

c. Stabilization – All land disturbing activity is to be planned and coordinated, to the extent practical, to minimize the disturbed areas exposed at any one time. Disturbed areas must be seeded after 7-working days of completion of grading. All remaining areas must be seeded and mulched, or otherwise stabilized within 14 calendar days after completion of grading of any phase of the project.

d. Outlet structures shall be designed to only draw down the cleanest water from the surface of the erosion control device.

e. Along with the required inspections after each storm event, weekly inspections will be performed to ensure that the installed devices have not been altered by construction activities. A log will be maintained by the contractor on each project demonstrating the vigilant monitoring and maintenance of the erosion control facilities.

f. Due to the mixed-use nature of the Veridea, residential development of single-family lots, townhomes, and condominiums within Veridea, net of public rights-of-way, RCA, and public and private easements, shall be exempt from the requirements of Section 7.2.5 of the Town of Apex UDO. Site Plans for single-family only developments in Veridea shall not be exempt from the requirements of 7.2.5.

B. Waste Minimization – SD Plan 3.4.3.3.b.

The waste minimization standards shall support the solid waste goals identified in the Wake County Environmental Stewardship Agenda, adopted by the Wake County Board of Commissioners February 21, 2005 and as may be amended from time to time.

a. Land-clearing Debris - Excavated soil and rock and land-clearing debris shall be re-used, to the extent allowed by applicable federal, state and local law, within Veridea to the maximum extent practicable. To this end, land-clearing debris may be mulched and used for landscaping and/or site stabilization purposes within Veridea.

b. Soil Stockpiles – Soil stockpiles 30' or less in height shall be permitted within the boundaries of Veridea. Stockpiles over 30' in height, but not exceeding 50', shall be permitted provided they are setback from property lines and thoroughfares a minimum of 100'. The maximum slope permitted for soil stockpiles is 3:1.

c. Mulch Stockpiles – Mulch stockpiles shall not exceed 15 feet in height and shall be stored no longer than 45 days.

C. Perimeter Buffers

a. A 10' Type B buffer is required where the SD zoning abuts property zoned or used primarily for residential purposes. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

b. A 10' Type B Buffer is required when the SD zoning abuts property zoned or used primarily for retail, industrial, or other similar uses. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

c. A 50' Type B Buffer is required where the residential uses in the SD zoning abut the rights-of-way of US-1 and NC-540. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

d. A 20' Type B Buffer is required where non-residential and vertical mixed uses abut the rights-of-way of US-1 and NC-540. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

e. When a building is constructed within 25' of the right-of-way of NC HWY 55, a planted 10' Type D buffer is required adjacent to NC HWY 55. No building shall be closer than 10' to the required buffer. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

f. When a building is constructed more than 25' from the right-of-way of NC HWY 55, a planted 15' Type A buffer is required adjacent to NC HWY 55. This buffer is intended to remain undisturbed. If disturbance is necessary due to site constraints or other limiting factors, the areas disturbed will be replanted per the Type A Buffer standards in the Town of Apex UDO.

g. If additional property is added to the SD zoning, buffers on existing and newly added property shall meet the preceding buffer requirements or be removed, as applicable.

h. Greenways and side paths are permitted to traverse perimeter buffers.

D. Landscaping

a. Where feasible, deciduous shade trees shall be planted on the south sides of buildings; evergreens shall be planted on the north side.

b. Pollinator friendly landscaping will be planted in landscaped areas where feasible.

c. All landscaping planted within Veridea shall be listed in the Town of Apex's Design and Development Manual.

V. AIR QUALITY PROTECTION

In recognition of the impacts of greenhouse gas emissions that a development the size of Veridea could have the SD Plan 3.4.3.4. establishes air quality goals. The following standards aim to achieve these goals.

a. Multiple land uses that will provide the services and facilities to increase the internal trip capture of the community and reduce vehicular trip generation and vehicle miles traveled both within and outside Veridea.

b. Interconnected development that will provide sidewalks, greenways and walking paths to link land uses through-out the development to be accessible by means other than motorized vehicles.

c. Linear parks will be constructed along Jessie Drive to encourage walking and biking, preserve and highlight environmental features, and provide active greens spaces for future residents and employees.

d. Coordination with and, where appropriate, provide accommodations for alternative modes of travel including rail, bus, ride sharing, charging stations for moving both within Veridea and to connect to the rest of the region. In coordination with Town staff around Apex's Comprehensive Transportation plan, mobility hubs and curb areas planned for quick and safe pick -up and drop offs in high-density, nixed use areas of the Project.

e. Significant open space, conservation area, landscape areas and street trees in high density areas to maintain a significant carbon absorbing medium.

f. Where practicable, buildings will be oriented toward pedestrian facilities or transit routes to promote modes of travel other than the single automobile.

g. To promote walkability, two grade-separated pedestrian crossings will be constructed. The crossings will be constructed as required per the Town of Apex's Comprehensive Transportation Plan, as amended.

h. Parking for electric vehicles and bicycles will be provided as required per the Town of Apex UDO.

i. Single-family homes will include a 240A/50V electrical outlet in garages for electric vehicle charging.

APPENDIX A

WATER RESOURCES DEPARTMENT

December 09, 2022

Steven Ball, RF, PWS
Soil & Environmental Consultants, PA
8412 Falls of Neuse Road, Suite 104
Raleigh, NC 27615

Subject: Stream Buffer Determination
Veridea
Apex, NC
Cape Fear River Basin

Apex 22-010

Dear Mr. Ball,

On December 07th, 2022, I met with you at the subject site to evaluate twenty-three (23) drainage features and determine if they are subject to the Town of Apex (Town) riparian buffer rules. Based on the information obtained during the evaluation and per the requirements set forth in Section 6.1.11 of the Town Unified Development Ordinance (UDO), I concur with the stream classifications as shown on the attached sketch dated 12-7-2022 and 11-22-2022 for SEV1.

Drainage Feature	Shown as on USGS	Shown as on Soil Survey	Determination made in the field	Determined Buffer Width
SEV1	Present	Perennial	Intermittent	50 feet
Feature 1 Upstream	Not Present	Intermittent	Ephemeral	0 feet
Feature 1 Downstream	Not Present	Intermittent	Intermittent	50 feet
Feature 2 Upstream	Not Present	Intermittent	Ephemeral	0 feet
Feature 2 Downstream	Not Present	Intermittent	Intermittent	50 feet
Feature 3 SFA	Not Present	Intermittent	Ephemeral	0 feet
Feature 3 SFB	Not Present	Intermittent	Intermittent	50 feet
Feature 4 Upstream	Not Present	Intermittent	Ephemeral	0 feet
Feature 4 Downstream	Not Present	Intermittent	Intermittent	50 feet

Feature 5 Upstream	Not Present	Intermittent	Ephemeral	0 feet
Feature 5 Downstream	Not Present	Intermittent	Intermittent	50 feet
Feature 6 Upstream	Not Present	Intermittent	Ephemeral	0 feet
Feature 6 Downstream	Not Present	Intermittent	Intermittent	50 feet
Feature 8 W	Not Present	Intermittent	Intermittent	50 feet
Feature 8 X	Not Present	Intermittent	Ephemeral	0 feet
Feature 9 Z	Not Present	Intermittent	Ephemeral	0 feet
Feature 10 Y	Not Present	Intermittent	Ephemeral	0 feet
Feature 11- I	Present	Perennial	Intermittent	50 feet
Feature 11-P	Present	Perennial	Perennial	100 feet
Feature 12	Present	Intermittent	Ephemeral	0 feet
Feature 13-E	Present	Intermittent	Ephemeral	0 feet
Feature 13-I	Present	Intermittent	Intermittent	50 feet
Stream 14	Not Present	Intermittent	Ephemeral	0 feet

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by the Division of Water Resources (DWR) or Delegated Local Authority in the Jordan Lake watershed may request a determination by the DWR Director.

An appeal request must be made within sixty (60) days of date of this letter or from the date the affected party (including downstream and/or adjacent owners) is notified of this letter. A request for a determination by the Director shall be referred to in writing c/o Paul Wojoski, DWR – 401 & Buffer Permitting Branch; 1617 Mail Service Center, Raleigh, NC 27699-1617. Otherwise the appeal procedure will be in accordance with UDO Section 6.1.11.

If you dispute the Director's determination, you may file a petition for an administrative hearing. You must file the petition with the Office of Administrative Hearings within sixty (60) days of receipt of this notice of decision. A petition is considered filed when it is received in the Office of Administrative Hearings

during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official State holidays.

To request a hearing, send the original and one (1) copy of the petition to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. A copy of the petition must also be served to the Department of Natural Resources, c/o Bill Lane, General Counsel, 1601 Mail Service Center, Raleigh, NC 27699-1601.

This determination is final and binding unless, as detailed above, you ask for a hearing or appeal within sixty (60) days. This project may require a Section 404/401 Permit for the proposed activity. Any inquiries should be directed to the US Army Corp of Engineers (Raleigh Regulator Field Office) at (919) 554-4884. If you have any questions, please do not hesitate to contact me at (919) 372-7470.

Sincerely,

James Misciagno, CES, CPESC
Environmental Field Services Supervisor

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this 13 day of October, 2022 by HH Trinity Apex Investments LLC and Veridea Holdings LLC (the "Owners").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as Veridea - South Village East in the Town of Apex, North Carolina and designated as PIN # 0740240514, 0740241461, 0740241020 by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the Owners are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the Owners do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness Cynthia Rodriguez By: [signature]

By: _____

Riparian Buffer Call
Application

This application is required to be fully completed and submitted to Town staff prior to conducting a buffer call. Please submit the application package electronically to james.miscione@apexnc.org.

PROPERTY INFORMATION

Owner(s): HH Trinity Apex Investments LLC / Veridea Holdings LLC

Site Address: Veridea Parkway - South of North Carolina Highway 540

CONSULTANT INFORMATION (If applicable)

Name: McAdams (William H. Derks)

Address: 621 Hillsborough Street, Raleigh, North Carolina 27603

Email: Derks@mcadamsco.com

Phone: 919- 361- 5000

CHECKLIST

Please place a checkmark in the spaces provided below to indicate that the required information has been provided with this submittal.

Right of Entry Form	X
NCDEQ Stream Identification Forms (v. 4.11)	X
Sketch Map*	X

Topo Map (most recent version)	X
1970 Wake County Soil Survey Map	X

*Sketch map should show all drainage features on the property with all applicable riparian buffers shown. Please clearly indicate or list which features are being called with this application.

NOTES

SIGNATURE (Consultant or Responsible Party)

By my signature below, I certify that the information provided with this application is accurate and truthful.

Date: October 21, 2022

East & South Village Delineation & Buffer Review.

The Preliminary Jurisdictional Determination (PJD) of streams and wetlands for the entirety of Veridea was reapproved by the USACOE and NCDENR on May 26, 2017. In discussions with the reviewers in preparation for the submittal of the Individual Permit (IP) application for Veridea it was agreed that that delineation would be utilized and would be extended by virtue of the IP approval for the duration of the IP.. There is precedent for a large IP to be approved for 25-years. The requested duration for the Veridea IP is 30-years.

It is understood that field conditions may change over time as development occurs in the watershed areas outside of the Veridea boundary. But the establishment of the buffers initially for East Village, and in the near future for the rest of Veridea, also need to have a longer commitment as well in order to have a reliable map for planning development that may occur 10-, 15, or 20-years from now.

To begin that confirmation field review of the streams in the East Village section of Veridea was completed by S&EC on September 29, 2022 and for South Village East on October 6, 2022. The scoring sheets are attached. The feature numbers below, from the recent review in the field, also have a reference to the Stream designation from the approved PJD. Discussion below references the inconsistencies of the PJD, Town's Watershed Protection Overlay Map, USGS, Wake County Soils Survey and field scoring sheets.

It is worth noting that all of the intermittent stream features shown on the East Village portion of Veridea are from designations on the Wake Co. Soils Survey. The Soils Survey was completed in 1970 and depicts the streams with intermittent buffers on the Town's map as either "Not crossable with tillage" or "Unclassified". None of the streams are shown on the online USGS Apex or New Hill Quad maps dated 2022.

Feature 1 (Stream LL) —This feature appears to extend upstream approx. 40-50' higher than the PJD. A new flag was hung (TOA 1) at the start point. Shown as a perennial stream on the PJD, intermittent on the Town's map, not identified on USGS and intermittent on the Soils Survey. Stream forms upstream and downstream were taken

Feature 2 (Stream II) – The start point stayed the same. A new flag was hung (TOA 2) start point. Stream forms were taken upstream and downstream

Feature 3 (Stream BB) - The pond is shown on USGS but not on the Soils Survey. Just the reverse for the stream. Not shown on USGS but indicated on the Soils Survey. Delineated as Intermittent Unimportant on the PJD. It appears that the buffer should start at the confluence of two minor draws from below the pond and the second running from the southeast. The feature begins at flag TOA 3, the buffer should not start until it reaches the drainage that runs north south from the pond as shown. There is also enough of a gap between the pond and this feature that the pond should not be buffered.

SEV1

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 South Village East 1

Date: 10/06/2022	Project/Site: VERIDEA/11065	Latitude: 35.684766
Evaluator: SWEC - JOSHUA HARVEY	County: WAKE	Longitude: -78.855885
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 25.5	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 13.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	1	(2)	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (0)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 0)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	0	0.5	(1)	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Per
USGS = Present

10/25/2022 JM

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 TOA 1 - UPStream

Date: 9/29/22	Project/Site: Vereden - EU	Latitude: 35.695892
Evaluator: K. Murph.	County: Wake	Longitude: -78.63536
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 13	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other Apex *e.g. Quad Name*

A. Geomorphology (Subtotal = 6.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = (0)		Yes = 3	

B. Hydrology (Subtotal = 4.5)				
12. Presence of Baseflow	(3)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 2)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

JM 10/31/2022

Down TOA-1 TOA1- Down stream

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 9/24	Project/Site: Upside - EU	Latitude: 35.69571
Evaluator: BB/KM	County: Wake	Longitude: -78.83541
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 22.75	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other 1 pge *e.g. Quad Name:*

A. Geomorphology (Subtotal = 13)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	(2)	3
8. Headcuts	0	(1)	(1)	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel *artificial ditches are not rated; see discussions in manual*	No = (0)		Yes = 3	

B. Hydrology (4.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (1)	

C. Biology (Subtotal = 5.25)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	(0.5)	1	1.5
24. Amphibians	(0)	(0.5)	1	1.5
25. Algae	(0)	0.5	(1)	1.5
26. Wetland plants in streambed	FACW = (0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

JM 10/31/2022

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 TOA2 - UpStream

Date: 9/29/22	Project/Site: Veridea - EU	Latitude: 35.697061
Evaluator: BB/KM	County: Wake	Longitude: -78.836777
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 11.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 7)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = (0)		Yes = 3	

B. Hydrology (0.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

JM 10/31/2022

T to A 2 Below

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Verdea - LU	Latitude: 35.696705
Evaluator: SB/KBM	County: Wake	Longitude: -78.83283
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30* (19) (13.5)	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other Apex e.g. Quad Name:

A. Geomorphology (Subtotal =)	Absent	Weak	Moderate	Strong
1ª Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (1.5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	0	1	0
19. Rooted upland plants in streambed	3	0	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

JM 10/31/2022

Feature 3 - SFA

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 9/29/22	Project/Site: Verdera LV	Latitude: 35.701467
Evaluator: SB KM	County: Wake	Longitude: -78.852491
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** (7)	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Apex

A. Geomorphology (Subtotal = 3.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 1.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(1.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 2)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75 OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

JM 11/16/2022

41

Feature 3-SFB

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 9/29/22	Project/Site: Veridea EV	Latitude: 35.700 [illegible]
Evaluator: SB KM	County: Wake	Longitude: -78.[illegible]205
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: [illegible]

	Absent	Weak	Moderate	Strong
A. Geomorphology (Subtotal = 9.5)				
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	0.5	1	1.5
9. Grade control	0	0.5	1	1.5
10. Natural valley	No = 0		Yes = 3	
11. Second or greater order channel				

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 4.5)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5; Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

41

Soils = Int
USGS = NP

JM 11/21/2022

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

TOA 4_ upstream

Date: 9/29/22	Project/Site: Uwharrie - EU	Latitude: 35.701476
Evaluator: SM/KM	County: Uwharrie	Longitude: -79.83539
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 4.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other Apex *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

artificial ditches are not rated; see discussions in manual

B. Hydrology				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 14)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

SM 10/21/2022

TOA 4 Downstream below

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Vericlea - LV	Latitude: 39.701532
Evaluator: SB3/KM	County: Wake	Longitude: 78.83550
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19.5	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other Apex e.g. Quad Name:

A. Geomorphology (Subtotal = 10.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 6)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal =)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

JM 10/31/2022

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 TOA 5- upstream

Date: 9/29/22	Project/Site: Vereden - LV	Latitude: 35.69974
Evaluator: SB/KM	County: Wake	Longitude: -78.839869
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 17	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other e.g. Quad Name: Apex

A. Geomorphology (Subtotal = 8)	Absent	Weak	Moderate	Strong
1a. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = 0		Yes = 3	

B. Hydrology (Subtotal = 4)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

JM 10/31/2022

Below TOT & Downstream

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Vendue - EV	Latitude: 35.694426
Evaluator: SB/KM	County: Wake	Longitude: -78.83[illegible]23
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 21.75	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other Apex *e.g. Quad Name:*

A. Geomorphology (Subtotal = 12)	Absent	Weak	Moderate	Strong
1st Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	(2)	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	(1.5)
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = (0)		Yes = 3	

B. Hydrology (5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(0)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4.75)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	0	0.5	1	(1.5)
26. Wetland plants in streambed	FACW = (0.75); OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = NP

JM 10/31/2022

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1 TOA 6 - upstream

Date: 9/29/22	Project/Site: Vanden - EV	Latitude: 35.648558
Evaluator: SB/KM	County: Wake	Longitude: -78.841210
Total Points: 14 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other Apex e.g. Quad Name:

A. Geomorphology (Subtotal = 5.5)	Absent	Weak	Moderate	Strong
1° Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	1	(1.5)
11. Second or greater order channel *artificial ditches are not rated; see discussions in manual	No = (0)		Yes = 3	

B. Hydrology (3.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			
*perennial streams may also be identified using other methods. See p. 35 of manual.				

Notes:

Sketch:

Soils = Int

USGS = NP

JM 10/31/2022

F of A 6* Below / Downstream

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Veridea-LV	Latitude: 35.648274
Evaluator: SB/KM	County: Iredell	Longitude: -88.842114
Total Points: (20) *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other Apex *e.g. Quad Name:*

A. Geomorphology (Subtotal = 12)	Absent	Weak	Moderate	Strong
1st Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	1	(1)	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	(1.5)
11. Second or greater order channel	No = 0 (0)		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.0)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	(1)	1.5
17. Soil-based evidence of high water table?	No = 0 (0)		Yes = 3 (3)	

C. Biology (Subtotal = 4.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(1)	(1)	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	(0)	0.5	1	1.5
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

SM 10/31/2022

Stream Form. W
Feature - B ?

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 9/29/22	Project/Site: Meridia EV	Latitude: 35.701029
Evaluator: SB KM	County: Wake	Longitude: -78.843825
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other Apex *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 4.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = InT
USGS = NP

Jm 11/21/2022

8

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

Stream Form X-Feature 8

NC DWQ Stream Identification Form Version 4.1

Date: 9/30/22	Project/Site: Veridea - EV	Latitude: 35.70089
Evaluator: SB/KM	County: Wake	Longitude: -78.8436
Total Points: 13 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other Apex *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

* artificial ditches are not rated; see discussions in manual

B. Hydrology (5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = INT
USGS = NP

10/31/2022

~~Do not need to see in field~~ OM

9

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

Stream form Z-Feature 9

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Vendela -EV	Latitude: 35.648238
Evaluator: SB/KM	County: Wake	Longitude: -78.84806
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 18	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Apex

A. Geomorphology (Subtotal = 8)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure; ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = (0)		Yes = 3	

B. Hydrology (5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0*
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

JM 10/31/2022

10

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

Stream form Y-Feature 10

NC DWQ Stream Identification Form Version 4.1

Date: 9/29/22	Project/Site: Veridea LDV	Latitude: 35.6953
Evaluator: SB/VM	County: Wake	Longitude: -78.84584
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other e.g. Quad Name:

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel (artificial ditches are not rated; see discussions in manual)	No = (0)		Yes = 3	

B. Hydrology (5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int
USGS = NP

JM 10/31/2022

Stream Form [illegible] - Feature 11

11-I

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/7/22	Project/Site: Verida EV	Latitude: 35.70463
Evaluator: SBell	County: Wake	Longitude: -78.843506
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 26.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Apex

A. Geomorphology (Subtotal = 15)	Absent	Weak	Moderate	Strong
1ª Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = (3)	

ª artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 7.5)				
12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	(0)	1	0
19. Rooted upland plants in streambed	3	(0)	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

JM 12/8/2022

Stream Form 11-P

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/7/22	Project/Site: Veridea LV	Latitude: 35.704339
Evaluator: SDgill	County: Wake	Longitude: -78.84395
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 32	Stream Determination (circle one) Ephemeral Intermittent (Perennial)	Other e.g. Quad Name: Apex

A. Geomorphology (Subtotal = 18)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	1	(2)	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = (3)	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 8.5)				
12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	(1.5)	1	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes (3)	

C. Biology (Subtotal = 6.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	0	(0.5)	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = present

JM 12/8/2022

Veridea EAST FEATURE 12

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/5/2022	Project/Site: VERIDEA EAST	Latitude: 35.705299
Evaluator: SWEC - JOSHUA HARVEY	County: WAKE	Longitude: -78.847135
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7)	Absent	Weak	Moderate	Strong
1ª. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

ª artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 0.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = Present

JM 12/8/2022

Veridea East FEATURE 13 E

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/5/2022	Project/Site: VERIDEA EAST	Latitude: 35.702822
Evaluator: SREC - JOSHUA HARVEY	County: WAKE	Longitude: -78.847666
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1* Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	(No = 0)		Yes = 3	

C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Int

USGS = Present

12/8/2022

Veridea East FEATURE 13 I

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/5/2022	Project/Site: VERIDEA EAST	Latitude: 35.702124
Evaluator: SEE - JOSHUA HARVEY	County: WAKE	Longitude: -78.846173
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 21	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 9.5)	Absent	Weak	Moderate	Strong
1a. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.5)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 0)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

41

Soils = Int

USGS = Present JM 12/6/2022

Verdea EAST FEATURE 14

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 12/5/2022	Project/Site: VERIDEA EAST	Latitude: 35.700972
Evaluator: SCC. JOSHUA HARVEY	County: WAKE	Longitude: -78.748283
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** No Scoreable Feature	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal =)	Absent	Weak	Moderate	Strong
1ª. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

ª artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal =)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal =)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

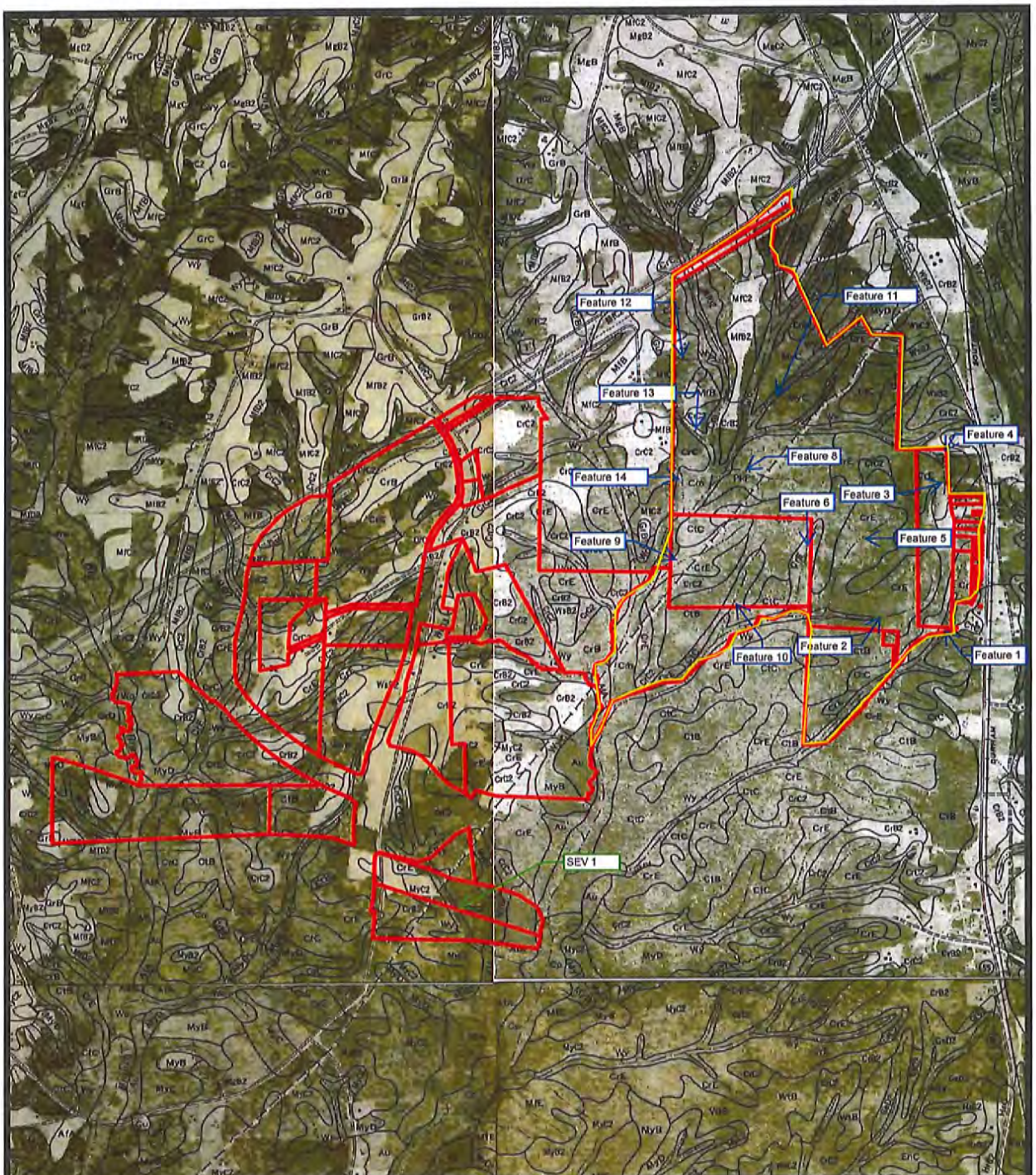
Sketch:

No Scoreable Feature JM

41

SOILS = Int
US62 = NP

12/8/2022



Project Number: 11065.W4	Map Title: SS Map Veridea Wake County, NC	0 1,750 3,500 Feet N
Project Manager: DS		
Scale: 1" = 1750'		
Date: 09/10/2021	Source: Wake County Soil Survey Sheets 74, 75, 82 & 83	S&EC Soil & Environmental Consultants, PA 8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467 sandec.com

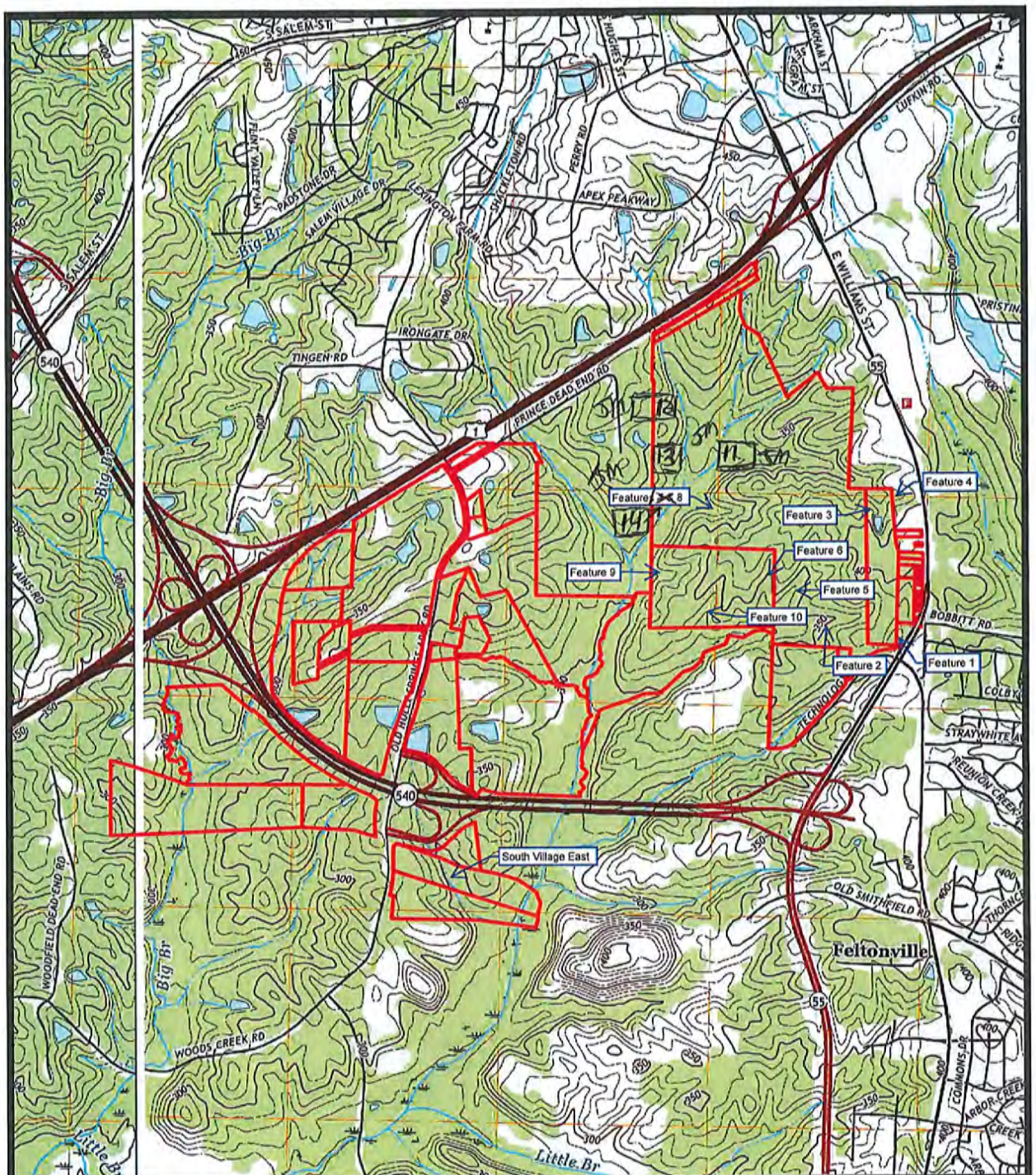
JM 12/8/2022

CM 12/8/2022

East Village Buffer Map
Verlidea
Soil & Environmental Consultants, PA
0 205 410 820
Feet
Legend
Verlidea East Village Buffer Review Boundary
Verlidea Property Boundary
Perennial Stream
Intermittent Stream
50' Town of Apex Buffer
100' Town of Apex Buffer

SM 11/22/2022

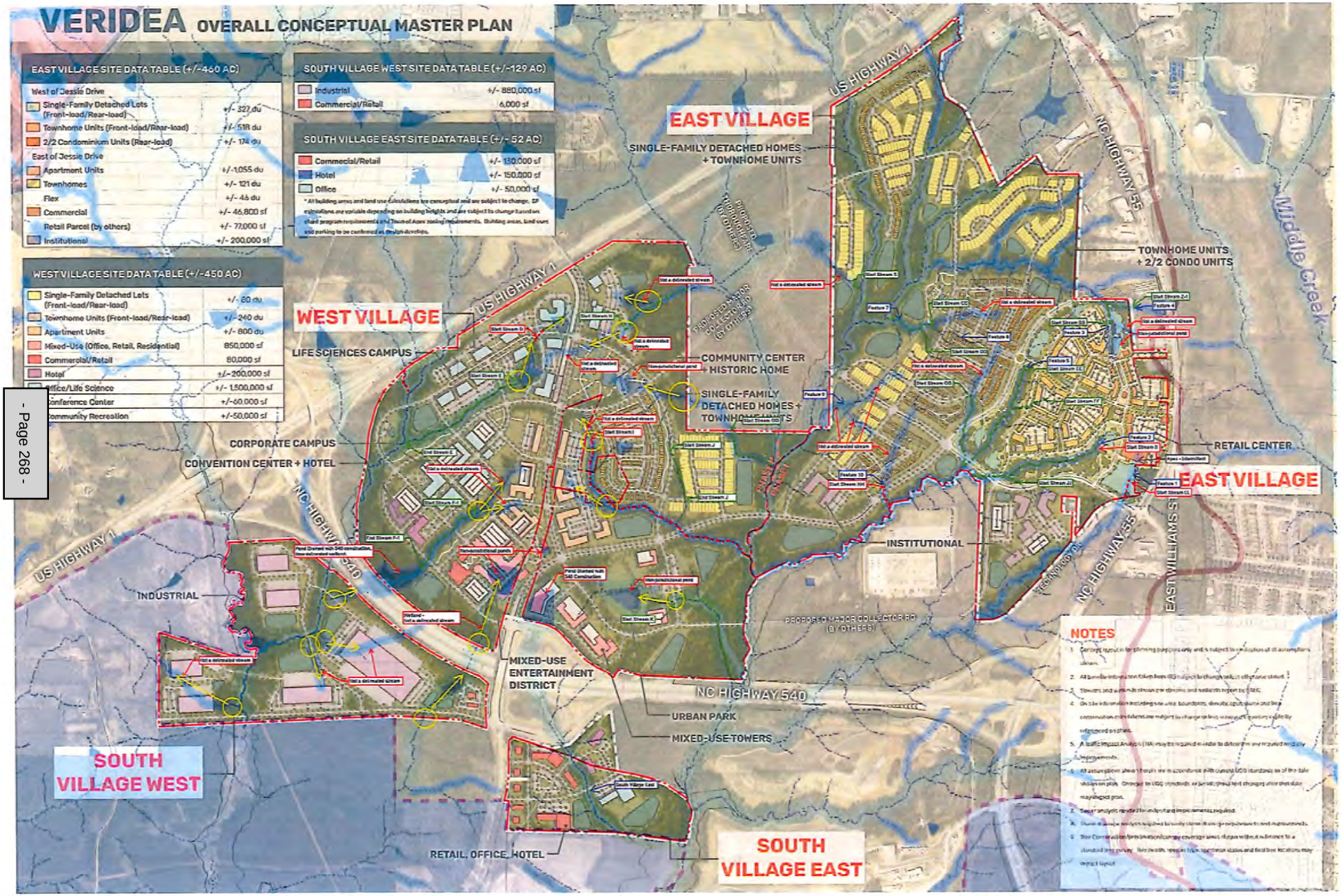
Project No.
11665.WS
Scale:
1" = 150'
NC OneMap
Wake County GIS
11/22/22
Prepared by: JH
Project Mgr.:
SB
Southeast Village Buffer Map
Verdiea
S&EC
Soil & Environmental Consultants, PA
0 100 200 400
Feet
Legend
Town of Apex Perennial Stream
Town of Apex Intermittent Stream
50' Town of Apex Buffer
100' Town of Apex Buffer
Property Boundary

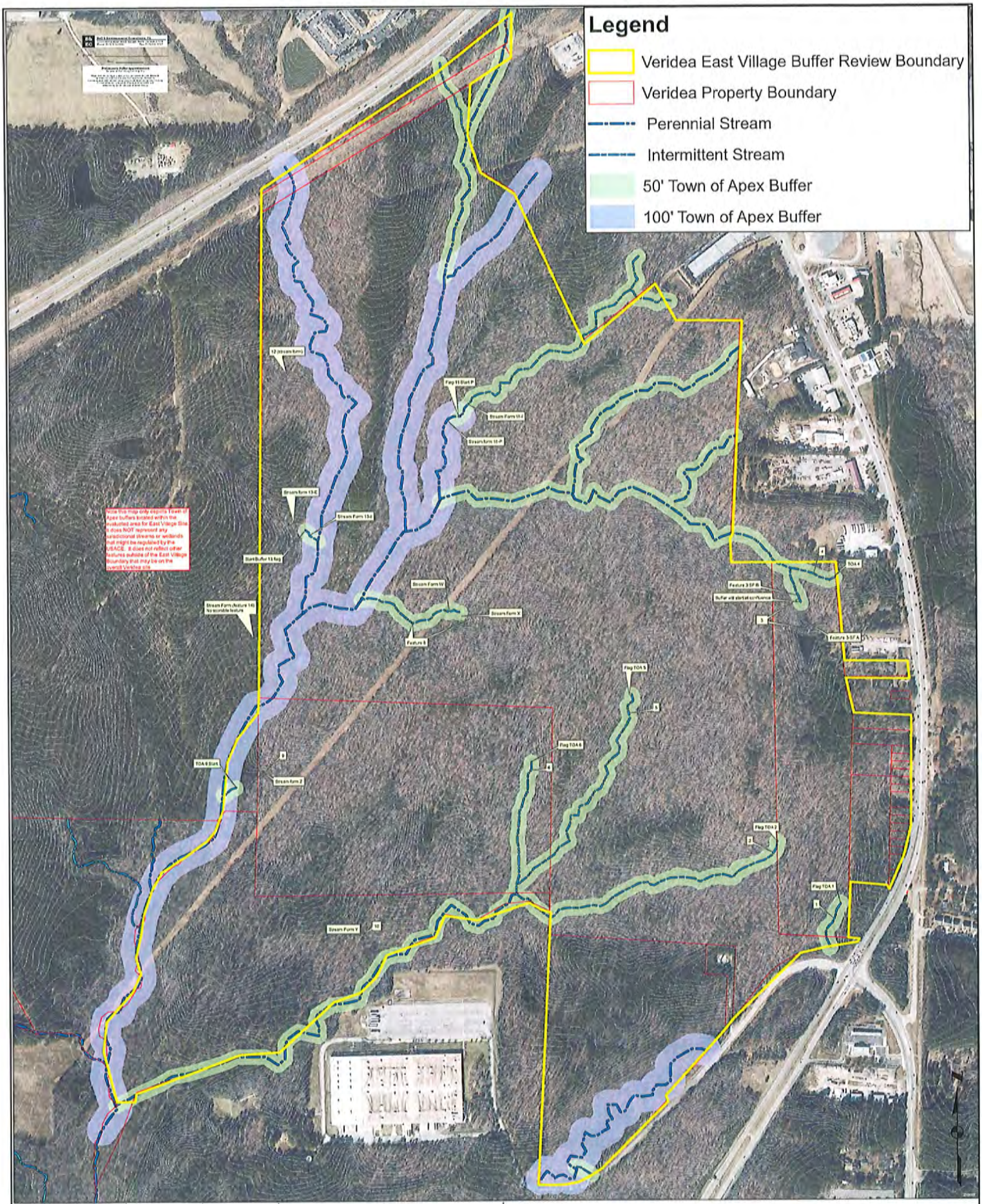


Project Number: 11065.W4	Map Title: USGS Map Veridea Wake County, NC	0 2,000 4,000 Feet N
Project Manager: DS		
Scale: 1" = 2000'		S&EC Soil & Environmental Consultants, PA
Date: 09/10/2021	Source: USGS Wake County Apex & New Hill Quad	8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-0467

JM 12/8/2022

JM 11/16/2022


VERIDEA OVERALL CONCEPTUAL MASTER PLAN
EAST VILLAGE SITE DATA TABLE (+/-460 AC)
West of Jessie Drive
Single-Family Detached Lots (Front-load/Rear-load) +/- 327 du
Townhome Units (Front-load/Rear-load) +/- 518 du
2/2 Condominium Units (Rear-load) +/- 174 du
East of Jessie Drive
Apartment Units +/-1,055 du
Townhomes +/- 121 du
Flex +/- 46 du
Commercial +/- 46,800 sf
Retail Parcel (by others) +/- 77,000 sf
Institutional +/- 200,000 sf
SOUTH VILLAGE WEST SITE DATA TABLE (+/-129 AC)
Industrial +/- 880,000 sf
Commercial/Retail 6,000 sf
SOUTH VILLAGE EAST SITE DATA TABLE (+/- 52 AC)
Commercial/Retail +/- 130,000 sf
Hotel +/- 150,000 sf
Office +/- 50,000 sf
* All building areas and land use calculations are conceptual and are subject to change. SF calculations are variable depending on building heights and are subject to change based on client program requirements and Town of Apex zoning requirements. Building areas, land uses and parking to be confirmed as design develops.
WEST VILLAGE SITE DATA TABLE (+/-450 AC)
Single-Family Detached Lots (Front-load/Rear-load) +/- 80 du
Townhome Units (Front-load/Rear-load) +/- 240 du
Apartment Units +/- 800 du
Mixed-Use (Office, Retail, Residential) 850,000 sf
Commercial/Retail 80,000 sf
Hotel +/- 200,000 sf
Office/Life Science +/- 1,500,000 sf
Conference Center +/-60,000 sf
Community Recreation +/-50,000 sf
EAST VILLAGE
SINGLE-FAMILY DETACHED HOMES + TOWNHOME UNITS
TOWNHOME UNITS + 2/2 CONDO UNITS
RETAIL CENTER
EAST VILLAGE
WEST VILLAGE
LIFE SCIENCES CAMPUS
COMMUNITY CENTER + HISTORIC HOME
SINGLE-FAMILY DETACHED HOMES + TOWNHOME UNITS
CORPORATE CAMPUS
CONVENTION CENTER + HOTEL
INDUSTRIAL
INSTITUTIONAL
MIXED-USE ENTERTAINMENT DISTRICT
URBAN PARK
MIXED-USE TOWERS
RETAIL, OFFICE, HOTEL
SOUTH VILLAGE WEST
SOUTH VILLAGE EAST
US HIGHWAY 1
NC HIGHWAY 55
NC HIGHWAY 540
EAST WILLIAMS ST
Middle Creek
PROPOSED MAJOR COLLECTOR RD (BY OTHERS)
NOTES



Project No. 11065.W5	Scale: 1" = 200'	NC OneMap Wake County GIS	East Village Buffer Map Veridea	Soil & Environmental Consultants, PA
Project Mgr.: SB	12/7/22	Prepared by: JH		0 205 410 820 Feet

January 27, 2023

Steven Ball, RF, PWS
Soil & Environmental Consultants, PA
8412 Falls of Neuse Road, Suite 104
Raleigh, NC 27615

Subject: Stream Buffer Determination
Veridea West Village Ph II
Apex, NC
Cape Fear River Basin

Apex 22-017

Dear Mr. Ball,

On January 20th and 27th, 2023, we met with your staff AJ and Kevin Murphrey at the subject sites to evaluate forty (40) drainage features and determine if they are subject to the Town of Apex (Town) riparian buffer rules. Based on the information obtained during the evaluations and per the requirements set forth in Section 6.1.11 of the Town Unified Development Ordinance (UDO), I concur with the stream classifications as shown on the attached sketch dated 12-02-2022.

Drainage Feature	Shown as on USGS	Shown as on Soil Survey	Determination made in the field	Determined Buffer Width
Feature B – West SF14	Not Present	Intermittent	Ephemeral	0 feet
Feature C – West SF1	Present	Perennial	Intermittent	50 feet
Feature C – West SF16	Not Present	Intermittent	Ephemeral	0 feet
Feature C – West SF5	Not Present	Perennial	Ephemeral	0 feet
Feature E – West SF4	Not Present	Intermittent	Ephemeral	0 feet
Feature G – West SF40	Not Present	Intermittent	Ephemeral	0 feet
Feature H – West SF3	Not Present	Intermittent	Ephemeral	0 feet
Feature J – West SF2	Not Present	Intermittent	Ephemeral	0 feet
Feature K – West SF28	Not Present	Intermittent	Ephemeral	0 feet

Feature K – West SF29	Not Present	Intermittent	Intermittent	50 feet
Feature K – West SF30	Not Present	Intermittent	Ephemeral	0 feet
Feature K – West SF31	Not Present	Intermittent	Ephemeral	0 feet
Feature K – West SF32	Not Present	Intermittent	Intermittent	50 feet
Feature L – West SF15	Not Present	Intermittent	Ephemeral	0 feet
Feature AA – West SF6	Present	Perennial	Ephemeral	0 feet
Feature O – West SF13	Present	Perennial	Intermittent	50 feet
Pond 6	Present	Present	Intermittent	50 feet
Feature O – West SF12	Present	Perennial	Ephemeral	0 feet
Feature O – West SF10	Present	Perennial	Ephemeral	0 feet
Feature O – West SF11	Present	Perennial	Intermittent	50 feet
Feature O – West SF9	Present	Perennial	Ephemeral	0 feet
Feature O – West SF8	Present	Perennial	Intermittent	50 feet
Feature P – West SF37	Not Present	Intermittent	Ephemeral	0 feet
Feature Q – West SF7	Not Present	Intermittent	Ephemeral	0 feet
Feature R – West SF27	Not Present	Intermittent	Ephemeral	0 feet
Feature R – West SF25	Not Present	Intermittent	Intermittent	50 feet
Feature S – West SF26	Not Present	Intermittent	Ephemeral	0 feet
Feature T – West SF24	Not Present	Perennial	Ephemeral	0 feet
Feature T – West SF20	Not Present	Perennial	Intermittent	50 feet
Feature U – West SF23	Not Present	Intermittent	Ephemeral	0 feet

Feature V – West SF35	Not Present	Intermittent	Ephemeral	0 feet
Feature V – West SF36	Not Present	Intermittent	Intermittent	50 feet
Feature V – West SF34	Not Present	Intermittent	Perennial *Intermittent on Soils	50 feet
Feature W – West SF17	Not Present	Intermittent	Ephemeral	0 feet
Feature X – West SF22	Not Present	Intermittent	Ephemeral	0 feet
Feature X – West SF21	Not Present	Intermittent	Intermittent	50 feet
Feature X – West SF41	Not Present	Intermittent	Ephemeral	0 feet
Feature Y – West SF18	Not Present	Perennial	Ephemeral	0 feet
Feature Y – West SF19	Not Present	Perennial	Intermittent	50 feet
Feature BB – West SF38	Not Present	Intermittent	Ephemeral	0 feet
Feature CC – West SF39	Not Present	Intermittent	Ephemeral	0 feet

This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by the Division of Water Resources (DWR) or Delegated Local Authority in the Jordan Lake watershed may request a determination by the DWR Director.

An appeal request must be made within sixty (60) days of date of this letter or from the date the affected party (including downstream and/or adjacent owners) is notified of this letter. A request for a determination by the Director shall be referred to in writing c/o Paul Wojoski, DWR – 401 & Buffer Permitting Branch; 1617 Mail Service Center, Raleigh, NC 27699-1617. Otherwise the appeal procedure will be in accordance with UDO Section 6.1.11.

If you dispute the Director's determination, you may file a petition for an administrative hearing. You must file the petition with the Office of Administrative Hearings within sixty (60) days of receipt of this notice of decision. A petition is considered filed when it is received in the Office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official State holidays.

To request a hearing, send the original and one (1) copy of the petition to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. A copy of the petition must also be served

to the Department of Natural Resources, c/o Bill Lane, General Counsel, 1601 Mail Service Center, Raleigh, NC 27699-1601.

This determination is final and binding unless, as detailed above, you ask for a hearing or appeal within sixty (60) days. This project may require a Section 404/401 Permit for the proposed activity. Any inquiries should be directed to the US Army Corp of Engineers (Raleigh Regulator Field Office) at (919) 554-4884. If you have any questions, please do not hesitate to contact me at (919) 372-7470.

Sincerely,

James Misciagno, CES, CPESC
Stormwater Field Services Supervisor

Riparian Buffer Call
Application

This application is required to be fully completed and submitted to Town staff prior to conducting a buffer call. Please submit the application package electronically to james.misciagno@apexnc.org .

PROPERTY INFORMATION

Owner(s): *See attached table

Site Address: 3012 Veridea Parkway, Apex, North Carolina 27539

CONSULTANT INFORMATION (If applicable)

Name: Joshua Harvey

Address: 8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615

Email: jharvey@sandec.com

Phone: 919.760.9622

CHECKLIST

Please place a checkmark in the spaces provided below to indicate that the required information has been provided with this submittal.

Right of Entry Form	X
NCDEQ Stream Identification Forms (v. 4.11)	X
Sketch Map*	X

Topo Map (most recent version)	X
1970 Wake County Soil Survey Map	X

*Sketch map should show all drainage features on the property with all applicable riparian buffers shown. Please clearly indicate or list which features are being called with this application.

NOTES

SIGNATURE (Consultant or Responsible Party)

By my signature below, I certify that the information provided with this application is accurate and truthful.

Joshua Harvey Digitally signed by Joshua Harvey Date: 2023.01.23 08:55:39 -05'00'

Date: 01/04/2023

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this _____ day of _____, 20____ by Town of Apex and PRINCE, FRANK D SR TRUSTEE (the "owner").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as Veridea - Phase 2 in the Town of Apex, North Carolina and designated as PIN # 0740191376, 0730896270 by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the owner are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the owner do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness: _____ By: _____ POA
Joseph Spagnoy

By: N/A

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this _____ day of _____, 20____ by Town of Apex and WHITEHOUSE, BRENDA P (the "owner").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as Veridea - Phase 2 in the Town of Apex, North Carolina and designated as PIN # 0740287376 by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the owner are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the owner do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness: _____ By: Brenda P Whitehouse

By: Brenda P Whitehouse Trustee

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this _____ day of _____, 20____ by Town of Apex and HH TRINITY APEX INVESTMENTS LLC (the "owner").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as South Village East in the Town of Apex, North Carolina and designated as PIN # 0730971141,0730852539,0740052449 by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the owner are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the owner do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness: _____

HH Trinity Apex Investments LLC
HRCF IV - Trinity Apex Investments LLC

By: _____

By: _____
Richard A. Ortiz
Authorized Signatory

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this _____ day of _____, 20____ by Town of Apex and HH TRINITY APEX INVESTMENTS LLC (the "owner").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as Veridea - Phase 2 in the Town of Apex, North Carolina and designated as PIN # See Attached by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the owner are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the owner do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness: _____

HH Trinity Apex Investments LLC
By: HRCF IV - Trinity Apex Investments LLC

By: _____
Richard A. Ortiz
Authorized Signatory

Phase 2	Owner
0740180331	HH TRINITY APEX INVESTMENTS LLC
0740360895	HH TRINITY APEX INVESTMENTS LLC
0740386384	HH TRINITY APEX INVESTMENTS LLC
0740078021	HH TRINITY APEX INVESTMENTS LLC
0740167653	HH TRINITY APEX INVESTMENTS LLC

NORTH CAROLINA
WAKE COUNTY

RIGHT OF ENTRY

This Right of Entry is executed this _____ day of _____, 20____ by Town of Apex and VERIDEA HOLDINGS LLC (the "owner").

WHEREAS, the Town of Apex ("Town") is seeking to make a stream buffer determination across the property known as Veridea - Phase 2 in the Town of Apex, North Carolina and designated as PIN # 0740180091, 0741203157 by the Wake County Revenue Department (the "**Subject Property**");

WHEREAS, the owner are agreeable to provide the Town with this Right of Entry under the terms and conditions stated herein so that the above referenced determination may proceed.

NOW THEREFORE in light of the above premises, the owner do hereby grant and give freely and without coercion, the right of access and entry to the Subject Property on the terms and conditions as stated below:

1. The Town of Apex and its contractors may enter the Subject Property for the purpose of conducting on-site environmental investigations and issuing a determination based on those investigations as it relates to stream buffer determination.
2. This Right of Entry does not convey to the Town any title or ownership interest in the Subject Property.
3. The Town and its employees, contractors, agents and representatives enter upon the Subject Property at their own risk and assume all risks related to the property.
4. The undersigned agrees and warrants to hold harmless the Town of Apex, its agencies, departments, contractors, and subcontractors, and discharges and waives any action, either equitable or legal that arise from the activities described above on the property except in the case of negligence by the Town.

Witness: _____

Veridea Holdings LLC
HRCF IV - Trinity Apex Investments LLC

By: _____

By: _____

Richard A. Ortiz
Authorized Signatory

PIN_NUM	DEED_ACRES	OWNER	ADDR1	ADDR2	ADDR3	SITE_ADDRESS	FULL_STREET_NAME
740188440	1.38	FIELDS, W J FIELDS, CATHERINE A	3125 VERIDEA PKWY	APEX NC 27539-9202		3125 VERIDEA PKWY	VERIDEA PKWY
730852539	54.65	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 OLD HOLLY SPRINGS APEX RD	OLD HOLLY SPRINGS APEX RD
730971141	98.72	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 VERIDEA PKWY	VERIDEA PKWY
740287376	27.26	WHITEHOUSE, BRENDA P WHITEHOUSE, BRENDA P	3109 VERIDEA PKWY	APEX NC 27539-9202		0 VERIDEA PKWY	VERIDEA PKWY
740191376	75.63	PRINCE, FRANK D SR TRUSTEE	8405 AMANDA CASSIE LN	FUQUAY VARINA NC 27526-9635		3012 VERIDEA PKWY	VERIDEA PKWY
740180331	1.66	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 VERIDEA PKWY	VERIDEA PKWY
740386384	64.67	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	3009 VERIDEA PKWY	VERIDEA PKWY
741207566	32.06	WVPRINCE PROPERTIES LLC	444 AUGUSTA DR	ROCKPORT TX 78382-6945		2901 VERIDEA PKWY	VERIDEA PKWY
740167653	27.29	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 VERIDEA PKWY	VERIDEA PKWY
740052449	17.36	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 VERIDEA PKWY	VERIDEA PKWY
740078021	32.28	HH TRINITY APEX INVESTMENTS LLC	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837	0 VERIDEA PKWY	VERIDEA PKWY
730996270	16.42	PRINCE, F D SR TRUSTEE	FRANK PRINCE JR	8405 AMANDA CASSIE LN	FUQUAY VARINA NC 27526-9635	0 US 1 HWY	US 1 HWY
740360895	82.24	HH TRINITY APEX INVESTMENTS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837		3229 VERIDEA PKWY	VERIDEA PKWY
740180091	12.57	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837		3200 VERIDEA PKWY	VERIDEA PKWY
740188176	3	BUSHEE, ROGER W BUSHEE, GLENDA K	3137 VERIDEA PKWY	APEX NC 27539-9202		3137 VERIDEA PKWY	VERIDEA PKWY
740189737	1.03	WHITEHOUSE, GREGORY HENRY	3109 VERIDEA PKWY	APEX NC 27539-9202		3109 VERIDEA PKWY	VERIDEA PKWY
741203157	1.84	VERIDEA HOLDINGS LLC	570 LEXINGTON AVE STE 2200	NEW YORK NY 10022-6837		2937 VERIDEA PKWY	VERIDEA PKWY
740283126	5	LANGLEY, DAVID K LANGLEY, RENEE M	6300 KING DAVID CT	APEX NC 27539-6897		6300 KING DAVID CT	KING DAVID CT
740188680	1.3	WHITEHOUSE ASSETS MANAGEMENT LLC	3109 VERIDEA PKWY	APEX NC 27539-9202		3117 VERIDEA PKWY	VERIDEA PKWY
740189999	2.49	WHITEHOUSE ASSETS MANAGEMENT LLC	3109 VERIDEA PKWY	APEX NC 27539-9202		3105 VERIDEA PKWY	VERIDEA PKWY
740070950	0.52	HUDSON, KARL GRIER IV	824 BRYAN ST	RALEIGH NC 27605-1104		3134 VERIDEA PKWY	VERIDEA PKWY
740293940	1.8	WVPRINCE PROPERTIES LLC	444 AUGUSTA DR	ROCKPORT TX 78382-6945		2945 VERIDEA PKWY	VERIDEA PKWY
740081019	2.16	APA VERIDEA INVESTMENTS LLC	2000 BEAR CAT WAY STE 102	MORRISVILLE NC 27560-6620		3138 VERIDEA PKWY	VERIDEA PKWY
730977967	10.27	APA VERIDEA INVESTMENTS LLC	2000 BEAR CAT WAY STE 102	MORRISVILLE NC 27560-6620		3142 VERIDEA PKWY	VERIDEA PKWY
740082199	2.09	WANG, YIFEI MEI, HUA	111 BRIDGEGATE DR	CARY NC 27519-7184		3130 VERIDEA PKWY	VERIDEA PKWY

West CP4 West SF 14

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.784010
Evaluator: SAEC – JH	County: Wake	Longitude: -78.886215
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 4	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other B *e.g. Quad Name:*

A. Geomorphology (Subtotal = 1)	Absent	Weak	Moderate	Strong
1a. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel artificial ditches are not rated; see discussions in manual	No = 0		Yes = 3	

B. Hydrology (3)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 0)				
18. Fibrous roots in streambed	3	2	1	0.5
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 12/15/2022

West SF 1

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.688108
Evaluator: S+EC – AJK + JA + KM	County: Wake	Longitude: -78.864747
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 22 23 JM	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other C *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	1	(2)	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (6.5)				
12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 5.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	0	(0.5)	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

JM

022

West SF16

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.694123
Evaluator: SFEC - AJK + JH + KM	County: Wake	Longitude: -78.859020
Total Points: Non-Scoreable Feature *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other C e.g. Quad Name:

A. Geomorphology (Subtotal =)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology ( )				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal =)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods, See p. 35 of manual.

