



## Memorandum

TO: Mayor and Town Board of Commissioners  
FROM: Danny Johnson, AICP, Planning Director  
DATE: September 25, 2019  
RE: Agenda Item C. 4.

Public Hearing (quasi-judicial) on Case: **SP 19-02**, The Townes at Carlton Pointe site plan review for 54 townhomes on a total of 5.8 acres, located 4524, 4522, 4541, and 4542 Vineyard Pine Lane located in the Carlton Pointe PUD Master Plan and zoned Residential and Planned Unit Development District (R&PUD).

### Background

#### Summary Information

Acreage: 5.8 (All four lots)

Current Zoning: Residential and Planned Unit Development (R&PUD) zoning district

Owner: Carlton Group of North Carolina, LLC

Developer: Carlton Group of North Carolina, LLC

#### Request

A request for a site plan approval (quasi-judicial) for 54 residential townhomes at located 4524, 4522, 4541, and 4542 Vineyard Pine Lane for a combined total 5.8 acres. The site plan shows existing residential buildings and individual townhome units with the required parking spaces, driveways to garages, sidewalks, water and sewer services, proposed public streets and landscaping for required buffers in compliance to the Special Use Permit 18-08 conditions. The site is currently zoned Residential and Planned Unit Development (R&PUD) zoning district, and included in the Carlton Pointe PUD Master Plan as amended. The maximum density for townhomes in R&PUD is ten dwellings per acre. The total density based on the proposed site plan is 9.31 units per acre. The proposed site plan will meet the requirements of the Unified Development Ordinance.

#### 2017 Rolesville Comprehensive Plan

The Comprehensive Plan, Future Land Use Map classifies these parcels for High-Density Residential describes a mixture of housing types with an average density of six or more dwelling units per acre.

## **2002 Thoroughfare Plan and Traffic Impact Analysis (TIA)**

The 2002 Thoroughfare Plan calls for Jonesville Road as a three-lane major highway, and at the existing intersection of Vineyard Pine Lane is an existing three-lane highway improvement up to South Main Street. Vineyard Pine Lane is an existing standard two-lane local town street and is not shown on the 2002 Thoroughfare Plan, therefore has no recommended street improvements.

### **Planning Staff Recommendation**

The Technical Review Committee has reviewed the proposed site plan for Townes at Carlton Pointe Townhomes, and the committee recommends approval. The Planning Staff recommendation is to approve the site plan for SP 19-02 Townes at Carlton Pointe Townhomes. All the requirements, provisions, and standards of the Rolesville Unified Development Ordinance has been met for this proposed site plan.

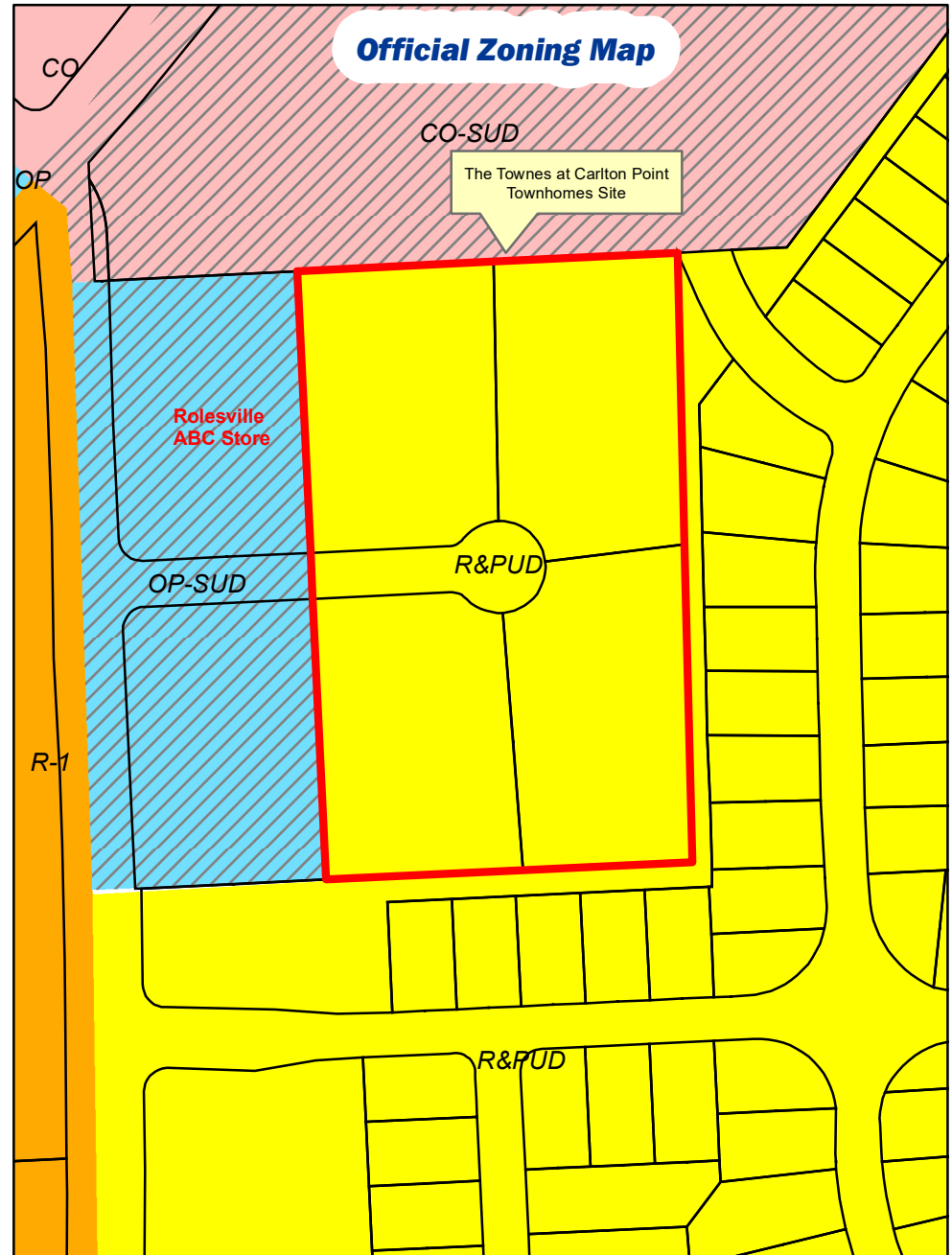
### **Suggested Town Board motion**


I move to approve public hearing Case SP 19-02, The Townes at Carlton Pointe with the evidence and testimony received at the hearing to determine the findings of fact.


