

Town Hall 301 W. Main St. Carrboro, NC 27510



Meeting Agenda Town Council

Tuesday, March 16, 2021

7:00 PM

Council Chambers - Room 110

7:00-7:05

A. ROLL CALL

7:05-7:15

- B. POETRY READING, RESOLUTIONS, PROCLAMATIONS, AND ACKNOWLEDGEMENTS
- 1. <u>21-85</u> Proclamation Girl Scout Month
- **2.** Proclamation Earth Hour

<u>7:15-7:20</u>

C. ANNOUNCEMENT OF UPCOMING MEETINGS

<u>7:20-7:30</u>

D. REQUESTS FROM VISITORS AND SPEAKERS FROM THE FLOOR

Comments are limited to three minutes per speaker.

7:30-7:40

- E. CONSENT AGENDA
- 1. <u>21-74</u> Approval of Minutes from the February 23, 2021 Meeting
- 2. <u>21-81</u> Request for a CUP Permit Extension for 300 East Main

PURPOSE: Town Council is asked to review and consider approving a request for an extension of the date when a Conditional Use Permit would otherwise expire for the 300 East Main CUP. Town staff recommends approval of the request.

Attachments: Attachment A - Resolution

Attachment B - Letter From Applicant
Attachment C - CUP Document

Attachment D - LUO Section15-62

Attachment E - Permit Extension Worksheet

4. <u>21-77</u> Stormwater Utility Monthly Report

PURPOSE: The purpose of this item is to provide the monthly update regarding

Stormwater Utility projects and initiatives.

Attachments: March 2021 Stormwater Report

5. <u>21-79</u> Economic Development Monthly Report

PURPOSE: Regular Monthly Activities and Status Report

Attachments: Attachment A - February Monthly Report

6. <u>21-5</u> Fire Department Monthly Report

PURPOSE: To provide the Town Council a monthly overview of calls for

service.

Attachments: Attachment A - February 2021 FD Incident Data

7. <u>21-76</u> Police Department Monthly Report

PURPOSE: The Purpose of this agenda item is to provide the Town Council a

brief overview of the monthly calls for service.

Attachments: February 2021 Monthly Report

8. <u>21-82</u> Request to Issue Permit for the Sladesign Fashion Show 2021:

ROOTS.

PURPOSE: The purpose of this item is to consider a Street Closing Permit Application submitted by Independent Artist Marcela Slade/ Orange County Arts

Commission for the sladesign Fashion Show 2021 "ROOTS".

<u>Attachments:</u> <u>Attachment A - Resolution</u>

Attachment B - Street Closing Permit Application

Attachment C - Town of Carrboro Community Event Pre-Application

F. PUBLIC HEARING

7:40-8:05

1. <u>21-80</u> Consideration of Conditional Use Permit for The ArtsCenter at 315 Jones Ferry Road.

PURPOSE: The purpose of this item is for the Town Council to consider the

Conditional Use Permit application for The ArtsCenter at 315 Jones Ferry Road.

Attachments: Attachment A - Draft Version of Final List of Conditions

Attachment B - Applicant Responses to Staff Conditions and Advisory

Board Recommendations

Attachment C - Exhibit Showing Permeable Pavement Area

Attachment D - Updated Letter from Applicant

Attachment E-CUP Worksheet

G. OTHER MATTERS

<u>8:05-8:25</u>

1. <u>21-84</u> Westwood Cemetery Draft Report

PURPOSE: The purpose of this item is for the Town Council to receive the

draft Westwood Cemetery Report.

<u>Attachments:</u> <u>Attachment A - Draft Westwood Cemetery Design Services</u>

8:25-9:00

2. <u>21-65</u> Transportation Projects Update

PURPOSE: The purpose of this agenda item is to provide the Town Council with information about the status of various transportation projects around Town.

Attachments: Attachment A - Transportation Projects Report

Attachment B - NCDOT NCNMVDP 2014-2020 Data Summary Report

<u>9:00-9:20</u>

3. <u>21-78</u> Information on Text Amendments Required as part of G.S. Chapter 160D, Part 3

PURPOSE: The purpose of this item is provide the Town Council with the third installment of draft text amendments to the Land Use Ordinance required by the adoption of G.S. Chapter 160D.

Attachments: Attachment A - Draft ordinance 03-12-2021 working

Attachment B - Table_working_03-12-2021

Attachment C - ART-I working 03-12-2021

Attachment D - ART-II working 03-12-2021

Attachment E - ART-XIII working 3-12-2021

Attachment F - ART-XIV working 03-12-2021

Attachment G - ART-XV working 03-12-2021

Attachment I - ART-XVII working 3-12-2021

Attachment I - ART-XVIII working 3-12-2021

Attachment J - ART-XIX working 3-12-2021 (& 22a Screening and Trees)

9:20-9:30

4. <u>21-83</u> Appointments to the Affordable Housing Advisory Commission

PURPOSE: The purpose of this agenda item is for the Town Council to make appointments to the Affordable Housing Advisory Commission.

Attachments: Attachment A - Appointment Resolution

Attachment B - Matrix

Attachment C - Chair Forms and Applications

H. MATTERS BY COUNCIL MEMBERS

I. CLOSED SESSION 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, which privilege is hereby acknowledged. General policy matters may not be discussed in a closed session and nothing herein shall be construed to permit a public body to close a meeting that otherwise would be open merely because an attorney employed or retained by the public body is a participant. The public body may consider and give instructions to an attorney concerning the handling or settlement of a claim, judicial action, mediation, arbitration, or administrative procedure. If the public body has approved or considered a settlement, other than a malpractice settlement by or on behalf of a hospital, in closed session, the terms of that settlement shall be reported to the public body and entered into its minutes as soon as possible within a reasonable time after the settlement is concluded.



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-85

Agenda Date: 3/16/2021

File Type: Agendas

In Control: Board of Aldermen

Version: 1

Proclamation - Girl Scout Month



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-87

Agenda Date: 3/16/2021

File Type: Agendas

In Control: Board of Aldermen

Version: 1

Proclamation - Earth Hour



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-74

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

Approval of Minutes from the February 23, 2021 Meeting



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-81

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Request for a CUP Permit Extension for 300 East Main

PURPOSE: Town Council is asked to review and consider approving a request for an extension of the date when a Conditional Use Permit would otherwise expire for the 300 East Main CUP. Town staff recommends approval of the request.

DEPARTMENT: Planning Department

CONTACT INFORMATION: Marty Roupe, 919-918-7333, or mroupe@townofcarrboro.org

INFORMATION: Laura Van Sant, on behalf of East Main Square, LLC, has requested a two year extension of the date on which a previously issued Conditional Use Permit (CUP) will otherwise expire (Attachment B). As stated in the letter, the applicant is proceeding with due diligence and in good faith toward using this property in accordance with the CUP.

The original permit for the project was issued on September 30, 2008 (Attachment C). Since that time, multiple minor modifications to the permit have been considered and granted by Town Council. The permit modification has in effect continued and extended the date on which the permit otherwise would expire. An expiration date is now approaching as the last minor modification was approved on April 9, 2019. If this item is approved, the new expiration date will be April 9, 2023. The permit still allows for construction of multiple new five-story buildings that have not yet been built.

Permit extensions are regulated by Section 15-62 of the LUO (Attachment D). Also attached is a permit extension worksheet (Attachment E). The worksheet is only needed if Council chooses to pull the item from the consent agenda and discuss. Otherwise, Council may simply approve the resolution approving the request (Attachment A).

FISCAL & STAFF IMPACT: The applicant has paid the applicable fee associated with this request. No other impact is noted.

RECOMMENDATION: Town staff recommends that Town Council adopt the attached resolution (Attachment A) approving the permit extension request. The new expiration date for the permit will be April 9, 2023.

A RESOLUTION APPROVING AN EXTENSION OF THE DATE ON WHICH A CUP WOULD OTHERWISE EXPIRE FOR 300 EAST MAIN CUP

WHEREAS, the Carrboro Town Council approved a Conditional Use Permit for the 300 East Main project on September 30, 2008; and

WHEREAS, the Carrboro Town Council last granted a CUP Minor Modification on April 9, 2019, thereby extending the permit to April 9, 2021; and

WHEREAS, the Town Council finds, per Section 15-62(c) of the LUO, that: 1) the CUP has not yet expired, 2) the permit recipient has proceeded with due diligence and in good faith, and 3) conditions have not changed so substantially as to warrant a new application.

NOW, THEREFORE BE IT RESOLVED by the Carrboro Town Council that the permit is extended, with a new expiration date for the 300 East Main CUP of April 9, 2023.

This the 16th day of March, 2021



1/25/21

Marty Roupe Development Review Administrator Town of Carrboro 301 W. Main St. Carrboro, NC 27510

Dear Marty:

This letter serves as a request for a two-year extension of the conditional-use permit for East Main Square (formerly known as 300 East Main) at 300, 306, 310, 370 and 380 E. Main St.

East Main Square LLC is proceeding with due diligence and in good faith toward using the property in accordance with the CUP. But we are waiting for two things to happen before we can proceed with the next phase of East Main Square: 1. Two of the larger users on site, the ArtsCenter and the Cat's Cradle, are working on their own plans to make larger investments in their futures in Carrboro. We are giving both entities some time to pursue those opportunities before planning new construction in their locations. 2. East Main Square and its tenants have been impacted significantly by the Covid-19 pandemic and our current priority is working to keep everyone in business until the retail, restaurant, hotel and entertainment sectors reach whatever the new normal will be.

In summary, we are working on plans for the next phases of East Main Square, but won't be in a position to pursue them until the pandemic is over and we know how and when the ArtsCenter and Cat's Cradle plans will take shape. We request a two-year extension to allow time for these issues to resolve.

Thank you for your consideration.

Yours truly,

Laura Van Sant LLC member

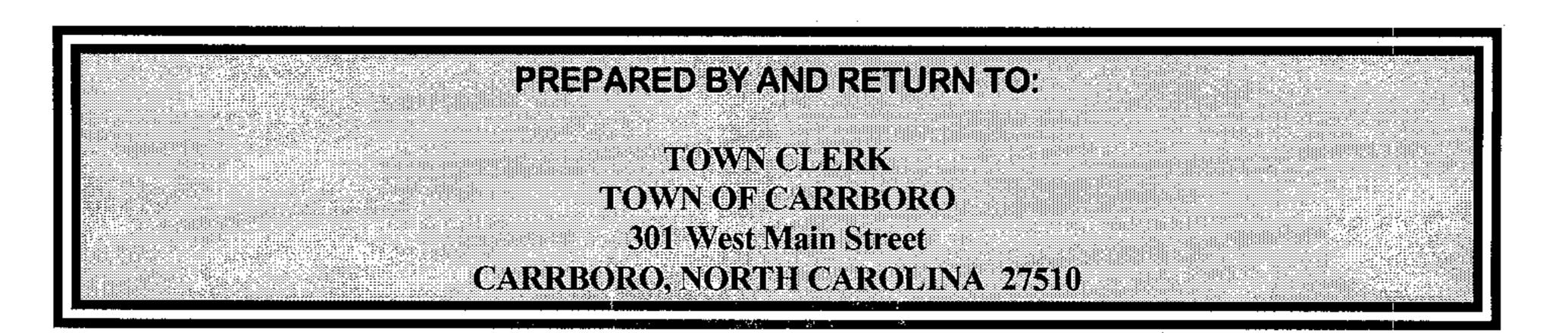


M

20090901000216360 PRMIT Bk:RB4817 Pg:156 09/01/2009 09:29:17 AM 1/7

My

FILED Joyce H. Pearson
Register of Deeds, Orange Co, NC
Recording Fee: \$32.00
NC Real Estate TX: \$.00



FOR MULTIPLE PIN SHEET
SEE BOOK 4817 PAGE 155



ORANGE COUNTY NORTH CAROLINA

TOWN OF CARRBORO CONDITIONAL USE PERMIT GRANTED

(300 East Main Street project)

On the date(s) listed below, the Board of Aldermen of the Town of Carrboro met and held a public hearing to consider the following application:

APPLICANT: Main Street Properties of Chapel Hill, LLC

OWNER: Main Street Properties of Chapel Hill, LLC

PROPERTY LOCATION (Street Address): 200, 208, 300, 300-G, 304, 400 and 404 East Main Street and 104 Boyd Street

TAX MAP, BLOCK, LOT(S): 7.92.A.1, 7.92.A.5, 7.92.A.5A, 7.92.A.11, 7.92.A.12, 7.92.A.8, 7.92.A.9, 7.92.D.19

7.92. A.10 RH per phone

PROPOSED USE OF PROPERTY: To allow for construction of multiple five-story commercial buildings and associated infrastructure at and around 300 East Main Street.

CARRBORO LAND USE ORDINANCE USE CATEGORY: Building Site – 2.110, 2.111, 2.120, 2.150 (in B-1(c) portion only); Office. Service and similar uses: 3.110, 3.120, 3.130, 3.150 3.250; Educational, Cultural, Religious, etc: 5.110, 5.120, 5.130, 5.200, 5.310, 5.320, 5.400; Recreation, Amusement, Entertainment: 6.110, 6.121, 6.122, 6.130, 6.140, 6.221, 6.222; Restaurants, Bars, Nightclubs: 8.100, 8.200, 8.500, 8.600; Emergency Services: 13.100; Public and Semi-Public Facilities: 15.100, 15.700; Open Air Markets and Horticultural Sales: 19.100; Temporary structure or parking lot used in connection with construction project or other non-recurring purpose: 23.000; Combination Use: 27.000; Satellite Parking Lot: 10.100

MEETING DATES: August 26, September 16, September 30, 2008

Having heard all the evidence and arguments presented at the hearing, the Board finds that the application is complete, that the application complies with all of the applicable requirements of the Carrboro Land Use Ordinance for the development proposed, and that therefore the application to



make use of the above described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Land Use Ordinance and the following conditions:

- 1. The applicant shall complete the development strictly in accordance with the plans submitted to and approved by this Board, a copy of which is filed in the Carrboro Town Hall. Any deviations from or changes in these plans must be submitted to the Development Review Administrator in writing and specific written approval obtained as provided in Section 15-64 of the Land Use Ordinance.
- 2. If any of the conditions affixed hereto or any part thereof shall be held invalid or void, then this permit shall be void and of no effect.
- 3. That both Phase A and Phase B construction plans must include a note referencing that the entire project is now regulated under one Conditional Use Permit.
- 4. That Use Classification 18.100 be removed from the list of permissible uses.
- 5. That the Board of Aldermen finds it acceptable to orient the parking deck either east-west or in the alternate north-south direction, along with related changes to the drive aisle area (i.e.: inclusion of a small traffic circle and drop-off area in front of the hotel).
- 6. That the applicant agrees to extend the east-west leg of Boyd Street to a new entrance / exit on Main Street, as shown on the CUP plans. In doing so, the applicant must coordinate filing a plat offering the necessary additional right-of-way to the Town of Carrboro, prior to construction plan approval. Final design details for both the existing leg and newly-proposed leg of Boyd Street are subject to approval by the Public Works Department during the construction plan review and shall incorporate necessary elements from Town plans and specifications. If the applicant is unable to coordinate the filing of a plat dedicating the necessary right-of-way to the Town prior to construction plan approval, then the applicant agrees to subject the project to an additional public hearing via the CUP Major Modification process, so that further consideration may be given to the associated changes to traffic patterns.
- 7. Prior to construction plan approval, the applicant shall replace the currently-shown handicap accessible ramp detail with a detail conforming to NCDOT roadway standard specifications for handicap ramp curb cut/sidewalk connections within public right-of-way (i.e.: two ramps per radius, 90-degrees from one another, instead of one ramp per radius).
- 8. That the applicant must obtain approval from Public Works for the final location for tree-containing grates and the tree species proposed along Main Street, prior to construction plan approval.
- 9. That the applicant must obtain approval from Public Works for the final details for brick-edged sidewalks to be included along both Main Street and Boyd Street, in accordance with Town specifications.
- 10. That the applicant must obtain a driveway permit from both Public Works (for Boyd Street) and NCDOT prior to construction plan approval. In granting the driveway permit, the Town encourages NCDOT to require the improvements mentioned in 'TIA recommendation #2,' consider requiring the improvements mentioned in 'TIA recommendation #1' (both reiterated in the '12/05/07 TIA Memorandum'), and to discuss their final list of requirements with the Town of Carrboro Transportation Planner to ensure compatibility with the Carrboro Downtown Traffic Circulation Study.
- 11. That the applicant must obtain approval for a construction traffic control plan from both Public Works and NCDOT prior to construction plan approval.
- 12. That the Board of Aldermen finds that 843 parking spaces are sufficient to serve the development. This finding is based on information provided by the applicant regarding the proposed mix of uses and expected shared use of spaces, which should result in the development having sufficient parking at all times except 6-9 PM Friday and Saturday evenings when a majority of the property is leased. This finding of a sufficient number of spaces also is subject to and dependent on the applicant's willingness to retain and utilize a valet parking company during times when a parking shortage exists. The valet



parking company is expected to utilize space within the parking deck in such a manner that an additional 47 parking spaces may be realized, as per the information submitted by the applicant stating that it is possible to gain this number of spaces. The obligation to utilize a valet parking company, in accordance with the terms explained herein, shall be a continuing, binding part of the CUP unless the Board of Aldermen agrees to modify this condition based on future circumstances.

- 13. Prior to issuance of each building permit, the applicant must present to the Town evidence showing that sufficient parking will be constructed concurrent with the proposed building, in accordance with the parking spreadsheet data included in the CUP plans. The certificate of occupancy for each building will not be issued until such parking is complete unless the applicant demonstrates that the parking deficit can be addressed by a parking valet company in the same manner described in CUP condition #12. In such a situation, the obligation to utilize a valet parking company shall be a continuing, binding part of the CUP until the necessary number of parking spaces are provided unless the Board of Aldermen agrees to modify this condition based on future circumstances.
- 14. That the applicant agrees to include at least 80 bicycle parking spaces. The spaces must be dispersed throughout the project with at least 25% located proximate to the front entrances of buildings, and with at least half of the spaces located in a covered location to shield bicycles from weather elements.
- 15. That except as required in the condition below relating to the residential property along Boyd Street on the southeast side of the site, the Board of Aldermen finds that no screening requirements are imposed on this project because the Board desires to foster a pedestrian-friendly atmosphere in the downtown area among other factors relative to the property lines and further finds that integration of this project with the neighboring property on the eastern side would be diminished were screening required between the two sites.
- 16. That the applicant shall consider suggestions made by the Environmental Planner prior to construction plan approval related to finding possible additional or alternate locations for shade trees.
- 17. That prior to construction plan approval for Phase A the applicant must fully analyze and survey the existing storm drain system all the way to the outlet and modify elements of the underground detention system if necessary based on associated findings.
- 18. That the applicant must incorporate an appropriate filter or similar type device into the proposed swirl-type vault system, upon such device being reasonably available, in order to increase the percentage of TSS removal associated with the stormwater device.
- 19. That the applicant shall provide to the Zoning Division, prior to issuance of the first Certificate of Occupancy for the project or before the release of a bond if some features are not yet in place at the time of the recording of the first Certificate of Occupancy for the project, Mylar and digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in a data table. The data will be tied to horizontal controls.
- 20. That the developer shall include a detailed stormwater system maintenance plan, specifying responsible entity and schedule. The plan shall be subject to approval by the Town Attorney and shall include scheduled maintenance activities for each unit in the development, (including cisterns, sand filters, swirl-systems, etc.), performance evaluation protocol, and frequency of self-reporting requirements (including a proposed self-reporting form) on maintenance and performance. The plan and supporting documentation shall be submitted to Town engineer and Environmental Planner for approval prior to construction plan approval. Upon approval, the plans shall become an ongoing obligation of the property owners.
- 21. That the applicant must obtain approval from OWASA for the final design related to water and sewer easements prior to construction plan approval, particularly related but not limited to including a 20-foot easement around the meter vault in Phase A, as



referenced on OWASA's May 16, 2007 letter, plus ensuring that OWASA easements are free from certain unallowable encroachments.

- 22. That the applicant shall present for approval the final architectural details for buildings D, E and F in accordance with the approval process established in the ordinance at the time such approval is sought. If the approval authority is the Appearance Commission, the architectural plans shall nevertheless be reviewed by the Board of Aldermen.
- 23. That the applicant must submit fire flow calculations and receive approval of the calculations from the Town Engineer and OWASA prior to construction plan approval.
- 24. That the applicant obtains all necessary temporary and permanent easements, encroachment agreements, or similar legal instruments prior to construction plan approval.
- 25. That prior to construction plan approval, the applicant must receive a 'transportation facility' permit from NCDENR.
- 26. That prior to construction plan approval, the applicant must provide to the Town evidence that the ArtsCenter retains perpetual access rights, parking rights, solid waste facilities rights, etc, consistent with the existing reciprocal operating agreement with Main Street Properties governing access and parking. If, subsequent to the issuance of the CUP, both parties agree to a new reciprocal operating agreement, then such agreement shall supersede the existing agreement with respect to this condition.
- 27. That the construction plans show a catch basin including the phrase 'dump no waste, drains to Jordan Lake.
- 28. That a covered bus shelter be required with a custom design.
- 29. That lighting be allowed to spill over onto the railroad in order to increase safety in this area to the extent permitted under the Land Use Ordinance.
- 30. The Board asked that the developer provide an 8-foot wide sidewalk between the railroad right-of-way and Roberson Street if possible.
- 31. That the hotel shall include the following water conservation measures: the use of Sloan Flushmate IV high efficiency toilets 1.0gal / 3.8 Liter per flush (or equivalent device) in all guest rooms and public restrooms; use of low consumption urinals in public restrooms; use of low consumption faucets in all guest rooms and public restrooms delivering 0.5 gallons per minute as opposed to 2.5 gallons per minute; use of low consumption shower heads in all guest rooms; and use of circulation pumps in main hot water line to make hot water available quickly at all faucets. The building permit application for the hotel building must include evidence sufficient to show that the building design adheres to this CUP condition.
- 32. That the applicant agrees to include on the construction plans a vegetative and/or fence screen in the southeast corner of the site (adjacent to the residences on Boyd Street) sufficient to meet the LUO's Type A description.
- 33. That the applicant must regularly water Boyd Street during construction, using OWASA reclaimed water, to reduce dust, erosion, etc potentially caused by heavy vehicles.
- 34. That the applicant agrees to place bollards at all entrances to the pedestrian plaza where vehicles travel adjacent to the area so as to create a physical barrier between the plaza and vehicle travel lanes. A detail drawing and spacing for the bollards shall be shown on the construction plans.
- 35. That prior to construction plan approval, the applicant, Town staff, and NCDOT will agree to a construction traffic management plan to include adequate signage to address pedestrian and bicycle flow along Main Street as well as vehicular traffic.
- 36. That during construction the applicant shall keep posted, on site in a conspicuous location, contact information including a phone number that citizens may call at any time with concerns about construction of the project.

- 37. That the applicant agrees to identify on the construction plans an at-grade pedestrian connection to the south, at 105/107 Padgette Lane, that is handicap accessible.
- 38. That the applicant is encouraged to lease to locally-owned businesses and businesses receiving funds from the Town's revolving loan fund.
- 39. That the applicant must maintain, at a minimum, an amount of vegetation on site consistent with the planting plan on Sheet L100 of the CUP plans. It is recognized that the species and types of plantings may change over time due to availability, but at no time may the amount of plantings fall below what is represented in the planting table.
- 40. That the Appearance Commission approves an alternative design for buildings B and C in accordance with the designs and details included in the CUP plans. Per the plans, the glazing shall not be reduced below 64% on ground floor and 28.3% for upper floors for Building B and 69% on ground floor and 26.8% for upper floors for Building C.
- 41. That the Appearance Commission shall conduct a courtesy-level review of the final architectural details and materials choices for buildings B and C prior to issuance of a building permit.
- 42. That the applicant shall strive to reduce heat-island effects by including plantings on a minimum of 10% of the pedestrian plaza area with a minimum of 20% canopy, as well as including shade trees and cool paving materials.
- 43. That the applicant also shall strive to reduce heat-island effects by using high-reflectance paving materials in lieu of dark brick or asphalt. In addition, the applicant shall strive to provide shading devices to reduce heat on building surfaces and pavements and use solar-reflective roofing materials.
- 44. That the applicant shall involve a LEED accredited professional with the ongoing design of the project and will use as many green building techniques as possible in their plans (for example: low impact design and development, resource efficiency, energy efficiency, water conservation and reuse, indoor environmental quality, homeowner education, etc.) and that the applicant shall utilize the LEED Green and Sustainable Buildings Checklist as a means of quantifying its contribution to sustainability.
- 45. That the applicant shall include at least one shower in multi-tenant office buildings for office tenant use. Accordingly, the building permit plans for each building containing multi-tenant office space must include at least one shower facility before the building permit may be issued.
- 46. That the applicant shall incorporate passive solar space heating and cooling principals into building design as consistent with the site plan.
- 47. That the applicant agrees to continue to explore solar power options, especially for hot water.
- 48. That the applicant agrees to provide some bicycle racks on the sidewalk in the public right-of-way along East Main Street as long as the Town of Carrboro and NCDOT agree with the request, and that the applicant agrees to phase in the installation of bike racks as construction progresses rather than waiting until all construction is complete.
- 49. That the applicant agrees that the central pedestrian walkway is closed to non-emergency vehicular traffic.
- 50. That distinctive paving material shall be used in pedestrian areas of the 300 E. Main project and these materials shall continue south and lead into The Butler condominium project.
- 51. That where pedestrian links from 300 E. Main to The Butler condominiums cross vehicular ways the crosswalks shall be distinctively marked and raised.



This permit shall automatically expire within two years of the date of issuance if the use has not commenced or less than 10 percent (10%) of total cost of construction has been completed or there has been non-compliance with any other requirements of Section 15-62 of the Carrboro Land Use Ordinance.

All street construction on those streets proposed for acceptance by the Town of Carrboro shall be certified by an engineer. Engineering certification is the inspection by the developer's engineer of the street's subgrade, base material, asphalt paving, sidewalks and curb and gutter, when used. The developer's engineer shall be responsible for reviewing all compaction tests that are required for streets to be dedicated to the town. The developer's engineer shall certify that all work has been constructed to the town's construction specifications.

If this permit authorizes development on a tract of land in excess of one acre, nothing authorized by the permit may be done until the property owner properly executes and returns to the Town of Carrboro the attached acknowledgment of the issuance of this permit so that the town may have it recorded in the Orange County Registry.

NORTH CAROLINA

ORANGE COUNTY

IN WITNESS WHEREOF, the Town of Carrboro has caused this permit to be issued in its name, and the undersigned being all of the Carrboro has caused this permit to be issued in its conditional Use Permit, together with the conditions as binding upon them and their successors in interest.

1911

THE TOWN OF CARRBORO

ATTEST:

Just C. William (SEAL)

Town Clerk

BY Menager

Town Manager

I, Jane h Tucking Notary Public in and for said County and State, do hereby certify that Sarah C. Williamson, Town Clerk for the Town of Carrboro, personally came before me this day and being by me duly sworn says each for himself that she knows the corporate seal of the

day and being by me duly sworn says each for himself that she knows the corporate seal of the Town of Carrboro and that the seal affixed to the foregoing instrument is the corporate seal of the Town of Carrboro, that Steven E. Stewart, Town Manager of said Town of Carrboro and Sarah C. Williamson, Town Clerk for the Town of Carrboro subscribed their names thereto; that the corporate seal of the Town of Carrboro was affixed thereto, all by virtue of a resolution of the Board of Aldermen, and that said instrument is the act and deed of the Town of Carrboro.

IN WITNESS THEREOF, I have hereunto set by hand and notarial seal this the 14 day of August, 2009.

My Commission Expires: 12 - 1 - 2013

Notary Public (SEAL)

Orange County

STATE OF NORTH CARCLINA

My Commission Expires December 1, 2013



We, Main Street Properties of Chapel Hill, LLC, owners, do hereby acknowledge receipt of this Conditional Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to this permit except in accordance with all of its conditions and requirements and that this restriction shall be binding upon them and their successors in interest.

MAIN STREET PROPERTIES OF CHAPEL HILL, LLC

BY: Laura Van Sant, Managing Member

NORTH CAROLINA

ORANGE COUNTY

I, June L. Two key, a Notary Public in and for said County and State, certify that Laura Van Sant personally came before me this day and acknowledged that she is Managing Member of Main Street Properties of Chapel Hill, LLC and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by her as Managing Member on behalf of Main Street Properties of Chapel Hill, LLC thereof all by authority duly given.

WITNESS my hand and notarial seal this the 13 day of July, 2009

My Commission Expires: 12-1-2013

(Not valid until fully executed and recorded)

Notary Public
Orange County
STATE OF NORTH CAROLINA
My Commission Expires December 1, 2013

Section 15-62 Expiration of Permits.

- (a) Zoning, special use, conditional use, and sign permits shall expire automatically if, within two years after the issuance of such permits: (AMENDED 5/26/81)
 - (1) The use authorized by such permits has not commenced, in circumstances where no substantial construction, erection, alteration, excavation, demolition, or similar work is necessary before commencement of such use; or
 - (2) Less than ten percent of the total cost of all construction, erection, alteration, excavation, demolition, or similar work on any development authorized by such permits has been completed on the site. With respect to phased development (see Section 15-61), this requirement shall apply only to the first phase.
- (b) If, after some physical alteration to land or structures begins to take place, such work is discontinued for a period (i) of one year if the date of discontinuance occurs more than one year after the issuance of the permit, or (ii) equal to two years less the time between the issuance of the permit and the time work is discontinued if the date of discontinuance occurs less than one year after the issuance of the permit, then the permit authorizing such work shall immediately expire. However, expiration of the permit shall not affect the provisions of Section 15-63.
- (c) The permit-issuing authority may extend for a period up to two years the date when a permit would otherwise expire pursuant to subsections (a) and (b) if it concludes that (i) the permit has not yet expired, (ii) the permit recipient has proceeded with due diligence and in good faith, and (iii) conditions have not changed so substantially as to warrant a new application. Successive extensions may be granted for periods of up to two years upon the same findings. All such extensions may be granted without resort to the formal processes and fees required for a new permit. (AMENDED 06/23/15)
- (d) For purposes of this section, a permit within the jurisdiction of the Board of Aldermen or the board of adjustment is issued when such board votes to approve the application and issue the permit. A permit within the jurisdiction of the zoning administrator is issued when the earlier of the following takes place: (AMENDED 11/10/81)
 - (1) A copy of the fully executed permit is delivered to the permit recipient, and delivery is accomplished when the permit is hand delivered or mailed to the permit applicant; or
 - (2) The zoning administrator notifies the permit applicant that the application has been approved and that all that remains before a fully executed permit can be delivered is for the applicant to take certain specified actions, such as having the permit executed by the property owner so it can be recorded if required under G.S. 15-46(c).
- (e) Notwithstanding any of the provisions of Article VIII (Nonconforming Situations), this section shall be applicable to permits issued prior to the date this section becomes effective.

TOWN OF CARRBORO

TOWN COUNCIL



PERMIT EXTENSION WORKSHEET

I.	FIND	OINGS REQUIRED BY SECTION 15-62(c)
	A.	The permit has not yet expired.
		☐ Yes ☐ No
	B.	The permit recipient has proceeded with due diligence and in good faith.
		☐ Yes ☐ No
	C.	Conditions have not changed so substantially as to warrant a new application.
		☐ Yes ☐ No
II.	<u>GRA</u>	NTING THE PERMIT EXTENSION REQUEST
		The Permit Extension Request is granted, extending the expiration date of the previously issued Conditional Use Permit by a period of two years from the date on which it would otherwise expire.
III.	DEN	YING THE PERMIT EXTENSION REQUEST
		The Permit Extension Request is denied because it fails to comply with the ordinance requirements set forth above in Section I.