Notes:

Sketch: Non-Scoreable Feature

Soils = Intermittent

USGS = Not Present

JM 12/15/2022

West SF5

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35691656
Evaluator: S+EC – AJK+ KW	County: Wake	Longitude: -78.862456
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12.25	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other C *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 3.75)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = (0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Not Present

11/15/2022

West SF4

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.688188
Evaluator: SEC - AJK, JH, KM	County: Wake	Longitude: -78.874638
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 11.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other E *e.g. Quad Name:*

A. Geomorphology (Subtotal = 8)	Absent	Weak	Moderate	Strong
1st. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

*artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

VSCS = Not Present

JM 12/15/2022

WEST SFHD (FEATURE G)

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Heridan	Latitude: 35.602574
Evaluator: SBEC - JOSHUA HARVEY	County: WAKE	Longitude: -78.789561
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** NO SIGNIFICANT FEATURE	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other G *e.g. Quad Name:*

A. Geomorphology (Subtotal = ✓)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel artificial ditches are not rated; see discussions in manual	No = 0		Yes = 3	

B. Hydrology (Subtotal = ✓)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = ✓)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soil = Intermittent

USGS = Not Present

JM 11/10/2022

West SF3

JM 1/20/2023

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.689827
Evaluator: SHEC-AJK + KM+JH	County: Wake	Longitude: -78.869936
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 9.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other H *e.g. Quad Name:*

A. Geomorphology (Subtotal = 3.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	(2) JM	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	0	(1) JM	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3)				
12. Presence of Baseflow	(0)	(1) JM	2	3
13. Iron oxidizing bacteria	(0)	(1) JM	2	3
14. Leaf litter	1.5	(1) JM	0.5	(0)
15. Sediment on plants or debris	(0)	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

VSCS = Not Present

12/15/2022

West SF2

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.689824
Evaluator: S+EC - AJK + JH + KM	County: Wake	Longitude: -78.868594
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 14	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other J *e.g. Quad Name:*

A. Geomorphology (Subtotal = 6)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

12/15/2022

West
SF28 JM 11/30/2022

NC Division of Water Quality --Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.695273
Evaluator: S+EC-AJK	County: Wake	Longitude: -78.862219
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other *e.g. Quad Name:* K

A. Geomorphology (Subtotal = 8)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 4)				
12. Presence of Baseflow	(0)	(1) JM	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	(1) JM	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 12/15/2022

West

SF29 NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.694757
Evaluator: SEC - AJK	County: Wake	Longitude: -78.862695
Total Points: 22.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other K *e.g. Quad Name:*

A. Geomorphology (Subtotal = 14)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent,
USGS = Not Present

JM 10/13/2022

West

SF30

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.694807
Evaluator: S+EC – AJK	County: Wake	Longitude: -78.863007
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 10	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other R *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (0)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 12/15/2022

JM 1/20/2023

West

SF31 NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/2022	Project/Site: Veridea	Latitude: 35.694541
Evaluator: S+EC-AJK	County: Wake	Longitude: -78.863163
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other *e g Quad Name:* K

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7 Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0 5	1	1,5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3)				
12 Presence of Baseflow	(0)	(1) JM	2	3
13 Iron oxidizing bacteria	(0)	1	2	3
14 Leaf litter	1,5	1	0.5	(0)
15 Sediment on plants or debris	(0)	0.5	(1) JM	1,5
16. Organic debris lines or piles	(0)	0.5	1	1,5
17 Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0 75; OBL = 1,5 Other = (0)			

*perennial streams may also be identified using other methods. See p 35 of manual

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 12/15/2022

West

SF32 NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.694109
Evaluator: SFEC – AJK	County: Wake	Longitude: -78.863801
Total Points: 24 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other e g Quad Name: R

A. Geomorphology (Subtotal = 14)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual

Notes:

Sketch:

Soils = Intermittent

VSBS = Not Present

JH 10/20/2022

West SF 15

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.694785
Evaluator: SHEC - AJK + KM	County: Wake	Longitude: -78.861676
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other L *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes (= 3)	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other (= 0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

5/2022

West SFB

NC DWQ Stream Identification Form Version 4.11

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.780631
Evaluator: StEC – JH	County: Wake	Longitude: -78.860357
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 13.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other AA *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 0)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

JM 11/2/22

West SF 13

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Vendel	Latitude: 35.648832
Evaluator: JH	County: Wake	Longitude: -78.861887
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other ○ *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (5)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 10.5)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	(0.5)	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

JM 12/15/2022

West SF12

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/22/2022	Project/Site: Vernon	Latitude: 35.698448
Evaluator: JH	County: Wayne	Longitude: -78.3626260
Total Points: 11.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4)	Absent	Weak	Moderate	Strong
1. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

artificial ditches are not rated; see discussions in manual

B. Hydrology (1.5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p, 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Present

JM 11/22

West 5 10

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Lewellen	Latitude: 35.647567
Evaluator: JH	County: Lenoir	Longitude: -78.864030
Total Points: 16 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other 0 *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a]artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 4)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

JM 12/

West SF11

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Verden	Latitude: 35.697734
Evaluator: JH	County: Warren	Longitude: -78.863691
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 21	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other 0 *e.g. Quad Name:* —

A. Geomorphology (Subtotal = 11)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 0)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Present

JM 12/13/2022

West SF#9

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2020	Project/Site: Vendeen	Latitude: 35.697070
Evaluator: JH - SEC	County: Carteret	Longitude: -78.86535
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other 0 *e.g. Quad Name:* —

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1 SM	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3.5)				
12. Presence of Baseflow	(0)	1	2	(3) SM
13. Iron oxidizing bacteria	(0)	1	2 SM	3
14. Leaf litter	1.5	SM 1	(0.5)	(0)
15. Sediment on plants or debris	(0)	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

USGS = Present

Evest SF8

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Verden	Latitude: 35.697098
Evaluator: JH - S+EC	County: ~~mc~~ Wake	Longitude: -78.865711
Total Points: 21.5 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other O *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4.5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 10)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Present

JM 11/7/2022

WEST SF37

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/2022	Project/Site: Veridea	Latitude: 35.696[illegible]
Evaluator: SHEC - JOSINA HARVEY	County: WAKE	Longitude: -78.5[illegible]
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 8	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other P *e.g. Quad Name:*

A. Geomorphology (Subtotal = 3.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel ~~artificial ditches are not rated; see discussions in manual~~	(No = 0)		Yes = 3	

B. Hydrology (Subtotal = 0.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	(0.5)	1	1.5
17. Soil-based evidence of high water table?	(No = 0)		Yes = 3	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

11/20/2022

Lower SF 7

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/27/2022	Project/Site: Verdue	Latitude: 35.699659
Evaluator: SH	County: Craven	Longitude: -78.864028
Total Points: 16 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other Q *e.g. Quad Name:*

A. Geomorphology (Subtotal = 6)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel[a] artificial ditches are not rated; see discussions in manual	No = 0		Yes = 3	

B. Hydrology (5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

12/15/2022

West SF27

NC DWQ Stream Identification Form Version 4.11

Date: 11/2/22	Project/Site: Verides	Latitude: 35.701121
Evaluator: S+EL-JH	County: Wake	Longitude: -78.856460
Total Points: 9 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other R *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel		No = 0	Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?		No = 0	Yes = 3	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 11/7/2022

West SF 25

NC DWQ Stream Identification Form Version 4.11

Date: 11/2/22	Project/Site: Verdea	Latitude: 35.702162
Evaluator: S+EC - JH	County: Wake	Longitude: -78.854496
Total Points: *Stream is at least Intermittent if ≥ 19 or perennial if ≥ 30** 21.75	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other R *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	(2)	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 6.75)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JH 11/2/2022

West SF26

NC DWQ Stream Identification Form Version 4.11

Date: 11/2/22	Project/Site: Verdea	Latitude: 35.701807
Evaluator: STEC-JH	County: Wake	Longitude: -78.855554
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 10.25	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other 5 *e.g. Quad Name:*

A. Geomorphology (Subtotal = 2.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 3)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 4.75)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 11/2022

West
SF 24

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.698569
Evaluator: SHEC - AJK + JH + KM	County: Wake	Longitude: -78.854833
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 18	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other T *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	1	(2)	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
VSCS = Not Present

2/15/2022

West SF20

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Verides	Latitude: 35.696709
Evaluator: SH-EC - AJK + JH + KM	County: Wake	Longitude: -78.852141
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19.5	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other T *e.g. Quad Name:*

A. Geomorphology (Subtotal = 10.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2) →	3
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	0	1	(2)	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Not Present

JH 11/15/2022

West SF23

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Verideo	Latitude: 35.698339
Evaluator: SFEC – AJK & KM	County: Wake	Longitude: -78.855074
Total Points: Non-Scoreable Feature, *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other U *e.g. Quad Name:*

A. Geomorphology (Subtotal = _____)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (_____)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = _____)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Non-Scoreable Feature

Soils = Intermittent
USGS = Not Present

JM 10/19/2022

West SF 35

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.697154
Evaluator: S+EC - AJK	County: Wake	Longitude: -78.858121
Total Points: 6 *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other e.g. Quad Name: V

A. Geomorphology (Subtotal = 1)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 2)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 12/20/2022

West SF36

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/22	Project/Site: Veridea	Latitude: 35.696363
Evaluator: SFEC-AJK	County: Wake	Longitude: -78.858198
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 23	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other ✓ *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11.5)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	(2)	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (6.5)				
12. Presence of Baseflow	0	(1)	2	3
13 Iron oxidizing bacteria	(0)	1	2	3
14 Leaf litter	1.5	(1)	0.5	0
15 Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17 Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22 Fish	(0)	0 5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0 75; OBL = 1,5 Other = 0			

*perennial streams may also be identified using other methods. See p 35 of manual

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 12/20/2022

West SF 34

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/3/2022	Project/Site: Verideа	Latitude: 35.694766
Evaluator: S+EC - AJK	County: Wake	Longitude: -78.856375
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 32	Stream Determination (circle one) Ephemeral Intermittent (Perennial)	Other e.g. Quad Name: ✓

A. Geomorphology (Subtotal = 18)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	(3)
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	0	1	(2)	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (8)				
12. Presence of Baseflow	0	1	(2)	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 0)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphiblans	0	0.5	(1)	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 12/20/2022

West
SF17

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.694829
Evaluator: StEC - AJK, JH, KM	County: Wake	Longitude: -78.859124
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 14	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other W *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4.5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = (1.5) Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JH 12/15/2022

West SF22 NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.696773
Evaluator: S+EC - AJK + JH + km	County: Wake	Longitude: -78.854816
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 7	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other X *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1a. Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	(0)	1	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

a artificial ditches are not rated; see discussions in manual

B. Hydrology (0)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 2)				
18. Fibrous roots in streambed	3	2	1	(0)
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent

USGS = Not Present

JM 12/13/2022

West SF21

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.695789
Evaluator: S+EC - AJK + JH + KM	County: Wake	Longitude: -78.854435
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19.75	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other X *e.g. Quad Name:*

A. Geomorphology (Subtotal = 11.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	1	(2)	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (3.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	0.5	(0)
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	(0)	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 4.75)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	(FACW = 0.75) OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 12/15/2022

WEST SF41

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/02/2022	Project/Site: Verdea	Latitude: 35.6944611
Evaluator: SAFEC - JOSHUA HARVEY	County: Wake	Longitude: -78.854206
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 15	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other X *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel ~~artificial ditches are not rated; see discussions in manual~~	No = 0		Yes = 3	

B. Hydrology (Subtotal = 5.5)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: Stream originates into wetland drainage

Sketch:

Soils = Intermittent

USGS = Not Present

JH 11/10/2022

West SF1B

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.691433
Evaluator: S+EC - AJK+JH + KM	County: Wake	Longitude: -78.855344
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 13.5	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other Y *e.g. Quad Name:*

A. Geomorphology (Subtotal = 6)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	(0)	1	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (4.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial

VSCS = Not Present

JMT 12/15/2022

West
SF 19

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/22	Project/Site: Veridea	Latitude: 35.690966
Evaluator: SHEC – AJK + KM	County: Wake	Longitude: -78.852807
Total Points: 21.5 23.5 JM *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	Stream Determination (circle one) Ephemeral (Intermittent) Perennial	Other Y *e.g. Quad Name:*

A. Geomorphology (Subtotal = 12.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	(2)	3
2. Sinuosity of channel along thalweg	0	1	2	(3)
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	1	(2)	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	0	0.5	(1)	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (6)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = (3)	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3	(2)	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Perennial
USGS = Not Present

JM 11/15/2022

WFST SF38 (FEATURE BB)

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/2022	Project/Site: Veridea	Latitude: 35.688922
Evaluator: SEC - Joshua Harvey	County: WAKE	Longitude: -78.751202
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** No Scoreable Feature	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other BB *e.g. Quad Name:*

A. Geomorphology (Subtotal = /)	Absent	Weak	Moderate	Strong
1a. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel artificial ditches are not rated; see discussions in manual	No = 0		Yes = 3	

B. Hydrology (Subtotal = /)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = /)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	/	FACW = 0.75; OBL = 1.5 Other = 0		

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Soils = Intermittent
USGS = Not Present

JM 10/2022

WEST SF 39 ([redacted]) [illegible] Ditch

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.1

NC DWQ Stream Identification Form Version 4.1

Date: 11/2/2022	Project/Site: Verdea	Latitude: 35.703025
Evaluator: SEC - Joshua HARVEY	County: WAKE	Longitude: -78.859370
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** No Scorable Feature	Stream Determination (circle one) (Ephemeral) Intermittent Perennial	Other CC *e.g. Quad Name:*

A. Geomorphology (Subtotal =)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel artificial ditches are not rated; see discussions in manual	No = 0		Yes = 3	

B. Hydrology (Subtotal =)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal =)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

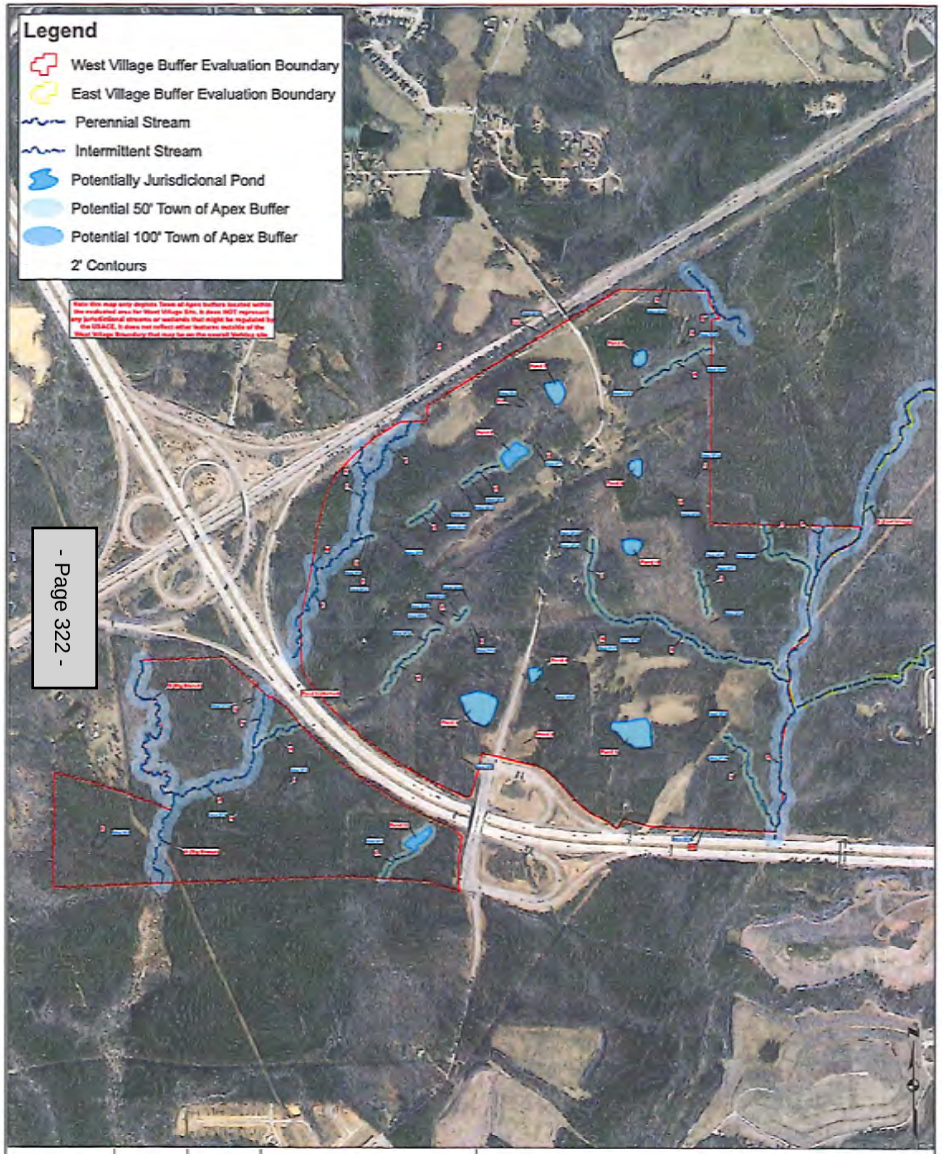
Notes:

Sketch:

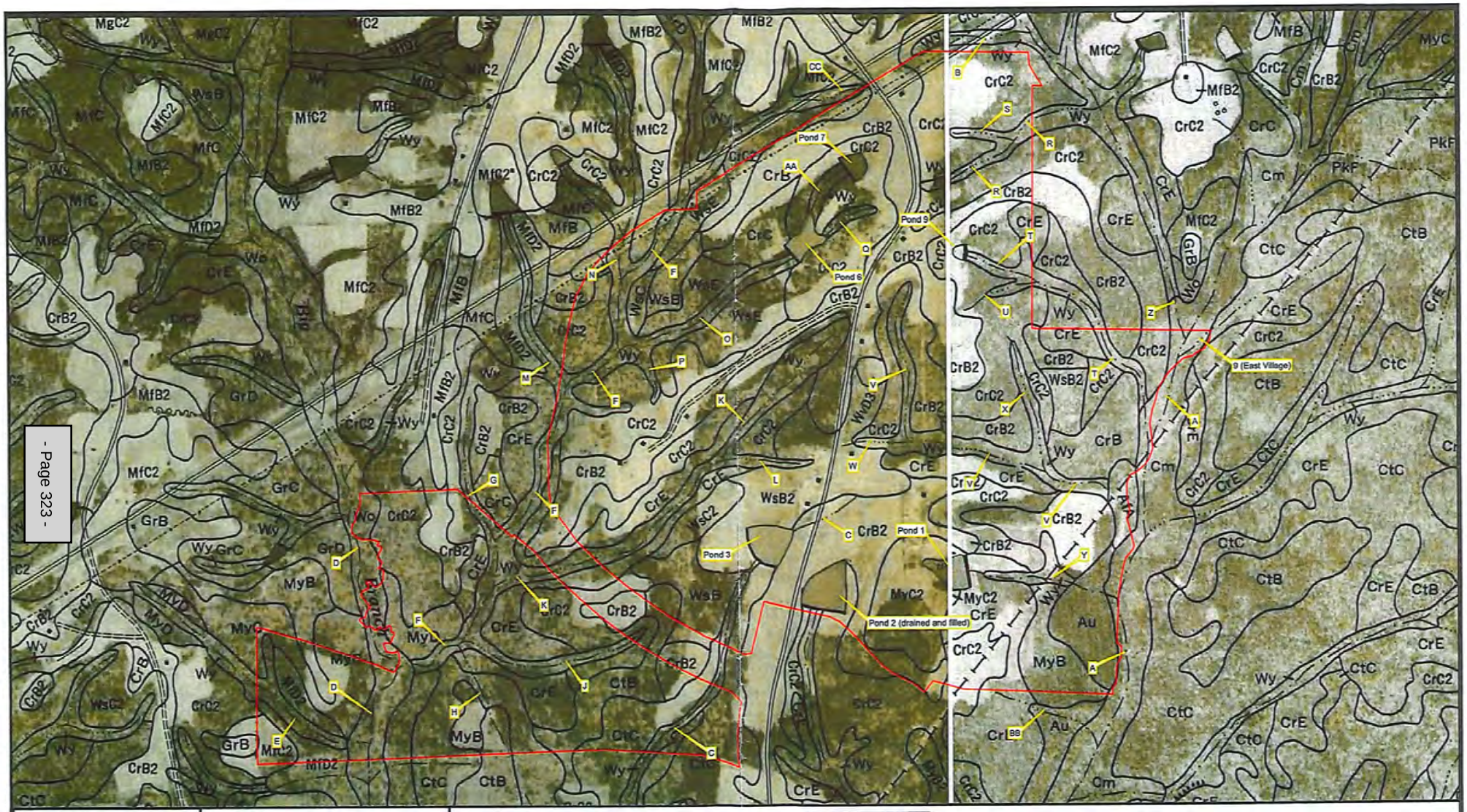
Soils = Intermittent

USGS = Not Present

JM 10/20/2022


Legend
West Village Buffer Evaluation Boundary
East Village Buffer Evaluation Boundary
Perennial Stream
Intermittent Stream
Potentially Jurisdicional Pond
Potential 50' Town of Apex Buffer
Potential 100' Town of Apex Buffer
2' Contours
West Village Buffer Map
Veridea
Soil & Environmental Consultants, PA
0 300 600 1,200
Feet

JM 12/15/2022



Project Number: 11065.W28	Map Title: Figure 2 - Soil Survey	
Project Manager: SB	Veridea West Village	
Scale: 1" = 750'	Source: Wake County Soil Survey Sheets 74 & 75	
Date: 12/02/2022		

JM 12/15/2022

S&EC
Soil & Environmental Consultants, PA
8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467
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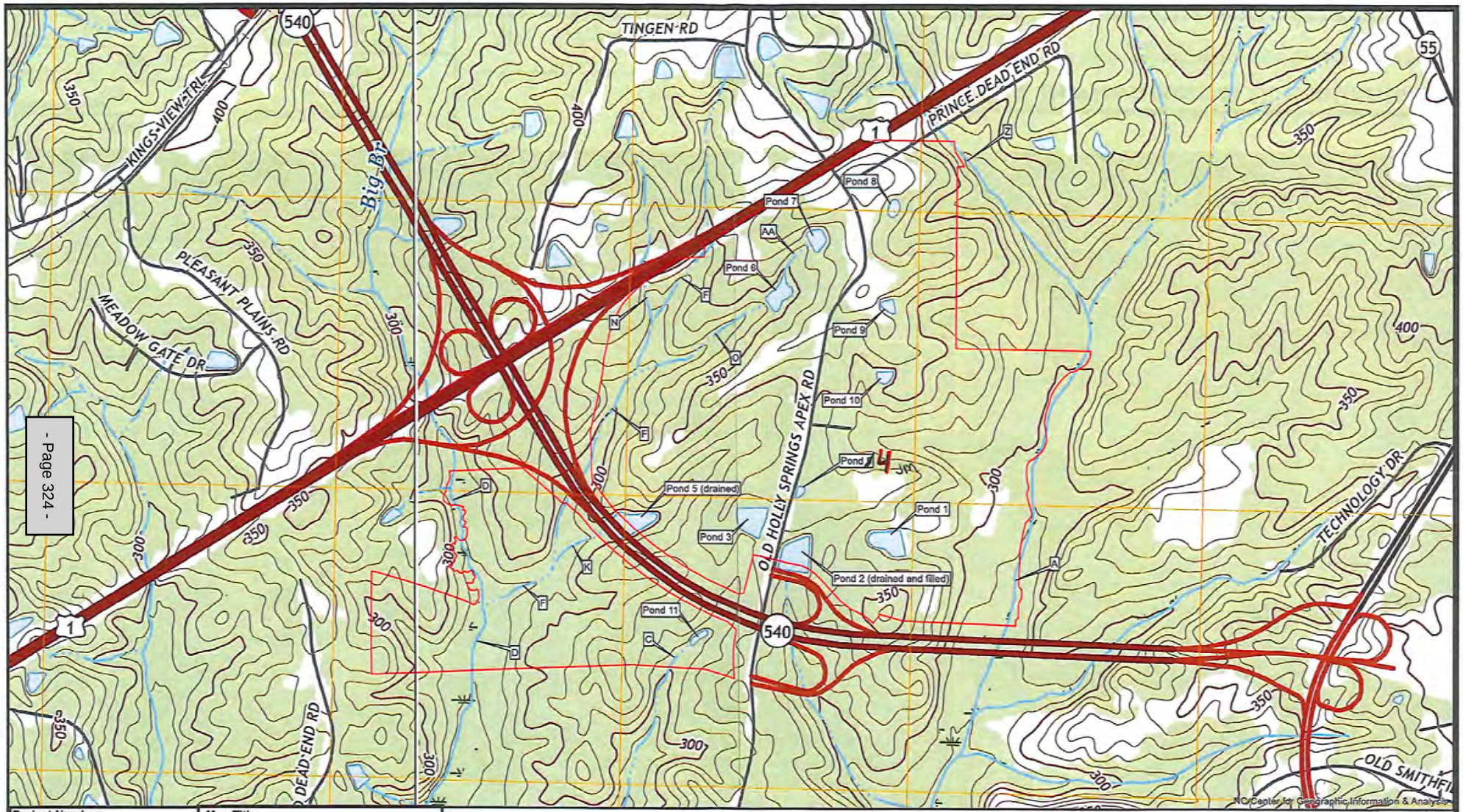

- Page 324 -

Project Number:	11065.W28
Project Manager:	SB
Scale:	1" = 1000'
Date:	12/02/2022

Map Title: **Figure 1 - USGS Map**

Veridea
West Village

Source: 2019 NC New Hill & Apex Quads

0 1,000 2,000
Feet

N

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8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone: (919) 846-5900 • Fax: (919) 846-9467
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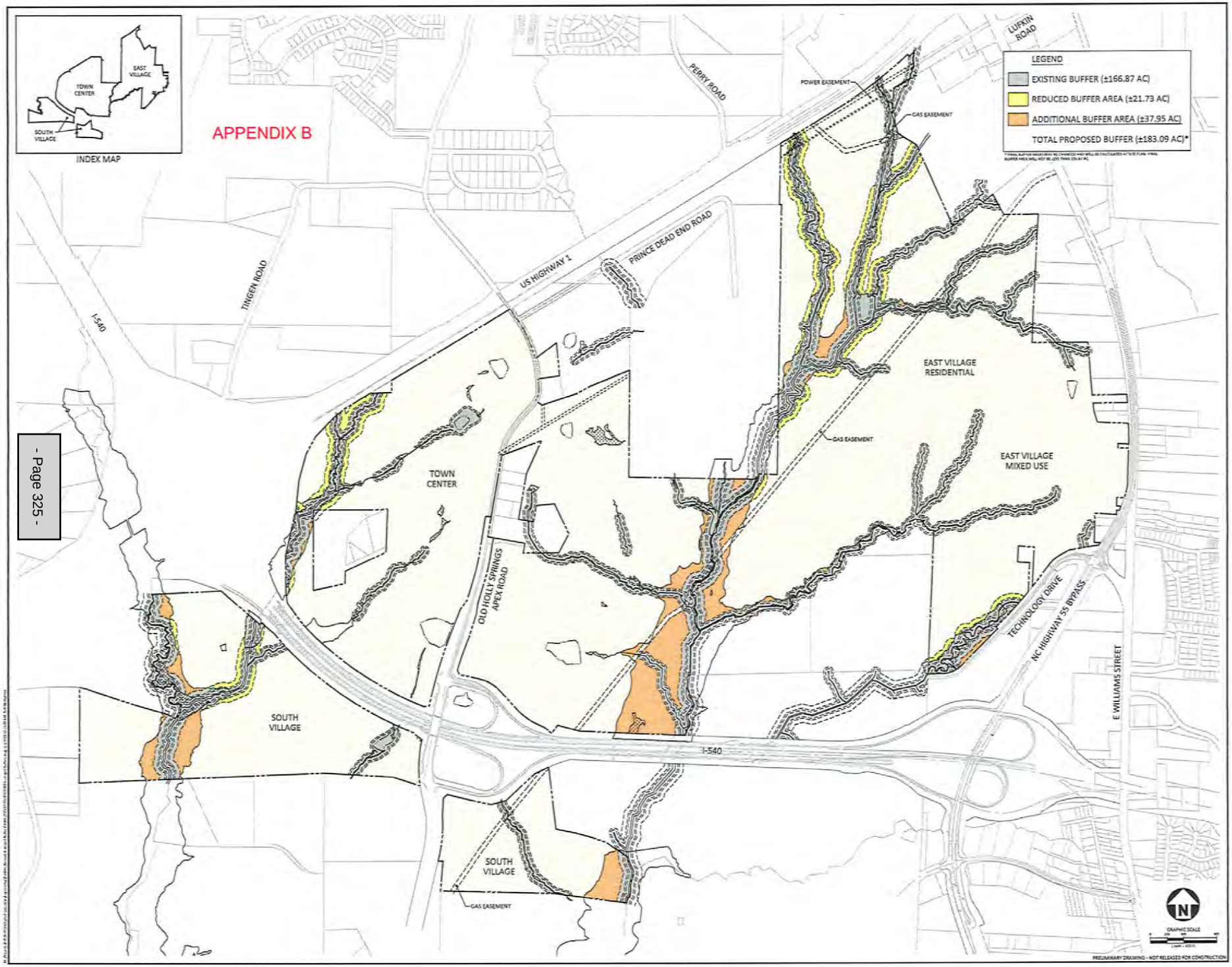

McADAMS
The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713
phone 919. 361. 5000
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license number: C-0293, C-187
www.mcadamsco.com

VERIDEA
AVERAGED STREAM BUFFER EXHIBIT
APEX, NORTH CAROLINA

REVISIONS

PLAN INFORMATION
PROJECT NO. RKR-22001
FILENAME RKR22001-S1
CHECKED BY WHD
DRAWN BY RLH
SCALE 1"=400'
DATE JUL 20, 2023

SHEET
AVERAGED STREAM BUFFER EXHIBIT
E1.00

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: April 23, 2024

Item Details

Presenter(s): Lauren Staudenmaier, Planner II

Department(s): Planning

Requested Motion

Motion to approve the Statement of the Town Council for Rezoning Application No. 22CZ27 Center City Townhomes, Jason Barron, Morningstar Law Group, petitioner, for the properties located at 1316, 1314, 0, 1320, 1332, 1400, 1328, and 0 Center Street (PINs 0741994612, 0741993895, 0741993581, 0741995716, 0741996516, 0741997663, 0741995786, & 0741995610).

Approval Recommended?

The Planning Department recommends approval.

Item Details

Rezoning Application No. 22CZ27 was denied at the April 9, 2024 Town Council meeting.

Attachments

- CN10-A1: Statement of the Town Council - Rezoning Case No. 22CZ27 Center City Townhomes Statement of Denial

STATEMENT OF THE APEX TOWN COUNCIL PURSUANT TO G.S. 160D-605
ADDRESSING ACTION ON ZONING PETITION #22CZ27

Jason Barron, Morningstar Law Group, owner/applicant (the "Applicant"), submitted a completed application for a conditional zoning on the 1st day of December 2022 (the "Application"). The proposed conditional zoning is designated #22CZ27.

The Planning Director for the Town of Apex, Dianne Khin, caused proper notice to be given (by publication and posting) of a public hearing on #22CZ27 before the Apex Planning Board on the 11th day of March 2024.

The Apex Planning Board held a public hearing on the 11th day of March 2024, gathered facts, received public comments and formulated a recommendation regarding the application for conditional zoning #22CZ27. A motion was made by the Apex Planning Board to recommend approval; the motion passed by a vote of 7-1 for the application for #22CZ27.

Pursuant to G.S. §160D-601 and Sec. 2.2.11.E of the Unified Development Ordinance, the Planning Director caused proper notice to be given (by publication and posting), of a public hearing on #22CZ27 before the Town Council on the 9th day of April 2024.

The Apex Town Council held a public hearing on the 9th day of April 2024. Lauren Staudenmaier, Planner II, presented the Planning Board's recommendation at the public hearing.

All persons who desired to present information relevant to the application for #22CZ27 were allowed to present evidence at the public hearing before the Apex Town Council. No one who wanted to speak was turned away.

The Apex Town Council by a vote of 3 to 2 denied Application #22CZ27 rezoning the subject tract located at 1316, 1314, 0, 1320, 1332, 1400, 1328, and 0 Center Street from High Density Single-Family Residential (HDSF), Residential Agricultural (RA), Office and Institutional-Conditional Use (O&I-CU #04CU04 & #04CU10), and Light Industrial-Conditional Use (LI-CU #97CU22B) to High Density Multi-Family Residential-Conditional Zoning (HDMF-CZ) & Office and Institutional-Conditional Zoning (O&I-CZ).

The 2045 Land Use Map classification for the subject properties is Office Employment. The proposed rezoning of a portion of the properties to Office and Institutional-Conditional Zoning (O&I-CZ) is consistent with that land use classification. However, the proposed rezoning of the remainder of the properties to High Density Multi-Family-Conditional Zoning (HDMF-CZ) is not consistent with that land use classification. Approval of the rezoning is not reasonable and in the public interest because the proposed HDMF-CZ district will have no connectivity to the residential development to the west and the future access to this development will be right-in/right out due to the future median location. Furthermore, the change from Office Employment to High Density Residential affects the economic development potential of the area as it would reduce the amount of land available for Tech Flex and/or Office & Institutional uses near the Investment Boulevard office and industrial park.

ATTEST:

Allen Coleman, CMC, NCCCC Town Clerk	Jacques K. Gilbert Mayor

Date

Proclamation

Civilian Law Enforcement Professionals Week 2024

from the Office of the Mayor

WHEREAS, Civilian Law Enforcement Professionals play an essential role in assisting the Apex Police Department and helping to coordinate their functions; and,

WHEREAS, These individuals are key contributors to aspects of public relations and outreach between the Apex Police Department and the Apex Community; and,

WHEREAS, The work these Civilian Law Enforcement Professionals do often goes unrecognized and is underappreciated, and it requires expertise in communications, project management, criminal justice systems, community service and engagement, and more; and,

WHEREAS, These professionals fulfill vital roles in our Police Department, such as Administration, Records Management, Evidence and Equipment Management, Victim Advocating, Crisis Counseling, Crime Analysis, Accreditation, Policy Compliance, and more; and,

WHEREAS, The Town of Apex is grateful to these men and women who have dedicated their careers to the service of helping keep our town safe.

NOW, THEREFORE, I, Jacques K. Gilbert, Mayor of Apex, North Carolina, do hereby proclaim the week of April 21st through April 27th, 2024, as "Civilian Law Enforcement Professionals Week" in the Town of Apex, and extend my heartfelt gratitude to the excellent Civilian Law Enforcement Professionals in our Police Department, who contribute greatly to its success.

I hereby set my hand and have caused the Seal of the Town of Apex, North Carolina, to be affixed this the 23rd day of April 2024

Jacques Gilbert, Mayor

Proclamation

Apex Small Business Week 2024

from the Office of the Mayor

WHEREAS, For more than 60 years, the U.S. Small Business Administration has celebrated National Small Business Week, which honors the critical contributions of entrepreneurs and small business owners across the United States, acknowledging their resilience, innovation, and dedication; and,

WHEREAS, In Apex, there are more than 2,000 small businesses which help form the character of our town, provide goods and services to our residents, and drive economic growth and innovation; and,

WHEREAS, In North Carolina, small businesses account for 99.6% of the businesses in the state and employ 44.5% of the state's workforce; and,

WHEREAS, From April 28th to May 4th, 2024, the Town of Apex and our small business partners have created a week of activities to celebrate our local small businesses and support their achievements and contributions; and,

WHEREAS, The Town of Apex is excited to celebrate small business week, and privileged to be home to so many small business owners and employees that help keep Apex such a thriving location to live, work, and play.

NOW, THEREFORE, I, Jacques K. Gilbert, Mayor of Apex, North Carolina, do hereby proclaim the week of April 28th through May 4th, 2024, as "Apex Small Business Week" in the Town of Apex, and encourage all residents to support our array of small businesses in our town during this week and all weeks.

I hereby set my hand and have caused the Seal of the Town of Apex, North Carolina, to be affixed this the 23rd day of April 2024

Jacques Gilbert, Mayor

Proclamation

Think Apex Day 2024

from the Office of the Mayor

WHEREAS, Think Apex Day was created in 2017 from the vision of former Councilmember and Mayor Pro-Tempore Nicole Dozier as a day to organize volunteer events and activities that bring the community together in order to improve the town and positively impact the people that live here; and,

WHEREAS, This year, Think Apex Day will host projects in several different categories of improvement around Apex, such as "Think Refresh", "Think Create", "Think Revitalize", "Think Earth", "Think Clean", and "Think Donate"; and,

WHEREAS, Each year, the town is proud to host its annual "Think Apex Awards" ceremony, which recognizes individuals, businesses, and non-profit organizations that help make a difference in our community; and,

WHEREAS, The "Top Thinkers" for the Think Apex Awards in 2024 were TJ Evans, Progressive Taekwondo Academy, Colleen McDermott, and Shield NC, with Honorable Mentions going to Olivia Scott, Charley Madelyn Faith & Fashion Boutique, Austin Krueger, and Bella Angels Inc.; and,

WHEREAS, Apex is at its best when all of its organizations and individuals are working together to ensure Apex remains the Peak of Good Living, and that is what Think Apex Day sets out to do.

NOW, THEREFORE, I, Jacques K. Gilbert, Mayor of Apex, North Carolina, do hereby proclaim Saturday, April 27th, 2024, as "Think Apex Day" in the Town of Apex, and encourage all residents to spend this day in organized or individual activities that seek to make Apex a better place for all.

I hereby set my hand and have caused the Seal of the Town of Apex, North Carolina, to be affixed this the 23rd day of April 2024

Jacques Gilbert, Mayor

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PRESENTATION

Meeting Date: April 23, 2024

Item Details

Presenter(s): Linda Graham Jones, Director
Celeste Sherer, Coordinator

Department(s): Diversity, Equity, and Inclusion (DEI) Department

Requested Motion

Receive the proposed Language Access Plan (LAP) for the Town of Apex and a possible motion to adopt the proposed Language Access Plan (LAP) for the Town of Apex and the implementation of said plan.

Approval Recommended?

Yes

Item Details

The Town of Apex is a participant in the Local Government Language Access Collaborative, a one-year interactive course designed to build capacity for North Carolina local governments to communicate with residents in community languages.

The Language Access Collaborative builds relationships between local governments and community partners, who must come together as a team to design a language access plan for their city, town, or county. Apex is joined in their efforts by Fiesta Cristiana, a community organization who provides a wide array of services to our Hispanic and Latino communities.

In the fall of 2022, Council provided a letter of support of the Language Access Collaborative initiative. This work aligns with the "Welcoming Community" goal within the Town's adopted Strategic Plan, otherwise known as "Game Plan Apex".

Our grant application was accepted into the Language Access Collaborative along with eight (8) other local government jurisdictions (Buncombe County, Concord, High Point, Morrisville, New Hanover County, Raleigh, Wilmington, and Winston Salem) and monthly activities began in January 2023. The program featured seven virtual workshops and two in-person events in Chapel Hill. Following the completion of the course, which is administered by Building Integrated Communities (BIC) and funded by the Blue Cross and

Blue Shield of North Carolina Foundation, the local government teams will be eligible for funding to assist with the implementation of their language access plan. At least one component of the language access plan must be completed by June 30, 2024.

Attachments

- PR4-A1: PowerPoint Presentation – Town of Apex Language Access Plan (LAP)
- PR4-A2: Town of Apex Language Access Plan (LAP)

APEX 1873 NORTH CAROLINA



April 23, 2024

Town of Apex
Language Access Plan

APEX
NORTH CAROLINA

Agenda

Town of Apex Proposed Language Access Plan

- Why Language Access
- Legal Requirements
- Language Data
  - Factors and Assessment
  - Survey Findings
- Stakeholder Engagement
- Suggestions and Recommendation
- Proposed Policies and Procedures
- Proposed Implementation and Proposed Action Items





Language Access Team

Order from left to right, (Town of Apex, Fiesta Christiana*)*

Stacie Galloway: *Communications Director*, **Susan Clifford,** ***Steffee Bowden:*** *Administration,* ***Linda Jones:*** *Diversity, Equity, & Inclusion Director,* ***Allen Coleman:*** *Town Clerk,* **Jeannette Casellas:** Family Support Manager, ***Celeste Sherer:*** *Diversity, Equity & Inclusion Coordinator,* **Claudia Tsiaousopoulos:** Director of Congregational life

Mission

The Town of Apex is committed to its mission of delivering exceptional public service that fosters opportunities for individuals and the community to live, thrive, and reach their full potential.

To accomplish this mission and achieve the Town's goals of fostering a:



A Welcoming Community



High Performing Government



Environmental Leadership

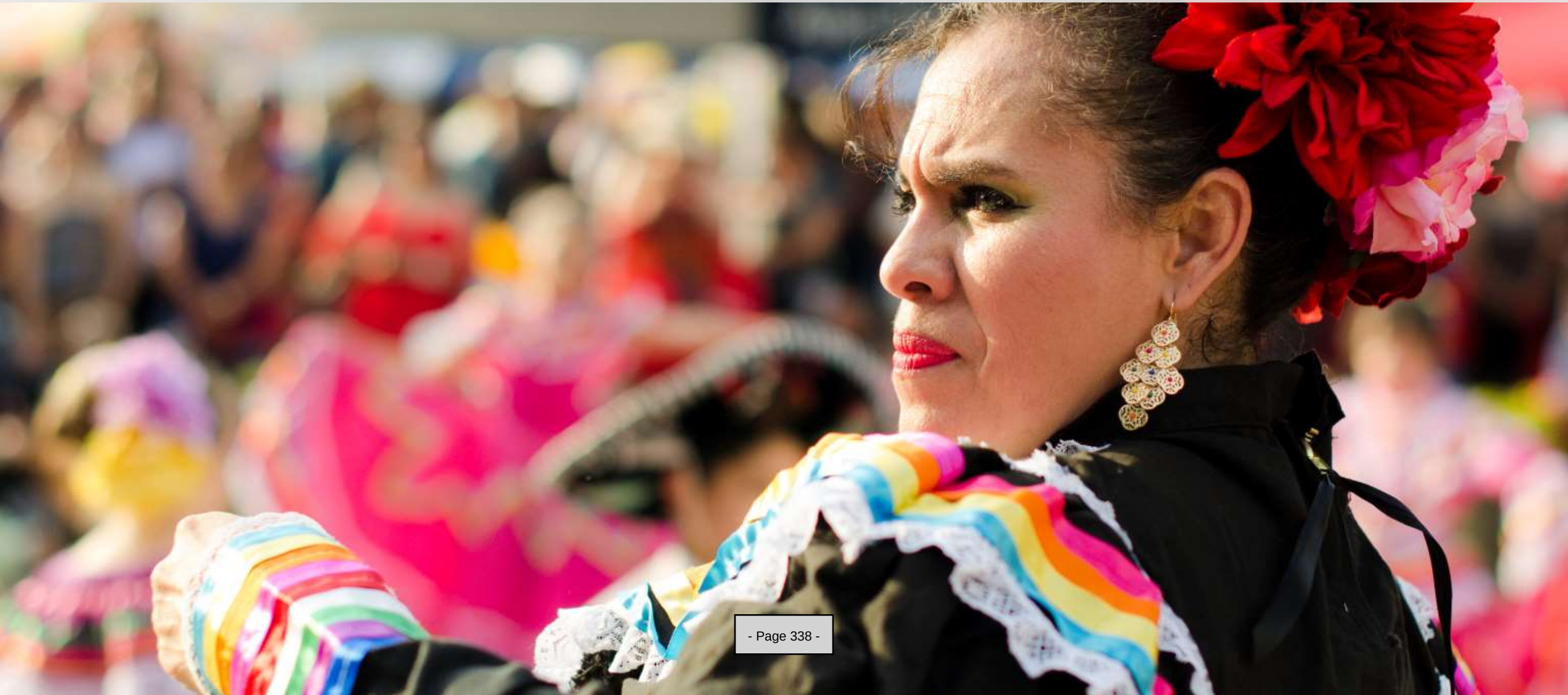


Responsible Development



Economic Vitality

"It is imperative to ensure all residents have meaningful access to Town services and programs, irrespective of their preferred language or English-speaking proficiency."



Why Language Access?

The Language Access Plan (LAP) of the Town of Apex represents a proactive and strategic framework aimed at providing accessible services with an intentional focus on language equity.

Language Spoken at Home:

Among residents of Apex aged 5 years and older, **19%** (11,988 individuals) reported speaking languages other than English. Among those who reported speaking a language other than English at home, **4.2%** (2,562 individuals) indicated that their speaking ability was "less than very well,". Over the past decade residents who reported speaking a language other than English has increased from **13.6%** (4,659) to **19.5%** (11,988).

Table. 1 Language Spoken at home by Apex residents

Languages	Population Estimate	Percent
Total Population 2022 *(5 years of age and older)*	61, 462	
Speak only English	49, 474	80.5%
Speak languages other than English	11, 988	19.5%
Speak English less than “very well” (LEP)	**2562**	**4.2%**

Source: ACS 2022(5 Year Estimates), Table S1601

Legal Requirements:

Federal Requirement	Summary of Language Access-related Requirements
Title VI of Civil Rights Act of 1964 and Executive Order 13166 (2000)	**Recipients of federal funding:** Failure to provide meaningful access to LEP persons can constitute national origin discrimination.
Affordable Care Act (2010) Section 1557	**Covered health entities:** Must post taglines informing LEP public of availability of free language services in top 15 languages spoken by LEP individuals in the state.
Stafford Act	**Emergency management:** Administrator of FEMA required to lead efforts to prevent discrimination against LEP individuals in emergency management and assistance.
Americans with Disabilities Act	**All federal, state, and local government programs:** Requires reasonable steps be taken to offer comparable access for members of public with disabilities to a public entity's services, programs, and activities.
Section 504 of Rehabilitation Act of 1973	**Recipients of federal funding:** Requires those programs to provide accommodations to people with disabilities when necessary to ensure effective communication.

Language Data

Language and English-Speaking Ability	Population Estimate	Percent
Spanish	5445	9.99%
Speaks English “very well”	3786	6.95%
(LEP) Speaks English less than “very well”	**1659**	**3.04%**
Chinese (including Mandarin)	3215	5.90%
Speaks English “very well”	2039	3.74%
(LEP) Speaks English less that “very well”	**1176**	**2.15%**
Telugu	2869	5.27%
Speaks English “very well”	2477	4.49%
(LEP) Speak English less than “very well	**392**	**.72%**
Russian	1027	1.88%
Speaks English “very well”	735	1.34%
(LEP) Speaks English less than “very well”	**292**	.53%
Hindi	1998	3.66%
Speaks English “very well”	1736	3.19%
(LEP) Speaks English less than “very well	**262**	.48%
*The highlighted sections indicate the Limited English Proficiency (LEP) languages that necessitate a review of Safe Harbor parameters.		

Factors and Assessment

Factors	Town of Apex
# or proportion of LEP Individuals in the community	**19%** (11,988) or residents speak a languages other than English **4.2 %** (2,562) of residents are LEP
Frequency of Contact with LEP Community	Department Frequency
Nature of Importance of Services	The Town provides essential services which include public safety services
Resources Available	To evaluate the Town conducted research to identify the elements necessary for the delivery of proficient and accurate language assistance
Identified Strategic Languages	The Town of Apex has employed the Department of Justice's safe harbor threshold, which is defined as 5% or 1,000 individuals, whichever is less, to determine the requirement for translation services . Upon reviewing the data , the Town of Apex is committed to translating essential documents into both Spanish and Chinese. Further assessment is required to determine whether documents should undergo translation into Traditional Chinese or Simplified Chinese

Needs Assessment: Survey Findings

Internal Language Capacity Assessment:

- Eight departments reported “often” interactions with LEP residents who have the preferred languages of: **Spanish, Hindi, Chinese and Russian**
- Seventeen departments reported “occasional” interactions with the previously identified preferred languages in addition to Vietnamese
- Seven departments mentioned using bilingual employees to translate and interpret materials which is not required by their job responsibility and they are currently not compensated for this added responsibility
- Multiple departments receive funds dedicated towards language assistance: utilize telephonic translation services
- Notable challenges reported in regards to accuracy of digital translations along with potential technological barriers

The Language Assistance line of the Police Department was also examined, revealing the following insights:

- Over the past decade, Spanish dominated language requests, accounting for 82.6% of all calls seeking Language As



Stakeholder Engagement & Collaborative Efforts

Below is a sample of the on going efforts between the Town of Apex and Fiesta Cristiana:

- Home Repair Fair
- Faith Action ID: Fiesta Cristiana, El Centro, & Apex Police Department
- Hispanic Heritage Month
- Latino Arts Festival
- Fiesta Cristiana Family Resource Center

(Open House Event):

- Town of Apex participated by providing resources



Suggestions and Recommendations

1. The Community would be more responsive if there was a person that could assist with past due concerns that spoke Spanish, and could be accessible by phone to help resolve these issues.
2. Providing resources in other languages at Town Hall and other Town of Apex department buildings that offer essential services for residents, such as guidance on creating accounts or starting and shutting off services, would be beneficial.
3. Additionally, offering information on translation and interpretation services would further support community needs.



Proposed Policies & Proposed Procedures



Policies

1. Notice of Availability for Language Assistance Services
2. Interpretation & Translation
3. Staff and Training

Procedures

1. Determining the Need for Language Assistance
2. Identification of Preferred Language & Language Services
3. Interpretation & Translation
4. Staff Training & Education
5. Procedure for Monitoring and Updating the Plan

Implementation & Proposed Action Items

The policies and procedures outlined above will guide the Town's efforts in FY 2024-25. This plan aims to align with identified priorities, comply with federal, state and applicable regulations, enhance capacity, and effectively respond to both staff and community stakeholder feedback.



Proposed Implementation and Action Items

1. Build Capacity for Language Services

- Establish a cross-departmental Language Access Subcommittee within the DEI Committee that will review Town policies and procedures
- Departmental appointed language access liaisons to advocate for language access within their respective
- Assign Language Access responsibilities to oversee the management and implementation of the language access plan, resources and training
- Develop staff training programs on language services and resources
- Consult and Collaborate with Human Resources on development of a language proficiency assessment and language skills pay stipend for bilingual/multilingual
- Strengthen language services by securing and finalizing language service contracts.

Spring 2024

The Town will implement translation platform on the Town's website using Recite Me.

"Recite Me provides a variety of on-demand accessibility solutions to assist with ADA and WCAG (Web Content Accessibility Guidelines) standards while ensuring user-friendly for individuals with disabilities, situational challenges, and language needs, through customization and translation options."

Implementation and Action

2. **<u>Respond to Specific Requests from Community</u>**
    - Develop more clear messaging and processes to enhance language access at public meetings and to utilities department
    - Begin to do outreach to Chinese-speaking, and Asian Community to gather Stakeholder input on vital document translation priorities and other language access priorities.
3. **<u>Respond to Specific Requests from Staff</u>**
    - Develop clear resources and processes beyond telephonic interpretation to assist with interpretation
    - Work with Subcommittee to identify vital documents and coordinate translation into strategic languages



Implementation and Action

4. Respond to Compliance and Management Needs

- Develop notices in strategic languages that inform of right to free interpretation services and right to submit a complaint
- Work with Subcommittee to identify data measures and tracking processes to assist with annual analysis, improved services, and to assist with future budget projections.
- Respond to complaints and work with community partner to evaluate improvements after 1 year

- **Provide update to Council at 2025 retreat**



Request from Town Council:

To approve the proposed Language Access Plan and Implementation Outline for the Town of Apex.



Language Access Plan

TOWN OF APEX

April 23, 2024





APEX
NORTH CAROLINA





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Introduction

Why Language Access?

The Town of Apex is committed to its mission of delivering exceptional public service that fosters opportunities for individuals and the community to live, thrive, and reach their full potential.[1]To accomplish this mission and achieve the Town's stated goals[2]of fostering a: *Welcoming Community, High-performing Government, Environmental Leadership, Responsible Development, and Economic Vitality*, it is imperative to ensure that residents have meaningful access to Town services and programs, irrespective of their preferred language or English-speaking proficiency.

Background and Purpose

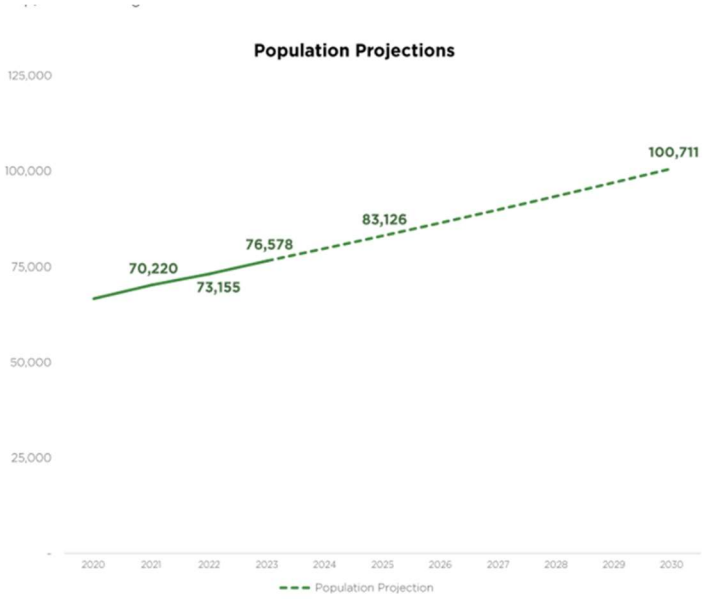
The Language Access Plan (LAP) of the Town of Apex represents a proactive and strategic framework aimed at providing accessible services with an intentional focus on language equity. This policy emphasizes the Town of Apex's dedication to ensuring that individuals who are Limited English Proficient (LEP) have meaningful access to the Town's activities, programs, and services. While this plan is primarily intended to promote meaningful access to individuals who are LEP, many aspects of this plan also apply to ensuring that Town departments are communicating effectively with persons with disabilities, including persons who rely on sign language to communicate.

The development of this policy is an integral and deliberate component of the Town of Apex's active participation in the Local Government Language Access Collaborative[3]. This collaborative initiative is conducted in partnership with the Town's designated community partner, Fiesta Cristiana[4], through the Institute for the Study of the Americas at the University of North Carolina at Chapel Hill. Notably, Apex stands alongside eight other local governments in North Carolina, engaging in a comprehensive year-long language access program designed to augment the Town's commitment and capacity to foster enhanced communication with residents, regardless of the languages they speak.

[1] https://www.apexnc.org/1285/Mission-Vision-and-Values
[2] https://www.apexnc.org/1321/Strategic-Plan
[3] https://isa.unc.edu/isapost/language-access-program/
[4] https://fiestacristiana.org/

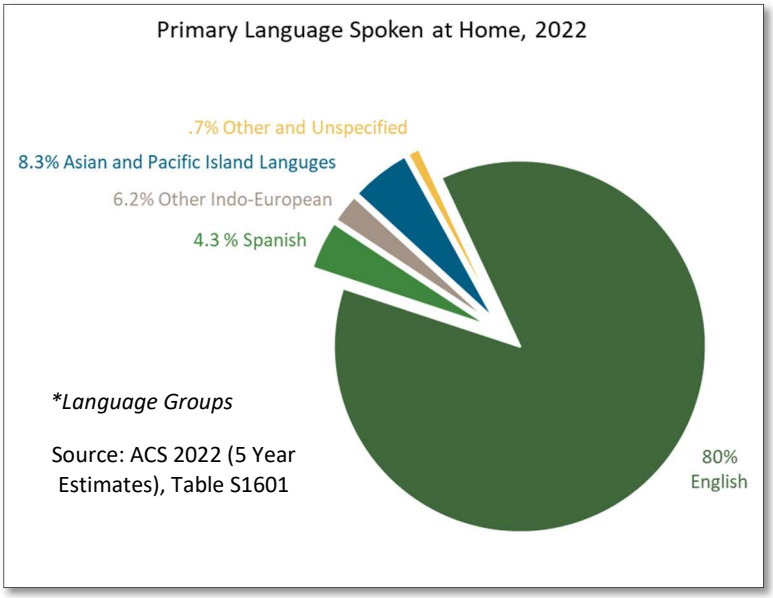
Demographics

Population and Forecasted Growth:
Over the past decade, the Town of Apex has experienced significant population growth, leading to a more diverse community. From 2013 to 2023, Apex's population nearly doubled, rising from 39,134 to an estimated 77,421, resulting in a growth rate of over 97%. This growth is not only evident in the increased diversity within the community but is also reflected in the expansion of languages spoken and present in the community.



Apex future population projections: 83,126 residents by year 2025 and over 100,000 residents by 2030.

(Estimated forecasts are derived from population estimates from the Apex Development Report of March 2024)



Language Spoken at Home in Apex:

Among residents of Apex aged 5 years and older, **19%** (11,988 individuals) reported speaking languages other than English. Among those who reported speaking a language other than English at home, **4.2%** (2,562 individuals) indicated that their speaking ability was "less than very well,". Over the past decade residents who reported speaking a language other than English has increased from **13.6%** (4,659) to **19.5%** (11,988).

Limited English Proficiency: Limited English Proficiency (LEP) is defined in this Language Access Plan (LAP) as individuals who identified as speaking English "less than very well" captured from the U.S. Census Bureau's American Community Survey (ACS).

Definitions

(The terms defined are consistent with the Department of Justice Language Access Plan definitions, unless noted)

Bilingual Staff: A person who has demonstrated proficiency in English and reading, writing, speaking, or understanding at least one other language.[5]

Interpretation: The act of listening to a communication in one language (source language) and orally converting it to another (target language) while retaining the same meaning.

Language Access: Providing individuals with Limited English Proficiency (LEP) reasonable and meaningful access to the same services as individuals who speak English It also refers to the laws and policies that guarantee people access to written, verbal, or visual materials or services in their preferred languages.

Language Assistance Services: Oral and written language services used to provide individuals with LEP meaningful access to, and an equal opportunity to participate fully in, the services, activities, and other programs administered by the Town of Apex.

Individuals with Limited English Proficiency (LEP): Individuals who:

- Do not speak English as their primary language; and
- Have a limited ability to read, write, speak or understand English.

Meaningful Access: Language assistance that results in accurate, timely, and effective communication at no cost to the individual with LEP needing assistance. Meaningful access denotes access that is not significantly restricted, delayed, or inferior as compared to programs or activities provided to English-proficient individuals.

Preferred/ Primary Language: The language in which an individual most effectively communicates when interacting with Town, including sign language or tactile sign language. An individual's preferred language may be a language variant.

Translation: The process of converting written text from a source langue into an equivalent written text in a target language as fully and accurately as possible while maintaining the style, tone and intent of the text, while in light of differences of culture and dialect

Vital Document: Paper of electronic written material that contains information that is critical for assessing the Town's programs, services or is required by law.

PUMA: Public Use Microdata Areas (PUMAs) are non-overlapping, statistical geographic areas that partition each state or equivalent entity into geographic areas containing no fewer than 100,000 people each. They cover the entirety of the United States, Puerto Rico, and Guam. The Census Bureau defines PUMAs for the tabulation and dissemination of decennial census and American Community Survey (ACS) Public Use Microdata Sample (PUMS) data. Additionally, the ACS and Puerto Rico Community Survey use them to disseminate their respective period estimates.[6]

[5] www.lep.gov- (U.S Equal Employment Opportunity Commission Language Access Plan)
[6] https://www.census.gov/en.html

Assessment

Language Data Collection

To assess language assistance requirements and identify Limited English Proficient (LEP) communities and stakeholders, the Town of Apex examined language trends within its jurisdiction and the Southwest Wake County PUMA designation. This analysis also included an internal agency language capacity survey, a review of demographic data from the U.S. Census Bureau's American Community Survey (ACS), and consultations with diverse stakeholder community groups.

The Town of Apex is currently undergoing a census resolution to reflect a more accurate population estimate. For this analysis, data from 2022, utilizing 5-Year Estimates from the ACS, were employed.

Strategic Language & Service Identification

To initiate the development of a Language Access Plan, the U.S. Department of Justice recommends conducting a Four-Factor Analysis. This analysis helps identify the necessary language support services needed to ensure that individuals with limited English proficiency (LEP) or non-English speaking individuals can access the Town's programs, services, and activities equitably. The four factors include:

Four-factor Analysis[7]

1. Number or proportion of persons with limited English proficiency (LEP) served or encountered in the eligible service populations;
2. Frequency with which individuals with LEP come in contact with the recipient's program, activity, or service;
3. Nature and importance of the recipient's program, activity, or service;
4. Resources available to the recipient and costs.

The Safe Harbor guideline[8] is another tool that can help select strategic language groups for translation of vital documents. Safe Harbor includes the following parameters:

1) 5 % or 1,000, whichever is less, of the population of persons eligible to be served or likely to be affected or encountered
2) If there are fewer than 50 people in a language group that meets the 5% trigger above, the recipient instead can provide translated written notice of the right to receive competent oral interpretation of vital documents, free of cost.

[7] www.lep.gov
[8] https://www.justice.gov/crt/doj-final-lep-guidance-signed-6-12-02

Factor 1: *Number or proportion of persons with limited English proficiency (LEP) served or encountered in the eligible service populations;*

The Town of Apex examined the most recent U.S Census Bureau data, American Community Survey 5- Year Estimates, to evaluate:

1) Languages Spoken at Home by Apex residents and PUMA designation of Southwest Wake County
2) English proficiency/ability by individuals who self-identified as speaking English less than "very well"

LEP Individuals: Among residents of Apex aged 5 years and older, **19.5%** (11,988 individuals) reported speaking languages other than English. Among those who reported speaking a language other than English at home, **4.2%** (2562 individuals) indicated that their speaking ability was "less than very well," based on the most comprehensive data available from the U.S. Census 5-Year estimate from 2022. In this Limited English Proficiency (LEP) analysis, individuals with English-speaking ability described as "less than very well" are identified as LEP.

Table. 1 Language Spoken at home by Apex residents

Languages	Population Estimate	Percent
Total Population 2022 *(5 years of age and older)*	61, 462	
Speak only English	49, 474	80.5%
Speak languages other than English	11, 988	19.5%
Speak English less than "very well" (LEP)	**2562**	**4.2%**

Source: ACS 2022(5 Year Estimates), Table S1601

According to the 2022 American Community Survey (ACS), residents speaking Asian and Pacific Islander languages make up Apex's largest LEP language group (Table 2). The US Census groups languages into four major language groups: Spanish, Other Indo-European languages, Asian and Pacific Island languages, and Other languages

Table 2. Language Spoken at home by Apex residents, Language groups

Language groups other than English	Total Speakers	Percent of Total Population	Speaks English less than "very well" LEP *(percent of specified language speakers*	Speaks English less than "very well" LEP *(percent of specified language speakers)*
Spanish	2,648	4.3%	592	22.4%
Other Indo-European languages	3,791	6.2%	516	13.6%
Asian and Pacific Island languages	5,110	8.3%	1,411	27.6%
Other Languages	439	.7%	43	9.8%

Source: ACS 2022 (5 Year Estimates), Table S1601

To identify the individualized languages within the aggregated language groups from the US Census Data, Household Language Analysis was conducted using Public Use Micro Data, in conjunction with Individual Analysis. *The Highlighted portions are the LEP language that require review of Safe Harbor parameters.*

Table 3. Top 5 non-English languages and percent of LEP population in Apex

Language and English-Speaking Ability	Population Estimate	Percent
Spanish	5445	9.99%
Speaks English "very well"	3786	6.95%
(LEP) Speaks English less than "very well"	**1659**	**3.04%**
Chinese (including Mandarin)	3215	5.90%
Speaks English "very well"	2039	3.74%
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Russian	1027	1.88%
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(LEP) Speaks English less than "very well	**262**	.48%
*The highlighted sections indicate the Limited English Proficiency (LEP) languages that necessitate a review of Safe Harbor parameters.		

Factor 2: *Frequency with which individuals with LEP come in contact with the recipient's program, activity, or service;*

1. The Town conducted an Internal Language Capacity Assessment to examine the frequency of interactions between Town departments and LEP residents, as well as the methods employed for communication. The following findings were revealed:

    - Eight departments reported "often" interactions with LEP residents who have the preferred languages of: Spanish, Hindi, Chinese and Russian
    - Seventeen departments reported "occasional" interactions with the previously identified preferred languages in addition to Vietnamese
    - Seven departments mentioned using bilingual employees to translate and interpret materials which is not required by their job responsibility and they are currently not compensated for this added responsibility

2. The Language Assistance line of the Police Department was also examined, revealing the following insights:

    - Over the past decade, Spanish dominated language requests, accounting for 82.6% of all calls seeking Language Assistance.
    - Analyzing the trends in language requests from 2020 to the present, it was observed that Spanish has consistently been a requested language every month, with the number of requests ranging from 1 to 16.
        - (Police Language Assistance Data in Appendix B)

Factor3: *Nature and importance of the recipient's program, activity or service;*

The Town of Apex delivers vital services and programs to residents, including: essential utilities, public safety, and transportation, among others. It is imperative that residents can readily access these services and programs, as well as obtain comprehensive information concerning service details and associated financial obligations. Therefore, essential documents and messaging within those 3 areas (public safety, transportation and utility) need to be prioritized when translating vital documents into the strategic languages.

Factor 4: *Resources available to the recipient and costs.*

To ascertain the available resources for language assistance, the Town evaluated its internal assets. These encompass bilingual staff, interpreter and translation services, and the current funding designated for language services.

- Several departments receive funding specifically allocated for language assistance, which includes the use of telephonic interpretation services.
- Noteworthy challenges have been reported regarding the accuracy of digital translations, along with potential technological barriers

To evaluate the cost, the Town conducted research to identify the elements necessary for the delivery of proficient and accurate language assistance services, which include but not limited to:

- Language Assistance Education and Training
- Hiring, training and compensating bilingual staff where bilingual skills are needed
- Providing contracted third-party interpretation and translation services
- Providing contracted written translation services to produce non-English language materials
- Training public facing employees

Spring 2024

The Town will implement translation platform on the Town's website using Recite Me.

- "Recite Me provides a variety of on-demand accessibility solutions to assist with ADA and WCAG (Web Content Accessibility Guidelines) standards while ensuring user-friendly for individuals with disabilities, situational challenges, and language needs, through customization and translation options."

July 2024

The Town will receive $25,000 from the UNC Language Collaborative Grant to support the language initiatives that have been outlined in the plan.