### **Attachments**

SP 19-02 Location Map  
SP 19-02 Site Plan Application  
SP 19-02 Proposed Site Plan

# SP 19-02 The Townes at Carlton Point Townhomes Site Plan Request



 Site Plan location



1 in = 200 ft

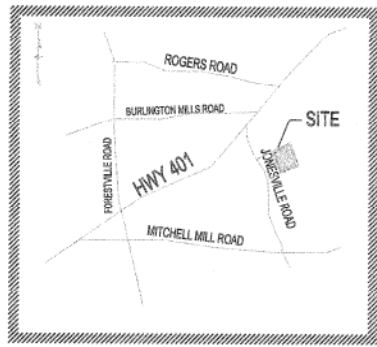
# Construction Plan Townes at Carlton Pointe Townhome Subdivision

Town of Rolesville  
Wake County, North Carolina

## The Carlton Group of NC, LLC

5856 Faringdon Place  
Suite 200  
Raleigh, NC 27609

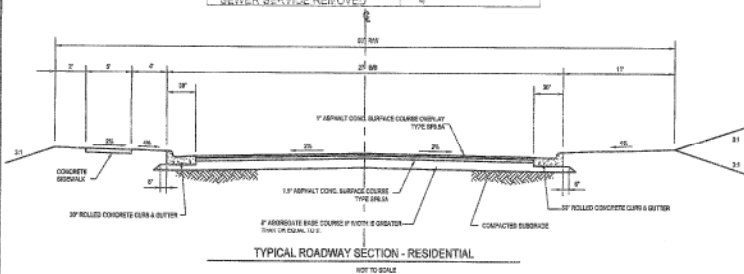
**PROJECT INFORMATION:**  
**PROJECT:** TOWNES AT CARLTON POINTE  
**CONSTRUCTION PLAN**  
**OWNER/DEVELOPER:** CARLTON GROUP OF NC LLC  
 5856 FARINGDON PLACE  
 RALEIGH, NC 27609  
 (914) 403-7848  
**PHONE:** MARSHALL SKIP DAVIS  
**CONTACT:** SKIPD4@AOL.COM  
**EMAIL:**  
**ENGINEER:** KEITH GETTLE, PE  
 caaENGINEERS, INC.  
 4932 B WINDY HILL DRIVE  
 RALEIGH, NC 27609  
 (919) 210-3934  
**PHONE:** KGETTLE@CAENGINEERS.COM  
**EMAIL:**  
**SURVEYOR:** THE WOODCOCK GROUP, LLC  
 P O BOX 336, YOUNGSVILLE NC, 27598  
 (919) 522-7253  
**PROJECT ADDRESS:** 4521, 4522, 4541, AND 4542 VINEYARD PINE LN  
 ROLESVILLE, NC  
**TOTAL ACRES:** 5.8 ACRES  
**OPEN SPACE:** ACTIVE = .42 ACRES  
 PASSIVE = 2.22 ACRES  
**PERMITS:** 1758455319, 1758457329, 1758455033, 1758457035  
**ZONING:** R 8 PUD  
**EXIST USE:** VACANT  
**FLOOD ZONE:** NO FLOOD ZONE PER FEMA FIRM MAP 3720174700J



VICINITY MAP  
1"=800'

### PUBLIC IMPROVEMENT QUANTITIES

PHASE NUMBER(S)	PHASE 1
NUMBER OF LOT(S)	53
LOT NUMBERS BY PHASE	53
NUMBER OF UNITS	53
PUBLIC WATER - 8" DIP (LF)	277
PUBLIC WATER - 8" DIP (LF)	639
PUBLIC SEWER (LF)	567
WATER SERVICE STUBS	65
WATER SERVICE ABANDONED	2
SEWER SERVICE STUBS (NEW)	53
SEWER SERVICE REMOVED	4



SHEET	DESCRIPTION
C1	Cover Sheet
C2	Standard Notes
C3	Existing Conditions & Demolition Plan
C4	Site Plan
C5	Utility Plan
C6	Grading Plan
C7	Landscaping Plan
C8	Plan and Profile - Marshskip and Jamescroft
D-1	Plan and Profile - Excelsior and Vineyard Pine Ln
D-1	Standard Site Details
D-2	Stormwater Details
D-3	Sanitary Sewer Details
D-4	Water Details
EC1	Erosion Control Plan - Phase 1
EC2	Erosion Control Plan - Phase 2
EC3	Erosion Control Plan - Phase 3
EC4	Erosion Control - Phase 4 and NCG01
EC5	Erosion Control Details
EC6	Erosion Control Details
NCG01	Ground Stabilization and Materials Handling
NCG01	Self Inspection, Record Keeping and Reporting

### GENERAL NOTES

- BOUNDARY AND TOPOG INFORMATION TAKEN FROM THE WOODCOCK GROUP, LLC, DATED JANUARY 26, 2019.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES & SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS ACTIVITIES. CALL UTILITY LOCATOR SERVICE AT LEAST 48 HOURS PRIOR TO DIGGING.
- ALL CONSTRUCTION WILL BE IN STRICT CONFORMANCE TO THE TOWN OF ROLESVILLE, CITY OF RALEIGH AND WAKE COUNTY'S STANDARDS AND SPECIFICATIONS.
- NO CHANGES MAY BE MADE TO THE APPROVED DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE ISSUING AUTHORITY.
- CONSTRUCTION PLANS FOR PUBLIC STREETS AND UTILITIES MUST BE APPROVED BY THE CITY OF RALEIGH PUBLIC WORKS DEPARTMENT AND PUBLIC UTILITIES DEPARTMENT PRIOR TO RECORDING OF ANY PLAN FOR THIS DEVELOPMENT.

### NOTES:

- WATER SUPPLY AND WASTEWATER FOR ALL LOTS IN THIS DEVELOPMENT SHALL BE PROVIDED BY THE CITY OF RALEIGH PER AGREEMENT WITH TOWN OF ROLESVILLE.
- ROAD NAMES SHALL BE SUBMITTED AND APPROVED PRIOR TO APPROVAL OF FINAL PLAN.
- ALL OPEN SPACE PARCELS SHALL BE OWNED BY A LEGALLY ORGANIZED HOMEOWNERS ASSOCIATION THAT WILL BE RESPONSIBLE FOR MANAGING AND INSURING RESIDENTS ACCESS.
- HANDICAP RAMPS WILL BE INSTALLED AT ALL INTERSECTIONS NECESSARY FOR SIDEWALK CONNECTIVITY.