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-77

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Stormwater Utility Monthly Report

PURPOSE: The purpose of this item is to provide the monthly update regarding Stormwater Utility

projects and initiatives.

DEPARTMENT: Public Works

CONTACT INFORMATION: Randy Dodd, Stormwater Utility Manager, 919 918-7341

INFORMATION: The report identifies 9 separate projects and initiatives that Stormwater staff are currently or will be involved in in FY 20/21. These are specific efforts, some time-limited and others part of ongoing stormwater program development, that are above and beyond the baseline workload that includes but is not limited to: program administration; responding to requests for support and community outreach; stormwater system inspection and maintenance; reviewing development plans; stream determinations/buffer reviews; and illicit discharge response and pollution prevention.

An emphasis of Stormwater staff work (beyond core workload) since the last report has been: continued follow up from the 2020 NPDES permit audit; outreach and implementation for increased Stormwater Control Measure maintenance oversight efforts; closeout for the stream restoration project and FEMA Public Assistance; and investigation of a grant opportunity to support a restoration/gulley repair and demonstration project focused on an 11 acre drainage area adjacent to Bolin Creek.

FISCAL & STAFF IMPACT: There is no fiscal impact associated with this update. There are/will be nearer and longer term fiscal and staff impacts, as presented in the report.

RECOMMENDATION: It is recommended that the Council receive the staff report.

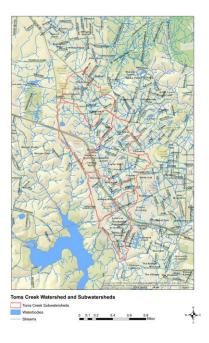
STORMWATER UTILITY MONTHLY REPORT

Contents

PAR	T 1: WATER QUANTITY DRIVEN WORK	2
1.	RainReady Study Follow Up	2
	Status: Planning.	2
2.	Land Use Ordinance Stormwater Provisions Review	3
	Status: Planning	3
3.	FEMA Hazard Mitigation Grant Program Letters of Interest (Acquisition and Elevation)	4
	Status: Applications in Review.	4
4.	FEMA Public Assistance: Damage Recovery from Hurricane Florence	5
	Status: Closeout.	5
PAR	T 2: WATER QUALITY & FEDERAL/STATE REGULATORY DRIVEN WORK	6
5.	NPDES Town Wide Permit	6
	Status: Active.	6
6.	Stormwater Control Measure Maintenance and Inspection Program	7
	Status: Active.	7
7.	NPDES Public Works Facility NPDES Permit	8
	Status: Active.	8
8.	Jordan Lake Rules Compliance	9
	Status: Under Review (State).	9
9.	Bolin Creek Watershed Restoration Plan Implementation	10
	Status: Active.	10

PART 1: WATER QUANTITY DRIVEN WORK

1. RainReady Study Follow Up



Project Description: In 2019, the Council directed staff to move forward with a pilot study due to the persistent and ongoing need to address flooding issues, with the upper Toms Creek watershed serving as the geographic focus.

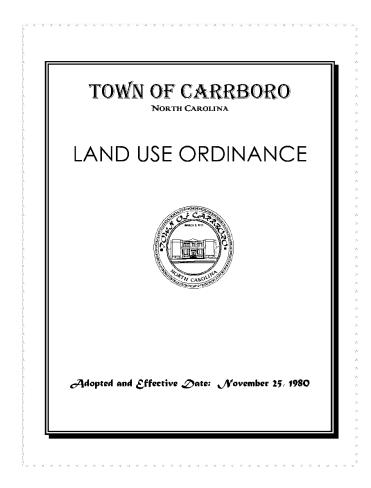
Project Background: For the Toms Creek watershed, flooding and drainage is a recurring and important theme. The upper watershed has received the most attention in recent years due to the degree of flooding and drainage issues experienced by residential property owners both in the regulated floodplain and other areas. A watershed based approach is needed to comprehensively address the issues that exist. An emerging concern is resiliency in consideration of the growing number of recent intense storms and the potential for a shift to more flooding in the future due to climate change.

Status: Planning. The Town contracted with the Center for Neighborhood Technology (CNT), resulting in a "RainReady" report in May, 2020. Sungate Design has also completed an engineering assessment of a catchment between Hillsborough Rd. and West Main Street with known drainage issues.

Fiscal and Staffing Considerations: Sungate's work cost \$16.5k and the CNT's work cost \$25k. There could be further implementation costs as a result of these projects. Any fiscal impact resulting from financial assistance to be provided as part of a new program will be determined through administrative and policy level review. There has been and will continue to be a staff impact associated with technical assistance. This impact will increase if staff will be administering a new program.

Additional Information: Additional information is available from multiple Council agenda items from 2013-2019. A <u>project website</u> has been created with relevant historical and project related information.

2. Land Use Ordinance Stormwater Provisions Review



Project Description: LUO stormwater provisions are under review.

Project Background: At the April 16, 2019 meeting, the Council referred further review of the stormwater provisions in the LUO to staff and the Stormwater Advisory Commission in consideration of the flooding and drainage impacts being experienced and elevated risk for increasing impacts due to climate change.

Status: Planning. This has been referred to Stormwater and Planning staff, Sungate Design, and the Stormwater Advisory Commission. Staff and Sungate are currently researching and considering the scope of potential changes, and anticipate working with the SWAC later in 2021 to allow for a nearer term focus on regulatory compliance, capital project planning, and SCM maintenance and inspection.

Fiscal and Staffing Considerations: There is no fiscal impact with reviewing and amending the LUO. There will be a staff impact with performing the review.

Additional Information:

 $\frac{https://carrboro.legistar.com/LegislationDetail.aspx?ID=3919560\&GUID=59CDD594-2973-4C2B-813C-738A1CF5707B\&Options=\&Search$

http://www.townofcarrboro.org/DocumentCenter/View/698/Article-XVI-Floodways-Floodplains-Drainage-and-Erosion-PDF

3. FEMA Hazard Mitigation Grant Program Letters of Interest (Acquisition and Elevation)





Project Description: The information presented below is for an acquisition project for 116 Carol Street, and a new elevation project for 100 James Street

Project Background: Following on Hurricane Florence and Tropical Storm Michael, FEMA announced new rounds of HMGP funding. In addition to the Lorraine Street properties discussed above, two additional homeowners at 116 Carol Street and 100 James Street (properties included in previous HMGP applications for acquisitions that did not move forward) have responded, and were included in Letters of Interest submitted by the Town to the NC Department of Public Safety (NCDPS). Staff submitted one Letter of Interest for an acquisition project for 116 Carol Street and a second Letter of Interest for elevation of the home at 100 James Street in early 2019. Staff received notification in the summer of 2019 that the NCDPS would accept applications.

Status: Applications in Review. Application materials for the 116 Carol acquisition were submitted to the State in October, 2019 under Hurricane Florence. Application materials for the 100 James Street elevation were submitted to the State in November, 2019 under Tropical Storm Michael. Staff regularly check on the status, which has remained "pending obligation" since the applications were submitted. If approved, staff will follow up with pursuit of entering into (a) grant agreement(s) for one or both projects.

Fiscal and Staffing Considerations: If the Town is able to successfully enter into grant agreements (one for acquisition and one for elevation), costs for work covered by the grants will first be borne by the Town and then reimbursed to the Town with a combination of both Federal and State funds covering eligible costs, provided that all grant requirements are met. Elevation costs can be reimbursed at up to \$175k per home and acquisition costs at up to \$276k per home. There would be a significant staff impact to administer the grant funds.

Additional Information:

https://www.fema.gov/media-library-data/1493317448449b83f27544e36b7bf67913f964a56b15a/HMA Homeowners Guide 040717 508.pdf

4. FEMA Public Assistance: Damage Recovery from Hurricane Florence



Public Assistance (PA) is FEMA's largest grant program providing funds to assist communities responding to and recovering from major disasters or emergencies declared by the President. The program provides emergency assistance to save lives and protect property, and assists with permanently restoring community infrastructure affected by a federally declared incident

Eligible Applicants

Eligible applicants include states, federally recognized tribal governments (including Alaska Native villages and organizations so long as they are not privately owned), U.S. territories, local governments, and certain private non-profit (PNP) organizations.

PNPs must have "an effective ruling letter from the U.S. Internal Revenue Service, granting tax exemption under sections 501(c), (d), or (e) of the Internal Revenue Code of 1954, or satisfactory evidence from the St nonrevenue producing organization or entity is a nonprofit one organized or doing business under State law."

Additionally, for a PNP operated facility to be eligible, the PNP must demonstrate the facility provides a critical service or provides a non-critical, but essential government service and is open to the general public. A facility that provides a critical service is defined as one used for an educational, utility, emergency, or medical purpose. ²

FEMA processes PA grant funding according to the type of work the applicant undertakes. Eligible work must be required as a result of the declared incident, be located in the designated area, be the legal responsibility of the applicant and be undertaken at a reasonable cost

Eligible work is classified into the following categories:

Emergency Work

Category B: Emergency protective measures

Permanent Work
Category C: Roads and bridges

Category C: Roads and bridges
Category D: Water control facilities
Category E: Public buildings and contents
Category F: Public utilities
Category G: Parks, recreational, and other facilities

Federal funding guidelines for each of these categories are listed in the *Public Assistance Progra Guide*, which is located online at https://www.fema.gov/media-library/assets/documents/111781.

After a federal declaration, the recipient (i.e. state, tribe, or territory) conducts Applicant Briefings to inform potential applicants (i.e. state, local, tribal, territorial, and PNP officials) of the assistance available and how to apply. Applicants must then file a Request for Public Assistance within 30 days of the date their respective area is designated by the federal declaration

Following the approved request, FEMA and the applicants will conduct additional meetings to discuss disaster

Project Description: The Town has been working through the FEMA Public Assistance process for damage recovery from Hurricane Florence. This aspect of Public Assistance is associated with covering the costs for debris removal, emergency protective measures, restoring roads, equipment and facilities to pre-storm conditions, and administrative costs. It is considered separately from the activities described in #11 below, although also under the Public Assistance umbrella.

Project Background: Stormwater staff have been leading the Town's pursuit of FEMA Public Assistance funding. Staff have submitted claims for losses not covered by insurance and have been working with FEMA/NCDPS staff to document and receive reimbursement, as well as reimbursement for staff time associated with emergency response and follow up. This process has been underway since the winter.

Status: Closeout. The Florence damage recovery work and reimbursal has been completed. Staff are working with NCDPS and FEMA to close out the final review now that the stream restoration project (#11) is complete.

Fiscal and Staffing Considerations: The Town has received about \$59k in uninsured costs from FEMA to date, and could receive up to about \$200k of additional funds, including any funds granted for the stream restoration project, and for staff time for Public Assistance administration. This work has required over 500 hundred hours of Stormwater staff time.

Additional Information:

https://www.fema.gov/media-library-data/1534520496845-4b41646e3d8839c768deb3a7f4ded513/PADeliveryModelFactSheetFINAL Updated 052418.pdf https://www.fema.gov/pdf/government/grant/pa/fema323_app_handbk.pdf

PART 2: WATER QUALITY & FEDERAL/STATE REGULATORY DRIVEN WORK

5. NPDES Town Wide Permit



An MS4 Audit is a structured review of the Stormwater Management Program to evaluate whether the MS4 is meeting the requirements specified in the NPDES MS4 Permit & Stormwater Management Plan (SWMP)



Department of Environmental Quality



Regulatory Requirement: The Town is regulated under a town wide permit that requires the Town to implement a comprehensive stormwater management program that includes six minimum measures:

- (1) Public education and outreach on stormwater impacts
- (2) Public involvement/participation
- (3) Illicit discharge detection and elimination
- (4) Construction site stormwater runoff control (delegated to Orange County)
- (5) Post-construction stormwater management for new development and redevelopment, and
- (6) Pollution prevention/good housekeeping for municipal operations.

The initial Carrboro permit was issued effective July 1, 2005, renewed in 2011, and again in 2017.

Background: In 1990, under the authority of the federal Clean Water Act and starting with large (population >100k) municipalities (and industries), EPA began regulating stormwater runoff. In 2000, the scope was extended to smaller municipalities, and EPA delegated the authority to the State to issue these municipalities (including Carrboro) a stormwater permit.

Status: Active. The planned EPA/State NPDES Phase II stormwater permit audit was completed on August 12. A Notice of Violation, as anticipated and previously reported, was provided on November 2. Staff prepared additional information as part of Council and Stormwater Advisory Commission agendas in early November. Staff presented a draft Stormwater Management Plan to the Stormwater Advisory Commission in early January, <u>submitted this plan to the NCDEQ</u>, <u>are awaiting NCDEQ review for next steps</u>.

Fiscal and Staffing Considerations: Preparing for and follow up from this audit and improving the Town's permit compliance and record keeping activities has been and will continue to be a significant undertaking.

Additional Information:

https://deq.nc.gov/about/divisions/energy-mineral-and-land-resources/stormwater/stormwater-program/npdes-ms4-permitting

6. Stormwater Control Measure Maintenance and Inspection Program



Background: The Town's Land Use Ordinance (LUO) has required "Stormwater Control Measures" (SCMs) as part of development projects. SCMs treat runoff to reduce both water quantity and quality impacts. Since 2007, the LUO¹ has articulated requirements for private landowner maintenance of SCMs. (Prior to 2007, this responsibility was implicit rather than explicit.) In early 2020, the Council approved a rate increase to support the necessary capacity to expand program efforts in general, and specifically including SCM compliance oversight. In August, 2020, NCDEQ audited the Town's performance for its permit. Past oversight of SCM maintenance was a recognized permit performance deficiency. Moving forward with a compliant and comprehensive Town wide SCM maintenance oversight program is also seen as an immediate and effective action that the Town can take for flood/climate change resilience since there are many existing SCMs for which performance can be improved with proper maintenance, and risks of poorer future performance can also be avoided through preventative maintenance.

Status: Active. The concept that staff are moving forward with, given the above, is to move forward with the SCM maintenance and inspection program activities with goals of:

- 1) A letter being sent to all owners of Town permitted SCMs outlining their responsibilities and clear communications about the program and what will be happening going forward (initiated in November);
- 2) All owners of Town permitted SCMs being required to initiate their own annual reporting of their maintenance and inspection efforts by the end of 2021;
- 3) Stormwater staff committing to complete staff inspections of all Town permitted SCMs by the end of 2022.

Staff have been reporting on activities to the Stormwater Advisory Commission since October. More than 20 letters have been written to SCM property owners, representing about half of the entire SCM inventory. The response has in general acknowledged an interest in pursuing the maintenance, inspection and reporting being requested. Letters to the remaining owners are planned for the coming weeks.

Fiscal and Staffing Considerations: This activity is requiring a significant amount of staff time.

Additional Information: http://www.townofcarrboro.org/751/Maintenance-and-Inspection

¹ Section 15-263.1 Maintenance of Structural BMPs

7. NPDES Public Works Facility NPDES Permit

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES
GENERAL PERMIT NO. NCG080000

TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

for establishments primarily engaged in the following activities:

Vehicle Maintenance Areas

Regulatory Requirement: Under federal and state law, the Public Works facility continues to be regulated through an NPDES stormwater general permit.

Background: In 1990, under the authority of the federal Clean Water Act and starting with large (population >100k) municipalities (and industries), EPA began regulating stormwater runoff. In 2000, the scope was extended to smaller municipalities, and EPA delegated the authority to the State to issue these municipalities a stormwater permit. In addition to receiving a town wide permit, Carrboro received a separate permit for the Public Works facility given the operations occurring at the site and potential for stormwater impacts on water quality.

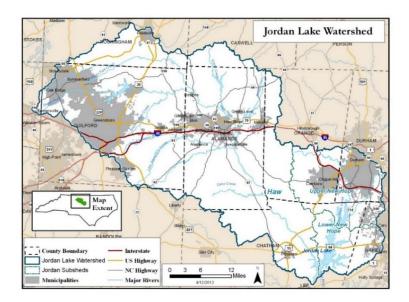
Status: Active. This activity has been and remains in a regular/routine operational status, with the facility remaining compliant with federal/state requirements.

Fiscal and Staffing Considerations: The Town has been working with a consultant for about \$6k/year to support regulatory compliance. There is also an ongoing level of staff activity to maintain compliance.

Additional Information:

https://deq.nc.gov/about/divisions/energy-mineral-land-resources/npdes-stormwater-gps

8. Jordan Lake Rules Compliance



Regulatory Requirement: The Jordan Lake Rules are a nutrient management strategy designed to restore water quality in the lake by reducing pollution entering the lake. Restoration and protection of the lake is essential because it serves as a water supply for several thriving communities, a prime recreation area for more than a million visitors each year, and an important aquatic ecosystem.

Background: Jordan Lake was impounded in 1983 by damming the Haw River near its confluence with the Deep River. It was created to provide flood control, water supply, fish and wildlife conservation, and recreation. The lake has had water quality issues from the beginning, with the NC Environmental Management Commission declaring it as nutrient-sensitive waters (NSW) the same year it was impounded. Since that time, Jordan Lake has consistently rated as eutrophic or hyper-eutrophic, with excessive levels of nutrients present. The most relevant provisions in the rules for Carrboro relate to stormwater management for both new and existing development, riparian buffers, and fertilizer application.

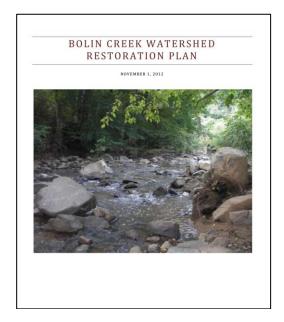
Status: Under Review (State). There was significant Town activity between about 2005 and 2015 to prepare for and enact ordinance provisions and begin work on implementation activities. The State then chose to pursue further studies to guide implementation. Jordan Lake Rules regulatory review has begun now that a NC Policy Collaboratory study has wrapped up. The goals of the rules readoption process is to evaluate the Collaboratory's findings and engage stakeholders throughout the watershed to help develop draft rules. The NC Division of Water Resources (DWR) has contracted with Triangle J Council of Governments (TJCOG) to administer this public participation process.

Fiscal and Staffing Considerations: The Town continues to be required to submit annual reports identifying stormwater retrofits, and has programmed several projects in the CIP. It is preliminary at this point to speculate on the potential fiscal/staff/regulatory impacts that will result, beyond an understanding that some staff time will be required to stay informed and report back as the review is pursued.

Additional Information:

https://deq.nc.gov/about/divisions/water-resources/water-planning/nonpoint-source-planning/jordan-lake-nutrient https://www.tjcog.org/programs-energy-environment%E2%80%AF-water-resources/jordan-lake-one-water

9. Bolin Creek Watershed Restoration Plan Implementation



Regulatory Requirement: The downstream extent of Bolin Creek in Carrboro, and continuing into Chapel Hill, is on the state/federal list of impaired waters. Local actions are needed to improve water quality.

Background: Carrboro staff worked with Chapel Hill and other local, state and federal agency staff in 2006 to create the Bolin Creek Watershed Restoration Team (BCWRT) because of the impaired waters listing. At the time, the Bolin Creek watershed was selected as one of only 7 watersheds in the state to receive focused state and federal assistance in preparing grant applications and leveraging other resources to remove Bolin Creek from the impaired waters list. The BCWRT's long term goal is to improve the health of Bolin Creek and its tributaries and remove it from the impaired waters list. This is an ambitious goal that will require a robust commitment for many years to come.

Status: Active. Since 2012, watershed restoration plan implementation has been inactive since 2012 due to insufficient staff capacity and funding resources. Staff are exploring an EPA/NCDEQ 319 grant application with 3 HOAs in the Bolin Forest neighborhood and other partners to address an eroding gulley as a restoration and demonstration project. The application deadline is May 4, 2021; awards will occur later in 2021. If successful, work would commence in 2022.

Fiscal and Staffing Considerations: There is a staff impact associated with preparing the application. Currently, it is envisioned that the Town would offer an in kind but not cash match for the grant. There would be a staff impact with grant administration.

Additional Information:

https://townofcarrboro.org/280/Bolin-Creek-Watershed-Restoration



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-79

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Economic Development Monthly Report

PURPOSE: Regular Monthly Activities and Status Report

DEPARTMENT: Economic Development

CONTACT INFORMATION: Jon Hartman-Brown - 919-391-7846 - JHartman-

Brown@TownofCarrboro.org

INFORMATION:

FISCAL & STAFF IMPACT:

RECOMMENDATION:

ACTIVITY

 Attending Bi-Weekly Regional Economic Developers Meeting for COVID-19 Response

I have been attending weekly meetings with Economic Development staff throughout the region including Chatham County, Orange County, Chapel Hill, UNC, Downtown Chapel Hill, Hillsborough, and Chamber staff. Our discussions have been revolving around post-COVID economic development and what that looks like.

- Attending CBA Marketing, Policy, and Leadership meetings
 I am currently attending CBA Marketing Committee, Policy Committee, and Leadership Council meetings to both understand the role of the CBA and to network with these business owners and find ways the Department can get plugged in. The focus of February has been on "For the Love of Carrboro."
- Working with Two New Businesses
 I have been working with two potential new businesses on getting started. I am currently working through some business viability work with one and working through the revolving loan process with the other. Both present great opportunities and will meet some of the categorical restaurant demand we have here.
- Acquiring new Parking Leases begun; Anticipated Completion by end of Q1
 I am in the process of acquiring new parking leases in downtown Carrboro. Primarily I
 am working with Fitch Lumber and the Dispute Settlement Center, but there is one other
 areas where Town Staff are working to acquire additional spaces.
- Assisted Two Local Businesses with Development Regulations
 I worked with Back Alley Bikes to help guide them through and find a solution to addingon their business within the Fire District. I am also working with another local businesses on potentially moving their business so that they can expand and trying to keep them here in Carrboro.
- BIPOC Business Update

Another BIPOC Business Roundtable Discussion occurred on February 25th. Staff are also working with El Centro to conduct a Spanish-speaking Roundtable as well. This will help us ensure that we are fully engaged in the needs of the entire BIPOC Community.

PROJECTS

Minority Business Roundtable – Implementation

<u>Current Status:</u> Online portion of the Resource Center is under development. Initial meetings with community leaders have been occurring. I am working with El Centro to schedule a Spanish only roundtable so that we can better understand the needs of our

Spanish-speaking businesses.

Next Steps: Development of a resource center (both online and physical locations). Projected Completion: On-going. We anticipate these activities to continue and become a part of the economic development workflow process. The resource center projected completion is early March.

Project Arrange

We have received feedback that Project Arrange was very appreciate of the Town Manager's offer. The company has paused this project until they can reassess their needs post-COVID-19.

• Economic Development Strategic Plan – Identifying Strategic Issues and Strategy <u>Current Status:</u> Currently working with the ESC to solidify strategic issues and identify strategies for each issue.

<u>Next Steps:</u> Continue to work with the ESC to identify strategies for each strategic issue at their March meeting.

Projected Completion: Mid April



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-5

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Fire Department Monthly Report

PURPOSE: To provide the Town Council a monthly overview of calls for service.

DEPARTMENT: Fire Department

CONTACT INFORMATION: Chief David Schmidt, (919) 918-7349

INFORMATION: This report will provide information on Fire Department calls for service that occurred in Carrboro, South Orange Fire District, and neighboring jurisdictions.

FISCAL & STAFF IMPACT: N/A

RECOMMENDATION: Staff recommends the report be received and accepted.

Carrboro Fire Rescue Department February 2021 Incident Data



			Ov	erpressure /			H	Hazard	ous											
		Fire		Rupture		EMS		Condition		Service Call		Good Intent		F	False Alarm		Weather		Total #	Total %
Location	#	%	#	%	#	%	#	%		#	%	#	%	#		%	#	%		
Carrboro	3	60.0%	1	100.0%	43	82.7%	4	ļ	50.0%	1	33.3%	6	50.09	%	5	100.0%			63	73.3%
South Orange	1	20.0%		0.0%	7	13.5%	4		50.0%		0.0%		0.09	6		0.0%			12	14.0%
Chapel Hill		0.0%		0.0%	1	1.9%			0.0%	2	66.7%	4	33.39	%		0.0%			7	8.1%
New Hope Fire District	1	20.0%		0.0%		0.0%			0.0%		0.0%		0.09	6		0.0%			1	1.2%
North Chatham Fire District		0.0%		0.0%		0.0%			0.0%		0.0%	2	16.79	%		0.0%			2	2.3%
Orange Grove Fire District		0.0%		0.0%	1	1.9%			0.0%		0.0%		0.09	6		0.0%			1	1.2%
Grand Total	5	100.0%	1	100.0%	52	100.0%	8	3 1	100.0%	3	100.0%	12	100.09	6	5	100.0%	0	0.0%	86	100.0%

Fire Examples include any type of fire; structure, vehicles, vegetation, rubbish, other outside fires										
Overpressure/Rupture	This is an overpressure or rupture of air, steam, or gas where there is no associated fire									
EMS	Any type of medical call or rescue of a person in distress									
Hazardous Condition	Any type of condition where no fire exists - fuel/chemical spills, electrical equipment failure									
Service Call	Examples of Public service incidents include: lockouts, water leaks, assisting other public agencies									
Good Intent	Examples of good intent incidents include: steam mistaken for smoke, authorized controlled burns, no incident found at the location									
False Alarm	Examples of false alarms include: alarms sounding due to a malfunction or the unintentional activation, and malicious false alarms.									
Weather	Examples of weater incidents include: earthquakes, floods, damage assessments, or weather spottiing									
Special Incident	Example of special incidents include: citizen complaints due to code or ordinance violations									



Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-76

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Police Department Monthly Report

PURPOSE: The Purpose of this agenda item is to provide the Town Council a brief overview of the

monthly calls for service.

DEPARTMENT: Police Department

CONTACT INFORMATION: Chief Chris Atack, 919-918-7397

INFORMATION: This report will provide information on calls for service, arrest, citations, use of force,

and accidents.

FISCAL & STAFF IMPACT: N/A

RECOMMENDATION: Staff recommends the Town Council receive and accept this report.

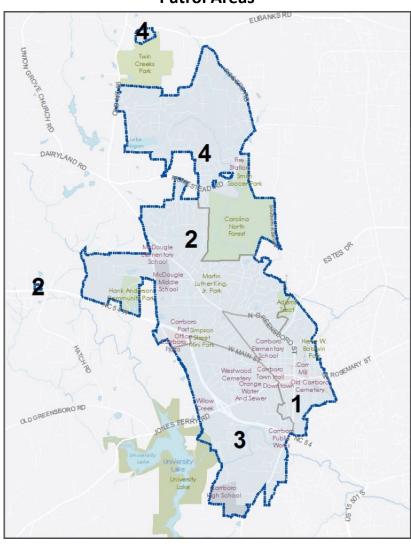


CARRBORO POLICE DEPARTMENT

Community • Accountability • Respect • Ethics

Monthly Report February 2021

Patrol Areas



Calls for Service

	January	February	% Change
Area 1	350	339	-3.14%
Area 2	256	206	-19.53%
Area 3	743	646	-13.06%
Area 4	97	120	23.71%
Total	1446	1311	-9.34%
Traffic Stops	261	217	-16.86%
Citations	160	217	35.63%
Arrest	17	28	64.71%
Use of Force	0	1	100.00%



Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-82

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Request to Issue Permit for the Sladesign Fashion Show 2021: ROOTS.

PURPOSE: The purpose of this item is to consider a Street Closing Permit Application submitted by Independent Artist Marcela Slade/ Orange County Arts Commission for the *sladesign Fashion Show 2021 "ROOTS"*.

DEPARTMENT: Public Works

CONTACT INFORMATION: Kristen Benoit, 919-918-7428, kbenoit@townofcarrboro.org; Joe Guckavan, 919-918-7427, jguckavan@townofcarrboro.org; Joe Guckavan, 919-918-7427, jguckavan@townofcarrboro.org;

INFORMATION: Artist Marcela Slade/ Orange County Arts Commission has submitted a Street Closing Permit Application for the temporary closing and usage for a portion of Old Pittsboro Road on Friday, April 9, 2021 from 6:00 PM to 9:00 PM to host the *sladesign Fashion Show 2021: Roots*. All driveways will be accessible during the event.

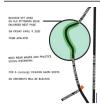
Portion of Old Pittsboro Road to be closed:



Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1



The event is free and open to the public. All participants and attendees are required to wear a face covering and practice social distancing in accordance with state and local requirements.

FISCAL & STAFF IMPACT: Applicant is responsible for all costs incurred to facilitate the event. Applicant will be sent an itemized bill for the final costs incurred by Police and Public Works.

RECOMMENDATION: It is recommended that the Town Council approve the Resolution for the temporary closing of Old Pittsboro Road on Friday, April 9, 2021 from 6:00 PM to 9:00PM to accommodate the sladesign Fashion Show 2021.

A RESOLUTION AUTHORIZING THE TEMPORARY CLOSING OF THE FOLLOWING STREETS TO ACCOMMODATE THE SLADESIGN FASHION SHOW: ROOTS

Section 1. Portion of Old Pittsboro Road, identified in Section a. below, shall be temporarily closed to vehicle traffic on Friday, April 9, 2021 from 6:00 PM to 9:00PM to accommodate the *sladesign Fashion Show: ROOTS*. This event is to be held in accordance with the permit issued by the Town Council pursuant to Article III of Chapter 7 of the Town Code.

a. Portion of Old Pittsboro Road to be closed



Section 2. The Town shall supply the appropriate traffic control devices to give notice of the temporary traffic controls.

Section 3. No person may operate any vehicle contrary to the traffic control devices installed in accordance with Section 2 of this resolution.

Section 4. The Event Coordinator will be responsible for notifying Central Communications when the street is closed and when it is reopened to vehicular traffic.

Section 5. Applicant shall post signs at the intersections of Old Pittsboro Road and South Greensboro Streets and Daffodil Lane and Old Pittsboro Road, 5-7 days before the event, to notify the public about the of the upcoming event.

Section 6. Applicant will be responsible for all costs incurred by Police, Fire, and Public Works to facilitate this event. Applicant will be sent an itemized bill for the final costs incurred by Police, Fire, and Public Works.

Section 7. This resolution shall become effective upon adoption.