Identified Strategic Languages

The Town of Apex has employed the Department of Justice's safe harbor threshold, which is defined as 5% or 1,000 individuals, whichever is less, to determine the requirement for translation services. Upon reviewing the data, the Town of Apex is committed to translating essential documents into both **Spanish** and **Chinese**. *Further assessment is required to determine whether documents should undergo translation into Traditional Chinese or Simplified Chinese*

Stakeholder Engagement

The Language Access Planning process has proven immensely helpful for the Town of Apex through our collaboration with Community Partner, Fiesta Cristiana. This partnership has enabled the Town of Apex to strategically identify languages for translation and interpretation, while also uncovering avenues for more effective community impact. As a united team, we proactively anticipated potential gaps and opportunities for growth in response to the swiftly increasing population and demographics of Apex.

A significant advantage of this Language Access Plan effort lies in our enhanced ability to better serve the needs of Apex residents. Nevertheless, our exploration demonstrated that translation alone falls short. Following a community meeting with Fiesta Cristiana, it became apparent that addressing the language barrier must be coupled with community building and engagement strategies. It is crucial that communities have information available in their preferred language and also access to information. During this process, it has become evident that both language and technology have served as barriers within the community.

Below is a sample of the ongoing collaborative efforts between the Town of Apex and Fiesta Cristiana the Town's Community Partner for the Language Access Collaborative and other Town initiatives:

- Home Repair Fair
- Faith Action ID[9] in collaboration: Fiesta Cristiana, El Centro Hispano[10] & Apex Police Department
- Hispanic Heritage Month Programming
- Latino Arts Festival
- Fiesta Cristiana Family Resource Center Open House:
    - Town of Apex participated by attending and provided resources
    - Departments present included: DEI, HR and Police Department representatives

Feedback & Recommendations from Fiesta Cristiana

Community Insights:

- Interpretation:
    - No language services are available to facilitate the initiation essential utilities and services.
- Digital Access:
    - Setting up an online account poses challenges, involving both language and technological barriers.
- Translation:

[9] Faith Action ID: Initiative that provides community residents with reliable form of identification (for those that do not have the necessary requirements to receive a state issued ID card or driver's license) that can be used as a tool by law enforcement, city departments, health centers, schools.

[10] El Centro Hispano: https://elcentronc.org/

- Inconsistencies exist regarding which resources from the Town of Apex have been translated.

- Impact:

  Accessibility Gaps:

  - Insight regarding stress and the emotional hardships that these particular barriers place on the community – not only towards essential services and utilities but also health and wellness
  - There are deficiencies in helping address overdue service payments. While information is accessible in Spanish, there are gaps in its effective delivery. The majority of the information is digitally translated, and it is recommended to consider a thoughtful and strategic approach to disseminating information, especially for community members without computer access.

- Public Meetings: Council Meetings
  - From the community perspective, residents have expressed feelings of exclusion, believing they cannot attend or won't understand the meetings due to language barriers. Although reasonable accommodations can presently be arranged, this information is not widely known within the community.

Suggestions from Fiesta Cristiana:

- The Community would be more responsive if there was a person that could assist with past due concerns that spoke Spanish, and could be accessible by phone to help resolve these issues.
- Providing resources in other languages at Town Hall and other Town of Apex department buildings that offer essential services for residents, such as guidance on creating accounts or starting and shutting off services, would be beneficial.
- Additionally, offering information on translation and interpretation services would further support community needs.

Policies

Using the language data, agency survey, community stake holder input and analysis above, the following policies, procedures and plans have been developed.

Policy for Notice of Availability for Language Assistance Services

The Town will ensure reasonable actions to notify Individuals who are LEP of their right to language assistance services

Notice will include:

- Information regarding the eligibility and availability of language services,
- Assurance to secure language services at no charge to the resident requesting assistance
- Instructions on requesting services
- Notices will be translated in to the Town's identified strategic languages

Notices will be provided in a variety of ways, which may include but not limited to:

- Flyers or posters in appropriate Town approved locations and other points of entry
- Notice of language services on Town website and other digital platforms
- Standard translated notice in Town outreach documents for public meetings
- Including notices in local news papers in languages other than English
- Working with community partners organizations and stakeholders to inform Apex residents of their right to language assistance services
- Delivering presentations at community meetings, schools and other organizations

Policies for Interpretation & Translation

The Town will offer interpretation and translation services to residents free of charge

- The Town will provide interpretation services to residents requesting interpretation for Town services or programs
- The Town will provide written translation of the Town's vital documents
- The Town will notify residents of their right to request interpretation services for public meetings, with clear guidance that, should be made at least 48 hours in advance ensure adequate time to secure arrangements

The Town will use qualified interpreters and translators that are competent, trained and culturally sensitive

- Interpreters are trained professionals who abide by a code of ethics and professional practice standards.
- Contracted interpreters and Town employees providing interpretation services must exhibit the competence necessary for delivering Town services effectively.
- Demonstrate proficiency in both English and the relevant language.

- Display the ability to convey information accurately and comprehensively in both languages, as evidenced through simulated interpreting scenarios.
- Possess foundational knowledge in both languages of any specialized terms or concepts pertinent to the organization's programs or activities.
- Exhibit cultural sensitivity towards Limited English Proficiency (LEP) individuals.

Vital documents

The Town will identify and translate vital documents into identified strategic languages and when requested, provide sight translation into other languages.

Vital information or content are in formats such as notices, brochures, fliers, meeting agenda and minutes, request for proposals, contracts and websites. Vital documents include, but are not limited to:

- Notices advising LEP persons of language assistance
- Written notices of eligibility criteria, rights, denial, loss, or decreases in benefits or services
- Consent and complaint forms
- Intake forms with the potential for financial consequences or service delivery changes
- Written tests that do not assess English language competency, but test competency for a particular license, job, or skill for which knowing English is not required
- Applications to participate in a recipient's program or activity or to receive recipient benefits or services.

Policies for Staff & Training

The Town will develop and establish Staff and training policies that shall include:

- Training and Education for Town of Apex employees
    - Interpretation and other select language access policies and procedures,
    - Best practices when working with LEP individuals
- Determine how bilingual/multilingual staff may provide support across the organization while ensuring equitable distribution of work.
    - Developing and establishing Department-wide standards for the appropriate use of bilingual employees, with respect to the recruitment, assessment, training, and compensation

Procedures

Procedures for Determining the Need for Language Assistance

At point of First Contact with LEP Individuals

Stall will exert reasonable efforts to evaluate the necessity for language assistance. Staff members can identify language assistance needs through various means, such as:

- Self-identification by the LEP individual
- Inquiring as to the preferred language of the individual if they have self-identified as needing language assistance services
- Using “I Speak” language identification cards or posters
- Staff should notify the individual of the right to services that are at no cost to the individual

Procedures for Identification of Preferred Language & Language Services Data Collection

How to identify LEP individuals and measure usage

Establish and develop a procedure to collect information about LEP individuals served by the Town by:

- Analyzing existing data sets, such as census figures or information from public agencies
- Asking LEP individuals to indicate their preferred language, using “I Speak” cards or other mechanisms and recording their preference in their file, if this is an option.
- Adapting current databases used by the Town to track languages spoken by residents
- Incorporating “preferred language” fields in resident intake forms and tracking responses
- Counting website “hits” directed to translated content
- Conducting resident or customer satisfaction surveys
- Tracking telephone interpreting service usage
- Tracking the number of translated materials requested and distributed
- Tracking the number of interpretation services requested and used
- Tracking the number of department requests for language assistance

Procedures for Interpretation & Translation

These procedures aim to streamline the process of requesting interpretation and translation services, ensuring a timely and effective response to the language needs of the community.

How to request Language Assistance Services
Develop and establish a protocol for urgent or immediate interpretation/ translation needs

Types of interpretation/translation services:

- Contract or professional interpreters
- Telephonic/ technological resources
    - Establish best practices for on-demand language assistance
- Bilingual Town staff trained in interpretation and or translation
    - Develop a system for coordinating language assistance for bilingual staff
    - Maintain a roster of qualified bilingual staff available for assistance

Procedures for Staff Training & Education

Develop and provide training for Town of Apex employees which shall include:

- Identifying the language needs of an LEP individual
- Working with an interpreter in person or on the telephone
- Requesting documents for translation; accessing and providing language assistance services via employees, telephonic and digital resources, and or contracted interpreters personnel
- Tracking the use of language assistance services
- Best practice on providing effective assistance for LEP individuals
- Ensure compliance with federal regulations related to language access

Develop and implement centralized Language Assistance Resources:

- Vetting language translation tools and platforms, and advising on best practices
- Implementing tracking mechanisms to monitor resource usage and effectiveness
- Establishing a repository for language resources, encompassing vital documents, translation materials, interpretation services, and multilingual guides
- Managing departmental contracts to ensure availability of translation and interpretation services

Procedure for Monitoring and Updating the Plan

The Town of Apex Language Access Plan will be assessed and updated annually.

The evaluation will include:

- Annual Language Access Progress Reports
    - Departmental Annual Reports that include demographic information should incorporate metrics relating to language assistance services (if appropriate)
- Identification of the number of Apex residents with LEP and possible recalculation of the Town's strategic languages
- Assessment of the current level of services delivered to LEP individuals by Town departments
- Reporting of training levels of Town staff regarding multilingual services
- Reporting of progress made by individual departments
- Review of Town language contract use, engagement strategies and communication mediums
- Feedback and comments from LEP communities, including community organizations and advocacy groups, on the effectiveness of the Town multilingual services

Implementation Outline and Proposed Action Items

The policies and procedures outlined above will guide the Town's efforts in FY 2024-25. This plan aims to align with identified priorities, comply with federal, state and applicable regulations, enhance capacity, and effectively respond to both staff and community stakeholder feedback.

1. Build Capacity for Language Services
    - Establish a cross-departmental Language Access Subcommittee within the DEI Committee that will review Town policies and procedures through an equity lens. Invite additional community outreach positions from various departments.
    - Departmental appointed language access liaisons to advocate for language access within their respective departments and aid in coordinating language services as needed.
    - Assign Language Access responsibilities to oversee the management and implementation of the language access plan, and coordinate language resources and trainings
    - Strengthen language services by securing and finalizing language service contracts.
    - Develop staff training programs on language services and resources, to be included in both new staff orientation and annual training sessions.
    - Consult and Collaborate with Human Resources on development of a language proficiency assessment and language skills pay stipend for bilingual/multilingual staff who would frequently be able to use their language skills in the workplace.

2. Respond to specific requests from community
    - Develop more clear messaging and processes to enhance language access at public meetings and to utilities department with support from Community Partner Fiesta Cristiana
    - Begin to do outreach to Chinese-speaking community to gather Stakeholder input on vital document translation priorities and other language access priorities.
3. Respond to specific requests from staff
    - Develop clear resources and processes beyond telephonic interpretation to assist with interpretation
    - Work with Subcommittee to identify vital documents and coordinate translation into strategic languages
4. Respond to compliance and management needs
    - Develop notices in strategic languages that inform of right to free interpretation services and right to submit a complaint
    - Work with Subcommittee to identify data measures and tracking processes to assist with annual analysis, improved services, and to assist with future budget projections.
    - Respond to complaints and work with community partner to evaluate improvements after 1 year.

References

1. Mission and Values 2023. (Webpage). Retrieved from: https://www.apexnc.org/1285/Mission-Vision-and-Values

2. Town Strategic Goals (2023). Retrieved from: https://www.apexnc.org/1321/Strategic-Plan

3. Language Access Collaborative https://isa.unc.edu/isapost/language-access-program/

4. Fiesta Cristiana https://fiestacristiana.org/

5. Apex Town Policy: https://www.apexnc.org/DocumentCenter/View/34248/Town-of-Apex-Title-VI-Policy-Statement?bidId=

6. U.S Census Bureau, American Community Survey Estimates Data.census.gov

7. Apex Development Report: https://www.apexnc.org/DocumentCenter/View/405/Apex-Development-Report-PDF?bidId=

8. (U.S Equal Employment Opportunity Commission Language Access Plan): www.lep.gov

9. https://www.census.gov/en.html

10. Limited English Proficiency (LEP). [Webpage]. Retrieved from: https://www.lep.gov/

11. Faith Action ID: https://faithaction.org/faithaction-id-program-and-network/

12. El Centro: El Centro Hispano: https://elcentronc.org/

Appendix A: Legal Information

Title VI Civil Rights Act of 1964

Title VI, 42 U.S.C. § 2000d et seq., was enacted as part of the landmark Civil Rights Act of 1964. It prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. As President John F. Kennedy said in 1963:

Simple justice requires that public funds, to which all taxpayers of all races [colors, and national origins] contribute, not be spent in any fashion which encourages, entrenches, subsidizes or results in racial [color or national origin] discrimination.

If a recipient of federal assistance is found to have discriminated and voluntary compliance cannot be achieved, the federal agency providing the assistance should either initiate fund termination proceedings or refer the matter to the Department of Justice for appropriate legal action. Aggrieved individuals may file administrative complaints with the federal agency that provides funds to a recipient, or the individuals may file suit for appropriate relief in federal court. Title VI itself prohibits intentional discrimination. However, most funding agencies have regulations implementing Title VI that prohibit recipient practices that have the effect of discrimination on the basis of race, color, or national origin.

Executive Order 13166

On August 11, 2000, the President signed Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency." The Executive Order requires Federal agencies to examine the services they provide, identify any need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so LEP persons can have meaningful access to them. It is expected that agency plans will provide for such meaningful access consistent with, and without unduly burdening, the fundamental mission of the agency. The Executive Order also requires that the Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. To assist Federal agencies in carrying out these responsibilities, the U.S. Department of Justice has issued a Policy Guidance Document, “Enforcement of Title VI of the Civil Rights Act of 1964 - National Origin Discrimination Against Persons with Limited English Proficiency" (LEP Guidance). This LEP Guidance sets forth the compliance standards that recipients of Federal financial assistance must follow to ensure that their programs and activities normally provided in English are accessible to LEP persons and thus do not discriminate on the basis of national origin in violation of Title VI's prohibition against national origin discrimination.

Non- Discrimination Policy Statement

It is the policy of the Town of Apex to ensure that no person shall, on the grounds of race, color, national origin, limited English language proficiency, income level, sex, pregnancy, sexual orientation, gender identity or expression, age, National Guard or veteran status, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to

discrimination under any Town of Apex program or activity, including, where applicable, religion, as provided by Title VI of the Civil Rights Act of 1964and other pertinent nondiscrimination authorities

Appendix B: Additional Demographics

Police Department
Language Assistance Request

Annual Language Trend 2021-2023

Language	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21
FARSI	0	0	0	0	0	0	0	0	0	0	0	1
MANDARIN	1	0	1	1	1	4	0	0	0	0	0	0
RUSSIAN	0	0	0	0	0	0	1	0	1	0	0	1
SPANISH	4	2	2	7	6	10	7	11	1	10	3	8

Language	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22
ARABIC	0	0	0	0	0	0	0	0	0	0	4	0
HINDI	0	0	0	0	0	0	0	0	0	0	1	0
MANDARIN	0	0	1	0	0	0	0	0	0	0	0	2
PORTUGUESE	1	0	0	0	0	0	0	0	0	0	0	1
ROMANIAN	0	0	1	0	6	1	0	0	3	0	0	0
SPANISH	3	4	2	5	0	10	6	7	12	4	7	9
TOISHANESE	0	0	0	0	0	0	0	0	0	1	0	0

Language	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23
ARABIC	4	0	0	0	0	0	0	1	0	3	0	0
CANTONESE	0	0	0	0	0	1	0	0	0	0	0	0
GUJARATI	0	0	0	0	0	0	0	0	1	0	0	0
HINDI	1	0	0	0	0	0	0	0	0	0	0	0
MANDARIN	0	2	0	1	5	1	0	1	0	2	1	0
PORTUGUESE	0	1	0	0	0	0	0	0	0	0	0	0
ROMANIAN	0	0	0	2	0	1	1	1	0	0	0	0
SPANISH	7	9	3	8	7	9	2	11	15	12	7	16

Language Review: 10 Year Summary

Language	Calls	Minutes	Charges	Avg. Connect Time	Avg. Minutes	% of Total
SPANISH	323	2831	7362.25	8.50	8.8	82.61
MANDARIN	25	344	1056.60	46.96	13.8	6.39
ROMANIAN	16	173	641.45	30.94	10.8	4.09
ARABIC	9	101	396.75	2.11	11.2	2.3
PORTUGUESE	4	26	80.60	1.75	6.5	1.02
RUSSIAN	3	47	155.15	27.00	15.7	0.77
KINYARWANDA	2	83	402.55	9.50	41.5	0.51
MOROCCAN ARABIC	2	26	126.10	2.50	13	0.51
BULGARIAN	1	35	103.25	7.00	35	0.26
CANTONESE	1	6	16.50	3.00	6	0.26
FARSI	1	56	165.20	119.00	56	0.26
FRENCH	1	14	38.50	36.00	14	0.26
GUJARATI	1	4	11.80	6.00	4	0.26
HINDI	1	5	14.75	2.00	5	0.26
TOISHANESE	1	31	91.45	1.00	31	0.26

Appendix C: Departmental Language Survey

Survey Reflections

Report: Language Access Survey- Town of Apex

1. Team:

Town of Apex	**Fiesta Cristiana**
Linda Jones	Claudia Oviedo
Stacie Galloway	Jeannette Casellas
Allen Coleman	
Steffee Bowden	
Celeste Sherer	

2. ***Survey***: https://www.cognitoforms.com/TownOfApex1/languageaccesssurvey
3. **The number of Town Departments**: 18 formal departments
4. **Number departments that completed the Survey**: 21 departments participated. Due to the complexity of the Parks and Recreation Department they submitted 4 surveys.
5. If not all the departments have responded to the survey, do you anticipate getting a response from the rest by June 1, 2023
    - We have received all of the surveys from applicable departments, and no further submissions are expected.
    - Majority of the Departments completed the survey on the day that it was disseminated, however there were a few departments that needed individual follow up.
6. **Briefly share any interesting responses or patterns that you've noticed in the surveys so far**.

Within the team, there were diverse perspectives in responds to the interpretation of the survey results. Particularly noteworthy were the reflections pertaining to federal funding, language diversity representation, and the necessity for language resources. The following departments have been identified as recipients of federal funding: Apex Police Department, Water Resources, Transportation, and Parks and Recreation. The responses varied, with some expressing surprise at the limited number of departments receiving federal funding, while others were previously unaware of any departments receiving such funding.

Apex has had a significant shift in population over the last five years, a team member eloquently reflected that she was surprised by the survey results but highlighted the fact that Apex is a multi-linguistic town and that speaks/resembles cultural diversity beyond what she could imagine. When it comes to the languages encountered within the Town of Apex, different departments have reported encountering various languages, with varying frequencies, in addition to English. However, Steffee Bowden's reflection stood out as she expressed surprise not by the departments that reported encounters with certain languages, but rather by those departments that claimed to have "never" come into contact with specific languages. An example cited was the certain department's lack of encounters with Russian, which was unexpected.

The survey distributed to the departments of the Town of Apex included a selection of 15 languages to indicate language interactions and frequency. Based on the survey results, 13 departments reported encounters with Spanish, 10 departments reported encounters with Chinese, 5 departments reported

interactions with Hindi, and 4 departments reported interactions with Russian (*these are but a sample of the survey results*). These findings aligned with the expectations of the majority of the team. The frequency of these interactions varied significantly among the departments, ranging from very frequent to rare occurrences.

Upon reviewing the survey results, the team expressed profound reflections concerning language resources, particularly in relation to the availability and accessibility of resources across different departments. The responses clearly indicate a need for a standardized approach to address language barriers. It is evident that there is a heavy reliance on bilingual staff who, despite lacking interpreter training, are tasked with default language services. It is crucial to acknowledge that these staff members are not adequately compensated for this additional job responsibility.

The survey has brought attention to several areas that require immediate attention, such as the provision of certified interpreters and the assessment of bilingual staff along with compensation for their additional responsibilities. While many departments rely on technology to overcome translation barriers, there have been notable challenges with the accuracy of digital translations, such as Google Translate, as well as technical barriers associated with specific technologies. Furthermore, the absence of a formal language resource and the differing approaches taken by departments to address these challenges have led to a lack of a unified approach. Consequently, implementing "best practices" becomes challenging when departments handle this issue independently.

Appendix D: Language Access Plans

Local NC Jurisdiction Plans

City of Chapel Hill Language Access Plan:
https://www.townofchapelhill.org/home/showpublisheddocument/44433/637093323620030000

City of Durham Language Access Plan:
https://www.durhamnc.gov/DocumentCenter/View/41347/PA-7-1---Language-Access-Plan-Policy

City of Fayetteville
https://www.fayettevillenc.gov/city-services/transit/accessibility/language-assistance

Orange County, NC Language Access Policy
https://www.orangecountync.gov/DocumentCenter/View/11565/Language-Access-Policy-Final-BOCC-Approved-6-16-2020

Local Government Language Access Collaborative
https://isa.unc.edu/isapost/language-access-program/

Other Plans

U.S Department of Justice Language Access Plan:
https://www.dol.gov/sites/dolgov/files/OASAM/crc/files/FY2023-LAP.pdf

Minneapolis 2015 Language Access Plan:
https://www2.minneapolismn.gov/media/content-assets/www2-documents/departments/2015-Language-Access-Plan..pdf

Dallas Limited English Proficiency Plan:
https://www.dallascounty.org/Assets/uploads/docs/human-resources/title-vi/ATTACHMENT-E_LEP-PlanforPublicWorks.pdf

Equal Employment Opportunity Commission Language Access Plan in Accordance with Executive Order 13166 - Improving Access to Services for Persons with Limited English Proficiency:
https://www.eeoc.gov/equal-employment-opportunity-commission-language-access-plan-accordance-executive-order-13166

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: April 23, 2024

Item Details

Presenter(s): Dianne Khin, Director

Department(s): Planning

Requested Motion

Conduct a Public Hearing and possible motion to adopt an Ordinance on the Question of Annexation - Apex Town Council's intent to annex 2.208 acres, located at 2014 Lufkin Road, Annexation No. 777 into the Town Corporate limits.

Approval Recommended?

Yes

Item Details

The Town Clerk certifies to the investigation of said annexation. Adoption of the Resolution authorizes the Town Clerk to advertise said public hearing by electronic means and on the Town of Apex's website.

Attachments

- PH1-A1: Annexation Ordinance – Annexation No. 777
- PH1-A2: Public Hearing Notice – Annexation No. 777
- PH1-A3: Legal Description – Annexation No. 777
- PH1-A4: Aerial Map – Annexation No. 777
- PH1-A5: Plat Map – Annexation No. 777
- PH1-A6: Annexation Petition – Annexation No. 777

TOWN OF APEX, NORTH CAROLINA
Municipality No. 333

After recording, please return to: Town Clerk, Town of Apex, P.O. Box 250, Apex, NC 27502

ORDINANCE NO. 2024 - _____
ANNEXATION PETITION NO. 777
2014 LUFKIN ROAD 2.208 ACRES

AN ORDINANCE TO EXTEND THE CORPORATE LIMITS
OF THE TOWN OF APEX, NORTH CAROLINA
P.O. Box 250, Apex, North Carolina 27502

WHEREAS, the Apex Town Council has been petitioned under G.S.§160A-31, as amended, to annex the area described herein; and

WHEREAS, the Apex Town Council has by Resolution directed the Town Clerk to investigate the sufficiency of said petition; and

WHEREAS, the Town Clerk has certified the sufficiency of said petition and a public hearing on the question of this annexation was held at Apex Town Hall at 6:00 p.m. on April 9, 2024, after due notice by posting to the Town of Apex website, http://www.apexnc.org/news/public-notices-legal-ads; and

WHEREAS, the Apex Town Council does hereby find as a fact that said petition meets the requirements of G.S.§160A-31, as amended.

NOW, THEREFORE, BE IT ORDAINED by the Town Council of Apex, North Carolina:

Section 1. By virtue of the authority granted by G.S.§160A-31, as amended, the territory described in the attached property description and also shown as "Annexation Area" on the below identified survey plat is hereby annexed and made part of the Town of Apex, North Carolina, as of the date of adoption of this Ordinance on April 23, 2024. The survey plat that describes the annexed territory is that certain survey plat entitled "Annexation Map for the Town of Apex, White Oak Township, PIN(S): 0751.09-16-6563 and 0751.09-16-5409 Land Surveyor dated January 30, 2024 and Plat Map Printed January 18, 2024" and recorded in Book of Maps book number 2024 and page number _____, Wake County Registry.

Section 2. Upon and after the adoption of this ordinance, the territory described herein and its citizens and property shall be subject to all debts, laws, ordinances and regulations in force in the Town of Apex, North Carolina, and shall be entitled to the same privileges and benefits as other parts of the Town of Apex. Said territory shall be subject to municipal taxes according to G.S.§160A-58.10, as amended.

Section 3. The Clerk of the Town of Apex, North Carolina shall cause to be recorded in the Office of the Register of Deeds of Wake County and in the Office of the Secretary of State at Raleigh, North Carolina and in the Office of the Wake County Board of Elections an accurate map of the annexed territory, described in Section 1 hereof, together with a duly certified copy of this Ordinance.

Adopted this the 23rd day of April, 2024.

_____
Jacques K. Gilbert
Mayor

ATTEST:

_____
Allen L. Coleman, CMC, NCCCC
Town Clerk

APPROVED AS TO FORM:

_____
Laurie L. Hohe
Town Attorney

Legal Description

2014 LUKFIN ROAD

2.208 ACRE ANNEXATION TRACT

Beginning at an Iron Stake Found at base of 24" Pine, being the southwest property corner of Lot 6 Pinnacle Park Center as recorded in Book of Maps 2017, Pages 2325-2328 Wake County Registry, thence from said Beginning Point North 86°22'40" West 325.44 feet to an existing iron pipe found, thence North 00°04'41" East 175.01 feet to an existing rebar found, thence North 81°19'05" East 165.18 feet to an existing rebar found in a pond, thence North 00°02'04" East 135.93 feet to an existing rebar found,

thence North 58°40'01" East 189.44 feet to an existing iron pipe found, thence South 00°04'45" West 454.95 feet to the point and place of Beginning containing 2.208 Acres more or less.

STATE OF NORTH CAROLINA

COUNTY OF WAKE

CLERK'S CERTIFICATION

I, Allen L. Coleman, Town Clerk, Town of Apex, North Carolina, do hereby certify the foregoing is a true and correct copy of Annexation Ordinance No. 2024 _____, adopted at a meeting of the Town Council, on the 23rd day of April the original of which will be on file in the Office of the Town Clerk of Apex, North Carolina.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official Seal of the Town of Apex, North Carolina, this the 23rd day of April 2024.

_____
Allen L. Coleman, CMC, NCCCC
Town Clerk

(SEAL)

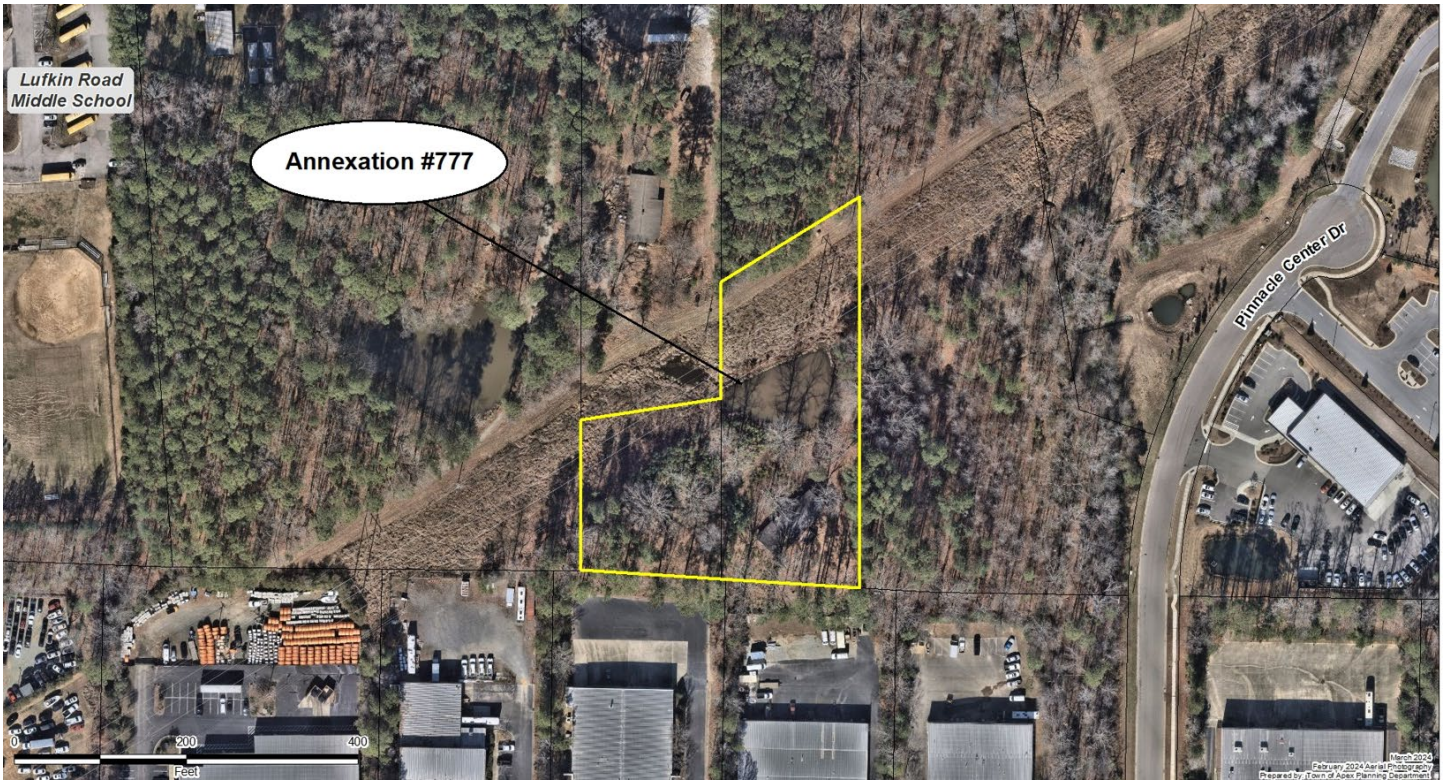
Media Contact:
Allen Coleman, Town Clerk to the Apex Town Council

FOR IMMEDIATE RELEASE

PUBLIC NOTICE – PUBLIC HEARING

APEX, N.C. (April 11, 2024) – The Town Council of Apex, North Carolina has scheduled a Public Hearing to be held at **6:00 p.m.** at Apex Town Hall, 73 Hunter Street, on the **23rd day of April, 2024**, on the question of annexation of the following property requested by petition filed pursuant to G.S. 160A-31:

Annexation Petition No. 777
2014 Lufkin Road – 2.208 acres



Residents may attend in-person and-or submit written comments to the Town Council with attention marked to the Town Clerk Allen Coleman; P.O. Box 250; Apex, NC 27502 or by email at public public.hearing@apexnc.org. Please use subject line "Annexation Petition No. 777" and include your first and last name, your address, and your phone number in your written statements. Written comments will be accepted until 3:00 PM on Tuesday, April 23, 2024.

Members of the public can access and view the meeting on the Town's YouTube Channel https://www.youtube.com/c/TownofApexGov or attend in-person.

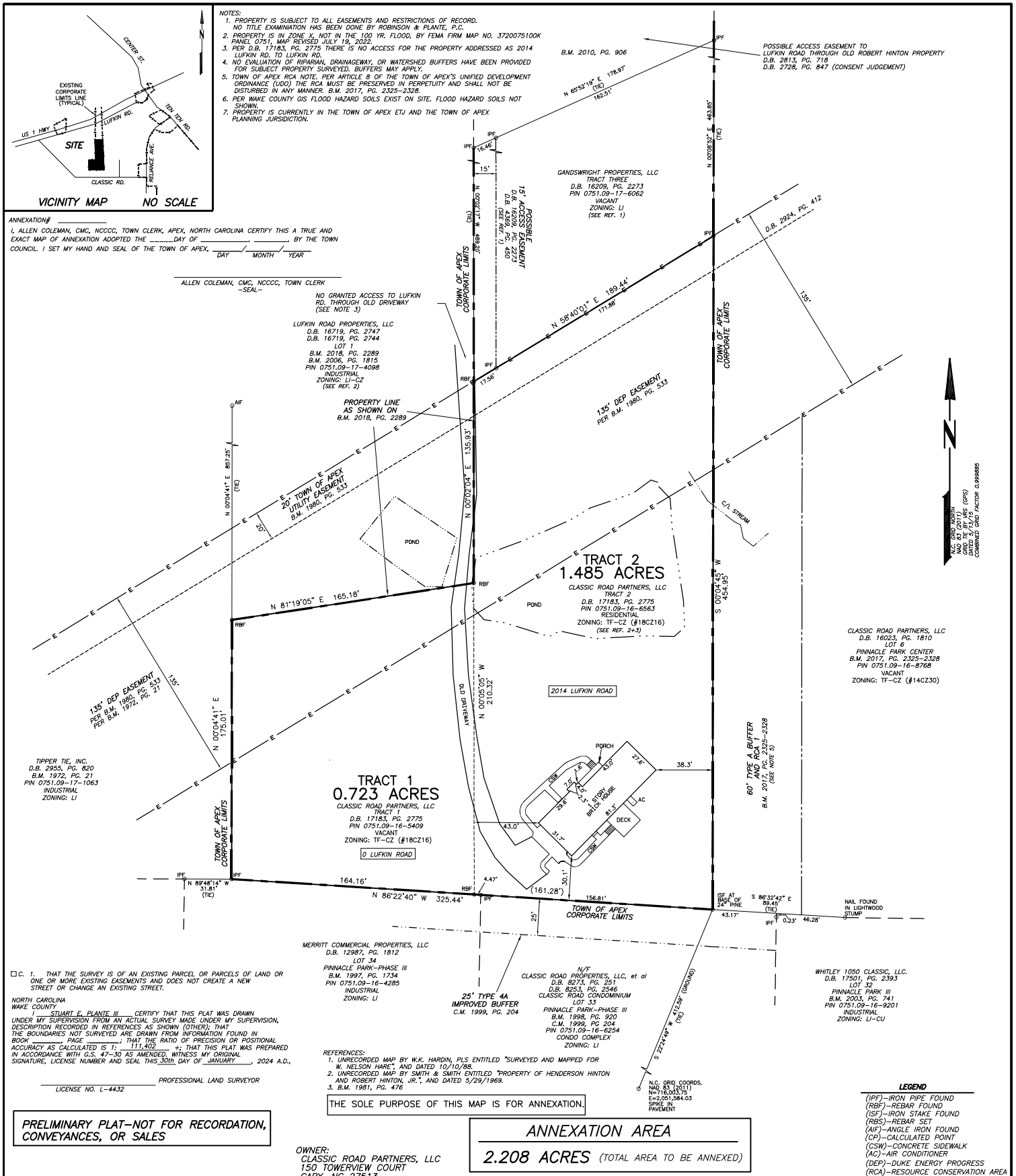
Anyone needing special accommodations to attend this meeting and/or if this information is needed in an alternative format, please contact the Town Clerk's Office. The Town Clerk is located at 73 Hunter Street in Apex Town Hall on the 2nd Floor, (email) allen.coleman@apexnc.org or (phone) 919-249-1260. We request at least 48 hours' notice prior to the meeting to make the appropriate arrangements.

Questions should be directed to the Town Clerk's Office.

###

Beginning at an Iron Stake Found at base of 24” Pine, being the southwest property corner of Lot 6 Pinnacle Park Center as recorded in Book of Maps 2017, Pages 2325-2328 Wake County Registry, thence from said Beginning Point North 86°22’40” West 325.44 feet to an existing iron pipe found, thence North 00°04’41” East 175.01 feet to an existing rebar found, thence North 81°19’05” East 165.18 feet to an existing rebar found in a pond, thence North 00°02’04” East 135.93 feet to an existing rebar found, thence North 58°40’01” East 189.44 feet to an existing iron pipe found, thence South 00°04’45” West 454.95 feet to the point and place of Beginning containing 2.208 Acres more or less.


Lufkin Road
Middle School
Annexation #777
Pinnacle Center Dr
0
200
400
Feet
March 2024
February 2024 Aerial Photography
Prepared by: Town of Apex Planning Department



□ c. 1. 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.

NORTH CAROLINA
WAKE COUNTY

I, STUART E. PLANTE III, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION, DESCRIPTION RECORDED IN REFERENCES AS SHOWN (OTHER); THAT THE BOUNDARIES NOT SURVEYED ARE DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS 1: 111,402 +; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 30th DAY OF JANUARY, 2024 A.D.,

_____ PROFESSIONAL LAND SURVEYOR
LICENSE NO. L-4432

REFERENCES:
1. UNRECORDED MAP BY W.K. HARDIN, PLS ENTITLED "SURVEYED AND MAPPED FOR W. NELSON HARE", AND DATED 10/10/88.
2. UNRECORDED MAP BY SMITH & SMITH ENTITLED "PROPERTY OF HENDERSON HINTON AND ROBERT HINTON, JR.", AND DATED 5/29/1969.
3. B.M. 1981, PG. 476

THE SOLE PURPOSE OF THIS MAP IS FOR ANNEXATION.

PRELIMINARY PLAT-NOT FOR RECORDATION, CONVEYANCES, OR SALES

OWNER:
CLASSIC ROAD PARTNERS, LLC
150 TOWERVIEW COURT
CARY, NC 27513

ANNEXATION AREA
2.208 ACRES (TOTAL AREA TO BE ANNEXED)

LEGEND
(IPF)-IRON PIPE FOUND
(RBF)-REBAR FOUND
(ISF)-IRON STAKE FOUND
(RBS)-REBAR SET
(AIF)-ANGLE IRON FOUND
(CP)-CALCULATED POINT
(CSW)-CONCRETE SIDEWALK
(AC)-AIR CONDITIONER
(DEP)-DUKE ENERGY PROGRESS
(RCA)-RESOURCE CONSERVATION AREA

NOTE:
MISCLOSURE WAS DISTRIBUTED BY THE COMPASS METHOD. THE DISTANCES ON THIS MAP ARE ADJUSTED HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED. ALL AREA CALCULATED BY COORDINATE COMPUTATION.

0 40 80 120
SCALE IN FEET

RECORDED IN BOOK OF MAPS_____PAGE_____.

REVISIONS	CONTIGUOUS ANNEXATION MAP FOR THE TOWN OF APEX	ROBINSON & PLANTE, P.C. LAND SURVEYING C-2687 970 TRINITY ROAD RALEIGH, NC 27607 PHONE: (919)859-6030	
	TOWN	COUNTY: WAKE	SURVEY DATE: 1-18-24	SURVEYED BY: RE
	STAT		SCALE: 1"=40'	DRAWN BY: SEP
	ZONE: TF-CZ (#18CZ16)	P.I.N.: SEE ABOVE	CHECKED & CLOSURE BY: SEP	FILE: HINTONANNEXR

PETITION FOR VOLUNTARY ANNEXATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Application #: Annexation #777 Submittal Date: 1-30-2024

Fee Paid $ 200.00 Check # 1219

TO THE TOWN COUNCIL APEX, NORTH CAROLINA

1. We, the undersigned owners of real property, respectfully request that the area described in Part 4 below be annexed to the Town of Apex, ■ Wake County, ☐ Chatham County, North Carolina.
2. The area to be annexed is ■ contiguous, ☐ non-contiguous (satellite) to the Town of Apex, North Carolina and the boundaries are as contained in the metes and bounds description attached hereto.
3. If contiguous, this annexation will include all intervening rights-of-way for streets, railroads, and other areas as stated in G.S. 160A-31(f), unless otherwise stated in the annexation amendment.

OWNER INFORMATION

Classic Road Partners, LLC Owner Name (Please Print)	0751166563 Property PIN or Deed Book & Page #
919-612-5245 Phone	gfutrell@jlgcorp.com E-mail Address
Classic Road Partners, LLC Owner Name (Please Print)	0751165409 Property PIN or Deed Book & Page #
919-612-5245 Phone	gfutrell@jlgcorp.com E-mail Address
Owner Name (Please Print)	Property PIN or Deed Book & Page #
Phone	E-mail Address

SURVEYOR INFORMATION

Surveyor: Robinson and Plante, PC- Buddy Plante

Phone: 919-859-6030 Fax:

E-mail Address: buddy@robinsonplante.com

ANNEXATION SUMMARY CHART

Property Information		Reason(s) for annexation (select all that apply)	
Total Acreage to be annexed:	2.2	Need water service due to well failure	☐
Population of acreage to be annexed:	0	Need sewer service due to septic system failure	☐
Existing # of housing units:	1	Water service (new construction)	☐
Proposed # of housing units:	0	Sewer service (new construction)	☐
Zoning District*:	TF-CZ	Receive Town Services	☑

*If the property to be annexed is not within the Town of Apex's Extraterritorial Jurisdiction, the applicant must also submit a rezoning application with the petition for voluntary annexation to establish an Apex zoning designation. Please contact the Planning Department with questions.

PETITION FOR VOLUNTARY ANNEXATION

Application #: Annexation #777 Submittal Date: 1-30-2024

COMPLETE IF SIGNED BY INDIVIDUALS:

All individual owners must sign. (If additional signatures are necessary, please attach an additional sheet.)

Please Print	Signature
Please Print	Signature
Please Print	Signature
Please Print	Signature

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, _____, a Notary Public for the above State and County, this the _____day of, _____, 20____.

_____
Notary Public

SEAL

My Commission Expires: _____

COMPLETE IF A CORPORATION:

In witness whereof, said corporation has caused this instrument to be executed by its President and attested by its Secretary by order of its Board of Directors, this the _____ day of _____, 20_____.

Corporate Name _____

SEAL

By: _____
President (Signature)

Attest:

_____
Secretary (Signature)

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, _____, a Notary Public for the above State and County, this the _____day of _____, 20____.

_____
Notary Public

SEAL

My Commission Expires: _____

PETITION FOR VOLUNTARY ANNEXATION

Application #: Annexation #777 Submittal Date: 1-30-2024

COMPLETE IF IN A LIMITED LIABILITY COMPANY

In witness whereof, Classic Road Partners, LLC a limited liability company, caused this instrument to be executed in its name by a member/manager pursuant to authority duly given, this the 18th day of January, 2024.

Name of Limited Liability Company Classic Road Partners, LLC

By: [signature]
Signature of Member/Manager

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Sonya L. Wheeler, a Notary Public for the above State and County, this the 18 day of January, 2024

SONYA L WHEELER
SEAL Notary Public
Johnston
County
NORTH CAROLINA

[signature]
Notary Public

My Commission Expires: 2/15/2028

COMPLETE IF IN A PARTNERSHIP

In witness whereof, _____, a partnership, caused this instrument to be executed in its name by a member/manager pursuant to authority duly given, this the _____ day of _____, 20_____.

Name of Partnership _____

By: _____
Signature of General Partner

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, _____, a Notary Public for the above State and County, this the _____day of _____, 20____.

_____
Notary Public

SEAL

My Commission Expires: _____

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: April 23, 2024

Item Details

Presenter(s): Shelly Mayo, Planner II

Department(s): Planning

Requested Motion

Public hearing and possible motion to approve Rezoning Application No. 24CZ02 5836 Old Smithfield Rd. The applicants, Natilee Hinton-Brooks & Inetta L. Hinton, seek to rezone approximately 2.22 acres from Rural Residential (RR) to Planned Commercial-Conditional Zoning (PC-CZ). The proposed rezoning is located at 5836 Old Smithfield Rd.

Approval Recommended?

The Planning Department recommends approval.

The Planning Board held a Public Hearing on April 8, 2024 and unaminously voted to recommend approval of the rezoning with the conditions offered by the applicant.

Item Details

The property to be rezoned is identified as PIN 0740850331.

Attachments

- PH2-A1: Staff Report - Rezoning Case No. 24CZ02 - 5836 Old Smithfield Rd
- PH2-A2: Planning Board Report to Town Council - Rezoning Case No. 24CZ02 - 5836 Old Smithfield Rd

All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Address:	5836 Old Smithfield Rd
Applicant/Owner:	Natilee Hinton-Brooks & Inetta L. Hinton

PROJECT DESCRIPTION:

Acreage:	+/- 2.22 acres
PIN:	0740850331
Current Zoning:	Rural Residential (RR)
Proposed Zoning:	Planned Commercial-Conditional Zoning (PC-CZ)
2045 Land Use Map:	Mixed Use: Medium Density Residential/Office Employment/Commercial Services
Town Limits:	In ETJ

ADJACENT ZONING & LAND USES:

	Zoning	Land Use
North:	High-Density Single-Family Residential (HDSF)	Vacant & NC 540 Hwy
South:	Holly Springs SR: Suburban Residential	Vacant & Single-Family Residential
East:	Rural Residential (RR)	Vacant & Single-Family Residential
West:	Rural Residential (RR)	Single-Family Residential

EXISTING CONDITIONS:

The site is +/- 2.22 acres and is located on the north side of Old Smithfield Road, east of the NC 55 Bypass. The site contains a large, single-story, non-residential building and gravel parking area. The northern part of the site is mostly wooded with an intermittent stream along the northern edge.

BACKGROUND:

The applicants' father, Billy Hinton, constructed a non-residential building at 5836 Old Smithfield Road in 1975 and operated a bar and event venue there for several decades. During Apex's 2007 Extraterritorial Jurisdiction (ETJ) expansion, neither Wake County staff nor the property owner were able to provide Apex staff with any records of zoning approvals for the business. Because of the absence of zoning approvals for the business, the parcel was zoned Rural Residential (RR) when it was brought into the Town of Apex ETJ.

The use was deemed a legal non-conforming use and was permitted to continue operation. In the late 2000s, the site was used as a church. Therefore, the bar and event venue (Assembly hall, for profit) use lost the legal non-conforming use status. Per UDO Sec. 10.2.6, if a nonconforming use is discontinued or abandoned for a period of more than six (6) consecutive months, then such use may not be re-established or resumed. The applicants currently rent the building as an Assembly hall, for profit, which is not compliant with the current Rural Residential (RR) zoning.

NEIGHBORHOOD MEETING:

Per UDO Sec. 2.2.7.B, the applicant conducted two (2) neighborhood meetings. They were held on January 29, 2024 and March 13, 2024; the neighborhood meeting reports are attached to the staff report.

2045 LAND USE MAP:

The 2045 Land Use Map designates the site as Mixed Use: Medium Density Residential/Office Employment/Commercial Services. The proposed rezoning to Planned Commercial-Conditional Zoning (PC-CZ) is consistent with the Land Use Map classification.

PROPOSED ZONING CONDITIONS:

The applicants are requesting to rezone the property to Planned Commercial-Conditional Zoning (PC-CZ) in order to bring the zoning into compliance for the use "Assembly hall, for profit" and obtain an ABC permit for beer and wine at events. If approved, the proposed conditions will result in minimal required improvements to the existing site, which will allow the local, small business to legally continue as a social hub in this historically underserved, African-American community.

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

The existing nonconforming site shall not be subject to UDO Articles 8 and 9 except as stated below, and provided that all of the following conditions are met:

1. Permitted uses:
    a. Assembly hall, for profit
    b. Assembly hall, non-profit
    c. Church or place of worship
2. The existing buildings shall follow UDO Sec. 10.3 Nonconforming Structures. No additional buildings shall be permitted on site.
3. If the existing building is damaged or destroyed to the extent that it must be rebuilt per UDO Sec. 10.3, the rebuilt building will also meet these conditions:
    a. The predominant exterior building materials shall be high quality materials, including:
        i. Brick masonry
        ii. Decorative concrete block (either integrally colored or textured)
        iii. Stone accents
        iv. Aluminum storefronts with anodized or pre-finished colors.
        v. EIFs cornices, and parapet trim
        vi. Precast concrete
    b. EIFs or synthetic stucco shall not be used in the first forty inches above grade.
    c. The building exterior shall have more than one material color.
    d. The building shall have more than one parapet height.
    e. The main entrance to the building shall be emphasized.
4. The total built upon area for the site shall not exceed 12% without a Stormwater Control Measure (SCM), unless it otherwise meets one or more of the exemptions listed in UDO Sec. 6.1.3.
5. The 100-foot riparian buffer at the northwestern corner of the property and the 50-foot riparian buffer at the rear property line shall not be disturbed, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer. The required

riparian buffers shall also be dedicated as Resource Conservation Area (RCA).
6. The buffer along Old Smithfield Road shall be a 15-foot Type E buffer.
7. The buffer along the western property line shall be 10-foot existing undisturbed.
8. Along the eastern property line, there shall be no required perimeter buffer due to the existing sewer easement.
9. The site shall not require a Traffic Impact Analysis and no road improvements shall be required. This does not exempt the installation of improvements required for the safe ingress and egress of vehicles and emergency services accessing the site, including, but not limited to, installation of a paved driveway apron, necessary driveway relocation, and other roadway markings and signage associated with the driveway location.
10. The parking lot may be gravel except for driveway aprons, which shall be concrete, and handicapped spaces, which shall be concrete or asphalt. Gravel parking shall at a minimum meet the following specifications:
    a. Compacted Subgrade;
    b. 6 Inches Aggregate Base Course;
    c. 1.5 Inches #78M Stone; and
    d. Drive aisles must be repaired or replaced with #78M Stone every six (6) months.
11. Parking and vehicular use areas shall not be required to be set back from any required buffers. Wheel stops shall be installed to protect vegetated areas from impacts by cars.
12. No exterior lighting shall be installed on site unless a lighting plan is submitted which meets all provisions of UDO Sec. 8.6, except as required by building code or ADA.
13. A dumpster shall not be permitted unless it is screened by an enclosure, per UDO Sec. 8.2.8 and the Town of Apex Standard Specifications and Standard Details.
14. Signs shall not be permitted unless they meet all provisions of UDO Sec. 8.7.
15. At least 1 parking space per 500 square feet of building area shall be provided.

ENVIRONMENTAL ADVISORY BOARD:

The Apex Environmental Advisory Board (EAB) met to discuss this rezoning on February 15, 2024. The EAB recommended the conditions listed in the rezoning and had no additional suggestions.

1. The total built upon area for the site shall not exceed 12% without a Stormwater Control Measure (SCM), unless it otherwise meets one or more of the exemptions listed in UDO Sec. 6.1.3.
2. The 100-foot riparian buffer at the northwestern corner of the property and the 50-foot riparian buffer at the rear property line shall not be disturbed, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer. The required riparian buffers shall also be dedicated as Resource Conservation Area (RCA).
3. The buffer along Old Smithfield Road shall be a 15-foot Type E buffer.
4. The buffer along the western property line shall be 10-foot existing undisturbed.
5. The parking lot may be gravel except for driveway aprons, which shall be concrete, and handicapped spaces, which shall be concrete or asphalt. Gravel parking shall at a minimum meet the following specifications:
    a. Compacted Subgrade;
    b. 6 Inches Aggregate Base Course;
    c. 1.5 Inches #78M Stone; and
    d. Drive aisles must be repaired or replaced with #78M Stone every six (6) months.
6. Parking and vehicular use areas shall not be required to be set back from any required buffers. Wheel

stops shall be installed to protect vegetated areas from impacts by cars.

7. No exterior lighting shall be installed on site unless a lighting plan is submitted which meets all provisions of UDO Sec. 8.6, except as required by building code or ADA.
8. A dumpster shall not be permitted unless it is screened by an enclosure, per UDO Sec. 8.2.8 and the Town of Apex Standard Specifications and Standard Details.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of the rezoning petition as proposed by the applicant.

PLANNING BOARD RECOMMENDATION:

Planning Board reviewed this project at their April 8, 2024 meeting and voted unanimously to recommend approval.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

> The 2045 Land Use Map designates the site as Mixed Use: Medium Density Residential/Office Employment/Commercial Services. The proposed rezoning to Planned Commercial-Conditional Zoning (PC-CZ) is consistent with that Land Use Map classification.
>
> The proposed rezoning is reasonable and in the public interest because the proposed conditions will allow the applicants to operate the "Assembly hall, for-profit" use as it did before it lost the legal non-conforming status back in the late-2000s due to its conversion to a church use. The proposed conditions will result in minimal required improvements to the existing site, which will allow the local, small business to legally continue as a social hub in this historically underserved, African-American community.

LEGISLATIVE CONSIDERATIONS

The Town Council shall find the Planned Commercial-Conditional Zoning (PC-CZ) demonstrates compliance with the following standards. 2.3.3.F.:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

3) *Zoning district supplemental standards.* The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards,* if applicable.

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

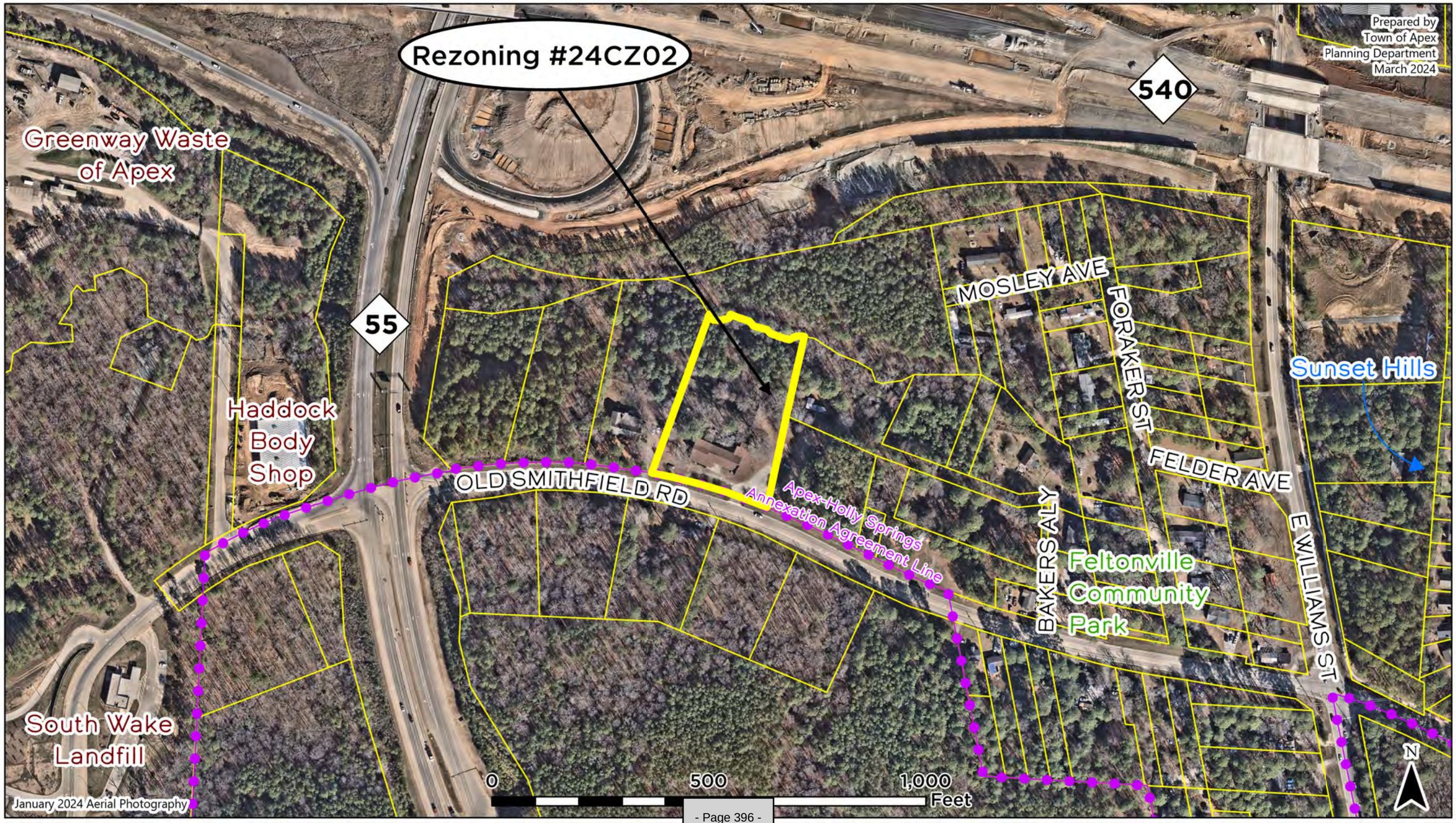
6) *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.


Rezoning #24CZ02
Prepared by
Town of Apex
Planning Department
March 2024
540
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Greenway Waste of Apex
Haddock Body Shop
South Wake Landfill
OLD SMITHFIELD RD
MOSLEY AVE
FORAKER ST
FELDER AVE
BAKER SALY
E WILLIAMS ST
Sunset Hills
Feltonville Community Park
Apex-Holly Springs Annexation Agreement Line
January 2024 Aerial Photography
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1,000
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PETITION TO AMEND THE OFFICIAL ZONING MAP

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Application #: 24CZ02 Submittal Date: 2/1/2024

Fee Paid: $1000

Project Information

Project Name: Hinton Project

Address(es): 5836 Old Smithfield Road Apex NC 27539

PIN(s): 0740850331

Acreage: 2.22

Current Zoning: RR Proposed Zoning: PC-CZ

Current 2045 LUM Classification(s):

Is the proposed rezoning consistent with the 2045 LUM Classification(s)? Yes No

If any portion of the project is shown as mixed use (3 or more stripes on the 2045 Land Use Map) provide the following:

Area classified as mixed use: Acreage:

Area proposed as non-residential development: Acreage:

Percent of mixed use area proposed as non-residential: Percent:

Applicant Information

Name: Natilee Hinton-Brooks and Inetta L Hinton

Address: 5900 Old Smithfield Road

City: Apex State: NC Zip: 27539

Phone: 919 285 6257 or 919 362 0825 E-mail: nhbrooks@yahoo.com

Owner Information

Name: Natilee Hinton-Brooks and Inetta L Hinton

Address: 5900 Old Smithfield Road

City: Apex State: NC Zip: 27539

Phone: E-mail:

Agent Information

Name: N.A

Address:

City: State: Zip:

Phone: E-mail:

Other contacts:

PETITION INFORMATION

Application #: 24CZ02 Submittal Date: 02/01/2024

An application has been duly filed requesting that the property described in this application be rezoned from RR to PC-CZ. It is understood and acknowledged that if the property is rezoned as requested, the property described in this request will be perpetually bound to the use(s) authorized and subject to such conditions as imposed, unless subsequently changed or amended as provided for in the Unified Development Ordinance (UDO). It is further understood and acknowledged that final plans for any specific development to be made pursuant to any such Conditional Zoning shall be submitted for site or subdivision plan approval, as required by the UDO. Use additional pages as needed.

PROPOSED USES:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

1	Please See Attached	21	
2		22	
3		23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
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20		40	

5836 Old Smithfield Road

Minimum zoning conditions proposed

The recommended zoning district is Planned Commercial-Conditional Zoning (PC-CZ).

The existing nonconforming site shall not be subject to UDO Articles 8 and 9 except as stated below, and provided that all of the following conditions are met:

1. Permitted uses:
    a. Assembly hall, for profit
    b. Assembly hall, non-profit
    c. Church or place of worship
2. The existing buildings shall follow UDO Sec. 10.3 Nonconforming Structures. No additional buildings shall be permitted on site.
3. If the existing building is damaged or destroyed to the extent that it must be rebuilt per UDO Sec. 10.3, the rebuilt building will also meet these conditions:
    a. The predominant exterior building materials shall be high quality materials, including:
        i. Brick masonry
        ii. Decorative concrete block (either integrally colored or textured)
        iii. Stone accents
        iv. Aluminum storefronts with anodized or pre-finished colors.
        v. EIFs cornices, and parapet trim
        vi. Precast concrete
    b. EIFs or synthetic stucco shall not be used in the first forty inches above grade.
    c. The building exterior shall have more than one material color.
    d. The building shall have more than one parapet height.
    e. The main entrance to the building shall be emphasized.
4. The total built upon area for the site shall not exceed 12% without a Stormwater Control Measure (SCM), unless it otherwise meets one or more of the exemptions listed in UDO Sec. 6.1.3.
5. The 100-foot riparian buffer at the northwestern corner of the property and the 50-foot riparian buffer at the rear property line shall not be disturbed, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer. The required riparian buffers shall also be dedicated as Resource Conservation Area (RCA).
6. The buffer along Old Smithfield Road shall be a 15-foot Type E buffer.
7. The buffer along the western property line shall be 10-foot existing undisturbed.
8. Along the eastern property line, there shall be no required perimeter buffer due to the existing sewer easement.
9. The site shall not require a Traffic Impact Analysis and no road improvements shall be required. This does not exempt the installation of improvements required for the safe ingress and egress of vehicles and emergency services accessing the site, including, but not limited to, installation of a paved driveway apron, necessary driveway relocation, and other roadway markings and signage associated with the driveway location.
10. The parking lot may be gravel except for driveway aprons, which shall be concrete, and handicapped spaces, which shall be concrete or asphalt. Gravel parking shall at a minimum meet the following specifications:
    a. Compacted Subgrade;
    b. 6 Inches Aggregate Base Course;
    c. 1.5 Inches #78M Stone; and
    d. Drive aisles must be repaired or replaced with #78M Stone every six (6) months.

11. Parking and vehicular use areas shall not be required to be set back from any required buffers. Wheel stops shall be installed to protect vegetated areas from impacts by cars.
12. No exterior lighting shall be installed on site unless a lighting plan is submitted which meets all provisions of UDO Sec. 8.6, except as required by building code or ADA.
13. A dumpster shall not be permitted unless it is screened by an enclosure, per UDO Sec. 8.2.8 and the Town of Apex Standard Specifications and Standard Details.
14. Signs shall not be permitted unless they meet all provisions of UDO Sec. 8.7.
15. At least 1 parking space per 500 square feet of building area shall be provided.

PETITION INFORMATION

Application #: 24CZ02 Submittal Date: 02/01/2024

PROPOSED CONDITIONS:

The applicant hereby requests that the Town Council of the Town of Apex, pursuant to the Unified Development Ordinance, approve the Conditional Zoning for the above listed use(s) subject to the following condition(s). Use additional pages as needed.

Please see attached.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

The proposed rezoning is consistent with the 2045 LUM.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

The proposed rezoning is compatible with the surrounding land uses.

3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards*, if applicable.