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT	
APPROVED	
EROSION CONTROL	<input type="checkbox"/> S-
STORMWATER MGMT.	<input type="checkbox"/> S-
FLOOD STUDY	<input type="checkbox"/> S-
DATE	

INITIAL SUBMITTAL DATE 6-19-2019  
REVISION 1 DATE 9-13-2019

### CONCURRENT REVIEW APPROVAL

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Public Water Distribution / Stormwater Drainage	
Public	
Water Distribution / Stormwater Drainage	
DATE	9/10/19

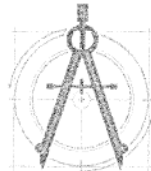
ATTENTION CONTRACTORS	
Public	
Water Distribution / Stormwater Drainage	
DATE	9/10/19

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and occupancy. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. The specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Contractors must be in accordance with all Local, State, and Federal Rules and Regulations.

TRANSPORTATION FIELD SERVICES  
 PUBLIC UTILITIES  
 STORMWATER  
 PLANNING/ZONING  
 FIRE  
 URBAN FORESTRY  
 SITE ACCESSIBILITY

NEW	EXISTING
DRAINAGE STRUCTURE	
SANITARY STORM MAINS #	
SANITARY SEWER CLEANOUT	
WATER VALVE	
FIRE HYDRANT	
UNDERHEAD UTILITY LINE	
UNDERGROUND ELECTRIC LINE	
UNDERGROUND TELECOMMUNICATION LINE	
FIBER OPTIC CABLE	
GAS LINE	
STORM DRAINAGE PIPE	
SANITARY SEWER LINE	
WATER LINE	
SURFACE ELEVATION CONTOUR	
SURFACE SPOT ELEVATION	
CLEANING LANYARD LINE	
LIMIT OF DISTURBANCE	
ELECTRICAL TRANSFORMER PAD	
TREE (LANDSCAPE / SURVEY)	

**811**  
 Know what's below.  
 Call before you dig.  
 (or call 1-888-484-8848)



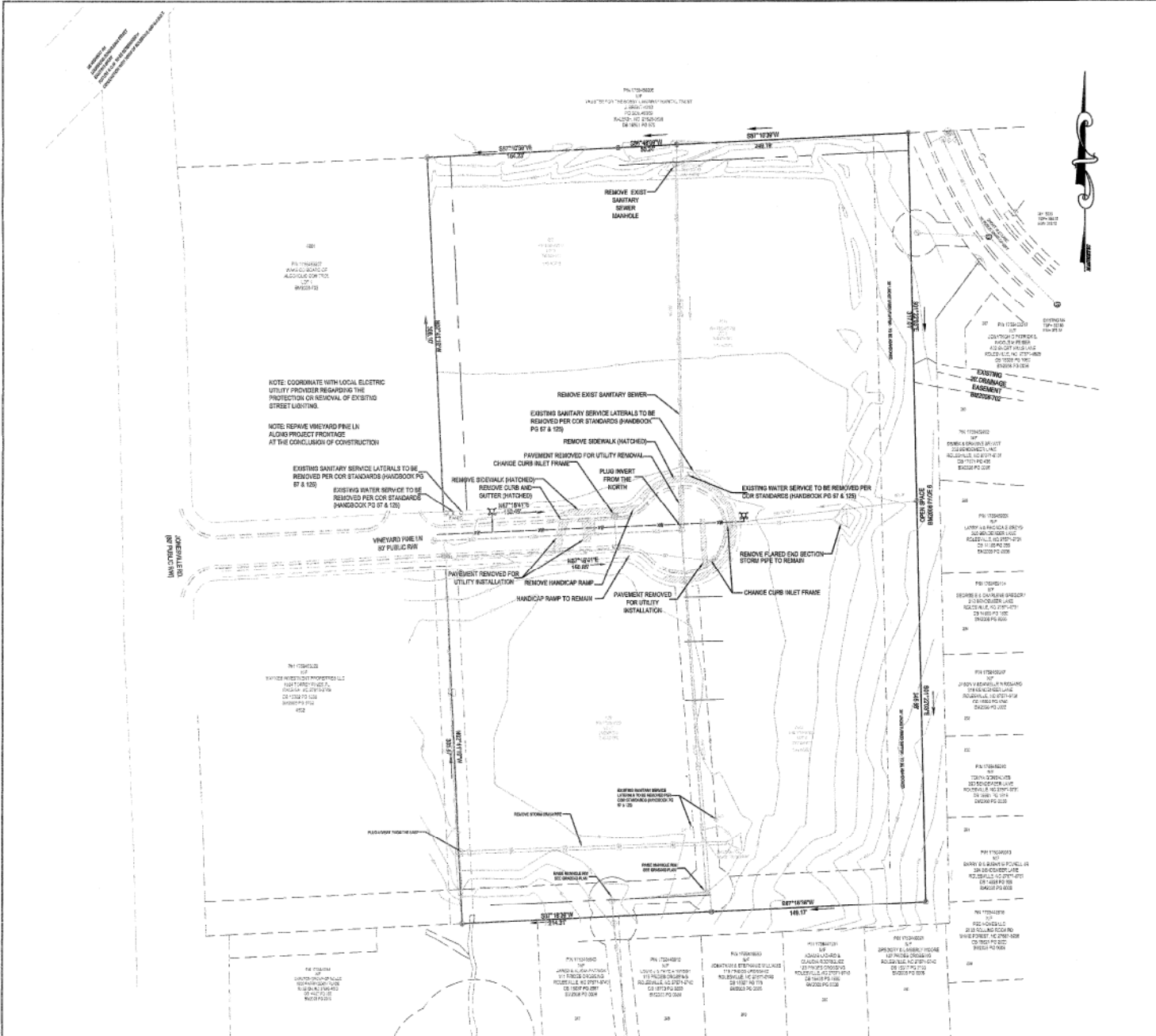
**caaENGINEERS, Inc.**  
 McIntyre, Gettle, Crowley  
 PROFESSIONAL ENGINEERS

1233 Heritage Links Drive, Wake Forest, North Carolina 27587  
 4932B Windy Hill Drive, Raleigh, North Carolina 27609  
 (919)625-6755

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### NOTE:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ROLESVILLE, WAKE COUNTY AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS



**DEMOLITION PLAN NOTES:**

1. REMOVE / DEMOLISH ABANDON AFTER EROSION CONTROL MEASURES ARE IN PLACE AND APPROVAL OF TOWN INSPECTOR. REFER TO EROSION CONTROL PLANS. DEMOLITION PERMIT REQUIRED PRIOR TO THE REMOVAL OF ANY EXISTING STRUCTURE ON SITE.
2. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS EXCEPT WHEN PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE ACCEPTABLE TEMPORARY UTILITY SERVICES: (1) NOTIFY OWNER NOT LESS THAN ONE WEEK IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS. (2) DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT RECEIVING OWNER WRITTEN PERMISSION. (3) COORDINATE ALL UTILITY RELOCATION WITH APPROPRIATE UTILITY PROVIDER.
3. SUBSURFACE FEATURES ARE SHOWN IN APPROXIMATE LOCATION. CONTRACTOR IS RESPONSIBLE FOR SUBSURFACE UTILITY EXPLORATION TO DETERMINE UTILITY LOCATIONS AND DEPTHS.
4. VERIFY LOCATIONS AND SIZES OF ALL EXISTING FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION, AND REPAIR OR REPLACE ANY DAMAGES TO EXISTING UTILITIES RESULTING FROM CONSTRUCTION.