STREET CLOSING PERMIT APPLICATION

CONCERNING THE USE OF STREETS AND PUBLIC RIGHT-OF-WAY FOR STREET FAIRS, FESTIVALS, CARNIVALS, AND OTHER PUBLIC EVENTS

EVENT:	sladesign Fashion Show 2021
EVENT SPONSOR:	Independent Artist Marcela Stade / OCAC Arts Commis
IS THE SPONSOR A:	NON-PROFITFOR PROFITOTHER:
ANY OTHER INFORMAT	TON ABOUT SPONSOR OR EVENT:
by he Andst he	
EVENT COORDINATOR	
NAME: ADDRESS:	Marcela Slade 115 South Peak Drive / Carrboro, NC 27510 / 9194484888
TELEPHONE NUMBER:	9194484888
	TIME PERIOD PROPOSED FOR CLOSING: Time Period: From: 6pm May (4, 2021 To: 9pm Time Period: From: 6pm To: 9pm
RAIN DATE: Mary	May [4, 202] To: 9pm
1	R OF PERSONS EXPECTED TO ATTEND THE EVENT: 40+
	VICES REQUESTED OF THE TOWN? YES NO NO and event organizers may be required to reimburse the Town for any related expenses):
If YES, specify	
I will need street signs (2 cones. (or beffer	to state the road is closed on each end of Old Pittsboro Road and street YET NO THRU TRAFFIC?) Sign
ATTACH A SKETCH SHO	
• Area where event is to to	
 Any streets to be closed 	
	ontrol devices to be erected
	ion stand, booth or other temporary structures nces stands, platforms, stages, benches or bleachers
	tees stantas, prayerms, stages, concres or escapres
OTHER INFORMATION:	
The area to be closed do	es not block access to anyone's personal drive way.
INSURANCE INFORMAT	ION:

NOTIFICATION OF CENTRAL COMMUNICATIONS (911):

The APPLICANT is responsible for notifying Central Communications (911):

- at least five (5) days in advance of the event in writing (Orange County EMS, Post Office Box 8181, Hillsborough, NC 27278)
- on the day of the closing, prior to the actual closing of the street (dialing 911)
- on the day of the closing, when the street is re-opened (dialing 911)

NOTIFICATION OF THE PUBLIC:

A public hearing is required for all street closing permit applications and the applicant must speak with the Town Clerk about requesting this public hearing. The public must be notified by a formal advertisement in a local newspaper. The Public Works Department will submit the advertisement copy to the newspaper. However, the applicant will be responsible for reimbursing the Town for the full cost of the advertisement (an estimated \$30-\$40).

Any other notification of the public of this event will be the Applicant's responsibility.

NOTIFICATION OF ABUTTING PROPERTY OWNERS:

The **APPLICANT** is responsible for notifying all abutting property owners of the Public Hearing. Such notification must be accomplished at least seven days prior to the Public Hearing. The notification must include:

- the DATE, TIME and LOCATION of the proposed street closing; and
- the DATE, TIME and LOCATION of the Public Hearing as well as the subject matter of this Public Hearing

The Public Works Department must receive in writing from the APPLICANT the following at least five days prior to the Public Hearing:

names of all property owners notified copy of the notification method used to notify these property owners (mail or hand delivery)

CLEAN-UP TIME TABLE:

6-9pm includes clean up time.. .

FEES:

\$ 85.00 application fee plus 100% of the cost of the Public Hearing advertisement Application fee must accompany the submittal of this application



HELLO NEIGHBOR!

MY NAME IS MARCELA SLADE, I LIVE IN THE WHISPERING HILLS TOWN HOUSES.

I WILL BE HOSTING A sladesign FASHION SHOW: ROOTS, ON A SECTION OF OLD PITTSBORO ROAD.

FRIDAY APRIL 9, 2021 FROM 6PM-9PM

THE TOWN OF CARRBORO WILL BE COLLABORATING WITH ME

TO CLOSE THE STREET THAT DAY.

I AM LETTING ALL MY NEIGHBORS KNOW IN ADVANCE.

IT'S FREE AND OPEN TO THE PUBLIC. DUE TO COVID-19 MANDATE EVERYONE MUST WEAR A MASK AND PRACTICE SOCIAL DISTANCING. THERE IS A LIMITED CAPACITY, BUT IF YOU WANT TO STOP BY AND THERE IS SPACE, EVERYONE IS WELCOME.

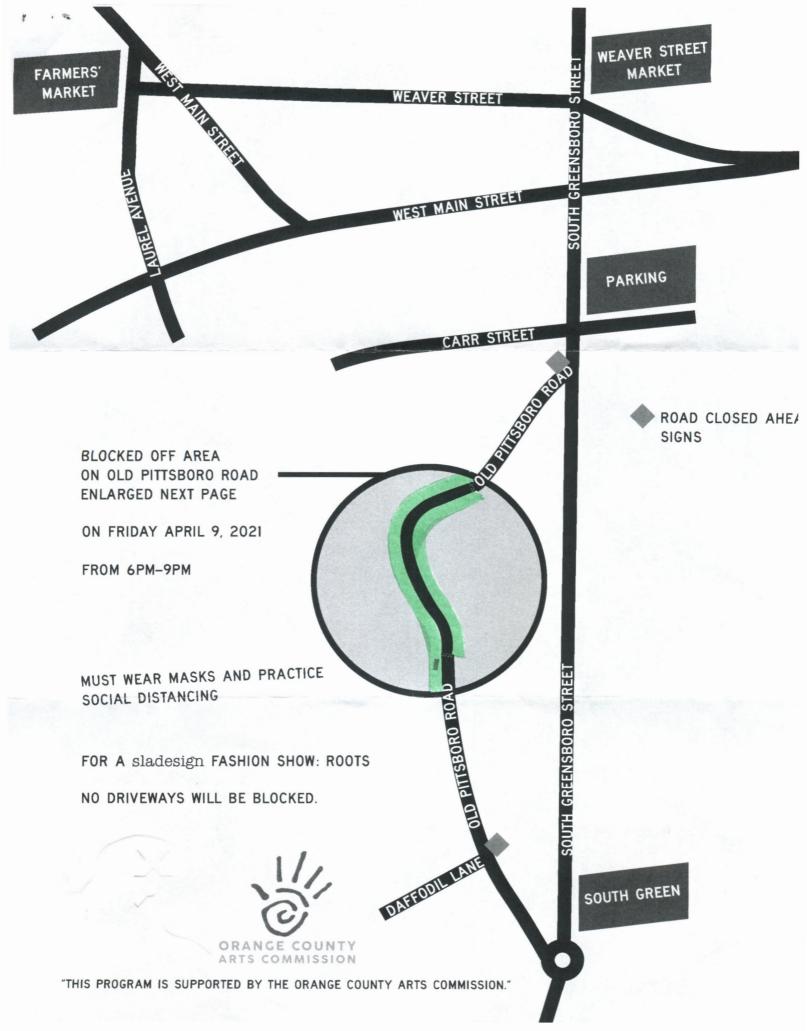
NO DRIVEWAYS WILL BE BLOCKED, JUST A SECTION OF OLD PROPITIOUS ROAD.

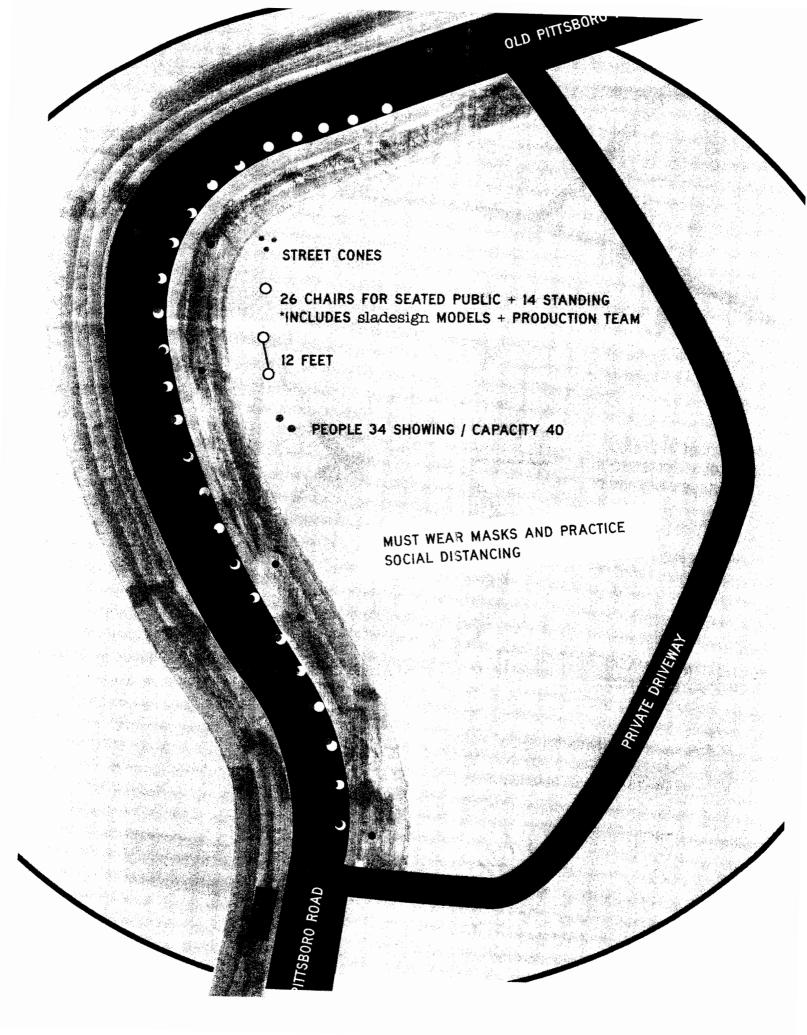
(SEE ATTACHED GRAPHS)

FOR 3 HOURS ON FRIDAY APRIL 9, 2021 FROM 6PM-9PM.

TO SPONSOR THE EVENT OR MORE INFO CONTACT: info@xerrajeros.com TO MODEL CONTACT: marcelaslade@gmail.com / 9194484888

THANK YOU FOR COLLABORATING!





CASHIER'S CHECK

037215

00001 Chapel Hill - Pittsboro Street

DATE: February 09, 2021

66-7704/2531

PAY
TO THE
ORDER OF CARRBORO PUBLIC WORKS

\$******85.00

**** EIGHTY FIVE DOLLARS AND 00 CENTS

REMITTER: MARCELA SLADE

MEMO:

VOID AFTER 180 DAYS

AUTHORIZED SIGNATURE

#O37215# #253177049#08619900121#

5600 438505



Town of Carrboro Community Event Pre-Application

Please provide the following information to assist staff with evaluating what types of approvals <u>may</u> be needed for your event. Submission of this application is not an approval of the event.

Event Organizer Information
Name of Organization: Murcela Slade
Organization: Nonprofit For-Profit Other:
Website: Xerrajeros.com
Organization Primary Contact Name (first, last name): Marcela Slade
Mailing Address: 115 South Peak Dr.
city: Cardooro State: NC zip: 27570
Phone (9194484888Fax: () . Email: Marcelas lade @gmail.com
Event Information would be see soul free and sould be seen to see the
Name of Event: Sladesign Fashin Show Poots
Preferred Dat April 9, 2021 2nd At Walk for Clean-up time: 7-8 pm Carbo co & Chapel Hill Other Possible Dates (if the above date is not available):
Rain Date: Next 2nd Friday Expected Attendance: ~ 25 seated + 10 sladesign personnel. But this event can also take place without attenders. Part of the
Depublic Event on Private Property Location: Event / art prece is to downent old fills! Read of Carrison, NC through the sladesing Fashion Show. It will be filmed 45 harred The world wide web +
Public Event on Public Property - Including (check all that applies): Town Commons Century Center Park or Facility (be specific): Mole for FRE Street Event -Public Street or Right-Of-Way-(list street(s): Other site(s): Other (Please explain):



HELLO NEIGHBOR!

MY NAME IS MARCELA SLADE, I LIVE IN THE WHISPERING HILLS TOWN HOUSES.

I WILL BE HOSTING A sladesign FASHION SHOW: ROOTS, ON A SECTION OF OLD PITTSBORO ROAD.

FRIDAY APRIL 9, 2021 FROM 6PM-9PM

TO CLOSE THE STREET THAT DAY.

I AM LETTING ALL MY NEIGHBORS KNOW IN ADVANCE.

IT'S FREE AND OPEN TO THE PUBLIC. DUE TO COVID-19 MANDATE EVERYONE MUST WEAR A MASK AND PRACTICE SOCIAL DISTANCING. THERE IS A LIMITED CAPACITY, BUT IF YOU WANT TO STOP BY AND THERE IS SPACE, EVERYONE IS WELCOME.

NO DRIVEWAYS WILL BE BLOCKED, JUST A SECTION OF OLD PROPITIOUS ROAD.

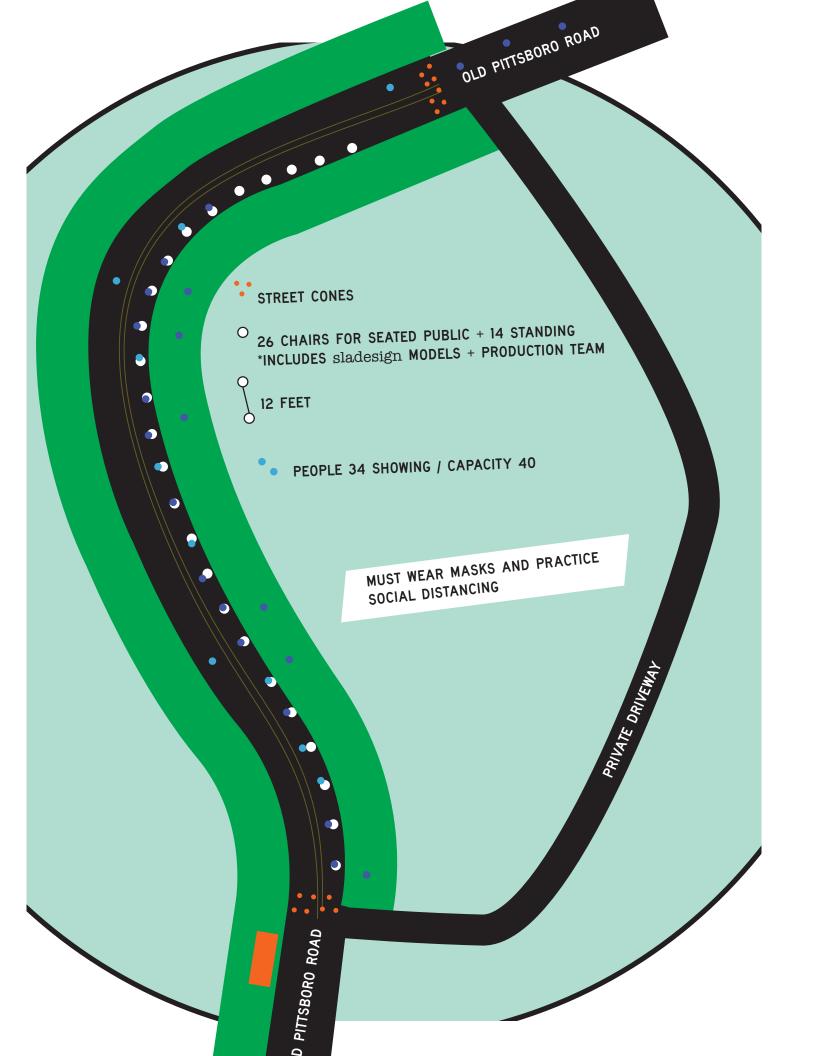
(SEE ATTACHED GRAPHS)

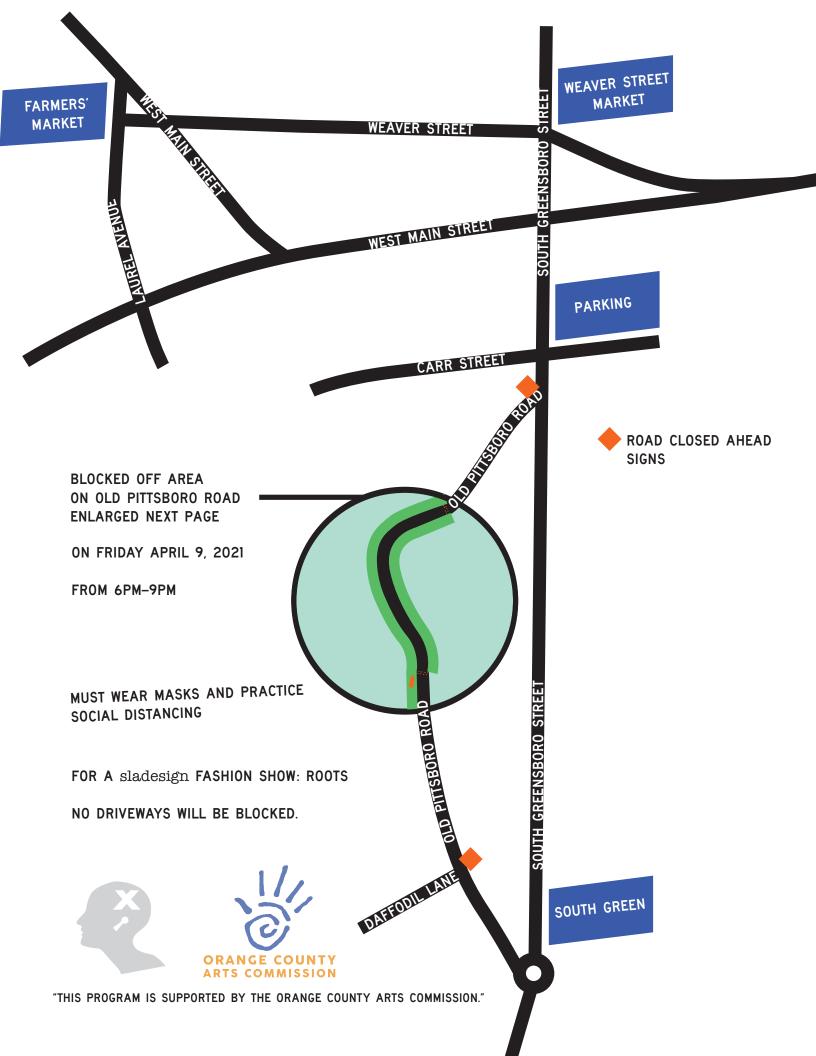
FOR 3 HOURS ON FRIDAY APRIL 9, 2021 FROM 6PM-9PM.

TO SPONSOR THE EVENT OR MORE INFO CONTACT: info@xerrajeros.com
TO MODEL CONTACT: marcelaslade@gmail.com / 9194484888

THANK YOU FOR COLLABORATING!

CHECK xerrajeros.com IN ABOUT A MONTH FOR FASHION SHOW PHOTOS & MORE!





Event Details

Does your event include any of the following?

Vac	No
res	No
a wedge	X
	X
×	and the losve
).×	
billy india	×
X CHAIRS	+ CURTAIN
Mongness	X
X CONES	E CONTRACTOR MAN
	Yes X CHAIRS X GNES

^{*}please be advised that some events may require reimbursement for town related expenses

Event Description

Please provide a general description and purpose of your event. Attach a simple diagram of event area with details of staging, fencing, booths, tents, walkways, entryway/exits, emergency response plan, etc. Providing this information will assist town staff in helping you to plan a successful event. Thank you!

This will be a Fashion Show. The catwalk is that small strip of Old Pittsbor. Road. There are no dineways and I will speak with the noighbors - my neighbors - about the event as soon as I thour This is possible and then again close to The event date so Ney plan a coordingly. I will have 10 models walking the sladesign collection... where for Perm to charge. Only 25 people maximum are to be seated. W/ to feet apart. This event can also take place with no attendance Signed by Primary Contact event 12 to downert old Pitts boro Road Through the sladerign Show. February 11, 2021 event. | can have 2 volunteers (2) Submit this application to Carrboro Recreation and Parks office at 100 N. Greensboro Street, or fax to (919)918-4475 or email to Dianah Alston-Sanders - dsanders@townofcarrboro.org or if the town can provide that ... < that would BE GREAT!!



Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-80

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Consideration of Conditional Use Permit for The ArtsCenter at 315 Jones Ferry Road.

PURPOSE: The purpose of this item is for the Town Council to consider the Conditional Use Permit

application for The ArtsCenter at 315 Jones Ferry Road.

DEPARTMENT: Planning Department

CONTACT INFORMATION: James Thomas 919-918-7335, <u>jthomas@townofcarrboro.org</u> <mailto:jthomas@townofcarrboro.org; Marty Roupe, Development Review Administrator, 919-918-7333, mroupe@townofcarrboro.org mailto:mroupe@townofcarrboro.org

INFORMATION: Town Council continued the public hearing to March 9th, 2021 and closed the public hearing portion at this meeting. Further discussion of the CUP was continued to the March 16th, 2021 meeting.

Agenda materials from the first meeting on February 23 are available here:

Town of Carrboro - File #: 21-59 (legistar.com) https://carrboro.legistar.com/LegislationDetail.aspx?
ID=4803977&GUID=07F390CB-D071-4A59-B04D-BF18711DFB39&Options=&Search=>
Agenda materials from the continuation on March 9 are available here:
Town of Carrboro - File #: 21-72 (legistar.com) https://carrboro.legistar.com/LegislationDetail.aspx?
ID=4814103&GUID=A56D694B-457F-4BDF-B471-BE8D93F0258C&Options=&Search=>

Following the March 9 meeting, staff compiled a draft list of conditions to be considered by Town Council based on discussion during the meeting. The list is included as Attachment A. The applicant has indicated that they would like to further discuss a few of the conditions with staff before Tuesday night. Those matters have been marked accordingly in the list of conditions, see numbers 5, 7, and 8. Town staff and the applicant will be meeting to discuss on Monday and additional information will be shared during the meeting Tuesday evening. As additional explanation, please note the following:

- -Conditions 1 through 5 remain the same as presented in previous meetings;
- -Conditions 6 through 10 represent newly added conditions based on Town Council discussion to date;
- -Numbers 11 through 20 represent possible additional conditions based on information submitted by the

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

applicant regarding willingness to accept as conditions. The information was previously shared with Town Council by way of email, it is included here for reference as Attachment B.

-Numbers 21 through 46 are the unedited comments from advisory boards presented during previous meetings.

Related to the list, an exhibit is included, as Attachment C, showing the area where the applicant has agreed to include permeable pavement.

The applicant has also submitted an updated letter regarding costs related to stormwater control measures. The letter is included as Attachment D.

FISCAL & STAFF IMPACT: Impacts associated with holding the hearing are legal, engineering, and staff time.

RECOMMENDATION: Town staff recommends that the Town Council receive the information and consider whether to approve the Conditional Use Permit application. Staff recommended conditions are included in Attachment A and the CUP worksheet is attached as well as Attachment E.

SUMMARY SHEET OF STAFF AND ADVISORY BOARD RECOMMENDATIONS CONDITIONAL USE PERMIT FOR THE ARTSCENTER. 315 JONES FERRY ROAD STAFF RECOMMENDATIONS I. Staff Recommendations (w/ Advisory Explanation: Staff recommendations, primarily related to LUO compliance and are represented by #s 1-5 below. If **Board support where applicable):** an advisory board voted to 'support' the staff recommendation, then such board is listed after staff in the left-hand column. Recommended by Recommendations Staff, PB, TAB, EAB, SWAC That the Town Council finds that 39 parking spaces are sufficient to serve The ArtsCenter project. This finding is based on information provided by the applicant regarding the alternative modes of transportation to get to and from The ArtsCenter. That NCDOT must issue a driveway permit for the Staff, PB, TAB, EAB, SWAC project prior to approval of the construction plans. Staff, PB, TAB, EAB, SWAC That the applicant shall provide to the Zoning Division, prior to the issuance of the Certificate of Occupancy for the building, digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF or PDF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF or PDF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in the map and in a data table. The data will be tied to horizontal controls. Staff, PB, TAB, EAB, SWAC That the developer shall include detailed a stormwater system maintenance plan, specifying responsible entity and schedule. The plan shall include scheduled maintenance activities for each stormwater control measure in the development, (including cisterns, bioretention areas, swales, check dams, and irrigation pond), performance evaluation protocol, and frequency of self-reporting requirements (including a proposed self-reporting form) on maintenance and performance. The plan and supporting documentation shall be submitted to Town engineer and Stormwater Utility Manager for approval prior to construction plan approval. Upon approval, the plans shall be included in the owner's association documentation. Staff, PB, TAB, EAB, SWAC That per LUO Section 15-92.1 the town shall receive in writing from NC DEO information confirming that formal Environmental Management Commission approval is not required related to encroachment into the Zone 1 stream buffer or such approval shall be granted by EMC, prior to approval of the construction plans. Note that the applicant may request alternative wording for this condition, staff will discuss with the applicant

before Tuesday's meeting.

New condition, per Appearance	6.	That Council hereby finds acceptable the deviations
Commission review	.	from subsections 1, 2, 4, and 6 of LUO Section 15-178,
		Architectural Standards for Downtown Development, in
		accordance with the building elevations presented during
		the public hearing.
New condition, per Town Council	7.	Wording of condition related to stormwater volume
discussion		control and Council finding related to the maximum
		extent practicable language still being discussed.
New condition, per Town Council	8.	Wording of condition related to additional community
discussion / Modified version of TAB and		engagement still being discussed.
PB recommendation		
New condition, per Town Council	9.	That the construction management plan for the project
discussion		will make clear that all aspects of construction shall be
		kept entirely outside of the adjacent residential
		neighborhood. The construction management plan
		cannot be approved by the Town Manager unless this
		matter is addressed along with the community
N. P. B.	1.0	engagement details of condition number 8.
New condition, per Town Council	10.	That the applicant agrees to increase the total number of
discussion / Modified version of TAB, PB,		bicycle parking spaces to a minimum of sixteen. A
and EAB recommendation		minimum of half of the spaces shall be covered and
		located near the front entry. These spaces must be
D:1111:4:11:4:T	11	included on the construction plans for the project.
Possible additional condition, per Town Council discussion to date and based on	11.	That the developer shall continue to explore satellite
		parking options for employees in order to minimize potential off-site impacts associated with parking for
the applicant expressing willingness to include as a condition / Modified version		events at The ArtsCenter, and shall implement a plan to
of TAB and PB recommendation		mitigate overflow parking when and if it does occur.
Possible additional condition, per Town	12	That the applicant agrees to apply for a grant from the
Council discussion to date and based on	12.	Orange County Climate Action Grant Program and / or
the applicant expressing willingness to		agrees to investigate and consider solar leasing. The
include as a condition / Modified version		applicant further agrees at a minimum to make the
of EAB recommendation		building solar ready by including conduit pathways and
of Elib recommendation		other necessary infrastructure into the building design.
Possible additional condition, per Town	13.	That the applicant agrees to keep bicyclists in mind if
Council discussion to date and based on		any changes to Jones Ferry Road, such as but not limited
the applicant expressing willingness to		to the design of the entrance driveway's curve radii.
include as a condition / Modified version		These details must be discussed with NCDOT before the
of EAB recommendation		driveway permit for the project is issued.
Possible additional condition, per Town	14.	That the applicant agrees to provide an additional five
Council discussion to date and based on		feet of right of way on the portion of the site with five
the applicant expressing willingness to		foot sidewalks, and to widen the entirety of the sidewalk
include as a condition / Modified version		to 10 feet. This additional right of way shall be shown on
of EAB and PB recommendation		the construction plans and all additional right of way
		dedicated to NCDOT shall be formalized by way of
		recording a plat with Orange County's Register of
		Deeds.
Possible additional condition, per Town	15.	That the applicant agrees to further explore with
Council discussion to date and based on		NCDOT incorporating a crossing location / crosswalk on
the applicant expressing willingness to		Jones Ferry Road.
include as a condition / Modified version		
of EAB recommendation		

Possible additional condition, per Town Council discussion to date and based on the applicant expressing willingness to include as a condition / Modified version of EAB recommendation	16. That the applicant agrees to continue working with Chapel Hill Transit during review of the construction plans to incorporate a bus stop proximate to the site, possibly with artistic treatment.
Possible additional condition, per Town Council discussion to date and based on the applicant expressing willingness to include as a condition / Modified version of EAB recommendation	17. That the applicant agrees to make every effort possible to protect the 42 inch oak tree on the site located near the edge of the stream bank within the stream buffer area.
Possible additional condition, per Town Council discussion to date and based on the applicant expressing willingness to include as a condition / Modified version of EAB recommendation	18. That the applicant agrees during construction plan review to further explore using electric instead of natural gas in order to meet the Town's climate protection goals.
Possible additional condition, per Town Council discussion to date and based on the applicant expressing willingness to include as a condition / Modified version of PB recommendation	19. That the applicant agrees to continue outreach and coordination efforts with the surrounding neighborhoods with regard to programming in order to serve their neighbors, including offering discounted or preferred access to programming and services.
Possible additional condition, per Town Council discussion to date and based on the applicant expressing willingness to include as a condition / Modified version of SWAC and PB recommendation	20. That prior to construction plan approval the applicant agrees to submit written documention from NCDEQ and USACE about the need for and potentially receipt of a 401/404 certification/permit related to the grading plan and stream channel disturbance.

ADVISORY BOARD COMMENTS / RECOMMENDATIONS		
II. Additional Advisory Board Comments & Recommendations:	Explanation: Comments and recommendations solely from advisory boards follow. If a comment involves LUO interpretation, then the applicable LUO section(s) are noted parenthetically. Otherwise, the Council may wish to consider comments in the context of public health, safety, or welfare findings. Staff generally does not endorse nor refute comments from advisory boards.	
Recommended by	Recommendations reworded as Conditions	
TAB	21. The developer shall commit to increased neighborhood engagement to ensure that concerns of the local community are addressed. This needs to include a specific conversation about providing connectivity from Prince Street to the site, addressing security concerns of the local neighbors, and preventing excess parking from occurring on Prince Street.	
TAB	22. The developer shall provide records of the community engagement that has been performed as part of the site development process, along with demographic information and zip codes of the people they engaged with.	
TAB	23. Increase the total bike parking to 16 spaces with half of those covered.	

TAB	24	The developer shall continue to explore satellite parking
		options for employees in order to minimize the amount
		of on-site parking through any means.
TAB	25.	Developer shall develop and implement a plan to
		mitigate overflow parking, including outreach to
		adjacent neighbors.
EAB, Stormwater	26.	We do not recommend changing the stormwater
		requirements in the Land Use Ordinance solely to
		accommodate this project.
EAB, Stormwater	27.	Failure to meet the Town's stormwater requirements is
		an environmental justice issue as it could lead to
		negative impacts for residents downstream.
EAB, Stormwater	28.	We would like to see this project move forward at this
		site. However, if the applicant cannot meet the Town's
		stormwater requirements, we do not recommend the
	<u> </u>	project's approval.
EAB, Roof Options	29.	We understand there are cost constraints for solar,
		however, we encourage you to apply for a grant from
		Orange County Climate Action Grant Program and/or
		investigate solar leasing. We are happy to help with this
		process.
EAD Transportation	20	In addition, the building should be solar ready. We recommend that the applicant provide infrastructure
EAB, Transportation	30.	for electric vehicle charging for 20% of the proposed
		parking spaces.
EAB, Transportation	31	We recommend installing as much bike parking and
LAB, Transportation	31.	covered bike parking as possible, going above and
		beyond LUO requirements for bike parking and covered
		bike parking.
EAB, Transportation	32.	We are concerned about the impacts of pedestrian foot
, I		traffic when bringing people into the natural areas of the
		property. This could lead to litter in the stream and
		could negatively affect the soil in the stream buffer.
EAB, Transportation	33.	The parking lot configuration is not ideal from a
		standpoint of traffic flow.
EAB, Transportation	34.	Keep bicyclists in mind when exploring any changes
		needed to the traffic configuration on Jones Ferry Road.
EAB, Transportation	35.	We recommend that the applicant dedicate an additional
		5 feet to the right of way on portion with 5 foot
	1	sidewalks.
EAB, Transportation	36.	That the applicant has agreed to work with NCDOT on
		crossing location for Jones Ferry Road.
EAD T	27	701 A.41 12 A.1 1.4 22 A 1.134
EAB, Transportation	5/.	That the applicant has agreed to continue to work with
		Chapel Hill Transit a.) on a stop location and consider an
		artistic treatment of the stop b.) provide covered bike
		racks near the front entry, convenient to Jones Ferry
		Road c.) widen the public sidewalk at the front of the building to 10 feet.
EAB, Trees and Vegetaion	38	We would like to request that every effort possible be
LAD, Tices and vegetaton	50.	made to protect the 42" oak tree.
	<u> </u>	made to protect the 72 bak liee.