The proposed rezoning will comply with all applicable supplemental standards.

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

The proposed rezoning will minimize any adverse impacts.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The proposed rezoning conditions will minimize any environmental impacts.

6) *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

The proposed rezoning will not have any adverse impacts on public facilities and services.

7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

The proposed rezoning will not have any adverse impacts on the health, safety, or welfare of the surrounding residents.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The proposed rezoning will not be substantially detrimental to the adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

The proposed rezoning will not be a nuisance or hazard.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

The proposed rezoning will comply with the UDO, except as called out in the zoning conditions.

AGENT AUTHORIZATION FORM

Application #: 24CZ02 Submittal Date: 02/01/2024

Natilee Hinton-Brooks and Inetta L Hinton is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☑ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other: _____

The property address is: 5836 Old Smithfield Road Apex N 27539

The agent for this project is: _____

- ☒ I am the owner of the property and will be acting as my own agent

Agent Name: _____

Address: _____

Telephone Number: _____

E-Mail Address: _____

Signature(s) of Owner(s)*

Natilee Hinton-Brooks

Natilee Hinton-Brooks 2/1/2024

Type or print name Date

Inetta L Hinton

Inetta L Hinton 2/1/2024

Type or print name Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP

Application #: 24C702 Submittal Date: 02/01/24

The undersigned, Natilee Hinton-Brooks and Inetta L Hinton (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 5836 Old Smithfield Road Apex NC 27539 and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated 4/2/2008, and recorded in the Wake County Register of Deeds Office on 4/2/2008, in Book 11-E Page 428.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on 4/2/08, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on 4/2/08, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 1st day of February, 2024.

Natilee Hinton-Brooks Inetta L. Hinton (seal)

Natilee Hinton-Brooks Inetta L. Hinton

Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Natalie Hinton Brooks + Inetta Hinton, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC Drivers License, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

J DEETTE DAMON NOTARY PUBLIC WAKE COUNTY, NC [NOTARY SEAL]

J Deette Damon

Notary Public
State of North Carolina
My Commission Expires: April 08 2024

chrome-extension://hbgjioklmpbdmemlmbkfckopochbgjpl/file:///C:/Users/nhint/Downloads/rezone-1_20231026074843053 3.pdf 9/34

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: 24CZ02 Submittal Date: 02/01/2024

Insert legal description below.

See Attached.

Smith & Smith Surveyors, P.A.
P.O. Box 457
Apex, N.C. 27502
(919) 362-7111
Firm License No. C-0155

Lying and being in Town of Apex ETJ, Holly Springs Township, Wake County, North Carolina and described more fully as follows to wit:

BEGINNING at an iron pipe set on the northern right of way of Old Smithfield Road ~ NCSR 1172, the southeastern corner of Lot 2 (B.M. 2004, PG. 1047), also the southwestern corner of Lot 1 described herein (B.M. 2004, PG. 1047); thence with Lot 2 North 22° 55' 35" East, 386.51 feet to a mathematical point (not set) in the center of Falls Branch; thence with Falls Branch the following 13 calls South 27° 59' 45" East, 8.07 feet; thence South 55° 26' 32" East, 10.49 feet; thence South 88° 21' 04" East, 15.16 feet; thence North 87° 32' 26" East, 19.80 feet; thence North 21° 12' 15" East, 13.76 feet; thence South 66° 49' 47" East, 47.23 feet; thence South 48° 29' 07" East, 22.82 feet; thence North 88° 28' 46" East, 11.49 feet; thence South 60° 23' 15" East, 11.78 feet; thence South 45° 10' 41" East, 22.73 feet; thence South 70° 57' 06" East, 34.44 feet; thence North 63° 02' 11" East, 20.67 feet; thence South 84° 19' 52" East, 18.48 feet; thence leaving Falls Branch South 16° 10' 00" West, 404.13 feet to an existing iron pipe near the northern right of way of Old Smithfield Road; thence along and with said right of way a curve to the left North 70° 35' 22" West, 273.67 feet (chord), 1210.00 feet radius to the BEGINNING, containing 2.221 total acres more or less.

PIN 0740-84-0331
This description was prepared for the sole purpose to rezone a property and for no other use.

NOTICE OF NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

11/6/24
Date

Dear Neighbor:

You are invited to a neighborhood meeting to review and discuss the development proposal at

5836 Old Smithfield Road, Apex, NC 27539 — Address(es)

0740840331 — PIN(s)

in accordance with the Town of Apex Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the [illegible] or the [illegible] located on the Town of Apex website at [illegible]. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

A Neighborhood Meeting is required because this project includes (check all that apply):

	Application Type	Approving Authority
☑	*Rezoning (including Planned Unit Development)*	*Town Council*
☐	Major Site Plan	Technical Review Committee (staff)
☐	Minor Site Plan for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"	Technical Review Committee (staff)
☐	Special Use Permit	Board of Adjustment (QJPH*)
☐	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Board of Adjustment cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)):

To Rezone 5836 Old Smithfield Rd for Commercial use

Estimated submittal date: 3/24

MEETING INFORMATION:

Property Owner(s) name(s): Natilee Hinton-Brooks & Inetta L. Hinton

Applicant(s): Natilee Hinton Brooks & Inetta L. Hinton

Contact information (email/phone): NHBrooks@yahoo.com 919-362-08[illegible]

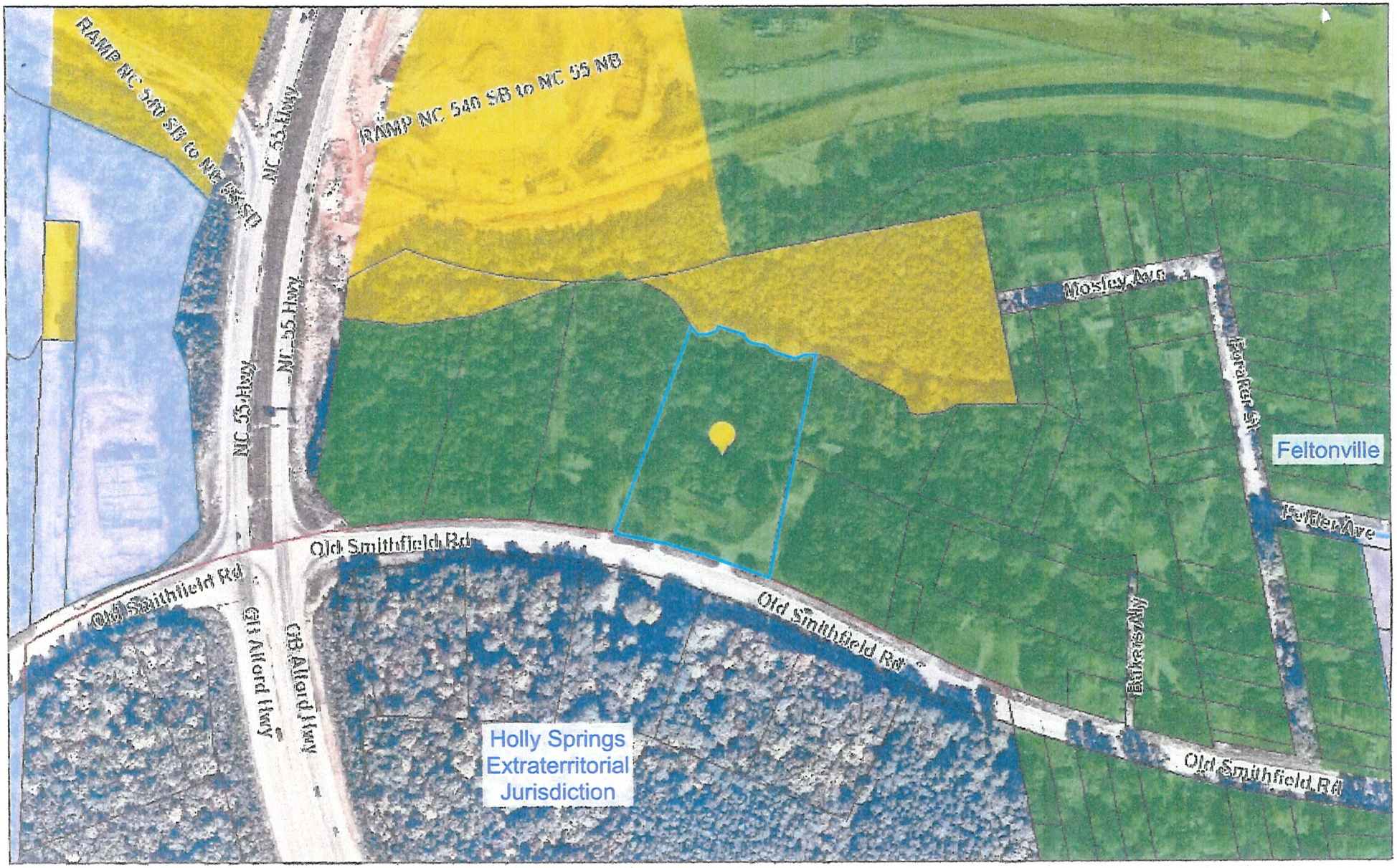
Meeting Address: 5836 Old Smithfield Rd Apex, NC 27[illegible]

Date/Time of meeting**: 1/29/24 6pm 7pm

Welcome: 6:00 Project Presentation: 6:15 Question & Answer: 6:30

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at [illegible].

5836 Old Smithfield Rod - Zoning



7/4/2024, 5:05:47 PM

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0 0.02 0.05 0.1 mi

0 0.04 0.07 0.15 km

Parcels - Property

Apex Zoning Districts

B1 Conditional Zoning

HDSF - High Density Single-Family Residential

LI Light Industrial

MI Conditional Zoning

RR Rural Residential

Municipal Agreement Line

Esri Community Maps Contributors, Town of Cary, Wake County, State of North Carolina DOT, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin

Chesley, Etta Geneva B Shannon, Natasha Claytonia
Property address: 5820 Old Smithfield Road Apex NC 27539
Current address: 3930 23rd Parkway Apt 21 Temple Hills MD 20748-6629

Hinton, Henderson Heirs, Hinton-Brooks Natalie
Property Address: 5816 Old Smithfield Road Apex NC 27539-5351
Current Address: 4929 Jessie Drive Apex NC 27539 5351

Hinton-Brooks, Natalie B
Property Address: 5900 Old Smithfield Road Apex NC 27539-5351
Current address: 5900 Old Smithfield Road Apex NC 27539-5351

Hinton-Brooks, Natilee D Trustee
Property address: 5836 Old Smithfield Road Apex NC 27539-5351
Current Address: 5900 Old Smithfield Road Apex NC 27539-5351

Johnson, Orphatrue
3512 Bakers Aly Apex NC 27539-9765
Current address: 3512 Bakers Aly Apex NC 27539-9765

Kizer, Mable Delores Trustee, Johnson Orphatrue B Successor Trustee
5828 Old Smithfield Road Apex NC 27539
Current address: 3512 Bakers Aly Apex NC 27539-9765

Lee Alice Beckwith
5837 Old Smithfield Road Apex 27539
Current address: 209 West Street Apex NC 27502

Morgan Patsy Smith Trustee Smith Family IRREV CHARITABLE UNITRUST
5817 Old Smithfield RoadApex NC 27539
Current address: 323 Golf Course Drive Raleigh NC 27610-2733

NC Dept of Transportation
0 Mosley Ave
Current address: 1546 Mail Service Center Raleigh NC 27699-1500

NC Dept of Transportation Turnpike Authority
5730 Mosley Ave
Current address: Transportation Section - 1578 MSC Raleigh 27699-1578

Paval, Aneta
3508 Bakers Aly Apex NC 27539
Current address: 7404 Chapel Hill Road STE M Raleigh NC 27607-5043

Woodell Anthony K Woodell Melissa S
0 Old Smithfield Road Apex NC 27539
Current address: 36 Scotland Street Ocean Isle Beach NC 28469-7628

Woodell Anthony K Woodell Melissa S
5904 Old Smithfield Road Apex NC 27539
Current address: 36 Scotland Street Ocean Isle Beach NC 28469-7628

Town of Apex
PO Box 250
Apex NC 27502

Current Tenant (NHB)
5836 Old Smithfield Road
Apex NC 27539

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: 5836 Old Smithfield Rd Apex NC 27539

Date of meeting: January 29, 2024 Time of meeting: 6:00

Property Owner(s) name(s): Nathilee Hinton-Brooks & Inetha Hinton

Applicant(s): _____

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	Thomas Brooks	5900 Oldsmithfield R	[redacted]		☐
2.	Mable Delbert Kizer	3117 Gold Dust Ln			☑
3.	Ophatlee B. Johnson	3512 Bakers Alley			☑
4.	Kimberly A Johnson	212 Purple Leaf Rd			☑
5.	[illegible]				☑
6.	Inetta Hinton	5400 Ballentine Rd Apex, NC 27539			☑
7.	Courtney Brooks				☑
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Natilee Hinton-Brooks, Inetta L. Hinton
Applicant(s): Natilee Hinton-Brooks, Inetta L. Hinton
Contact information (email/phone): nhbrooks@yahoo.com 919 285-6257
Meeting Address: 5836 Old Smithfield Road Apex NC 27539
Date of meeting: 1-29-24 Time of meeting: 6:00 - 7:00

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:
Wanted information on future plans for Feltonville.

Applicant's Response:
No information on plans for Feltonville

Question/Concern #2:
All approved rezoning and future use of bldg.

Applicant's Response:
We will continue to be an asset to the community.

Question/Concern #3:

Applicant's Response:

Question/Concern #4:

Applicant's Response:

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Natilee Hinton Brooks Lynetta Hinton, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at 5836 Old Smithfield Rd Apex NC (location/address) on 1-29-24 (date) from 6:00pm (start time) to 7:00pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

2.28.24
Date

By: Natilee Hinton Brooks
Lynetta Hinton

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Elizabeth Talton, a Notary Public for the above State and County, on this the 28 day of February, 2024.

SEAL

ELIZABETH TALTON
NOTARY PUBLIC
Lee County
North Carolina
My Commission Expires 4/18/2027

Elizabeth Talton
Notary Public

Elizabeth Talton
Print Name

My Commission Expires: 4/18/2027

Hinton Project
Rezoning of 5836 Old Smithfield Road Apex, NC 27539

Date: March 13, 2024
Time: 6:00 - 7:00 pm
Location: 5836 Old Smithfield Road Apex, NC 27539

Hosts: Natilee Hinton-Brooks and Inetta L. Hinton

Attendees:

Etta Geneva B Shannon Chesley
Natasha Claytonia
Henderson Hinton Heirs
Natilee Hinton-Brooks
Orphature Johnson
Mable Delores Kizer
Alice Beckwith Lee
Patsy Smith Morgan
NC Dept of Transportation
NC Dept of Transportation Turnpike Authority
Aneta Paval
Anthony and Melissa Woodell
Town of Apex

Welcome:

Purpose:

This meeting is the second required form of community outreach to receive your feedback regarding rezoning 5836 Old Smithfield Road Apex, NC 27539 from RR (rural residential) to commerical. It's intend is to identify issues and provide you an opportunity to address any concerns.

Once approved, we will open an assembly hall for profit. Our business will have a positive impact in the community by organizing community events, by participating in non-profit fundraisers/charities, offering space to host events, by partnering with other local business to build relationships and by donating back to the community.

Having commerical zoning can increase the value of residential properties. It will attract businesses which could enhance the area's amenities and desirability, potentially raising property values.

Open Forum:
Questions, comments, and concerns

5836 Old Smithfield Rod - Zoning



1/4/2024, 5:05:47 PM

Parcels - Property
Apex Zoning Districts
B1 Conditional Zoning
HDSF High Density Single-Family Residential
LI Light Industrial
MI Conditional Zoning
RR Rural Residential
Municipal Agreement Line

1:3,578

0 0.02 0.03 0.1 mi
0 0.04 0.07 0.15 km

Esri Community Maps Contributors, Town of Cary, Wake County, State of North Carolina, DOT, © OpenStreetMap contributors, and the GIS User Community

Chesley, Etta Geneva B Shannon, Natasha Claytonia
Property address: 5820 Old Smithfield Road Apex NC 27539
Current address: 3930 23rd Parkway Apt 21 Temple Hills MD 20748-6629

Hinton, Henderson Heirs, Hinton-Brooks Natalie
Property Address: 5816 Old Smithfield Road Apex NC 27539-5351
Current Address: 4929 Jessie Drive Apex NC 27539 5351

Hinton-Brooks, Natalie B
Property Address: 5900 Old Smithfield Road Apex NC 27539-5351
Current address: 5900 Old Smithfield Road Apex NC 27539-5351

Hinton-Brooks, Natilee D Trustee
Property address: 5836 Old Smithfield Road Apex NC 27539-5351
Current Address: 5900 Old Smithfield Road Apex NC 27539-5351

Johnson, Orphatrue
3512 Bakers Aly Apex NC 27539-9765
Current address: 3512 Bakers Aly Apex NC 27539-9765

Kizer, Mable Delores Trustee, Johnson Orphatrue B Successor Trustee
5828 Old Smithfield Road Apex NC 27539
Current address: 3512 Bakers Aly Apex NC 27539-9765

Lee Alice Beckwith
5837 Old Smithfield Road Apex 27539
Current address: 209 West Street Apex NC 27502

Morgan Patsy Smith Trustee Smith Family IRREV CHARITABLE UNITRUST
5817 Old Smithfield RoadApex NC 27539
Current address: 323 Golf Course Drive Raleigh NC 27610-2733

NC Dept of Transportation
0 Mosley Ave
Current address: 1546 Mail Service Center Raleigh NC 27699-1500

NC Dept of Transportation Turnpike Authority
5730 Mosley Ave
Current address: Transportation Section - 1578 MSC Raleigh 27699-1578

Paval, Aneta
3508 Bakers Aly Apex NC 27539
Current address: 7404 Chapel Hill Road STE M Raleigh NC 27607-5043

Woodell Anthony K Woodell Melissa S
0 Old Smithfield Road Apex NC 27539
Current address: 36 Scotland Street Ocean Isle Beach NC 28469-7628

Woodell Anthony K Woodell Melissa S
5904 Old Smithfield Road Apex NC 27539
Current address: 36 Scotland Street Ocean Isle Beach NC 28469-7628

Town of Apex
PO Box 250
Apex NC 27502

Current Tenant (NHB)
5836 Old Smithfield Road
Apex NC 27539

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: 5836 Old Smithfield Rd Apex NC 27539

Date of meeting: 3/13/24 Time of meeting: 6:00pm - 7pm

Property Owner(s) name(s): Natilee Hinton-Brooks & INetta Hinton

Applicant(s): Natilee Hinton-Brooks & INetta Hinton

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	Chris R. Hinton	5240 Jessie Dr Apex	[redacted]	[redacted]	☐
2.	Eric Barclift	5105 Dove Forest Ln			☐
3.	Blanche Hinton	4929 Jessie Drive Apex			☐
4.	Kacey Barclift	5105 Dove Forest Ln			☐
5.	MABLE DeLores Kizer	3117 Gold Dust LN W			☐
6.	Ophie Jackson	3512 Baker Riley			☐
7.					☐
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Nathlee Hunter-Brooks & Inetta Hunter

Applicant(s): N. Hunter-Brooks & Inetta Hunter

Contact information (email/phone): nh brooks @yahoo.com 919362.0825

Meeting Address: 5836 Old Smithfield Rd Apex NC 27539

Date of meeting: 3/13/24 Time of meeting: 6pm- 7pm

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:

NO concerns for building being zoned for Commerical use.

Applicant's Response:

Will continue to support community.

Question/Concern #2:

Applicant's Response:

Question/Concern #3:

Applicant's Response:

Question/Concern #4:

Applicant's Response:

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Natilee Hinton-Brooks, Unetta Hinton, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at 5836 Old Smithfield Rd Apex NC 27539 (location/address) on Wednesday March 13 2024 (date) from 6pm (start time) to 7pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

3/17/24
Date

By: Natilee Hinton Brooks
Unetta Hinton

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Crystal Mangum, a Notary Public for the above State and County, on this the 17th day of March, 2024.

SEAL

Crystal Mangum
Notary Public

Crystal Mangum
Print Name

Crystal Mangum
Notary Public
Wake County, NC

My Commission Expires: 8/24/27

PB Legal Notice - Both.pdf
Adobe Acrobat: PDF edit, conver
chrome-extension://efaidnb...
Tools
PB Lega...e - Both
Share

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION
OF PUBLIC HEARINGS
CONDITIONAL ZONING #24CZ02
5836 Old Smithfield Rd

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Natilee Hinton-Brooks and Inetta L. Hinton
Authorized Agent: Natilee Hinton-Brooks and Inetta L. Hinton
Property Address: 5836 Old Smithfield Road
Acreage: ±2.22 acres
Property Identification Number (PIN): 0740850331
2045 Land Use Map Designation: Mixed Use: Medium Density Residential/Office Employment/Commercial Services
Existing Zoning of Property: Rural Residential (RR)
Proposed Zoning of Property: Planned Commercial-Conditional Zoning (PC-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: April 8, 2024 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/45947

Dianne F. Khin, AICP
Planning Director

Published Dates March 25-April 8, 2024

PB Legal Notice - Both.pdf
Adobe Acrobat: PDF edit, convei
chrome-extension://efaidnb...
Tools
PB Lega...e - Both
Share

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS
ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ02
5836 Old Smithfield Rd

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Natilee Hinton-Brooks and Inetta L. Hinton
Agente autorizado: Natilee Hinton-Brooks and Inetta L. Hinton
Dirección de la propiedad: 5836 Old Smithfield Road
Superficie: ±2.22 acres
Números de identificación de la propiedad: 0740850331
Designación en el Mapa de Uso Territorial para 2045: Mixed Use: Medium Density Residential/Office Employment/ Commercial Services
Ordenamiento territorial existente de la propiedad: Rural Residential (RR)
Ordenamiento territorial propuesto para la propiedad: Planned Commercial-Conditional Zoning (PC-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 8 de abril de 2024 4:30 P.M.
Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/45947.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 25 de marzo - 8 de abril de 2024

2
2
8:45 AM

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #24CZ02
5836 Old Smithfield Rd

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Natilee Hinton-Brooks and Inetta L. Hinton
Authorized Agent: Natilee Hinton-Brooks and Inetta L. Hinton
Property Address: 5836 Old Smithfield Road
Acreage: ±2.22 acres
Property Identification Number (PIN): 0740850331
2045 Land Use Map Designation: Mixed Use: Medium Density Residential/Office Employment/Commercial Services
Existing Zoning of Property: Rural Residential (RR)
Proposed Zoning of Property: Planned Commercial-Conditional Zoning (PC-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

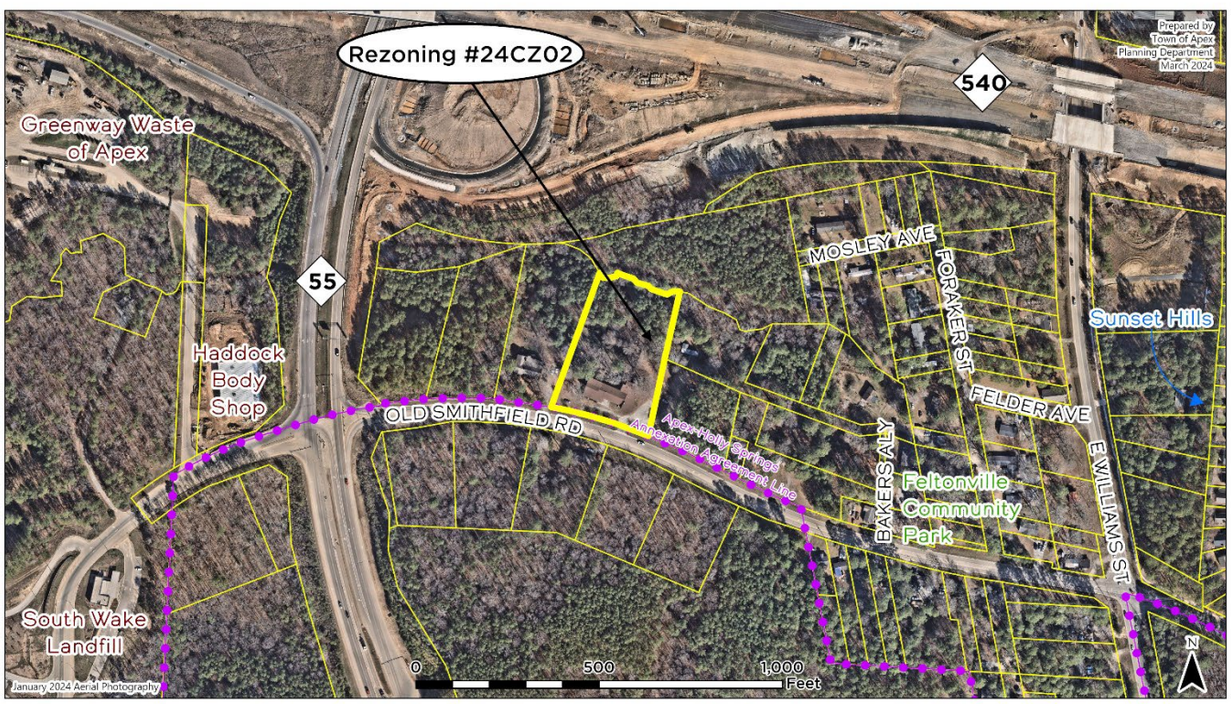
Planning Board Public Hearing Date and Time: April 8, 2024 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/45947

Dianne F. Khin, AICP
Planning Director

Published Dates March 25-April 8, 2024

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ02
5836 Old Smithfield Rd

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Natilee Hinton-Brooks and Inetta L. Hinton
Agente autorizado: Natilee Hinton-Brooks and Inetta L. Hinton
Dirección de la propiedad: 5836 Old Smithfield Road
Superficie: ±2.22 acres
Números de identificación de la propiedad: 0740850331
Designación en el Mapa de Uso Territorial para 2045: Mixed Use: Medium Density Residential/Office Employment/ Commercial Services
Ordenamiento territorial existente de la propiedad: Rural Residential (RR)
Ordenamiento territorial propuesto para la propiedad: Planned Commercial-Conditional Zoning (PC-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

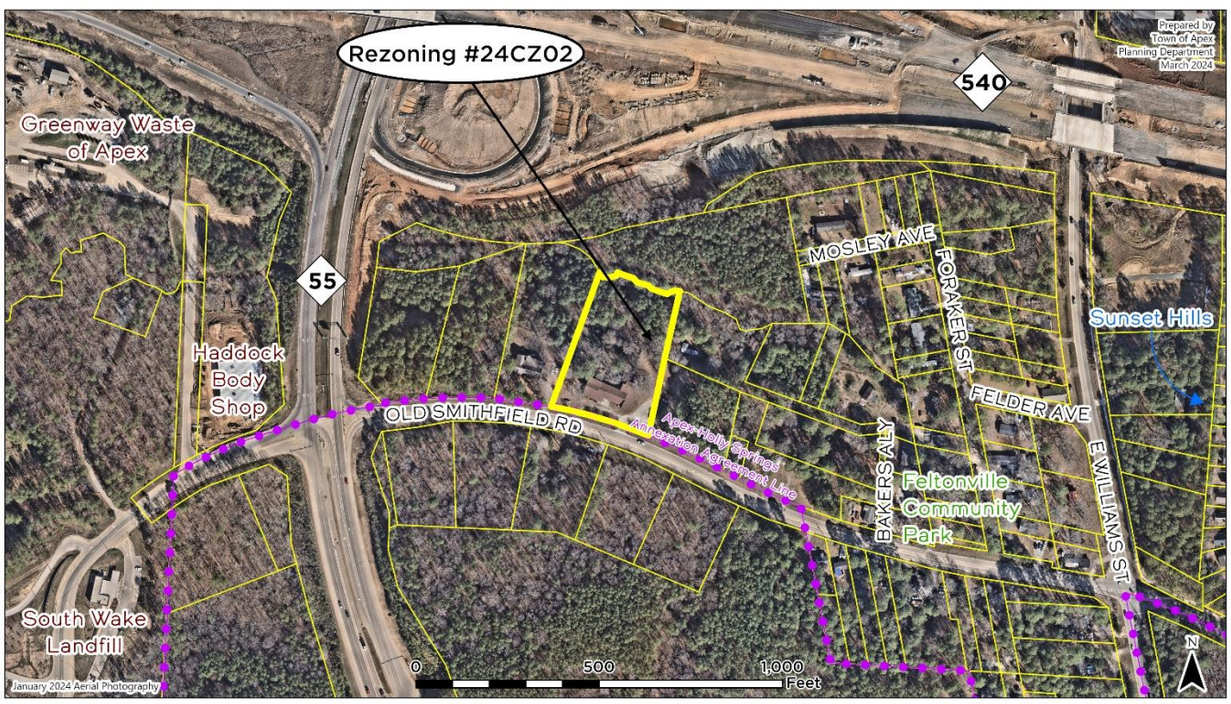
Fecha y hora de la audiencia pública de la Junta de Planificación: 8 de abril de 2024 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/45947.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 25 de marzo - 8 de abril de 2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #24CZ02 5836 Old Smithfield Rd
Project Location:	5836 Old Smithfield Rd
Applicant or Authorized Agent:	Natilee Hinton-Brooks and Inetta L. Hinton
Firm:	n/a
Planning Board Public Hearing Date:	April 8, 2024
Project Planner:	Shelly Mayo

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on March 25, 2024, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

3/25/2024
Date

Planning Director

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Jesus A. Ibanez-Ibarra, a Notary Public for the above State and County, this the 25th day of March, 2024.

Notary Public

My Commission Expires: 4/10/2028

JESUS A IBANEZ-IBARRA NOTARY PUBLIC WAKE COUNTY, NC My Commission Expires April 10, 2028 SEAL

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TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION
OF PUBLIC HEARINGS
CONDITIONAL ZONING #24CZ02
5836 Old Smithfield Rd

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Natilee Hinton-Brooks and Inetta L. Hinton
Authorized Agent: Natilee Hinton-Brooks and Inetta L. Hinton
Property Address: 5836 Old Smithfield Road
Acreage: ±2.22 acres
Property Identification Number (PIN): 0740850331
2045 Land Use Map Designation: Mixed Use: Medium Density Residential/Office Employment/Commercial Services
Existing Zoning of Property: Rural Residential (RR)
Proposed Zoning of Property: Planned Commercial-Conditional Zoning (PC-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: April 23, 2024 6:00 PM
You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/lmaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/Do 478. You may call 919-249-3426, Planning

9:09 AM
4/2/2024

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TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ02
5836 Old Smithfield Rd

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Natilee Hinton-Brooks and Inetta L. Hinton
Agente autorizado: Natilee Hinton-Brooks and Inetta L. Hinton
Dirección de la propiedad: 5836 Old Smithfield Road
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Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 23 de abril de 2024 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. [illegible] presadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. [illegible] la propiedad también puede verse aquí:

9:10 AM
4/2/2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #24CZ02
5836 Old Smithfield Rd

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

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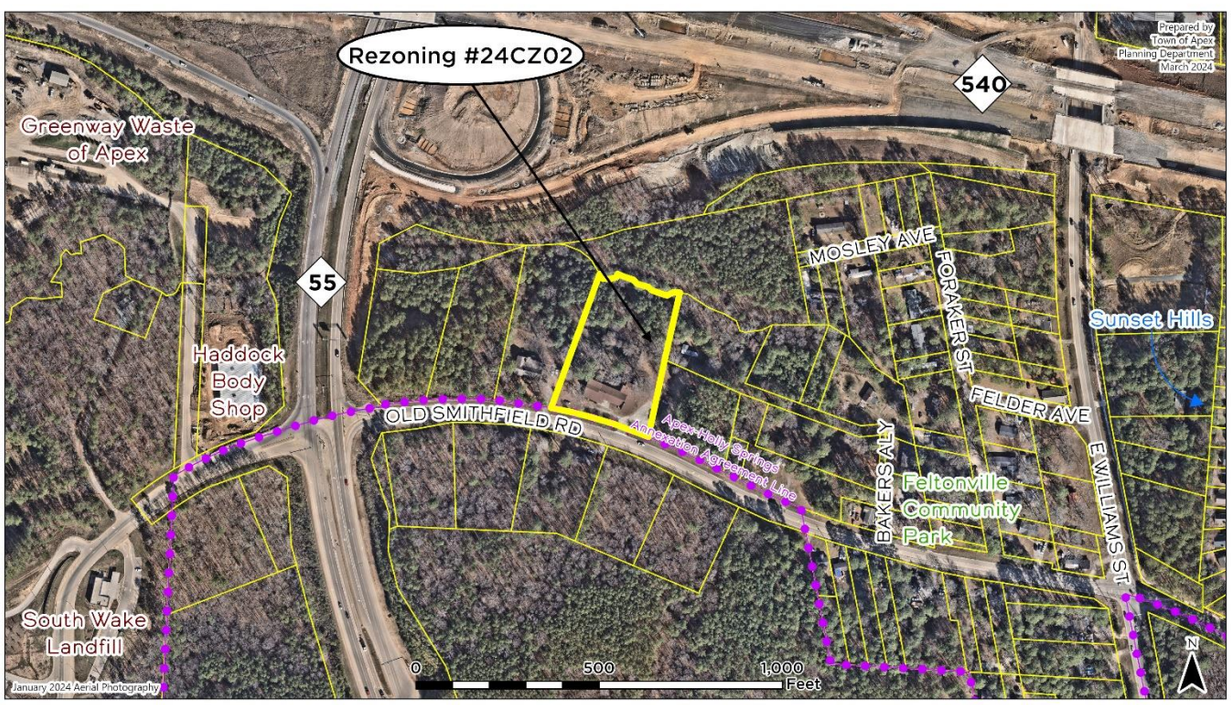

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Dianne F. Khin, AICP
Planning Director

Published Dates: April 01-April 23, 2024

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #24CZ02
5836 Old Smithfield Rd

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Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

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Fecha y hora de la audiencia pública del Consejo Municipal: 23 de abril de 2024 6:00 P.M.

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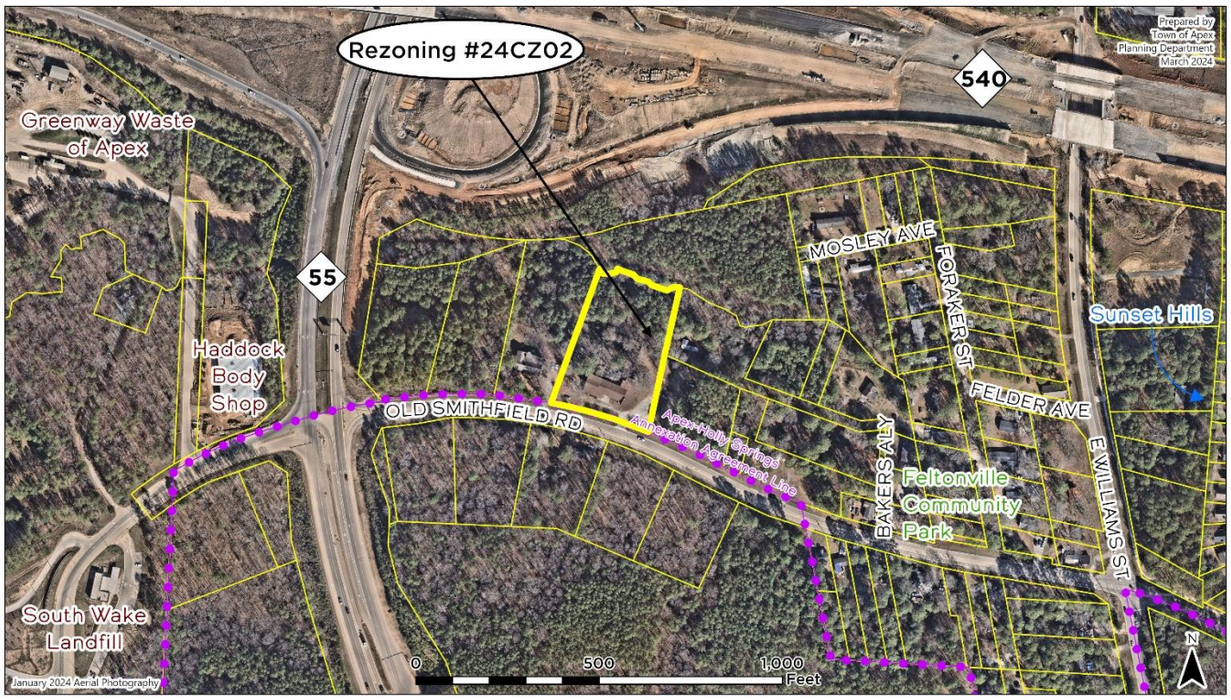

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Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 1 de abril - 23 de abril de 2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #24CZ02 5836 Old Smithfield Rd
Project Location:	5836 Old Smithfield Rd
Applicant or Authorized Agent:	Natilee Hinton-Brooks and Inetta L. Hinton
Firm:	n/a
Town Council Public Hearing Date:	April 23, 2024
Project Planner:	Shelly Mayo

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on April 1, 2024, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

4/1/2024
Date

Planning Director

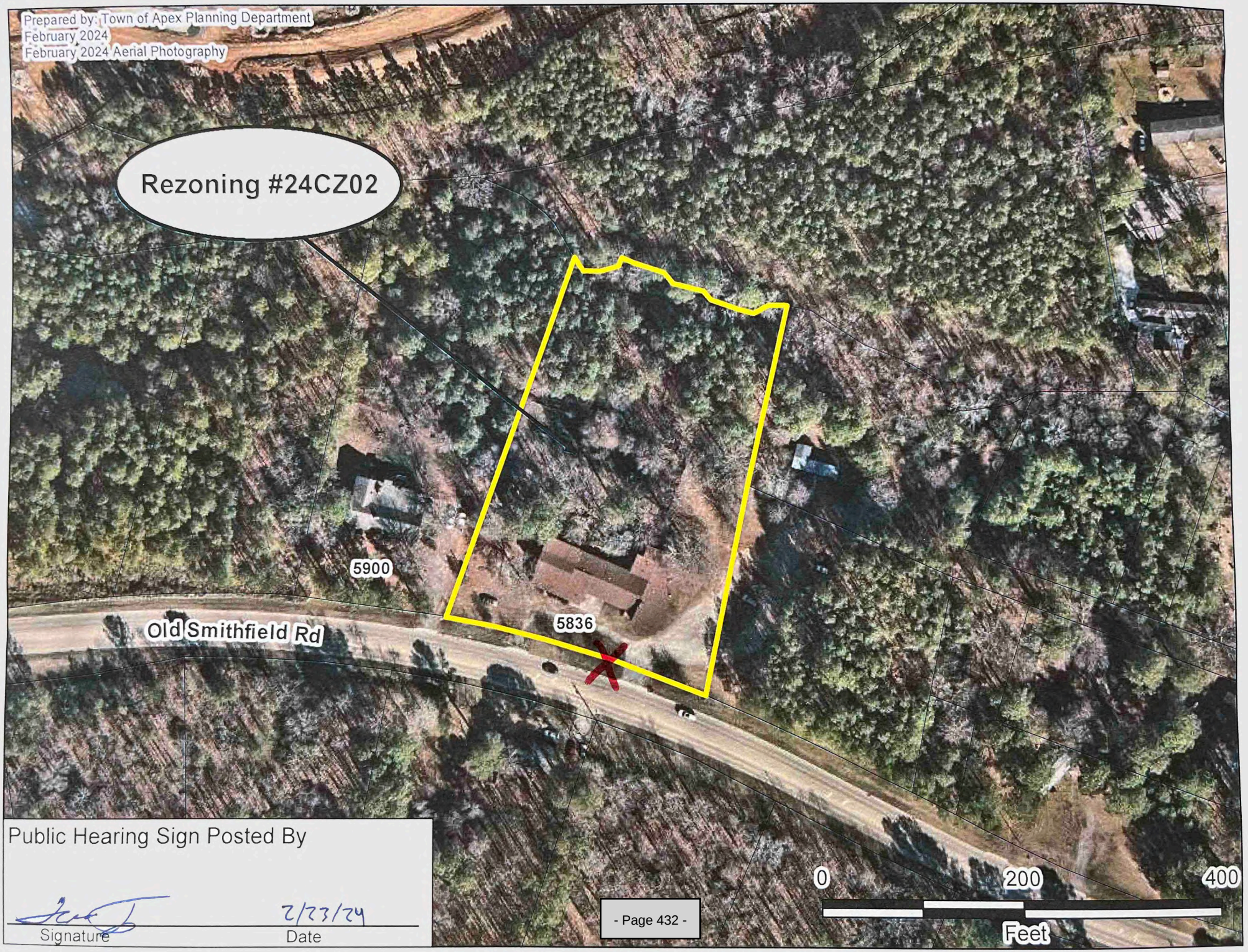
STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Jesus A. Ibanez-Ibarra, a Notary Public for the above State and County, this the 1st day of April, 2024.

JESUS A IBANEZ-IBARRA NOTARY PUBLIC SEAL My Commission Expires April 10, 2028 WAKE COUNTY, NC

Notary Public

My Commission Expires: 4/10/2028



Public Hearing Sign Posted By

Signature

2/23/24
Date

PLANNING BOARD REPORT TO TOWN COUNCIL

Rezoning Case: #24CZ02 5836 Old Smithfield Rd

Planning Board Meeting Date: April 8, 2024

Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

PROJECT DESCRIPTION:

Acreage: +/- 2.22 acres

PIN(s): 0740850331

Current Zoning: Rural Residential (RR)

Proposed Zoning: Planned Commercial-Conditional Zoning (PC-CZ)

2045 Land Use Map: Mixed Use: Medium Density Residential/Office Employment/Commercial Services

Town Limits: In ETJ

Applicable Officially Adopted Plans:

The Board must state whether the project is consistent or inconsistent with the following officially adopted plans, if applicable. Applicable plans have a check mark next to them.

☑ 2045 Land Use Map
☑ Consistent ☐ Inconsistent Reason: _____

☑ Apex Transportation Plan
☑ Consistent ☐ Inconsistent Reason: _____

☐ Parks, Recreation, Open Space, and Greenways Plan
☐ Consistent ☐ Inconsistent Reason: _____

Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1. *Consistency with 2045 Land Use Plan.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Plan.
   ☑ Consistent ☐ Inconsistent Reason: _____

2. *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.
   ☑ Consistent ☐ Inconsistent Reason: _____

3. *Zoning district supplemental standards.* The proposed Conditional Zoning (CZ) District use's compliance with Sec. 4.4 *Supplemental Standards*, if applicable.
   ☑ Consistent ☐ Inconsistent Reason: _____

4. *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
   ☑ Consistent ☐ Inconsistent Reason: _____

5. *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.
   ☑ Consistent ☐ Inconsistent Reason: _____

6. *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
   ☑ Consistent ☐ Inconsistent Reason: _____

7. *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
   ☑ Consistent ☐ Inconsistent Reason: _____

8. *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
   ☑ Consistent ☐ Inconsistent Reason: _____

9. *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
   ☑ Consistent ☐ Inconsistent Reason: _____

10. *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.
    ☑ Consistent ☐ Inconsistent Reason: _____

Planning Board Recommendation:

Motion: To recommend approval with conditions as presented.

Introduced by Planning Board member: Ryan Akers

Seconded by Planning Board member: Preston Mitchell

☐ *Approval*: the project is consistent with all applicable officially adopted plans and the applicable legislative considerations listed above.

☑ *Approval with conditions*: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above, so the following conditions are recommended to be included in the project in order to make it fully consistent:

Conditions as presented.

☐ *Denial*: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above.

With 8 Planning Board Member(s) voting "aye"

With 0 Planning Board Member(s) voting "no"

Reasons for dissenting votes:

This report reflects the recommendation of the Planning Board, this the 8th day of April 2024.

Attest:

Tina Sherman, Planning Board Chair

Dianne F. Khin Digitally signed by Dianne F. Khin Date: 2024.04.08 18:16:46 -04'00'

Dianne Khin, Planning Director

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: April 23, 2024

Item Details

Presenter(s): Joshua Killian, Planner I

Department(s): Planning

Requested Motion

Public hearing and possible motion to approve Rezoning Application No. 23CZ22 1013 Olive Chapel Rd. The applicants, Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa, and Gurudath Munimakula, seeks to rezone approximately 2.0 acres from Residential Agricultural (RA) to Medium Density Residential-Conditional Zoning (MD-CZ). The proposed rezoning is located at 1013 Olive Chapel Rd.

Approval Recommended?

The Planning Department recommends approval.

The Planning Board held a Public Hearing on April 8, 2024 and recommended approval by a vote of 8-0 with an amendment to Condition 12 to read "Access to Olive Chapel Road shall be provided by a single right-in/right-out intersection". The reason for the amendment is to limit the design constraints caused by the current wording of the condition that was recommended by Traffic Engineering staff.

Item Details

The property to be rezoned is identified as PIN 0732732042.

Attachments

- PH3-A1: Staff Report - Rezoning Case No. 23CZ22 1013 Olive Chapel Road
- PH3-A2: Planning Board Report to Town Council - Rezoning Case No. 23CZ22 1013 Olive Chapel Road

All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 1013 Olive Chapel Road
Applicant/Owner: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa, and Gurudath Munimakula

PROJECT DESCRIPTION:

Acreage: ±2.0
PIN: 0732732042
Current Zoning: Residential Agricultural (RA)
Proposed Zoning: Medium Density Residential-Conditional Zoning (MD-CZ)
2045 Land Use Map: Medium Density Residential
Town Limits: No (ETJ)

Adjacent Zoning & Land Uses:

	Zoning	Land Use
North:	Residential Agricultural (RA)	Olive Chapel Road; Single-family residence
South:	Medium Density Residential-Conditional Use (MD-CU #97CU14)	Single-family Residential (Dogwood Ridge Subdivision)
East:	Medium Density Residential-Conditional Use (MD-CU #97CU14); Office & Institutional-Conditional Use (O&I-CU #98CU01)	Single-family Residential (Dogwood Ridge Subdivision); Single-family Residential
West:	Medium Density Residential-Conditional Use (MD-CU #94CU25)	Dogwood Ridge Subdivision; Historic Maynard-Pearson House

Existing Conditions:

The property to be rezoned is a 2-acre parcel located south of Olive Chapel Road. The land is undeveloped, sloping to the south, with trees populating most of the property. The Historic Maynard-Pearson House is located on the parcel to the West.

Neighborhood Meetings:

The applicant conducted neighborhood meetings on October 4, 2023 and January 23, 2024. The neighborhood meeting reports are attached.

WCPSS Coordination:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included in the staff report packet.

WCPSS indicates that schools at the high school level within the current assignment area for the proposed rezoning are anticipated to have insufficient capacity for future students. Transportation to schools outside of the current assignment area should be anticipated. School expansion or construction within the next five years may address concerns at the high school level.

2045 Land Use Map:
The 2045 Land Use Map classifies the subject property as Medium Density Residential. The proposed rezoning to Medium Density Residential-Conditional Zoning (MD-CZ) is consistent with that land use classification.

PROPOSED ZONING CONDITIONS:

Limitation of Uses:
The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply

Permitted Uses and Limitations:

1. Single-family
2. Accessory apartment*
3. Utility, minor

**Homeowners Association covenants shall not restrict the construction of accessory dwelling units.*

Conditions:

1. A Solar PV system shall be installed on 100% of the homes within the development with a minimum of 6 kilowatts per system.
2. All homes shall be equipped with a 220V outlet for electric vehicle charging.
3. Development shall meet all stormwater requirements listed in UDO Section 6.1.12, including but not limited to limiting the post-development stormwater flows to not exceed pre-development rates. In addition, the post-development peak runoff rate shall be limited to the predevelopment peak runoff rate for the 2-year, 24-hour, the 10-year, 24-hour and the 25-year, 24- hour storm events.
4. Existing trees greater than 18” in a diameter that are removed by site development shall be replaced by planning a 1.5” caliper native tree from the Town of Apex Design and Development Manual either on-site or at an alternative location approved by Town of Planning Staff, above and beyond standard UDO requirements.
5. Development of the site shall include planting of warm season grasses.
6. Prior to the approval of the Master Subdivision Final Plat, a minimum 6’ tall fence consisting of wood or vinyl shall be installed and/or plant materials including evergreen species not less than 6’ in height shall be planted along the common property line of 1101 Olive Chapel Road (PIN 0732730167).
7. Homeowner Association covenants shall not restrict the construction of accessory dwelling units.
8. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
9. Garage doors shall have windows, decorative details or carriage-style adornments on them.
10. The visible side of a home on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
    - Windows
    - Bay window
    - Recessed window
    - Decorative window

- Trim around the windows
- Wrap around porch or side porch
- Two or more building materials
- Decorative brick/stone
- Decorative trim
- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer

11. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
12. Access to Olive Chapel Road shall be provided by a single right-in/right-out intersection on the west side of the parcel, located approximately 350-400 feet west of Caley Road.
13. Development of the site will include a single stub street to the property located to the east (PIN 0732733089).
14. Olive Chapel Road Frontage widening and right of way dedication shall be provided based on a 4-lane median divided section on 110-foot right of way as identified in the Transportation Plan.

PARKS, RECREATION, AND CULTRUAL RESOURCES ADVISORY COMMISSION:
This rezoning will provide less than 30 single family detached units. Therefore, the rezoning was not reviewed by the PRCR Advisory Commission per UDO Section 14.1.2 *Exceptions*.

ENVIRONMENTAL ADVISORY BOARD:
The Apex Environmental Advisory Board (EAB) held a pre-application meeting for this rezoning on January 18, 2024. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Condition	Applicant's Response
A minimum 6kW Solar PV system shall be installed on each home.	Added
A 220V outlet shall be installed in each garage	Added
Grasses that are planted shall be warm-season	Added
The builder shall use concrete permeable pavers or permeable grass pavers for the driveways, if feasible. The pavers shall not be installed within the ROW.	Not added

TRANSPORATION PLAN:
The Town of Apex Thoroughfare and Collector Street Plan designates the section of Olive Chapel Road frontage for the subject property as a 4-lane median divided thoroughfare, with proposed widening. This is consistent with zoning condition number 14 as offered by the applicant.

4-Lane Divided Thoroughfare (110')

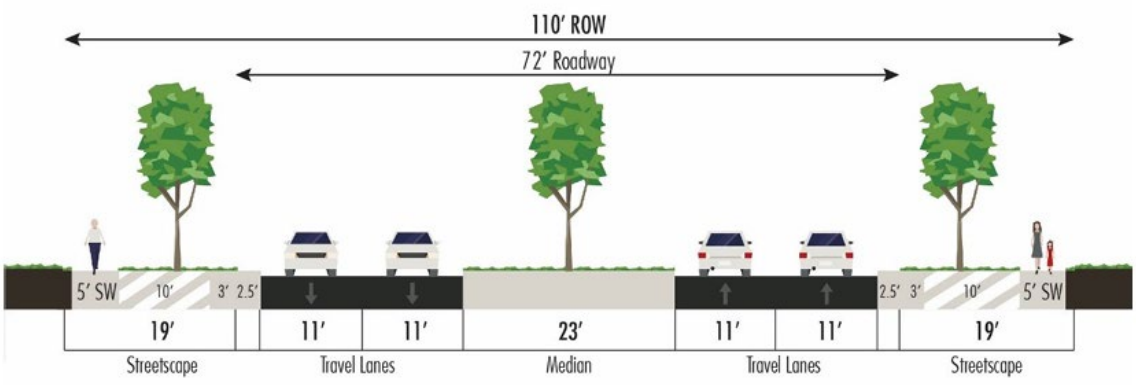


Figure 1: 4-Lane Median Divided Thoroughfare

The zoning condition providing a stub street for the property to the East may prevent future conflicts along Olive Chapel with the existing curb cut immediately to the East of the subject property along Olive Chapel Rd.

PLANNING STAFF RECOMMENDATION:
Planning staff recommends approval of Rezoning #23CZ22 with the conditions as offered by the applicant.

PLANNING BOARD RECOMMENDATION:
The Planning Board held a public hearing on April 8, 2024 and recommended approval by a vote of 8-0 with an amendment to Condition 12 to read "Access to Olive Chapel Road shall be provided by a single right-in/right-out intersection". The reason for the amendment is to limit the design constraints caused by the current wording of the condition that was recommended by Traffic Engineering staff.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:
This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

The 2045 Land Use Map classifies the subject properties as Medium Density Residential. The proposed rezoning to Medium Density Residential-Conditional Zoning (MD-CZ) is consistent with that land use classification.

The proposed rezoning will be reasonable and in the public interest because it will implement stricter environmental conditions than the UDO requires and provide additional single-family homes that are compatible with those in the general vicinity.

CONDITIONAL ZONING STANDARDS:
The Town Council shall find the MD-CZ designation demonstrates compliance with the following standards. 2.3.3.F:

Legislative Considerations
The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

2) *Compatibility.* The proposed Conditional Zoning District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

3) *Zoning district supplemental standards.* The proposed Conditional Zoning District use's compliance with Sec 4.4 *Supplemental Standards,* if applicable.

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

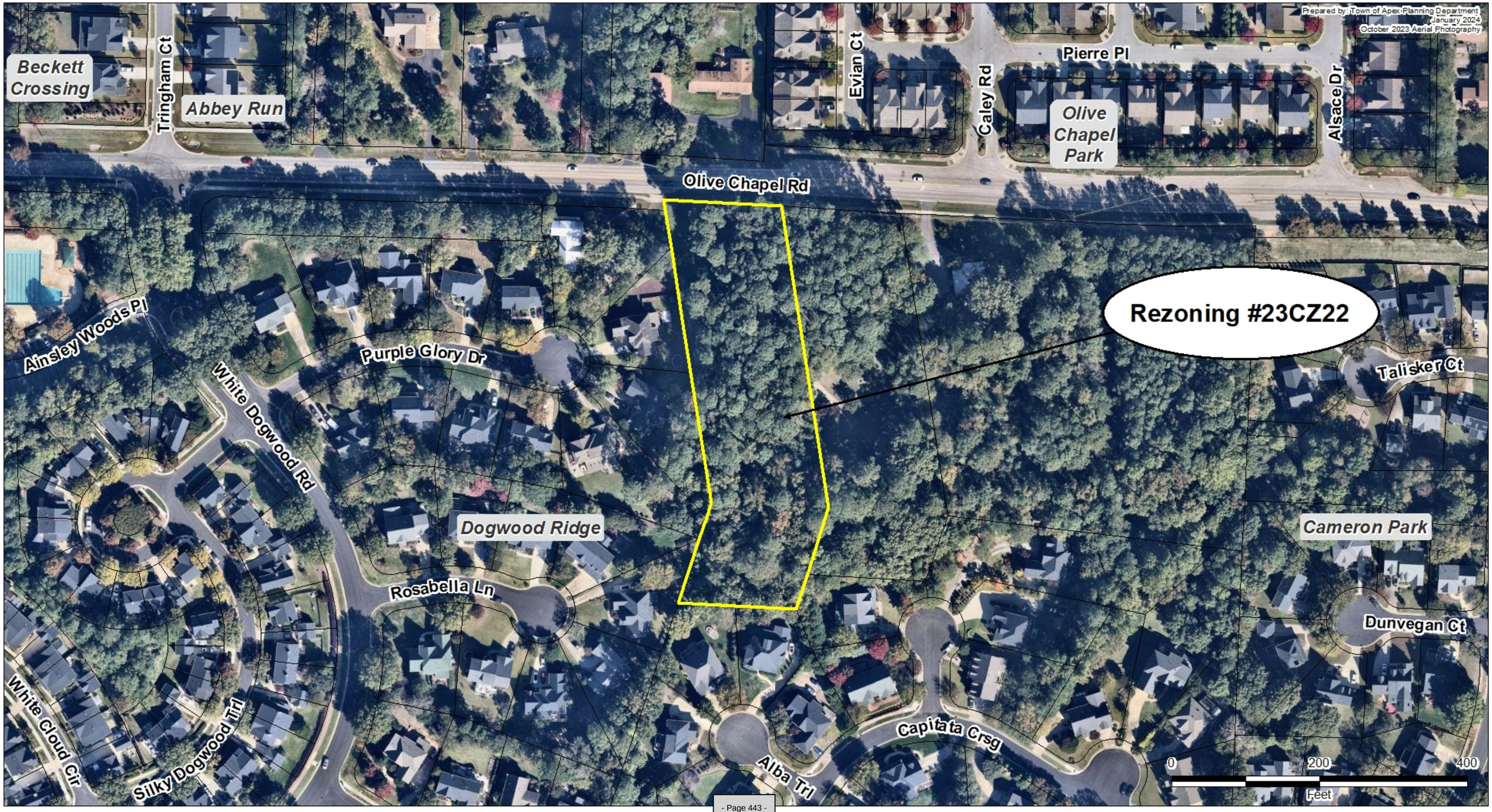
6) *Impact on public facilities.* The proposed Conditional Zoning District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

7) *Health, safety, and welfare.* The proposed Conditional Zoning District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning District use is substantially detrimental to adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.


Prepared by: Town of Apex Planning Department
January 2024
October 2023 Aerial Photography
Beckett Crossing
Tringham Ct
Abbey Run
Evian Ct
Caley Rd
Pierre Pl
Olive Chapel Park
Alsace Dr
Olive Chapel Rd
Rezoning #23CZ22
Ainsley Woods Pl
Purple Glory Dr
White Dogwood Rd
Talisker Ct
Dogwood Ridge
Cameron Park
Rosabella Ln
Dunvegan Ct
White Cloud Cir
Silky Dogwood Trl
Alba Trl
Capitata Crsg
0
200
400
Feet

(REZONING) PETITION TO AMEND THE OFFICIAL ZONING DISTRICT MAP

REZONING PETITION SUBMISSION:	REZONING PETITION FEES:
Applications and fees are due by 12:00 pm on the first business day of each month. See the Rezoning Schedule on the website for details. **LATE FEE:** $300	Conditional Zoning: $1,000.00 Rezoning: $700.00* *No zoning conditions may be added to address concerns of staff, adjacent property owners, Planning Board, or Town Council

PRE-APPLICATION MEETING: A pre-application meeting with the Technical Review Committee (TRC) is required to be scheduled prior to sending notices for the required pre-application Neighborhood Meeting and prior to submittal of a Rezoning Petition. Pre-application meetings with the TRC are typically scheduled during regular business hours on the 1st, 2nd, and 5th Thursdays of the month. To schedule an appointment for a meeting, the applicant must contact Planner II Lauren Staudenmaier (lauren.staudenmaier@apexnc.org). To finalize the appointment time, the applicant must complete and upload the Rezoning Pre-Application Meeting Request form and required documents at least five (5) working days prior to the scheduled meeting. The invitation to the meeting will be sent to the applicant and staff once the required information is uploaded.

PURPOSE OF A CONDITIONAL ZONING: Conditional Zoning (CZ) Districts are zoning districts in which the development and use of property is subject to the ordinance standards applicable to the corresponding general use district as well as additional rules, regulations, and conditions that are imposed as part of the legislative decision creating the district. A Conditional Zoning (CZ) District allows particular uses to be established only in accordance with site specific standards and conditions pertaining to each individual development project. All site-specific standards and conditions must be consistent with the objectives of these regulations, the adopted 2045 Land Use Map, and adopted area plans. The review process established in this part provides for the accommodation of such uses by a reclassification of property into a CZ District, subject to site-specific standards and conditions.

NEIGHBORHOOD MEETING: One (1) neighborhood meeting prior to application submittal and another meeting in the month prior to the anticipated public hearing date are required per UDO Sec. 2.2.7. The applicant is required to notify property owners, tenants, and any neighborhood association that represents citizens that are abutting or within 300 feet of the subject property via first class mail a minimum of 14 days in advance of the neighborhood meeting. The notification list must be obtained by emailing addressing.team@apexnc.org and will be provided within 5-10 business days of the initial request. The applicant shall use their own return address on the envelopes as the meeting is a private meeting between the developer and the neighbors. In their initial submittal, the applicant shall submit the "Neighborhood Meeting Packet" forms included in this application packet. The Neighborhood Meeting Packet is located at the very end of this document.

ANNEXATION REQUIREMENTS: If a property or portion thereof subject to this rezoning is outside the corporate limits and ETJ, an annexation petition is **required** to be submitted on the same day as this application.

Electronic Submittal Requirements: Click here to access the GeoCivix (IDT Plans) Website

- One (1) original Rezoning Petition Application
- Written Metes and Bounds Legal Description
- Agent Authorization Form & Affidavit of Ownership
- Neighborhood Meeting Packet
- WCPSS Residential Development Notice Form
- If applicable: Annexation Petition, map, legal description, and $200.00 fee
- Notification list including property owners of the land subject to the application, all property owners and tenants abutting and located within 300 feet of the land subject to the application, and any neighborhood association that represents citizens within the notification area. This list must be obtained by emailing addressing.team@apexnc.org and will be provided within 5-10 business days of the initial request.

Hard Copy Submittal Requirements: Submit to Planning Department

- Two (2) sets of envelopes addressed to property owners subject to the application and to those on the notification list.
  - Addresses must be from the notification list obtained by emailing addressing.team@apexnc.org
  - Affixed with first class stamps and the following return address: Town of Apex Planning Department
P.O. Box 250
Apex, NC 27502
- Petition Fee by one of the following forms of payment:
  - Visa or Master Card (online only);
  - Cash (exact amount only); or
  - Check payable to 'Town of Apex'

NEIGHBORHOOD MEETING: One (1) neighborhood meeting prior to application submittal and another meeting in the month prior to the anticipated public hearing date are required per UDO Sec. 2.2.7. The applicant is required to notify property owners, tenants, and any neighborhood association that represents citizens that are abutting or within 300 feet of the subject property via first class mail a minimum of 14 days in advance of the neighborhood meeting. The notification list must be obtained by emailing addressing.team@apexnc.org and will be provided within 5-10 business days of the initial request. The applicant shall use their own return address on the envelopes as the meeting is a private meeting between the developer and the neighbors. In their initial submittal, the applicant shall submit the "Neighborhood Meeting Packet" forms included in this application packet. The Neighborhood Meeting Packet is located at the very end of this document.