NOTE: COORDINATE WITH LOCAL ELECTRIC UTILITY PROVIDER REGARDING THE PROTECTION OR REMOVAL OF EXISTING STREET LIGHTING.

NOTE: REPAIR WHEYARD PIPE LN ALONG PROJECT FRONTAGE AT THE CONCLUSION OF CONSTRUCTION

EXISTING SANITARY SERVICE LATERALS TO BE REMOVED PER COR STANDARDS (HANDBOOK PG 87 & 128)

EXISTING WATER SERVICE TO BE REMOVED PER COR STANDARDS (HANDBOOK PG 87 & 128)

NOTE: COORDINATE WITH LOCAL ELECTRIC UTILITY PROVIDER REGARDING THE PROTECTION OR REMOVAL OF EXISTING STREET LIGHTING.

NOTE: REPAIR WHEYARD PIPE LN ALONG PROJECT FRONTAGE AT THE CONCLUSION OF CONSTRUCTION



**Know what's below.  
Call before you dig.**  
(or call: 1-800-832-4948)

**NOTES**

1. SEE SHEET C1 FOR STANDARD NOTES.

**GRAPHIC SCALE**



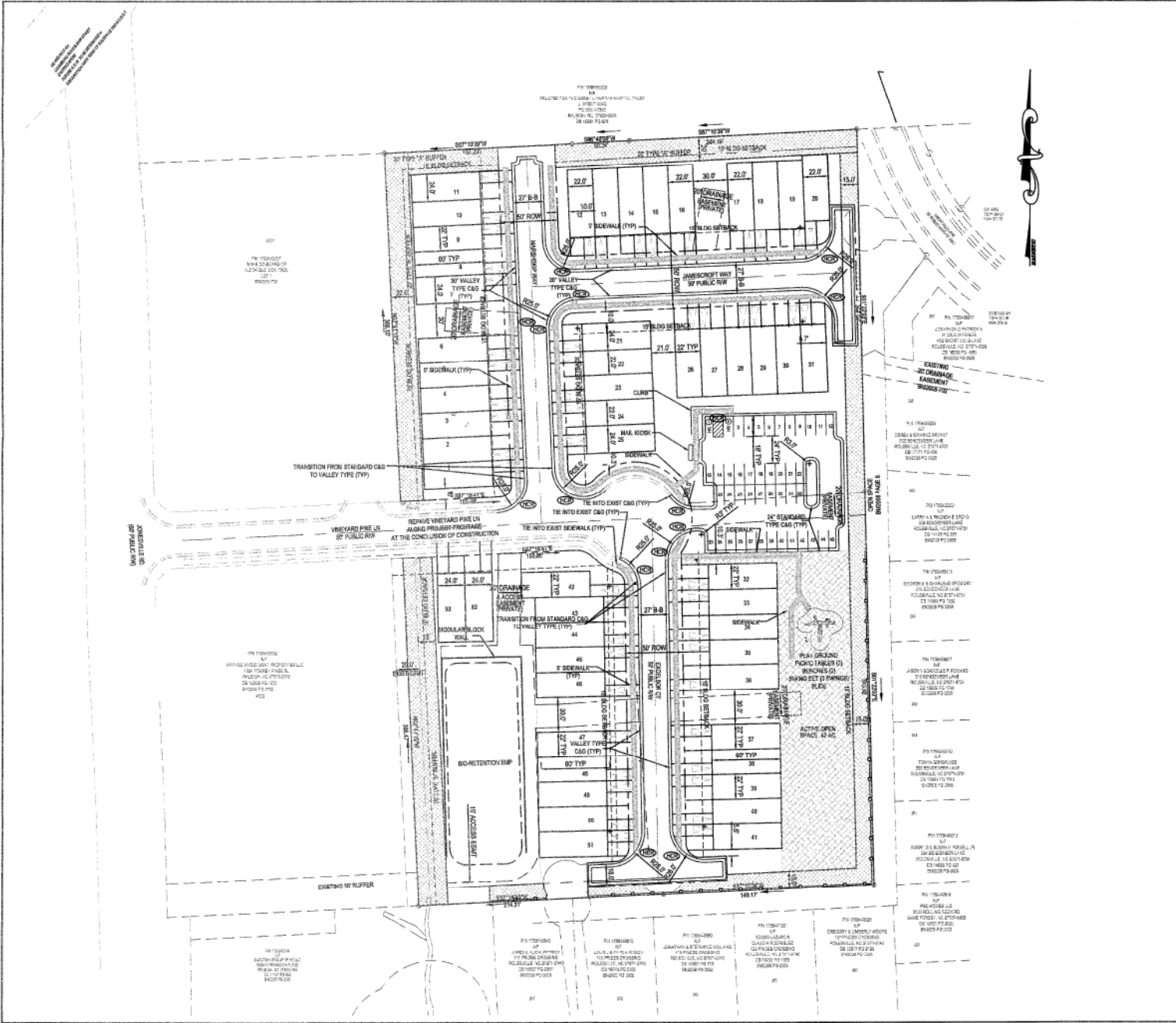
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Inclayville, Corolla, Croftley  
PROFESSIONAL ENGINEERS  
1223 Hanging Lake Drive, Wake Forest, North Carolina 27677  
40222 Wesley Branch, Raleigh, North Carolina 27608  
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NO.	DATE	DESCRIPTION	BY	CHK.
1	10/10/19	ISSUED FOR PERMIT	JK	JK
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10	10/10/19	REVISION	JK	JK



**Existing Conditions and Demo Plan**  
The Townes at Carlton Point  
The Carlton Group of NC, LLC  
Rolesville, Wake County, North Carolina