EAB, Energy Efficient Measures	30	We recommend using electric instead of natural gas in
EAB, Energy Efficient Weasures	39.	order to meet Carrboro's climate goals. Producing and
		transporting natural gas (composed of primarily
		methane) represents significant greenhouse gas
		emissions, which in the short term are significantly more
		potent that carbon dioxide.
EAB, General	40	We have some concerns about how this project will
LAD, General	40.	change and gentrify the existing neighborhood.
PB	41	That the ArtsCenter continue outreach and collaboration
1 D	71.	with the surrounding neighborhoods with regards to
		parking, programming, etc. The ArtsCenter should seek
		to serve their neighbors, including by offering
		discounted or otherwise preferred access to
PB	42	programming and services. That the ArtsCenter make additional effort to reduce
LD.	42.	overflow parking in the Lincoln Park neighborhood by,
		for example, making arrangements for satellite parking
		for staff and/or visitors, securing temporary offsite
		parking for large events, arranging for shuttle bus
		transportation from satellite and offsite parking, notifying visitors (including with signature) that parking
		in surrounding neighborhoods is not permitted for
		ArtsCenter events, and encouraging multi-modal transit
np.	12	to the ArtsCenter.
PB	43.	The Planning Board recognizes that the restraints
		OWASA imposes on planting and fences over sewer
		lines will not permit the ArtsCenter to put a fence or
		dense plantings on the south boundary of the site such
		that access would be blocked. While the Planning Board
		is not in favor of restrictions to pedestrian connectivity,
		the concerns we heard from neighbors on Prince and
		Barnes Street deserve to be heard and give the same
		consideration that other neighborhoods in Carrboro have received under similar circumstances. The Town
		Council should continue the conversation beyond this
		single project, and seek to meet the neighborhood's
		needs for parking and traffic mitigation, including but
		not limited to creating safe sidewalks on Barnes St and
		improving pedestrian safety at the intersection of Barnes
SWAC	11	and Jones Ferry. If the council determines that issuing a permit may be
SWAC	44.	desirable, resubmittal of a Stormwater Impact Analysis
		that addressed the below points be required prior to final
		permit review:
		a.) Staff approval of compliance with all LUO
		provisions, including 15-263(g)(3) and 15-
		92(k). That written documentation from
		the State be received to demonstrate
		compliance with 15-92(k) prior to permit
		issuance.
	<u> </u>	issualice.

SWAC	45. The applicant to submit to staff:
	a.) Additional SNAP tool calculations and
	accompanying plan view drawings of SCM
	locations for, at the minimum, infiltrating
	permeable pavement, and preferably, for
	other SCMs with greater volume reduction
	ability.
	b.) Additional and technically based
	justification for why infiltrating permeable
	pavement is not feasible on this site.
	Field based information (seasonally high
	water table determination and soil testing)
	to determine the feasibility of infiltration
	based SCMs.
	c.) a flood analysis of the impacts of buffer incursion on
	upstream and downstream flood elevations and in-stream
	channel stress.
SWAC	46. As part of construction plan approval, the applicant to
	submit written documentation from NCDEQ and the
	USACE about the need for and potentially receipt of a
	401/404 certification/permit given the grading plan and
	channel disturbance.

SUMMARY SHEET OF STAFF AND ADVISORY BOARD RECOMMENDATIONS CONDITIONAL USE PERMIT FOR THE ARTSCENTER WAS COMMENDATIONS

I. Staff Recommendations (w/ Advisory Board support where applicable):	Explanation: Staff recommendations, primarily related to LUO compliance and are represented by #s 1-5 below. If an advisory board voted to 'support' the staff recommendation
Recommended by	Recommendations
Staff, PB, TAB, EAB, SWAC	1. That the Town Council finds that 39 parking spaces are sufficient to serve The ArtsCenter project. This finding is based on information provided by the applicant
Staff, PB, TAB, EAB, SWAC	That NCDOT must issue a driveway permit for the project prior to approval of the construction plans. AGREED
Staff, PB, TAB, EAB, SWAC	3. That the applicant shall provide to the Zoning Division, prior to the issuance of the Certificate of Occupancy for the building, Mylar and digital as-builts for the stormwater features of the project. Digital as-builts shall be in DXF format and shall include a base map of the whole project and all separate plan sheets. As-built DXF files shall include all layers or tables containing storm drainage features. Storm drainage features will be clearly delineated in a data table. The data will be tied to horizontal controls. AGREED
Staff, PB, TAB, EAB, SWAC	4. That the developer shall include detailed stormwater system maintenance plan, specifying responsible entity and schedule. The plan shall include scheduled maintenance activities for each unit in the development, (including cisterns, bioretention areas, swales, check dams, and irrigation pond), performance evaluation protocol, and frequency of self-reporting requirements (including a proposed self-reporting form) on maintenance and performance. The plan and supporting documentation shall be submitted to Town engineer and Stormwater Utility Manager for approval prior to construction plan approval. Upon approval, the plans shall be included in the homeowners' association documentation. AGREED
Staff, PB, TAB, EAB, SWAC	5. That per LUO Section 15-92.1 the town shall receive in writing from NC DWQ information confirming that formal EMC approval is not required related to encroachment into the Zone 1 stream buffer or such approval shall be granted by EMC, prior to approval of the construction plans. Change to "the Town shall receive reasonable assurances of NCDWQ approval or no action required by NCDWQ"

ADVISORY BOARD COMMENTS / RECOMMENDATIONS		
II. Additional Advisory Board Comments & Recommendations:	Explanation: Comments and recommendations solely from advisory boards follow. If a comment involves LUO interpretation, then the applicable LUO section(s) are noted parenthetically. Otherwise, the Council may wish to consider comments in the context of public health, safety, or welfare findings. Staff generally does not endorse nor refute comments from advisory boards.	
Recommended by	Recommendations reworded as Conditions	
TAB	6. The developer shall commit to increased neighborhood engagement to ensure that concerns of the local community are addressed. This needs to include a specific conversation about providing connectivity from Prince Street to the site, addressing security concerns of the local neighbors, and preventing excess parking from occurring on Prince Street. AGREED	
TAB	7. The developer shall provide records of the community engagement that has been performed as part of the site development process, along with demographic information and zip codes of the people they engaged with. AGREED	
TAB	8. Increase the total bike parking to 16 spaces with half of those covered. AGREED, with the covered spaces under the building overhang	
TAB	9. The developer shall continue to explore satellite parking options for employees in order to minimize the amount of on-site parking through any means. Agreed so long as LUO waiver is granted to Arts Center in this instance	
TAB	10. Developer shall develop and implement a plan to mitigate overflow parking, including outreach to adjacent neighbors. AGREED	
EAB, Stormwater	11. We do not recommend changing the stormwater requirements in the Land Use Ordinance solely to accommodate this project.	
EAB, Stormwater	12. Failure to meet the Town's stormwater requirements is an environmental justice issue as it could lead to negative impacts for residents downstream.	
EAB, Stormwater	13. We would like to see this project move forward at this site. However, if the applicant cannot meet the Town's stormwater requirements, we do not recommend the project's approval.	
EAB, Roof Options	14. We understand there are cost constraints for solar, however, we encourage you to apply for a grant from Orange County Climate Action Grant Program and/or investigate solar leasing. We are happy to help with this process. AGREED In addition, the building should be solar ready.	
EAB, Transportation	15. We recommend that the applicant provide infrastructure for electric vehicle charging for 20% of the proposed parking spaces. We do not believe that this is warranted at this time as it will take up two of our precious parking spots and we believe the it will have very limited use as most of our visitors are there for relatively short periodstoo short to charge.	

Attachment B, Page 3 Attachment E, Page 3

Attachment B, Page 4 Attachment E, Page 4

	Attachment E, Page 4
PB	28. The Planning Board recognizes that the restraints
	OWASA imposes on planting and fences over sewer
	lines will not permit the ArtsCenter to put a fence or
	dense plantings on the south boundary of the site such
	that access would be blocked. While the Planning Board
	is not in favor of restrictions to pedestrian connectivity,
	the concerns we heard from neighbors on Prince and
	Barnes Street deserve to be heard and give the same
	consideration that other neighborhoods in Carrboro have
	received under similar circumstances. The Town
	Council should continue the conversation beyond this
	single project, and seek to meet the neighborhood's
	needs for parking and traffic mitigation, including but
	not limited to creating safe sidewalks on Barnes St and
	improving pedestrian safety at the intersection of Barnes
	and Jones Ferry.
SWAC	29. If the council determines that issuing a permit may be
	desirable, resubmittal of a Stormwater Impact Analysis
	that addressed the below points be required prior to final
	permit review:
	a.) Staff approval of compliance with all LUO
	provisions, including 15-263(g)(3) and 15-
	92(k). That written documentation from
	the State be received to demonstrate
	compliance with 15-92(k) prior to permit
	issuance. See response next page
SWAC	30. The applicant to submit to staff:
	a.) Additional SNAP tool calculations and
	a.) Additional SixAl tool calculations and
	accompanying plan view drawings of SCM
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site.
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site.
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel
	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress. See response next page
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress. See response next page
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress. See response next page
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress. See response next page 31. As part of construction plan approval, the applicant to submit written documentation from NCDEQ and the USACE about the need for and potentially receipt of a 401/404 certification/permit given the grading plan and
SWAC	accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability. See response next page b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site. Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs. See response next page c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress. See response next page

29. If the council determines that issuing a permit may be desirable, resubmittal of a Stormwater Impact Analysis that addressed the below points be required prior to final permit review:

a.) Staff approval of compliance with all LUO provisions, including 15-263(g)(3) and 15-

92(k). That written documentation from the State be received to demonstrate compliance with 15-92(k) prior to permit issuance. Applicant Response: Compliance with 15-263(g)(3) cannot be met, but Council has made the determination that we have in fact the test of "to the maximum extent practicable". Regarding section 15-92(k), The Board of Adjustment approved a variance on June 17, 2020 for the intrusion and work in the stream buffer. Since that approval, the scope of work proposed in the buffer has been reduced. At the time of the approval, confirmation was provided by John R. McAdams, EMC member, that EMC would not need to review the proposed intrusion. The LUMO stipulates that the variance cannot be approved until it is approved by EMC. As noted above, the variance was approved, so the correspondence from

30. The applicant to submit to staff:

prior to moving forward with construction.

a.) Additional SNAP tool calculations and accompanying plan view drawings of SCM locations for, at the minimum, infiltrating permeable pavement, and preferably, for other SCMs with greater volume reduction ability.

Mr. McAdams was deemed adequate per the BOA decision. In addition, please note that the proposed work in the buffer will still have to reviewed and approved by NCDEO and USACE

- Additional SNAP Tool calculations were sent to Town staff on 2/15. Additional SNAP Tool calculations were sent over to Town staff on 2/18 and 2/19 as well. The only SCM combination that is viable given the Arts Center's required program and that meets the Town's requirements are a green roof and pervious pavement (with infiltration) throughout the entire site. As discussed with staff, the SNAP Tool does not consider all variables for the annual runoff volume calculation. For instance, there is no differentiation between groundcover other than impervious surface and all other groundcover. There is also no consideration given to the existing HSG or infiltration capacities of the site. So, sites with HSG A and HSG D soils have the same annual runoff volume for the same size site and impervious cover.
- b.) Additional and technically based justification for why infiltrating permeable pavement is not feasible on this site.
 - Field based information (seasonally high water table determination and soil testing) to determine the feasibility of infiltration based SCMs.

Typically, infiltration rates to determine the viability of infiltration systems such as pervious pavement are taken at the subgrade of the proposed system. For this site, there is only a small area that is close to the subgrade elevation. The majority of the site requires imported fill to bring the site up to the proposed grades. We have very little control over the soil that will be brought into the site. Specifying a specific soil type and locating a source will add cost to the project. When the soil is brought onto the site, it will be compacted to support the building and parking lot. This compaction will limit any infiltration capabilities of the soil. Pervious pavement with infiltration is not viable over the OWASA sewer main for the same reasons. The backfill compaction requirements will limit infiltration into the soil. If infiltration does occur over the OWASA sewer main, it is possible that the water will migrate into the stone bedding around the sewer main and negate any benefits of an infiltration system. Infiltration is also not practical over the proposed underground detention and sand filter vaults. The top of these vaults is relatively shallow. In addition, the backfill around these structures must be compacted to ensure their stability and a stable parking lot in this area. So, infiltration in this location is also not practical.

c.) a flood analysis of the impacts of buffer incursion on upstream and downstream flood elevations and in-stream channel stress.

First, note there is no mapped floodplain on this site. So, a HEC-RAS model is not established at this location. Based on our analysis, there is approximately 45 acres upstream of the site that

Attachment B, Page 6 Attachment E, Page 6

drain into the stream. At the upstream end the site, there is an existing 42" culvert under Jones Ferry Rd. This pipe operates under inlet control during large rain events and does not have adequate capacity to convey the peak discharge from the basin based on current design methodology. Given this, the pipe affects areas upstream of the site, and there are no adverse effects on property upstream of this site as a result of the proposed development. Based on the calculations for the stream channel, the only portion of the site where water would leave the channel during the 100-yr storm is at the very downstream end of the site where the channel depth is reduced. The only development proposed at this location for this project is the installation of the storm drain outfall pipe from the sand filter. So, there will be no adverse impacts or increased spread of the floodplain as a result of the proposed development. With regards to in-channel stresses, this is directly related to the depth. Since there is no measurable increase in flow depth, the shear stress will not change. For this project, detention of the 100-yr storm is provided. So, the peak runoff rate from the site is reduced. This should reduce flooding impacts downstream of the site.

P.I.N. 9778656581

RIM ELEV. = 449.36INV. OUT INV. IN 445.30' 445.32 PIN: 9778-65-8620 HARRIET ROBINSON NO DEED REF. 301 JONES FERRY RD. ZONGING: R75 USE: 1.100 TREE PROTECTION FENCING AND LIMITS OF DISTURBANCE BW 452 ZONE 2X STREAM BUFFER STREAM BUPKE LEATON C. MEACHUM, JR ZONE 1 EVELYN R. MEACHUM STREAM BUFFER D.B. 877/298 101 BARNES ST ZONING: M1 USE: 2.100 TREE PROTECTION FENCING AND LIMITS OF DISTURBANCE RIP RAP LINED CHANNEL SEGMENTAL BLOCK RETAINING WALL PROPOSED (DESIGN BY ~CONTOUR OTHERS) (TYPICAL) STREAM BUFFER PIN: 9778-65-5335 WILLIAM A. WILKINSON, JR. MARTHA O. WILKINSON D.B. 366/603 103 BARNES ST. ZONING: M1 TW 452_/ BW 450 USE: 2.100 10 BARNES ST., LLC D.B. 4340/201 10 BARNÉS ST ZONING: R75 CURB INLET USE: 1.100 RCP STORM TYPICAL) UNDERGROUND DETENTION / SAND FILTER (8' DEEP CONCRETE VAULTS) ALL INSTALLED BMP'S (WATER QUALITY AND DETENTION DEVICES) MUST BE CERTIFIED BY THE ENGINEER OF RECORD AS CONSTRUCTED PER THE APPROVED CONSTRUCTION PLANS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY AND THAT AS-BUILT CONSTRUCTION PLANS WILL BE SUBMITTED TO THE TOWN. GRADING AND DRAINAGE PLAN

Scale 1" = 20'

grading & storm drainage notes

GRADING NOTES:

1. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CARRBORO STANDARDS AND SPECIFICATIONS.

- 3. CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR TO CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL".
- 4. PRIOR TO BEGINNING ANY DISTURBANCE, THE GENERAL CONTRACTOR SHALL SCHEDULE AND ATTEND A PRECONSTRUCTION CONFERENCE WITH THE TOWN OF CARRBORO PLANNING DEPARTMENT (919) 918-7324, AND A REPRESENTATIVE OF THE OWNER.
- 5. CONSTRUCTION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 6. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S
- 7. SOIL UNDER BUILDING PAD, PAVED AREAS AND WITHIN SLOPES GREATER THAN 3:1 (H:V) SHALL BE APPROVED, PLACED AND COMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. THÈSE SOILS SHALL BE COMPACTED AS SPECIFIED UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER. ANY UNDERCUT OF SOILS IN THESE AREAS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER & OWNER. THE UNDERCUT SOILS SHALL ALSO QUANTIFIED BY THE GEOTECHNICAL ENGINEER.
- 8. ALL BANKS, SWALES AND FILL SLOPES SHALL BE NO STEEPER THAN 2.5:1 MAXIMUM. CUT SLOPES SHALL BE NO STEEPER THAN 2:1.
- 9. ALL GRADING MUST PRODUCE SURFACE DRAINAGE ADEQUATE TO PREVENT STANDING WATER OR WET LAWN AREAS, AND TO ENSURE THAT ALL STORM WATER FLOWS TO INLETS OR OTHER POINTS OF DISCHARGE.
- 10. ALL SIDEWALKS SHALL BE CONSTRUCTED WITH A MAXIMUM 1.8% CROSS SLOPE IN THE DIRECTION SHOWN ON THE 11. CONNECT ALL ROOF LEADERS AND DOWNSPOUTS TO STORM DRAINAGE SYSTEM WITH PVC PIPE. SEE
- 12. ALL PERMANENT SLOPES INCLUDING MAIN POND OF SCM WILL BE CONSTRUCTED AT NO STEEPER THAN 3:1. SLOPES OF SCM FORBAY SHALL BE 2:1

STORM DRAINAGE NOTES:

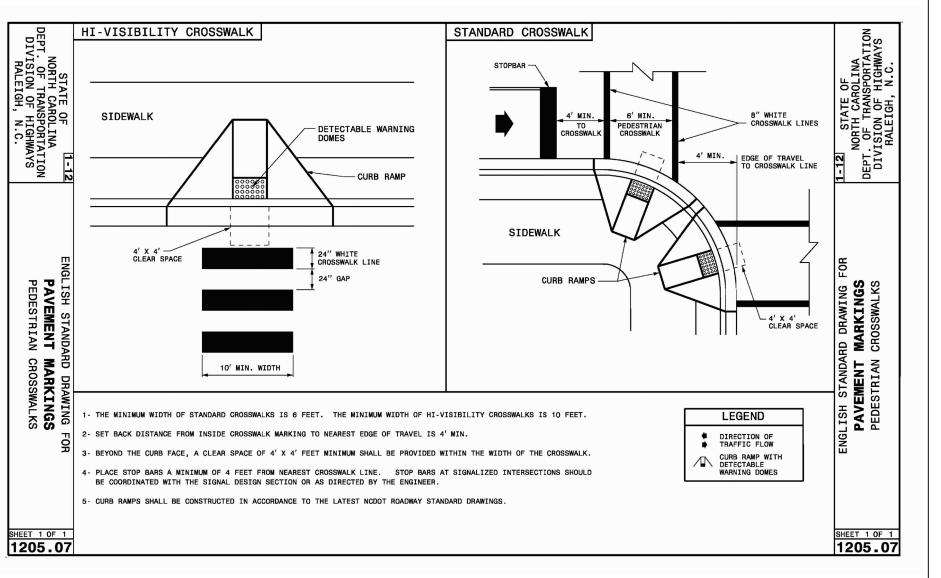
ARCHITECTURAL PLANS FOR LOCATIONS.

- 1. ALL STORM DRAINAGE PIPES SHOWN ARE TO BE CLASS III REINFORCED CONCRETE (RCP) UNLESS NOTED
- 2. ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CARRBORO AND NCDOT STANDARDS.
- 3. ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- 4. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH INSIDE WALL.
- 5. ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- 6. THE INTERIOR SURFACES OF ALL STORM DRAINAGE STRUCTURES SHALL BE POINTED UP AND SMOOTHED TO AN ACCEPTABLE STANDARD USING MORTAR MIXED TO MANUFACTURER'S SPECIFICATIONS.
- 7. ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- 8. MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- 9. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100% STANDARD PROCTOR.
- 10. UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- 11. SEE THE COVER SHEET FOR NOTES REGARDING IMPERVIOUS SURFACE.

ADA route notes applies to all sheets

FOR ALL SIDEWALKS THE FOLLOWING APPLIES:

- 1. SIDEWALK SLOPES TO BE A MAXIMUM 4.8%.
- 2. SIDEWALK CROSS SLOPES TO BE A MAXIMUM 1.8%.
- 3. MINIMUM 1' SHOULDER AT MAXIMUM 2% SLOPE ADJACENT TO ADA PAVED ROUTES UNLESS A HANDRAIL IS CALLED OUT.
- 4. ADA PARKING TO BE A MAXIMUM 1.8% SLOPE IN ANY DIRECTION FOR ENTIRE AREA PARKING SPACES
- 5. ALL DOORS EXITING THE BUILDING REQUIRE AN ADA ACCESSIBLE COMPLIANT ROUTE TO A PUBLIC WAY.





111 West Main Street

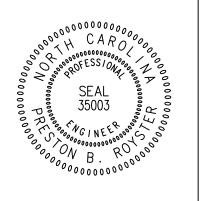
Durham, N.C. 27701

p 919.682.0368

f 919.688.5646

www.cjtpa.com NC BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LIC # C-1209 NC BOARD OF LANDSCAPE

ARCHITECTS LIC # C-104



The ArtsCenter

303 Jones Ferry Road Carrboro, NC

P.I.N. 9778656581

Job Number 1934 JSA, JCJ, MTC Checked . 6/1/2020 Date Revisions 11/2/2020 TOWN COMMENTS 01/29/2021

> CONDITIONAL USE PLANS NOT ISSUED FOR CONSTRUCTION PLANS NOT FOR

BIDDING PURPOSES

GRADING AND DRAINAGE PLAN

Sheet Title

SD-3.0

Attachment D, Page1



115 Chatham Street, Suite 301 Sanford, North Carolina 27330 Tel: 919-718-5454 Fax: 919-718-5455

March 10, 2021

Mr. Ken Reiter Belmont Sayre PO Box 1622 Carrboro, NC 27510

Re: Conceptual Budgets for Additional Storm Water Elements-Revised

The ArtCenter 315 Jones Ferry Rd. Carrboro, NC 27510

Dear Mr. Reiter:

As requested, Progressive Contracting Co., Inc. is providing the following Conceptual Budgets for Additional Storm Water Elements as requested.

Provide a permeable paver parking lot in lieu of the asphalt paved parking lots shown. We've deleted our original allowances for the stone base course and asphalt paving. We've added allowances for additional surveying services for layout and sub-grade certification, to replace approximately 24" of sub-grade with a sandy soil mix for infiltration, install 6" perforated pipe for an emergency drain, to place an average of 18" of washed stone topped with 2" of a #78 stone setting bed then Belgard Aqua Brick permeable pavers, and additional General Conditions as required for modified Sequence of Construction.

Permeable Paver Parking Lot

ALLOWANCE \$ 158,800.00

Provide a tray type Green Roof System. We've included allowances to increase the building foundations and roof framing by 25% as recommended by the Structural Engineer to support the added weight, roof system upgrades, a green roof tray system, and to add a fall protection system. The allowance does not include an electronic leak detection system.

Green Roof System

ALLOWANCE \$ 382,100.00

Attachment D, Page2

Provide a Blue Roof System. We've included allowances to increase the building foundations by 29% and roof framing by 125% as recommended by the Structural Engineer to support the added weight, roof system upgrades, a light gauge metal framed parapet with aluminum composite panels to match the wall type below, install an automatic water level control system, and to add a fall protection system. The allowance does not include an electronic leak detection system.

Blue Roof System

ALLOWANCE \$ 496,300.00

Please note, the above are Conceptual Budgets based on the limited information. These allowances do not include additional design fees, geotechnical services, unsuitable soils, maintenance costs, etc.

Sincerely,

PROGRESSIVE CONTRACTING CO., INC.

Gerry Harden Division Manager

Division manager

CC: Matt Springer

Dan Mayer

Dan Jewell

Teri Canada

Edwin Harris

Billy Askey

Preston Royster

Jeremy Anderson

Bruce Rumberg

TOWN OF CARRBORO



CONDITIONAL OR SPECIAL USE PERMIT WORKSHEET

	LETENESS OF APPLICATION e application is complete
	e application is incomplete
COMP	LIANCE WITH THE ORDINANCE REQUIREMENTS
	e application complies with all applicable requirements of the Land Use
	e application is not in compliance with all applicable requirements of the nd Use Ordinance for the following reasons:
CONSI	DERATION OF PROPOSED CONDITIONS
If the a	pplication is granted, the permit shall be issued subject to the following ons:
pla	applicant shall complete the development strictly in accordance with the ns submitted to and approved by this Council, a copy of which is filed in Carrboro Town Hall. Any deviations from or changes in these plans

2. If any of the conditions affixed hereto or any part thereof shall be held invalid or void, then this permit shall be void and of no effect.

must be submitted to the Development Review Administrator in writing and specific written approval obtained as provided in Section 15-64 of the Land

IV. GRANTING THE APPLICATION

Use Ordinance.

	Attachment E, Page 2 The application is granted, subject to the conditions agreed upon under Section III of this worksheet.
DEN	NYING THE APPLICATION The application is denied because it is incomplete for the reasons set
	forth above in Section 1.
	The application is denied because it fails to comply with the Ordinance requirements set forth above in Section II.
	The application is denied because, if completed as proposed, the development more probably than not:
	Vill materially endanger the public health or safety for the following reasons:
	Vill substantially injure the value of adjoining or abutting property for the following reasons:
3.	



Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-84

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Westwood Cemetery Draft Report

PURPOSE: The purpose of this item is for the Town Council to receive the draft Westwood Cemetery

Report.

DEPARTMENT: Public Works

CONTACT INFORMATION: Joe Guckavan, 919-918-7427, jguckavan@townofcarrboro.org mailto:jguckavan@townofcarrboro.org; Ben Schmadeke, 919-918-7424, bschmadeke@townofcarrboro.org mailto:bschmadeke@townofcarrboro.org

INFORMATION: Town Staff procured the services of landscape architect, Carter van Dyke Associates (CVDA), to assist in planning for future development of the Westwood Cemetery. The scope of the project did not consider a change of land use. The undeveloped area of Westwood Cemetery is currently designated for cemetery use.

FISCAL & STAFF IMPACT: Town Staff procured the services of landscape architect, Carter van Dyke Associates (CVDA), to assist in planning for future development of the Westwood Cemetery. The scope of the project did not consider a change of land use. The undeveloped area of Westwood Cemetery is currently designated for cemetery use.

Town Staff and CVDA presented a proposed burial arrangement for the undeveloped portion of Westwood Cemetery on November 10th 2020. The attached draft report on Westwood Cemetery (Attachment A) includes information on current Westwood Cemetery use, expected interment demand, and proposed development including accommodations for cremains and natural burials. The proposed development also includes walking paths, green space, seating and a reflection area.

RECOMMENDATION: It is recommended that the Council receive and review the attached draft report in order to be prepared to direct Staff at a future Town Council meeting, tentatively scheduled for March 16, 2021.

DRAFT

Town of Carrboro

Westwood Cemetery Design Services

Prepared for the Town Council Town of Carrboro, North Carolina



Consultant Team

Lead Consultant:

Peter R. Fernandez, RLA, ASLA, CLARB, Principal-in-Charge Carter van Dyke Associates (CVDA) 40 Garden Alley Doylestown, PA 18901-4325

Subconsultants:

Taylor Wiseman & Taylor (TWT) 2043 Energy Drive Apex, NC 27502 Terracon Consultants, Inc. 2401 Brentwood Road Raleigh, NC 27604

Contents

```
Introduction and Background • 1
 a. Town of Carrboro • 1
 b. Westwood Cemetery • 1
 c. Current Project • 2
Statutory Review and Compliance • 3
 a. Legal Compliance and Recommendations • 3
 b. Review of Existing Cemetery Rules and Procedures \bullet 5
Site Analysis • 7
 a. Introduction • 7
 b. Geotechnical Engineering Services • 8
 c. Circulation and Access • 10
 d. Spatial Organization, Site Furnishings, and Signage • 12
 e. Wayfinding and Information, Directional Signage, and Interpretation • 13
 f. Drainage Systems • 14
 g. Landscape • 15
Plan Options and Opportunities • 17
 a. Introduction • 17
 b. Land Use and Master Plan • 17
 c. New Facilities and Features • 18
 d. Planting Plan • 23
 e. Irrigation Plan • 23
 f. Financial Analysis • 23
Definition of Terms • 27
Appendices • 29
 Appendix 1. Carrboro Town Code Chapter 13 Cemeteries • <u>30</u>
 Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc. • 41
 Appendix 3. Site Analysis Plans and Concept Master Plans • 93
```

Town of Carrboro

Westwood Cemetery Design Services

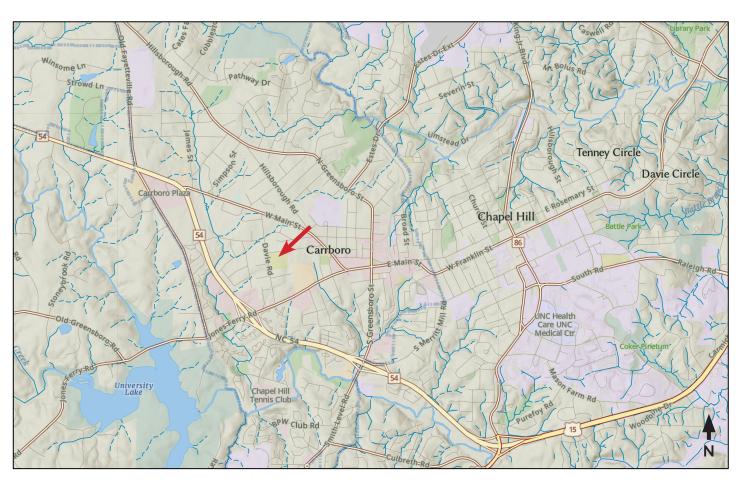


Figure 1 Regional context map. Red arrow indicates location of Westwood Cemetery. Not to scale. (https://tocgis.ci.carrboro.nc.us/)

Introduction and Background

a. Town of Carrboro

Carrboro, North Carolina, was first settled in 1882, and was originally known as West End, due to its relationship to the neighboring town of Chapel Hill. The Town was incorporated in 1911. It is named for Julian Shakespeare Carr, the owner of the textile mill that was the Town's dominant industry for its first fifty years. Carrboro is now a diverse municipality of over 20,000 residents, which supports a vibrant arts and cultural community and economy.

The Town's outdoor recreation facilities, parks, and greenways cover 110 acres. In addition, the Town owns two public cemeteries, maintained by the Public Works Department: Old Carrboro Cemetery, established around 1860, and Westwood Cemetery, established around 1933.

b. Westwood Cemetery

Westwood Cemetery is an active burial cemetery, owned and managed by the Town of Carrboro. The cemetery is located at 401 Davie Road, Carrboro, NC 27510, at the corner of Fidelity Street, in an R10 zoning district. The surrounding land use is primarily residential, though at the opposite end of the block Fidelity Street meets Main Street in the main business district. Currently only conventional casketed and cremains in a 4' by 12' plot are permitted.

The total land area is 8.73 acres. The cemetery is divided into four sections:

Zone 1: 1.18 acres and contains 860 plots, of which 10 plots are available

Zone 2: 1.05 acres and contains 608 plots, of which 16 are available

Zone 3: 0.5 acres and contains 763 plots, of which 302 are available (Note: Zone 3 is larger, however part of the section is within the tree line and the cul-de-sac.)