REVIEW FOR SUFFICIENCY: Incomplete plans will be returned to the applicant and sufficiently complete applications are forwarded to TRC staff for review.

REVIEW BY STAFF: TRC staff reviews the application to determine compliance with the Unified Development Ordinance (UDO). If the application is determined not to be compliant with the UDO, comments will be sent to the applicant. The applicant must address all staff comments before any public hearings are scheduled.

REVIEW BY THE ENVIRONMENTAL ADVISORY BOARD (EAB): All applications for Rezoning must be reviewed by the EAB during the staff review portion of the process. The EAB will offer suggested zoning conditions to the applicant. To request to be on the EAB agenda, applicants must contact Senior Program Support Specialist Lindley Paynter (lindley.paynter@apexnc.org) at least five (5) working days prior to the desired EAB meeting. The EAB meets at 6:00 p.m. on the 3rd Thursday of the month. Review by the EAB must occur at least one (1) month prior to the first public hearing notification date in order to maintain the published schedule. This allows time for staff to review any additional zoning conditions proposed based on the EAB's recommendations.

PUBLIC HEARING NOTIFICATION: Notification of the public hearing will take place by three different methods.

1. A written notice will be prepared by Planning staff and sent to property owners, tenants, and neighborhood associations abutting and within 300 feet of the land subject to the application not more than 25 days nor less than 10 days prior to the public hearings, as required by the UDO.
2. A notice will be published on the Town of Apex website (www.apexnc.org) no less than 10 days, but not more than 25 days, prior to the public hearings.
3. A public hearing sign will be posted at the land subject to the application at least 10 days prior to the public hearings.

1ST PUBLIC HEARING/PLANNING BOARD MEETING: The Planning Board will consider the application, relevant support materials, the Staff Report, and public testimony given at the public hearing. After the public hearing the Planning Board will make a recommendation to the Town Council. The Planning Board may recommend approval, approval with conditions, or disapproval. The application is then forwarded to the Town Council. The Planning Board meets at 4:30 p.m. in the Town Hall Council Chambers on the date indicated on the Rezoning Schedule.

2ND PUBLIC HEARING/TOWN COUNCIL MEETING: The Town Council will consider the application, relevant support materials, the Staff Report, the Planning Board recommendation, and public testimony given at the public hearing. After the public hearing the Town Council will either vote to continue action on the application to a subsequent meeting or vote to approve, approve with conditions, or disapprove the rezoning. The Town Council meets at 6:00 p.m. in the Town Council Chamber on the date indicated on the Rezoning Schedule.

PETITION TO AMEND THE OFFICIAL ZONING MAP

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Application #: #23CZ22 Submittal Date:

Fee Paid:

Project Information

Project Name: 1013 Olive Chapel Road Rezoning

Address(es): 1013 Olive Chapel Road

PIN(s): 0732732042

Acreage: 2.0

Current Zoning: Residential Agricultural District -RA Proposed Zoning: Medium Density Residential District Conditional Zoning- MD-CZ

Current 2045 LUM Classification(s): Medium Density Residential

Is the proposed rezoning consistent with the 2045 LUM Classification(s)? Yes ☑ No ☐

If any portion of the project is shown as mixed use (3 or more stripes on the 2045 Land Use Map) provide the following:

Area classified as mixed use: Acreage: N/A

Area proposed as non-residential development: Acreage: N/A

Percent of mixed use area proposed as non-residential: Percent: N/A

Applicant Information

Name: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Address: 1103 Myers Point Dr.

City: Morrisville State: NC Zip: 27560-5855

Phone: 919-590-0366 E-mail:

Owner Information

Name: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Address: 1103 Myers Point Dr.

City: Morrisville State: NC Zip: 27560-5855

Phone: E-mail:

Agent Information

Name: Leticia Shapiro, Morningstar Law Group

Address: 421 Fayetteville Street, Suite 530

City: Raleigh State: NC Zip: 27601

Phone: (919) 590-0366 E-mail: tshapiro@morningstarlawgroup.com

Other contacts: Jason Barron, Morningstar Law Grooup

421 Fayetteville Street, Suite 530

Raleigh NC 27601

jbarron@morningstarlawgroup.com

PETITION INFORMATION

Application #: #23CZ22 Submittal Date:

An application has been duly filed requesting that the property described in this application be rezoned from RA to MD-CZ. It is understood and acknowledged that if the property is rezoned as requested, the property described in this request will be perpetually bound to the use(s) authorized and subject to such conditions as imposed, unless subsequently changed or amended as provided for in the Unified Development Ordinance (UDO). It is further understood and acknowledged that final plans for any specific development to be made pursuant to any such Conditional Zoning shall be submitted for site or subdivision plan approval, as required by the UDO. Use additional pages as needed.

PROPOSED USES:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

1	Single Family Residential	21	
2	Accessory Apartment	22	
3	Utility, minor	23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

PETITION INFORMATION

Application #: #23CZ22 Submittal Date:

PROPOSED CONDITIONS:

The applicant hereby requests that the Town Council of the Town of Apex, pursuant to the Unified Development Ordinance, approve the Conditional Zoning for the above listed use(s) subject to the following condition(s). Use additional pages as needed.

See attached revised conditions.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) *Consistency with 2045 Land Use Map.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

The subject rezoning seeks to develop four single family residential lots which is consistent with the Medium Density Residential land use designation on the 2045 Land Use Map. Thus, the use proposed is appropriate for this location.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

This site fronts Olive Chapel Road and is surrounded by Medium Density Residential to the west, south, and east; and mixed use to the north. The development is ideal for residential use south and is consistent with the character of its surrounding land uses.

3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards*, if applicable.

N/A

4) *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

Development of the property consistent with the proposed rezoning will comply with the Town UDO requirements while facilitating the development of four single family residential lots on the subject property.

5) *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The development of the property will include UDO required RCA for this area.

6) *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

To the applicant's knowledge there are sufficient public facilities and services to serve the development of the property consistent with the proposed rezoning.

7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

There will be no adverse impact to health, safety and welfare as a result of the proposed rezoning.

8) *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The proposed zoning district is consistent with the land use plan contemplated for the subject property along with others in close proximity. The development will be consistent with Apex UDO standards for buffers, access, stormwater, RCA, and others, such that there will be no detriment to adjacent properties.

9) *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

Nothing about the proposed use would constitute a nuisance or hazard due to traffic or noise. Development of the property proposed four single family lots and will be consistent with the traffic recommendations.

10) *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

No deviations are requested from the UDO.

AFFIDAVIT OF OWNERSHIP

Application #: #23CZ22 Submittal Date: _____

The undersigned, Ashwini Kumar Reddy Yalala (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1013 Olive Chapel Road, Apex, NC 27502 and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated June 30, 2021, and recorded in the Wake County Register of Deeds Office on July 8, 2021, in Book 018590 Page 01400-01401.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on June 30, 2021, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on June 30, 2021, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 31 day of Oct, 2023.

Y. Ashwini (seal)

Ashwini Kumar Reddy Yalala
Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Ashwini Kumar Reddy Yalala, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC DL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.
[NOTARY SEAL]

Julia Ogden
Notary Public
State of North Carolina
My Commission Expires: April 21, 2024

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: #23CZ22 Submittal Date: _____

Insert legal description below.

Being all of Lot 1, Property of William E. Gerringer and Stephen V. Mills as shown on map recorded in Book of Maps 1979, Page 154, Wake County Registry.

PROPERTY ADDRESS: 1013 Olive Chapel Road, Apex, NC 27502

The property hereinabove described was acquired by Gran tor by instrument recorded in Book 7047, Page 073 7.
All or a portion of the property herein conveyed_ includes or_ x _ does not include the primary residence of a Grantor.

A map showing the above described property is recorded in Book of Maps 1979 _, Pages 154_.

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

Lot 1 Legal Description

Beginning at an existing iron pipe corner in the southern right of way of Olive Chapel Road; said corner having NC Grid coordinates of N 723,244.51', E 2,037, 139.73'; Thence with the southern right of way of Olive Chapel Road S 86° 48' 40" E, 160.01' to an existing iron pipe; Thence leaving Olive Chapel Road right of way with the line of Lot 2 of the Gerringer & Mills Subdivision S 08° 57' 46" E, 415.98' to an iron pipe corner; Thence with the line of Lot 2, S 18° 31' 19" W, 142.87' to a corner with Dogwood Ridge Subdivision; Thence with the line of Dogwood Ridge Subdivision N 86° 48' 40" W, 160.01' to an iron pipe corner; Thence N 18°31'19" E, 142.87' to an iron pipe corner; Thence continuing with the line of Dogwood Ridge Subdivision N 08° 57' 46" W, 415.98' to the point and place of beginning. Being all of Lot 1 as recorded in Book of Maps 1979, Page 154 recorded in the Wake County Register of Deeds; said tract having an area of 2.00 acres more or less.

AGENT AUTHORIZATION FORM

Application #: #23CZ22 Submittal Date:

Ashwini Kumar Reddy Yalala is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other:

The property address is: 1013 Olive Chapel Road, Apex, NC 27502

The agent for this project is: Morningstar Law Group

☐ I am the owner of the property and will be acting as my own agent

Agent Name: Leticia Shapiro and Jason Barron

Address: 421 Fayetteville Street

Telephone Number: (919) 590-0366

E-Mail Address: tshapiro@morningstarlawgroup.com; jbarron@morningstarlawgroup.com

Signature(s) of Owner(s)*

DocuSigned by:
Ashwini Yalala
96BAF71C880F4EA...

Ashwini Kumar Reddy Yalala — 3/18/2024

Type or print name — Date

Type or print name — Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP

Application #: #23CZ22 Submittal Date: _____

The undersigned, Srikanth Nalla (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1013 Olive Chapel Road, Apex, NC 27502 and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated June 30, 2021, and recorded in the Wake County Register of Deeds Office on July 8, 2021, in Book 018590 Page 01400-01401.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on June 30, 2021, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on June 30, 2021, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 31 day of OCTOBER, 2023.

N - Srikanth (seal)

SRIKANTH NALLA

Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Srikanth Nalla, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC DL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.

[NOTARY SEAL]

Notary Public
State of North Carolina
My Commission Expires: April 21, 2024

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: #23CZ22 Submittal Date: _____

Insert legal description below.

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All or a portion of the property herein conveyed_ includes or_ x _ does not include the primary residence of a Grantor.

A map showing the above described property is recorded in Book of Maps 1979 _, Pages 154_.

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

Lot 1 Legal Description

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DocuSign Envelope ID: C5EAA45F-E774-4AE3-926A-272420CD5FD5

AGENT AUTHORIZATION FORM

Application #: #23CZ22 Submittal Date: _____

Srikanth Nalla is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other: _____

The property address is: 1013 Olive Chapel Road, Apex, NC 27502

The agent for this project is: Morningstar Law Group

☐ I am the owner of the property and will be acting as my own agent

Agent Name: Leticia Shapiro and Jason Barron

Address: 421 Fayetteville Street

Telephone Number: (919) 590-0366

E-Mail Address: tshapiro@morningstarlawgroup.com; jbarron@morningstarlawgroup.com

Signature(s) of Owner(s)*

Signed by:
SRIKANTH NALLA
9E037DA47A5741D...

Srikanth Nalla — Type or print name

3/18/2024 — Date

_____ — Type or print name

_____ — Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP

Application #: #23CZ22 Submittal Date: _____

The undersigned, Rajanikanth Chippa (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1013 Olive Chapel Road, Apex, NC 27502 and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

3. If Affiant is the owner of the Property, Affiant acquired ownership by deed, dated June 30, 2021, and recorded in the Wake County Register of Deeds Office on July 8, 2021, in Book 018590 Page 01400-01401.

4. If Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s).

5. If Affiant is the owner of the Property, from the time Affiant was deeded the Property on June 30, 2021, Affiant has claimed sole ownership of the Property. Affiant or Affiant's predecessors in interest have been in sole and undisturbed possession and use of the property during the period of ownership. Since taking possession of the Property on June 30, 2021, no one has questioned Affiant's ownership or right to possession nor demanded any rents or profits. To Affiant's knowledge, no claim or action has been brought against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is acting as an authorized agent for owner(s)), which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property.

This the 31 day of Oct, 2023.

Rajanikanth (seal)

RAJANIKANTH CHIPPA

Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Rajanikanth Chippa, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC DL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.

[NOTARY SEAL]

Julia Ogden
Notary Public
State of North Carolina
My Commission Expires: April 21, 2024

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: #23CZ22 Submittal Date: _____

Insert legal description below.

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All or a portion of the property herein conveyed_ includes or_ x _ does not include the primary residence of a Grantor.

A map showing the above described property is recorded in Book of Maps 1979 _, Pages 154_.

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DocuSign Envelope ID: FAD1A547-8668-4ED2-B42E-9F5603E26681

AGENT AUTHORIZATION FORM

Application #: #23CZ22 Submittal Date: _____

Rajanikanth Chippa is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other: _____

The property address is: 1013 Olive Chapel Road, Apex, NC 27502

The agent for this project is: Morningstar Law Group

☐ I am the owner of the property and will be acting as my own agent

Agent Name: Leticia Shapiro and Jason Barron

Address: 421 Fayetteville Street

Telephone Number: (919) 590-0366

E-Mail Address: tshapiro@morningstarlawgroup.com; jbarron@morningstarlawgroup.com

Signature(s) of Owner(s)*

DocuSigned by:
Rajanikanth Chippa
5296E86C8A1A426...

Rajanikanth Chippa — 3/18/2024

Type or print name — Date

_____

_____ _____

Type or print name — Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

AFFIDAVIT OF OWNERSHIP

Application #: #23CZ22 Submittal Date: _____

The undersigned, Gurudath Munimakula (the "Affiant") first being duly sworn, hereby swears or affirms as follows:

1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 1013 Olive Chapel Road, Apex, NC 27502 and legally described in **Exhibit "A"** attached hereto and incorporated herein (the "Property").

2. This Affidavit of Ownership is made for the purpose of filing an application for development approval with the Town of Apex.

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This the 31st day of Oct, 2023.

_____ (seal)

GURUDATH MUNIMAKULA

Type or print name

STATE OF NORTH CAROLINA
COUNTY OF Wake

I, the undersigned, a Notary Public in and for the County of Wake, hereby certify that Gurudath Munimakula, Affiant, personally known to me or known to me by said Affiant's presentation of said Affiant's NC DL, personally appeared before me this day and acknowledged the due and voluntary execution of the foregoing Affidavit.

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.

[NOTARY SEAL]

_____
Notary Public
State of North Carolina
My Commission Expires: April 21, 2024

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #: #23CZ22 Submittal Date: _____

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DocuSign Envelope ID: 7121C820-E543-470F-A918-C609616B0928

AGENT AUTHORIZATION FORM

Application #: #23CZ22 Submittal Date:

Gurudath Munimakula is the owner* of the property for which the attached application is being submitted:

- ☑ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved.
- ☐ Site Plan
- ☐ Subdivision
- ☐ Variance
- ☐ Other:

The property address is: 1013 Olive Chapel Road, Apex, NC 27502

The agent for this project is: Morningstar Law Group

☐ I am the owner of the property and will be acting as my own agent

Agent Name: Leticia Shapiro and Jason Barron

Address: 421 Fayetteville Street

Telephone Number: (919) 590-0366

E-Mail Address: tshapiro@morningstarlawgroup.com; jbarron@morningstarlawgroup.com

Signature(s) of Owner(s)*

Docusigned by:
Gurudath Munimakula
0462062896 7C427...

Gurudath Munimakula — Type or print name — 3/18/2024 — Date

Type or print name — Date

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

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AYES

Aiken & Yelle Associates, PA
Professional Engineers and Land Surveyors
7700 Serenity Lake Dr, Wake Forest, North Carolina 27587

Lot 1 Legal Description

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REZONING CASE #23CZ22 – 1013 OLIVE CHAPEL ROAD

REZONING CONDITIONS

1. A Solar PV system shall be installed on 100% of the homes within the development with a minimum of 6 kilowatts per system.
2. All homes shall be equipped with a 220 outlet for electric vehicle charging.
3. Development shall meet all stormwater requirements listed in UDO Section 6.1.12, including but not limited to limiting the post-development stormwater flows to not exceed pre-development rates. In addition, the post-development peak runoff rate shall be limited to the pre-development peak runoff rate for the 2-year, 24-hour, the 10-year, 24-hour and the 25-year, 24-hour storm events.
4. Existing trees greater than 18" in a diameter that are removed by site development shall be replaced by planting a 1.5" caliper native tree from the Town of Apex Design and Development Manual either on-site or at an alternative location approved by Town of Planning Staff, above and beyond standard UDO requirements.
5. Development of the site shall include planting of warm season grasses.
6. Prior to the issuance of a certificate of occupancy in conjunction with new development on the subject property, a minimum 6' tall fence consisting of wood or vinyl shall be installed and/or plant materials including evergreen species not less than 6' in height shall be planted along the common property line of 1101 Olive Chapel Road (PIN 0732730167).
7. Homeowner Association covenants shall not restrict the construction of accessory dwelling units.
8. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
9. Garage doors shall have windows, decorative details or carriage-style adornments on them.
10. The visible side of a home on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
    - Windows
    - Bay window
    - Recessed window
    - Decorative window
    - Trim around the windows
    - Wrap around porch or side porch
    - Two or more building materials
    - Decorative brick/stone
    - Decorative trim
    - Decorative shake
    - Decorative air vents on gable
    - Decorative gable
    - Decorative cornice
    - Column
    - Portico

- Balcony
- Dormer

11. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
12. Subject to approval by the Town and NCDOT at the time of development plan review, access to Olive Chapel Road shall be provided by a single right-in/right-out intersection.
13. Olive Chapel Road Frontage widening and right of way dedication shall be provided based on a 4-lane median divided section on 110-foot right of way as identified in the Transportation Plan.

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Wake County Residential Development Notification

Please complete each section of this form and submit with your application.

Town of Apex staff will enter this information into the online WCPSS form.

Please send any questions about this form to:

studentassignment-gis-group@wcpss.net

Developer Company *Information*	
Company *Name*	
Company Phone *Number*	
Developer Representative *Name*	
Developer Representative *Phone Number*	
Developer Representative *Email*	

New Residential Subdivision *Information*	
Date of Application for Subdivision	
City, Town or Wake County Jurisdiction	Apex
Name of Subdivision	
Address of Subdivision (if unknown enter nearest cross streets)	1013 Olive Chapel Road
REID(s) 0107654	
PIN(s) 07372732042	

Projected Dates *Information*	
Subdivision *Completion Date*	
Subdivision *Projected First Occupancy Date*	

Lot by Lot Development *Information*

Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Square Foot Range		Price Range		Anticipated Completion Units & Dates					
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family	4						4+										
Townhomes	N/A																
Condos	N/A																
Apartments	N/A																
Other	N/A																

Revised 08/10/2018

Instruction Packet and Affidavit for
Neighborhood Meetings

Town of Apex
Planning Dept
PO Box 250
Apex, NC 27502

T: 919-249-3426
F: 919-249-3338

This packet consists of instructions and templates for conducting a required Neighborhood Meeting. Planning staff are available to advise you in the preparation of these materials. Call the Planning Department at (919) 249-3426 for more information.

WHAT IS THE PURPOSE OF A NEIGHBORHOOD MEETING?

A neighborhood meeting is a required form of community outreach to receive initial feedback regarding certain project types and any long range plan amendments directly associated with such projects prior to submittal to the Planning Department per the standards found in UDO Sec. 2.2.7.B. The intent of the meeting is to initiate neighbor communication and identify issues and concerns early on and provide the applicant an opportunity to address neighbor concerns about the potential impacts of the project prior to submitting an application. A pre-application neighborhood meeting is valid for six (6) months prior to the submission of an application; a delay in submission requires a new neighborhood meeting.

WHEN IS A NEIGHBORHOOD MEETING REQUIRED?

- Rezonings (including Planned Unit Developments);
- Major Site Plans;
- Minor Site Plans for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", and "Convenience store with gas sales";
- Residential Master Subdivision Plans (excluding exempt subdivisions); or
- Special Use Permits

INSTRUCTIONS

Prior to submitting an application for a Rezoning; Major Site Plan; Minor Site Plans for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"; residential Master Subdivision Plan (excluding exempt subdivisions); or Special Use Permit, the applicant must conduct at least one (1) Neighborhood Meeting. **The notices for this Neighborhood Meeting shall not be mailed until after the pre-application meeting with the Technical Review Committee has been held.** This meeting may be held in-person or virtually. Virtual meetings shall provide a dial-in option in addition to a link to participate by internet. The applicant shall submit all forms included in this packet with the initial application submittal.

A second Neighborhood Meeting is required for all Rezonings (including Planned Unit Developments). This meeting shall be held in the month preceding the anticipated public hearing date.

The Neighborhood Meeting must be held in accordance with the following rules:

These groups and individuals must be invited to the meeting:

- The applicant is required to notify the Planning Department, all property owners and tenants abutting and within 300 feet of the subject property, and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance

of the neighborhood meeting, not including the day of mailing. The applicant shall send an email to addressing.team@apexnc.org to request the notification list as early as possible in order to receive the list in time for the mailing. The list will be provided within 5-10 business days of the initial request. The applicant shall use their own return address on the envelopes as the meeting is a private meeting between the applicant and the neighbors. An updated list shall be provided by Planning staff prior to the required 2nd meeting for Rezoning applications.

- The applicant shall include with the meeting notice a vicinity map in addition to the materials listed under "Mailing and handout requirements" below.

The meeting must be held within specific timeframes and meet certain requirements:

- For all applications except Rezonings, the meeting must be held for a minimum of two (2) hours, Monday through Thursday, during the 5:00 p.m. - 9:00 p.m. time period.
- For Rezonings, two (2) meetings are required. The first meeting must be held prior to submittal of the application and the second meeting must be held in the month preceding the anticipated public hearing date. The meetings must be held for a minimum of one (1) hour each, Monday through Thursday, during the 5:00 p.m. - 9:00 p.m. time period.
- Meetings cannot be held on Town recognized holidays (http://www.apexnc.org/calendar.aspx).
- In-person meetings:
    - Meeting shall be held at a place that is generally accessible to neighbors that reside in close proximity to the land subject to the application.
    - A sign-in sheet must be used in order to verify attendance. Ensure each attendee signs in. Please note if any person(s) refuses to sign in. Note if no one attended.
- Virtual meetings:
    - Meeting shall be held via an interactive online video conferencing software such as Microsoft Teams, Zoom, WebEx, or any similar platform of the applicant's choice. A dial-in option shall be provided.
    - An attendance sheet must be used to log known attendees at the virtual meeting. Note if no one attended.
- Mailing and handout requirements to help facilitate discussion:
    - For rezonings (excluding rezonings to PUD-CZ, TND-CZ and MEC-CZ):
        - A vicinity map and existing zoning map of the area; and
        - An exhibit(s) showing any proposed long range plan amendment(s), if applicable.
    - For rezonings to PUD-CZ, TND-CZ and MEC-CZ; Major Site Plans; Minor Site Plans for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", and "Convenience store with gas sales"; residential Master Subdivision Plans; and Special Use Permits:
        - A vicinity map and preliminary plans of the proposed development. Neighbors may request emailed/mailed copies of the maps or plans from the applicant by checking the "send plans" box on the sign-in sheet; applicant shall provide reduced copies upon request. For virtual meetings, the applicant must ask meeting participants if they would like any materials emailed/mailed to them; and
        - An exhibit showing any proposed long range plan amendment(s), if applicable.
    - Printed copies (handouts) must equal the number of notices required to be sent.
    - Contact information for the applicant's representative and Town Staff must be provided on the attached "Project Contact Information" form.
    - "Common Construction Issues & Who to Call" sheet (attached) must be included as part of the mailing/handout.
    - A copy of the handout must be included as part of the Neighborhood Meeting report.

- The agenda of the meeting shall include:
  - Explanation of all processes the meeting is being held for (rezoning, subdivision, etc.).
  - Explanation of future meetings (additional neighborhood meetings, Planning Board, Town Council, etc.).
  - Explanation of development proposal – uses and conditions for rezonings, layout for subdivision and site plans, and builder/end user if known/public knowledge.
- Questions or concerns by attendees, and responses by the applicant, if any, must be noted. For in-person meetings, provide blank comment sheets or notecards for neighbors to submit written comments. For virtual meetings, copy all questions and answers entered into the meeting's chat feature before closing the meeting and save them into a document. The applicant shall also include any questions and concerns received via written correspondence (such as email) or phone call along with responses provided by the applicant.
- The applicant shall be responsible for notifying any neighbors who check the "Send Plans & Updates" box on the sign-in sheet or who otherwise request to be updated of any additional neighborhood meetings and the actual submittal date to the Town with a link to the Town of Apex's Interactive Development Map.

For accountability purposes, please submit the following with your application:

- A copy of the letter mailed to the Planning Department, neighbors, and neighborhood organizations (use attached invitation template);
- A list of those persons and neighborhood organizations invited to the meeting;
- A copy of the sign-in sheet (use attached sign-in sheet template);
- A summary of the meeting and a list of any changes made to the project as a result of the neighborhood comments (use attached meeting summary template);
- The affidavit, signed, dated, and notarized (use attached affidavit template); and
- One (1) reduced copy of the maps and/or plans included in the invitation and presented to the neighbors at the Neighborhood Meeting.

NOTICE OF NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

September 19, 2023
Date

Dear Neighbor:
You are invited to a neighborhood meeting to review and discuss the development proposal at

1013 Olive Chapel Rd.	0732732042
Address(es)	PIN(s)

in accordance with the Town of Apex Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at http://www.apexnc.org/180. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

A Neighborhood Meeting is required because this project includes (check all that apply):

	Application Type	Approving Authority
☑	Rezoning (including Planned Unit Development)	Town Council
☐	Major Site Plan	Technical Review Committee (staff)
☐	Minor Site Plan for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"	Technical Review Committee (staff)
☐	Special Use Permit	Board of Adjustment (QJPH*)
☐	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Board of Adjustment cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)):
The applicant seek to rezone the property from Residential Agricultural District (RA) to Medium Density Residential District (MD) to facilitate the development of five single-family dwellings.

Estimated submittal date: November 6, 2023

MEETING INFORMATION:

Property Owner(s) name(s):	Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Applicant(s):	Leticia Shapiro, Morningstar Law Group
Contact information (email/phone):	tshapiro@morningstarlawgroup.com/919-590-0366
Meeting Address:	https://morningstarlaw.group/10042023.mtg
Date/Time of meeting**:	October 4, 2023

Welcome: 6pm-6:15pm Project Presentation: 6:05pm-6:35pm Question & Answer: 6:35pm-7pm

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:

Project Name: 1013 Olive Chapel Road Rezoning Zoning: RA

Location: 1013 Olive Chapel Road

Property PIN(s): 0732732042 Acreage/Square Feet: 2.0 acres

Property Owner: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Address: 1103 Myers Point Dr.

City: Morrisville State: NC Zip: 27560-5855

Phone: Email:

Developer: N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Engineer: Don Curry, Curry Engineering

Address: 205 S. Fuquay Ave.

City: Fuquay-Varina State: NC Zip: 27526

Phone: (919) 552-0849 x101 Fax: Email: don@curryeng.com

Builder (if known): N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Project Manager	(919) 372-7468
Public Works - Transportation Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control) Matt Echols, Utility Engineering Manager (Water & Sewer)	(919) 249-3537 (919) 372-7505
Electric Utilities Division Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4da27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction:	**Non-Emergency Police**	**919-362-8661**

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 a.m. to 8:30 p.m. so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:	**James Misciagno**	**919-372-7470**

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:	**Water Resources – Infrastructure Inspections**	**919-362-8166**

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources – Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations:	**Non-Emergency Police**	**919-362-8661**

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:	**James Misciagno**	**919-372-7470**

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:	**James Misciagno**	**919-372-7470**
	Danny Smith	**Danny.Smith@ncdenr.gov**

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

Dust:	**James Misciagno**	**919-372-7470**

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:	**James Misciagno**	**919-372-7470**

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:	**James Misciagno**	**919-372-7470**

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

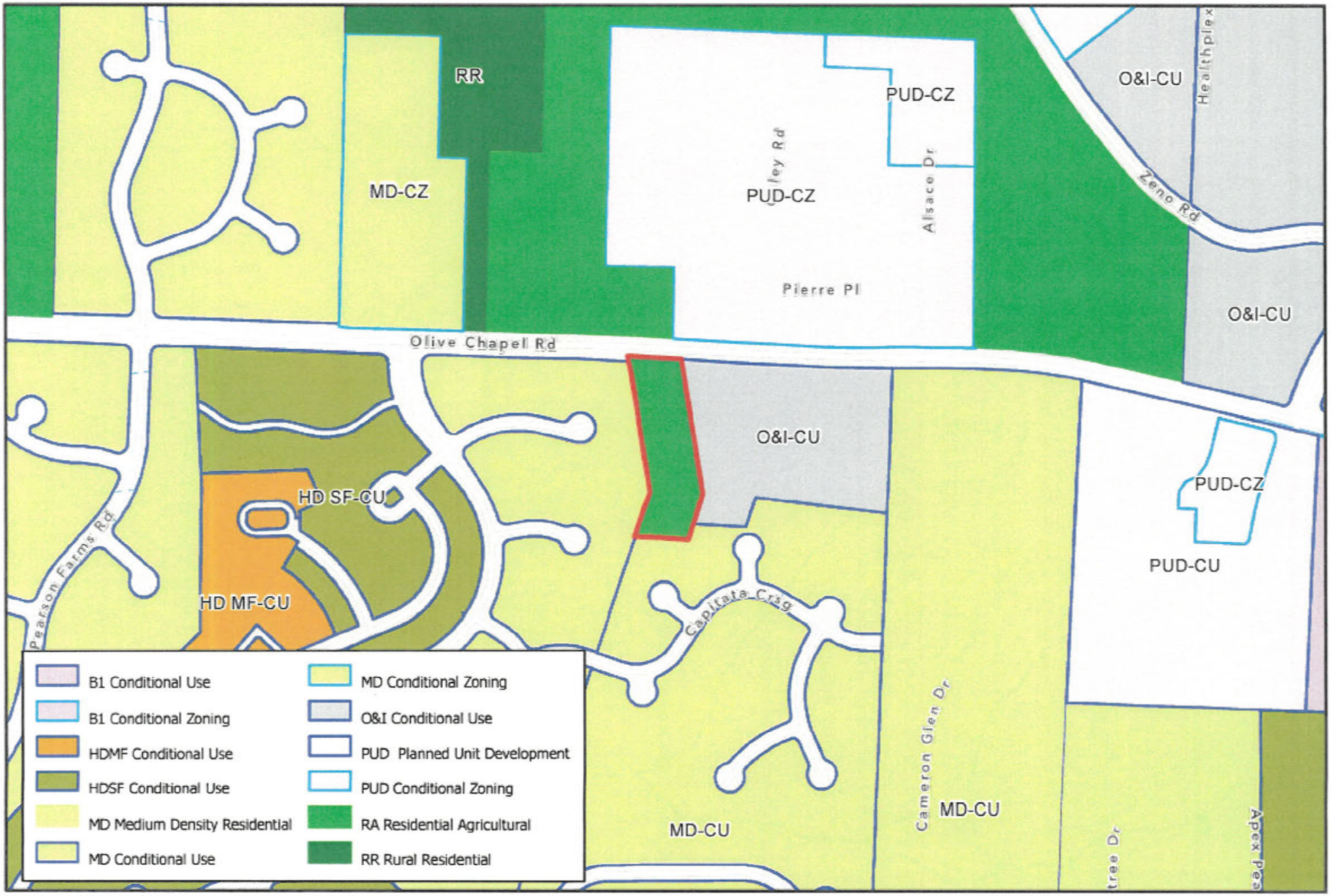
Stormwater Control Measures:	**Jessica Bolin**	**919-249-3537**

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Jessica Bolin at 919-249-3537.

Electric Utility Installation:	**Rodney Smith**	**919-249-3342**

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.


Olive Chapel Rd
Carley Rd
Olive Ch
Purple Glory Dr
Dogwood Rd
White Dogwood Rd
Rosabella Ln


RR
MD-CZ
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PUD-CZ
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Pierre Pl
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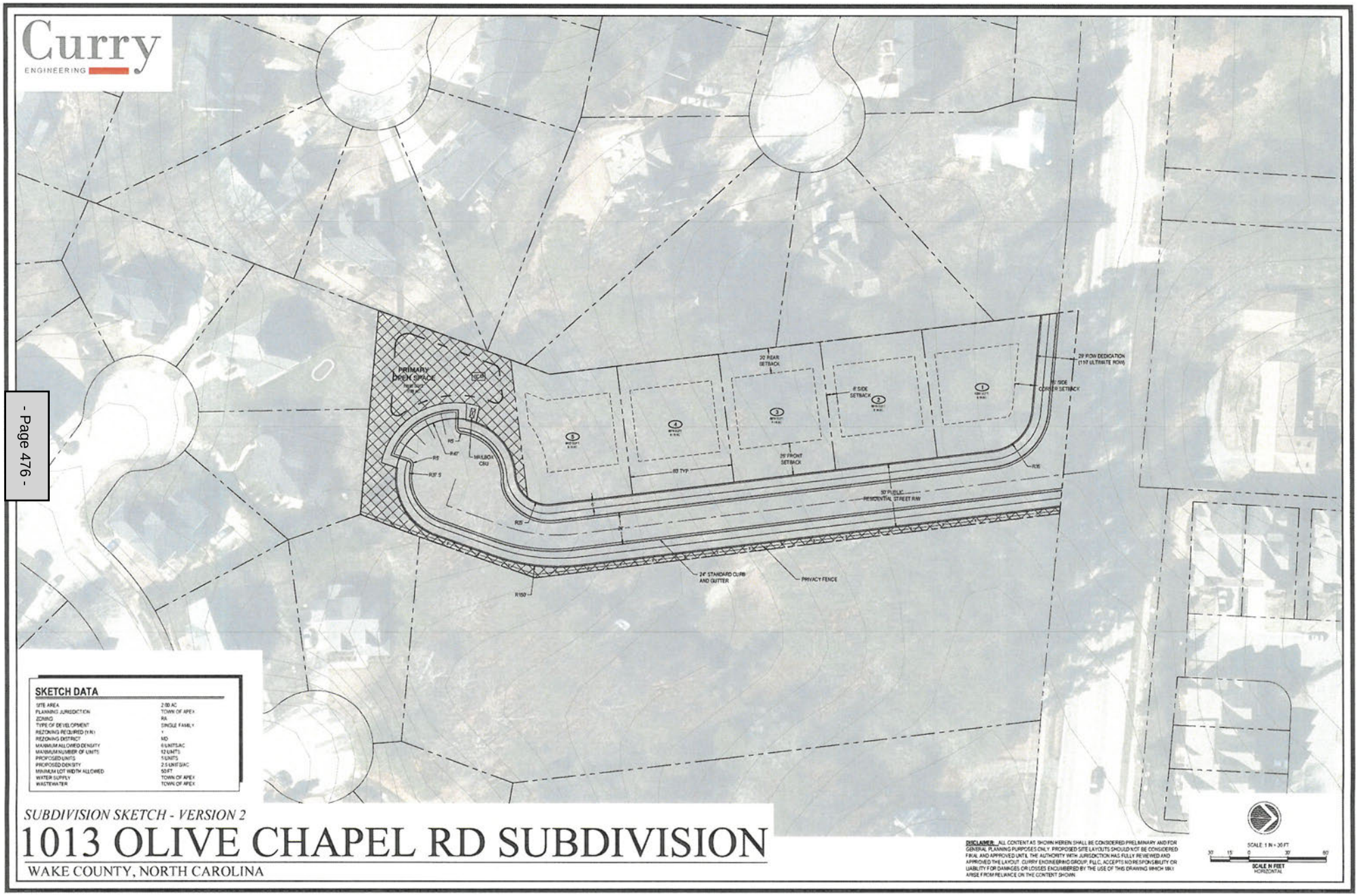
Healthplex
Zeno Rd
O&I-CU
Olive Chapel Rd
O&I-CU
HD SF-CU
HD MF-CU
Pearson Farms Rd
Capitate Crsg
PUD-CZ
PUD-CU
Cameron Glen Dr
MD-CU
MD-CU
B1 Conditional Use
B1 Conditional Zoning
HDMF Conditional Use
HDSF Conditional Use
MD Medium Density Residential
MD Conditional Use
MD Conditional Zoning
O&I Conditional Use
PUD Planned Unit Development
PUD Conditional Zoning
RA Residential Agricultural
RR Rural Residential


Curry
ENGINEERING
PRIMARY OPEN SPACE
30' REAR SETBACK
6' SIDE SETBACK
20' FRONT SETBACK
29' ROW DEDICATION (1/2 ULTIMATE ROW)
15' SIDE CORNER SETBACK
83' TYP
50' PUBLIC RESIDENTIAL STREET R/W
24" STANDARD CURB AND GUTTER
PRIVACY FENCE
MAILBOX CBU
R35
R150'
SKETCH DATA
SITE AREA 2.00 AC
PLANNING JURISDICTION TOWN OF APEX
ZONING RA
TYPE OF DEVELOPMENT SINGLE FAMILY
REZONING REQUIRED (Y/N) Y
REZONING DISTRICT MD
MAXIMUM ALLOWED DENSITY 6 UNITS/AC
MAXIMUM NUMBER OF UNITS 12 UNITS
PROPOSED UNITS 5 UNITS
PROPOSED DENSITY 2.5 UNIT S/AC
MINIMUM LOT WIDTH ALLOWED 50 FT
WATER SUPPLY TOWN OF APEX
WASTEWATER TOWN OF APEX
SUBDIVISION SKETCH - VERSION 2
1013 OLIVE CHAPEL RD SUBDIVISION
WAKE COUNTY, NORTH CAROLINA
DISCLAIMER: ALL CONTENT AS SHOWN HEREIN SHALL BE CONSIDERED PRELIMINARY AND FOR GENERAL PLANNING PURPOSES ONLY. PROPOSED SITE LAYOUTS SHOULD NOT BE CONSIDERED FINAL AND APPROVED UNTIL THE AUTHORITY WITH JURISDICTION HAS FULLY REVIEWED AND APPROVED THE LAYOUT. CURRY ENGINEERING GROUP, PLLC, ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR DAMAGES OR LOSSES ENCUMBERED BY THE USE OF THIS DRAWING WHICH MAY ARISE FROM RELIANCE ON THE CONTENT SHOWN
SCALE: 1 IN = 30 FT
30' 15' 0 30' 60'
SCALE IN FEET
HORIZONTAL

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: Virtual: https://morningstarlaw.group/10042023.mtg

Date of meeting: October 4, 2023 Time of meeting: 6pm-7pm

Property Owner(s) name(s): Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Applicant(s): Leticia Shapiro, Morningstar Law Group

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	See Attached List of	Attendees			☐
2.					☐
3.					☐
4.					☐
5.					☐
6.					☐
7.					☐
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Applicant(s): Leticia Shapiro, Morningstar Law Group

Contact information (email/phone): _____

Meeting Address: Virtual: https://morningstarlaw.group/10042023.mtg

Date of meeting: October 4, 2023 Time of meeting: 6pm-7pm

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #2:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #3:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #4:
See Attached Summary of Discussion

Applicant's Response:

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Leticia L. Shapiro, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at Virtual: https://morningstarlaw.group/10042023.mtg (location/address) on October 4, 2023 (date) from 6pm (start time) to 7pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

10/26/23
Date

By: _____

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Leticia Shapiro, a Notary Public for the above State and County, on this the 26th day of October, 20____.

SEAL

JULIA OGDEN
NOTARY PUBLIC
WAKE COUNTY, N.C.

_____
Notary Public

Julia Ogden
Print Name

My Commission Expires: April 21, 2024

Attended	User Name (Original Name)	First Name	Last Name	Email	Address	City	Zip/Postal Code	State/Province
Yes	Ashwini Yalala	Ashwini	Yalala	[redacted]	1103 Myers point dr	Morrisville	27560	NC
Yes	Meg Pounds	Meg	Pounds		1100 Olive Chapel Rd	Apex	27502	NC
Yes	William Keyes	William	Keyes		1014 Olive Chapel Rd.	Apex	27502	NC
Yes	Srikanth Nalla	Srikanth	Nalla					
Yes	Robert Santaniello	Robert	Santaniello		1101 Purple Glory Dr	Apex	27502	NC
Yes	Joan	Joan	Moravick		1004 Alba Trail	Apex	27502	NC
Yes	Ken Ulrich	Ken	Ulrich		1004 Alba Trail	Apex	27502	NC
Yes	Samuel Arbes	Samuel	Arbes		1000 Sweetwater Red Court	Apex	27502	NC
Yes	Cynthia Wellman	Cynthia	Wellman		1108 Sterling Drive	Champaign	61821	
Yes	Susan Hucks	Susan	Hucks		1100 Rosabella Lane	Apex	27502	NC
Yes	Matt Peedin	Matt	Peedin		1003 Alba Trail	Apex	27502	NC
Yes	Charles King	Charles	King		2525 York Rd.	Raleigh	27608	NC
Yes	Lynne Barile	Lynne	Barile		1105 Rosabella Lane	Apex	27502	NC
Yes	Robert Wellman	Robert	Wellman		1100 Purple Glory	Apex	27502	NC
Yes	Roy McCall	Roy	McCall		1003 Sweetwater Red Court	Apex	27502	NC
Yes	Bernie Porter	Bernie	Porter		1002 Alba Trail	Apex	27502	NC
Yes	Barb Fiedler	Barb	Fiedler		1102 Rosabella Lane	Apex	27502	
Yes	Lisa Day	Lisa	Day		1104 Olive Chapel Road	Apex	27502	NC

NEIGHBORHOOD MEETING
SUMMARY OF DISCUSSION
1013 OLIVE CHAPEL ROAD
OCTOBER 4, 2023 6PM – 7PM

1. Discussion regarding what is rezoning.
2. Discussion regarding rezoning process.
3. Discussed current and proposed zoning.
4. Discussed where this matter is in the rezoning process.
5. Discussed relevant parcels and showed aerial view for context.
6. Discussed concept plan shown on slide.
7. Discussed the topography and specifically used the aerial with participants to discuss specific issues discussed below.
8. Discussed questions that were provided prior to the meeting and responses:

   Question 1

   In 2019, we were in touch with the Town of Apex regarding a large amount of standing water that accumulates on the 1013 Olive Chapel Road property where it abuts the corner of our backyard. We were told by an Engineer from the town, who came out to review the situation, that there is a high water table in that area and therefore water continues to accumulate there following heavy rains. There is a drainage grate located on our property that is a receptacle for any runoff, however we frequently observe that following a heavy rain, or several periods of rain, that surface water will continue to run for nearly a week's time into that drain.

   Our concern is that any mass grading that might take place for the proposed development, or any clearance of a majority of the vegetation on the sloped property, or an inadequately designed or properly sited SCM, would only exacerbate these drainage issues and increase the volume and velocity of runoff onto our property. Where will the proposed SCM be discharged and what is your SCM design and overflow plan that will take into account the slope of the property and the obvious lack of depth of the groundwater table?

   Response: *This is a perfect line of questioning that demonstrates why these initial meetings are so helpful because we can learn a lot from driving by, reviewing maps, etc. but we don't live there to see what happens with drainage. At this time, we are so early in the process we do not have specific answers, but we will comply with the Town's Uniform Development Ordinance for the development of the site. Again, given the size of the site and there only being a handful of lots planned, we do not anticipate any mass grading. We have not begun engineering the site and appreciate this information that will help us understand how we can best lay the site out.*

   Question #2

   In the 14 years of living in our home, we have enjoyed a plethora of birds and wildlife that frequent our backyard and that have used the wooded parcel as one of the few remaining natural habitats in this growing area. Many of the bird species are currently listed as protected on the Migratory Bird Treaty Act (MBTA) including the Black-capped

Chickadee, Hairy and Downy Woodpecker, Tufted Titmouse, Eastern Towhee, Hawks, and Thrashers. There is even an impressive Barred Owl that we have documented with photographs that has made its home in the wooded parcel now for several years. The wooded parcel is dense with mature trees that includes several pines and hardwoods that are well over 24" DBH, including an exceptionally tall and threatened Longleaf Pine that measures nearly 40" DBH. Such large trees make this a natural home for the Barred Owl who required larger trees for nesting.

Furthermore, a recent (September 2023) Tree Canopy Assessment of Wake County (which includes a municipal report specific to Apex), found that Wake County has lost 11,120 acres of tree canopy from 2010 to 2020. Furthermore, Apex, Cary and Holly Springs all lost more acres of tree canopy than Raleigh over a decade. Aside from the heat mitigation, the Assessment notes that trees in Apex remove 451 tons of pollutants from the air, absorb 16,984 tons of carbon dioxide, and intercept 331.8 million gallons of stormwater each year.
[Source: https://www.wake.gov/departments-government/planning-development-inspections/planning/wake-county-tree-canopy-assessment]

What are your plans to satisfy the Resource Conservation Area (RCA) in regard to tree canopy preservation, the "undisturbed forested area" and the "undisturbed wildlife and plant habitat areas" - specifically for the protection of the Barred Owl nesting habitat and the preservation of the well-established Longleaf pine (35+" DBH)?

Response: *We are familiar with these studies and this is an important issue with the Town and the Town Council. With regard to RCA, this site has an RCA requirement is 20%. We will comply with the Town's RCA requirements and as of today, we don't know of any environmentally sensitive areas located on the site but this is where you are likely to encounter wild life and plant habitat areas. As far as tree conservation again, we will have to comply with Town ordnance with regard to tree save and open space requirements.*

How much of a vegetated setback or buffer do you plan to leave at the southern end of property where the Longleaf Pine is located?

Response: *The UDO requires a 20' Type B buffer along the western and southern property lines and the applicant will be required to meet or exceed this requirement. A type B buffer is Semi-Opaque and serves as a screen from the ground to a height of between 3 and 6 feet with openings no greater than 10 feet. Additional information about the Type B buffer can be found in the UDP at Section 8.2.6 B 5(b).*

Question #3
There is a 62,000-square-foot, two-story rehab facility currently under construction at the corner of Olive Chapel Road and Apex Peakway. This building and its parking lots will

ultimately increase the amount of heat-absorbing concrete and roofing materials along this residential corridor.

What considerations have you made in addressing the 'heat island effect' given the proposed design of your medium-density development?

Response: *Again, these are issues that are very important to the Town of Apex which has an Environmental Advisory Board who offers a general list of suggested rezoning conditions for rezoning applicants to consider before filling a rezoning petition. The heat island effect usually occurs when there is a lot of asphalt and roofing that takes the place of the natural environment and that is not what is planned here. This is not a dense concentration of asphalt lot, etc. Of course, in order to build this development, there will be trees that will be knocked down as there was when adjacent development was built, but this is a very small development with only a handful of lots with no anticipated mass grading. The applicant is being a good steward of the environment and is considering building a 100% solar development with EV charging stations in every unit.*

9. Participant walked through specific drainage issues on their property located to the south. Participant noted: There is a grate located at the property line between the two properties to the south and the subject property. There is a wet area further north is where water accumulates and a Town engineer told them that this is a high water table. When there is a heavy rain the water stands in there and it runs and drains in our drain and you can hear it and sometimes it runs for a week before it is drained down. 80% of the water that falls into this drain comes from the subject property and about 20% comes from his property. There is also drainage that comes from the property located to the northwest.
10. Participant walked through where a tall Pine and wildlife were located, specifically the Barred Owl. He stated the pine with the Barred Owl next is located just the north of the southern property line about midway west to east. It would be great if this tree could be preserved along with some of the trees along the line of the property to the south and west to preserve the screening that they currently enjoy. **Response:** *Tree preservation will be discussed. There is open space along the eastern and southern property lines in this concept plan, but again this is a very preliminary sketch.*
11. Participant stated that from the third house located on the eastern property line down south is a slope and drainage heads south to the property line. **Response:** *Discussed the required 20ft buffer on the eastern and southern property lines.*
12. Participant discussed significant standing water issues where the property lines from 1100 Purple Glory and 1101 Purple Glory meet the subject property. This water eventually runs between the houses and into Purple Glory Court and also to the back that was previously discussed. There is about ten feet of open space between my property line and the subject property line. How would that affect the buffer? Are they going to plant? **Response:** *Planting would be appropriate for the required Type B Buffer.*
13. Participant discussed his dislike for retention ponds because of mosquitoes, algae, etc. Some of the bigger concerns I have has already been communicated and I don't know if

there are any other solutions for the run-off here, but retention ponds seem problematic. **Response:** *This will be noted.*

14. Participant discussed that he is near the southern property line where there is a retaining wall that stays pretty wet so I am concerned about any potential run-off that might occur with the development of the site. It is standing water, and we have French drains but it stays pretty wet so any additional run-off would be problematic.
15. Participant stated he is unsure of the proposed road placement from Olive Chapel Rd. down the adjoining property to the east. He owns the property to the east of the subject property and he wanted to make sure that the road depicted on the concept plan will be on the subject property and not on his property. Right now the entrance coming off of Olive Chapel Road splits the two properties and I have a tenant that is there currently and if this is a right in, right out, I don't know how thrilled they are going to be about that.
16. Participant asked what the size of the houses will be. **Response**: *Owner responded that it is anticipated the houses will 3000 sq. ft to 5000 sq.ft.*
17. Participant asked if there will be parking on the street? **Response from Owner**: *No that is not allowed.*
18. Participant asked if the houses will have garages. **Response**: *Yes. Three car garages on most of them.*
19. Participant asked if any of the owners looking to live in the properties. **Response:** *Yes, all of the owners will live in the houses.*
20. Participant asked if the owner had ever built a home. **Response:** *No, we bought the parcel to build our own homes.*
21. Participant asked owner if he had ever built a subdivision before. **Response**: *No, we know some contractors who can do that. We are talking with builders who will do it for us.*
22. Participant asked what the price point is with regarding to the homes that will be built. **Response:** *We are not sure at this time. It is too early.*
23. Participant asked if with the set backs they will be able to put on screened in porches or decks. **Response:** *We have not talked with contractors yet so it is too early to discuss.*
24. Participant asked if the plan was to live there, why did they try to sell it for six months last year. **Response:** *For those six months last year we were looking to sell because he bought new homes but now do not like our homes and want to move into our own homes we can build.*
25. Participant expressed concern regarding a right in, right out specifically if routing through Cameron Woods and Olive Chapel to be able to come back around to Olive Chapel to go up and make a right hand turn. That will increase the traffic load considerably going into these neighborhoods and cause cut through traffic on roads not designed for that much traffic. How do you account for that? **Response:** *Traffic is a topic that is addressed following the submittal of the application. Traffic is top priority of the Town.*
26. Participant stated the main question is, if traffic isn't going to go through the neighborhoods, what is the proposal. Is there any preliminary idea of how that might work? **Response**: *It is too early in the process to know specifics about Traffic but it is*

something that is very important to the Town and to the applicant as they plan to live there.

27. Participant stated he is not sure if the first ten home owners on Cameron Glen Drive were included in the notice but he would believe the left from Olive Chapel to turn on Cameron Glen Drive is already challenging I would expect that if people are going to turn there and U-turn around, that is going to be a big challenge and I don't know if those homeowners are represented on this. **Response:** *I would need to know addresses to be able to know if they were included in the notice.*
28. Participant asked if this street is going to be large enough for a fire truck to turn around in. Especially if cars are parking in the street. I know there should be no cars parking on the street but that doesn't tend to work out very well. **Response:** *The street will have to comply with the Town requirements to allow for emergency vehicles.*
29. Participant expressed concern that we now have countless UPS trucks, Amazon deliveries, etc. who will now start taking short cuts all over the place to turn around. There is also an issue with exiting out of White Dogwood onto Olive Chapel Road in that it sits on the top of a hill and when we exit, sometimes we have to rapidly accelerate. By the time we get to where you are planning on building this road, you are then going to have people turning right out of it where we have just accelerated to stay ahead of the heavy traffic coming up behind us. **Response:** *That is something that will be a part of the traffic analysis.*
30. Participant stated that if the plan is to build a 3000 square foot house or larger, in our neighborhood everything has texture meaning not everything is flat against the back walls, they are not big boxes. Are these going to be big boxes or are they going to have character to the back of them? **Response:** *We have not discussed elevations and this is going to take some time. There are also Town architectural policies with regard to the visual front of the home.*
31. Participant stated what he would be looking at is the back of these homes, not the front where the architectural policies apply.
32. Participant asked if this is going to be a private road or a public road. **Response:** *This is going to be a public road.*
33. Participant asked that construction vehicles not be able to use the adjacent subdivision roads to turn around so they can make a right turn into the property. The concern is safety and wear of newly paved roads. **Response:** *This is a topic that can be discussed during the rezoning process following submittal of the application.*
34. Participant asked on the topic of the houses, will they all be built together as 'spec' or will lots be sold and individuals build their own. **Response:** *The current owners will be building their homes and will live in them.*
35. Participant asked if there is any reason this property was chosen for their own homes vs the other property located at 0 New Hill Olive Chapel Road. **Response:** *It was personal preference.*
36. Participant stated he is curious as to how the homes will fit on the lots but understands that that has not been determined yet.
37. Participant expressed concern as to where solar panels will be placed on the homes specifically with regard to the view from the back, and if there will be trees saved, how

will you optimize solar panels without removing a lot of trees. **Response:** *It is too early in the process to answer these questions and will be worked out later on in the rezoning process and in the development plan.*

38. Participant discussed that prior to the current owners purchasing the property, the property had gone under contract, did they ever explore why the property when from contingent to active. **Response:** *Owner believes it was a pricing issue but was not involved in that process, so he is not sure.*
39. Participant requested that they be provided more than 13 days' notice of the meeting. **Response:** *We are required to follow the Town's requirements for notice which is mailing within 14 days of the meeting. We do apologize if you had to cancel plans but appreciate your attendance.*

Questions received following the meeting via email:

Regarding the 20-foot buffer zone: Do the residents have any say in what is planted and/or retained in the part of the buffer zone that affects their property? Does the six-foot requirement refer to the mature height of the plantings which would not be sufficiently tall? It should be a condition of the plan approval that all trees and shrubs currently in what would become the 20-foot buffer zone remain and cannot be removed. **Response:** *Participant was sent a link to the Town of Apex UDO and reference to the specific section regarding buffers.*

A reference was made several times to a 20% retention of trees, vegetation, I am not sure exactly what, having to do with a Resource Conservation Area. That means the 20% retention could be concentrated in one area such as the end of the cul-de-sac which would not benefit the majority of the property owners. **Response:** *Participant was sent a pdf of the section of the UDO that discusses RCA. Participant was invited to reach out if there was a desire for a one on one meeting to discuss specific issues. Participant declined a separate meeting at this time.*

One of the things you asked me to follow-up on was around the traffic flow. With the right turn only situation, it will create the need for U-Turns that will take place on both White Dogwood as well as Cameron Glen. White Dogwood is less problematic, due to the pool parking lot being a natural place for a U-Turn, but I wanted to make sure you have community involvement from those on Cameron Glen Drive. I drove through there this morning to get addresses of the key neighbors that should be involved, due their roads/driveways likely to be used for U-Turns. They are:

- 101-203 Cameron Glen Drive
- Talisker Ct (the whole cul-de-sac)
- Dunvegan Ct (the whole cul-de-sac)

Some of the homes on Talisker and Dunvegan may have already been included as those at the very end of the cul-de-sacs may be within the 600(?)' window you mentioned last night, but those at the end, closest to Cameron Glen, may be the ones impacted by the U-Turns, and should be included in future communications.

PLANTING AND LANDSCAPING (6-13)	YES	NO	N/A
Goal 7. Plant trees to improve energy efficiency.			
Option 7.1: Plant deciduous shade trees on southern side of buildings. To improve energy efficiency, a combination of large and small deciduous shade trees shall be planted on the southern side of any buildings.	☑	☐	☐
Option 7.2: Plant evergreen trees as a windbreak on northern side of buildings. To improve energy efficiency, the project shall plant evergreen trees on the northern side of all buildings to act as a windbreak.	☑	☐	☐
Goal 8. Increase biodiversity. Note: Invasive species are prohibited. Please see the Town's Design and Development Manual for a link to the list of prohibited species.			
Option 8.1: Plant pollinator-friendly flora. Provide diverse and abundant pollinator and bird food sources (e.g. Snectar, pollen, and berries from blooming plants) that bloom in succession from spring to fall. (Refer to the Apex Design & Development Manual for suggested native species). a. The project shall ensure that _____% of the landscaping shall be native species, which shall provide diverse and abundant pollinator and bird food sources. Special attention shall be paid to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	☑	☐	☐
Option 8.2: Provide and allow for undisturbed spaces (e.g. leaf piles, unmown fields, fallen trees) for nesting and overwintering for native pollinators and wildlife. In order to support wildlife and pollinators, HOA covenants shall not require that fallen leaves or dormant plants be removed during the winter on areas without turf grass, including individual homes and HOA owned common areas.	☐	☐	☑
Option 8.3: Retain and protect old ponds if the dam is structurally sound. To preserve and protect existing species, existing ponds shall be preserved if structurally sound.	☐	☐	☑
Option 8.4: Increase the number of native trees and shrubs. a. The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for the canopy, understory and shrub levels. A minimum of _____% of the species selected shall be native or a native of North Carolina.	☑	☐	☐
AND/OR			
b. No single species of native or adaptive vegetation shall constitute more than 20% of the plant material of its type within a single development site.	☑	☐	☐
Goal 9. Implement xeriscaping in design, which will use landscaping that requires less irrigation and chemical use. Contact Planning for assistance, if needed. a. The project commits to planting only drought tolerant plants, of which _____% of the plants selected shall be native. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	☑	☐	☐
OR			
b. To reduce irrigation requirements, the project shall select and plant only warm season grasses.	☐	☐	☐
Goal 10. Promote the benefits of native pollinators. The project shall plant at least _____ native pollinator demonstration garden within the development. The developer shall coordinate with a local or state agency that specializes in the design or certification of such gardens. Informational signage regarding the purpose of the garden and selected vegetation shall be provided. The pollinator garden shall be maintained by the developer or HOA.	☑	☐	☐
Goal 11. Improve soil quality to be amenable for a variety of native and non-invasive plantings.			

PLANTING AND LANDSCAPING (6-13)	YES	NO	N/A
To encourage the establishment of healthy plants, reduce fertilizers, and reduce stormwater runoff, topsoil shall be retained on site and a minimum of 4 inches of topsoil shall be placed on each lot and within disturbed common areas.	☐	☐	☑
Goal 12. Increase perimeter buffer requirements, especially in transitional areas (nonresidential to residential areas). The UDO requires a _____-foot buffer along the _____perimeter of the property. The applicant shall add _____-foot buffer in that location, which would be an increase of _____-feet above the requirement.	☐	☐	☑
Goal 13. Reduce impacts to resource conservation Areas (RCAs). a. The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed.	☐	☐	☑
OR			
b. A farm-style split rail fence shall be installed where wooded or natural condition Resource Conservation Area (RCA) abuts individual residential lots.	☐	☐	☑

SUSTAINABLE BUILDINGS (14)	YES	NO	N/A
Goal 14. Apply for green building certifications, such as LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard. The project shall be designed to meet the requirements for one of the green building certifications listed above. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.	☑	☐	☐

WASTE MANAGEMENT (15)	YES	NO	N/A
Goal 15. Encourage the proper disposal of pet waste to reduce environmental impacts. ***Numbers shown may be changed based on project.*** The project shall install at least one (1) pet waste station per 25 residential units throughout the community in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths. If there fewer than 25 homes, at least one (1) pet waste station shall be installed.	☑	☐	☐

CLEAN ENERGY (16-18)	YES	NO	N/A
Goal 16. Install rooftop solar on buildings. a. A solar PV system of at least _____kW shall be installed on at least _____homes within the development. All solar installation required by this condition shall be completed or under construction prior to 90% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time.	☑	☐	☐
AND/OR			
b. A solar PV system shall be installed on a minimum of _____model home. All solar installation required by this condition shall be completed or under construction prior to _____% of the building permits being issued for the development. The lot(s) on which this home/these homes is/are located shall be identified on the Master Subdivision Plat, which may be amended from time to time.	☐	☐	☑
AND/OR			

CLEAN ENERGY (16-18)	YES	NO	N/A
c. The amenity center for the project shall include a rooftop solar PV system with a capacity of at least _____ kWHs.	☐	☐	☑
Goal 17. Include solar conduit in building design. All homes shall be pre-configured with conduit for a solar energy system.	☑	☐	☐
Goal 18. Encourage clean transportation. The developer shall install at least _____electric vehicle charging station in amenity centers or common area parking lots.	☑	☐	☐

Part II - Non-Residential

Includes condominiums, apartments, and multi-family, common areas in residential developments (e.g. amenity areas, parking lots, exterior building lights, and exterior architecture), commercial, office, and industrial areas.