Job No. 5501  
Dwg No. **C2**



**SITE DATA**

PROJECT AREA = 5.8 ACRES  
 OPEN SPACE REQUIRED = 5.8 AC x 15% = .87 ACRES  
 ACTIVE OPEN SPACE REQUIRED = .87 AC x 30% = .26 ACRES  
 ACTIVE OPEN SPACE PROVIDED = .42 ACRES  
 LANDSCAPE BUFFERS = .89 AC  
 COMMON AREA LOT (OPEN SPACE) = 2.84 AC  
 PASSIVE OPEN SPACE 2.84 AC - .42 AC - .89 AC = 1.54 AC

RIGHT OF WAY AREA = 1.04 AC  
 TOWNHOME LOTS AREA 2.12 AC

**DESIRED PARKING**

TOTAL OF 50 UNITS @ 3 BEDROOMS / UNIT = 150 BEDROOMS  
 50 UNITS X 2.5 SPACES / UNIT = 125 SPACES  
 VISITOR PARKING REQUIRED - 53 UNITS X 1 SPACE / 4 UNITS = 14 SPACES  
 PARKING FOR MAIL - 3 SPACES + 1 HANDICAP SPACE  
 TOTAL REQUIRED PARKING - 133 + 14 + 3 + 1 = 151 SPACES

**PROVIDED PARKING**

PARKING PROVIDED IN DRIVENAYS AND GARAGE - 106 SPACES  
 OFF STREET PARKING SPACES PROVIDED - 45 SPACES  
 TOTAL PROVIDED PARKING - 106 + 45 = 151 SPACES

**BUILDING SETBACKS - TOWNHOMES**

FRONT YARD - BUILDING TO ROW - 15' MINIMUM  
 REAR YARD - 10' MINIMUM  
 SIDE YARD - 5' MINIMUM  
 DISTANCE BETWEEN BUILDINGS - 30' MINIMUM

**LEGEND**

- LANDSCAPE BUFFER
- OPEN SPACE (ACTIVE)
- SIDEWALK
- HANDICAP RAMP
- CAR SYMBOL

**NOTES**

1. SEE SHEET C1 FOR STANDARD NOTES.

**GRAPHIC SCALE**



**craENGINEERS, Inc.**  
 Raleigh, North Carolina  
 PROFESSIONAL ENGINEERS  
 1223 Hatteras Lake Drive, Wake Forest, North Carolina 27627  
 4022 W. Hargett Street, Suite 200  
 Raleigh, NC 27607  
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NO.	REVISION	DATE	BY	CHK.
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51	REVISED PER COMMENTS	08/14/19	MM	MM



**Site Plan**  
 The Townes at Carlton Point  
 The Carlton Group of NC, LLC  
 Rolesville, Wake County, North Carolina

Job No. 5501  
 Dwg. No. C3



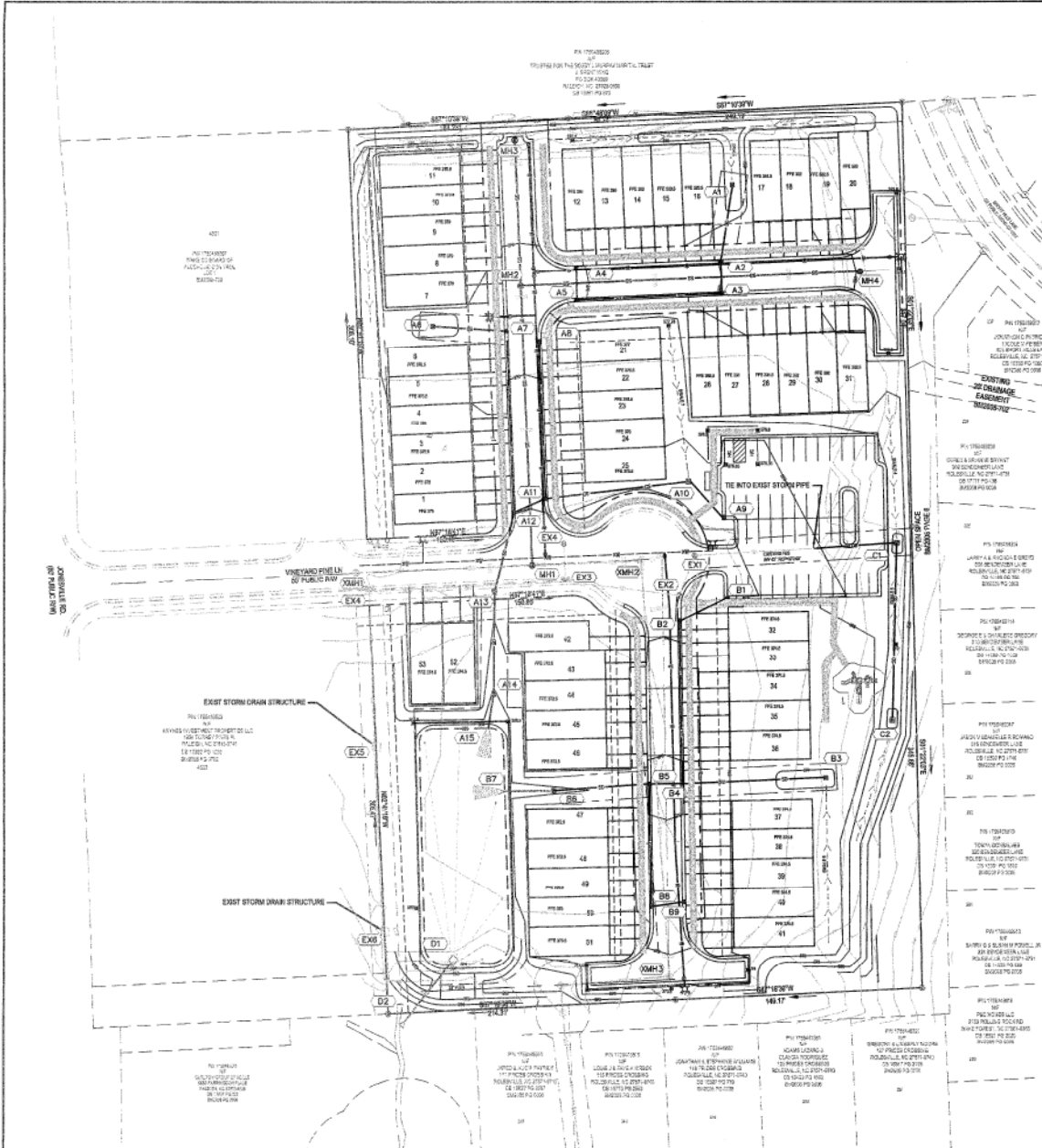
**caaeENGINEERS, Inc.**  
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REV	DATE	BY	CHK	DESCRIPTION
1	11/15/18	MM	MM	ISSUED FOR PERMIT
2	11/15/18	MM	MM	REVISIONS
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19	11/15/18	MM	MM	REVISIONS
20	11/15/18	MM	MM	REVISIONS