Zone 4: 2.4 acres of undeveloped land

The remaining 2.4 acres of the site is wooded.



Figure 2 Westwood Cemetery zones map. (Carrboro RFP)

c. Current Project

In July of 2020, the Town of Carrboro engaged a team led by Carter van Dyke Associates (CVDA) to develop a plan to guide future development and expansion of Westwood Cemetery.

CVDA is a landscape architecture and planning firm and has been providing cemetery planning and design for the past 27 years. CVDA is the prime consultant and has worked closely with locally based subconsultants to develop this report.

Taylor Wiseman & Taylor (TWT) is a civil engineering and survey firm, with offices in North Carolina, and has provided site analysis, focusing on site circulation, development costs, irrigation and site drainage. TWT assisted CVDA in the review of laws and codes.

Terracon, also with an office in North Carolina, provided geotechnical analysis, developing the geotechnical subsurface investigation for the site. Test borings assisted in determining the suitability of areas of the site for internments, and are used to determine the design of walls, walks and roads.

With the support of the subconsultants, CVDA has completed a statutory review, analyzed the existing site conditions, and provided a master plan for land use and landscaping, including expanded opportunities for burial options.

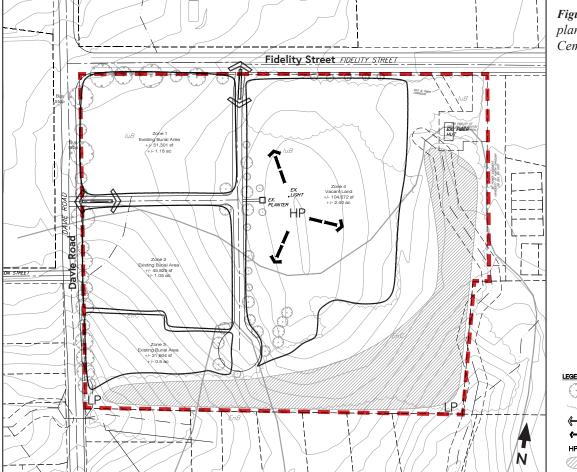


Figure 3 Topographic plan of Westwood Cemetery. (CVDA)

Statutory Review and Compliance

The Carrboro Town Code, Chapter 13 Cemeteries, addresses the general regulations, the designation and sale of lots and spaces, the installation and design of structures and memorial markers, and the nature of burials allowed within the two Town-owned and operated cemeteries, Westwood Cemetery and Old Carrboro Cemetery. Certain regulations (Sections 13-3, 13-4, 13-5 and 13-6) apply to all cemeteries within the Town borders. (See Appendix 1 on page 31 for Carrboro Town Code Chapter 13 Cemeteries.)

This plan for future development complies with existing code requirements or recommends revisions to accommodate proposed changes. For example, the code currently limits interments to conventional burials or burials of cremated ashes within a 4' by 12' burial space. This plan proposes creating additional burial options that will need to be addressed by revising language in the code. The Consultant Team suggests the following revisions to the Town Code be considered by Council.

a. Legal Compliance and Recommendations

Article I Definitions; Application

Section 13-1 (Definitions) should be expanded to include terms to describe new burial options, such as columbarium, niche, ossuary, and scattering garden, as well as the associated markers or memorial plaques. The definition of "Burial Space" may need to be revised to address dimensions and use.

Article III Designation of Sale of Cemetery Lots and Spaces

Section 13-11 (Cemetery Map Required) describes the requirement for an official map maintained by the clerk depicting the location and dimensions of all lots and spaces within a Town-owned cemetery.

The proposed addition of new burial options would require a revised map indicating additional conventional burial spaces, natural burial spaces, columbarium niches, an ossuary, and a scattering garden.

Subsection (a) refers to maintaining "adequate spacing" between natural burial lots or spaces. This spacing should be defined in the code.

Section 13-12 (Purchase of Burial Rights), subsection (d), limits the use of each burial space. A burial space is defined as "A parcel of ground within a cemetery lot having the dimensions of 4 feet by 12 feet, and the usage of each burial space shall be limited to one of the following: (1) the interment of one human body; (2) the interment of one human body and one cremation urn; or (3) the interment of no more than

four cremation urns."

With the proposed addition of new burial options, such as a columbarium, and ossuary, and a scattering garden, the definition of "burial space" should be revised. Double depth burial vaults had previously been discussed as an option, but due to the shallow depth to bedrock within the cemetery, this type of burial is not being proposed in the plan.

Article IV Mausoleums, Monuments, Markers, and Coping/Curbs or Fencing

Section 13-17 (Mausoleums) limits the erection of mausoleums, tombs, buildings, or other structures of any kind to lots designated on the plat and plan of the Town's cemeteries to be used exclusively for that purpose.

The proposed construction of a columbarium and ossuary structure should be incorporated into the Town's approved plan for the cemetery.



Figure 4 A typical grave site in Zone 2, with headstone monument and footstone markers. (CVDA)

Section 13-18 (Monuments) and Section 13-19 (Markers) define the type of memorial stones and plaques that can be installed in the ground to mark a conventional or natural burial.

Memorial markers for the new burial options should be considered. Columbaria often have uniform designs and a granite or bronze plaque on each of the niches. If scattering gardens and an ossuary are constructed, then a memorial wall would be included in the plan to allow memorial plaques to be attached.

Note: Coping/curbs and Fencing is not currently addressed in this Article.

Article V Burials

This Article only addresses conventional and natural burials. With the proposed addition of new burial options, details of columbarium and ossuary interments and scattering gardens should be included.

Section 13-21 (Interment or Disinterment), subsection (e), requires excess dirt that remains following an interment to be hauled away. Currently, a "spoils" pile exists to the east of the cul-de-sac in Zone 4, where excess soil from dug graves is piled. The spoils pile is unsightly and causes erosion and muddy runoff across the drive, as well as damage to turf areas. The code requirement for removal should be enforced.

In a natural burial, the entire volume of soil is returned to the grave, creating a slight mound, which naturally subsides with time and natural decomposition of the body. The soil is not necessarily hidden from sight, as

is required by current code.

Section 13-23 (Minimum Depth of Graves), subsection (a), requires graves be dug to a minimum depth of 5 feet for conventional burials and 3.5 feet for natural burials. The proposed master plan would conform to these requirements.

Subsection (b) allows for soil mounding in natural burials, but requires conventional graves to be filled and leveled with the surrounding area.

Section 13-24 (Grave Liner or Vault Required) requires a grave liner or vault to hold a casket for all graves, excluding natural burials. This section could be redefined to apply only to "conventional in-ground burials" to allow for natural burials, in-ground interment of a cremation urn or box, and above-ground structures.

Under this section, natural burials are only allowed in Old Carrboro Cemetery. This section should be revised to allow natural burials in Westwood Cemetery as well.

b. Review of Existing Cemetery Rules and Procedures

The Consultant Team recommends that the cemetery regulations be reviewed. Cemeteries were historically the first landscaped open spaces, and people would visit cemeteries for family outings and even picnics. While loitering may be prohibited, the Town may want to invite visitors in to enjoy the new site amenities, such as trails and benches. Regulations can be written to enforce a respectful atmosphere while also allowing some recreational use of the space.

Article II General Regulations

Section 13-4 (Disruptive Activity Prohibited) limits the use of any cemetery within the Town to activities consistent "with the use of a cemetery as a cemetery." Subsections (b), (c), and (f) prohibit recreational access to or use of



Figure 5 Sign posted in Westwood Cemetery, displaying the current rules against recreational activities. (CVDA)

cemeteries, including driving or parking in a cemetery other than when attending a burial or visiting a grave, dog-walking, and picnicking, jogging, playing games, or other active and passive recreational activities.

With the proposed introduction of walking paths and benches into the cemetery, the Town can choose to invite people into the cemetery to enjoy the landscape and natural area, to pause to rest or contemplate, and to make use of an public green space within the town core. The Town could consider revising this section to allow some recreational access and activities within cemeteries, and to allow private cemeteries to impose more restrictive rules if desired.

Section 13-5 (Desecration of Public and Private Cemeteries) protects any cemetery within the Town from desecration from trash or litter and from damage to plants, landscaping, and ornaments.

Only one trash receptacle currently exists on the Westwood Cemetery grounds. Subsection (1) is unclear in its phrasing regarding the use of trash or recycling receptacles and could be revised to encourage their use and to discourage illegal littering and dumping. If more visitors are encouraged to use the cemetery, trash receptacles should be available to them. (Note: the subsections are numbered rather than lettered.)

Dumping is currently a problem along the southern property edge and should be addressed.

Section 13-8 (Trees, Plantings, Landscaping), subsection (a), limits planting, pruning, and removal of any plants in the Town-owned cemeteries to the administrator. The proposed introduction of natural burial sites and a scattering garden increases the complexity of landscaping in grave areas. Families of the deceased who are buried or whose ashes are scattered there may wish to have more direct influence in that landscaping by planting and tending to flowers or shrubs, for example. Subsection (a) could be revised to encourage or allow for more public interaction with plantings.

Site Analysis

a. Introduction

CVDA and subconsultants Terracon Consultants and TWT have completed a site analysis of Westwood Cemetery, reviewing geologic and hydrologic conditions, existing land use, vehicle and pedestrian circulation through the site, site amenities, drainage systems, and landscaping. Terracon's subsurface exploration and geotechnical engineering recommendations will guide future land use, earthwork, and the design and construction of foundations for structures.

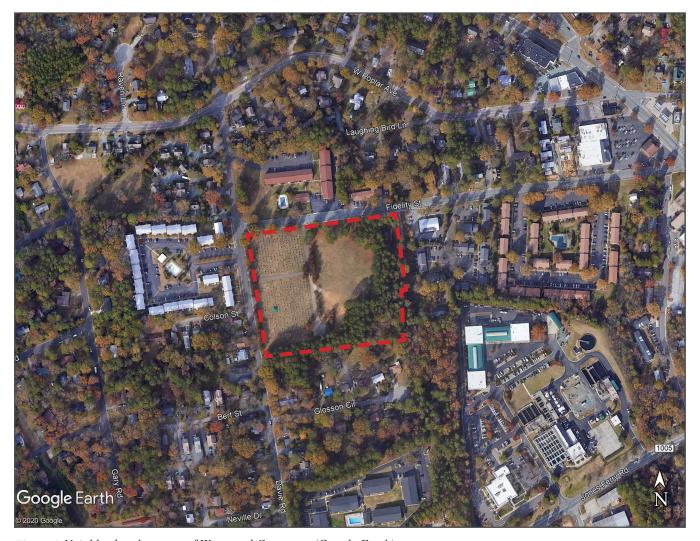


Figure 6 Neighborhood context of Westwood Cemetery. (Google Earth)

b. Geotechnical Engineering Services

See Appendix 2 on page 43 for the complete Geotechnical Engineering Report by Terracon Consultants, Inc.

Terracon's geotechnical engineering report presents the results of our subsurface exploration and geotechnical engineering services performed for future site improvements of Westwood Cemetery located at 401 Davie Road in Carrboro, Orange County, North Carolina. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Foundation design and construction

Fifteen test pits were excavated. (See Figure 7 on page 9, Exploration Plan.) Test pits TP-4, TP-10, TP-11, TP-13, and TP-14 encountered bedrock refusal at depths less than six feet. Shallow bedrock may limit available usable space for new interment sites. Two locations with granite outcrops were found in the central portion of the site. The majority of the ground surface is relatively flat; however perimeter areas slope moderately downward to the south and east.

EXECUTIVE SUMMARY

The following geotechnical considerations were identified:

- As observed at test pits TP-1, TP-3, and TP-11, a thin, discontinuous layer of existing silty/clayey sand fill is present at scattered locations across the site. Below existing fill (if present), native residual soils were found to consist of silty/clayey sand, which were observed to extend to depths of 3 feet to at least 8 feet below the existing ground surface.
- Test pit excavations encountered backhoe refusal, due to the presence of partially weathered rock (PWR) or intact bedrock, at eight of fifteen test pit locations. Surface contours indicating depth to backhoe refusal is shown on the Exploration Plan. Groundwater was not observed in test pit excavations. Further details regarding subsurface conditions are summarized in Geotechnical Characterization.
- Foundation support of possible small grade level structures, such as columbaria, or other small memorial structures, can be founded upon properly prepared subgrade consisting of soil (residual soils or structural fill), or properly prepared subgrade consisting of PWR/bedrock. The Shallow Foundations section addresses support of the small grade level structures on approved subgrade. Foundation subgrade for any structure should consist entirely of either type of subgrade, and not partially on soil subgrade and partially on PWR/bedrock subgrade. We recommend footing excavations to be inspected by Terracon for suitable preparation of bearing conditions.
- Support of foundations or new earthfill on or above existing fill materials is discussed in this
 report. However, even with the recommended construction procedures, there is an inherent risk
 to the owner that compressible fill or unsuitable material within or buried by the fill will not be
 discovered. This risk of unforeseen conditions cannot be eliminated without completely removing
 the existing fill, but can be reduced by following the recommendations contained in this report.

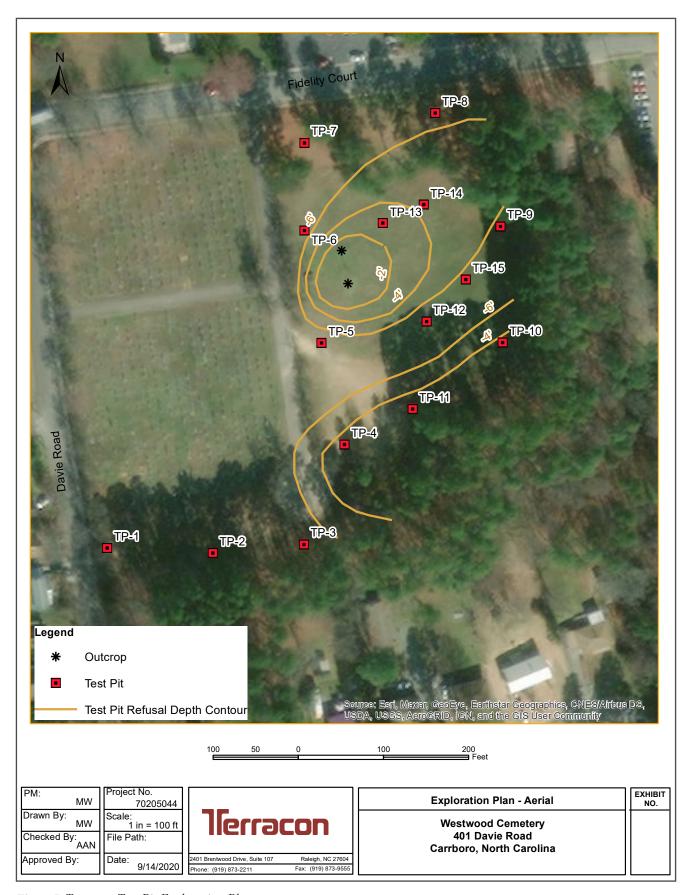


Figure 7 Terracon Test Pit Exploration Plan

To take advantage of the cost benefit of not removing the entire amount of undocumented fill, the owner must be willing to accept the risk associated with building over the undocumented fills following the recommended reworking of the material.

Terracon should be retained during site earthwork to perform the necessary testing and observations
during cut excavation, subgrade preparation, proof-rolling, placement and compaction of controlled
fills, and backfilling of excavations to the planned subgrades.

c. Circulation and Access

The cemetery sits at the intersection of two local streets: Fidelity Street runs along the northern border of the cemetery, and Davie Road is the western border. To the south, the cemetery property borders residential backyards. To the east, the property borders a medical office and more residential properties. In the northeast corner of the property is a telecommunications structure and access easement.

Two internal cemetery drives south off of Fidelity Street and east off of Davie Road provide vehicle access. The two drives intersect, and the drive coming south from Fidelity Street extends almost to the property



Figure 8 Aerial view of Westwood Cemetery and existing features. (Google Earth)

line and ends in a cul-de-sac or turnaround that extends into Section 3 of the burial grids. The cemetery drives are paved with asphalt, with no curbs, and appear to be recently paved. The driveway entrances are paved differently, and should be consistent. Vehicle parking is available along the drives. The cemetery is bordered by sidewalks along Fidelity Street and Davie Road, but there are no sidewalks or walkways within the cemetery. A bus stop is located on the property across from the apartment complex at 400 Davie Road.



Figure 9 The main entrance to the cemetery, from Fidelity Street, looking south. The spoils pile is visible in the background. (Google)



Figure 10 The entrance to the cemetery from Davie Road, between Sections 1 and 2, showing recent asphalt patching, and the sidewalk and driveway apron. The driveway apron is not separated from the adjacent sidewalk and does not have curbing. The sidewalks do not continue into the cemetery. (CVDA)



Figure 11 Erosion and root damage are visible along the south side of the driveway apron at Davie Road, in Section 2, looking east. (CVDA)

The cemetery is not fenced. It is open to the adjacent streets, and existing trees are planted quite close to the property line. In some places, the tree roots have caused upheaval damage to the adjacent sidewalks. Town code allows graves to be dug as close as twelve inches to a property line.



Figure 12 Mature trees growing close to the road along the property line have damaged the sidewalk. (CVDA)

d. Spatial Organization, Site Furnishings, and Signage

CVDA visited the site and reviewed the existing amenities and furnishings. There is one monumental sign located on the east side of the Fidelity Street entrance. The sign is constructed with brick and has a granite inset, and there is some cracking in the mortar of the brick joints on top. The base of the sign is surrounded by a timber-edged planter, planted with annual flowers, and a small wooden retaining wall runs along the township sidewalk.



Figure 13 Sign and planter at Fidelity Street entrance, edged with timbers and planted with seasonal flowers. (CVDA)



Figure 14 Timber retaining wall along sidewalk. (CVDA)

The cemetery offers few amenities for visitors. There are no benches or informational signage. In the center of the site, there is a cluster of site furnishings: there is one trash receptacle, which is the Town of Carrboro standard metal drum with a dome top on a swivel. There is one "rules" sign posting the section of the Town of Carrboro code Section 13-4f. Adjacent to the rules sign is a light pole and a small raised brick planter with a water spigot.









Figure 15 (Top left) The only existing trash receptacle is a standard drum with dome lid. (CVDA)

- Figure 16 (Top right) The sign posting cemetery regulations. (CVDA)
- Figure 17 (Bottom left) The raised brick planter, with yard hydrant. (CVDA)

Figure 18 (Bottom right) The light pole, with planter and sign visible. (CVDA)

e. Wayfinding and Information, Directional Signage, and Interpretation

Other than the entrance sign and the sign stating the cemetery regulations, there is no existing wayfinding or informative signage. As development of the cemetery proceeds additional wayfinding and signage will be required. A mobile application could be used to facilitate grave location. The inventory of burial sites should be continually updated in the Township's GIS mapping.

f. Drainage Systems

Currently there are two 12"x12" drain inlets along the internal drive that are connected and drain to the west

to the underground stormwater system at Davie Road.

A drainage issue exists along Fidelity Street where street tree roots have pushed up the grade near the trees and have caused an area of ponding. There is a drain through the curb near this area, and a small inlet could be installed to connect to that pipe to drain the area.

Soil erosion occurs on-site due to the activities of funeral homes. The unpaved access path to the spoils disposal area has eroded and muddy runoff drains across the internal cul-de-sac drive and into the adjacent burial area.

One other item to note is the four observation wells found on site. The purpose and history of these wells isn't fully determined, but it is



Figure 19 Interconnected drain inlets leading to the stormwater system at Davie Road. (CVDA)

believed that the wells were installed to monitor for possible chemical leachate from a former dry cleaning business at 127 Fidelity Street, and that the wells were decommissioned in the late 1990s. The Township Planning or Public Works divisions may have permitting paperwork relating to these wells.

As part of the master planning for the cemetery, the Town should assess the need for professional engineering services to address drainage issues.



Figure 20 On Fidelity Street, tree roots create a ponding issue that could be resolved by connecting an inlet to the existing drain pipe. (CVDA)



Figure 21 Loose soil in the spoils pile erodes in rain storms. This area was graded and cleaned up in November 2020. (CVDA)

g. Landscape

Vegetation

The existing landscaping is composed of Callery pear trees, red maples, crape myrtles and a few oak trees. Mature street trees line Fidelity Street and Davie Road and the north-south internal drive. The condition of many of the trees is poor, and they should be evaluated by an arborist to protect the safety of the public.

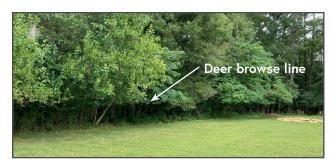


Figure 22 Heavy deer browse is evident in the woodland to the east in Zone 4. (CVDA)

The woodland areas to the east and south are composed of oak trees, southern yellow pine, a few hollies, and Callery pears that have seeded from existing on-site trees. Callery pears are a short-lived species and are considered invasive.

CVDA observes that the overall condition of the turf is marginal. The site is not currently irrigated.



Figure 23 Woodland is mostly open with no understory plants; excavated boulders from graves. (CVDA)



Figure 24 Existing mature pine trees near Fidelity Street in Zone 4. (CVDA)



Figure 25 Mature pear trees along interior drive along edge of Zone 4. (CVDA)



Figure 26 Contractor damage to the turf in Zone 4 and resulting erosion. (CVDA)

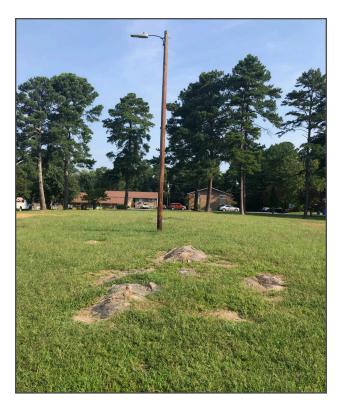


Figure 27 Bedrock is visible through the soil at the high point of the site. (TWT)



Figure 28 Tires and household trash in the woodlands in the south of the site. (CVDA)

Soils and Landforms

The site is located on a gentle hill, with the high point near the current location of the light post in the center of the site, in Zone 4. The land slopes downward moderately to the south, with low points in the southeast and southwest corners.

There are granite outcrops visible in the lawn in Zone 4, where the depth to bedrock is very shallow. Test pits excavated by Terracon encountered bedrock refusal at depths less than 6 feet in five locations. Excavated boulders have also been moved into the wooded areas around the edge of the property.

See Appendix 2: Geotechnical Engineering Report by Terracon Consultants, Inc., on page 43 for a detailed investigation of the physical properties of the site.

Burial Spoils Area

The funeral homes that dig the graves have been driving across the turf and piling spoils on site for years. The turf and cemetery sections have been damaged by this activity. Town Code Article V Section 13-21(e) states all excess dirt is to be hauled away and the turf leveled, other than in natural burial areas. The Department of Public Works is working to address this issue.

Dumping

Along the southern property line, there is evidence of dumping, which is prohibited according to Town Code Article II Section 13-5(1). Brush cuttings, lawn waste, and trash cover the ground in the woodland behind the residential properties.

Utilities

The Cemetery is serviced by an overhead electric line for the light pole in Section 4. There are no additional lights.

Currently there is one yard hydrant providing water in the cemetery, at the brick planter in the center of the site. This spigot will need to be relocated and upgraded when the cemetery is expanded.

Plan Options and Opportunities

a. Introduction

Through this process, the Township would like to explore the phased expansion and improvement of the Westwood Cemetery. Currently the burial options at the Cemetery are limited. It is the intent of the master plan to provide a range of burial options. Options would include: in-ground cremains, columbaria, an ossuary with memorial wall, a scattering garden, natural burial plots, and expansion of conventional burial plots. The proposed master plan would also expand public engagement and respectful recreation at the cemetery.

b. Land Use and Master Plan

The existing cemetery is under-utilized. To expand access and utility, it is recommended that a new loop roadway be installed. The new road would form a large "P" loop and eliminate the existing cul-de-sac. The center of the loop road would become a multi-functional area that could include columbaria, memorial



Figure 29 Concept Plan showing proposed land uses and site layout. (CVDA)

wall, in-ground cremains plots, scattering garden, and a ceremony space with benches and flagpoles. The space would be serviced with a yard hydrant and electrical. The ceremony space would be ADA-accessible and provide for cortege parking and wayfinding signage. This new space could also become the site for memorial services and functions on national holidays. A new sign system should be designed to identify the site as well as the burial sections.

c. New Facilities and Features

BURIAL OPTIONS

The space for conventional burial plots is diminishing and existing site features impact the number of available and potential plots. Issues such as depth to bedrock, site layout, and existing site conditions all impact the total number of potential plots. Therefore it is recommended that the Cemetery expand the types of burials permitted to include in-ground cremains, columbaria, a scattering garden with memorial wall, an ossuary, and natural burials in the undisturbed forested portions of the site.



Figure 30 An example of 4' by 4' burial plots for cremated remains. (CVDA)

In-Ground Cremains

Cremation urns are currently allowed to be interred in Westwood Cemetery under Town code, with four cremation urns allowed in one 4' by 12' burial space, with one monument per burial space. Individual in-ground cremation burial spaces require a small plot size (4' by 4') and the depth of the grave is much shallower, at 24 inches. The Town could choose to dedicate an area of shallow depth to bedrock to this type of burial. In Figure 29: Concept Plan on page 17, the areas labeled 'B' near the center of the site are proposed for 1,038 in-ground cremation burial spaces.

Natural Burial

Natural or "green" burial is a method of interment which allows for the natural decomposition of bodies. It does not include embalming bodies, does not require grave liners or vaults, and encourages the use of biodegradable burial containers or wrappings. Conservation of natural resources and habitats, reduction of carbon emissions, lower cost, and protection of worker health are often factors in choosing natural burial. According to the National Funeral Directors Association, nearly 54 percent of Americans are considering a green burial, and 72 percent of cemeteries are reporting increased demand. In October 2018, the Town Council approved natural burials in the Old Carrboro Cemetery and directed staff to prepare a plan to convert some of the un-plotted land in Westwood Cemetery to natural burials.

The carbon footprint of conventional burial is heaviest in the production and materials of the coffin, the concrete vault, and the transportation of materials and people to the cemetery. Natural burials avoid coffins and vaults, and the grave itself is smaller and shallower to dig.

By code, all burial spaces are currently required to be 4' by 12' but nationally green burial spaces can be as small as 3' by 8'. While conventional burial graves must be opened to a minimum depth of 5 feet under Town code, the required depth of the grave in a natural burial is 3.5 feet. Soil may be mounded on a natural grave, with the expectation that it will settle as natural decomposition occurs. Natural burials can be performed in wooded settings, as the there is less disturbance of soil than in a conventional burial. The required grave

Trinity Natural Burial

marker must be of stone and/or bronze and set on a footing of concrete.

In Figure 29: Concept Plan on page 17, the woodland areas labeled 'F' to the south of the site are proposed for 306 natural burial spaces, with asphalt and mulch paths to provide access. The Concept Plan allows for 4' by 12' burial spaces.



no casket or vault, and with the soil left visible during the funeral. (Green Burial Council)



Figure 31 A natural burial site in the woods, accessed by a mulch path. (CVDA)

Figure 33 The natural burial area in Old Carrboro Cemetery, with mounds of soil visible over newer graves. Burial spaces are 4' x 12' but can be 3' x 8'. (CVDA)

Figure 32 An example of a natural burial, with

Scattering Garden

Cremated ashes may be scattered over a landscaped areas with perennial ground cover and lightly raked in. A plaque on a memorial wall or another type of marker displays the names of the deceased. Benches are often provided, and landscaping is well maintained. In Figure 29: Concept Plan on page 17, the landscaped area labeled 'E' in the center of the site is proposed for a scattering garden.



Figure 34 An example of a memorial marker in a cremation or scattering garden. (Dignity Memorial)

Ossuary and Memorial Wall

An ossuary is an underground chamber or vault for holding the cremated ashes of the deceased. A raised top with a removable section allows the ashes to be poured into the structure. The names of the deceased are memorialized on a plaque on a memorial wall. Benches are included in the design of the ossuary space. In Figure 29: Concept Plan on page 17, the central area labeled 'D' is proposed for a memorial wall and an ossuary. A flag pole and benches could be installed in this area to create a central gathering space for civic events, such as Veterans Day or Memorial Day.



Figure 35 A stone wall provides a backdrop for the ossuary. An open gathering place with flags and memorials is created. (CVDA)

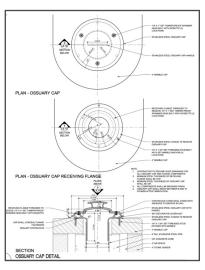


Figure 36 Construction details for an ossuary. (CVDA)

Columbaria

A columbarium is an aboveground vault that holds cremation urns. Usually formed of pre-cast concrete, the structure contains individual niches that can hold up to two or three urns. On the face of the structure, granite covers with plaques label each niche. The top, sides and back can be covered in granite. The structure can be single- or double-sided. In Figure 29: Concept Plan on page 17, the area labeled 'C' in the center of the site is proposed for six columbaria structures, accommodating 300 burial niches in Phase One, and 2400 niches at full build-out.



Figure 37 Columbaria under construction, with pre-cast concrete niches visible. (CVDA)



Figure 38 An 80-niche columbarium, faced in granite, with bronze markers on niches. The granite niche covers are predrilled to accept bronze plaques. (CVDA)



Figure 39 Another style of columbarium. (CVDA)

SITE FURNITURE

Additional monuments and commemorative features can be included to memorialize the dead and to allow contemplative space for visitors. Benches allow mourners to linger and create a welcoming environment.



Figure 40 Brick paving on a pedestrian path and a landscaped seating area. (CVDA)



Figure 41 Teak benches, with post lights and wall-mounted path lights. (CVDA)



Figure 42 Granite section marker. (CVDA)



Figure 43 Wayfinding signage. (CVDA)

New signage identifying sections of the cemetery assists visitors in finding graves. Interpretive or informational signage can provide the history of the site.

In the central area of the concept site plan, a gathering area with a flag pole, benches, and paving are proposed.

d. Planting Plan

CVDA suggests hiring a certified arborist to evaluate the health of the existing mature trees, and pruning or removing trees for public safety. Native tree species and crape myrtles to blend with existing trees will be chosen to replace removed or missing trees along the street and internal drives. Evergreens such as American Holly will create screening and year-round interest. A selection of flowering trees, including magnolias and crape myrtles, provide successive seasons of color. A detailed planting plan will be developed as part of the site planning process.

e. Irrigation Plan

Currently the Cemetery is not irrigated. It is questionable whether money is well spent to completely renovate the turf area and then install an irrigation system. The existing lawn hydrant should be relocated and upgraded as part of the site design, to provide a source of water for landscaped areas.

f. Financial Analysis

Westwood Cemetery is currently plotted to accommodate a total of 2,231 burial spaces, of which 328 are still available. Expanding the cemetery with new burial options in addition to new conventional burial plots will increase the capacity of the cemetery to serve the community into the future, as well as improve revenues for the cemetery. Based on geotechnical analysis of the site and an inventory of its existing features, CVDA has proposed a grid plan that provides for an additional 5,200 burials.