STORMWATER AND WATER CONSERVATION – WATER QUANTITY (1)	YES	NO	N/A
Goal 1. Increase design storm for retention basin in flood-prone areas. The UDO requires that treatment for the first 1-inch of runoff will be provided such that the removal of 85% Total Suspended Solids is achieved. Each option is intended to be used as an improvement to the minimum UDO requirements. If an area is already required to mitigate the 25-year storm, option b should not be selected.			
a. Post-development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, 25-year and 100-year storm events in accordance with the Unified Development Ordinance.	☐	☐	☑
OR			
b. Post development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, and 25-year storm events in accordance with the Unified Development Ordinance.	☐	☐	☑

STORMWATER AND WATER CONSERVATION – WATER QUALITY (2-7)	YES	NO	N/A
Goal 2. Increase riparian buffer widths from surface waters in environmentally sensitive areas. The project shall increase the riparian buffer width by at least _____feet above the minimum required by the Unified Development Ordinance. The additional buffer width shall be measured from the top of bank on each side of the stream.	☐	☐	☑
Goal 3. Limit tree clearing, stormwater control measures (SCM), or infrastructure in either zone of the riparian buffer. No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required sewer infrastructure and SCM outlets. The SCM water storage and treatment area shall not be permitted within the riparian buffer. The sewer shall be designed to minimize impacts to the riparian buffer.	☐	☐	☑
Goal 4. Install signage near environmental sensitive areas in order to reduce pet waste and excess nutrient inputs near Stormwater Control Measure (SCM) drainage areas. The project shall install one (1) sign per SCM to reduce pet waste and prohibit fertilizer, in locations that are publicly accessible, such as adjacent to amenity centers, sidewalks, greenways, or side paths.	☐	☐	☑
Goal 5. Implement low impact development (LID) techniques as defined by the NC Department of Environmental Quality. The project shall install a minimum of _____Low Impact Development Technique as defined and approved by the NC Department of Environmental Quality. The specific	☐	☐	☑

STORMWATER AND WATER CONSERVATION – WATER QUALITY (2-7)	YES	NO	N/A
type of LID technique shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.			
Goal 6. Increase pervious surface to reduce stormwater runoff and pollutant concentrations. The Department of Public Works & Transportation does not currently support these options within the ROW. These may be done on private sites, but not within the public ROW.			
Option 6.1: Install pervious pavements where practicable (e.g. when parking maximums are exceeded).			
a. The project shall utilize pervious pavement when constructing parking spaces that are in excess of the minimum parking requirement. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	☐	☐	☑
AND/OR			
b. The project shall utilize pervious pavement for all of the parking spaces provided. The specific type of pervious pavement system shall be reviewed and approved by the Water Resources Department at site or subdivision plan review.	☐	☐	☑
Option 6.2: Modify curb and gutters to provide stormwater infiltration and evaporation, such as swale-only, reverse curbs, Silva cells, or curb cuts with rain gardens.			
To increase stormwater infiltration and evaporation, the project shall use modified curb and gutter designs to direct driveway runoff to one or more stormwater device, such as, but not limited to, bioswales, Silva cells, or rain gardens. The specific type and design shall be selected at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Department of Public Works and Transportation.	☐	☐	☑
Option 6.3: Utilize green street design. May be done within the public ROW if it's in the form of a bioretention cell within a landscaped median or large roundabout. Will require approval by the Department of Public Works and Transportation.			
The project shall design and install one or more bioretention cells within the landscape median or roundabout along the primary road. The specific type and design shall be determined at site or subdivision plan review. The proposal shall be reviewed and approved by the Water Resources Department and Department of Public Works and Transportation.	☐	☐	☑
Goal 7. Stormwater re-use application: Integrate irrigation from the SCM (wet pond) on site.			
At least one _____SCM shall be designed and constructed to provide irrigation to the surrounding landscaping on site. The design shall be reviewed and approved by the Water Resources Department at site plan.	☐	☐	☑

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
Goal 8. Preserve tree canopy and prioritize medium to large, healthy, desirable species.			
Option 8.1: Preserve existing trees (percentage-based). Numbers shown may be changed based on project. The EAB's preference is for a minimum of 50%.			
a. The project shall preserve a minimum of _____% of the existing tree canopy. Preserved areas may include, but are not limited to, RCA, perimeter buffers, riparian buffers and/or HOA maintained open space throughout the neighborhood.	☐	☐	☑
OR			
b. The project shall preserve a minimum of _____% of the existing tree canopy. Where the project abuts adjacent developments, special effort shall be taken to	☐	☐	☑

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
locate the preserved trees adjacent to areas of existing preserved open space, including but not limited to, RCA, perimeter landscape buffers, riparian buffers, and/or HOA maintained open spaces.			
Option 8.2: Replace canopy (percentage- or DBH size-based) where there is sufficient space. The project shall replace any large type trees, that measure 18-inches in caliper size or larger, and small type trees, that measure 8-inches in caliper size or larger, that are removed as a part of the development. The ratio of replacement shall be 1 large tree to 1 replacement tree. The UDO's required landscaping may be used to satisfy this requirement. To determine the number of trees that must be replaced, a tree survey for the full property shall be provided to the Planning Department. The survey shall be independently verified by a third-party licensed arborist.	☐	☐	☑
Goal 9. Plant trees for improved energy efficiency.			
Option 9.1: Plant deciduous shade trees on southern side of buildings. To improve energy efficiency, a combination of large and small deciduous shade trees shall be planted on the southern side of any buildings.	☐	☐	☑
Option 9.2: Plant evergreen trees as a windbreak on northern side of buildings. To improve energy efficiency, the project shall plant evergreen trees on the northern side of all buildings to act as a windbreak.	☐	☐	☑
Goal 10. Increase biodiversity.			
Option 10.1: Plant pollinator-friendly flora. Provide diverse and abundant pollinator and bird food sources (e.g. nectar, pollen, and berries from blooming plants) that bloom in succession from spring to fall. (Refer to the Apex Design & Development Manual for suggested native species).			
a. The project shall select and install tree, shrub and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.	☐	☐	☑
OR			
b. The project shall ensure that _____% of the landscaping shall be native species. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.	☐	☐	☑
Option 10.2: Retain and protect old ponds if the dam is structurally sound. To preserve and protect existing species, existing ponds shall be preserved if structurally sound.	☐	☐	☑
Option 10.3: Increase the number of native tree and shrub species selected.			
a. The project shall increase biodiversity within perimeter buffers, common owned open space, and other landscape areas by providing a variety of native and adaptive species for the canopy, understory and shrub levels. A minimum of _____% of the species selected shall be native or a native of North Carolina.	☐	☐	☑
OR			
b. No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type within a single development site.	☐	☐	☑
Goal 11. Implement green infrastructure.			
Option 11.1: Plant rain gardens. The project shall install one or more rain gardens throughout the site.	☐	☐	☑
Option 11.2: Install vegetated rooftops.			
a. The project shall install a vegetated rooftop, aka green roof, on each building.	☐	☐	☑
OR			
b. The project shall install a vegetated rooftop, aka green roof, on at least _____ft^2 of each building.	☐	☐	☑

PLANTING AND LANDSCAPING (8-15)	YES	NO	N/A
Option 11.3: Implement xeriscaping in design. a. The project commits to planting _____% drought tolerant native plants. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review. **OR** b. The project commits to planting only drought tolerant plants. At least _____% of the plants selected shall be native. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review. **OR** c. To reduce irrigation requirements, the project shall select and plant only warm season grasses.	☐ ☐ ☐	☐ ☐ ☐	☑ ☑ ☑
Goal 12. Install community gardens and native pollinator demonstration gardens. The project shall plant at least _____ native pollinator demonstration garden within the development. The developer shall coordinate with a local or state agency that specializes in the design or certification of such gardens. Informational signage regarding the purpose of the garden and selected vegetation shall be provided.	☐	☐	☑
Goal 13. Improve soil quality to be amenable for a variety of native and non-invasive plantings. To encourage the establishment of healthy plants, reduce fertilizers, and reduce stormwater runoff, topsoil shall be retained on site and a minimum of 4 inches of topsoil shall be placed within disturbed areas.	☐	☐	☑
Goal 14. Increase perimeter buffer requirements, especially in transitional areas (nonresidential to residential areas). The UDO requires a _____-foot buffer along the _____perimeter of the property. The applicant is proposing a _____-foot buffer in that location, which would be an increase of _____-feet above the requirement.	☐	☐	☑
Goal 15. Add information signage or other marking at the boundary of lots when they are adjacent to a wooded or natural condition resource conservation area (RCA) indicating that the area beyond the sign is RCA and is not to be disturbed. a. The project shall install signage adjacent to wooded or natural condition Resource Conservation Area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed. **OR** b. A farm-style split rail fence shall be installed where wooded or natural condition Resource Conservation Area (RCA) abuts individual residential lots.	☐ ☐	☐ ☐	☑ ☑

SUSTAINABLE BUILDINGS (16)	YES	NO	N/A
Goal 16. Apply for green building certifications, such as LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard. The project shall be designed to meet the requirements for _____green building certification. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.	☐	☐	☑

WASTE REDUCTION (17)	YES	NO	N/A
Goal 17. Install pet waste stations in public areas for multi-family, apartments, or condominiums or dog friendly businesses.			

WASTE REDUCTION (17)	YES	NO	N/A
The project shall install at least _____ pet waste stations throughout the community, in locations that are publicly accessible, such as adjacent to amenity centers, SCMs, sidewalks, greenways or side paths.	☐	☐	☑

CLEAN ENERGY (18-20)	YES	NO	N/A
Goal 18. Install rooftop solar on buildings.			
a. A solar PV system shall be incorporated into buildings to be constructed on the property. Such PV systems shall have a capacity of not less than 2 kW/1,000 heated square feet of building floor area.	☐	☐	☑
OR			
b. A solar PV system of at least 3.5kW shall be installed on at least _____% of or _____ buildings within the development. All solar installation required by this condition shall be completed or under construction prior to _____% of the building permits being issued for the development. The buildings on which these PV systems are located shall be identified on the Site Plan, which may be amended from time to time.	☐	☐	☑
OR			
c. The amenity center for the project shall include a rooftop solar PV system with a capacity of at least _____ kWHs.	☐	☐	☑
Goal 19. Include solar conduit in building design.			
The project shall install conduit for solar energy systems for all non-residential buildings. The roof shall also be engineered to support the weight of a future rooftop solar PV system.	☐	☐	☑
Goal 20. Encourage clean transportation.			
a. The installation of EV charging spaces shall not reduce the width of adjacent sidewalk to less than 5 feet.	☐	☐	☑
AND/OR			
b. EV charging spaces shall be located such that the cords shall not cause a trip hazard.	☐	☐	☑
AND/OR			
c. The developer shall provide 5% of all parking spaces as EV charging spaces.	☐	☐	☑

LIGHTING EFFICIENCY (21-24)	YES	NO	N/A
Goal 21. Include energy efficient lighting in building design.			
Option 21.1: Increase the use of LEDs. The exterior lighting for all multi-family and commercial buildings and parking lots will consist entirely of LED fixtures.	☐	☐	☑
Option 21.2: Lower maximum foot-candles outside of buildings. On the lighting plan, the average footcandle measurement for parking, building lighting and driveways shall be at least 0.5 footcandles lower than the UDO requires.	☐	☐	☑
Goal 22. Install timers or light sensors or smart lighting technology.			
a. The project shall install light timers, motion sensors, or other smart lighting technology for all exterior lighting.	☐	☐	☑
Goal 23. Include International Dark Sky Association compliance standards.			
The project shall use full cutoff LED fixtures that have a maximum color temperature of 3000K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.	☐	☐	☑

Applicant Clarification/Additional Language:

Additional Board Recommendations:

NOTICE OF NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

January 4, 2024
Date

Dear Neighbor:
You are invited to a neighborhood meeting to review and discuss the development proposal at

1013 Olive Chapel Rd. | 0732732042
Address(es) | PIN(s)

in accordance with the Town of Apex Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, please refer to the Project Contact Information page for ways to contact the applicant. Notified neighbors may request that the applicant provide updates and send plans via email or mail. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at http://www.apexnc.org/180. Applications for Rezoning must hold a second Neighborhood Meeting in the month prior to the anticipated public hearing date.

A Neighborhood Meeting is required because this project includes (check all that apply):

	Application Type	Approving Authority
☑	Rezoning (including Planned Unit Development)	Town Council
☐	Major Site Plan	Technical Review Committee (staff)
☐	Minor Site Plan for the uses "Day care facility", "Government service", "School, public or private", "Restaurant, drive-through", or "Convenience store with gas sales"	Technical Review Committee (staff)
☐	Special Use Permit	Board of Adjustment (QJPH*)
☐	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review Committee (staff)

*Quasi-Judicial Public Hearing: The Board of Adjustment cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)):
The applicant seek to rezone the property from Residential Agricultural District (RA) to Medium Density Residential District Conditional Zonding (MD-CZ) to facilitate the development of five single-family dwellings.

Estimated submittal date: November 1, 2023

MEETING INFORMATION:

Property Owner(s) name(s):	Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Applicant(s):	Leticia Shapiro, Morningstar Law Group
Contact information (email/phone):	tshapiro@morningstarlawgroup.com/919-590-0366
Meeting Address:	https://morningstarlaw.group/01232024.mtg
Date/Time of meeting**:	January 23, 2024

Welcome: 5:30pm-5:45pm Project Presentation: 5:45pm-6pm Question & Answer: 6pm-6:30pm

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:

Project Name: 1013 Olive Chapel Road Rezoning Zoning: RA

Location: 1013 Olive Chapel Road

Property PIN(s): 0732732042 Acreage/Square Feet: 2.0 acres

Property Owner: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Address: 1103 Myers Point Dr.

City: Morrisville State: NC Zip: 27560-5855

Phone: Email:

Developer: N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Engineer: Don Curry, Curry Engineering

Address: 205 S. Fuquay Ave.

City: Fuquay-Varina State: NC Zip: 27526

Phone: (919) 552-0849 x101 Fax: Email: don@curryeng.com

Builder (if known): N/A

Address:

City: State: Zip:

Phone: Fax: Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number (Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department Angela Reincke, Parks Planning Project Manager	(919) 372-7468
Public Works - Transportation Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation & Erosion Control) Matt Echols, Utility Engineering Manager (Water & Sewer)	(919) 249-3537 (919) 372-7505
Electric Utilities Division Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4da27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction:	**Non-Emergency Police**	**919-362-8661**

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 a.m. to 8:30 p.m. so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:	**James Misciagno**	**919-372-7470**

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:	**Water Resources – Infrastructure Inspections**	**919-362-8166**

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources – Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations:	**Non-Emergency Police**	**919-362-8661**

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:	**James Misciagno**	**919-372-7470**

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:	**James Misciagno**	**919-372-7470**
	Danny Smith	**Danny.Smith@ncdenr.gov**

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

Dust:	**James Misciagno**	**919-372-7470**

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:	**James Misciagno**	**919-372-7470**

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:	**James Misciagno**	**919-372-7470**

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:	**Jessica Bolin**	**919-249-3537**

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Jessica Bolin at 919-249-3537.

Electric Utility Installation:	**Rodney Smith**	**919-249-3342**

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.

How to Participate in the January 23, 2024, Second Neighborhood Meeting 1013 Olive Chapel Road

- To participate by PC, Mac, iPad, iPhone or Android device,

Go to https://morningstarlaw.group/01232024.mtg to register for the meeting.
(Registration is necessary as we are required by the Town of Apex to have a record of attendance.)

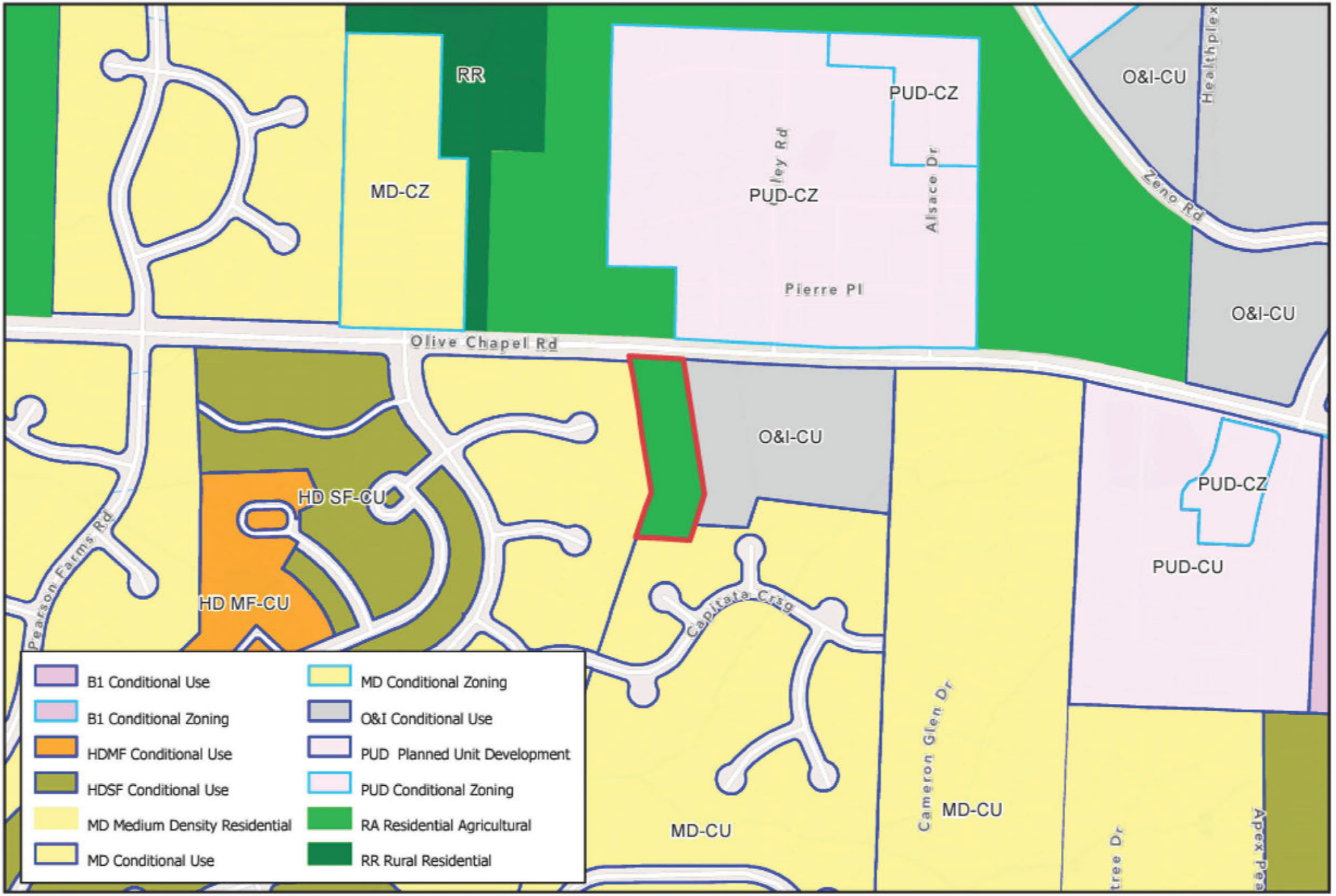
- Upon registration, you will receive a confirmation email with instructions on how to access the meeting.
- To participate by phone,
- Dial one of the following numbers:
  - +1 929 436 2866
  - +1 301 715 8592
  - +1 305 224 1968
  - +1 309 205 3325
  - +1 253 215 8782
- Webinar ID: 817 3351 6249
- Passcode: 718420
- For attendance purposes as required by the Town of Apex, individuals participating via telephone will be unmuted and asked to identify themselves including their name and address.

If you have difficulty registering, you can call Leticia Shapiro at (919) 590-0366 or email tshapiro@morningstarlawgroup.com prior to the meeting for assistance. If you have difficulty connecting during the meeting, please email tshapiro@morningstarlawgroup.com and the meeting link will be sent to help assist.

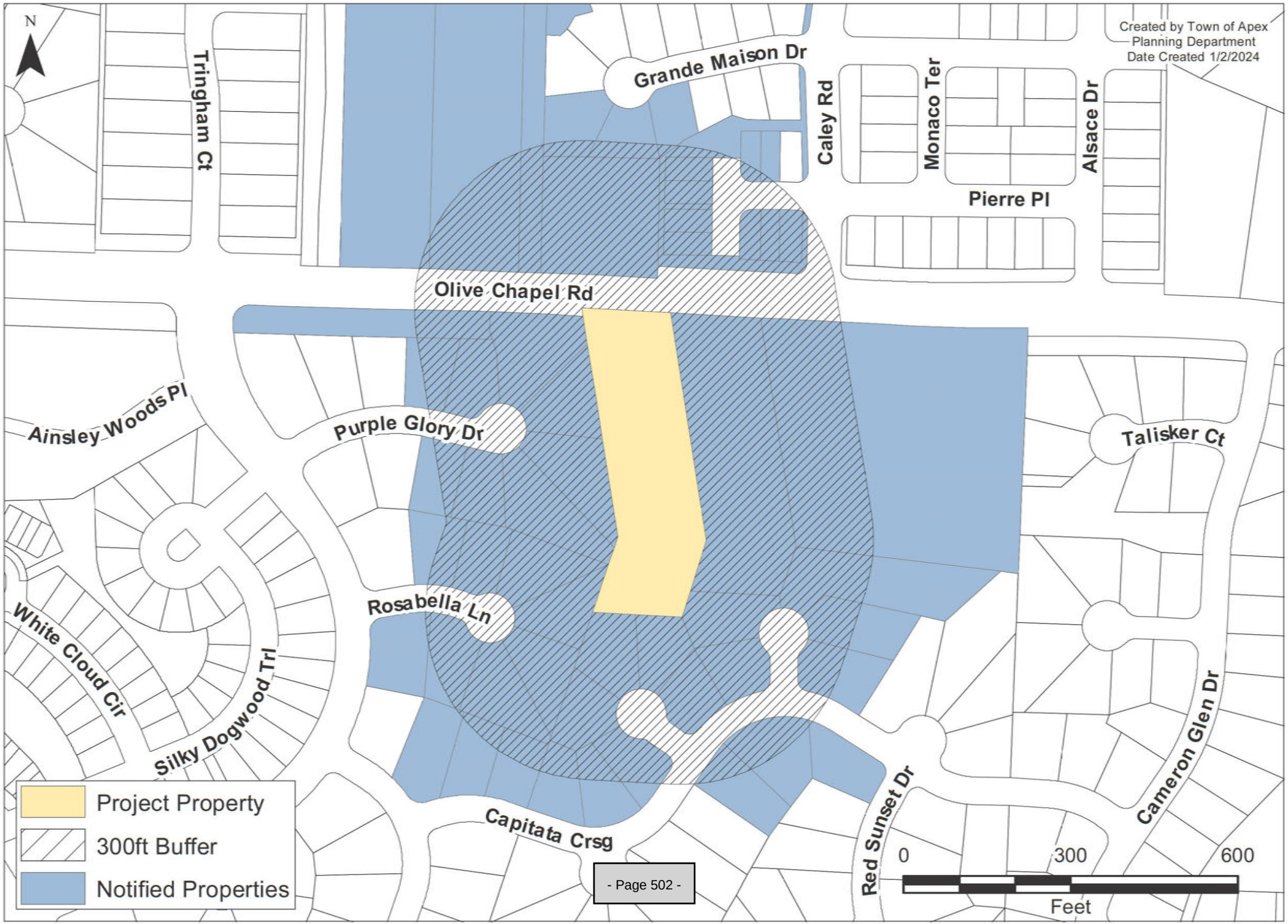
During the meeting, participants will be muted by default. Also, participants' video will be off by default, i.e. only the presenters will be visible.

- If you are participating via your computer, iPhone or Android device, you can submit questions/comments by using the Raise Hand and/or Chat features. If you use Raise Hand, a panelist will either unmute you to allow you to speak or will chat with you to solicit your questions/comments.
- If you are participating via telephone, you can submit questions/comments prior to the meeting via email at tshapiro@morningstarlawgroup.com. At the end of the Q&A period of the meeting, all callers may be unmuted to allow for questions/comments.

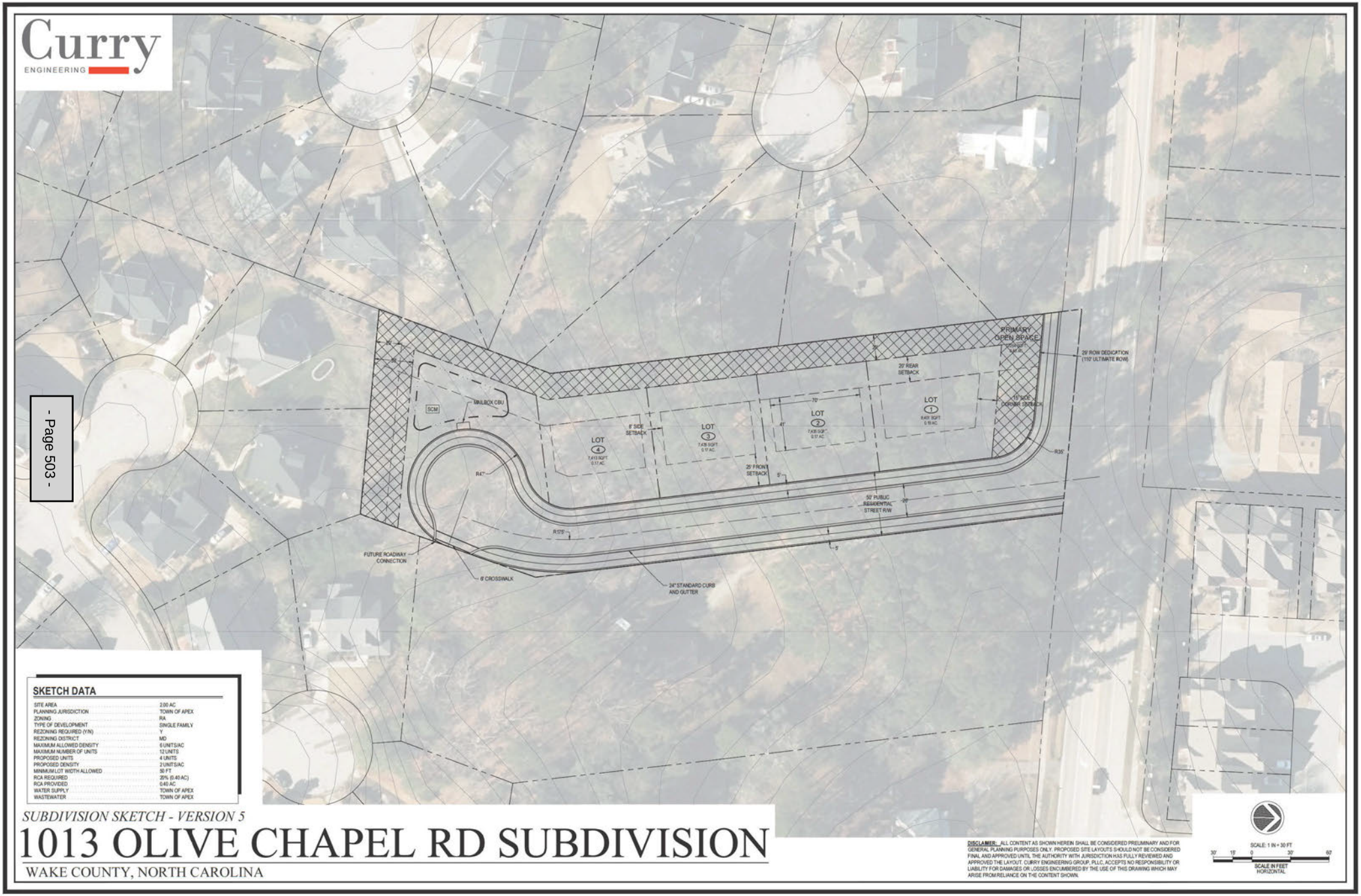

Olive Chapel Rd
Olive Ch
Caley Rd
Purple Glory Dr
Dogwood Rd
White Dogwood Rd
Rosabella Ln


RR
MD-CZ
PUD-CZ
PUD-CZ
Alsace Dr
Pierre Pl
O&I-CU
Healthplex
Zeno Rd
O&I-CU
Olive Chapel Rd
O&I-CU
HD SF-CU
HD MF-CU
Pearson Farms Rd
Capitata Crsg
PUD-CZ
PUD-CU
Cameron Glen Dr
MD-CU
MD-CU
B1 Conditional Use
B1 Conditional Zoning
HDMF Conditional Use
HDSF Conditional Use
MD Medium Density Residential
MD Conditional Use
MD Conditional Zoning
O&I Conditional Use
PUD Planned Unit Development
PUD Conditional Zoning
RA Residential Agricultural
RR Rural Residential

Notified Properties Within 300ft of the Project Property



Curry
ENGINEERING



SKETCH DATA

SITE AREA	2.00 AC
PLANNING JURISDICTION	TOWN OF APEX
ZONING	RA
TYPE OF DEVELOPMENT	SINGLE FAMILY
REZONING REQUIRED (Y/N)	Y
REZONING DISTRICT	MD
MAXIMUM ALLOWED DENSITY	6 UNITS/AC
MAXIMUM NUMBER OF UNITS	12 UNITS
PROPOSED UNITS	4 UNITS
PROPOSED DENSITY	2 UNITS/AC
MINIMUM LOT WIDTH ALLOWED	50 FT
RCA REQUIRED	20% (0.40 AC)
RCA PROVIDED	0.40 AC
WATER SUPPLY	TOWN OF APEX
WASTEWATER	TOWN OF APEX

SUBDIVISION SKETCH - VERSION 5

1013 OLIVE CHAPEL RD SUBDIVISION

WAKE COUNTY, NORTH CAROLINA

DISCLAIMER: ALL CONTENT AS SHOWN HEREIN SHALL BE CONSIDERED PRELIMINARY AND FOR GENERAL PLANNING PURPOSES ONLY. PROPOSED SITE LAYOUTS SHOULD NOT BE CONSIDERED FINAL AND APPROVED UNTIL THE AUTHORITY WITH JURISDICTION HAS FULLY REVIEWED AND APPROVED THE LAYOUT. CURRY ENGINEERING GROUP, PLLC, ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR DAMAGES OR LOSSES ENCUMBERED BY THE USE OF THIS DRAWING WHICH MAY ARISE FROM RELIANCE ON THE CONTENT SHOWN.

SCALE: 1 IN = 30 FT
30' 15' 0 30' 60'
SCALE IN FEET
HORIZONTAL

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: Virtual: https://morningstarlaw.group/01232024.mtg

Date of meeting: January 23, 2024 Time of meeting: 5:30pm-6:30pm

Property Owner(s) name(s): Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Applicant(s): Leticia Shapiro, Morningstar Law Group

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	See Attached List of	Attendees			☐
2.					☐
3.					☐
4.					☐
5.					☐
6.					☐
7.					☐
8.					☐
9.					☐
10.					☐
11.					☐
12.					☐
13.					☐
14.					☐

Use additional sheets, if necessary.

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula

Applicant(s): Leticia Shapiro, Morningstar Law Group

Contact information (email/phone): _____

Meeting Address: Virtual: https://morningstarlaw.group/01232024.mtg

Date of meeting: January 23, 2024 Time of meeting: 5:30pm-6:30pm

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #2:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #3:
See Attached Summary of Discussion

Applicant's Response:

Question/Concern #4:
See Attached Summary of Discussion

Applicant's Response:

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Leticia L. Shapiro, do hereby declare as follows:
Print Name

1. I have conducted a Neighborhood Meeting for the proposed Rezoning, Major Site Plan, Minor Site Plan, Residential Master Subdivision Plan, or Special Use Permit in accordance with UDO Sec. 2.2.7.B *Neighborhood Meeting*.

2. The meeting invitations were mailed to the Apex Planning Department, all property owners and tenants abutting and within 300 feet of the subject property and any neighborhood association that represents citizens in the notification area via first class mail a minimum of 14 days in advance of the Neighborhood Meeting.

3. The meeting was conducted at Virtual: https://morningstarlaw.group/01232024.mtg (location/address) on January 23, 2024 (date) from 5:30pm (start time) to 6:30pm (end time).

4. I have included the mailing list, meeting invitation, sign-in sheet, issue/response summary, and zoning map/reduced plans with the application.

5. I have prepared these materials in good faith and to the best of my ability.

February 28, 2024
Date

By: _____

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Paula H. Zorio, a Notary Public for the above State and County, on this the 28th day of February, 2024.

SEAL

PAULA H. ZORIO
NOTARY PUBLIC
WAKE COUNTY, N.C.

_____
Notary Public

Paula H. Zorio
Print Name

My Commission Expires: 3/26/24

Attendee Report	Webinar ID	Actual Start Time	Actual Duration (minutes)	
1013 Olive Chapel Road Second Neighborhood Meeting	817 3351 6249	1/23/2024 17:16	75	
Host Details				
Attended	User Name (Original Name)	Email	Join Time	
Yes	Leticia Shapiro	[redacted]	1/23/2024 17:16	
Panelist Details				
Attended	User Name (Original Name)		Join Time	
Yes	Don Curry		1/23/2024 17:28	
Yes	Rajanikanth Chippa		1/23/2024 17:19	
Yes	Rajanikanth Chippa		1/23/2024 17:22	
Yes	Rajanikanth Chippa		1/23/2024 17:25	
Yes	Branden Foster		1/23/2024 17:20	
Yes	Srikanth Nalla		1/23/2024 17:19	
Yes	Gurudath Munimakula		1/23/2024 17:28	
Yes	Ashwini Yalala		1/23/2024 17:22	
Attendee Details				
Attended	User Name (Original Name)	First Name	Last Name	Email
Yes	Gloria Dragonette	Gloria	Dragonette	[redacted]
Yes	Robert Santaniello	Robert	Santaniello	
Yes	Barb Fiedler	Barb	Fiedler	
Yes	Susan Hucks	Susan	Hucks	
Yes	Cynthia Wellman	Cynthia	Wellman	
Yes	Roy McCall	Roy	McCall	
Yes	Ken & Joan Ulrich	Ken & Joan	Ulrich	
Yes	Robert Wellman	Robert	Wellman	
Yes	norma Keyes	norma	Keyes	
Yes	kathy sokel	kathy	sokel	
Yes	jeff hastings	jeff	hastings	
Yes	charles king	charles	king	

1013 Olive Chapel Second Neighborhood Meeting

1. Discussion regarding where we are in the rezoning process.
2. Discussed concept plan changes.
3. Discussed current and proposed zoning.
4. We remain quite concerned about the standing water and the runoff from the high water table at the southern end and the inherent slope of the parcel. The recent rains have reinforced our concerns. **Response: We are required to comply with the Town Ordinance requirements. Stormwater controls are planned for the site.**
5. Have the town engineers weighed in on these runoff/standing water issues? Have the engineers provided you with guidance on the proposed SCM outlined in your updated plans? Where is the new SCM outlet expected to drain? **Response: There will be an increase in impervious surface and runoff associated with development, we are required by the Town Ordinance to address runoff rates.**
6. To reiterate, we continue to see a considerable amount of standing water at the southern end of the property, and we are also witness to runoff from the western side of the parcel. Both areas flow into the drain located at the back corner of our property. We have attached some recent photos highlighting these issues. **Response: Currently, drainage flows from north to south on the property. The plan involves implementing an underground sand filter at the southern end to collect and mitigate storm drainage from homes and the roadway, ensuring post-runoff rates do not exceed pre-runoff rates.**
7. With the anticipated removal of vegetation for the construction of the homes and the addition of the asphalt roadway (including a turnaround) that will increase the velocity of the runoff from north to south, what actions are expected to be taken to prevent the runoff/standing water problems from increasing along the southern end? **Response: Unless there are some changes, and once we get the survey, we will know better about the plan, but right now it will be an underground sand filter. It will drain to the south because that's where it goes today, so we will have to release it in the same direction. It is the low part of the property, and everything will continue to drain in that direction. That is the current plan, and it will all be handled during the construction design, drawing, and design phase, which is after the rezoning.**
8. With the current construction on Olive Chapel Road within a mile in each direction of the parcel, (Rehab facility at corner of Apex Peakway and the Professional Park Development closer I540), the heat island effect in the corridor appears to be more dire given the clear-cutting that has been taken place at these locations. It was stated during the first neighborhood meeting that "no mas grading is anticipated" 1013 Olive Chapel Road address. Will mass grading take place with the new plans? **Response: There will not be mass grading on this property; our goal is to preserve as much vegetation as possible. It is in the owners' best interests since everyone likes more mature vegetation in their neighborhood, so we will try to keep as much of the existing tree canopy as possible. If anything is taken down, we must meet the landscaping and buffer requirements of the Town's ordinance. We will supplement the existing**

vegetation with new landscaping, but the plan is to keep as much vegetation as possible.

9. The revised subdivision sketch that you provided to us (Curry Engineering Version 5) is difficult to read. What is the measurement of the buffer expected to be preserved outright (and possibly supplemented with native trees/shrubs as outlined in the UDO)? Or will it be cleared completely and replanted? **Response: The UDO requires a 20ft type B buffer along the western and southern property lines. The applicant is required to meet or exceed this requirement.**
10. Given our concerns for the wildlife habitat that this parcel has supported over the years, what is expected to happen to the mature trees including the longleaf pine that measures over 38" DBH and is approximately 50° from the southern border? Has the Apex Environmental Advisory Boatd provided you with any statements or considerations regarding the preservation of the "champion" tree and other mature trees in the revised plan? **Response: As previously discussed, the plan is to save as many trees as we can along the borders. We are aware of the pine and barred owl. A tree study will be conducted to assess the health of the trees and determine if they can be saved. After rezoning, we will get a full survey of the property so that we know exactly where the trees are and the type of trees, in particular. We will do everything we can to preserve the mature vegetation on the site.**
11. Per our conversations with fellow neighbors, and the comments made during the first neighborhood meeting, traffic is of great concern to all of us. What are the latest plans regarding the traffic situation in and out of the proposed property? Is it still expected to be a 'right turn only' exit? ~Joan Moravick and Kenneth Ulrich. **Response: We have been discussing access to Olive Chapel with staff and they have indicated a desire for a right-in, right-out due to the geometry of the road.**
12. What is the proposed distance of the southern border currently? **Response: A 20-foot type B buffer is required on the southern property line.**
13. It looks extended a bit from what it was originally, it looks wider than it is on the other side so I'm wondering is that now planned to be 30 feet? **Response: We have a requirement to meet the minimum buffer width. We also must comply with the open space requirement of the Town's ordinance for landscaping and open space. That is why it widens at the southern end.**
14. Is the buffer area going to be cleared and then replanted or is it going to be intact the way it is? **Response: There will be some clearing required as part of the development process, but we aim to preserve as much existing vegetation as possible.**
15. You're building four detached homes, building single family homes, but detached homes, correct? **Response: Correct, there are four single family detached homes.**
16. It appears that the town wanted you to flip the street to the western side, could you please talk about that? **Response: I do not remember the details of that.**
17. I saw a note last week and they suggested that were was not adequate frontage on Olive Chapel in the eastern side and the transportation department has advised that it be moved to the western side. **Response: I do not remember seeing that comment but will look into it.**

18. It was from Russell Dalton, it's in section 6 of the comments they provided back. **Response: Yes, we are currently in the middle of reviewing comments and will be discussing these with staff.**
19. So, this could be flipped? **Response: We cannot say no, but I know that was something we had discussed earlier and there was reason for flipping it back. That would be a discussion that Dalton wants to have with us. We continue to have conversations with the town. The layout is subject to change.**
20. I just do not see how this would work with the other driveway coming in on the other side, is that going to automatically make that right in right out? What about the people across the street? Who else is going to have to become right in right out so that you can do this? **Response: This rezoning does not include anybody else's existing or current driveways. Olive Chapel is planned to be a median divided road at some point.**
21. There is a future roadway at the southeast end of the map. Can anyone comment on any plans there for a future road? **Response: The ordinance requires a connection or a stub to the adjacent property. This is typical when you develop a piece of property. Most municipalities have a requirement that stubs to adjacent parcels, which satisfies the connection.**
22. I just don't see how you could do this without forcing a current driveway to become right in and right out because it's going to be within ten feet of each other. **Response: The Town regulates this, so they have standards and requirements for separation between driveways along Olive Chapel Road.**
23. If the only option is right in and right out as the only solution, is the expectation that traffic will have to go through Common Woods? **Response: There are four detached homes planned which will have very minimal impact to any traffic, right turns or U turns.**
24. Will the median require widening on Olive Chapel Road? **Response: Yes, we are still working with the town about what happens on Olive Chapel Road. There is widening that includes a median. Sometimes it involves a fee in lieu due to the fact this is a small piece of property. We are still waiting to hear from the town. The adjacent driveways will not be impacted.**
25. If you put a median or anything in there the only way, you're going to be able to get into that subdivision is to go through and left into Common Woods, then through, back up into Dogwood Ridge, then exit on Olive Chapel Road, while turning right into there. **Response: This is not unusual. We are often dictated by NCDOT or the municipality. An owner cannot be denied access to his/her property. They can place restrictions and we must comply with these standards and direction.**
26. You can do all of this without touching any of the Historical Society Property in the Maine Pearson House? **Response: This house is not on the subject property and will not be touched.**
27. Will the cars make a U-turn in the neighborhoods? Will there be traffic signals? **Response: I am not sure where the traffic signals are going to be placed but this can be found in the transportation plan. Anyone can ask the planning staff what is in the Transportation Department.**

28. Is the road going to go down the east or west side? **Response: The current layout has it on the east side of the property.**
29. Will you enter Olive Chapel Road onto your property or the adjacent property? **Response: This subdivision will be accessed from Olive Chapel Road only.**
30. The road itself will go from Olive Chapel to the back of the property, correct? **Response: Yes, that is correct.**
31. Is there going to be a retention pond? **Response: Since the property is so small, it will likely have an underground sand filter.**
32. When this is developed, will it be a part of the HOA responsibility to take care of? **Response: Response: Yes, an HOA will manage the common area and open space. The Town of Apex will manage the road.**
33. Is there a particular reason you chose the east instead of the west side of the property of our road? **Response: This is a better layout that allows for a stub to the adjacent property. If it were in the other direction, we would not be able to stub to the adjacent property.**
34. Are they really going to be build a 5000 sq ft house? **Response: The house size is subject to the owner's discretion within the limitations of the Town of Apex.**
35. In either direction, there is a hill. Even if the speed limits are reduced to accommodate right in and right out on both sides of Olive Chapel Road, there would still be a dangerously challenging situation. I don't believe the conditions will meet satisfaction. **Response: We will communicate your concern to the town. Currently, we are still in discussions about right in and right-out access.**
36. Will the entrance road include curb gutter and stormwater runoff? **Response: Yes, the road will have curb and gutter with catch basins and storm drainage. It will not be a ditch.**

Tools 23CZ22 ...31145357 Share Sign in

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #23CZ22
1013 Olive Chapel Road

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Authorized Agent: Leticia Shapiro, Morningstar Law Group
Property Address: 1013 Olive Chapel Road
Acreage: ± 2 acres
Property Identification Number (PIN): 0732732042
2045 Land Use Map Designation: Medium Density Residential
Existing Zoning of Property: Residential Agricultural (RA)
Proposed Zoning of Property: Medium Density Residential-Conditional Zoning (MD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: April 8, 2024 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/45238.

11:04 AM
3/25/2024

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #23CZ22
1013 Olive Chapel Road

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Agente autorizado: Leticia Shapiro, Morningstar Law Group
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Designación en el Mapa de Uso Territorial para 2045: Medium Density Residential
Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)
Ordenamiento territorial propuesto para la propiedad: Medium Density Residential-Conditional Zoning (MD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 8 de abril de 2024 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/45238.

F. Khin, AICP
a de Planificación

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #23CZ22
1013 Olive Chapel Road

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

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Proposed Zoning of Property: Medium Density Residential-Conditional Zoning (MD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

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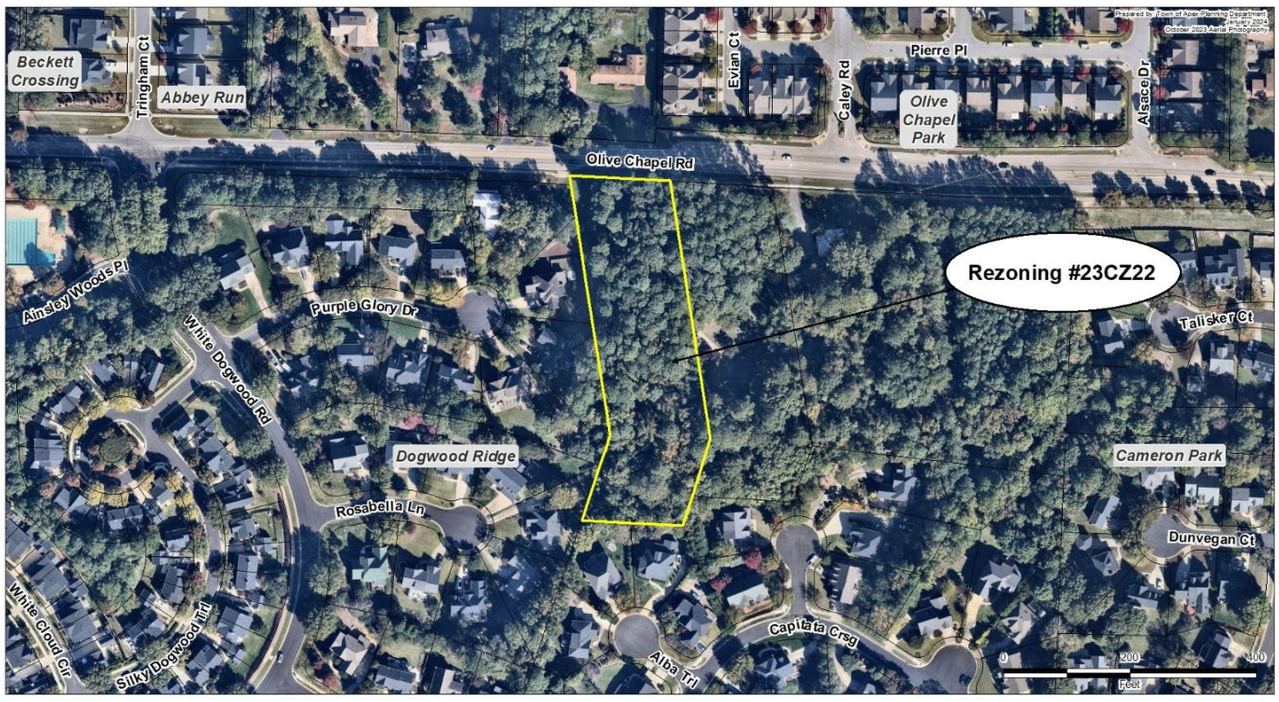
A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



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Dianne F. Khin, AICP
Planning Director

Published Dates: March 25 – April 8, 2024

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #23CZ22
1013 Olive Chapel Road

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Agente autorizado: Leticia Shapiro, Morningstar Law Group
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Números de identificación de la propiedad: 0732732042
Designación en el Mapa de Uso Territorial para 2045: Medium Density Residential
Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)
Ordenamiento territorial propuesto para la propiedad: Medium Density Residential-Conditional Zoning (MD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 8 de abril de 2024 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

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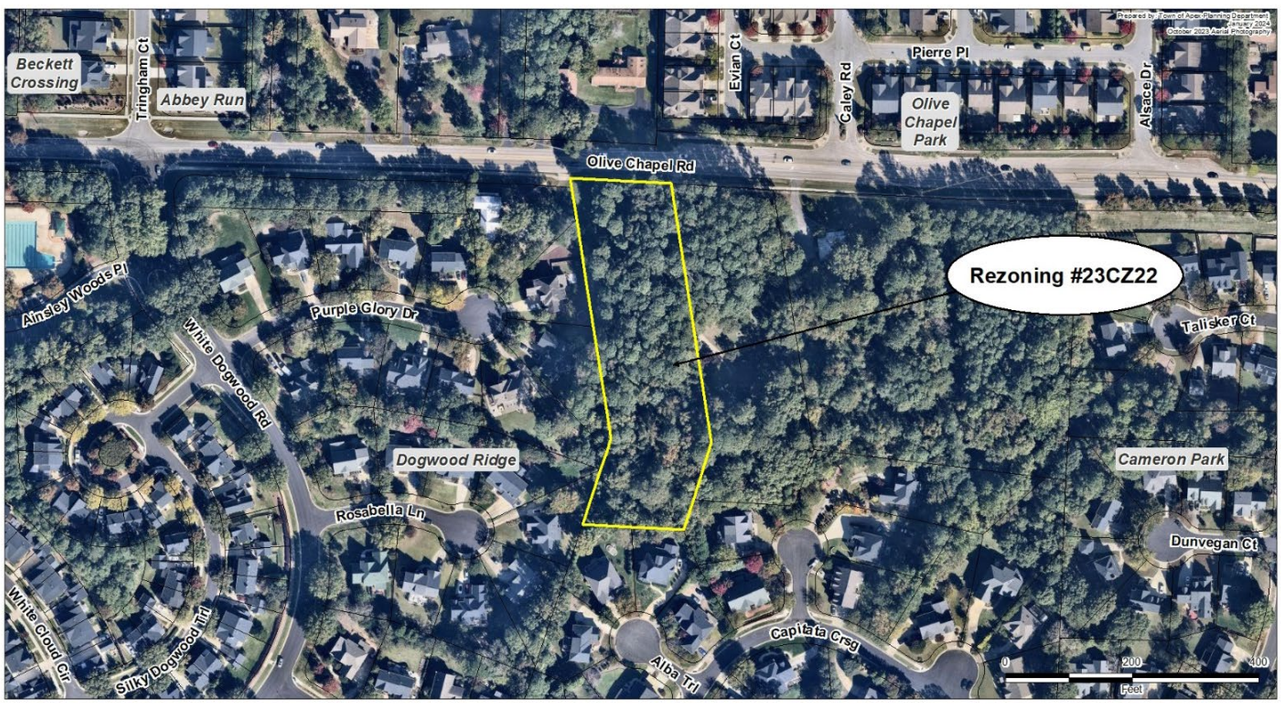
De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/45238.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 25 de marzo – 8 de abril de 2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #23CZ22
Project Location:	1013 Olive Chapel Rd
Applicant or Authorized Agent:	Leticia Shapiro
Firm:	Morningstar Law Group
Planning Board Public Hearing Date:	April 8, 2024
Project Planner:	Joshua Killian

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on March 25, 2024, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

3/25/2024
Date

Planning Director

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Jesus A. Ibanez-Ibarra, a Notary Public for the above State and County, this the 25th day of March, 2024.

Notary Public

JESUS A IBANEZ-IBARRA
My Commission Expires
NOTARY PUBLIC
April 10, 2028
WAKE COUNTY, NC

My Commission Expires: 4/10/2028


Prepared by: Town of Apex Planning Department
November 2023
October 2023 Aerial Photography
Abbey Run
Olive Chapel Park
Tringham Ct
Olive Chapel Rd
Pierre Pl
Caley Rd
Alsace Dr
1013
Rezoning #23CZ22
Purple Glory Dr
White Dogwood Rd
Rosabella Ln
Dogwood Ridge
Silky Dogwood Trl
Alba Trl
Cameron Park
0
200
400
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Public Hearing Sign Posted By
Signature
11/14/2023
Date

TC 23CZ...ce Com... Share Sign in

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS
CONDITIONAL ZONING #23CZ22
1013 Olive Chapel Road

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Authorized Agent: Leticia Shapiro, Morningstar Law Group
Property Address: 1013 Olive Chapel Road
Acreage: ± 2 acres
Property Identification Number (PIN): 0732732042
2045 Land Use Map Designation: Medium Density Residential
Existing Zoning of Property: Residential Agricultural (RA)
Proposed Zoning of Property: Medium Density Residential-Conditional Zoning (MD-CZ)

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: April 23, 2024 6:00 PM
You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council prior to their vote. Please include the Public Hearing name in the subject line.

Vicinity Map:



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...he F. Khin, AICP
...ning Director

8:47 AM
4/2/2024

TC 23CZ...ce Com... Share Sign in

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 275
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS
ORDENAMIENTO TERRITORIAL CONDICIONAL #23CZ22
1013 Olive Chapel Road

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Solicitante: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Agente autorizado: Leticia Shapiro, Morningstar Law Group
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Números de identificación de la propiedad: 0732732042
Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential
Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)
Ordenamiento territorial propuesto para la propiedad: Medium Density Residential-Conditional Zoning (MD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 23 de abril de 2024 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Mapa de las inmediaciones:



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8:48 AM
4/2/2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #23CZ22
1013 Olive Chapel Road

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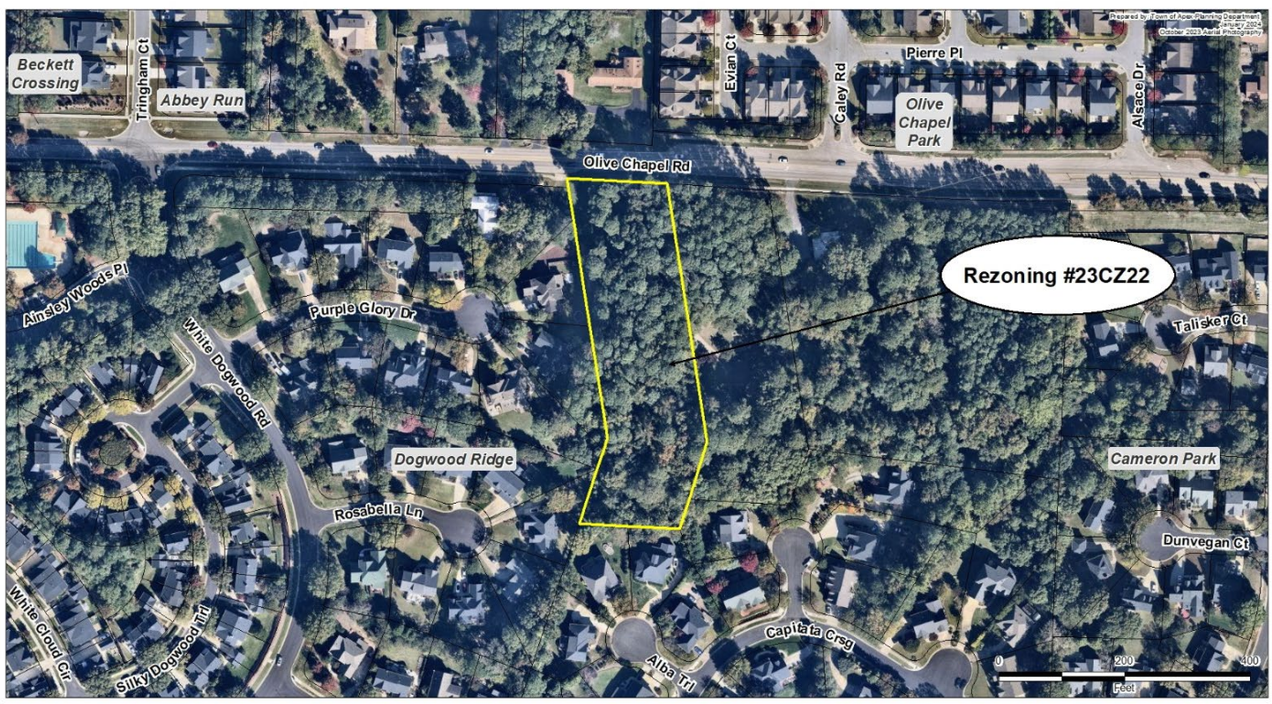
Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Planning Department, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/45238.

Dianne F. Khin, AICP
Planning Director

Published Dates: April 1-23, 2024

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 275
TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #23CZ22
1013 Olive Chapel Road

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Ashwini Kumar Reddy Yalala, Srikanth Nalla, Rajanikanth Chippa and Gurudath Munimakula
Agente autorizado: Leticia Shapiro, Morningstar Law Group
Dirección de la propiedad: 1013 Olive Chapel Road
Superficie: ±2 acres
Números de identificación de la propiedad: 0732732042
Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential
Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)
Ordenamiento territorial propuesto para la propiedad: Medium Density Residential-Conditional Zoning (MD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 23 de abril de 2024 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/45238.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 1-23 de abril de 2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

AFFIDAVIT CERTIFYING
Public Notification – Written (Mailed) Notice

Section 2.2.11
Town of Apex Unified Development Ordinance

Project Name:	Conditional Zoning #23CZ22
Project Location:	1013 Olive Chapel Rd
Applicant or Authorized Agent:	Leticia Shapiro
Firm:	Morningstar Law Group
Town Council Public Hearing Date:	April 23, 2024
Project Planner:	Joshua Killian

This is to certify that I, as Planning Director, mailed or caused to have mailed by first class postage for the above mentioned project on April 1, 2024, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

4/1/2024
Date

Planning Director

STATE OF NORTH CAROLINA
COUNTY OF WAKE

Sworn and subscribed before me, Jesus A. Ibanez-Ibarra, a Notary Public for the above State and County, this the 1st. day of April, 2024.

Notary Public

SEAL

My Commission Expires: 4/10/2028

WAKE COUNTY PUBLIC SCHOOL SYSTEM

Student Assignment
5625 Dillard Drive
Cary, NC, 27518
Email: studentassignment@wcpss.net

tel: (919) 431-7333
fax: (919) 694-7753

December 8, 2023

Dianne Khin, AICP
Director, Department of Planning and Community Development
Town of Apex
Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

- Date of application: November 1, 2023
- Name of development: 23CZ22 1013 Olive Chapel Rd
- Address of rezoning: 1013 Olive Chapel Rd
- Total number of proposed residential units: 5
- Type(s) of residential units proposed: Single-family detached

Based on the information received at the time of application, the Office of School Assignment is providing the following assessment of possible impacts to the Wake County Public School System:

☐ Schools at all grade levels within the current assignment area for the proposed rezoning/development are anticipated to have sufficient capacity for future students.

☒ Schools at the following grade levels within the current assignment area for the proposed rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated:

☐ Elementary ☐ Middle ☒ High

The following mitigation of capacity concerns due to school construction or expansion is anticipated:

☐ Not applicable – existing school capacity is anticipated to be sufficient.

☐ School expansion or construction within the next five years is not anticipated to address concerns.

☒ School expansion or construction within the next five years may address concerns at these grade levels:

☐ Elementary ☐ Middle ☒ High

Thank you for sharing this information with the Town of Apex Planning Board and Town Council as they consider the proposed rezoning/development.

Sincerely,

Susan W. Pollin

PLANNING BOARD REPORT TO TOWN COUNCIL

Rezoning Case: 23CZ22 1013 Olive Chapel Rd

Planning Board Meeting Date: April 8, 2024

Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

PROJECT DESCRIPTION:

Acreage: ±2.0

PIN(s): 0732732042

Current Zoning: Residential Agricultural (RA)

Proposed Zoning: Medium Density Residential-Conditional Zoning (MD-CZ)

2045 Land Use Map: Medium Density Residential

Town Limits: No (ETJ)

Applicable Officially Adopted Plans:

The Board must state whether the project is consistent or inconsistent with the following officially adopted plans, if applicable. Applicable plans have a check mark next to them.

☑ 2045 Land Use Map
☑ Consistent ☐ Inconsistent Reason: _____

☑ Apex Transportation Plan
☑ Consistent ☐ Inconsistent Reason: _____

☑ Parks, Recreation, Open Space, and Greenways Plan
☑ Consistent ☐ Inconsistent Reason: _____

Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1. *Consistency with 2045 Land Use Plan.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Plan.
   ☑ Consistent ☐ Inconsistent Reason: _____

2. *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.
   ☑ Consistent ☐ Inconsistent Reason: _____

3. *Zoning district supplemental standards.* The proposed Conditional Zoning (CZ) District use's compliance with Sec. 4.4 *Supplemental Standards*, if applicable.
   ☑ Consistent ☐ Inconsistent Reason: _____

4. *Design minimizes adverse impact.* The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
   ☑ Consistent ☐ Inconsistent Reason: _____

5. *Design minimizes environmental impact.* The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.
   ☑ Consistent ☐ Inconsistent Reason: _____

6. *Impact on public facilities.* The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
☑ Consistent ☐ Inconsistent Reason: _____

7. *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
☑ Consistent ☐ Inconsistent Reason: _____

8. *Detrimental to adjacent properties.* Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
☑ Consistent ☐ Inconsistent Reason: _____

9. *Not constitute nuisance or hazard.* Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
☑ Consistent ☐ Inconsistent Reason: _____

10. *Other relevant standards of this Ordinance.* Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.
☑ Consistent ☐ Inconsistent Reason: _____

Planning Board Recommendation:

Motion: To recommend approval with conditions as presented except for condition #12 as noted below.

Introduced by Planning Board member: Alyssa Byrd

Seconded by Planning Board member: Sarah Soh

☐ *Approval*: the project is consistent with all applicable officially adopted plans and the applicable legislative considerations listed above.

☑ *Approval with conditions*: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above, so the following conditions are recommended to be included in the project in order to make it fully consistent:

Condition #12 is recommended to read: Access to Olive Chapel Road shall be provided by a single right-in/right-out intersection.

.

☐ *Denial*: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above.

With 8 Planning Board Member(s) voting "aye"

With 0 Planning Board Member(s) voting "no"

Reasons for dissenting votes:

This report reflects the recommendation of the Planning Board, this the 8th day of April 2024.

Attest:

Tina Sherman, Planning Board Chair

Dianne F. Khin Digitally signed by Dianne F. Khin Date: 2024.04.08 17:47:39 -04'00'

Dianne Khin, Planning Director

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: April 23, 2024

Item Details

Presenter(s): Robert Patterson, PE, Senior Stormwater Engineer

Department(s): Water Resources

Requested Motion

Public hearing and possible motion regarding various amendments to the Unified Development Ordinance (UDO).

Approval Recommended?

The Water Resources and Planning Department recommend approval. The Planning Board heard these amendments at their April 8, 2024 meeting and unanimously recommended approval.

Item Details

Amendments to Sec. 6.1 *Watershed Protection Overlay Districts* in order to incorporate the Neuse River Basin stormwater regulations as required by 15A NCAC 02B .0711 *Neuse Nutrient Strategy - Stormwater* and update the riparian buffer mitigation requirements to be consistent with that in 15A NCAC 02B .0295 *Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers*. Amendments to Sec. 8.2.7 *Fences, Walls, and Berms* and Sec. 11.4.4 *Civil Penalties* are proposed to update Section references related to the proposed changes in Sec. 6.1. Also included are amendments to Sec. 12.2 *Terms Defined* in order to update the definition of "Built-Upon Area" to be consistent with that required by NC General Statute 143-214.7 and have Sec. 6.1 refer to Sec. 12.2 to avoid a duplication of the definition.

Background: In the re-adoption of the Neuse Nutrient Strategy Stormwater Rules by the North Carolina Department of Environmental Quality (NCDEQ) on April 1, 2020, the Town of Apex became a "named" community within the Neuse River Basin. During their November 9, 2023 meeting, the NC Environmental Management (EMC) reviewed the Town's draft UDO revisions to incorporate the Neuse stormwater rules subsequently approved the changes. NCDEQ has also revised the riparian buffer mitigation rules to allow for more alternatives to satisfy buffer mitigation when a project requires it.