**Grading / Storm Drainage**  
 The Townes at Carlton Point  
 The Carlton Group of NC, LLC  
 Rolesville, Wake County, North Carolina

Job No. 5501  
 Draw No. **C4**



### STORM DRAINAGE STRUCTURE SCHEDULE

Structure Number	Structure Type	Structure Data		Invert Elevation		Pipe Data		Remarks
		Bottom (ft)	Top (ft)	Struct. Invert (ft)	Outlet Invert (ft)	Flow Line (ft)	Flow Line (ft)	
A1	RECTOY MANHOLE	377.00	377.00	377.00	377.00	42	15.00	10 RCP
A2	RECTOY MANHOLE	386.00	374.25	374.25	374.25	42	15.00	10 RCP
A3	RECTOY MANHOLE	388.00	375.75	375.75	375.75	42	15.00	10 RCP
A4	RECTOY MANHOLE	378.75	375.75	375.75	375.75	42	15.00	10 RCP
A5	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A6	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A7	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A8	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A9	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A10	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A11	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A12	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A13	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
A14	RECTOY MANHOLE	380.00	380.00	380.00	380.00	42	15.00	10 RCP
A15	RECTOY MANHOLE	380.00	380.00	380.00	380.00	42	15.00	10 RCP
B1	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
B2	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
B3	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
B4	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
B5	RECTOY MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX1	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX2	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX3	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX4	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX5	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
EX6	EXISTING MANHOLE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S1	SWALE	380.00	380.00	380.00	380.00	42	15.00	10 RCP
S2	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S3	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S4	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S5	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S6	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
S7	SWALE	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C1	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C2	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C3	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C4	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C5	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C6	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP
C7	EXISTING CURB	375.00	375.00	375.00	375.00	42	15.00	10 RCP

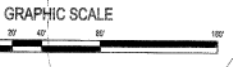
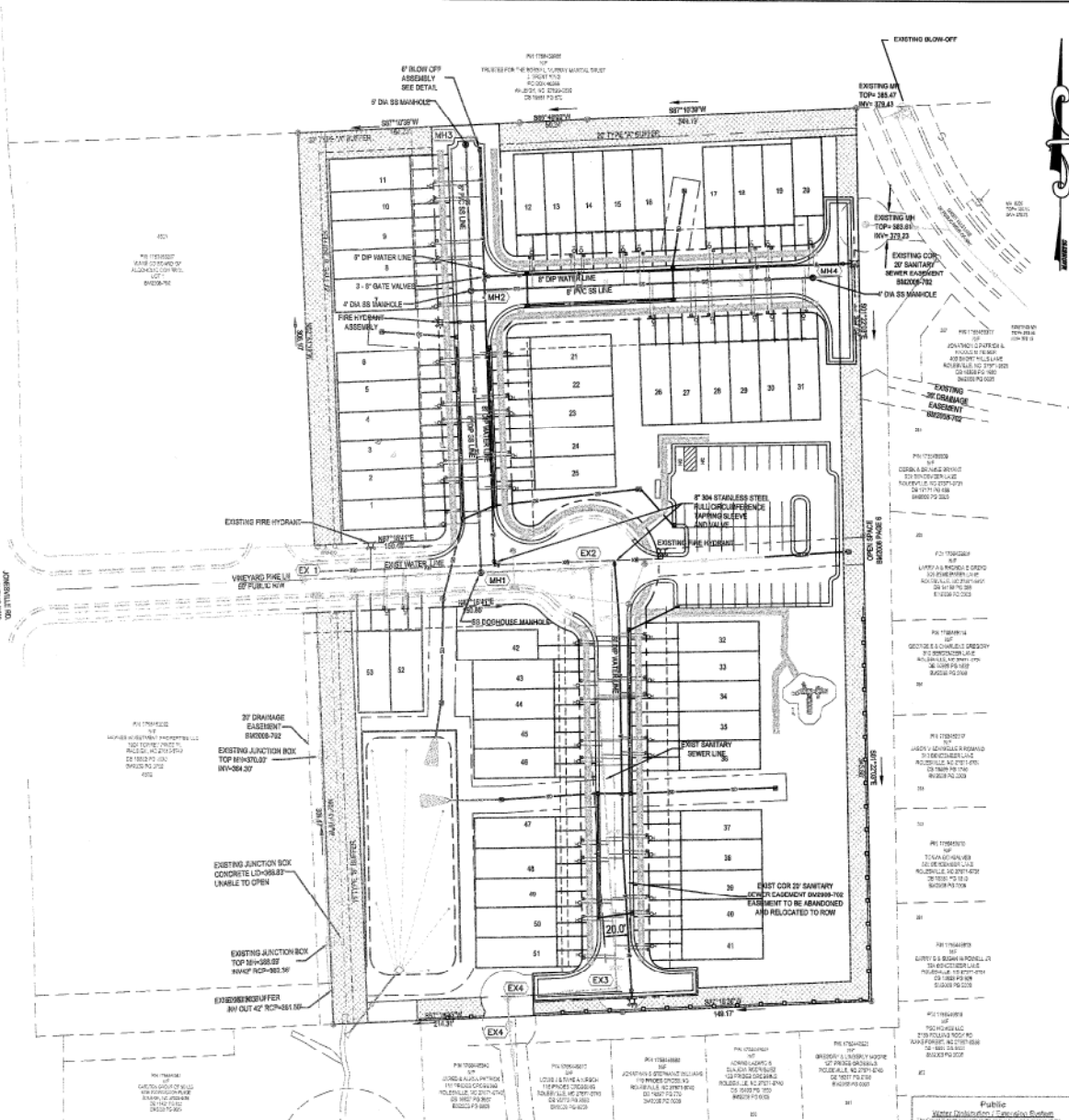
### PERMANENT DRAINAGE SWALE SCHEDULE