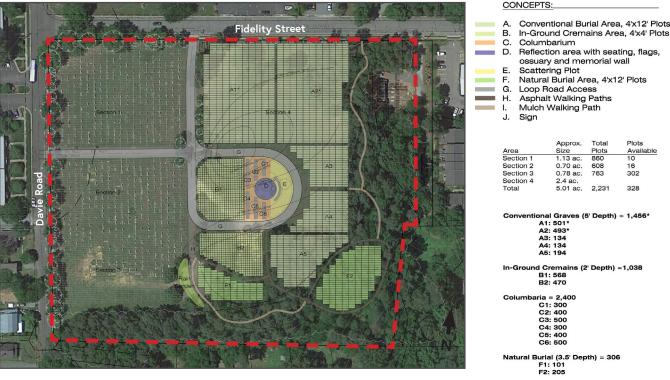


Figure 44 Concept Plan showing proposed grid and burial spaces. (CVDA)

TOTAL:

5.200

The Consultant Team proposes to divide the project into two phases: Phase One and a complete build-out of the Master Plan. Phase One would include site work, including grading and earthwork, installation of the asphalt drive, a 5'-wide concrete sidewalk, asphalt path, and masonry memorial wall. (See Figure 46: Preliminary Partial Estimate of Probable Cost for TWT's estimate.) Phase One would also include construction of two double-sided columbaria structures, site furnishings, and a new entrance sign at Fidelity Street. The complete build-out of the Master Plan would follow, with more extensive site development and landscaping, as well as the construction of the remainder of the columbaria structures. (See Figure 45: Phased Cost Estimate for the total construction cost estimate.)

The Master Plan proposes areas for conventional burials and new burial options, with the yield of burial spaces for each type of burial option and the associated proposed sales price is outlined in Figure 47: Estimated Revenue Generation. Phase One as proposed could generate revenues of \$3,548,400, while construction costs are estimated at \$375,193. At full build-out of the Master Plan, revenue would be \$7,738,400, with total construction costs of \$1,696,991.

Revenue from plot sales from the previous fiscal years (July to June) are as follows:

FY 2021 - YTD [9/28/2020] - \$15,000

FY 2020 - \$85,500

FY 2019 - \$34,750

FY 2018 - \$49,600

This estimate does not include ongoing maintenance of the site. Currently the Town spends \$800 every two weeks on lawn mowing and trimming. Additional costs for landscape maintenance and lighting may be expected.

Westwood Cemetery Expansion - Phased Cost Estimate

CVDA / TWT December 2020

Master Plan												
	qty	unit		unit price		total	qty	unit	u	unit price		total
Columbarium niches	2400	each	\$	425.00	\$	1,020,000.00	300	each	\$	425.00	\$	127,500.00
Benches	8	each	\$	1,400.00	\$	11,200.00	2	each	\$	1,400.00	\$	2,800.00
Signs	5	each	\$	300.00	\$	1,500.00	3	each	\$	300.00	\$	900.00
Ossuary	1	lump sum	\$	12,000.00	\$	12,000.00						
Flagpoles	3	lump sum	\$	23,000.00	\$	69,000.00						
Landscaping	1	lump sum	\$	25,000.00	\$	25,000.00						
Scatter garden curbing	280	linear feet	\$	80.00	\$	22,400.00						
Utility work - Water	1	lump sum	\$	3,000.00	\$	3,000.00						
Utility work - Electrical	1	lump sum	\$	12,000.00	\$	12,000.00						
Entrance sign - Fidelity St.	1	lump sum	\$	5,000.00	\$	5,000.00	1	lump sum	\$	5,000.00	\$	5,000.00
Subtotal					\$	1,181,100.00					\$	136,200.00
Contingency @ 15%				15%	\$	177,165.00				15%	\$	20,430.00
Construction Subtotal					\$	1,358,265.00					\$	156,630.00
Design fees @ 10%				10%	\$	135,826.50				10%	\$	15,663.00
Total					\$	1,494,091.50					\$	172,293.00
* Projected Costs - TWT					\$	202,900.00					\$	202,900.00
Total Costs - Phase One											\$	375,193.00
Total Costs - Build-out				·	\$	1,696,991.50				•		

^{*} See TWT Preliminary Partial Estimate of Probable Cost

Figure 45 Estimated costs to expand Westwood Cemetery, with Phase One broken out, including TWT's initial site work construction estimate. (CVDA/TWT)

PRELIMINARY PARTIAL ESTIMATE OF PROBABLE COST¹

Westwood Cemetery - Cemetery Expansion

Town of Carrboro Orange County, NC

Taylor Wiseman & Taylor

11/4/2020

			TOTAL		UNIT		EXTENDED
	DESCRIPTION	UNITS	QUANTITY		COST		COST
1 [Demolition ²	LS	1		by Owner		-
2 1	Memorial Wall (Masonry w/ Brick Face)	SF	280	\$	32.00	\$	8,960.00
3 5	5' Concrete Sidewalk	SF	8,250	\$	6.75	\$	55,687.50
4	Asphalt Drive, 20-ft wide, ditch & shoulder Section ³	SY	1,222	\$	28.00	\$	34,222.22
5	Asphalt Path, 8-ft wide ⁴	SY	178	\$	13.50	\$	2,400.00
6	Earthwork Rough Grading ⁵	CY	5,556	\$	1.85	\$	10,277.78
7 E	Earthwork Fine Grading	CY	2,222	\$	2.80	\$	6,222.22
8 l	Undercut Unstable Soil	CY	75	\$	50.00	\$	3,750.00
9 F	Rock Excavation - Removal by Mechanical Means	CY	100	\$	175.00	\$	17,500.00
10 9	Sedimentation & Erosion Control	LS	1	\$	7,500.00	\$	7,500.00
11 9	Seeding & Mulching	AC	1.38	\$	2,000.00	\$	2,754.82
	·	uction Cost	Ġ	1/19 300 00			

Estimated Construction Cost	\$ 149,300.00
Contingency @ 15%	\$ 22,400.00
Engineering Design Fees	\$ 18,700.00
Utility Relocation Allowance2	-
Permitting Fees	\$ 1,500.00
Geotechnical Soils Eval. & CMT	\$ 11,000.00
ESTIMATED TOTAL PROJECT COST1	\$ 202,900.00

NOTES:

Figure 46 Estimated initial construction costs for Phase One site work. (TWT)

Westwood Cemetery Expansion - Estimated Revenue Generation

CVDA December 2020

Master Plan Phase One

	Est	. Sale Cost	Total Yield	Revenue / Build-out		Est. Sale Cost		Phase 1 Yield	Rev	venue / Phase 1
In-Ground Grave	\$	1,200.00	1,456	\$	1,747,200.00	\$	1,200.00	1,456	\$	1,747,200.00
In-Ground Cremain	\$	800.00	1,038	\$	830,400.00	\$	800.00	1,038	\$	830,400.00
Columbarium Niche	\$	1,400.00	2,400	\$	3,360,000.00	\$	1,400.00	300	\$	420,000.00
Natural Burial	\$	1,800.00	306	\$	550,800.00	\$	1,800.00	306	\$	550,800.00
Ossuary	\$	500.00	2,000	\$	1,000,000.00					
Scattering Garden	\$	500.00	500	\$	250,000.00					
Total				\$	7,738,400.00				\$	3,548,400.00
Estimated Construction Cost Phase One						·		\$	375,193.00	

Figure 47 Estimated revenue generation from expansion of Westwood Cemetery, including estimates of burial site numbers and sales costs.(CVDA)

¹ PRELIMINARY PARTIAL COST ESTIMATE. Costs are estimated for project bid in 2021, no adjustment for escalation between Fiscal Years is included. Additional Line items and Unit Prices to be provided by Landcape Architect.

² Demolition will be performed by the Town. No Allowance included for utility relocation; some electrical work may be needed for lighting circuit continuity with removed light pole.

³ Asphalt Roadway Section includes compacted subgrade, Compacted 8" Base, 3" Binder Course, and 2" Overlay with ditch and shoulder section.

 $^{^{\}rm 4}$ Asphalt Path Section includes compacted subgrade, 2" Binder Course, 1" Overlay.

⁵ Assumes 2.5-ft average depth of earthwork across 60,000 SF for volume estimate.

Definition of Terms

Burial Space A parcel of ground within a cemetery, which can be allocated for the interment of one or more human bodies or cremation urns. Carrboro Code currently defines a space as "having the dimensions of 4 feet by 12 feet, and the usage of each burial space shall be limited to one of the following: (1) the interment of one human body; (2) the interment of one human body and one cremation urn; or (3) the interment of no more than four cremation urns."

Columbarium An above-ground structure or vault with niches that hold cremation urns.

Conventional Burial A method of interment in which an embalmed body is placed in a casket, and the casketed body is buried in a grave into which a burial vault has previously been placed, or entombed in an above-ground mausoleum.

Cremains The ashes that remain after the cremation of a body.

Marker An identifying plaque installed at ground level at a grave site, or installed on a memorial wall or stone at an columbarium, ossuary, or scattering garden.

Mausoleum A structure substantially exposed above ground used for the entombment of human bodies.

Monument A memorial stone or other structure installed at a grave site.

Natural Burial Also known as "Green burial." A method of interment which allows for the natural decomposition of bodies. It does not include embalming bodies, does not require grave liners or vaults, and encourages the use of biodegradable burial containers or wrappings. Conservation of natural resources and habitats, reduction of carbon emissions, lower cost, and protection of worker health are often factors in choosing natural burial.

Ossuary A receptacle or vault for holding the ashes or bones of the dead, often of more than one person.

Scattering Garden A landscaped space where cremated ashes may be scattered.

Appendices

Appendix 1. Carrboro Town Code Chapter 13 Cemeteries

Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.

Appendix 3. Site Analysis Plans and Concept Master Plans

Appendix 1. Carrboro Town Code Chapter 13 Cemeteries

Appendix 1. Carrboro Town Code Chapter 13 Cemeteries

CHAPTER 13

CEMETERIES

Artic]	le I -	De	fini	tions;	App	licati	on
--------	--------	----	------	--------	-----	--------	----

Section 13-1 Definitions

Section 13-2 Application of Provisions

Article II - General Regulations

Section 13-3 Burial Only in Cemeteries

Section 13-4 Disruptive Activity Prohibited

Section 13-5 Desecration of Public and Private Cemeteries

Section 13-6 Removing or Defacing Monuments and Tombstones

Section 13-7 Hours of Operation

Section 13-8 Trees, Plantings, Landscaping

Sections 13-9 through 13-10 Reserved

Article III - Designation and Sale of Cemetery Lots and Spaces

Section 13-11 Cemetery Map Required

Section 13-12 Purchase of Burial Rights

Section 13-13 Rights of Owner of Certificate of Burial Right

Section 13-14 Speculation in Burial Rights Prohibited

Sections 13-15 through 13-16 Reserved

Article IV - Mausoleums, Monuments, Markers and Coping/Curbs or Fencing

Section 13-17 Mausoleums

Section 13-18 Monuments

Section 13-19 Markers

Section 13-20 Reserved

Section 13-20.1 Installation, Repair or Removal of Monuments

Article V - Burials

Section 13-21 Interment or Disinterment

Section 13-22 Records of Persons Buried Required

Section 13-23 Minimum Depth of Graves

Section 13-24 Grave Liner or Vault Required

Section 13-25 Reserved

Article VI - Penalties and Remedies

Section 13-26 Penalties and Remedies

Article I

DEFINITIONS; APPLICATION

Section 13-1 Definitions

Unless the context otherwise indicates, the following words shall have the meaning indicated when used in this chapter.

- (1) <u>Administrator</u>: The person designated by the manager to perform the functions and exercise the responsibilities assigned by this chapter to the administrator.
- (2) <u>Burial Space</u>: A parcel of ground within a cemetery lot having the dimensions of 4 feet by 12 feet, and the usage of each burial space shall be limited to one of the following: (1) the interment of one human body; (2) the interment of one human body and one cremation urn; or (3) the interment of no more than four cremation urns. (Amend. 5/9/89, 1/21/92)
- (3) <u>Lot</u>: A plot of ground within the town cemeteries consisting of not more than three (3) burial spaces, as shown on the official cemetery map. (Amend. 5/9/89)
- (4) <u>Marker</u>: A plaque installed at ground level at the site of a grave to indicate the name, date of birth, and date of death of the person buried there.
- (5) <u>Mausoleum</u>: A structure or building substantially exposed above ground intended to be used for the entombment of remains of a deceased person.
- (6) <u>Monument</u>: A memorial stone or other structure erected at a gravesite in remembrance of the dead.
- (7) <u>Natural Burial</u>: A method of internment with minimal environmental impact and which aids in the conservation of natural resources, reduction of carbon emissions, protection of worker health, and the restoration and preservation of natural habitats. This method of internment does not include embalming of bodies, does not require grave liners or vaults, encourages the use of biodegradable burial containers, and is intended to the natural decomposition of bodies. Graves used for Natural Burials shall be maintained such that the grave's appearance shall be kept as consistent as practical with the surrounding graves. This burial method may also be referred to as "Green Burial" (Created 10/16/18)

Section 13-2. Application of Provisions

The following sections apply to all cemeteries within the town: Sections 13-3, 13-4, 13-5 and 13-6. The remaining sections of this chapter apply only to cemeteries owned or operated by the town.

Article II

GENERAL REGULATIONS

Section 13-3 Burial Only in Cemeteries

No person may bury or cause to be buried the body of any deceased person within the town limits in any place other than a church cemetery or a cemetery operated by a governmental entity or a private cemetery licensed or specifically exempted from licensing according to the North Carolina Cemetery Act (Article 9 of G.S. Chapter 65).

Section 13-4 Disruptive Activity Prohibited

- (a) No person may drive any motor vehicle of any kind in any cemetery except upon the main roads and avenues provided therein for vehicular traffic.
- (b) No person may drive any motor vehicle or park any motor vehicle in any cemetery unless in attendance at burial services or otherwise engaged in activities consistent with the use of a cemetery as a cemetery.
- (c) No person may take any dog, horse, or other animal into any cemetery or allow any animal to run at large therein. This provision shall not apply to seeing eye dogs when accompanied by a blind person. (Amend. 5/9/89)
- (d) No person may intentionally disrupt any funeral service or disturb the quiet and good order of any cemetery by extremely loud or boisterous conduct. Except in the case of military funerals and veterans or military commemorative exercises, no person may carry or discharge firearms in any cemetery.
- (e) No person may post or attach any bills, posters, placards, pictures or other form of political or commercial advertising within any cemetery or on the inside or outside of any wall or fence enclosing any cemetery.
- (f) No person may engage in recreational activities in any cemetery. For purposes of this subsection, recreational activities shall include, but not be limited to the throwing of balls or frisbees, playing games or engaging in sports activities, running or jogging, picnicking, walking dogs, cats or other animals, allowing dogs, cats, or other animals to run at large, and other similar activities inconsistent with the use of a cemetery as a cemetery. (Amend. 8/11/92)

Section 13-5 Desecration of Public and Private Cemeteries

As provided in G.S. 14-150.1, if any person shall willfully commit any of the acts set forth in the following subdivisions, he shall be guilty of a misdemeanor and shall be fined not more than one-hundred dollars (\$100.00) or imprisoned for not more than thirty days, or both, in the discretion of the court.

- (1) Throwing, placing, or putting any refuse, garbage, trash, or articles of similar nature in or on a public or private cemetery where human bodies are interred.
- (2) Destroying, removing, breaking, damaging, overturning, or polluting any flower, plant, shrub, or ornament located in any public or private cemetery where human bodies are interred without the express consent of the person in charge of said cemetery.

Provided nothing contained in this section shall preclude operators of such cemeteries from exercising all the powers reserved to them in their respective rules and regulations relating to the care of such cemeteries.

Section 13-6 Removing or Defacing Monuments and Tombstones

As provided in G.S. 14-140, if any person shall, unlawfully and on purpose, remove from its place any monument of marble, stone, brass, wood, or other material, erected for the purpose of designating the spot where any dead body is interred, or for the purpose of preserving and perpetuating the memory, name, fame, birth, age or death of any person, whether situated in or out of the common burying ground, or shall unlawfully and on purpose break or deface such monument, or alter the letters, marks or inscription thereof, he shall be guilty of a misdemeanor. Provided that nothing contained in this section shall preclude operators of public or private cemeteries from exercising all the powers reserved to them in their respective rules and regulations relating to the use and care of such cemeteries.

Section 13-7 Hours of Operation

- (a) The town cemetery shall remain open to the public throughout the year from sunrise until sunset.
- (b) No person may enter the town cemetery at any time other than the hours of operation established by subsection (a).

Section 13-8 Trees, Plantings, Landscaping

- (a) No person may plant, prune, or remove any tree, shrub, flower, grass or other plant of any kind except with the consent of and in accordance with the directions of the cemetery administrator.
- (b) The cemetery administrator may enter any lot and remove or trim any tree, shrub, or other plant that encroaches upon any other lot or any walkway, or driveway, or other part of the cemetery.
- (c) The cemetery administrator may remove from the cemetery all floral designs, flowers, weeds, or plants of any kind from the cemetery as soon as they deteriorate or otherwise become unsightly.
- (d) Artificial flowers used in floral decorations may be used in the cemetery but a limit of two months is established as a reasonable period for use of such decorations. After two months such arrangements will be removed and disposed of by the cemetery administrator.

Sections 13-9 through 13-10 Reserved

Article III

DESIGNATION AND SALE OF CEMETERY LOTS AND SPACES

Section 13-11 Cemetery Map Required

- (a) There shall be maintained in the town clerk's office an official cemetery map which shall depict, as accurately as possible, the boundaries of the town cemetery and the location and dimension of all lots and spaces within the cemetery. Natural Burial spaces shall be clearly marked on the cemetery map and the cemetery map shall be amended from time to time in order to ensure that adequate spacing is maintained between Natural Burial lots or spaces. (Amended 10/16/18)
 - (b) Burial rights in all lots and spaces shall be sold in reference to the official cemetery map.
- (c) There shall be maintained by the cemetery administrator an alphabetical list of purchasers of Certificates of Burial Rights and a numerical list of lots sold. (Amend. 5/9/89)

Section 13-12 Purchase of Burial Rights

- (a) The town shall sell burial rights in cemetery lots and spaces in accordance with the provisions of this chapter and the schedule of fees set forth in the Miscellaneous Fees and Charges Schedule maintained in the office of the town clerk.
- (b) Differential fees shall be charged according to whether the person intended to be buried in the space with respect to which a burial right is purchased is a bona fide resident of or owner of real property within the Town of Carrboro at the time such right is purchased. (Amend. 5/22/84, effective 6/1/84)
- (c) (c) A Certificate of Burial Right shall be issued to the person who purchases a burial right. The certificate shall identify the purchaser, the specific lots or spaces to which the certificate applies, the names of the individuals intended to be buried in the spaces purchased, and whether the lots or spaces shall be used for traditional or natural burials. If spaces are intended to be reserved for unborn children or grandchildren of the purchaser, that fact shall be noted on the certificate and such offspring shall be deemed to have the same residency as their parents. If the cremated remains of more than one person are to be located on a single space, the names of all persons whose remains are intended to be located on the space shall be indicated on the certificate. (Amend. 12/11/84, 10/16/18)

(d) The usage of each burial space shall be limited to one of the following: (1) the interment of one human body; (2) the interment of one human body and one cremation urn; or (3) the interment of no more than four cremation urns. (Amend. 5/9/89, 1/21/92)

Section 13-13 Rights of Owner of Certificate of Burial Right

- (a) The Certificate of Burial Right transfers no property right to the certificate owner. The Certificate of Burial Right entitles the owner thereof (i.e., the purchaser) to use the designated spaces as a place of burial for the persons named on the certificate, subject to the terms and conditions of this ordinance and subject to the town's authority to operate, regulate, control, and abandon cemeteries. (Amend. 5/9/89)
- (b) If the owner of a Certificate of Burial Right desires to change the designation of persons entitled to be buried in the spaces covered by the certificate, he or she may do so by surrendering the old certificate and obtaining a new certificate. Fees will be charged at the then current rate for the spaces being changed, but credit will be given for previous payments with respect to those spaces. In addition, the town will refund, without interest, any sums paid for spaces that the owner of a Certificate of Burial Right no longer wishes to reserve, upon surrender of the Certificate of Burial Right covering those spaces.
- (c) Upon the death of the owner of a Certificate of Burial Right, all rights evidenced by such certificate shall pass to the owner's heirs, legatees, or devisees in the same manner as other interests in personal property.

Section 13-14 Speculation in Burial Rights Prohibited

- (a) No person may purchase or otherwise acquire any burial right for the purpose of sale or exchange.
 - (b) No person may sell or exchange any burial right for a profit or gain.

Sections 13-15 through 13-16 Reserved

Article IV

MAUSOLEUMS, MONUMENTS, MARKERS, AND COPING/CURBS OR FENCING

Section 13-17 Mausoleums

No mausoleum, tomb, building, or other structure of any kind shall be erected on any lot within the town's cemeteries, except on lots which may be designated on the plat and plan of the town's cemeteries by the Board of Aldermen as lots to be used exclusively for mausoleums and tombs. (Amend. 5/9/89)

Section 13-18 Monuments (Amend. 5/9/89)

- (a) All monuments shall be bronze and/or stone.
- (b) All monuments shall be placed on a concrete apron which shall extend four (4) inches from each side of the base of the monument and which shall be flush with the ground in order to facilitate monument protection, stability and maintenance.
 - (c) No monument may exceed four (4) feet in height.
 - (d) The length for single burial space monuments shall not exceed twenty-eight (28) inches.
- (e) A double space monument shall be permitted on two (2) adjacent burial spaces, located side by side. The length for double space monuments shall not exceed seventy-six (76) inches. A double space monument shall be centered on the line between two (2) burial spaces.
- (f) A triple space monument shall be permitted on three (3) adjacent burial spaces, located side by side. The length for the triple space monument shall not exceed one hundred-twenty (120) inches. A triple space monument shall be centered on the second (middle) burial space.
 - (g) The width of monuments shall not exceed sixteen (16) inches.
- (h) All monuments shall be placed at the head of the burial space(s) and positioned perpendicular to the burial space(s).
- (i) The foregoing provisions of this section shall not apply to monuments placed prior to the effective date of this section.

Section 13-19 Markers

- (a) All markers shall be of bronze and/or stone. (Amend. 5/9/89)
- (b) A head marker used in place of a monument shall be placed on a concrete apron which shall extend four (4) inches from each side of the base of the head marker and which shall be laid flush with the ground in order to facilitate head marker protection, stability, and maintenance. (Amend. 5/9/89)
- (c) A head marker used in place of a monument shall be laid flush with the ground, shall not exceed two (2) feet in length and one foot in width and shall be placed at the head of the grave, perpendicular to the burial space(s). Only one head marker shall be permitted on each burial space. (Amend. 5/9/89, 1/21/92)
- (d) A foot marker shall be laid flush with the ground, shall not exceed two (2) feet in length and one (1) foot in width and shall be placed at the foot of the grave, perpendicular to the burial space. Only one foot marker shall be permitted on each burial space. (Amend. 5/9/89, 1/21/92)

(e) The foregoing provisions of this section shall not apply to markers placed prior to the effective date of this section. (Amend. 5/9/89)

Section 13-20 Reserved

Section 13-20.1 Installation, Repair or Removal of Monuments (Amend. 5/9/89)

- (a) A monument or marker shall be placed at the burial site within one (1) year of the funeral.
- (b) Should any monument or marker in the town's cemeteries at any time become unsafe, unsightly, or in need of repair or resetting, the cemetery administrator shall notify the owner of the relevant Certificate of Burial Rights of such condition and shall request such person to make any needed repairs under the administrator's supervision.
- (c) Nothing in this section shall obligate the town to place, replace, or repair any monument or marker in the town's cemeteries.

Section 13-20.2 Monuments and Markers on Natural Burial Sites (Created 10/16/18)

Notwithstanding the foregoing provisions of Article IV, Monuments and Markers installed at graves used as Natural Burial sites shall be placed such that they will not be affected by natural sinking of topsoil resulting from the decomposition of the bodies.

Article V

BURIALS

Section 13-21 Interment or Disinterment (Amend. 5/9/89)

- (a) No person shall be interred or disinterred in the town's cemeteries without lawful authority and a written permit issued by the cemetery administrator.
- (b) Application for the permit authorized by this section shall be made at least ten (10) hours prior to the opening of the grave. This application shall be submitted in writing and shall designate the person to be buried.
- (c) No permit shall be issued when the person to be buried is not designated as the person to be buried in the relevant burial space on the current Certificate of Burial Rights maintained by the cemetery administrator. The permit required by this section shall be issued if the application contains the information specified in this section and if all fees and charges authorized by this chapter have been paid.
- (d) No person shall open any grave in a town cemetery other than a licensed funeral director or those employed by such funeral director under the supervision of the cemetery administrator.

(e) Following the digging of a grave, the dirt shall be hidden from public view until after the funeral. Following the funeral, the dirt is to be replaced and sufficiently packed. All excess dirt is to be hauled away and the turf leveled.

Section 13-22 Records of Persons Buried Required

- (a) The cemetery administrator shall keep complete and accurate records of the name, age, sex, date of death, and date of burial of every person buried in the town cemetery, as well as the particular space where such person is buried.
- (b) The funeral director shall provide the cemetery administrator with a Death Information Certificate within ten (10) days of any burial. (Amend. 5/9/89)

Section 13-23 Minimum Depth of Graves

- (a) All graves must be opened to a depth of at least five (5) feet to the bottom thereof. Notwithstanding the foregoing, graves intended for use for a Natural Burial shall be opened to a depth of three and a half (3.5) feet to the bottom thereof. (Amend. 5/9/89, 10/16/18)
- (b) All graves shall be level with the surrounding areas and no mounds shall be allowed. Notwithstanding the foregoing, graves intended for use for a Natural Burial may be covered with a mound and are not subject to the requirement that all graves shall be level with the surrounding areas, except to the extent that the grave's appearance shall be kept as consistent as practical with the surrounding graves. (Amend. 10/16/18)
- (c) No grave in town cemeteries shall be dug nearer than twelve (12) inches to any property line. (Amend. 5/9/89)

Section 13-24 Grave Liner or Vault Required

Grave liners or vaults, composed of concrete or a substance of equivalent strength and durability, shall be required for all graves within the town cemetery. No person may bury or cause to be buried the body of any deceased person unless the casket is properly placed within a grave liner or vault. Notwithstanding the forgoing, the Natural Burials shall be permitted in the Old Carrboro Cemetery in conformance with this Chapter. (Amend. 12/11/84, 10/16/18)

Section 13-25 Reserved

Article VI

PENALTIES AND REMEDIES

Section 13-26 Penalties and Remedies

(a) A violation of any of the following provisions shall constitute a misdemeanor, punishable as provided in G.S. 14-4:

Sections 13-3, 13-4, 13-7, 13-8, 13-14, 13-17, 13-18, 12-19, 13-20, 13-21, 13-23, 13-24 (Amend, 12/11/84, 5/9/89)

- (b) Violations of any of the sections listed in subsection (a) shall also subject the offender to a civil penalty of twenty- five dollars (\$25.00). If a person fails to pay this penalty within ten (10) days after being cited for a violation, the town may seek to recover the penalty by filing a civil action in the nature of debt.
 - (c) The town may seek to enforce this chapter through any appropriate equitable action.
- (d) Each day that a violation continues after the offender has been notified of the violation shall constitute a separate offense.
- (e) The town may seek to enforce this chapter by using any one or any combination of the foregoing remedies.

Appendix 2. Geotechnical I	Engineering R	Report by Terra	acon Consulta	nts, Inc.



Proposed Westwood Cemetery Improvements Carrboro, Orange County, North Carolina

September 30, 2020 Terracon Project No. 70205044

Prepared for:

Carter Van Dyke Associates, Inc. Doylestown, Pennsylvania

Prepared by:

Terracon Consultants, Inc. Raleigh, North Carolina

Environmental Facilities Geotechnical Materials

September 30, 2020

Carter Van Dyke Associates, Inc. 40 Garden Alley Doylestown, Pennsylvania 18901



Attn: Mr. Peter R. Fernandez, President

> (215) 345-5053 x129 E: peter@cvda.com

Re: Geotechnical Engineering Report

Proposed Westwood Cemetery Improvements

401 Davie Road

Carrboro, Orange County, North Carolina

Terracon Project No. 70205044

Dear Mr. Fernandez:

We have completed Geotechnical Engineering services for the above referenced project. This study was conducted in general accordance with Terracon Proposal No. P70205044 dated July 14, 2020. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning site improvements for the cemetery.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely.

Terracon Consultants, Inc.

Senior Engineer

Andrew A. Nash, P.E. Geotechnical Manager Registered, NC 031022

Terracon Consultants, Inc. 2401 Brentwood Road Raleigh, North Carolina 27604 P [919] 873 2211 F [919] 873 9555 terracon.com North Carolina Registered F-0869

Environmental

Facilities

Geotechnical

Materials



REPORT TOPICS

EXECUTIVE SUMMARY	1
INTRODUCTION	
SITE CONDITIONS	
PROJECT DESCRIPTION	
GEOTECHNICAL CHARACTERIZATION	
GEOTECHNICAL OVERVIEW	
EARTHWORK	
SHALLOW FOUNDATIONS	
GENERAL COMMENTS	

Note: This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the legal logo will bring you back to this page. For more interactive features, please view your project online at client.terracon.com.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES
SITE MAP AND EXPLORATION PLANS
EXPLORATION RESULTS (Test Boring Logs, Laboratory Data, and GPR Results)
SUPPORTING INFORMATION (General Notes and Unified Soil Classification System)



EXECUTIVE SUMMARY

The following geotechnical considerations were identified:

- As observed at test pits TP-1, TP-3, and TP-11, a thin, discontinuous layer of existing silty/clayey sand fill is present at scattered locations across the site. Below existing fill (if present), native residual soils were found to consist of silty/clayey sand, which were observed to extend to depths of 3 feet to at least 8 feet below the existing ground surface.
- Test pit excavations encountered backhoe refusal, due to the presence of partially weathered rock (PWR) or intact bedrock, at eight of fifteen test pit locations. Surface contours indicating depth to backhoe refusal is shown on the Exploration Plan. Groundwater was not observed in test pit excavations. Further details regarding subsurface conditions are summarized in Geotechnical Characterization.
- Foundation support of possible small grade level structures, such as columbariums, or other small memorial structures, can be founded upon properly prepared subgrade consisting of soil (residual soils or structural fill), or properly prepared subgrade consisting of PWR/bedrock. The Shallow Foundations section addresses support of the small grade level structures on approved subgrade. Foundation subgrade for any structure should consist entirely of either type of subgrade, and not partially on soil subgrade and partially on PWR/bedrock subgrade. We recommend footing excavations to be inspected by Terracon for suitable preparation of bearing conditions.
- Support of foundations or new earthfill on or above existing fill materials is discussed in this report. However, even with the recommended construction procedures, there is an inherent risk to the owner that compressible fill or unsuitable material within or buried by the fill will not be discovered. This risk of unforeseen conditions cannot be eliminated without completely removing the existing fill, but can be reduced by following the recommendations contained in this report. To take advantage of the cost benefit of not removing the entire amount of undocumented fill, the owner must be willing to accept the risk associated with building over the undocumented fills following the recommended reworking of the material.
- Terracon should be retained during site earthwork to perform the necessary testing and observations during cut excavation, subgrade preparation, proof-rolling, placement and compaction of controlled fills, and backfilling of excavations to the planned subgrades.
- The General Comments section provides a description of report limitations.





Geotechnical Engineering Report

Proposed Westwood Cemetery Improvements 401 Davie Road

Carrboro, Orange County, North Carolina Terracon Project No. 70205044 September 30, 2020

INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for future site improvements of Westwood Cemetery located at 401 Davie Road in Carrboro, Orange County, North Carolina. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Foundation design and construction

The geotechnical engineering scope of services for this project included the excavation of fifteen test pits and geophysical exploration by ground penetrating radar (GPR).