Attachments

- PH4-A1: Staff Report - Unified Development Ordinance (UDO) Amendments - April 2024
- PH4-A2: Planning Board Report to Town Council - Unified Development Ordinance (UDO) Amendments - April 2024
- PH4-A3: Ordinance - Unified Development Ordinance (UDO) Amendments - April 2024
- PH4-A4: PowerPoint Presentation - Unified Development Ordinance (UDO) Amendments - April 2024


APEX
1873
NORTH CAROLINA

Requested by Water Resources Staff:

1. Amendments to Sec. 6.1 *Watershed Protection Overlay Districts* in order to incorporate the Neuse River Basin stormwater regulations as required by 15A NCAC 02B .0711 *Neuse Nutrient Strategy - Stormwater* and update the riparian buffer mitigation requirements to be consistent with that in 15A NCAC 02B .0295 *Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers*. Amendments to Sec. 8.2.7 *Fences, Walls, and Berms* and Sec. 11.4.4 *Civil Penalties* are proposed to update Section references related to the proposed changes in Sec. 6.1. Also included are amendments to Sec. 12.2 *Terms Defined* in order to update the definition of "Built-Upon Area" to be consistent with that required by NC General Statute 143-214.7 and have Sec. 6.1 refer to Sec. 12.2 to avoid a duplication of the definition.

Background: In the re-adoption of the Neuse Nutrient Strategy Stormwater Rules by the North Carolina Department of Environmental Quality (NCDEQ) on April 1, 2020, the Town of Apex became a "named" community within the Neuse River Basin. During their November 9, 2023 meeting, the NC Environmental Management (EMC) reviewed the Town's draft UDO revisions to incorporate the Neuse stormwater rules subsequently approved the changes. NCDEQ has also revised the riparian buffer mitigation rules to allow for more alternatives to satisfy buffer mitigation when a project requires it.

6.1 WATERSHED PROTECTION OVERLAY DISTRICTS

6.1.1 Purpose, Authority, and Enactment

The purpose of the Watershed Protection Overlay Districts is to ensure the availability of public water supplies at a safe and acceptable level of water quality, to ensure protection of public water supplies for recreational and aesthetic purposes, to minimize sedimentation of streams, and to protect the environment, health, and general welfare of present and future residents of the Town and the Triangle Region under the authority set forth in Sec. 1.2 *Authority* of this Ordinance and in NCGS 160A-174. In addition, the Legislature of the State of North Carolina has, in Chapter 143, Article 21 of the North Carolina General Statutes, entitled Water and Air Resources, directed local governmental units to adopt regulations designed to promote the public health, safety, and general welfare pursuant to the more specific requirements set forth in 15A NCAC 2B .0100, 15A NCAC 2B .0200, ~~and~~ in the Jordan Water Supply Watershed Nutrient Management Strategy Rules, 15A NCAC 2B .0262 through .0273 and .0311(p)**, and the Neuse Nutrient Strategy: Stormwater Rule, 15A NCAC 02B .0731**. Also pursuant to the Federal Water Pollution Control Act of 1972, federal Phase II Stormwater rules promulgated under it, and NCGS 143-215.1 and S.L. 2006-246, the Town is required to obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management for its municipal separate storm sewer system and to adopt, among other things, requirements and procedures to control the adverse effects of increased post development stormwater runoff and nonpoint and point source pollution associated with new development and redevelopment. (Additional specific purposes may be found in the Swift Creek Land Management Plan and the 2045 Land Use Map Update.) In furtherance of these goals and under such authorities, the Town of Apex promulgated this Sec. 6.1 *Watershed Protection Overlay Districts*.

…

6.1.3 Exemptions

…

A) ~~Development~~ **Single-family, duplex residential and related recreational development and expansion of development** that cumulatively disturbs less than one (1) acre and is not part of a larger common plan of development;

B) Development of an individual single-family or duplex residential lot that is located within the Neuse River Watershed, is not part of a larger common plan of development or sale, and does not result in a greater than five (5) percent built-upon area on the lot;

C) Commercial, industrial, institutional, multi-family, or local government development that cumulatively disturbs less than one-half (0.5) acre, does not expand existing structures on a parcel, and is not part of a larger common plan of development;

D) Commercial, industrial, institutional, multi-family, or local government development that cumulatively disturbs less than one-half (0.5) acre and does expand existing structures on a parcel, but does not result in a cumulative built upon area for the parcel exceeding that allowed in Sec. 6.1.6.B.1.a;

~~B)~~**E)** Redevelopment that cumulatively disturbs less than ~~one (1) acre~~ **the thresholds established in Sec. 6.1.3.A through D** and is not part of a larger common plan or development or sale;

~~C)~~**F)** Development Existing as of the Effective Date of this Section

…

~~D)~~**G)** *Expansions to Existing Development*

Any expansion to a lot or project that is exempt from the requirements of Sec. 6.1 pursuant to Sec. 6.1.3.~~C~~**F.** *Development Existing as of the Effective Date of this Section* and disturbs greater than ~~one (1) acre~~ **the thresholds established in 6.1.3.A through D** must comply with the requirements of Sec. 6.1. The built-upon area of the existing development shall be included in the built-upon area calculations for any proposed expansion to any such lot or project**; but only the net increase in built-upon area is subject to stormwater treatment requirements**. Provided, however, that the built-upon area of any school facility owned by the Wake County Public School System or any qualified nonpublic school that is exempt from the requirements of Sec. 6.1 pursuant to Sec. 6.1.3.~~C~~**F** *Development Existing as of the Effective Date of this Section* is not required to be included in the built-upon area calculations for any expansion to such existing development. For purposes of this Section, "school facility" means any building, structure or other facility used by the Wake County Public School System or any qualified nonpublic school for educational purposes. For purposes of this Section, "qualified nonpublic school" means a school having an enrollment of 100 or more students, and that has one or more of the characteristics set out in NCGS 115C-555.

~~E)~~**H)** *Developments and Uses Exempted by State Law*

…

~~F)~~**I)** *Complete Applications*

…

6.1.6 Low-Density Development Option

A) *General*

All development within both the Primary Watershed Protection District and the Secondary Watershed Protection District shall be designed to comply with the standards of the low-density development option unless the Technical Review Committee or Town Council, as applicable, approves a plan of development pursuant to the procedures and standards for the high-density development option, or unless a minor or major variance is approved pursuant to Sec. 6.1.~~13~~**14** *Modifications by Variance.*

…

6.1.7 High-Density Development Option

…

B) *Within the Primary Watershed Protection District*

…

3) *Stormwater Control Measures (SCMs)*

All stormwater control measures shall meet the requirements in Sec. 6.1.~~12~~**13** *Stormwater Control Measures*.

For water quality purposes, SCMs shall be used to collect and hold the runoff from the first one-(1) inch of rainfall. This runoff volume shall be released in two (2) to five (5) days in accordance with Sec. 6.1.~~12~~**13**.

…

…

7) *Nitrogen Control Requirements.*

For development located within the Neuse River Watershed the nitrogen control requirements in Sec. 6.1.12 shall be met. The developer shall submit an electronic version of the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources at the first construction drawing submittal.

C) *Within the Secondary Watershed Protection District*

…

5) *Nitrogen Control Requirements.*

For development located within the Neuse River Watershed the nitrogen control requirements in Sec. 6.1.12 shall be met. The developer shall submit an electronic version of the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources at the first construction drawing submittal.

6.1.9 Definition of Built-Upon Area

Built-upon area is defined in Sec. 12.2 *Terms Defined*.~~For the purposes of complying with the standards and requirements of the Watershed Protection Overlay Districts, calculation of the built-upon area within the proposed development shall include, but not be limited to, all existing public and private streets, proposed public streets, sidewalks, driveways, rooftops, parking lots, patios, and all other impervious and partially impervious surfaces, including CABC and gravel within the development. The water area of swimming pools and wooden slatted decks shall not be included in the calculation of the built-upon area.~~

6.1.11 Riparian Buffers

…

G) *Uses Permitted Within the Riparian Buffer*

…

2) Within Zone 3 of a Riparian Buffer in the Neuse River Basin and All Other Remaining Areas of Both the Primary Watershed Protection District and the Secondary Watershed Protection District

…

b) All uses not categorized as exempt, allowable, or allowable with mitigation are considered prohibited and may not proceed within the riparian buffer or outside the buffer if the use would impact the buffer, unless a variance is granted pursuant to Sec. 6.1.~~13~~**14** below.

Table 6.1.11.G.1

Use	Exempt*	Allowable*	Allowable with Mitigation*
…			
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this Ordinance[3,5,7]: • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width • Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of riparian buffer	X	X X	X X
…			

…

[7]Utility maintenance corridor shall have the same meaning as a utility easement.

3) Requirements for Categories of Uses

…

c) ALLOWABLE WITH MITIGATION. Uses designated as allowable may proceed within the riparian buffer provided that there are no practical alternatives to the requested use pursuant to Sec. 6.1.11.G.4 Determination of "No Practical Alternatives" and an appropriate mitigation strategy has been approved pursuant to Sec. 6.1.~~14~~**15** below. These uses require written authorization from the Town of Apex.

…

5) Mitigation

…

b) Obtain approval for a mitigation proposal pursuant to Sec. 6.1.~~14~~**15**.

…

6.1.12 Nitrogen Control Requirements.

A) *Nutrient Loading Rate Targets.*

1) The development shall meet either a nitrogen stormwater loading rate target of 3.6 pounds per acre per year, or the "runoff volume match" as defined in 15A NCAC 02H .1002.

2) The development area used for nutrient calculation and stormwater requirements include the site area less any existing built-upon-area. The development density used for determining stormwater requirements is the amount of built-upon-area subject to Sec. 6.1 at development completion divided by the development area.

3) The developer shall determine the nitrogen load and loading rate generated from the development area without stormwater control measures (SCMs) and determine the needed nitrogen load reduction to meet nutrient targets by using the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Quality.

B) *Methods to Meet Nutrient Control Requirements.*
Development subject to Sec. 6.1 shall meet nitrogen loading target through a combination of the following methods:

1) Developments may reduce export of nitrogen through any combination of engineered SCMs treating runoff on the property, in an approved offsite regional SCM, or through acquisition of permanent nutrient offset credits. The developer shall calculate the nitrogen reduction provided by these controls using the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources.

2) Proposed development undertaken by a local government solely as a public road expansion or public sidewalk project, or proposed development subject to the jurisdiction of the Surface Transportation Board, may meet nitrogen reduction needs for a development entirely through the use of permanent nitrogen offset credits pursuant to the Nutrient Offset Credit Trading Rule, 15A NCAC 02B.0703.

C) *Use of Permanent Nutrient Offset Credits.*

1) Sufficient permanent nutrient offset credits to meet development nutrient reduction needs not provided by engineered SCMs serving the development shall be acquired prior to approval of a development plan. The Stormwater Engineering Manager shall issue an approval letter for the development that documents the needed nitrogen credits and where the development is located relative to the Neuse Rules' geographic requirements. All permanent nutrient offset credits permitted pursuant to Sec. 6.1 shall meet the requirements of 15A NCAC 02B.0703.

2) Permanent nutrient offset credits shall be acquired pursuant to N.C.G.S. 143-214.26 and 15A NCAC 02B.0703 prior to the start of construction of the development project.

3) A developer subject to Sec. 6.1 may acquire permanent nutrient offset credits through of the following methods:

a) A private nutrient bank;

b) Offsite offset provided by the developer and approved by the Stormwater Engineering Manager; or

c) Payment into the Riparian Buffer Restoration Fund established by NCGS 143-214.21.

~~6.1.12~~**6.1.13** Stormwater Control Measures (SCMs)

…

F) *Compliance Prior to Receiving Plat Approval or Certificate of Occupancy*
Subject to Subsection G. below, prior to approval of a Final Plat (with respect to a subdivision), issuance of a certificate of occupancy (with respect to a site plan), or commencement of a use for any development upon which a SCM is required, the owner shall have installed the improvements required by this Article and shall have received the approval of the Stormwater Engineering Manager with respect to the improvements. Upon installation of the required improvements, the Stormwater Engineering Manager or designee shall inspect the SCM and the owner shall demonstrate that the required structure is in place, that it is operational, that it complies with all relevant portions of Sec. 6.1.~~12~~**13** *Stormwater Control Measures (SCMs)*, and shall submit to the Stormwater Engineering Manager actual "as built" plans for the structure, which shall include the information listed in Article 6: *Overlay Districts*, and Section 1.06(c) Stormwater Drainage System of the *Town of Apex Standard Specifications and Standard Details*, certifying completion of the same.

G) *Performance Guarantees*

…

3) *Duration of performance guarantee.* Performance guarantees shall run until the requirements of Sec. 6.1.~~12~~**13** have been satisfied and the Stormwater Engineering Manager has given final approval of the required SCM(s).

4) *Default.* Failure of the owner to construct, repair, and if necessary, reconstruct the SCM(s) as required by Sec. 6.1.~~12~~**13** is a default. Upon such default, the Town may obtain and use all or any portion of the performance guarantee necessary to complete the improvements.

…

H) *Maintenance and Maintenance Guarantees*

1) *Duty to maintain and maintenance and defects guarantee.* The owner is responsible for all maintenance and repair of improvements required by this Article. In addition to the Operation and Maintenance Agreement required by Sec. 6.1.~~12~~**13**.D, with respect to a subdivision, a maintenance and defects guarantee shall be provided by the owner in the amount equal to 25% of the total construction cost of the SCM to ensure proper maintenance and repair prior to conveyance of the improvements to a property owners association. The maintenance and defects guarantee shall be submitted to the Town of Apex prior to SCM final approval. The owner's estimate of this amount shall be

submitted and is subject to review, modification, and approval by the Stormwater Engineering Manager. Such estimate shall be signed and sealed by a licensed North Carolina professional engineer, landscape architect, or land surveyor. Guarantees required by this Section may be in the form of a surety bond enforceable at the sole discretion of the Town and in the form prescribed by the Town, a letter of credit that meets the specifications of Sec. 7.5.17 *Irrevocable Letter of Credit in Lieu of Surety Bond or Other Guarantee of Performance*, certified check drawn in favor of the Town, or cash deposited with the Town.

…

~~6.1.13~~**6.1.14** Modifications by Variance

A) *General*

Requests for minor and major variances from the standards of the Watershed Protection Overlay Districts shall be made to the Board of Adjustment, except for variance requests pertaining to impacts within Zone 1 and/or Zone 2 of a riparian buffer within the Neuse River Basin which shall be made to the Director of the NC DEQ as specified below in Sec. 6.1.~~13~~**14**.B.1.b and B.2.c. Due to certain process differences in State statutes or rules for decision making and appeals based on which basin or watershed a proposed project is located, a separate variance provision is set forth below for each of the following basins or watersheds: (i) the Neuse River Basin, (ii) the Jordan Lake Watershed portion of the Cape Fear River Basin and (iii) the Cape Fear River Basin outside of the Jordan Lake Watershed.

Sec 6.1.~~13~~**14**.F sets forth an alternative variance process that is available for, but not required to be used by, an applicant seeking a variance from Sec. 6.1 density requirements for a project located in the Secondary Watershed Protection District and/or from Town Buffer requirements. Town Buffers and State Buffers are defined in Sec. 6.1.~~14~~**15**.C. The purpose of this alternative variance process is to provide additional design flexibility for a project that provides a unique or additional benefit to the Town or surrounding area that would not be available from a traditional development located in areas within the Town or its ETJ where the applicable requirements of Sec. 6.1 are not part of a State authorized program, or where separate State rules do not apply.

All applications for variances made to the Board of Adjustment shall be reviewed by the Board of Adjustment, which shall approve, approve with conditions (which may include mitigation requirements), or disapprove the variance after a public hearing noticed pursuant to Sec. 2.2.11 Public Notification, and conducted pursuant to Sec. 2.2.19 *Quasi-judicial Public Hearing Procedures*, based on the applicable standards in Sec. 6.1.~~13~~**14**.E or F.

B) *Variances for Activities in the Neuse River Basin*

1) *Minor Variances*

a) *Minor Variance Requests that are to be Submitted to the Board of Adjustment.*

…

(iii) It pertains to activities that will impact Zone 3 of a riparian buffer located within the Neuse River Basin. However, if the impacted area is also within the Neuse River Basin's Primary Watershed Protection District and along perennial waters

within a high- density development option area, the area of proposed impacts in the buffer also shall not exceed five (5%) percent of the buffer area. If such proposed activity within the Neuse River Basin requiring a variance for Zone 3 also includes impacts to Zone 2 that require a variance, then as specified in Sec. 6.1.~~13~~**14**.B.1.b.i. the Director of the NC DEQ shall consider the variance request as it pertains to Zone 2 impacts, and a separate variance request shall be submitted to the Board of Adjustment pertaining to Zone 3 impacts.

…

b) *Minor Variance Requests that are to be Submitted to the NC DEQ*. A variance request for an activity in the Neuse River Basin shall be considered minor and a decision on such request shall be made by the NC DEQ when:

(i) It pertains to activities that will impact Zone 2 of a riparian buffer located within the Neuse River Basin. However, if the impacted area is also within the Neuse River Basin's Primary Watershed Protection District and along perennial waters within a high density development option area, the proposed impacts to the buffer also shall not exceed five (5%) percent of the buffer area. If such proposed activity within the Neuse River Basin requiring a variance for Zone 2 also includes impacts to Zone 3 that require a variance, then the Director of the NC DEQ shall consider the variance request as it pertains to Zone 2 impacts, and as specified in Sec. 6.1.~~13~~**14**.B.1.a.iii a separate variance request shall be submitted to the Board of Adjustment pertaining to Zone 3 impacts.

…

2) *Major Variances*

a) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Decided by the Board of Adjustment.*

…

An appeal of a major variance decision made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.B.2.a shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

b) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Forwarded to the Environmental Management Commission Upon Approval*.

…

Following a public hearing on an application within the scope of this Sec. 6.1.~~13~~**14**.B.2.b, the Board of Adjustment shall provide its recommendation to the Environmental Management Commission if the Board of Adjustment determines that the variance should be granted. After the Board of Adjustment reviews and recommends approval of the application for the major variance, the Planning Director shall prepare and forward to the Environmental Management Commission for consideration the following materials relevant to the application:

…

C) *Variances for Activities in the Jordan Lake Watershed Portion of the Cape Fear River Basin*

…

2) *Major Variances*

a) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Decided by the Board of Adjustment*.

…

An appeal of a major variance decision made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.C.2.a. shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

…

c) Following a public hearing on an application within the scope of this Sec. 6.1.~~13~~**14**.C.2.b, the Board of Adjustment shall provide its recommendation to the Environmental Management Commission if the Board of Adjustment determines that the variance should be granted. After the Board of Adjustment reviews and recommends approval of the application for the major variance, the Planning Director shall prepare and forward to the Environmental Management Commission for consideration the following materials relevant to the application:

…

D) *Variances for Activities in the Cape Fear River Basin outside of the Jordan Lake Watershed*

…

2) *Major Variances*

a) *Major Variance Requests that are to be Submitted to the Board of Adjustment.*

…

Appeals of major variance decisions made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.D.2 shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

E) *Standards*

1) *General.* The standards set forth in Sec. 6.1.~~13~~**14**.E.2-3 shall be applicable to all variance requests submitted to the Board of Adjustment, except for a request submitted pursuant to the alternative variance process in Sec. 6.1.~~13~~**14**.F.

…

F) *Alternative Process and Standards for Variance From Density Requirements in Secondary Watershed Protection District and/or From Impacts to Town Buffers*

1) An applicant seeking a variance from the density requirements in Sec. 6.1, which may include stormwater management requirements, for a project located in the Secondary Watershed Protection District, and/or from buffer requirements applicable to a Town Buffer as defined in Sec. 6.1.~~14~~**15**.C.1, may elect to, but is not required to, seek such variance pursuant to the process and standards set forth in this Sec. 6.1.~~13~~**14**.F. The purpose of this alternative variance process is

to provide additional design flexibility for a project that provides a unique or additional benefit to the Town or surrounding area that would not be available from a traditional development in areas where the applicable Ordinance requirements are not part of a State authorized program or where separate State rules do not apply.

…

4) Prior Approvals Required Before Submitting a Variance Request Under Sec. 6.1.~~13~~**14**.F.

a) Prior to submitting a variance request to the Board of Adjustment pursuant to this Sec. 6.1.~~13~~**14**.F, the applicant shall first have obtained all required permits and approvals for the proposed development from the DEQ and/or US Army Corps of Engineers, as may be applicable, with regard to any proposed dredging or filling of surface waters within the proposed development, and with regard to any proposed impacts to State Buffers in the Neuse River Basin (i.e. Zone 1 or Zone 2) or in the Cape Fear River Basin outside of the Jordan Lake Watershed (i.e. Zone 1).

(i) Although the Board of Adjustment may approve a variance request for impacts to Zone 1 of a riparian buffer in the Cape Fear River Basin outside of the Jordan Lake Watershed pursuant to the variance process in Sec. 6.1.~~13~~**14**.D.2, advance DEQ approval will be required for such impacts to Zone 1 of a riparian buffer in the Cape Fear River Basin outside of the Jordan Lake Watershed if the impacts are part of a project for which a variance is being sought pursuant to this Sec. 6.1.~~13~~**14**.F.

b) If the proposed project will impact any State Buffer in the Jordan Lake Watershed (i.e. Zone 1 or Zone 2) then, prior to submitting a variance request to the Board of Adjustment under this Sec. 6.1.~~13~~**14**.F for the remainder of the project, the applicant shall first submit a separate variance request to the Board of Adjustment pursuant to the applicable process and standards set forth in Sec. 6.1.~~13~~**14**.C and E pertaining to such impacts to Zone 1 and/or Zone 2, and the applicant shall have obtained approval of this request. Pursuant to Sec. 6.1.~~13~~**14**.C.1.iii a minor variance request pertaining to Zone 2 of a buffer in the Jordan Lake Watershed will be determined by the Board of Adjustment. Pursuant to Sec. 6.1.~~13~~**14**.C.2.b.iii, a major variance request pertaining to Zone 1, or Zone 1 and 2, of a buffer in the Jordan Lake Watershed shall first be considered by the Board of Adjustment, and the Board of Adjustment shall provide its recommendation to the Environmental Management Commission for final decision if the Board determines that the variance should be granted.

5) An applicant for a variance who is electing to proceed pursuant to this Sec. 6.1.~~13~~**14**.F shall clearly state that intent in the application and shall provide written confirmation with the application that all prior approvals required pursuant to Sec. 6.1.~~13~~**14**.F.4 above have been obtained, or that no such approvals are required.

6) The application shall then be reviewed by the Board of Adjustment, which shall approve, approve with conditions (which may include mitigation requirements), or disapprove the variance after a public hearing noticed pursuant to Sec. 2.2.11 Public Notification, and conducted pursuant to Sec. 2.2.19 Quasi-judicial Public Hearing Procedures, based on the standards in Sec. 6.1.~~13~~**14**.F.2 and 3.

…

~~6.1.14~~**6.1.15** Mitigation for Riparian Buffers

A) *Applicability*

1) This Section applies to persons who wish to impact a riparian buffer within the Town or its ETJ when one of the following applies:

…

b) The person has received a variance pursuant to Sec. 6.1.~~13~~**14** and is required to perform mitigation as a condition of a variance approval.

2) The mitigation provisions of this Sec. 6.1.~~14~~**15** apply to all buffer requirements in the Town or its ETJ, except that in the area of the Town or its ETJ in the Neuse River Basin the buffer mitigation requirements for Zones 1 and 2 shall be administered by the NC DEQ.

B) *Issuance of the Mitigation Approval*

The Town shall issue a mitigation approval upon determining that a proposal meets the requirements set out in this Sec. 6.1.~~14~~**15**. The approval shall identify at a minimum the option chosen for meeting the mitigation requirement, the required area of mitigation, ~~and~~ either the mitigation location or the offset payment amount as applicable**, and the water quality benefits to be provided by the mitigation site. For each mitigation site proposed by an applicant under 6.1.15.G or 6.1.15.H, the following criteria shall be met:**

1) The location of the buffer mitigation site shall comply with the requirements of 6.1.15.D and E.

2) The mitigation proposal shall include a commitment to provide:

a) a perpetual conservation easement or similar preservation mechanism to ensure perpetual stewardship that protects the mitigation site's nutrient removal and other water quality functions;

b) a non-wasting endowment or other dedicated financial surety to provide for the perpetual land management and hydrological maintenance of lands and maintenance of structures as applicable; and

c) financial assurance in the form of a completion bond, credit insurance, letter of credit, escrow, or other vehicle acceptable to the Town payable to, or for the benefit of, the Town in an amount sufficient to ensure that the property is secured in fee title or by easement, and that planting or construction, monitoring and maintenance are completed as necessary to meet success criteria as specified in the

approved mitigation plan. This financial assurance obligation shall not apply to the NC Division of Mitigation Services (DMS).

3) Diffuse flow of runoff shall be maintained in the riparian buffer. Any existing impervious cover or stormwater conveyances such as ditches, pipes, or drain tiles shall be eliminated and the flow converted to diffuse flow. If the applicant determines that elimination of existing stormwater conveyances is not feasible, then they shall include a justification and shall provide a delineation of the watershed draining to the stormwater outfall and the percentage of the total drainage by area treated by the riparian buffer with the mitigation plan specified in 6.1.15.G. and H. for Town approval. During mitigation plan review and approval, the Town may reduce credit proportionally.

4) Sewer easement within the buffer. If the proposed mitigation site contains a sewer easement in Zone 1, that portion of the sewer easement within Zone 1 shall not be suitable for buffer mitigation credit. If the proposed mitigation site contains a sewer easement in Zone 2, the portion of the sewer easement in Zone 2 may be suitable for buffer mitigation credit if:

a) the applicant or mitigation provider restores or enhances the forested buffer in Zone 1 adjacent to the sewer easement;

b) the sewer easement is required to be maintained in a condition that meets the vegetative requirements of the collection system permit; and

c) diffuse flow is provided across the entire buffer width.

5) The applicant shall provide a site specific credit/debit ledger to the Town at regular intervals as specified in the mitigation plan approval or mitigation banking instrument once credits are established and until they are exhausted.

6) Buffer mitigation credit, nutrient offset credit, wetland mitigation credit, and stream mitigation credit shall be accounted for in accordance with the following:

a) Buffer mitigation used for buffer mitigation credit shall not be used for nutrient offset credits;

b) Buffer mitigation credit shall not be generated within wetlands that provide wetland mitigation credit required by 15A NCAC 02H .0506; and

c) Buffer mitigation credit may be generated on stream mitigation sites as long as the width of the restored or enhanced riparian buffer meets the requirements in Table 6.1.15.G.1.

C) *Options for Meeting the Mitigation Requirements*
The mitigation requirement may be met through one of the following options:

1) *State Buffers.* The mitigation requirements for State Buffers (defined herein as buffers required by the State laws and/or rules, or approved by the State as a State authorized program) may be met through one of **the** options ~~a), b), or c)~~ below. More specifically, State Buffers are: the 50-foot buffer required in the Neuse River Basin area of the Town and its ETJ; the 50-foot buffer required in the Jordan Lake Watershed area of the Town and its ETJ; the 30-foot buffer required by Phase 2 stormwater rules throughout the Town and its ETJ; the 30-foot buffer required adjacent to perennial waters in the Primary Watershed Protection District for developments utilizing the low-density option; and the 100-foot buffer required adjacent to perennial waters in the portion of the Primary Watershed Protection District within the Neuse River Basin for developments utilizing the high-density option. All other buffers in the Town and its ETJ regulated by Sec. 6.1 are referred to as "Town Buffers."

a) Payment of a compensatory mitigation fee either (i) to~~ the State Riparian Buffer Restoration Fund pursuant to State rules applicable to the location of the State Buffer that is lost, contingent upon acceptance of payments by the NC Ecosystem Enhancement Program~~ **a compensatory buffer mitigation bank pursuant to Sec. 6.1.15.I**, or (ii) to~~ a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently set out at http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890, and the applicable trading criteria in State rules applicable to the location of the impacted State Buffer~~ **the Riparian Buffer Restoration Fund pursuant to Sec. 6.1.15.J. Payment shall conform to the requirements of N.C.G.S. 143-214.20**;

b) Donation of real property or of an interest in real property pursuant to Sec. 6.1.~~14~~**15**.F.; ~~or~~

c) Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Sec. 6.1.~~14~~**15**.G.

d) Alternative buffer mitigation pursuant to the requirements of Sec. 6.1.15.H; or

e) Other buffer mitigation approved as a condition of a variance approval.

2) *Town Buffers*. The mitigation requirement for Town Buffers may be met through one of the following options.

a) **Alternative buffer mitigation pursuant to the requirements of Sec. 6.1.15.H.**~~Construction of an alternative measure or combination of measures that reduce nutrient loading as well or better than the riparian buffer that is lost, that is located in the same river basin as the riparian buffer that is lost, and that is approved by the Town. Such measures may include stormwater control measures and other means of capturing and controlling nutrients and other pollutants and shall be located on the site of the riparian buffer that is lost, if practicable, or as close to that location as is practicable~~;

b) Payment of a compensatory mitigation fee either: (i) **to a compensatory buffer mitigation bank pursuant to Sec. 6.1.15.I, (ii) to the Riparian Buffer Restoration Fund pursuant to Sec. 6.1.15.J, or (iii)** to a Town Riparian Buffer Restoration Fund established by the Town, if such fund is established and available at the time, and such fee shall be calculated using the same fee per square foot or acre as established in the State rules for a buffer in the same basin or watershed as the Town Buffer at issue, but the applicable multiplier to determine the required area of mitigation shall be determined pursuant to Sec. 6.1.~~14~~**15**.D.2**. Payment shall conform to the requirements of N.C.G.S. 143-214.20**~~, or (ii) to a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently as set out at http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890, and the applicable trading criteria in State rules applicable to the location of the State Buffer that is lost~~;

c) Donation of real property, or of an interest in real property, pursuant to Sec. 6.1.~~14~~**15**.F.; ~~or~~

d) Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Sec. 6.1.~~14~~**15**.G.~~;~~ **; or**

e) Other buffer mitigation approved as a condition of a variance approval.

D) *The Area of Mitigation*

The Town shall determine the required area of mitigation for all mitigation options identified above in Sec. 6.1.~~14~~**15**.C and as further specified in the requirements for each option set out in this Sec. 6.1.~~14~~**15**, according to the following:

…

2) The required area of mitigation shall be determined by applying the following multipliers to the area of the impacts determined according to Sec. 6.1.~~14~~**15**.D.1. for each zone of the riparian buffer:

…

d) Impacts to wetlands within Zones 1 and 2 of the riparian buffer that are subject to mitigation under 15A NCAC **0**2H .0506 shall comply with the mitigation ratios in 15A NCAC **0**2H .0506**; and shall be deducted from buffer mitigation area**.

3) Mitigation activities shall generate riparian buffer mitigation units in accordance with Table 6.1.15.D.1 below:

Table 6.1.15.D.1

Mitigation Activity	Square Feet of Mitigation Buffer	Riparian Buffer Mitigation Units Generated
Restoration Site	1	1
Enhancement Site	2	1
Preservation Site on Non-Subject Urban Streams	3	1
Preservation Site on Subject Urban Streams	3	1
Preservation Site on Non-Subject Rural Streams	5	1
Preservation Site on Subject Rural Streams	10	1

E) *The Location of Mitigation of Buffer Impacts*

1) *State Buffers*. For any option chosen for mitigation of State Buffer impacts, ~~the mitigation effort~~ **the following locational multipliers** shall be **applied to the area of mitigation, determined according to Sec. 6.1.15.D.2, based on location of the proposed mitigation site relative to that of the proposed impact site.** ~~located within the same subwatershed where the impacted property is located and the same distance or closer to the closest public water supply reservoir as the proposed impact, and as close to the location of the impact as feasible. Alternatively, the applicant may propose mitigation anywhere within the Town's corporate limits or ETJ provided that the mitigation proposal accounts for differences in delivery of nutrients to the affected reservoir resulting from differences between the locations of the buffer impact and mitigation. Additional location requirements for the property donation option are enumerated below in Sec. 6.1.14.F.3.a.~~

a) Mitigation within the 12-digit Hydraulic Unit Code (HUC) shall be multiplied by 0.75;

b) Mitigation within the eight-digit HUC shall be multiplied by one (1); and

c) Outside of the eight-digit HUC shall be multiplied by two (2).

2) *Town Buffers.* For any option chosen for mitigation of Town buffer impacts, the mitigation effort shall be ~~located within the same river basin where the impacted property is located~~ **the same as that for State Buffers in Sec. 6.1.15.E.1.** ~~Additional location requirements for the property donation option are enumerated below in Sec. 6.1.14.F.3.a.~~

3) *Geographic Restrictions on Location of Mitigation.* Mitigation shall be performed in the same river basin where the impact is located with the following additional specifications:

a) In the Jordan Lake Watershed, mitigation shall be within the Lower New Hope sub-watershed of the Jordan Lake Watershed.

b) Buffer mitigation for impacts within watersheds with riparian buffer rules that also have federally listed threatened or endangered aquatic species may be done within other watersheds with the same federally listed threatened or endangered aquatic species as long as the impacts are in the same river basin as the mitigation site.

F) *Donation of Property*

Persons who choose to satisfy their mitigation determination by donating real property or an interest in real property shall meet the following requirements:

1) The donation of real property interests may be used to either partially or fully satisfy the payment of a compensatory mitigation fee to either**:** the State Riparian Buffer Restoration Fund for impacts to a State Buffer **in accordance with 15A NCAC 02R .0403,** or to a Town Riparian Buffer Restoration Fund, if

established and available at the time, for impacts to a Town Buffer **in accordance with this Sec. 6.1.15.F**. The value of the property interest shall be determined by an appraisal performed in accordance with Sec. 6.1.~~14~~**15**.F.4.d. The donation shall satisfy the mitigation determination if the appraised value of the donated property interest is equal to or greater than the required mitigation fee calculated pursuant to 15A NCAC ~~2B .0269~~**02R .0601**. If the appraised value of the donated property interest is less than the required fee, the applicant shall pay the remaining balance due.

…

3) Donation of real property interests to satisfy the mitigation determination shall be accepted only if such property meets all of the following requirements:

a) In addition to the location requirements for mitigation of buffer impacts for State Buffers and Town Buffers, as applicable in Sec. 6.1.~~14~~**15**.E, the property shall be located within an area that is identified as a priority for restoration in, or is otherwise consistent with the goals of, the Basinwide Wetlands and Riparian Restoration Plan for the Basin developed by the NC DEQ pursuant to NCGS 143-214.10 for the basin in which the property is located;

b) The property shall contain riparian buffers not currently protected by the State's riparian buffer protection program that are in need of restoration as defined in Sec. 6.1.~~14~~**15**.G.4;

…

d) The size of the restorable riparian buffer on the property to be donated shall equal or exceed the area of mitigation responsibility determined pursuant to Sec. 6.1.~~14~~**15**.D;

…

4) At the expense of the applicant or donor, the following information shall be submitted to the Town with any proposal for donations or dedications of interest in real property:

a) Documentation that the property meets the requirements laid out in Sec. 6.1.~~14~~**15**.F.3;

…

c) A current property survey performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office, as identified by the State Board of Registration for Professional Engineers and Land Surveyors in "Standards of Practice for Land Surveying in North Carolina." Copies may be obtained from the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, **www.ncbels.org** ~~3620 Six Forks Road, Suite 300, Raleigh, North Carolina 27609~~;

d) A current appraisal of the value of the property performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office as identified by the Appraisal Board in the "Uniform Standards of Professional North Carolina Appraisal Practice." Copies may be obtained from the Appraisal Foundation, ~~Publications Department, P.O. Box 96734, Washington, D.C. 20090-6734~~ **http://www.appraisalfoundation.org**; ~~and~~

e) A title certificate~~.~~**; and**

f) A Phase 1 Environmental Site Assessment documenting that the property does not contain structures that present health or safety problems to the general public. If wells, septic systems, water treatment systems, or water or sewer connections exist, they shall be filled, remediated, or closed at owner's expense and in accordance with State and local health and safety regulations.

5) In addition to the factors outlined in Sec. 6.1.15.F.2 through 4, the Town shall consider the following factors when determining whether to accept a donation of interest in real property to satisfy compensatory mitigation requirements:

a) whether restoration of the property will offset the adverse impacts of the permitted project; and

b) whether the adverse impacts of the permitted project are within the same 8-digit HUC as the property proposed for donation.

G) *Riparian Buffer Restoration or Enhancement*

Persons who choose to meet their mitigation requirement through riparian buffer restoration or enhancement shall meet the following requirements:

1) ~~The applicant may restore or enhance a non-forested riparian buffer if either of the following applies:~~ **The area of riparian buffer restoration or enhancement shall be equal to the required area of mitigation determined pursuant to Sec. 6.1.15.D;**

~~a) The area of riparian buffer restoration is equal to the required area of mitigation determined pursuant to Sec. 6.1.14.D: or~~

~~b) The area of riparian buffer enhancement is three (3) times larger than the required area of mitigation determined pursuant to Sec. 6.1.14.D;~~

2) The location of the riparian buffer restoration or enhancement shall comply with the requirements in Sec. 6.1.~~14~~**15**.E;

3) The riparian buffer restoration or enhancement site **may be proposed in accordance with Table 6.1.15.G.1 below**~~shall have a minimum width of 50 feet or equal to the width of the impacted buffer, whichever is greater, as measured on a line perpendicular to the surface water~~;

Table 6.1.15.G.1

Buffer Width (ft)	Proposed Percentage of Full Credit
Less than 20	0%
20-29	75%
30-100	100%
101-200	33%

4) Enhancement and restoration shall both have the objective of establishing a forested riparian buffer according to the requirements this Section. Enhancement shall be distinguished from restoration based on existing buffer conditions **which shall be determined by the Town. The applicant must submit a written request for the Town to perform this on-site buffer mitigation determination.** ~~Where existing trees are sparse, that is greater than or equal to 100 trees per acre but less than 200 trees per acre, a buffer may be enhanced. Where existing woody vegetation is absent, that is less than 100 trees per acre, a buffer may be restored;~~ **In accordance with 15A NCAC 02B .0295:**

a) Enhancement site means a riparian zone site characterized by conditions between that of a restoration site and a preservation site such that the establishment of woody stems (i.e., tree or shrub species) will maximize nutrient removal and other buffer functions;

b) Restoration site means riparian zone sites that are characterized by an absence of trees and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings) or sites that are characterized by scattered individual trees such that the tree canopy is less than 25 percent of the cover and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings); and

c) Preservation site is defined in Sec. 6.1.15.H.1.

5) The applicant shall ~~first receive an Authorization Certificate for the proposed use according to the requirements of Sec. 6.1.11.G.5, or a variance pursuant to Sec. 6.1.13. After receiving this Certificate or variance, the applicant shall~~ submit a restoration or enhancement plan for approval by the Town. The restoration or enhancement plan shall **demonstrate compliance with the requirements in Sec. 6.1.15.B, D, and E; and shall also** contain the following:

…

b) A vegetation plan~~.~~ **that shall detail the activities proposed to ensure a final performance standard of 260 stems per acre at the completion of monitoring. The final performance standard shall include a minimum of four native hardwood tree species or four native hardwood tree and native shrub species, where no one species is greater than 50% of stems. Native hardwood and native shrub volunteer species may be included to meet the final performance standard of 260 stems per acre. The Town may approve alternative vegetation plans upon consideration of factors, including site wetness and plant availability, to meet the requirements of this Section**~~The vegetation plan shall include a. minimum of at least two (2) native hardwood tree species planted at a density sufficient to provide 320 trees per acre at maturity~~;

c) A grading plan**, if applicable**. The site shall be graded in a manner to ensure diffuse flow through the **entire** riparian buffer;

d) A **schedule for implementation, including** fertilization **and herbicide** plan **if applicable**; and

e) A ~~schedule for implementation~~**monitoring plan to document whether the site is expected to meet the final performance standards as defined in Sec. 6.1.15.G.5.b and other anticipated benefits to the adjacent water. The plan shall include a proposed schedule and method for monitoring the vegetative status of the restoration or enhancement site for five (5) years, including the health and average stem densities of native hardwood tree or tree and shrub species that are to be counted toward the final performance standard.**

6) Within one (1) year after the Town has approved the restoration or enhancement plan, the applicant shall present ~~proof~~**documentation** to the Town that the riparian buffer has been restored or enhanced**; unless the applicant requests, and the Town agrees in writing prior to that date, to a longer time period**. If ~~proof~~**documentation** is not presented within this timeframe, then the person shall be in violation of both the State's, where applicable, and the Town's riparian buffer protection program and shall be subject to civil penalties pursuant to Sec. 6.~~15~~**16**;

~~7) The mitigation area shall be placed under a perpetual conservation easement that will provide for protection of the property's nutrient removal functions; and~~

~~8)~~**7)** The applicant shall submit **written** annual reports**, unless an alternative schedule has been approved by the Town during the mitigation plan approval,** for a period of five (5) years after **completion of** the restoration or enhancement **site**, showing ~~that~~ **compliance with** the ~~trees planted have survived~~**approved monitoring plan** and that diffuse flow through the riparian buffer has been maintained.**; and** ~~The applicant shall replace trees that do not survive and restore diffuse flow if needed during that five (5) year period.~~

8) If the Town determines that the native hardwood tree or tree and shrub species at the site are not expected to meet the final performance standards listed in Sec. 6.1.15.G.5.b , then the Town may require that the applicant replace trees or trees and shrubs as needed during that five-(5) year period. If the Town determines that diffuse flow through the buffer is not being maintained, then the Town may require that the applicant restore diffuse flow. If the Town determines that the final performance standards listed in Sec. 6.1.15.G.5.b have not been achieved at the end of the five-(5) year monitoring period, the Town may require additional years of monitoring. The Town shall make determinations referenced in this Section on a site specific basis based on the annual reports, any supplemental information submitted by the applicant, or a site evaluation by the Town.

H) Alternative Buffer Mitigation.

Any proposal for alternative buffer mitigation for impacts to State Buffers shall be submitted by the applicant in writing to the NC DEQ in accordance with 15A NCAC 02B .0295, and shall meet the content and procedural requirements for approval by the NC DEQ. Any proposal for alternative buffer mitigation for impacts to Town Buffers shall be provided in writing to the Town, shall meet the content and procedural requirements for approval by the Town, shall meet the requirements set out in Sec. 6.1.15.B and D, and the requirements set out as follows:

1) Preservation site means riparian zone sites that, as determined by a site visit conducted by the Town, are characterized by a forest consisting of the forest strata and diversity of species appropriate for the location.

2) *Retroactive Credit.* Alternative buffer mitigation sites constructed and within the required monitoring period on the effective date of this Rule shall be eligible for use as alternative buffer mitigation sites. Alternative buffer mitigation sites that have completed monitoring and were released by the Town on or within the past 10 years of the effective date of 15A NCAC 02B .0295, November 1, 2015, shall be eligible for use as alternative buffer mitigation sites. These alternative buffer mitigation sites shall receive credit in accordance with the criteria set forth in Sec. 6.1.15.D and E. All alternative buffer mitigation site proposals submitted for retroactive credit shall include the following:

a) A map or maps of the proposed alternative buffer mitigation site;

b) Documentation of pre-existing conditions showing that the proposed alternative buffer mitigation site met the criteria to qualify for the applicable alternative buffer mitigation type identified in the applicable item in this Sec. 6.1.15.H;

c) Documentation of the activities that were conducted at the proposed alternative buffer mitigation site to meet success criteria identified in the applicable item in this Sec. 6.1.15.H; and

d) Documentation that the proposed alternative buffer mitigation site met the success criteria identified in the applicable item in this Sec. 6.1.15.H.

3) *Buffer Restoration and Enhancement on Non-Subject Streams.* Restoration or enhancement of buffers may be conducted on intermittent or perennial streams that are not buffered pursuant to Sec. 6.1.11.C and D. These streams shall be confirmed as intermittent or perennial streams by Town staff in accordance with Sec. 6.1.11.D.4. The proposal shall meet all applicable requirements of Sec. 6.1.11.G.

4) *Preservation of Buffer on Non-Subject Streams*. Preservation of buffers on intermittent or perennial streams that are not buffered pursuant to Sec. 6.1.11.C and D may be proposed in order to permanently protect the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer. These streams shall be confirmed as intermittent or perennial streams by Town staff in accordance with Sec. 6.1.11.D.4. The preservation site shall meet the requirements of Table 6.1.15.G.1; and shall be absent of the following: structures, infrastructure, hazardous substances, solid waste, and encumbrances and conditions on the transfer of the property interests. The area of preservation credit within a buffer mitigation site shall comprise of no more than 25% of the total area of buffer mitigation.

5) *Preservation of Buffers on Subject Streams.* Buffer preservation may be proposed on streams that are buffered pursuant to Sec. 6.1.11.C and D in order to permanently protect the buffer from cutting, clearing, filling, grading,

and similar activities that would affect the functioning of the buffer beyond the protection afforded by the existing buffer rules on sites that meet the definition of a preservation site. The preservation site shall meet the requirements of Table 6.1.15.G.1; and shall be absent of the following: extensive structures, extensive infrastructure, hazardous substances, solid waste, and encumbrances and conditions on the transfer of the property interests. The area of preservation credit within a buffer mitigation site shall comprise of no more than 25% of the total area of buffer mitigation.

6) ***Enhancement of grazing areas adjacent to streams.*** **Buffer credit at a 2:1 ratio shall be available for an applicant who proposes permanent exclusion of grazing livestock that otherwise degrade the stream and riparian zone through trampling, grazing, or waste deposition by fencing the livestock out of the stream and its adjacent buffer. The applicant shall provide an enhancement plan as set forth in Sec. 6.1.15.G. The applicant shall demonstrate that grazing was the predominant land use since August, 2000, the effective date of the UDO Town riparian buffer regulations.**

7) ***Mitigation on ephemeral channels.*** **For purposes of riparian buffer mitigation as described in this Sec. 6.1.15.H, an ephemeral channel is defined as a natural channel exhibiting discernible banks within a topographic crenulation (V-shaped contour lines) indicative of natural drainage on the 1:24,000 scale (7.5 minute) quadrangle topographic map prepared by the U.S. Geologic Survey, or as seen on digital elevation models with contours developed from the most recent available LiDAR data, available at no cost at http://www.ncfloodmaps.com/lidar.com. Ephemeral channels only flow for a short period of time after precipitation in the drainage area and do not have periods of base flow sustained by groundwater discharge. The applicant shall provide a delineation of the watershed draining to the ephemeral channel. The entire area proposed for mitigation shall be within the contributing drainage area to the ephemeral channel. The ephemeral channel shall be directly connected to an intermittent or perennial stream and contiguous with the rest of the mitigation site protected under a perpetual conservation easement. The area of the mitigation site on ephemeral channels shall comprise no more than 25% of the total area of buffer mitigation. The proposal shall meet all applicable requirements of Sec. 6.1.15.G for restoration or enhancement. The proposal shall meet all applicable requirements of 6.1.15.H.4 and 5 for preservation.**

8) ***Restoration and Enhancement on Ditches.*** **For purposes of riparian buffer mitigation as described in this Sec. 6.1.15.H, a ditch is defined as a man-made channel other than a modified natural stream that was constructed for drainage purposes. The width of the restored or enhanced area shall not be less than 30 feet and shall not exceed 50 feet for crediting purposes. The applicant or mitigation provider shall provide a delineation of the watershed draining to the ditch. The watershed draining to the ditch shall be at least four times larger than the restored or enhanced area along the ditch. The perpetual conservation easement shall include the ditch and the confluence of the ditch with the intermittent or perennial stream, and provide language that prohibits future maintenance of the ditch. The proposal shall meet all applicable requirements of Sec. 6.1.15.G for restoration or enhancement. To be used for mitigation, a ditch shall meet all of the following criteria:**

a) be directly connected with and draining towards an intermittent or perennial stream;

b) be contiguous with the rest of the mitigation site protected under a perpetual conservation easement;

c) stormwater runoff from overland flow shall drain towards the ditch;

d) be between one (1) and three (3) feet in depth; and

e) the entire length of the ditch shall have been in place prior to the effective date of the UDO Town buffer regulations, August, 2000.

9) *Stormwater Treatment Options.* All stormwater treatment options shall meet the following requirements:

a) Structural options already required by other local, state, or federal rule or permit cannot be used as alternative buffer mitigation credit, except to the extent such measure(s) exceed the requirements of such rule or permit. Stormwater Control Measures (SCMs), including bioretention facilities, constructed wetlands, infiltration devices and sand filters are all potentially approvable SCMs by the Town for alternative buffer mitigation credit. Other SCMs may be approved only if they meet the nutrient removal levels outlined in Sec. 6.1.15.H.9.b. Existing or planned SCMs for a local, state, or federal rule or permit may be retrofitted or expanded to improve their nutrient removal if this level of treatment is not required by other local, state, or federal rules. In this case, the predicted increase in nutrient removal may be counted toward alternative buffer mitigation credit;

b) *Minimum treatment levels:* Any structural SCM shall provide at least 30% total nitrogen and 35% total phosphorus removal as demonstrated by a scientific and engineering literature review as approved by the Town. The mitigation proposal shall demonstrate that the proposed alternative removes an equal or greater annual mass load of nutrients to surface waters as the buffer impact authorized in the authorization certificate or variance, following the calculation of impact and mitigation areas pursuant to Sec. 6.1.15.D and E. To estimate the rate of nutrient removal of the impacted buffer, the applicant may use the "NC Division of Water Quality–Methodology and Calculation for determining nutrient reductions associated with Riparian Buffer Establishment" available at no cost at https://files.nc.gov/ncdeq/Water%20Quality/Planning/NPU/Nutrient%20Offset%20Rule/Ag-Buffer-Credit.pdf. The applicant may propose an alternative method of estimating the rate of nutrient removal for consideration and review by the Town;

c) All proposed structural SCMs shall follow the NC DEQ Stormwater Design Manual and the *Town of Apex Standard Specifications and Standard Details*. If a specific proposed structural SCM is not

addressed in this Manual, the applicant shall follow Part F in this Manual for approval.

d) All structural options are required to have Town approved operation and maintenance agreements in accordance with 6.1.12.D;

e) All structural options are required to have continuous and perpetual maintenance and inspection in accordance with 6.1.12.H and I;

f) Upon completion of construction, the designer for the type of SCM installed shall provide a signed and sealed certification statement that the system was inspected during construction and that the SCM was constructed in conformity with plans and specifications approved by the Town and in accordance with 6.1.12.F and the *Town of Apex Standard Specifications and Standard Details*;

g) *Removal and replacement of structural options:* If a structural option is proposed to be removed and cannot be replaced on-site, then a structural or non-structural measure of equal or better nutrient removal capacity, as determined by calculations submitted to and approved by the Town, in a location as specified by Sec. 6.1.15.G shall be constructed as a replacement;

h) *Renovation or repair of structural options:* If the applicant or the Town determines that a structural option must be renovated or repaired, it shall be renovated to provide equal or better nutrient removal capacity than as originally designed; and

i) Structural options, as well as their operation and maintenance, are the responsibility of the landowner or easement holder unless the Town gives written approval for another responsible party to operate and maintain them. Structural options shall be located in recorded easements for the purposes of operation and maintenance and shall have recorded access easements providing access to the nearest public right-of-way. These easements shall be granted in favor of the party responsible for operating and maintaining the structure and provide that operation and maintenance is the responsibility of the landowner, easement holder, or other responsible party.

10) *Approval for other alternative buffer mitigation options.* Other alternative riparian buffer mitigation options not specified within this Sec. 6.1.15.H may be submitted to the Town for review and recommendation to the Water Resources Director on a case-by-case basis. Any proposal submitted under Sec. 6.1.15.H.10 shall provide documentation or calculations to demonstrate that the proposed alternative mitigation option removes an equal or greater annual mass load of nutrients to surface waters as a riparian buffer. Upon completion of the Town's review, and prior to recommendation to the Water Resources Director, the Town shall advertise a 30-calendar day public comment period through the Town's website with instructions on how to provide comments. Town staff shall present their recommendations, including comments received during the public comment notice period, to the Water Resources Director for a final decision. If approved by the Water Resources

Director, the alternative buffer mitigation option may be proposed by other applicants.

I) ***Purchase of Buffer Mitigation Credits from a Private or Public Compensatory Buffer Mitigation Bank.*** **Applicants who choose to satisfy some or all of their mitigation by purchasing mitigation credits from a private or public compensatory buffer mitigation bank shall meet the following requirements:**

1) The compensatory buffer mitigation bank from which credits are purchased shall have available riparian buffer credits approved by the NCDEQ;

2) The compensatory buffer mitigation bank from which credits are purchased shall be located pursuant to 6.1.15.D and 6.1.15.E; and

3) After receiving a mitigation acceptance letter from the compensatory buffer mitigation bank, proof of payment for the credits shall be provided to the Town prior to any activity that results in the removal or degradation of the protected riparian buffer, and prior to Construction Drawing approval.

J) ***Payment to the Riparian Buffer Restoration Fund.*** **Applicants who choose to satisfy some or all of their mitigation requirement by paying a compensatory mitigation fee to the Riparian Buffer Restoration Fund shall meet the requirements of 15A NCAC 02R .0601. Applicants may also choose to make a payment to a Town Riparian Buffer Restoration Fund, if established and available at the time, for impacts to a Town Buffer. Payments made to the NC Division of Mitigation Services (DMS), or the Town as applicable, shall be contingent upon acceptance of the payment by the DMS, or the Town. The DMS, or the Town, shall consider their financial, temporal, and technical ability to satisfy the mitigation request to determine whether they shall accept or deny the request.**

~~6.1.15~~**6.1.16** Civil Penalties

…

~~6.1.16~~**6.1.17** Criminal Penalties

…

~~6.1.17~~**6.1.18** Remedies

…

8.2.7 Fences, Walls, and Berms

Fences, walls, and berms are permitted as elements of site design and in some locations, may be used to conceal storage or other unsightly or conflicting land uses. Fences are not allowed around detention and retention basins per Sec. 6.1.1~~2~~**3**.B.10. All fences, walls, and berms shall meet the following requirements:

…

11.4.4 Civil Penalties

Except as provided in Sec. 6.1.1~~5~~**6**, the following civil penalties may be imposed on a person who violates this Ordinance:

…

12.2 TERMS DEFINED

…

Built-Upon Area

For the purposes of complying with the standards and requirements of the Watershed Protection Overlay Districts, calculation of the built-upon area within the proposed development shall include, but not be limited to, all existing public and private streets, proposed public streets, sidewalks, driveways, rooftops, parking lots, patios, and all other impervious and partially impervious surfaces, including CABC and gravel within the development. **In accordance with NCGS 143-214.7, built upon area does not include** ~~The~~**the** water area of swimming pools**;** ~~and wooden~~ slatted decks**; and a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric; a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.001 centimeters per second (1.41 inches per hour); or landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as the area between sections of pavement that support the weight of a vehicle.**~~shall not be included in the calculation of the built-upon area~~. **The owner or developer of a property may opt out of any of the exemptions from built-upon area set out in this section.**

…

WATER RESOURCES AND PLANNING STAFF RECOMMENDATION:

Water Resources and Planning staff recommend approval of the proposed amendments.

PLANNING BOARD RECOMMENDATION:

The Planning Board heard these amendments at their April 8, 2024 meeting and unanimously recommended approval.

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARING

AMENDMENTS TO THE UNIFIED DEVELOPMENT ORDINANCE (UDO)

Pursuant to the provisions of North Carolina General Statutes §160D-601 and to the Town of Apex Unified Development Ordinance (UDO) Sec. 2.2.11, notice is hereby given of a public hearing before the Town Council of the Town of Apex for the purpose of soliciting comments relative to the following amendment(s) to the Unified Development Ordinance that are applicable Town-wide:

Requested by Water Resources Staff:

1. Amendments to Sec. 6.1 *Watershed Protection Overlay Districts* in order to incorporate the Neuse River Basin stormwater regulations as required by 15A NCAC 02B .0711 *Neuse Nutrient Strategy - Stormwater* and update the riparian buffer mitigation requirements to be consistent with that in 15A NCAC 02B .0295 *Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers*. Amendments to Sec. 8.2.7 *Fences, Walls, and Berms* and Sec. 11.4.4 *Civil Penalties* are proposed to update Section references related to the proposed changes in Sec. 6.1. Also included are amendments to Sec. 12.2 *Terms Defined* in order to update the definition of "Built-Upon Area" to be consistent with that required by NC General Statute 143-214.7 and have Sec. 6.1 refer to Sec. 12.2 to avoid a duplication of the definition.

Public Hearing Location: Apex Town Hall
Council Chamber, 2nd Floor
73 Hunter Street, Apex, North Carolina

Town Council Public Hearing Date and Time: April 23, 2024 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

The UDO can be accessed online at: http://www.apexnc.org/233.

Dianne F. Khin, AICP
Planning Director

Published Dates: April 1-23, 2024

TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
TEL. 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

Modificación de la Ordenanza de Desarrollo Unificado (UDO)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-601 y con la sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del pueblo de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del pueblo de Apex a fin de solicitar comentarios relativos a la siguiente modificación de la Ordenanza de Desarrollo Unificado que se aplican a toda la ciudad:

Solicitado por el personal de Recursos Hídricos:

1. Enmiendas a la Sección 6.1 *Distritos de Superposición de Protección de Cuencas Hidrográficas* para incorporar las regulaciones de aguas pluviales de la cuenca del río Neuse según lo exige la regla 15A NCAC 02B .0711 *Estrategia de nutrientes de Neuse - Aguas pluviales* y actualizar los requisitos de mitigación de áreas de protección ribereña para que sean consistentes con los de la regla 15A NCAC 02B .0295 *Requisitos del programa de Mitigación para Protección y Mantenimiento de Áreas de protección ribereña.* Enmiendas a la Sección 8.2.7 *Cercas, muros y bermas* y la Sección 11.4.4 Se proponen *Sanciones Civiles* para actualizar las referencias a las secciones relacionadas con los cambios propuestos en la Sección 6.1. También se incluyen enmiendas a la Sección 12.2 *Términos definidos* para actualizar la definición de "Área construida" para que sea consistente con lo requerido por el Estatuto General de Carolina del Norte 143-214.7 y tener la Sección 6.1 como referencia de la Sección 12.2 para evitar una duplicación de la definición.

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública del Consejo Municipal: 23 de abril de 2024 6:00 PM

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la Oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

Se puede acceder a la UDO en línea en: http://www.apexnc.org/233.

Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 1-23 de abril de 2024

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TOWN OF APEX
POST OFFICE BOX 250
APEX, NORTH CAROLINA 27502
PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARING

AMENDMENTS TO THE UNIFIED DEVELOPMENT ORDINANCE (UDO)

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Requested by Water Resources Staff:

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Dianne F. Khin, AICP
Planning Director

Published Dates: April 1-23, 2024

9:44 AM
4/1/2024

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TOWN OF APEX
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NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

Modificación de la Ordenanza de Desarrollo Unificado (UDO)

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Solicitado por el personal de Recursos Hídricos:

1. Enmiendas a la Sección 6.1 *Distritos de Superposición de Protección de Cuencas Hidrográficas* para incorporar las regulaciones de aguas pluviales de la cuenca del río Neuse según lo exige la regla 15A NCAC 02B .0711 *Estrategia de nutrientes de Neuse - Aguas pluviales* y actualizar los requisitos de mitigación de áreas de protección ribereña para que sean consistentes con los de la regla 15A NCAC 02B .0295 *Requisitos del programa de Mitigación para Protección y Mantenimiento de Áreas de protección ribereña.* Enmiendas a la Sección 8.2.7 *Cercas, muros y bermas* y la Sección 11.4.4 Se proponen *Sanciones Civiles* para actualizar las referencias a las secciones relacionadas con los cambios propuestos en la Sección 6.1. También se incluyen enmiendas a la Sección 12.2 *Términos definidos* para actualizar la definición de "Área construida" para que sea consistente con lo requerido por el Estatuto General de Carolina del Norte 143-214.7 y tener la Sección 6.1 como referencia de la Sección 12.2 para evitar una duplicación de la definición.

Lugar de la audiencia pública: Ayuntamiento de Apex
Cámara del Consejo, 2º piso
73 Hunter Street, Apex, Carolina del Norte

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Dianne F. Khin, AICP
Directora de Planificación

Fechas de publicación: 1-23 de abril de 2024

9:45 AM
4/1/2024

PLANNING BOARD REPORT TO TOWN COUNCIL
Unified Development Ordinance Amendments

Planning Board Meeting Date: April 8, 2024

Report Requirements:
Per NCGS §160D-604, all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Planning Board Recommendation:

Motion: To recommend approval as presented.

Introduced by Planning Board member: Sarah Soh

Seconded by Planning Board member: Ryan Akers

☑ Approval of the proposed UDO amendment(s)
☐ Approval of the proposed UDO amendment(s) with the following conditions:

☐ Denial of the proposed UDO amendment(s)

With 8 Planning Board Member(s) voting "aye"

With 0 Planning Board Member(s) voting "no"

Reasons for dissenting votes:

This report reflects the recommendation of the Planning Board, this the 8th day of April 2024.