Swale Number	Approx Length (ft)	Crest Section			Bottom Drainage	5-Year Rainfall				10-Year Rainfall				Scale Liner	Installed Width (ft)		
		Left Side (ft)	Bottom (ft)	Right Side (ft)		Flow Depth (ft)	Flow Velocity (ft/s)	Shear Stress (lb/ft²)	Flow Depth (ft)	Flow Velocity (ft/s)	Shear Stress (lb/ft²)						
1	64	2	2.0	1.00	0.19	0.60	0.25	1.44	0.87	1.80	0.36	1.80	3.46	2.27	BohNe ST75BN	Permanent	15.3
2	140	2	2.0	1.00	0.05	0.60	0.10	0.20	0.71	0.45	0.15	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7
3	38	2	2.0	1.00	0.05	0.60	0.83	0.36	2.71	0.45	1.21	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7
4	72	2	2.0	1.50	0.09	0.60	0.19	0.36	2.71	0.45	0.27	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7
5	300	2	2.0	1.00	0.16	0.60	0.33	0.36	2.71	0.45	0.49	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7
6	118	2	2.0	1.00	0.24	0.60	0.50	0.36	2.71	0.45	0.73	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7
7	91	2	2.0	1.50	0.25	0.60	0.52	0.36	2.71	0.45	0.76	0.46	2.17	0.57	BohNe ST75BN	Temporary	6.7

NOTE: STRUCTURES ARE SCHEDULED TO ACCOMMODATE LARGE DIAMETER PIPING, ALTHOUGH 18" DIA. MULTIPLE PENETRATIONS AND PIPE CONNECTION ANGLES ARE ELIMINATED, AND NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE DRAINAGE STRUCTURE FOR PERMANENT DRAINAGE SWALES. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND WHERE AVAILABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

NOTE: STRUCTURES ARE SCHEDULED TO ACCOMMODATE LARGE DIAMETER PIPING, ALTHOUGH 18" DIA. MULTIPLE PENETRATIONS AND PIPE CONNECTION ANGLES ARE ELIMINATED, AND NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE DRAINAGE STRUCTURE FOR PERMANENT DRAINAGE SWALES. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND WHERE AVAILABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

811  
Know what's below.  
Call before you dig.  
(Or call: 1-800-832-6909)



**CITY OF RALEIGH UTILITY NOTES**

1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORP. HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS
  - a. A DISTANCE OF 10' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, PERMANENT SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 2' FROM A PRIVATE WELL OR 8' FROM A PUBLIC WELL.
  - b. WHEN INSTALLING WATER & SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 12". IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 1' ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIA. TO OUTSIDE DIA. CENTER.
  - c. WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DP MATERIAL OR STEEL ENCASUREMENT EXTENDED 12" ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS
  - d. IF A MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DP MATERIAL IS SPECIFIED FOR SANITARY SEWER
  - e. MAINWAY OF 30" VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINWAY OF 30" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DP MATERIALS & A CONCRETE CRADLE HAVING 0.75" MIN. CLEARANCE PER CORP. DETAILS M-41 & 4-48
  - f. ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED
3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN AND PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION
4. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT
5. 3" MINIMUM COVER IS REQUIRED ON ALL WATER MAINS; 4" MINIMUM COVER IS REQUIRED ON ALL SEWER MAINS.
6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER AND SEWER SERVICES NOT BEING USED IN DEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORP. HANDBOOK PROCEDURE.
7. INSTALL 4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT TO THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW AND PRESSURE.
8. INSTALL 4" PVC SEWER SERVICES AT 1.5% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE AND SPACED EVERY 75' UNLESS FEET MAINTAIN.
9. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 3/4" AND WATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS UNDER 12" ABOVE THE NEXT UPSTREAM MANHOLE.
10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM MCDM, USACE, AWR FEPA FOR ANY RIPARIAN BUFFER, WETLAND AND FLOODPLAIN IMPACTS RESPECTIVELY PRIOR TO CONSTRUCTION
11. MCDOT TRAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MAIN EXTENSION AND SERVICE TAPS WITHIN OR ADJACENT TO ROW PRIOR TO CONSTRUCTION
12. INCREASE INTERCEPTOR OIL WATER SEPARATOR SIZING CALCULATIONS AND INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORP. FOOD PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT THE READY AT 919-998-3534 OR TIMOTHY.BEALEY@RALPHIGOV.GOV FOR MORE INFORMATION
13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DISEASE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-A OF THE AMERICAN SOCIETY OF SANITARY ENGINEERING IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING DESIGN STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST - THE DEVICES SHALL BE INSTALLED AND TESTED BOTH INITIAL AND PERIODIC TESTING THEREAFTER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOHNS HARTLEY AT 919-783-6622 OR JOHNS.HARTLEY@RALPHIGOV.GOV FOR MORE INFORMATION

**NOTES**

1. SEE SHEET C1 FOR STANDARD NOTES.

CONCURRENT REVIEW APPROVAL  
CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Public Safety Collection & Extension System		
City Name		
Project Description		
City Engineer		
Installation Date		

Attention Contractor		
City Name		
Project Description		
City Engineer		
Installation Date		

- Plans for this proposed use have been reviewed for general compliance with applicable codes. This does not constitute approval for construction is not to be construed to represent that compliance with all legal requirements for development and construction. The property owner, S&B consultants and contractors are each responsible for compliance with all applicable City, State and Federal laws. The specific authorization herein is not a permit, nor shall it be construed to be in violation of City, State or Federal Law. All construction must be in accordance with all local, state, and Federal Rules and Regulations.
- TRANSPORTATION FIELD SERVICES
  - PUBLIC UTILITIES
  - STORMWATER
  - PLANNING/ENGINEERING
  - FIRE
  - URBAN FORESTRY
  - SITE ACCESSIBILITY