Maps showing the site and exploration locations are shown in the Site Map and Exploration Plan sections, respectively. Results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring and test pit logs in the Exploration Results section of this report.







SITE CONDITIONS

The following description of site conditions is derived from our site visits in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description		
Location	401 Davie Road, Carrboro, North Carolina. The cemetery is an 8.7-acre parcel located at the southeast corner of the intersection of Davie Road and Fidelity Street.		
	35.911° latitude, -79.083° longitude		
Existing Improvements	The northwestern and west-central portions of the cemetery are actively used and are occupied with grave sites. The Zone 3 area (0.5 acre-southwestern portion) and the Zone 4 area (2.4 acre-eastern portion) are currently inactive.		
Current Ground Cover	Most of the ground surface is covered with grass turf. Some scattered mature trees are located around the cemetery perimeter. Granite outcrops are located within the central portion of the site.		
Existing Topography	The majority of the ground surface is relatively flat; however, perimeter areas slope moderately downward to the south and east.		

PROJECT DESCRIPTION

Project Information

Our current understanding of the project conditions is as follows:

Item	Description	
Project Description	Within Zones 3 and 4, we understand that the Town is considering layout of new interment sites, and possible construction of other memorial features. Shallow bedrock, however, may limit available usable space for new interment sites.	
Proposed Structures or Improvements	New structures may include columbariums (small precast concrete memorial structures with urn niches) or other similar, but small memorial structures. New site features may include green burial areas (burial areas in ungraded wooded areas) or small cremains grave areas. New paths or walkways may also be included in new site features.	
Finished Floor Elevation	Unknown	
Maximum loads	Unknown, but wall loads are assumed to be less than 2 klf.	
Maximum allowable movement	Total: 1-inch Differential: ½ inch over 50 feet	





Item	Description		
Grading	Proposed grading has not been provided but is expected to be minimal. Site grading is assumed to include cut and fill depths of less than 2 feet. Grave excavations are anticipated to be 6 feet.		

GEOTECHNICAL CHARACTERIZATION

Site Geology

The project site is located in the Piedmont Physiographic Province, an area underlain by igneous and metamorphic bedrock. Residual soils in this area are the product of in-place physical and chemical weathering of native bedrock. The typical residual soil profile consists of clayey soils near the surface where soil weathering is more advanced, underlain by clayey/silty sands that generally become denser with depth to the top of parent bedrock. According to the 1985 Geologic Map of North Carolina, bedrock at the site is described as foliated to massive granite. Granite outcrops are present in the central portion of project site.

Residual soils derived from in-place weathering of parental bedrock generally transition from soil to rock gradually over a vertical distance of a few feet to tens of feet. This transitional zone is termed "partially weathered rock (PWR)," which is defined for engineering purposes as residual bedrock material that can be drilled with soil drilling methods and exhibits standard penetration test values in excess of 100 blows per foot.

Subsurface Profile

We developed a general characterization of the subsurface soil and groundwater conditions based upon our review of the data and our understanding of the geologic setting and planned construction. The geotechnical characterization forms the basis of our geotechnical calculations and evaluation of site preparation, foundation options and pavement options. As noted in **General Comments**, the characterization is based upon widely spaced exploration points across the site, and variations are likely. The following table provides our geotechnical characterization.

Stratum	Approximate Depth to Bottom of Stratum	Material Description	Estimated Density
1	1.5 to 3.5 (Test Pits TP-1, TP-3, & TP-11)	Existing Fill: Silty Sand (SM) to Clayey Sand (SC)	loose to medium dense
2	3.0 to greater than 8.0	Silty Sand (SM) to Clayey Sand (SC)	medium dense to very dense (contains zones of PWR, cobbles & boulders)
3	Top of Unweathered Bedrock	Granite Bedrock	very hard





Conditions encountered at each test pit location are indicated on individual logs in the attached **Exploration Results**. Stratification boundaries on logs represent the approximate location of changes in native soil types; in situ, the transition between materials may be gradual.

Groundwater Conditions

Test pit excavations were observed during excavation for the presence and level of groundwater. Groundwater was not observed in test pits during the time interval that excavations were open.

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the test pits were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

GEOTECHNICAL OVERVIEW

As observed at test pits TP-1, TP-3, and TP-11, a thin, discontinuous layer of existing silty/clayey sand fill is present at scattered locations across the site. Below existing fill (if present), native residual soils were found to consist of silty/clayey sand. Native residual soils were observed to extend to depths of 3 feet to at least 8 feet below the existing ground surface.

Test pit excavations encountered backhoe refusal at eight of fifteen test pit locations. Backhoe refusal (test pit refusal) was likely encountered at or near the interface between very dense soil and least dense PWR. Contours indicating depth to backhoe refusal is shown on the Exploration Plan. Groundwater was not observed in test pit excavations. Further details regarding subsurface conditions are summarized in **Geotechnical Characterization**.

The site was also explored by Ground Penetrating Radar (GPR), which is an exploration method that provides a continuous, high resolution graphical cross-section depicting variations in the electrical properties of the shallow subsurface. GPR results appeared to be affected by the presence of cobbles and boulders within the upper portion of the soil profile. The interpreted bedrock surface estimated by GPR methods, therefore, tends to be higher than what was observed in test pits. GPR results do confirm the absence of shallow bedrock in the southwest corner of the project site. Results of the GPR exploration, as interpreted by the geophysicist, are presented in the **Exploration Results**. Results of test pit information should be relied to be more accurate, or representative, than GPR results.

Foundation subgrade for possible small grade level structures, such as columbariums, or other small memorial structures, can be founded upon properly prepared subgrade consisting of residual soils, or properly prepared subgrade consisting of PWR/bedrock. The **Shallow Foundations** section addresses support of the small grade level structures on approved subgrade



re should consist entirely

consisting of soil, or PWR/bedrock. Foundation subgrade for any structure should consist entirely of either type of subgrade, and not partially on soil subgrade and partially on PWR/bedrock subgrade. We recommend footing excavations to be inspected by Terracon for suitable preparation of bearing conditions.

Excavations for individual graves may encounter zones of PWR, granite boulders, or intact granitic bedrock. Excavation equipment larger than a Case 580N backhoe may be required to extend deeper into most PWR material, or excavate boulders. Rock excavation methods, such as hydraulic hammering, ripping, or drilling and blasting will be required to extend excavations into very dense PWR or intact granitic bedrock.

Placement of new structural fill, or preparation of foundation subgrade, should not be conducted on existing fill without proper exploration or evaluation by the geotechnical engineer, This risk of unforeseen conditions cannot be eliminated without completely removing existing fill, but can be reduced by following the recommendations contained in this report. To take advantage of the cost benefit of not removing the entire amount of undocumented fill, the owner must be willing to accept the risk associated with building over the undocumented fills following the recommended reworking of the material.

EARTHWORK

The following presents recommendations for development of specifications for site preparation, excavation, subgrade preparation and placement of engineered fills for the project. The recommendations presented for design and construction of earth-supported elements including shallow foundations are contingent upon following the recommendations outlined in this section.

Earthwork on the project should be observed and evaluated by Terracon personnel. The evaluation of earthwork should include observation of cut excavations and testing of engineered fill, and subgrade preparation.

Site Preparation

Prior to placing structural fill, existing vegetation, root mat, and other unwanted utilities, structures or materials should be removed. After site stripping, we recommend proof-rolling exposed soil in areas to receive fill or areas of earth cut. Proof-rolling should be performed with a minimum 10-ton truck. Proof-rolling operations should be observed by a representative of Terracon and should be performed after a suitable period of dry weather to avoid degrading an otherwise acceptable subgrade and to reduce the amount of remedial work required.

If the exposed soil surface exhibits excessive deflection, pumping, or rutting under the proofrolling operation, we recommend over-excavation of soft/unstable soil and replacement with suitable compacted structural fill or crushed stone. The extent to which over-excavation and

Responsive Resourceful Reliable

6





replacement will be required will likely be reduced if site preparation and earthwork are performed during warmer and drier periods of the year. Additional recommendations for site stabilization will depend on the location of the instability and should be provided by the Geotechnical Engineer based on observations at the time of construction.

Existing Fill

As noted in **Geotechnical Characterization**, test pits encountered existing fill up to a depth of 3.5 feet below existing grade at three of the fifteen test pit locations. Support of foundations or placement of new earth fill on or above existing fill soils is discussed in this report. However, even with the recommended construction procedures, there is an inherent risk for the owner that compressible fill or unsuitable material within or buried by the fill will not be discovered. This risk of unforeseen conditions cannot be eliminated without completely removing the existing fill, but can be reduced by recommendations contained in this report.

Excavation Conditions

We anticipate that most soil material can be excavated with conventional earth moving equipment. Large excavation equipment, or bedrock excavation methods, may be required for excavations to extend into moderately dense PWR, or intact bedrock. All temporary excavations that may be required during construction should comply with applicable local, state and federal safety regulations, including the current OSHA Excavation and Trench Safety Standards to provide stability and safe working conditions.

PWR was encountered at this site. Mass excavation of dense PWR may require excavation equipment with ripper teeth or may require blasting. If PWR and/or rock are encountered in open cut areas, the least dense PWR material can typically be excavated from open cuts by ripping with a single-tooth ripper pulled by a Caterpillar D-8 or equivalent bulldozer. Moderately dense to very dense PWR material and rock, if encountered, will likely require blasting or hydraulic hammers to effectively excavate. The PWR excavated at the site can be used as fill in other areas of the site only if the material is thoroughly processed with maximum particle sizes smaller than 3 inches, and thoroughly blended with soil to fill voids

Water was not observed in test pit excavations at times of excavation; however, dewatering of any excavations may be required during prolonged periods of wet weather. Most dewatering can be accomplished with sumps and pumps.

Fill Material Types

Engineered fill should consist of approved materials, free of organic material, debris and particles larger than about 3 inches. The maximum particle size criteria may be relaxed by the geotechnical engineer of record depending on construction techniques, material gradation, allowable lift

Responsive Resourceful Reliable

7

Proposed Westwood Cemetery Improvements
Carrboro, Orange County, North Caroli September 30, 2020
Terracon Project No. 70205044



thickness and observations during fill placement. Soil for use as engineered fill material should conform to the following specifications:

Fill Material ¹	USCS Classification	Acceptable Location for Placement	
On-Site Soils or Imported Soils (min. 20% fines)	SM, SC, CL, ML	All locations and elevations	
Sand / Gravel with less than 10% fines	GW/GP, SW/SP	NCDOT ABC – suitable beneath pavement sections and floor slabs	

Controlled, compacted fill should consist of approved materials that are free of organic matter and debris. A sample of each material type should be submitted to the geotechnical engineer for evaluation.

Fill Compaction Requirements

Structural and general fill should meet the following compaction requirements.

Item	Description
Fill Lift Thickness	9-inches or less in loose thickness (4-inch to 6-inch lifts when hand-operated equipment is used).
Structural Fill	Minimum of 95% of the material's standard Proctor maximum dry density (ASTM D698).
Compaction Requirements ¹	The top lift of engineered fill should be compacted to a minimum of 98% of the material's standard Proctor maximum dry density (ASTM D698).
General Fill	Minimum of 92% of the material's standard Proctor maximum
Compaction Requirements ¹	dry density (ASTM D698).
Moisture Content	Within the range of -2% to +3% of optimum moisture content as determined by the standard Proctor test at the time of placement and compaction.

Engineered fill should be tested for moisture content and compaction during placement. If in-place density
tests indicate the specified moisture or compaction limits have not been met, the area represented by the tests
should be reworked and retested as required until the specified moisture and compaction requirements are
achieved.

Grading and Drainage

Adequate positive drainage should be provided during construction and maintained throughout the life of site features. Surface water drainage should be controlled to prevent undermining of fill slopes and structures during and after construction. Exposed ground should be sloped and





maintained at a minimum 5 percent away from site features for at least 10 feet beyond its perimeter.

Gutters and downspouts that drain water a minimum of 10 feet beyond the footprint of the proposed structures are recommended. This can be accomplished through the use of splash-blocks, downspout extensions, and flexible pipes that are designed to attach to the end of the downspout. Flexible pipe should only be used if it is daylighted in such a manner that it gravity-drains collected water. Splash-blocks should also be considered below hose bibs and water spigots.

It is recommended that all exposed earth slopes be seeded to provide protection against erosion as soon as possible after completion. Seeded slopes should be protected until the vegetation is established.

Earthwork Construction Considerations

Residual soils can be moisture sensitive and will lose strength and stability and will become difficult to adequately compact as their moisture content increases. Performing site earthwork between during dryer times of the year (typically between June and October) will likely reduce the potential for earthwork problems associated with wet soil.

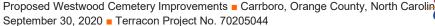
Performing site preparation and earthwork at other times of the year increases the potential for having to perform remedial work on the subgrade soil. Construction traffic over wet subgrades should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades. If the subgrade should become, desiccated, saturated, or disturbed, the affected material should be removed or these materials should be scarified, moisture conditioned, and re-compacted. The use of lime treatment generally reduces the plasticity of clays and silts, makes them less susceptible to moisture fluctuations, and may make them more workable during wetter periods of the year.

Upon completion of filling and grading, care should be taken to maintain the subgrade moisture content prior to construction of floor slabs and pavements. Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become frozen, desiccated, saturated, or disturbed, the affected material should be removed or these materials should be scarified, moisture conditioned, and recompacted prior to floor slab and pavement construction and observed by Terracon.

Surface water should not be allowed to pond and soak into the soil during construction. Construction staging should provide drainage of surface water and precipitation away from the building and pavement areas. Any water that collects over or adjacent to construction areas should be promptly removed, along with any softened or disturbed soils. Surface water control in

Responsive Resourceful Reliable

9





the form of sloping surfaces, drainage ditches and trenches, and sump pits and pumps will be important to avoid ponding and associated delays due to precipitation and seepage.

All excavations should be sloped or braced as required by OSHA regulations to provide stability and safe working conditions. Temporary excavations will probably be required during grading operations. The grading contractor, by his contract, is usually responsible for designing and constructing stable, temporary excavations and should shore, slope or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. All excavations should comply with applicable local, state and federal safety regulations, including the current Occupational Health and Safety Administration (OSHA) Excavation and Trench Safety Standards.

Construction site safety is the sole responsibility of the contractor who controls the means, methods and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean that Terracon is assuming any responsibility for construction site safety or the contractor's activities; such responsibility shall neither be implied or inferred.

Construction Observation and Testing

Earthwork efforts should be monitored under the direction of the Geotechnical Engineer. Monitoring should include documentation of adequate removal of vegetation and topsoil, observation of cut excavations, proof-rolling and mitigation of areas delineated by the proof-roll to require mitigation.

Each lift of compacted fill should be tested, evaluated, and reworked as necessary until approved by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency indicated in this section.

In areas of foundation excavations, the bearing subgrade should be evaluated under the direction of the Geotechnical Engineer. In the event that unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

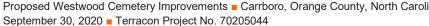
In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

SHALLOW FOUNDATIONS

Small ground level structures, such columbariums or other small memorial structures, with total wall loads less than 2 kips per foot, can be supported on shallow wall or spread footings bearing

Responsive Resourceful Reliable

10





on residual soil, or backhoe refusal grade (PWR or intact granitic bedrock). If foundations are expected to bear on PWR or intact bedrock, some removal of PWR or intact bedrock may be required to prepare a level bearing surface. Removal or PWR or intact bedrock may require bedrock excavation methods ad described in this report. Provided that foundation subgrade has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

Foundation Design Recommendations

Description	Value
Net allowable soil bearing capacity, soil ¹	3,000 psf
Net allowable bearing capacity, PWR/bedrock (backhoe refusal grade) ¹	6,000 psf
Minimum embedment below lowest adjacent finished grade for frost protection and protective embedment ²	18 inches
Minimum width for continuous wall footings	16 inches
Minimum width for isolated column footings	24 inches
Approximate total settlement ³	Up to 1 inch
Estimated differential settlement ³	Less than L/500 along walls. Less than ½ inch over 50 feet between interior columns.
Passive Lateral Resistance	300 pcf (unfactored)
Coefficient of Friction	0.35 (unfactored)

- The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation.
- The footing embedment depth recommended exceeds the frost depth for the area. Footings should be embedded at least 12 inches to provide protective embedment.
- 3. The actual magnitude of settlement that will occur beneath the foundations would depend upon the variations within the subsurface soil profile, the structural loading conditions and the quality of the foundation excavation. The estimated total and differential settlements listed assume that the foundation related earthwork and the foundation design are completed in accordance with our recommendations.

The allowable foundation bearing pressures apply to dead loads plus design live load conditions. The design bearing pressure may be increased by one-third when considering total factored loads that include wind or seismic conditions. The weight of the foundation concrete below grade may be neglected in dead load computations.

Footings, foundations, and masonry walls should be reinforced as necessary to reduce the potential for distress caused by differential foundation movement. The use of control joints at openings or other discontinuities in masonry walls is recommended.



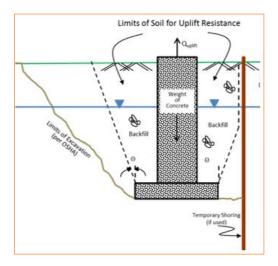


A representative of the geotechnical engineer should be retained at this time to carefully evaluate the foundation excavations through a combination of hand auger borings, dynamic cone penetrometer (DCP) testing, and probing. The materials within a depth of at least 4 feet below foundation bearing elevations should be evaluated. Soft, loose, or otherwise unsuitable materials, if encountered, should be over-excavated and replaced with compacted engineered fill. If the subsurface conditions encountered differ from those presented in this report, supplemental recommendations will be required.

If existing fill is found below the proposed foundation the hand auger and DCP should extended to residual soils. In areas were existing fill remains under the proposed building the frequency of testing should be increased.

Design Parameters - Uplift Loads

Uplift resistance of spread footings can be developed from the effective weight of the footing and the overlying soils. As illustrated on the subsequent figure, the effective weight of the soil prism defined by diagonal planes extending up from the top of the perimeter of the foundation to the ground surface at an angle, θ , of 20 degrees from the vertical can be included in uplift resistance. The maximum allowable uplift capacity should be taken as a sum of the effective weight of soil plus the dead weight of the foundation, divided by an appropriate factor of safety. A maximum total unit weight of 115 pcf should be used for the backfill. This unit weight should be reduced to 53 pcf for portions of the backfill or natural soils below the groundwater elevation.



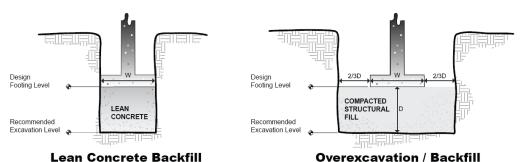
Proposed Westwood Cemetery Improvements Carrboro, Orange County, North Caroling September 30, 2020 Terracon Project No. 70205044



Foundation Construction Considerations

As noted in **Earthwork**, the footing excavations should be evaluated under the direction of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil and rock prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Should the soils at bearing level become excessively dry, disturbed, saturated, or frozen, the affected soil should be removed prior to placing concrete. We recommend placement of a lean concrete mud-mat over bearing soils if excavations must remain open over night, or for an extended period. It is recommended that the geotechnical engineer be retained to observe and test the soil foundation bearing materials.

If unsuitable bearing soils are encountered in footing excavations, excavations should be extended deeper to suitable soils and the footings could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations up to design foundation subgrade levels. The footings could also bear on properly compacted backfill extending down to the suitable soils. Overexcavation for compacted backfill placement below footings should extend laterally beyond all edges of the footings a distance equivalent to at least 8 inches per foot of overexcavation depth below footing base elevation. The overexcavation should then be backfilled up to the footing base elevation with well-graded granular material placed in lifts of 9 inches or less in loose thickness and compacted to at least 95 percent of the material's maximum standard Proctor dry density (ASTM D-698). Compacted crushed stone or compacted No. 57 stone could also be used. The overexcavation and backfill procedure is illustrated in the figure below.



NOTE: Excavations in sketches shown vertical for convenience. Excavations should be sloped as necessary for safety.

Construction Considerations

On most project sites, site grading is generally accomplished early in the construction phase. However, as construction proceeds, the subgrade may be disturbed due to utility excavations, construction traffic, desiccation, rainfall, etc. Areas where unsuitable conditions are located should be repaired by removing and replacing the affected material with properly compacted fill. Subgrade

Responsive Resourceful Reliable

13





areas should be moisture conditioned and properly compacted to the recommendations in this report immediately prior to placement of the crushed stone base and concrete, if required for construction.

GENERAL COMMENTS

As the project progresses, we address assumptions by incorporating information provided by the design team, if any. Revised project information that reflects actual conditions important to our services is reflected in the final report. The design team should collaborate with Terracon to confirm these assumptions and to prepare the final design plans and specifications. This facilitates the incorporation of our opinions related to implementation of our geotechnical recommendations. Any information conveyed prior to the final report is for informational purposes only and should not be considered or used for decision-making purposes.

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in the final report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our scope of services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third party beneficiaries intended. Any third party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site

Responsive Resourceful Reliable

14





characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.

ATTACHMENTS

	Appendix 2. Geo	otechnical Eng	ineering Repor	t by Terracon	Consultants, Ir	ıc.

EXPLORATION AND TESTING PROCEDURES



EXPLORATION AND TESTING PROCEDURES

Field Exploration

Test Pits: Test pit exploration locations were measured in the field by GPS location. The locations of the test pits should be considered accurate only to the degree implied by the means and methods used to define them.

Test pits were excavated with a Case 510N backhoe, provided by the Town Carrboro. Samples of the soil encountered in test pits were obtained as grab samples. Soil samples were tagged for identification, sealed to reduce moisture loss, and taken to our laboratory for further examination, testing, and classification. Information provided on the test pit logs attached to this report includes soil descriptions, excavation depths, sampling intervals, and groundwater conditions. Test pits were backfilled with excavated soil material after the test pit was logged.

Initially, test pit logs were prepared in the field by a geotechnical engineer and include visual classification of the materials encountered during excavation. Final test pit logs, included in Exploration Results, represent the engineer's interpretation of the field logs and include modifications based on laboratory testing of selected samples.

Geophysics: The site was also explored by Ground Penetrating Radar (GPR). We conducted the GPR survey using a 350 MHz HS digital antenna and SIR-4000 Subsurface Interface Radar System made by Geophysical Survey Systems, Inc. (GSSI) to perform an upper profile geophysical survey. In general, field data collection was accomplished as referenced in ASTM D6432. Data was collected using a free-scan method, allowing for data to be interpreted in the field in real-time.

Ground penetrating radar is a method that provides a continuous, high resolution graphical crosssection depicting variations in the electrical properties of the shallow subsurface. The method involves repeatedly radiating an electromagnetic pulse (radar signal) into the ground from a transducer (antenna) as it moves along a traverse. Radar signals reflected by subsurface objects or horizons are detected by an antenna (typically the same one used to generate the signal) and sent to a control unit for processing. The control unit then converts the varying amplitude of the reflected radar signal as a function of time into a cross-sectional image showing signal amplitude as a function of distance and depth.

GPR responses is governed by two electrical properties; electrical conductivity and dielectric permittivity, also referred to as dielectric constant. Electrical conductivity is the ability of a material to conduct a charge when an electromagnetic field is applied. Electrical conductivity governs how far radar signals can propagate through the subsurface before becoming unstable. The higher the conductivity, the faster the signal attenuates. Consequently, conductivity also affects the strength of radar signals that are reflected from subsurface boundaries representing a change in





permittivity. The greater the contract the more energy that is reflected. Most earthen materials (soil and rock) and even artificial materials (e.g. concrete) have relatively low dielectric permittivity and therefore, are relatively transparent to electromagnetic energy. This means that only a portion of the radar signal incident upon a subsurface boundary is reflected back to the surface. On the other hand, when radar encounters an object composed of material that has very high permittivity, such as buried metal, most of the incident energy is reflected. Results of the GPR survey are as shown in **Exploration Results**.

Property Disturbance: We backfilled the test pit after completion. Our services did not include repair of the site beyond backfilling the test pits. Excess soil dispersed in the general vicinity of the test pit. Because backfill material often settles below the surface after a period, we recommend test pits are checked periodically and backfilled, if necessary.

Laboratory Testing

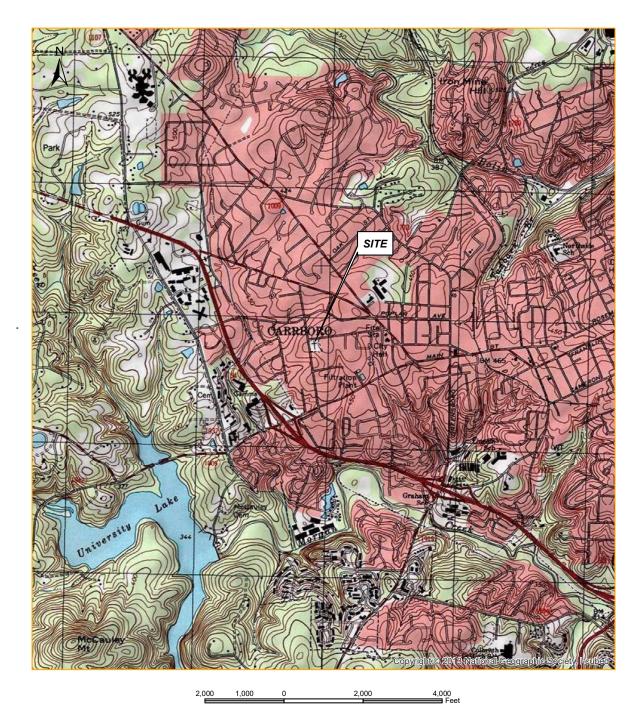
The project engineer reviews field data and assigns various laboratory tests to better understand the engineering properties of various soil strata. Procedural standards noted below are for reference to methodology in general. In some cases, local practices and professional judgement require method variations. Standards noted below include reference to other related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Method of Determination of Water Content of Soil and Rock by Mass
- ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- ASTM D2488 Standard Practice of Description and Identification of Soils (Visual Manual Method)
- ASTM D422 Standard Test Method for Particle Size Analysis of Soils
- ASTM D4318 Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils

Our laboratory testing program often includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS). Laboratory test results are included in Exploration Results.

Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.

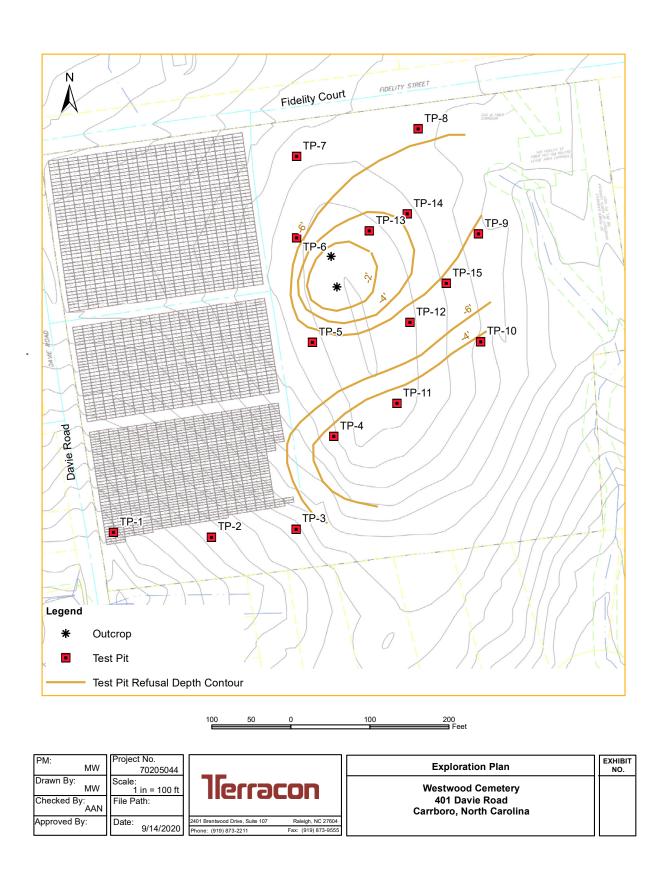
SITE MAP AND EXPLORATION PLANS

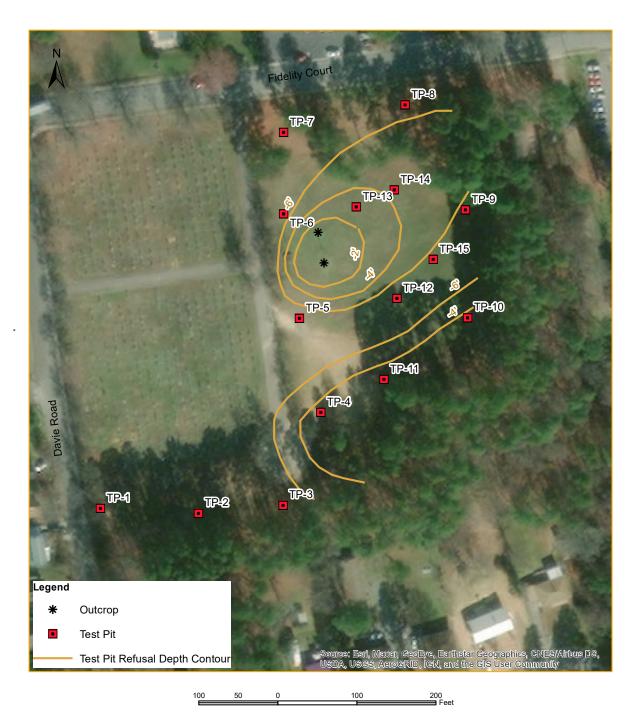


PM:	Project No.	
MW	70205044	
Drawn By: MW	Scale: 1 in = 2,000 ft	
Checked By: AAN	File Path:	
Approved By:	Date: 9/28/2020	

Terracon		
2401 Brentwood Drive, Suite 107	Raleigh, NC 27604	

Site Map	EXHIBIT NO.
Westwood Cemetery 401 Davie Road Carrboro, North Carolina	





PM:	Project No.
MW	70205044
Drawn By: MW	Scale: 1 in = 100 ft
Checked By: AAN	File Path:
Approved By:	Date: 9/14/2020

lierral	LUII
2401 Brentwood Drive, Suite 107	Raleigh, NC 27604

Exploration Plan - Aerial	EXHIBIT NO.
Westwood Cemetery 401 Davie Road Carrboro, North Carolina	

Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.