Attest:

Tina Sherman, Planning Board Chair

Dianne F. Khin Digitally signed by Dianne F. Khin Date: 2024.04.08 18:33:01 -04'00'

Dianne Khin, Planning Director

AN ORDINANCE TO AMEND CERTAIN SECTIONS OF THE UNIFIED DEVELOPMENT ORDINANCE

BE IT ORDAINED by the Town Council of the Town of Apex as follows:

Section 1. Sections 6.1, 8.2.7, 11.4.4, and 12.2 of the Unified Development Ordinance are amended to read as follows with additions shown as bold underlined text and deletions shown as struck-through text:

6.1 WATERSHED PROTECTION OVERLAY DISTRICTS

6.1.1 Purpose, Authority, and Enactment

The purpose of the Watershed Protection Overlay Districts is to ensure the availability of public water supplies at a safe and acceptable level of water quality, to ensure protection of public water supplies for recreational and aesthetic purposes, to minimize sedimentation of streams, and to protect the environment, health, and general welfare of present and future residents of the Town and the Triangle Region under the authority set forth in Sec. 1.2 *Authority* of this Ordinance and in NCGS 160A-174. In addition, the Legislature of the State of North Carolina has, in Chapter 143, Article 21 of the North Carolina General Statutes, entitled Water and Air Resources, directed local governmental units to adopt regulations designed to promote the public health, safety, and general welfare pursuant to the more specific requirements set forth in 15A NCAC 2B .0100, 15A NCAC 2B .0200, ~~and~~ in the Jordan Water Supply Watershed Nutrient Management Strategy Rules, 15A NCAC 2B .0262 through .0273 and .0311(p)**, and the Neuse Nutrient Strategy: Stormwater Rule, 15A NCAC 02B .0731**. Also pursuant to the Federal Water Pollution Control Act of 1972, federal Phase II Stormwater rules promulgated under it, and NCGS 143-215.1 and S.L. 2006-246, the Town is required to obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management for its municipal separate storm sewer system and to adopt, among other things, requirements and procedures to control the adverse effects of increased post development stormwater runoff and nonpoint and point source pollution associated with new development and redevelopment. (Additional specific purposes may be found in the Swift Creek Land Management Plan and the 2045 Land Use Map Update.) In furtherance of these goals and under such authorities, the Town of Apex promulgated this Sec. 6.1 *Watershed Protection Overlay Districts*.

…

6.1.3 Exemptions

…

A) ~~Development~~ **Single-family, duplex residential and related recreational development and expansion of development** that cumulatively disturbs less than one (1) acre and is not part of a larger common plan of development;

B) Development of an individual single-family or duplex residential lot that is located within the Neuse River Watershed, is not part of a larger common plan of development or sale, and does not result in a greater than five (5) percent built-upon area on the lot;

C) Commercial, industrial, institutional, multi-family, or local government development that cumulatively disturbs less than one-half (0.5) acre, does not expand existing structures on a parcel, and is not part of a larger common plan of development;

D) Commercial, industrial, institutional, multi-family, or local government development that cumulatively disturbs less than one-half (0.5) acre and does expand existing

structures on a parcel, but does not result in a cumulative built upon area for the parcel exceeding that allowed in Sec. 6.1.6.B.1.a;

~~B)~~**E)** Redevelopment that cumulatively disturbs less than ~~one (1) acre~~ **the thresholds established in Sec. 6.1.3.A through D** and is not part of a larger common plan or development or sale;

~~C)~~**F)** Development Existing as of the Effective Date of this Section
…

~~D)~~**G)** *Expansions to Existing Development*
Any expansion to a lot or project that is exempt from the requirements of Sec. 6.1 pursuant to Sec. 6.1.3.~~C~~**F.** *Development Existing as of the Effective Date of this Section* and disturbs greater than ~~one (1) acre~~ **the thresholds established in 6.1.3.A through D** must comply with the requirements of Sec. 6.1. The built-upon area of the existing development shall be included in the built-upon area calculations for any proposed expansion to any such lot or project**; but only the net increase in built-upon area is subject to stormwater treatment requirements**. Provided, however, that the built-upon area of any school facility owned by the Wake County Public School System or any qualified nonpublic school that is exempt from the requirements of Sec. 6.1 pursuant to Sec. 6.1.3.~~C~~**F** *Development Existing as of the Effective Date of this Section* is not required to be included in the built-upon area calculations for any expansion to such existing development. For purposes of this Section, "school facility" means any building, structure or other facility used by the Wake County Public School System or any qualified nonpublic school for educational purposes. For purposes of this Section, "qualified nonpublic school" means a school having an enrollment of 100 or more students, and that has one or more of the characteristics set out in NCGS 115C-555.

~~E)~~**H)** *Developments and Uses Exempted by State Law*
…

~~F)~~**I)** *Complete Applications*
…

6.1.6 Low-Density Development Option

A) *General*
All development within both the Primary Watershed Protection District and the Secondary Watershed Protection District shall be designed to comply with the standards of the low-density development option unless the Technical Review Committee or Town Council, as applicable, approves a plan of development pursuant to the procedures and standards for the high-density development option, or unless a minor or major variance is approved pursuant to Sec. 6.1.~~13~~**14** *Modifications by Variance.*
…

6.1.7 High-Density Development Option
…
B) *Within the Primary Watershed Protection District*
…
3) *Stormwater Control Measures (SCMs)*
All stormwater control measures shall meet the requirements in Sec. 6.1.~~12~~**13** *Stormwater Control Measures*

For water quality purposes, SCMs shall be used to collect and hold the runoff from the first one-(1) inch of rainfall. This runoff volume shall be released in two (2) to five (5) days in accordance with Sec. 6.1.~~12~~**13**.

…

…

7) ***Nitrogen Control Requirements.***

For development located within the Neuse River Watershed the nitrogen control requirements in Sec. 6.1.12 shall be met. The developer shall submit an electronic version of the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources at the first construction drawing submittal.

C) *Within the Secondary Watershed Protection District*

…

5) ***Nitrogen Control Requirements.***

For development located within the Neuse River Watershed the nitrogen control requirements in Sec. 6.1.12 shall be met. The developer shall submit an electronic version of the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources at the first construction drawing submittal.

6.1.9 Definition of Built-Upon Area

Built-upon area is defined in Sec. 12.2 *Terms Defined*.~~For the purposes of complying with the standards and requirements of the Watershed Protection Overlay Districts, calculation of the built-upon area within the proposed development shall include, but not be limited to, all existing public and private streets, proposed public streets, sidewalks, driveways, rooftops, parking lots, patios, and all other impervious and partially impervious surfaces, including CABC and gravel within the development. The water area of swimming pools and wooden slatted decks shall not be included in the calculation of the built-upon area.~~

6.1.11 Riparian Buffers

…

G) *Uses Permitted Within the Riparian Buffer*

…

2) Within Zone 3 of a Riparian Buffer in the Neuse River Basin and All Other Remaining Areas of Both the Primary Watershed Protection District and the Secondary Watershed Protection District

…

b) All uses not categorized as exempt, allowable, or allowable with mitigation are considered prohibited and may not proceed within the riparian buffer or outside the buffer if the use would impact the buffer, unless a variance is granted pursuant to Sec. 6.1.~~13~~**14** below.

Table 6.1.11.G.1

Use	Exempt*	Allowable*	Allowable with Mitigation*
…			
Utility, non-electric, perpendicular crossings of streams and other surface waters subject to this Ordinance[3,5,~~7~~**7**]:			
• Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width	X		
• Disturb equal to or less than 40 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width		X	
• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor equal to or less than 10 feet in width		X	
• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of riparian buffer with a maintenance corridor greater than 10 feet in width			X
• Disturb greater than 150 linear feet of riparian buffer			X
…			

…

[7]Utility maintenance corridor shall have the same meaning as a utility easement.

3) Requirements for Categories of Uses

…

c) ALLOWABLE WITH MITIGATION. Uses designated as allowable may proceed within the riparian buffer provided that there are no practical alternatives to the requested use pursuant to Sec. 6.1.11.G.4 Determination of "No Practical Alternatives" and an appropriate mitigation strategy has been approved pursuant to Sec. 6.1.~~14~~**15** below. These uses require written authorization from the Town of Apex.

…

5) Mitigation

…

b) Obtain approval for a mitigation proposal pursuant to Sec. 6.1.~~14~~**15**.

…

6.1.12 Nitrogen Control Requirements.

A) *Nutrient Loading Rate Targets.*

1) The development shall meet either a nitrogen stormwater loading rate target of 3.6 pounds per acre per year, or the "runoff volume match" as defined in 15A NCAC 02H .1002.

2) The development area used for nutrient calculation and stormwater requirements include the site area less any existing built-upon-area. The development density used for determining stormwater requirements is the amount of built-upon-area subject to Sec. 6.1 at development completion divided by the development area.

3) The developer shall determine the nitrogen load and loading rate generated from the development area without stormwater control measures (SCMs) and determine the needed nitrogen load reduction to meet nutrient targets by using the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Quality.

B) *Methods to Meet Nutrient Control Requirements.*
Development subject to Sec. 6.1 shall meet nitrogen loading target through a combination of the following methods:

1) Developments may reduce export of nitrogen through any combination of engineered SCMs treating runoff on the property, in an approved offsite regional SCM, or through acquisition of permanent nutrient offset credits. The developer shall calculate the nitrogen reduction provided by these controls using the most current approved SNAP Tool for such calculations developed by the N.C. Dept. of Environmental Quality, Division of Water Resources.

2) Proposed development undertaken by a local government solely as a public road expansion or public sidewalk project, or proposed development subject to the jurisdiction of the Surface Transportation Board, may meet nitrogen reduction needs for a development entirely through the use of permanent nitrogen offset credits pursuant to the Nutrient Offset Credit Trading Rule, 15A NCAC 02B.0703.

C) *Use of Permanent Nutrient Offset Credits.*

1) Sufficient permanent nutrient offset credits to meet development nutrient reduction needs not provided by engineered SCMs serving the development shall be acquired prior to approval of a development plan. The Stormwater Engineering Manager shall issue an approval letter for the development that documents the needed nitrogen credits and where the development is located relative to the Neuse Rules' geographic requirements. All permanent nutrient offset credits permitted pursuant to Sec. 6.1 shall meet the requirements of 15A NCAC 02B.0703.

2) Permanent nutrient offset credits shall be acquired pursuant to N.C.G.S. 143-214.26 and 15A NCAC 02B.0703 prior to the start of construction of the development project.

3) A developer subject to Sec. 6.1 may acquire permanent nutrient offset credits through of the following methods:

a) A private nutrient bank;

b) Offsite offset provided by the developer and approved by the Stormwater Engineering Manager; or

c) Payment into the Riparian Buffer Restoration Fund established by NCGS 143-214.21.

~~6.1.12~~**6.1.13** Stormwater Control Measures (SCMs)

…

F) *Compliance Prior to Receiving Plat Approval or Certificate of Occupancy*
Subject to Subsection G. below, prior to approval of a Final Plat (with respect to a subdivision), issuance of a certificate of occupancy (with respect to a site plan), or commencement of a use for any development upon which a SCM is required, the owner shall have installed the improvements required by this Article and shall have received the approval of the Stormwater Engineering Manager with respect to the improvements. Upon installation of the required improvements, the Stormwater Engineering Manager or designee shall inspect the SCM and the owner shall demonstrate that the required structure is in place, that it is operational, that it complies with all relevant portions of Sec. 6.1.~~12~~**13** *Stormwater Control Measures (SCMs)*, and shall submit to the Stormwater Engineering Manager actual "as built" plans for the structure, which shall include the information listed in Article 6: *Overlay Districts*, and Section 1.06(c) Stormwater Drainage System of the *Town of Apex Standard Specifications and Standard Details*, certifying completion of the same.

G) *Performance Guarantees*

…

3) *Duration of performance guarantee.* Performance guarantees shall run until the requirements of Sec. 6.1.~~12~~**13** have been satisfied and the Stormwater Engineering Manager has given final approval of the required SCM(s).

4) *Default.* Failure of the owner to construct, repair, and if necessary, reconstruct the SCM(s) as required by Sec. 6.1.~~12~~**13** is a default. Upon such default, the Town may obtain and use all or any portion of the performance guarantee necessary to complete the improvements.

…

H) *Maintenance and Maintenance Guarantees*

1) *Duty to maintain and maintenance and defects guarantee.* The owner is responsible for all maintenance and repair of improvements required by this Article. In addition to the Operation and Maintenance Agreement required by Sec. 6.1.~~12~~**13**.D, with respect to a subdivision, a maintenance and defects guarantee shall be provided by the owner in the amount equal to 25% of the total construction cost of the SCM to ensure proper maintenance and repair prior to conveyance of the improvements to a property owners association. The maintenance and defects guarantee shall be submitted to the Town of Apex prior to SCM final approval. The owner's estimate of this amount shall be submitted and is subject to review, modification, and approval by the Stormwater Engineering Manager. Such estimate shall be signed and sealed by a licensed North Carolina professional engineer, landscape architect, or land surveyor. Guarantees required by this Section may be in the form of a surety bond enforceable at the sole discretion of the Town and in the form prescribed by the Town, a letter of credit that meets the specifications of Sec. 7.5.17 *Irrevocable Letter of Credit in Lieu of Surety Bond or Other Guarantee of Performance*, certified check drawn in favor of the Town, or cash deposited with the Town.

…

~~6.1.13~~**6.1.14** Modifications by Variance

A) *General*

Requests for minor and major variances from the standards of the Watershed Protection Overlay Districts shall be made to the Board of Adjustment, except for variance requests pertaining to impacts within Zone 1 and/or Zone 2 of a riparian buffer within the Neuse River Basin which shall be made to the Director of the NC DEQ as specified below in Sec. 6.1.~~13~~**14**.B.1.b and B.2.c. Due to certain process differences in State statutes or rules for decision making and appeals based on which basin or watershed a proposed project is located, a separate variance provision is set forth below for each of the following basins or watersheds: (i) the Neuse River Basin, (ii) the Jordan Lake Watershed portion of the Cape Fear River Basin and (iii) the Cape Fear River Basin outside of the Jordan Lake Watershed.

Sec 6.1.~~13~~**14**.F sets forth an alternative variance process that is available for, but not required to be used by, an applicant seeking a variance from Sec. 6.1 density requirements for a project located in the Secondary Watershed Protection District and/or from Town Buffer requirements. Town Buffers and State Buffers are defined in Sec. 6.1.~~14~~**15**.C. The purpose of this alternative variance process is to provide additional design flexibility for a project that provides a unique or additional benefit to the Town or surrounding area that would not be available from a traditional development located in areas within the Town or its ETJ where the applicable requirements of Sec. 6.1 are not part of a State authorized program, or where separate State rules do not apply.

All applications for variances made to the Board of Adjustment shall be reviewed by the Board of Adjustment, which shall approve, approve with conditions (which may include mitigation requirements), or disapprove the variance after a public hearing noticed pursuant to Sec. 2.2.11 Public Notification, and conducted pursuant to Sec. 2.2.19 *Quasi-judicial Public Hearing Procedures*, based on the applicable standards in Sec. 6.1.~~13~~**14**.E or F.

B) *Variances for Activities in the Neuse River Basin*

1) *Minor Variances*

a) *Minor Variance Requests that are to be Submitted to the Board of Adjustment.*

…

(iii) It pertains to activities that will impact Zone 3 of a riparian buffer located within the Neuse River Basin. However, if the impacted area is also within the Neuse River Basin's Primary Watershed Protection District and along perennial waters within a high- density development option area, the area of proposed impacts in the buffer also shall not exceed five (5%) percent of the buffer area. If such proposed activity within the Neuse River Basin requiring a variance for Zone 3 also includes impacts to Zone 2 that require a variance, then as specified in Sec. 6.1.~~13~~**14**.B.1.b.i. the Director of the NC DEQ shall consider the variance request as it pertains to Zone 2 impacts, and a separate variance request shall be submitted to the Board of Adjustment pertaining to Zone 3 impacts.

…

b) *Minor Variance Requests that are to be Submitted to the NC DEQ*. A variance request for an activity in the Neuse River Basin shall be considered minor and a decision on such request shall be made by the NC DEQ when:

(i) It pertains to activities that will impact Zone 2 of a riparian buffer located within the Neuse River Basin. However, if the impacted area is also within the Neuse River Basin's Primary Watershed Protection District and along perennial waters within a high density development option area, the proposed impacts to the buffer also shall not exceed five (5%) percent of the buffer area. If such proposed activity within the Neuse River Basin requiring a variance for Zone 2 also includes impacts to Zone 3 that require a variance, then the Director of the NC DEQ shall consider the variance request as it pertains to Zone 2 impacts, and as specified in Sec. 6.1.~~13~~**14**.B.1.a.iii a separate variance request shall be submitted to the Board of Adjustment pertaining to Zone 3 impacts.

…

2) *Major Variances*

a) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Decided by the Board of Adjustment.*

…

An appeal of a major variance decision made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.B.2.a shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

b) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Forwarded to the Environmental Management Commission Upon Approval*.

…

Following a public hearing on an application within the scope of this Sec. 6.1.~~13~~**14**.B.2.b, the Board of Adjustment shall provide its recommendation to the Environmental Management Commission if the Board of Adjustment determines that the variance should be granted. After the Board of Adjustment reviews and recommends approval of the application for the major variance, the Planning Director shall prepare and forward to the Environmental Management Commission for consideration the following materials relevant to the application:

…

C) *Variances for Activities in the Jordan Lake Watershed Portion of the Cape Fear River Basin*

…

2) *Major Variances*

a) *Major Variance Requests Submitted to the Board of Adjustment That Will Be Decided by the Board of Adjustment*.

…

An appeal of a major variance decision made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.C.2.a. shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

…

c) Following a public hearing on an application within the scope of this Sec. 6.1.~~13~~**14**.C.2.b, the Board of Adjustment shall provide its recommendation to the Environmental Management Commission if the Board of Adjustment determines that the variance should be granted. After the Board of Adjustment reviews and recommends approval of the application for the major variance, the Planning Director shall prepare and forward to the Environmental Management Commission for consideration the following materials relevant to the application:

…

D) *Variances for Activities in the Cape Fear River Basin outside of the Jordan Lake Watershed*

…

2) *Major Variances*

a) *Major Variance Requests that are to be Submitted to the Board of Adjustment.*

…

Appeals of major variance decisions made by the Board of Adjustment within the scope of this Sec. 6.1.~~13~~**14**.D.2 shall be subject to review in Superior Court by proceedings in the nature of certiorari in accordance with NCGS 160D-406(h).

E) *Standards*

1) *General.* The standards set forth in Sec. 6.1.~~13~~**14**.E.2-3 shall be applicable to all variance requests submitted to the Board of Adjustment, except for a request submitted pursuant to the alternative variance process in Sec. 6.1.~~13~~**14**.F.

…

F) *Alternative Process and Standards for Variance From Density Requirements in Secondary Watershed Protection District and/or From Impacts to Town Buffers*

1) An applicant seeking a variance from the density requirements in Sec. 6.1, which may include stormwater management requirements, for a project located in the Secondary Watershed Protection District, and/or from buffer requirements applicable to a Town Buffer as defined in Sec. 6.1.~~14~~**15**.C.1, may elect to, but is not required to, seek such variance pursuant to the process and standards set forth in this Sec. 6.1.~~13~~**14**.F. The purpose of this alternative variance process is to provide additional design flexibility for a project that provides a unique or additional benefit to the Town or surrounding area that would not be available from a traditional development in areas where the applicable Ordinance requirements are not part of a State authorized program or where separate State rules do not apply.

…

4) Prior Approvals Required Before Submitting a Variance Request Under Sec. 6.1.~~13~~**14**.F.

a) Prior to submitting a variance request to the Board of Adjustment pursuant to this Sec. 6.1.~~13~~**14**.F, the applicant shall first have obtained all required permits and approvals for the proposed development from the DEQ and/or US Army Corps of Engineers, as may be applicable, with regard to any proposed dredging or filling of surface waters within the proposed development, and with regard to any proposed impacts to State Buffers in the Neuse River Basin (i.e. Zone 1 or Zone 2) or in the Cape Fear River Basin outside of the Jordan Lake Watershed (i.e. Zone 1).

(i) Although the Board of Adjustment may approve a variance request for impacts to Zone 1 of a riparian buffer in the Cape Fear River Basin outside of the Jordan Lake Watershed pursuant to the variance process in Sec. 6.1.~~13~~**14**.D.2, advance DEQ approval will be required for such impacts to Zone 1 of a riparian buffer in the Cape Fear River Basin outside of the Jordan Lake Watershed if the impacts are part of a project for which a variance is being sought pursuant to this Sec. 6.1.~~13~~**14**.F.

b) If the proposed project will impact any State Buffer in the Jordan Lake Watershed (i.e. Zone 1 or Zone 2) then, prior to submitting a variance request to the Board of Adjustment under this Sec. 6.1.~~13~~**14**.F for the remainder of the project, the applicant shall first submit a separate variance request to the Board of Adjustment pursuant to the applicable process and standards set forth in Sec. 6.1.~~13~~**14**.C and E pertaining to such impacts to Zone 1 and/or Zone 2, and the applicant shall have obtained approval of this request. Pursuant to Sec. 6.1.~~13~~**14**.C.1.iii a minor variance request pertaining to Zone 2 of a buffer in the Jordan Lake Watershed will be determined by the Board of Adjustment. Pursuant to Sec. 6.1.~~13~~**14**.C.2.b.iii, a major variance request pertaining to Zone 1, or Zone 1 and 2, of a buffer in the Jordan Lake Watershed shall first be considered by the Board of Adjustment, and the Board of Adjustment shall provide its recommendation to the Environmental Management Commission for final decision if the Board determines that the variance should be granted.

5) An applicant for a variance who is electing to proceed pursuant to this Sec. 6.1.~~13~~**14**.F shall clearly state that intent in the application and shall provide written confirmation with the application that all prior approvals required pursuant to Sec. 6.1.~~13~~**14**.F.4 above have been obtained, or that no such approvals are required.

6) The application shall then be reviewed by the Board of Adjustment, which shall approve, approve with conditions (which may include mitigation requirements), or disapprove the variance after a public hearing noticed pursuant to Sec. 2.2.11 Public Notification, and conducted pursuant to Sec. 2.2.19 Quasi-judicial Public Hearing Procedures, based on the standards in Sec. 6.1.~~13~~**14**.F.2 and 3.

…

~~6.1.14~~**6.1.15** Mitigation for Riparian Buffers

A) *Applicability*

1) This Section applies to persons who wish to impact a riparian buffer within the Town or its ETJ when one of the following applies:

…

b) The person has received a variance pursuant to Sec. 6.1.~~13~~**14** and is required to perform mitigation as a condition of a variance approval.

2) The mitigation provisions of this Sec. 6.1.~~14~~**15** apply to all buffer requirements in the Town or its ETJ, except that in the area of the Town or its ETJ in the Neuse River Basin the buffer mitigation requirements for Zones 1 and 2 shall be administered by the NC DEQ.

B) *Issuance of the Mitigation Approval*

The Town shall issue a mitigation approval upon determining that a proposal meets the requirements set out in this Sec. 6.1.~~14~~**15**. The approval shall identify at a minimum the option chosen for meeting the mitigation requirement, the required area of mitigation, ~~and~~ either the mitigation location or the offset payment amount as applicable**, and the water quality benefits to be provided by the mitigation site. For each mitigation site proposed by an applicant under 6.1.15.G or 6.1.15.H, the following criteria shall be met:**

1) The location of the buffer mitigation site shall comply with the requirements of 6.1.15.D and E.

2) The mitigation proposal shall include a commitment to provide:

a) a perpetual conservation easement or similar preservation mechanism to ensure perpetual stewardship that protects the mitigation site's nutrient removal and other water quality functions;

b) a non-wasting endowment or other dedicated financial surety to provide for the perpetual land management and hydrological maintenance of lands and maintenance of structures as applicable; and

c) financial assurance in the form of a completion bond, credit insurance, letter of credit, escrow, or other vehicle acceptable to the Town payable to, or for the benefit of, the Town in an amount sufficient to ensure that the property is secured in fee title or by easement, and that planting or construction, monitoring and maintenance are completed as necessary to meet success criteria as specified in the approved mitigation plan. This financial assurance obligation shall not apply to the NC Division of Mitigation Services (DMS).

3) Diffuse flow of runoff shall be maintained in the riparian buffer. Any existing impervious cover or stormwater conveyances such as ditches, pipes, or drain tiles shall be eliminated and the flow converted to diffuse flow. If the applicant determines that elimination of existing stormwater conveyances is not feasible, then they shall include a justification and shall provide a

delineation of the watershed draining to the stormwater outfall and the percentage of the total drainage by area treated by the riparian buffer with the mitigation plan specified in 6.1.15.G. and H. for Town approval. During mitigation plan review and approval, the Town may reduce credit proportionally.

4) Sewer easement within the buffer. If the proposed mitigation site contains a sewer easement in Zone 1, that portion of the sewer easement within Zone 1 shall not be suitable for buffer mitigation credit. If the proposed mitigation site contains a sewer easement in Zone 2, the portion of the sewer easement in Zone 2 may be suitable for buffer mitigation credit if:

a) the applicant or mitigation provider restores or enhances the forested buffer in Zone 1 adjacent to the sewer easement;

b) the sewer easement is required to be maintained in a condition that meets the vegetative requirements of the collection system permit; and

c) diffuse flow is provided across the entire buffer width.

5) The applicant shall provide a site specific credit/debit ledger to the Town at regular intervals as specified in the mitigation plan approval or mitigation banking instrument once credits are established and until they are exhausted.

6) Buffer mitigation credit, nutrient offset credit, wetland mitigation credit, and stream mitigation credit shall be accounted for in accordance with the following:

a) Buffer mitigation used for buffer mitigation credit shall not be used for nutrient offset credits;

b) Buffer mitigation credit shall not be generated within wetlands that provide wetland mitigation credit required by 15A NCAC 02H .0506; and

c) Buffer mitigation credit may be generated on stream mitigation sites as long as the width of the restored or enhanced riparian buffer meets the requirements in Table 6.1.15.G.1.

C) *Options for Meeting the Mitigation Requirements*
The mitigation requirement may be met through one of the following options:

1) *State Buffers.* The mitigation requirements for State Buffers (defined herein as buffers required by the State laws and/or rules, or approved by the State as a State authorized program) may be met through one of **the** options ~~a), b), or c)~~ below. More specifically, State Buffers are: the 50-foot buffer required in the Neuse River Basin area of the Town and its ETJ; the 50-foot buffer required in the Jordan Lake Watershed area of the Town and its ETJ; the 30-foot buffer required by Phase 2 stormwater rules throughout the Town and its ETJ; the 30-foot buffer required adjacent to perennial waters in the Primary Watershed Protection District for developments utilizing the low-density option; and the

100-foot buffer required adjacent to perennial waters in the portion of the Primary Watershed Protection District within the Neuse River Basin for developments utilizing the high-density option. All other buffers in the Town and its ETJ regulated by Sec. 6.1 are referred to as "Town Buffers."

a) Payment of a compensatory mitigation fee either (i) to ~~the State Riparian Buffer Restoration Fund pursuant to State rules applicable to the location of the State Buffer that is lost, contingent upon acceptance of payments by the NC Ecosystem Enhancement Program~~ **a compensatory buffer mitigation bank pursuant to Sec. 6.1.15.I**, or (ii) to ~~a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently set out at http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890, and the applicable trading criteria in State rules applicable to the location of the impacted State Buffer~~ **the Riparian Buffer Restoration Fund pursuant to Sec. 6.1.15.J. Payment shall conform to the requirements of N.C.G.S. 143-214.20**;

b) Donation of real property or of an interest in real property pursuant to Sec. 6.1.~~14~~**15**.F.; ~~or~~

c) Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Sec. 6.1.~~14~~**15**.G.

d) Alternative buffer mitigation pursuant to the requirements of Sec. 6.1.15.H; or

e) Other buffer mitigation approved as a condition of a variance approval.

2) *Town Buffers*. The mitigation requirement for Town Buffers may be met through one of the following options.

a) **Alternative buffer mitigation pursuant to the requirements of Sec. 6.1.15.H.**~~Construction of an alternative measure or combination of measures that reduce nutrient loading as well or better than the riparian buffer that is lost, that is located in the same river basin as the riparian buffer that is lost, and that is approved by the Town. Such measures may include stormwater control measures and other means of capturing and controlling nutrients and other pollutants and shall be located on the site of the riparian buffer that is lost, if practicable, or as close to that location as is practicable~~;

b) Payment of a compensatory mitigation fee either: (i) **to a compensatory buffer mitigation bank pursuant to Sec. 6.1.15.I, (ii) to the Riparian Buffer Restoration Fund pursuant to Sec. 6.1.15.J, or (iii)** to a Town Riparian Buffer Restoration Fund established by the Town, if such fund is established and available at the time, and such fee shall be calculated using the same fee per square foot or acre as established in the State rules for a buffer in the same basin or watershed as the Town Buffer at issue, but the applicable multiplier to determine the required area of mitigation shall be determined pursuant to Sec. 6.1.~~14~~**15**.D.2**. Payment**

shall conform to the requirements of N.C.G.S. 143-214.20~~, or (ii) to a private mitigation bank that complies with banking requirements of the US Army Corps of Engineers, currently as set out at http://www.saw.usace.army.mil/WETLANDS/Mitigation/mitbanks.html or from the US Army Corps of Engineers, P.O. Box 1890, Wilmington, NC, 28402-1890, and the applicable trading criteria in State rules applicable to the location of the State Buffer that is lost~~;

c) Donation of real property, or of an interest in real property, pursuant to Sec. 6.1.~~14~~**15**.F.; ~~or~~

d) Restoration or enhancement of a non-forested riparian buffer pursuant to the requirements of Sec. 6.1.~~14~~**15**.G.~~;~~ **; or**

e) Other buffer mitigation approved as a condition of a variance approval.

D) *The Area of Mitigation*

The Town shall determine the required area of mitigation for all mitigation options identified above in Sec. 6.1.~~14~~**15**.C and as further specified in the requirements for each option set out in this Sec. 6.1.~~14~~**15**, according to the following:

…

2) The required area of mitigation shall be determined by applying the following multipliers to the area of the impacts determined according to Sec. 6.1.~~14~~**15**.D.1. for each zone of the riparian buffer:

…

d) Impacts to wetlands within Zones 1 and 2 of the riparian buffer that are subject to mitigation under 15A NCAC **0**2H .0506 shall comply with the mitigation ratios in 15A NCAC **0**2H .0506**; and shall be deducted from buffer mitigation area**.

3) Mitigation activities shall generate riparian buffer mitigation units in accordance with Table 6.1.15.D.1 below:

Table 6.1.15.D.1

Mitigation Activity	Square Feet of Mitigation Buffer	Riparian Buffer Mitigation Units Generated
Restoration Site	**1**	**1**
Enhancement Site	**2**	**1**
Preservation Site on Non-Subject Urban Streams	**3**	**1**
Preservation Site on Subject Urban Streams	**3**	**1**
Preservation Site on Non-Subject Rural Streams	**5**	**1**
Preservation Site on Subject Rural Streams	**10**	**1**

E) *The Location of Mitigation of Buffer Impacts*

1) *State Buffers*. For any option chosen for mitigation of State Buffer impacts,~~ the mitigation effort~~ **the following locational multipliers** shall be **applied to the area of mitigation, determined according to Sec. 6.1.15.D.2, based on location of the proposed mitigation site relative to that of the proposed impact site.** ~~located within the same subwatershed where the impacted property is located~~

~~and the same distance or closer to the closest public water supply reservoir as the proposed impact, and as close to the location of the impact as feasible. Alternatively, the applicant may propose mitigation anywhere within the Town's corporate limits or ETJ provided that the mitigation proposal accounts for differences in delivery of nutrients to the affected reservoir resulting from differences between the locations of the buffer impact and mitigation. Additional location requirements for the property donation option are enumerated below in Sec. 6.1.14.F.3.a.~~

a) Mitigation within the 12-digit Hydraulic Unit Code (HUC) shall be multiplied by 0.75;

b) Mitigation within the eight-digit HUC shall be multiplied by one (1); and

c) Outside of the eight-digit HUC shall be multiplied by two (2).

2) *Town Buffers.* For any option chosen for mitigation of Town buffer impacts, the mitigation effort shall be ~~located within the same river basin where the impacted property is located~~ **the same as that for State Buffers in Sec. 6.1.15.E.1.** ~~Additional location requirements for the property donation option are enumerated below in Sec. 6.1.14.F.3.a.~~

3) *Geographic Restrictions on Location of Mitigation.* Mitigation shall be performed in the same river basin where the impact is located with the following additional specifications:

a) In the Jordan Lake Watershed, mitigation shall be within the Lower New Hope sub-watershed of the Jordan Lake Watershed.

b) Buffer mitigation for impacts within watersheds with riparian buffer rules that also have federally listed threatened or endangered aquatic species may be done within other watersheds with the same federally listed threatened or endangered aquatic species as long as the impacts are in the same river basin as the mitigation site.

F) *Donation of Property*

Persons who choose to satisfy their mitigation determination by donating real property or an interest in real property shall meet the following requirements:

1) The donation of real property interests may be used to either partially or fully satisfy the payment of a compensatory mitigation fee to either**:** the State Riparian Buffer Restoration Fund for impacts to a State Buffer **in accordance with 15A NCAC 02R .0403,** or to a Town Riparian Buffer Restoration Fund, if established and available at the time, for impacts to a Town Buffer **in accordance with this Sec. 6.1.15.F**. The value of the property interest shall be determined by an appraisal performed in accordance with Sec. 6.1.~~14~~**15**.F.4.d. The donation shall satisfy the mitigation determination if the appraised value of the donated property interest is equal to or greater than the required mitigation fee calculated pursuant to 15A NCAC ~~2B .0269~~**02R .0601**. If the appraised value of the donated property interest is less than the required fee, the applicant shall pay the remaining balance due.

…

3) Donation of real property interests to satisfy the mitigation determination shall be accepted only if such property meets all of the following requirements:

a) In addition to the location requirements for mitigation of buffer impacts for State Buffers and Town Buffers, as applicable in Sec. 6.1.~~14~~**15**.E, the property shall be located within an area that is identified as a priority for restoration in, or is otherwise consistent with the goals of, the Basinwide Wetlands and Riparian Restoration Plan for the Basin developed by the NC DEQ pursuant to NCGS 143-214.10 for the basin in which the property is located;

b) The property shall contain riparian buffers not currently protected by the State's riparian buffer protection program that are in need of restoration as defined in Sec. 6.1.~~14~~**15**.G.4;

…

d) The size of the restorable riparian buffer on the property to be donated shall equal or exceed the area of mitigation responsibility determined pursuant to Sec. 6.1.~~14~~**15**.D;

…

4) At the expense of the applicant or donor, the following information shall be submitted to the Town with any proposal for donations or dedications of interest in real property:

a) Documentation that the property meets the requirements laid out in Sec. 6.1.~~14~~**15**.F.3;

…

c) A current property survey performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office, as identified by the State Board of Registration for Professional Engineers and Land Surveyors in "Standards of Practice for Land Surveying in North Carolina." Copies may be obtained from the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, **www.ncbels.org** ~~3620 Six Forks Road, Suite 300, Raleigh, North Carolina 27609~~;

d) A current appraisal of the value of the property performed in accordance with the procedures of the North Carolina Department of Administration, State Property Office as identified by the Appraisal Board in the "Uniform Standards of Professional North Carolina Appraisal Practice." Copies may be obtained from the Appraisal Foundation, ~~Publications Department, P.O. Box 96734, Washington, D.C. 20090-6734~~ **http://www.appraisalfoundation.org**; ~~and~~

e) A title certificate~~.~~**; and**

f) A Phase 1 Environmental Site Assessment documenting that the property does not contain structures that present health or safety problems to the general public. If wells, septic systems, water treatment systems, or water or sewer connections exist, they shall be filled, remediated, or closed at owner's expense and in accordance with State and local health and safety regulations.

5) In addition to the factors outlined in Sec. 6.1.15.F.2 through 4, the Town shall consider the following factors when determining whether to accept a donation of interest in real property to satisfy compensatory mitigation requirements:

a) whether restoration of the property will offset the adverse impacts of the permitted project; and

b) whether the adverse impacts of the permitted project are within the same 8-digit HUC as the property proposed for donation.

G) *Riparian Buffer Restoration or Enhancement*
Persons who choose to meet their mitigation requirement through riparian buffer restoration or enhancement shall meet the following requirements:

1) ~~The applicant may restore or enhance a non-forested riparian buffer if either of the following applies:~~ **The area of riparian buffer restoration or enhancement shall be equal to the required area of mitigation determined pursuant to Sec. 6.1.15.D;**

~~a) The area of riparian buffer restoration is equal to the required area of mitigation determined pursuant to Sec. 6.1.14.D: or~~

~~b) The area of riparian buffer enhancement is three (3) times larger than the required area of mitigation determined pursuant to Sec. 6.1.14.D;~~

2) The location of the riparian buffer restoration or enhancement shall comply with the requirements in Sec. 6.1.~~14~~**15**.E;

3) The riparian buffer restoration or enhancement site **may be proposed in accordance with Table 6.1.15.G.1 below**~~shall have a minimum width of 50 feet or equal to the width of the impacted buffer, whichever is greater, as measured on a line perpendicular to the surface water~~;

Table 6.1.15.G.1

Buffer Width (ft)	Proposed Percentage of Full Credit
Less than 20	0%
20-29	75%
30-100	100%
101-200	33%

4) Enhancement and restoration shall both have the objective of establishing a forested riparian buffer according to the requirements this Section. Enhancement shall be distinguished from restoration based on existing buffer conditions **which shall be determined by the Town. The applicant must submit a written request for the Town to perform this on-site buffer mitigation determination.** ~~Where existing trees are sparse, that is greater than or equal to 100 trees per acre but less than 200 trees per acre, a buffer may be enhanced.~~

~~Where existing woody vegetation is absent, that is less than 100 trees per acre, a buffer may be restored;~~ **In accordance with 15A NCAC 02B .0295:**

a) Enhancement site means a riparian zone site characterized by conditions between that of a restoration site and a preservation site such that the establishment of woody stems (i.e., tree or shrub species) will maximize nutrient removal and other buffer functions;

b) Restoration site means riparian zone sites that are characterized by an absence of trees and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings) or sites that are characterized by scattered individual trees such that the tree canopy is less than 25 percent of the cover and by a lack of dense growth of smaller woody stems (i.e., shrubs or saplings); and

c) Preservation site is defined in Sec. 6.1.15.H.1.

5) The applicant shall ~~first receive an Authorization Certificate for the proposed use according to the requirements of Sec. 6.1.11.G.5, or a variance pursuant to Sec. 6.1.13. After receiving this Certificate or variance, the applicant shall~~ submit a restoration or enhancement plan for approval by the Town. The restoration or enhancement plan shall **demonstrate compliance with the requirements in Sec. 6.1.15.B, D, and E; and shall also** contain the following:

…

b) A vegetation plan~~.~~ **that shall detail the activities proposed to ensure a final performance standard of 260 stems per acre at the completion of monitoring. The final performance standard shall include a minimum of four native hardwood tree species or four native hardwood tree and native shrub species, where no one species is greater than 50% of stems. Native hardwood and native shrub volunteer species may be included to meet the final performance standard of 260 stems per acre. The Town may approve alternative vegetation plans upon consideration of factors, including site wetness and plant availability, to meet the requirements of this Section**~~The vegetation plan shall include a. minimum of at least two (2) native hardwood tree species planted at a density sufficient to provide 320 trees per acre at maturity~~;

c) A grading plan**, if applicable**. The site shall be graded in a manner to ensure diffuse flow through the **entire** riparian buffer;

d) A **schedule for implementation, including** fertilization **and herbicide** plan **if applicable**; and

e) A ~~schedule for implementation~~**monitoring plan to document whether the site is expected to meet the final performance standards as defined in Sec. 6.1.15.G.5.b and other anticipated benefits to the adjacent water. The plan shall include a proposed schedule and method for monitoring the vegetative status of the restoration or enhancement site for five (5) years, including the health and average stem densities of native hardwood tree or tree and shrub species that are to be counted toward the final performance standard.**

6) Within one (1) year after the Town has approved the restoration or enhancement plan, the applicant shall present ~~proof~~**documentation** to the Town that the riparian buffer has been restored or enhanced**; unless the applicant requests, and the Town agrees in writing prior to that date, to a longer time period**. If ~~proof~~**documentation** is not presented within this timeframe, then the person shall be in violation of both the State's, where applicable, and the Town's riparian buffer protection program and shall be subject to civil penalties pursuant to Sec. 6.~~15~~**16**;

~~7) The mitigation area shall be placed under a perpetual conservation easement that will provide for protection of the property's nutrient removal functions; and~~

~~8)~~**7)** The applicant shall submit **written** annual reports**, unless an alternative schedule has been approved by the Town during the mitigation plan approval,** for a period of five (5) years after **completion of** the restoration or enhancement **site**, showing ~~that~~ **compliance with** the ~~trees planted have survived~~**approved monitoring plan** and that diffuse flow through the riparian buffer has been maintained~~.~~**; and** ~~The applicant shall replace trees that do not survive and restore diffuse flow if needed during that five-(5) year period.~~

8) If the Town determines that the native hardwood tree or tree and shrub species at the site are not expected to meet the final performance standards listed in Sec. 6.1.15.G.5.b , then the Town may require that the applicant replace trees or trees and shrubs as needed during that five-(5) year period. If the Town determines that diffuse flow through the buffer is not being maintained, then the Town may require that the applicant restore diffuse flow. If the Town determines that the final performance standards listed in Sec. 6.1.15.G.5.b have not been achieved at the end of the five-(5) year monitoring period, the Town may require additional years of monitoring. The Town shall make determinations referenced in this Section on a site specific basis based on the annual reports, any supplemental information submitted by the applicant, or a site evaluation by the Town.

H) Alternative Buffer Mitigation.

Any proposal for alternative buffer mitigation for impacts to State Buffers shall be submitted by the applicant in writing to the NC DEQ in accordance with 15A NCAC 02B .0295, and shall meet the content and procedural requirements for approval by the NC DEQ. Any proposal for alternative buffer mitigation for impacts to Town Buffers shall be provided in writing to the Town, shall meet the content and procedural requirements for approval by the Town, shall meet the requirements set out in Sec. 6.1.15.B and D, and the requirements set out as follows:

1) Preservation site means riparian zone sites that, as determined by a site visit conducted by the Town, are characterized by a forest consisting of the forest strata and diversity of species appropriate for the location.

2) ***Retroactive Credit.*** **Alternative buffer mitigation sites constructed and within the required monitoring period on the effective date of this Rule shall be eligible for use as alternative buffer mitigation sites. Alternative buffer mitigation sites that have completed monitoring and were released by the Town on or within the past 10 years of the effective date of 15A NCAC 02B**

.0295, November 1, 2015, shall be eligible for use as alternative buffer mitigation sites. These alternative buffer mitigation sites shall receive credit in accordance with the criteria set forth in Sec. 6.1.15.D and E. All alternative buffer mitigation site proposals submitted for retroactive credit shall include the following:

a) A map or maps of the proposed alternative buffer mitigation site;

b) Documentation of pre-existing conditions showing that the proposed alternative buffer mitigation site met the criteria to qualify for the applicable alternative buffer mitigation type identified in the applicable item in this Sec. 6.1.15.H;

c) Documentation of the activities that were conducted at the proposed alternative buffer mitigation site to meet success criteria identified in the applicable item in this Sec. 6.1.15.H; and

d) Documentation that the proposed alternative buffer mitigation site met the success criteria identified in the applicable item in this Sec. 6.1.15.H.

3) ***Buffer Restoration and Enhancement on Non-Subject Streams.*** **Restoration or enhancement of buffers may be conducted on intermittent or perennial streams that are not buffered pursuant to Sec. 6.1.11.C and D. These streams shall be confirmed as intermittent or perennial streams by Town staff in accordance with Sec. 6.1.11.D.4. The proposal shall meet all applicable requirements of Sec. 6.1.11.G.**

4) ***Preservation of Buffer on Non-Subject Streams*****. Preservation of buffers on intermittent or perennial streams that are not buffered pursuant to Sec. 6.1.11.C and D may be proposed in order to permanently protect the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer. These streams shall be confirmed as intermittent or perennial streams by Town staff in accordance with Sec. 6.1.11.D.4. The preservation site shall meet the requirements of Table 6.1.15.G.1; and shall be absent of the following: structures, infrastructure, hazardous substances, solid waste, and encumbrances and conditions on the transfer of the property interests. The area of preservation credit within a buffer mitigation site shall comprise of no more than 25% of the total area of buffer mitigation.**

5) ***Preservation of Buffers on Subject Streams.*** **Buffer preservation may be proposed on streams that are buffered pursuant to Sec. 6.1.11.C and D in order to permanently protect the buffer from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer beyond the protection afforded by the existing buffer rules on sites that meet the definition of a preservation site. The preservation site shall meet the requirements of Table 6.1.15.G.1; and shall be absent of the following: extensive structures, extensive infrastructure, hazardous substances, solid waste, and encumbrances and conditions on the transfer of the property interests. The area of preservation credit within a buffer mitigation site shall comprise of no more than 25% of the total area of buffer mitigation.**

6) ***Enhancement of grazing areas adjacent to streams.*** **Buffer credit at a 2:1 ratio shall be available for an applicant who proposes permanent exclusion of grazing livestock that otherwise degrade the stream and riparian zone through trampling, grazing, or waste deposition by fencing the livestock out of the stream and its adjacent buffer. The applicant shall provide an enhancement plan as set forth in Sec. 6.1.15.G. The applicant shall demonstrate that grazing was the predominant land use since August, 2000, the effective date of the UDO Town riparian buffer regulations.**

7) ***Mitigation on ephemeral channels.*** **For purposes of riparian buffer mitigation as described in this Sec. 6.1.15.H, an ephemeral channel is defined as a natural channel exhibiting discernible banks within a topographic crenulation (V-shaped contour lines) indicative of natural drainage on the 1:24,000 scale (7.5 minute) quadrangle topographic map prepared by the U.S. Geologic Survey, or as seen on digital elevation models with contours developed from the most recent available LiDAR data, available at no cost at http://www.ncfloodmaps.com/lidar.com. Ephemeral channels only flow for a short period of time after precipitation in the drainage area and do not have periods of base flow sustained by groundwater discharge. The applicant shall provide a delineation of the watershed draining to the ephemeral channel. The entire area proposed for mitigation shall be within the contributing drainage area to the ephemeral channel. The ephemeral channel shall be directly connected to an intermittent or perennial stream and contiguous with the rest of the mitigation site protected under a perpetual conservation easement. The area of the mitigation site on ephemeral channels shall comprise no more than 25% of the total area of buffer mitigation. The proposal shall meet all applicable requirements of Sec. 6.1.15.G for restoration or enhancement. The proposal shall meet all applicable requirements of 6.1.15.H.4 and 5 for preservation.**

8) ***Restoration and Enhancement on Ditches.*** **For purposes of riparian buffer mitigation as described in this Sec. 6.1.15.H, a ditch is defined as a man-made channel other than a modified natural stream that was constructed for drainage purposes. The width of the restored or enhanced area shall not be less than 30 feet and shall not exceed 50 feet for crediting purposes. The applicant or mitigation provider shall provide a delineation of the watershed draining to the ditch. The watershed draining to the ditch shall be at least four times larger than the restored or enhanced area along the ditch. The perpetual conservation easement shall include the ditch and the confluence of the ditch with the intermittent or perennial stream, and provide language that prohibits future maintenance of the ditch. The proposal shall meet all applicable requirements of Sec. 6.1.15.G for restoration or enhancement. To be used for mitigation, a ditch shall meet all of the following criteria:**

a) be directly connected with and draining towards an intermittent or perennial stream;

b) be contiguous with the rest of the mitigation site protected under a perpetual conservation easement;

c) stormwater runoff from overland flow shall drain towards the ditch;

d) be between one (1) and three (3) feet in depth; and

e) the entire length of the ditch shall have been in place prior to the effective date of the UDO Town buffer regulations, August, 2000.

9) *Stormwater Treatment Options.* All stormwater treatment options shall meet the following requirements:

a) Structural options already required by other local, state, or federal rule or permit cannot be used as alternative buffer mitigation credit, except to the extent such measure(s) exceed the requirements of such rule or permit. Stormwater Control Measures (SCMs), including bioretention facilities, constructed wetlands, infiltration devices and sand filters are all potentially approvable SCMs by the Town for alternative buffer mitigation credit. Other SCMs may be approved only if they meet the nutrient removal levels outlined in Sec. 6.1.15.H.9.b. Existing or planned SCMs for a local, state, or federal rule or permit may be retrofitted or expanded to improve their nutrient removal if this level of treatment is not required by other local, state, or federal rules. In this case, the predicted increase in nutrient removal may be counted toward alternative buffer mitigation credit;

b) *Minimum treatment levels:* Any structural SCM shall provide at least 30% total nitrogen and 35% total phosphorus removal as demonstrated by a scientific and engineering literature review as approved by the Town. The mitigation proposal shall demonstrate that the proposed alternative removes an equal or greater annual mass load of nutrients to surface waters as the buffer impact authorized in the authorization certificate or variance, following the calculation of impact and mitigation areas pursuant to Sec. 6.1.15.D and E. To estimate the rate of nutrient removal of the impacted buffer, the applicant may use the "NC Division of Water Quality–Methodology and Calculation for determining nutrient reductions associated with Riparian Buffer Establishment" available at no cost at https://files.nc.gov/ncdeq/Water%20Quality/Planning/NPU/Nutrient%20Offset%20Rule/Ag-Buffer-Credit.pdf. The applicant may propose an alternative method of estimating the rate of nutrient removal for consideration and review by the Town;

c) All proposed structural SCMs shall follow the NC DEQ Stormwater Design Manual and the *Town of Apex Standard Specifications and Standard Details*. If a specific proposed structural SCM is not addressed in this Manual, the applicant shall follow Part F in this Manual for approval.

d) All structural options are required to have Town approved operation and maintenance agreements in accordance with 6.1.12.D;

e) All structural options are required to have continuous and perpetual maintenance and inspection in accordance with 6.1.12.H and I;

f) Upon completion of construction, the designer for the type of SCM installed shall provide a signed and sealed certification statement that the system was inspected during construction and that the SCM was constructed in conformity with plans and specifications approved by the Town and in accordance with 6.1.12.F and the *Town of Apex Standard Specifications and Standard Details*;

g) *Removal and replacement of structural options:* If a structural option is proposed to be removed and cannot be replaced on-site, then a structural or non-structural measure of equal or better nutrient removal capacity, as determined by calculations submitted to and approved by the Town, in a location as specified by Sec. 6.1.15.G shall be constructed as a replacement;

h) *Renovation or repair of structural options:* If the applicant or the Town determines that a structural option must be renovated or repaired, it shall be renovated to provide equal or better nutrient removal capacity than as originally designed; and

i) Structural options, as well as their operation and maintenance, are the responsibility of the landowner or easement holder unless the Town gives written approval for another responsible party to operate and maintain them. Structural options shall be located in recorded easements for the purposes of operation and maintenance and shall have recorded access easements providing access to the nearest public right-of-way. These easements shall be granted in favor of the party responsible for operating and maintaining the structure and provide that operation and maintenance is the responsibility of the landowner, easement holder, or other responsible party.

10) *Approval for other alternative buffer mitigation options.* Other alternative riparian buffer mitigation options not specified within this Sec. 6.1.15.H may be submitted to the Town for review and recommendation to the Water Resources Director on a case-by-case basis. Any proposal submitted under Sec. 6.1.15.H.10 shall provide documentation or calculations to demonstrate that the proposed alternative mitigation option removes an equal or greater annual mass load of nutrients to surface waters as a riparian buffer. Upon completion of the Town's review, and prior to recommendation to the Water Resources Director, the Town shall advertise a 30-calendar day public comment period through the Town's website with instructions on how to provide comments. Town staff shall present their recommendations, including comments received during the public comment notice period, to the Water Resources Director for a final decision. If approved by the Water Resources Director, the alternative buffer mitigation option may be proposed by other applicants.

I) *Purchase of Buffer Mitigation Credits from a Private or Public Compensatory Buffer Mitigation Bank.* Applicants who choose to satisfy some or all of their mitigation by purchasing mitigation credits from a private or public compensatory buffer mitigation bank shall meet the following requirements:

1) The compensatory buffer mitigation bank from which credits are purchased shall have available riparian buffer credits approved by the NCDEQ;

2) The compensatory buffer mitigation bank from which credits are purchased shall be located pursuant to 6.1.15.D and 6.1.15.E; and

3) After receiving a mitigation acceptance letter from the compensatory buffer mitigation bank, proof of payment for the credits shall be provided to the Town prior to any activity that results in the removal or degradation of the protected riparian buffer, and prior to Construction Drawing approval.

J) ***Payment to the Riparian Buffer Restoration Fund.*** **Applicants who choose to satisfy some or all of their mitigation requirement by paying a compensatory mitigation fee to the Riparian Buffer Restoration Fund shall meet the requirements of 15A NCAC 02R .0601. Applicants may also choose to make a payment to a Town Riparian Buffer Restoration Fund, if established and available at the time, for impacts to a Town Buffer. Payments made to the NC Division of Mitigation Services (DMS), or the Town as applicable, shall be contingent upon acceptance of the payment by the DMS, or the Town. The DMS, or the Town, shall consider their financial, temporal, and technical ability to satisfy the mitigation request to determine whether they shall accept or deny the request.**

~~6.1.15~~**6.1.16** Civil Penalties

…

~~6.1.16~~**6.1.17** Criminal Penalties

…

~~6.1.17~~**6.1.18** Remedies

…

8.2.7 Fences, Walls, and Berms

Fences, walls, and berms are permitted as elements of site design and in some locations, may be used to conceal storage or other unsightly or conflicting land uses. Fences are not allowed around detention and retention basins per Sec. 6.1.1~~2~~**3**.B.10. All fences, walls, and berms shall meet the following requirements:

…

11.4.4 Civil Penalties

Except as provided in Sec. 6.1.1~~5~~**6**, the following civil penalties may be imposed on a person who violates this Ordinance:

…

12.2 TERMS DEFINED

…

Built-Upon Area

For the purposes of complying with the standards and requirements of the Watershed Protection Overlay Districts, calculation of the built-upon area within the proposed development shall include, but not be limited to, all existing public and private streets, proposed public streets, sidewalks, driveways, rooftops, parking lots, patios, and all other impervious and partially impervious surfaces, including CABC and gravel within the development. **In accordance**

with NCGS 143-214.7, built upon area does not include ~~The~~**the** water area of swimming pools**;** ~~and wooden~~ slatted decks**; and a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric; a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.001 centimeters per second (1.41 inches per hour); or landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as the area between sections of pavement that support the weight of a vehicle.**~~shall not be included in the calculation of the built-upon area~~. **The owner or developer of a property may opt out of any of the exemptions from built-upon area set out in this section.**

…

Section 2. These amendments shall not apply to projects for which an application for development approval has been submitted before the effective date of this ordinance.

Section 3. The Planning Director and/or Town Manager are hereby authorized to renumber, revise formatting, correct typographic errors, to verify and correct cross references, indexes and diagrams as necessary to codify, publish, and/or accomplish the provisions of this ordinance or future amendments as long as doing so does not alter the terms of this ordinance.

Section 4. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed. If any section, paragraph, subdivision, clause or provision of this ordinance shall be adjudged invalid, such adjudication shall apply only to such section, paragraph, subdivision, clause or provision so adjudged and the remainder of the ordinance shall be deemed valid and effective.

Section 5. The ordinance shall be effective upon enactment on the 1st day of July 2024.

Introduced by Council Member _____

Seconded by Council Member _____

Attest:

_____
Allen Coleman, CMC, NCCCC
Town Clerk

TOWN OF APEX

_____
Jacques K. Gilbert
Mayor

Approved As To Form:

_____
Laurie L. Hohe
Town Attorney



APEX
NORTH CAROLINA

6.1 & 12.2 UDO Amendments

PB 4/8/24 & TC 4/23/24

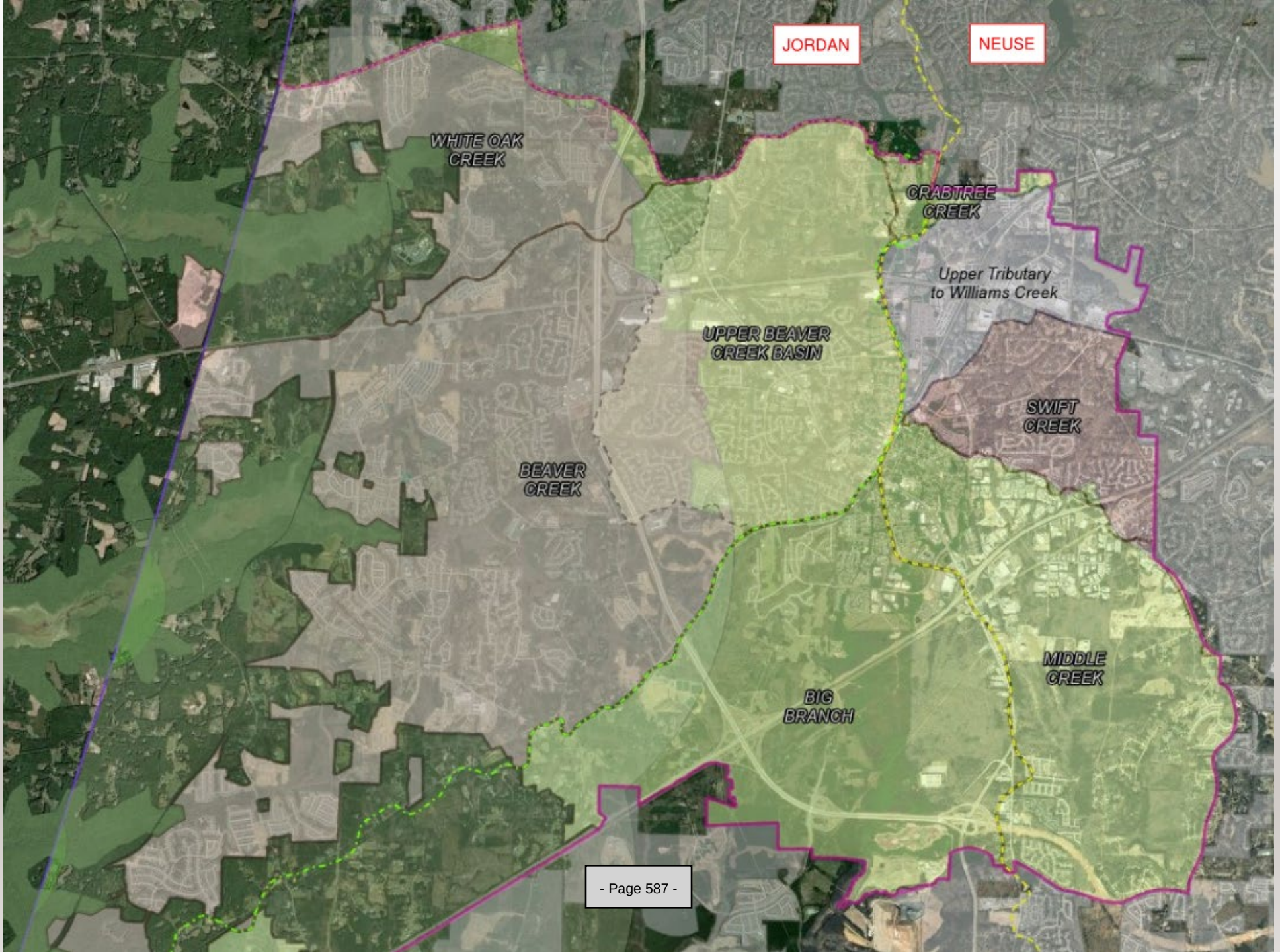
Proposed Changes

- Section 6.1 – *Watershed Protection Overlay Districts*
  - Add Neuse River Basin Nutrient Management
  - Update Riparian Buffer Mitigation

- Section 12.2 – *Terms Defined*
  - Update Built-Upon Area (BUA) definition

UDO	Revision	State Regulation
6.1	Neuse Rules	15A NCAC 02B .0711
6.1	Buffer Mitigation	15A NCAC 02B .0295
12.2	BUA Definition	NCGS 143-214.7

APEX NORTH CAROLINA


JORDAN
NEUSE
WHITE OAK CREEK
CRABTREE CREEK
Upper Tributary to Williams Creek
UPPER BEAVER CREEK BASIN
SWIFT CREEK
BEAVER CREEK
MIDDLE CREEK
BIG BRANCH

Neuse Nutrient Management for Developments

- Nitrogen stormwater loading rate limit: ≤3.6 lbs/ac/yr*
- Land disturbance thresholds for stormwater requirements:

	Current	Min. Required per Regulation		Proposed	
Development Type	Town-wide	Neuse	Jordan/Cape Fear	Neuse	Jordan/Cape Fear
Single Family / Duplex	1 ac.	1 ac.	1 ac.	1 ac.	1 ac.
Commercial, Multifamily, etc.	1 ac.	0.5 ac.	1 ac.	0.5 ac.	0.5 ac.

*Currently no nutrient requirements within the Jordan/Cape Fear basin

APEX NORTH CAROLINA

Buffer Mitigation

- Revised mitigation calculation
  - Proximity, type, width

- Expanded mitigation options
  - Restore/enhance subject streams
  - Donate property
  - Buy mitigation bank credits
  - ***New*** **options** [6.1.15.H]
    - Preservation, restore/enhance non-subject streams/ditches, Enhanced SCM design/size
    - requires DEQ approval

APEX NORTH CAROLINA

Neuse Implementation

- Regulatory deadline
  - No later than July 1, 2024

- Proposed
  - Projects with 1st site plan submitted on or after July 1, 2024

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CLOSED SESSION

Meeting Date: April 23, 2024

Item Details

Presenter(s): Laurie Hohe, Town Attorney

Department(s): Legal Services

Requested Motion

Motion to go into closed session pursuant to NCGS 143-318.11(a)(3) to discuss the handling of the matter of Empire Contractors, Inc v. Town of Apex.

Approval Recommended?

Yes

Item Details

NCGS § 143-318.11(a)(3)

"To consult with an attorney employed or retained by the public body in order to preserve the attorney-client privilege between the attorney and the public body"

Attachments

- N/A

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CLOSED SESSION

Meeting Date: April 23, 2024

Item Details

Presenter(s): Laurie Hohe, Town Attorney

Department(s): Legal Services

Requested Motion

Possible motion to enter into closed session pursuant to NCGS § 143-318.11(a)(6) to consider a personnel matter.

Approval Recommended?

N/A

Item Details

NCGS § 143-318.11(a)(6)

"To consider the qualifications, competence, performance, character, fitness, conditions of appointment, or conditions of initial employment of an individual public officer or employee or prospective public officer or employee; or to hear or investigate a complaint, charge, or grievance by or against an individual public officer or employee"

Attachments

- N/A