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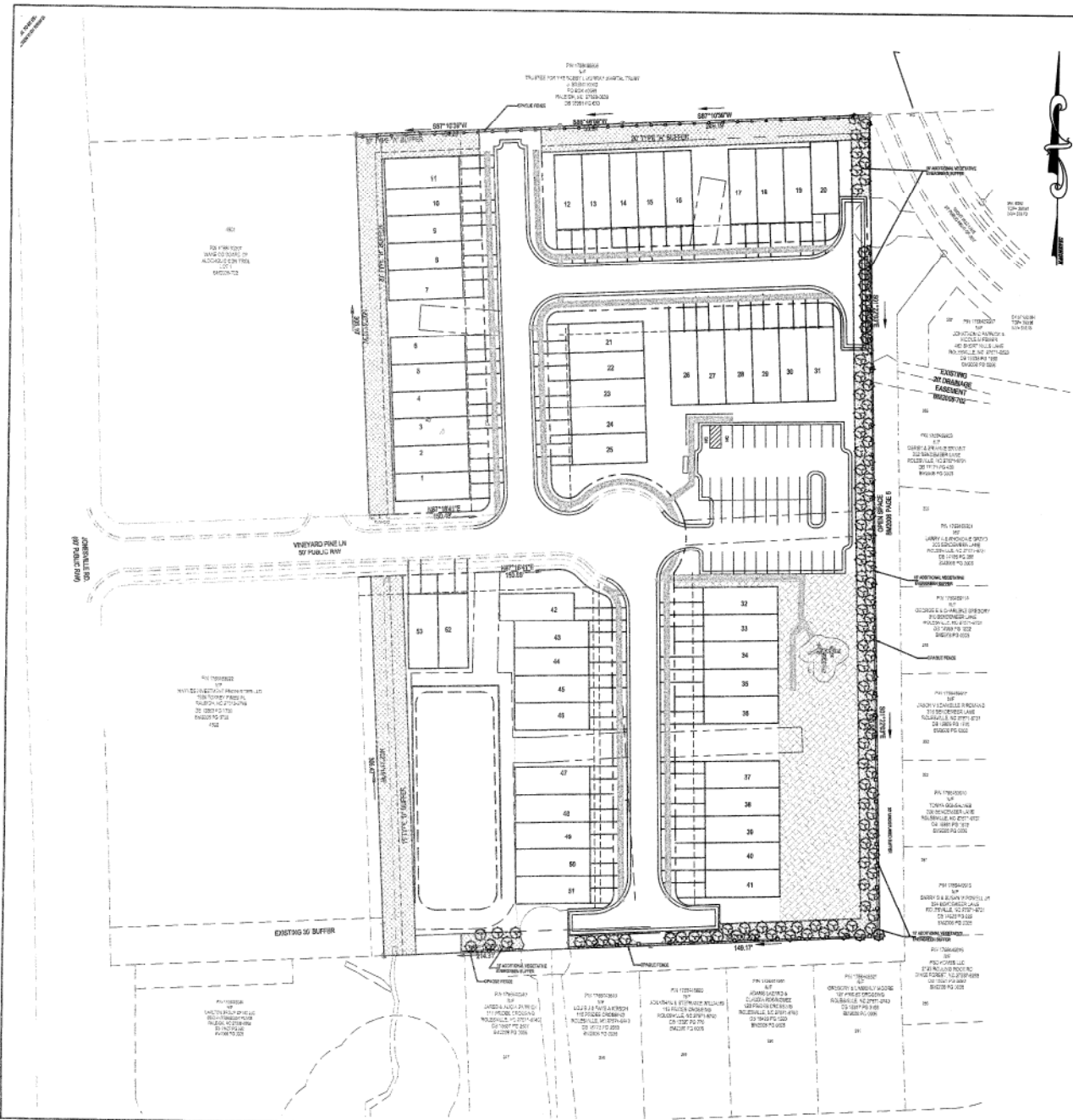
Contract No.	Draw No.	Rev.	Date	Description



Utility Plan  
The Townes at Carillon Point  
The Carlton Group of NC, LLC  
Rosedale, Wake County, North Carolina

Job No. 5801  
Dwg No. C5



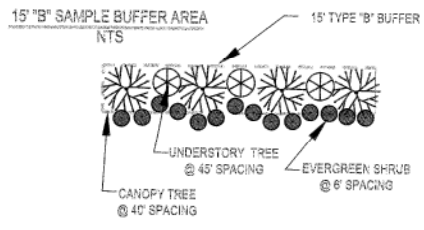
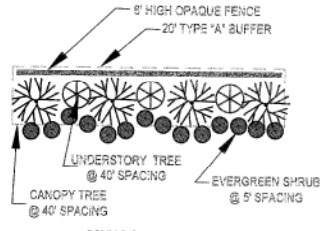


- GENERAL PLANTING NOTES**
1. ALL LAWN AREAS TO BE SEEDED WITH TREMOR IV, CONFEDERATE PLUS, OR FESCUE TALL TURF TYPE PEGSUE.
  2. ALL MULCH TO BE DOUBLE SHIPPED HARDWOOD, NO PINE STRAW MULCH ADJACENT TO STRUCTURES.
  3. PLANT MATERIAL ON THIS SITE MUST BE INSTALLED IN CONFORMANCE WITH THE GENERAL PLANTING NOTES AND DETAILS ON THIS PLAN OR TO THE STANDARDS OF THE CITY OF RALEIGH CODE OF ORDINANCES.
  4. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
  5. OWNERS SHALL MAINTAIN ALL PLANT SEEDS AND PLANT MATERIAL IN GOOD HEALTH, AND ANY DEAD, UNHEALTHY, OR LARSED PLANTS SHALL BE REPLACED WITH LOGICALLY ADAPTED VEGETATION WHICH CONFORMS TO THE RETAIL PLANTING STANDARDS OF THE LANDSCAPING INDUSTRY.
  6. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING ANY UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK.
  7. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS AND LICENSES TO PERFORM THE REQUIRES WORK.
  8. ALL PLANT SEEDS SHALL BE TREATED WITH PRE-EMERGENT WEED CONTROL, I.E. TRIFLURALIN.
  9. ALL PLANTS SHALL BE VIGOROUS, HEALTHY MATERIAL FREE FROM PESTS AND DISEASE.

PLANT LIST					
STREET	KEY	BOTANICAL NAME	COMMON NAME	CALIPER	QUANTITY
1	NO	Quercus rubra	White oak	3"	1000472 = 35
2	NO	Quercus rubra	White oak	3"	800472 = 43
3	NO	Quercus rubra	White oak	3"	800472 = 30
4	NO	Quercus rubra	White oak	3"	2000472 = 100

- PLANTING NOTES**
1. STREET TREES WILL BE REQUIRED AT 4' ON CENTER WITH THE RIGHT OF WAY IN A 6 FOOT TREE LANE.
  2. EACH TREE SHALL REQUIRE 600 CUBIC FEET OF IMPROVED / UNCOMPACTED SOIL BETWEEN THE CURB AND SIDEWALK.
  3. MAINTENANCE AND WARRANTY WILL BE REQUIRED FOR THE TREES.

**RETAINING EXISTING VEGETATION**  
 ALL EXISTING HEALTHY VEGETATION (NON INVASIVE TREES, SHRUBS, ETC) THAT EXISTS OUTSIDE THE PROPOSED DISTURBED AREAS OF THIS DEVELOPMENT ARE TO BE RETAINED TO THE MOST PRACTICAL EXTENT POSSIBLE.



**NOTES**

1. SEE SHEET C1 FOR STANDARD NOTES.



**c6aENGINEERS, Inc.**  
 Malenyne, Condit, Conway  
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NO.	DATE	DESCRIPTION	BY	CHKD.
1	10/19	ISSUED FOR PERMIT	MS	MS
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**Landscape Plan**  
 The Townes at Carleton Point  
 The Carleton Group of NC, LLC  
 Rolesville, Wake County, North Carolina

Job No. 5501  
 Dwg No. **C6**