EXPLORATION RESULTS

				TEST PIT L	OG NO. TP	·-1			F	Page	1 of 1
П	PR	OJECT:	Westwood Cemetery		CLIENT: Carter	Van Dyke Assoc	iates				
-	SIT	E:	401 Davie Road Carrboro, NC		_ Doyle:	stown, PA					
8	5	LOCATION	N See Exploration Plan				œ	'EL	/PE	(%)	ATTERBERG LIMITS
			9102° Longitude: -79.0841°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI
\otimes		DEPTH FILL	- SILTY SAND (SM), orange brown to	gray brown, moist, wood	debris at 3 feet				.,		
ATEMPLATE.GDI 9/10/20	* · · · · · · · · · · · · · · · · · · ·	3.5 SILT	Y SAND (SM), fine to coarse grained,	orange brown to brown, n	noist, weathered rock	fragments at 5 to	-				
IEKKACON_DAIAIEMPLA		6.5 fe	eet		,		5 —				
เกิ							_				
표 <mark>:] .</mark>			ninated at 6.5 Feet								
NOT VALID IN SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 70203044 WESTWOOD CEMELENYGED P P P P P P P P P P P P P P P P P P P			on lines are approximate. In-situ, the transition m			Nation					
Ad		ement Metho	od:	See Exploration and Test description of field and la	ing Procedures for a boratory procedures used	Notes:					
MACIE VALIE		nment Metho	od: cavated soil.	and additional data (If any See Supporting Information symbols and abbreviation	/). on for explanation of						
NG LO			ER LEVEL OBSERVATIONS	75		Boring Started: 08-25-2020	В	Boring (Comp	leted: 08	3-25-2020
IHIS BORING FOG IS		Groundw	rater not encountered		acon	Drill Rig: Case 580N Backhoe	. [Oriller:	Town	of Carrb	oro
<u>P</u>				2401 Brentwo Ralei	od Rd, Ste 107 gh, NC	Project No.: 70205044					

		1	EST PIT L	OG NO. TP	-2			F	Page	1 of 1
Pi	ROJ	ECT: Westwood Cemetery		CLIENT: Carter	Van Dyke Associ Stown, PA	iates				
SI	ITE:	401 Davie Road Carrboro, NC		Doyle	stown, r A					
90	LO	CATION See Exploration Plan				t.)	/EL ONS	YPE	(%)	ATTERBERG LIMITS
GRAPHICLOG		ude: 35.9102° Longitude: -79.0836°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI
74 1N	DEF .∴\ .∴ 0.5	TH TOPSOIL						-		
		SILTY SAND (SM), fine to coarse grained, oran	nge brown to brown, n	noist						
NZ.										
8	·					-				
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	3.5					_				
IERRACON_DATATEMENTATE:GD1 9/10/20		SILTY SAND (SM), fine to coarse grained, light	t gray and rust brown,	moist, weathered roc	k fragments	_				
	<u>:</u>							™	9	23-20-3
ERRA						5 —				
5. F						_				
	6.5	Terminated at 6.5 Feet								
M M										
44 ₩										
nenzn										
7 										
0 2-5 5										
, - -										
O O										
2										
GINAL										
₹ 0 2										
AKA	Str	atification lines are approximate. In-situ, the transition may b	e gradual.		,					
		nt Method: test pit	See Exploration and Test description of field and la	ing Procedures for a	Notes:					
VALID		•	and additional data (If any	/).						
Aban Ba		nt Method: with excavated soil.	 See Supporting Information symbols and abbreviation 	s.						
	_	WATER LEVEL OBSERVATIONS	75		Boring Started: 08-25-2020	В	Boring (Comp	leted: 08	3-25-2020
	Gr	oundwater not encountered		acon	Drill Rig: Case 580N Backhoe	,	Oriller:	Town	of Carrt	oro
2			2401 Brentwo Raleig	od Rd, Ste 107 gh, NC	Project No.: 70205044					

	TE	ST PIT L	OG NO. TP)-3			Page	1 of 1
F	PROJECT: Westwood Cemetery		CLIENT: Carter	r Van Dyke Associat stown, PA	es			
\$	SITE: 401 Davie Road Carrboro, NC		Doyle	Stown, FA				
Ċ	LOCATION See Exploration Plan			<u>.</u>	ÝĒL OPIO	YPE	(%)	ATTERBERG LIMITS
OCIOIHavao				OFDTH (F)	WATER LEVEL	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI
<u>, 7.7,</u>	DEPTH				+	,		
	FILL - CLAYEY SAND (SC), fine to coarse grained	d, brown and light (gray, moist		-			
	2.2 SILTY SAND (SM), fine to coarse grained, yellow b	prown moist weat	hered rock fragments	at 5 to 6 5 feet	-			
LAIE.G	Size i Galas (Gill), line to coalse grained, yellow i	orown, moist, weat	nored rook fragments	at 5 to 0.5 feet				
GPJ IEKKACON_DAIAIEMPLAIE								
NO_DA	91. 31.							
EKKAC				5	; -			
I GPJ								
KEPORI. GEO SWARI LOG-NO WELL 70205044 WES IWOOD CEME LERY.								
	7.1 Terminated at 7.1 Feet				+			
S MO								
044 WE								
7020								
O WELI								
-5 -5 -0 -1								
SMAK								
. GEO								
(EPOR								
M CK								
U FRO								
SEPAKATED FROM ORIGINAL	Stratification lines are approximate. In-situ, the transition may be gra	adual.			•	•		
ALID IF SE	des des pit	e Exploration and Testi scription of field and lat d additional data (If any	oratory procedures used	Notes:				
	andonment Method: Seackfilled with excavated soil.	e Supporting Information mbols and abbreviation	on for explanation of s.					
0 PC	WATER LEVEL OBSERVATIONS Groundwater not encountered	76-66		Boring Started: 08-25-2020	Boring	Comp	pleted: 0	8-25-2020
SBOK	Groundwater not encountered			Drill Rig: Case 580N Backhoe	Drille	: Town	of Carrt	ooro
Ĕ		2401 Brentwoo Raleig	h, NC	Project No.: 70205044				

		TEST PIT L	.OG NO. TP-4	1		F	Page 1 of 1	I
PF	ROJECT: Westwood Cemetery		CLIENT: Carter V Doylesto	an Dyke Associat	es			
Sľ	TE: 401 Davie Road Carrboro, NC		Doylesto	JWII, PA				
GRAPHICLOG	LOCATION See Exploration Plan Latitude: 35.9105° Longitude: -79.0831°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%) d-TT	IITS
	DEPTH 0.1_\(\sum_{\text{TOPSOIL}}\) SILTY SAND (SM), fine to coarse grained, light 3.0 Test Pit Refusal at 3 Feet	t gray and tan, moist, I	many rock fragments					
	Stratification lines are approximate. In-situ, the transition may b	e gradual.						
Ba	coment Method: ckhoe test pit donment Method: ckfilled with excavated soil.	See Exploration and Testi description of field and lat and additional data (If any See Supporting Information symbols and abbreviation). on for explanation of	es:				
	WATER LEVEL OBSERVATIONS	75-	Borir	ng Started: 08-25-2020	Boring (Compl	eted: 08-25-202	20
	Groundwater not encountered	liett	acon –	Rig: Case 580N Backhoe	+-		of Carrboro	
		2401 Brentwoo Raleig	od Rd, Ste 107	ect No.: 70205044	†			

		Т	EST PIT L	.OG NO. TF	P-5			F	Page 1	1 of 1
P	PRO	OJECT: Westwood Cemetery		CLIENT: Carte	r Van Dyke Assoc estown, PA	iates	;			
S	SIT	E: 401 Davie Road		Doyle	.5town, 1 A					
_		Carrboro, NC					1			ATTERBERG
FOG)	LOCATION See Exploration Plan				Œ.	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	R 「%)	LIMITS
GRAPHICLOG		Latitude: 35.9109° Longitude: -79.0832°				DEPTH (Ft.)	TER LI	PLE .	WATER CONTENT (%)	LL-PL-PI
S.		DEPTH				Ö	WA- OBSI	SAN	00	
		D.2_TOPSOIL CLAYEY SAND (SC), fine to coarse grained, rus	st tan and light gray.	moist, scattered rock	fragments, cobbles					
		and boulders		, , , , , , , , , , , , , , , , , , , ,	,	-				
07/01	/									
)6 I O						_				
A IE.						_	-			
EMP										
T PAIN						-				
IERKACON_DATA IEMPLATE. GDT 9/10/20	/					5 —				
						5				
KEPORI. GEO SMARI LOG-NO WELL 70205044 WES IWOOD CEWELERY.GPJ		5.3				-				
MEIE		Terminated at 6.3 Feet								
- CO										
NO.										
44 WE										
05050										
/ELL /										
> O -N										
Z Z										
SMA										
E. GE										
H N N										
0 KG										
L KO										
INIS BORING LOG IS NOT VALID IT SEPARATED FROM ORIGINAL B PROP B B B B B B B B B B B B B B B B B B B		Stratification lines are approximate. In-situ, the transition may be	gradual.				<u> </u>			
Adv		ement Method:	See Exploration and Testi	ng Procedures for a	Notes:					
ALID II		hoe test pit	description of field and lat and additional data (If any	oratory procedures used						
Aba		nment Method:	See Supporting Information	on for explanation of s.						
S B	Back	filled with excavated soil.								
		WATER LEVEL OBSERVATIONS Groundwater not encountered	7600	200	Boring Started: 08-25-2020	E	Boring (Comp	leted: 08	3-25-2020
S BCK			2401 Brentwoo	OCUPACION DE LOS DELOS DE LOS DELOS DE LOS DELOS DE LOS DELOS DE LOS DE	Drill Rig: Case 580N Backhoe	. [Oriller:	Town	of Carrb	oro
Ė			Raleig	h, NC	Project No.: 70205044					

		TES	ST PIT L	OG NO. TF	P- 6			F	Page	1 of 1
	PR	OJECT: Westwood Cemetery		CLIENT: Carte	r Van Dyke Assoc stown, PA	iates				
	SIT	E: 401 Davie Road Carrboro, NC		20,10	,					
F	၅	LOCATION See Exploration Plan				_	⊩ SN	믭	(9)	ATTERBERG LIMITS
	GRAPHICLOG	Latitude: 35.9112° Longitude: -79.0833°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	
	RAP					DEPT	ATER SER\	MPL	WA-	LL-PL-PI
L		DEPTH					≥ 8	SA	Ō	
Ž		0.2 <u>TOPSOIL</u> <u>CLAYEY SAND (SC)</u> , fine to coarse grained, tan bro	wn and light gray	v. moist. rock fragmer	nts at 2 feet					
		<u></u>		,,g		_				
R										
02/01/6						_				
DATATEMPLATE.GDT										
S /						_				
M EM										
Š.						_				
EKKACON						5 —				
- GPJ -										
ERY.C						_				
EMEIL										
		8.0				_				
KEPOKI: GEO SMAKI LOG-NO WELL 70205044 WESTWO		Terminated at 8 Feet								
05044										
707										
WELI										
O - N										
2										
MAK										
O L L										
Д										
iNAL										
2 2										
Ž Ž										
<u> </u>		Stratification lines are approximate. In-situ, the transition may be grade	ual.							
SEPAKATED FROM ORIGINAL										
ALID IF SE	dvand Back	rement Method: shoe test pit desc and a	Exploration and Testing ription of field and laborated and laborated and lateral (If any	ng Procedures for a procedures used).	Notes:					
IHIS BORING LOG IS NOT VALID IF		onment Method: symbol s	Supporting Information ools and abbreviation	on for explanation of s.						
- 5		WATER LEVEL OBSERVATIONS	ı		Boring Started: 08-25-2020	.	Roring (Comp	leted: 00	3-25-2020
Z		Groundwater not encountered	llerr:	acon		-+				
13 BC			2401 Brentwoo	od Rd, Ste 107	Drill Rig: Case 580N Backhoe	-	Jriller:	iown	of Carrb	ого
<u> </u>			Raleig	h, NC	Project No.: 70205044					

		ΓEST PIT L	OG NO. TI	P-7			F	Page	1 of 1
PI	ROJECT: Westwood Cemetery	ECT: Westwood Cemetery CLIENT: Carter Van Dyke Associ Doylestown, PA 401 Davie Road							
SI	TE: 401 Davie Road Carrboro, NC		Doyle	estown, PA					
90	LOCATION See Exploration Plan					NS E	PE	(%)	ATTERBERG LIMITS
GRAPHICLOG	Latitude: 35.9115° Longitude: -79.0833°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	
RAP					DEPT	ATEF SER	MPL	WA	LL-PL-PI
***	DEPTH					> 8	S/S	0	
	CLAYEY SAND (SC), fine to coarse grained, lig difficult excavation 4.5 to 6.8 feet	ht rust brown and ligh	nt gray, moist, scattere	ed rock fragments,					
	difficult excavation 4.5 to 6.8 feet				_				
9/10/20									
					_				
DAIAIEMPLAIE.GD									
	*				_				
RRACON					5 —				
	*				-				
	6.8								
REPORT: GEO SIMART LOG-NO WELL 70205044 WEST WOOD CENTER	Terminated at 6.8 Feet								
- A									
2044									
7.020									
1									
> 0 2 7									
3									
¥ ¥									
0									
- - -									
Г									
2									
<u>≥</u>									
	Stratification lines are approximate. In-situ, the transition may be	aradual							
Action of the state of the stat	Cadamoduori iirios are approximate. Il Psitu, trie transition may be	, gradual.							
Adva Ba	ncement Method: ckhoe test pit	See Exploration and Testi description of field and lat and additional data (If any	ng Procedures for a poratory procedures used).	Notes:					
	donment Method: ckfilled with excavated soil.	See Supporting Information symbols and abbreviation	on for explanation of s.						
	WATER LEVEL OBSERVATIONS			Daving Otastad: 00 05 0000		anir - 1		latarii Ci	0 0E 0000
NIN CONTRACTOR	Groundwater not encountered	llerr	acon	Boring Started: 08-25-2020					3-25-2020
] DC		2401 Brentwoo	od Rd, Ste 107	Drill Rig: Case 580N Backhoe		Jriller:	Iown	of Carrb	ooro
<u> </u>		Raleig	h, NC	Project No.: 70205044					

	1	EST PIT L	.OG NO. TF	- -8			F	Page	1 of 1
PF	ECT: Westwood Cemetery CLIENT: Carter Van Dyke Associa Doylestown, PA 401 Davie Road								
SI	TE: 401 Davie Road Carrboro, NC		20,1.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
90	LOCATION See Exploration Plan					NS E	PE	(%)	ATTERBERG LIMITS
GRAPHICLOG	Latitude: 35.9116° Longitude: -79.0828°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	
RAP					EPT	ATER SERV	MPL	WA	LL-PL-PI
ō	DEPTH					₩ OB8	SA	S	
<u> </u>	10.3 TOPSOIL	1.4 1 B							
	CLAYEY SAND (SC), fine to coarse grained, lig difficult excavation 4.5 to 6.8 feet	int rust brown and ligh	nt gray, moist, scatter	ed rock fragments,					
DZIOLIZ DZIOLI					_				
					_				
Alewin Cale									
					_				
							m	18	39-20-19
NO PAR					5 —		١٧		
					-				
NETON: GEO SIMAN LOG-NO WELL 72253044 WES INCOLD CEMPETEN	√6.5 Terminated at 6.5 Feet								
5									
2									
\$!									
DEU ZU									
, 									
2									
5									
5									
5									
Į									
5									
2									
Advai	Stratification lines are approximate. In-situ, the transition may be	gradual.				L			1
Ž L				L					
	cement Method: ckhoe test pit	See Exploration and Testi description of field and lal and additional data (If any	ng Procedures for a coratory procedures used r).	Notes:					
Aban	donment Method:	See Supporting Information symbols and abbreviation	on for explanation of s.						
₂ Ba	ckfilled with excavated soil.								
	WATER LEVEL OBSERVATIONS	76		Boring Started: 08-25-2020	E	Boring (Compl	leted: 0	3-25-2020
200	Groundwater not encountered	liett	acon	Drill Rig: Case 580N Backhoe	,	Driller: Town of Carrboro			
2			od Rd, Ste 107	Project No.: 70205044	\neg				
-		i valeig	,,	,	- 1				

		7	TEST PIT L	OG NO. T	P-9			F	Page	1 of 1	
PF	ROJ	ECT: Westwood Cemetery		CLIENT: Carte	er Van Dyke Asso estown, PA	ciate	s				
SI	TE:	401 Davie Road Carrboro, NC		Боуг	estown, r A						
90	LO	CATION See Exploration Plan				<u> </u>	/EL ONS	/PE	(%)	ATTERBERG LIMITS	
GRAPHICLOG	Latit	tude: 35.9113° Longitude: -79.0825°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI	
74 18. 7	DEF 0.4	TOPSOIL					- 0	0)			
02/07/20		CLAYEY SAND (SC), fine to coarse grained, light	nt rust brown and ligh	nt gray, moist		-					
DAIAIEMPDAIE.GD	3.0	CLAYEY SAND (SC), fine to coarse grained, rus	st tan and light gray, r	moist to very moist, di	fficult excavation	-					
T.GPJ IERKACON	6.0	Test Pit Refusal at 6 Feet				5 —					
REFORL, GEO SWART LOG-NO WELL TIZZOG44 WEST WOOD CEMETERY, GEO											
Advanta Baca Baca Baca Baca Baca Baca Baca Ba											
Y ARA	Stı	ratification lines are approximate. In-situ, the transition may be	gradual.								
Advanda Back	donme		See Exploration and Testi description of field and lat and additional data (If any See Supporting Information symbols and abbreviations). In for explanation of	Notes:						
Date Date Date Date Date Date Date Date	_	WATER LEVEL OBSERVATIONS	7[Boring Started: 08-25-2020	В	Boring (Compl	leted: 08	3-25-2020	
200	Gı	roundwater not encountered		econ	Drill Rig: Case 580N Backhoe		Oriller:	Town	of Carrb	oro	
Ē			2401 Brentwoo Raleig	od Rd, Ste 107 h, NC	Project No.: 70205044		Driller: Town of Carrboro				

		TI			F	Page	1 of 1			
	PR	OJECT: Westwood Cemetery		CLIENT: Carter Doyle	r Van Dyke Assoc stown, PA	iates				
	SIT	E: 401 Davie Road Carrboro, NC								
	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 35.9108° Longitude: -79.0825°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI
	'4 12 · 18	DEPTH 0.2 TORSON					-0	S		
	7	0.3 TOPSOIL SILTY SAND (SM), fine to coarse grained, brow	/n							
						-				
07/01		1.5 CLAYEY SAND (SC), fine to coarse grained, ru	st tan and light gray,	moist						
8						-				
П Б										
3						_				
Ä						-				
ξ'		4.8								
YYY YYY		Test Pit Refusal at 3.8 to 4.8 Feet								
5										
<u> </u>										
REPORT. GEO SMART LOG-NO WELL / UZUSU44 WESTWOOD CEMETERY.GPJ TER										
200										
<u>۱</u>										
N N										
12004										
/ UZ										
L L										
2										
5										
YY										
N N										
<u>й</u> 5										
5										
ור אבו										
2										
≥ 2 2 2 2										
3										
PARA LED FROM ORIGINA		Stratification lines are approximate. In-situ, the transition may be	gradual.							
II OE		ement Method: thoe test pit	See Exploration and Testi description of field and lal	ng Procedures for a	Notes:					
ALID IF	Jaci	and the put	description of field and lat and additional data (If any	ooratory procedures used).						
5	Abond	unmont Mathad	See Supporting Information							
0		nment Method: filled with excavated soil.	symbols and abbreviation	o.						
Š		WATER LEVEL OBSERVATIONS	75		Boring Started: 08-25-2020	-	Sorina (Comp	leted: 09	3-25-2020
IHIS BOKING LOG		Groundwater not encountered	llerr	acon	Drill Rig: Case 580N Backhoe	-+			of Carrb	
200			2401 Brentwo	od Rd, Ste 107	Project No.: 70205044				0	-
-			rkaleig	jii, ivo	10 00L110 10200044	- 1				

				TEST PIT LO	OG NO. TP	-11	_		F	Page	1 of 1
Р	PR	OJECT:	Westwood Cemetery		CLIENT: Carter	r Van Dyke Associa stown, PA	ates				
S	SIT		401 Davie Road Carrboro, NC			,					
90		LOCATION	See Exploration Plan		1		£	/EL	YPE	(%)	ATTERBERG LIMITS
GRAPHICLOG		Latitude: 35.9	9107° Longitude: -79.0828°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI
****		DEPTH 0.1_\\TOPS	<u>SOIL</u>					- 0	0)		
		FILL 1.5	- SILTY SAND (SM), fine to coarse gr	rained, brown, scattered n	netal and concrete deb	oris	_				
Riol M	/		YEY SAND (SC), fine to coarse graine	d, rust brown and tan gra	y, moist						
E.G.D.											
	/	3.3 Tost	Pit Refusal at 3.3 Feet				_				
<u> </u>		76311	rit Nelusal at 3.3 Teet								
2											
ARA D											
2											
REPORT. GEO SWART LOGGNO WELL 70203044 WESTWOOD CEMETERT.GFJ TERRAGON_DA											
200											
M											
702076											
7											
50											
AAN A											
0 0 1											
ົງ - -											
A A											
2											
2											
ARATED TROM ORIGINAL		Stratification	n lines are approximate. In-situ, the transition m	nay be gradual.							
Ľ											
		ement Metho khoe test pit	d:	and additional data (If any	boratory procedures used y).	Notes:					
Aba		onment Metho cfilled with exc		See Supporting Informati symbols and abbreviation							
		WATE	R LEVEL OBSERVATIONS	76		Boring Started: 08-25-2020	F	Borina (Comp	leted: 08	3-25-2020
		Groundw	ater not encountered	lierr	acon	Drill Rig: Case 580N Backhoe	\dashv			of Carrb	
- PORING FOR				2401 Brentwo	od Rd, Ste 107 gh, NC	Project No.: 70205044	\exists				
				7 10101							

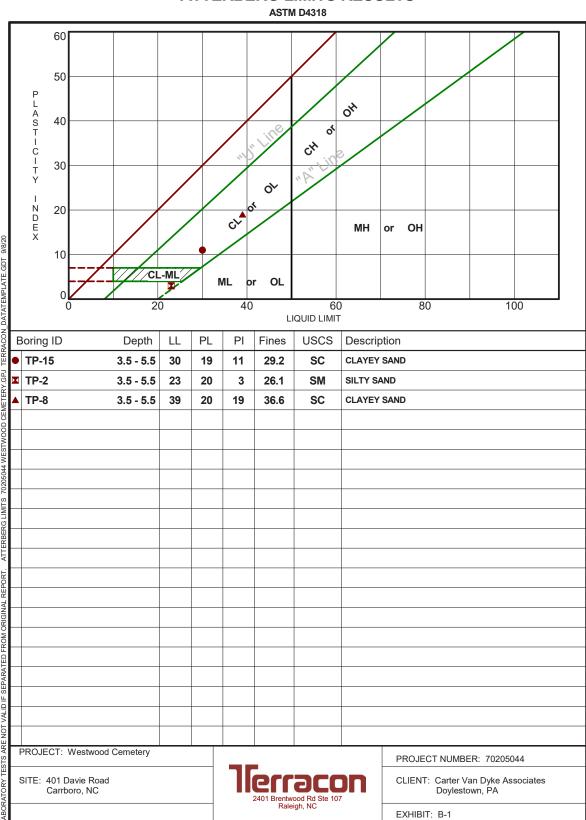
		TEST PIT LOG NO. TP-12								1 of 1
Ī	PR	OJECT: Westwood Cemetery		CLIENT: Carte	er Van Dyke Assoc estown, PA	ciates	5			
;	SIT	E: 401 Davie Road Carrboro, NC		,	•					
9	<u>დ</u>	LOCATION See Exploration Plan					- S	ᆔ		ATTERBERG LIMITS
3	GRAPHICLOG	Latitude: 35.9109° Longitude: -79.0828°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	
į	APH	3				Ŧ	TER.	틸	WAT	LL-PL-PI
Ġ	G R	DECT.				Ö	WA-	SAN	00	
<u> </u>	ار برا	DEPTH 0.2 TOPSOIL								
	//	CLAYEY SAND (SC), fine to coarse grained, tan I	brown and light gray	, moist						
						-				
9/10/20										
						-				
E.GD										
Z /						_				
EM										
A C						-				
z ^l										
IERKACON_DAIAIEMPLAIE.GDI						5 —				
Y.GPJ						_				
ERY.										
EME CEME						_				
KEPORI. GEO SMARI LOG-NO WELL 70205044 WESIWO	//	8.0 Test Pit Refusal at 8 Feet				-				
4 WE		restrit Netusal at 0 reet								
0504										
70,7										
WEL										
O -N										
ğ										
MAK										
S C C C										
D P										
AL K										
5										
O ⊠										
Z Z										
SEPARATED FROM ORIGINAL		Stratification lines are approximate. In-situ, the transition may be gr	radual.							
EPAI					F					
ACID IF S	dvand Bac	pement Method: Sr. khoe test pit de ar	ee Exploration and Testing escription of field and labor and additional data (If any	ng Procedures for a oratory procedures used).	Notes:					
		onment Method: sy kfilled with excavated soil.	ee Supporting Information mbols and abbreviations	n for explanation of s.						
50 —		WATER LEVEL OBSERVATIONS				-				
D I		Groundwater not encountered	lore:	econ	Boring Started: 08-25-2020	-+	Boring (Comp	leted: 08	3-25-2020
S BOI			2401 Brentwoo		Drill Rig: Case 580N Backhoe	• [Oriller:	Town	of Carrb	oro
Ĭ			2401 Brentwoo Raleig	h, NC	Project No.: 70205044					

	TEST PIT LOG NO. TP-13 Page 1 of 1											
PR	OJECT: Westwood Cemetery		CLIENT: Carte	r Van Dyke Assoc estown, PA	iates							
SIT	TE: 401 Davie Road Carrboro, NC		Doyle	Stown, I A								
90	LOCATION See Exploration Plan		ı		_	⊩SN	PE	(9)	ATTERBERG LIMITS			
GRAPHICLOG	Latitude: 35.9113° Longitude: -79.083°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI			
74 12 - 71	DEPTH 0.4 TOPSOIL					> ö	Š					
7//	0.4 TOPSOIL CLAYEY SAND (SC), fine to coarse grained,	red brown to tan, moist										
		,			-							
					-							
	3.5				_							
- H. J.	Test Pit Refusal at 3.5 Feet											
	Stratification lines are approximate. In-situ, the transition may	be gradual.				l						
	cement Method: khoe test pit	See Exploration and Test description of field and la and additional data (If any	ng Procedures for a boratory procedures used /).	Notes:								
Aband Bac	onment Method: kfilled with excavated soil.	See Supporting Information symbols and abbreviation	on for explanation of s.									
_	WATER LEVEL OBSERVATIONS	 			1.			:	05.005			
	Groundwater not encountered	1 Nerr	acon	Boring Started: 08-25-2020	_				-25-2020			
			od Rd, Ste 107	Drill Rig: Case 580N Backhoo	•	Oriller: 7	Town	of Carrbo	oro			
		Raleig	gh, NC	Project No.: 70205044								

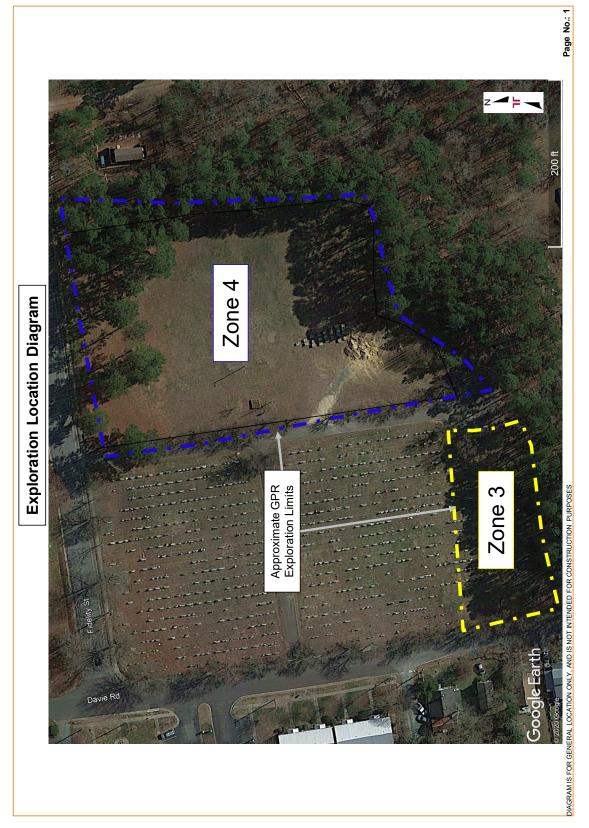
	TEST PIT LOG NO. TP-14 Page 1 of 1										
PR	OJECT: Westwood Cemetery		CLIENT: Carte	r Van Dyke Assoc estown, PA	ciates	5					
SI	TE: 401 Davie Road		Doyle	,otomi, i A							
_	Carrboro, NC								ATTERBERG		
GRAPHICLOG	LOCATION See Exploration Plan				<u>:</u> ;	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	(%)	LIMITS		
음	Latitude: 35.9113° Longitude: -78.0828°				DEPTH (Ft.)	R LE	ᄪ	ATEF			
GRAI						NATE	AMF	WATER CONTENT (%)	LL-PL-PI		
13 1 _N	DEPTH TOPSOIL					-0	S				
	O.4 TOPSOIL CLAYEY SAND (SC), fine to coarse grained, tar	n brown. moist. scatte	red cobbles and boul	ders							
					_						
RI ///											
al loizo					_						
					_						
	4.2				_						
	Test Pit Refusal at 4.2 Feet										
REFORT, GEO SMART LOG-NO WELL 1020044 WESTWOOD CEMPLENT, SPOT LENYALON,											
5											
<u> </u>											
Π Σ Π											
<u></u>											
// }											
20044											
1020											
7											
2											
9											
<u> </u>											
o O											
5 -											
Ž.											
취 참											
<u>\$</u>											
2											
2											
	Stratification lines are approximate. In-situ, the transition may be	gradual.									
Advan		<u> </u>									
	cement Method: khoe test pit	See Exploration and Testir description of field and lab and additional data (If any)	g Procedures for a pratory procedures used	Notes:							
2		See Supporting Information	for explanation of								
Aband Bad	onment Method: kfilled with excavated soil.	symbols and abbreviations	•								
3	WATER LEVEL ORSERVATIONS				-						
5 	WATER LEVEL OBSERVATIONS Groundwater not encountered	Toss	econ	Boring Started: 08-25-2020	Boring Completed: 08-25-2020						
000				Drill Rig: Case 580N Backhoe	, [Oriller:	Town	of Carrb	oro		
Ē		2401 Brentwoo Raleigl	a Ka, Ste 107 n, NC	Project No.: 70205044							

	TEST PIT LOG NO. TP-15 Page 1 of 1											
PR	OJECT: Westwood Cemetery		CLIENT: Carter	r Van Dyke Assoc stown, PA	iates							
SI	TE: 401 Davie Road Carrboro, NC		Doyle	stown, FA								
90	LOCATION See Exploration Plan				3	/EL	/PE	(%)	ATTERBERG LIMITS			
GRAPHICLOG	Latitude: 35.9111° Longitude: -79.0826°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	WATER CONTENT (%)	LL-PL-PI			
7 <u>4 1</u> 8. 7	DEPTH 0.4 TOPSOIL						-					
DATATEMETALE: GD1 9/10/20	CLAYEY SAND (SC), fine to coarse grained, r	ust tan and light gray,	moist, scattered cobbl	es and boulders	-							
lerry down					5 —		~~	14	30-19-11			
	6.0 Test Pit Refusal at 6 Feet				-							
Advanda Baca Baca Baca Baca Baca Baca Baca Ba	Stratification lines are approximate. In-situ, the transition may b	e gradual.										
į.		T										
Aband Bac	zement Method: khoe test pit onment Method: kfilled with excavated soil.	See Exploration and Test description of field and la and additional data (If any See Supporting Informatis symbols and abbreviation). on for explanation of	Notes:								
Date Date Date Date Date Date Date Date	WATER LEVEL OBSERVATIONS Groundwater not encountered	75	3668	Boring Started: 08-25-2020	E	Boring (Compl	eted: 08	3-25-2020			
200	Grandwater not encountered			Drill Rig: Case 580N Backhoe	. [Oriller:	Town	of Carrb	oro			
Ĕ		2401 Brentwo Raleig	od Rd, Ste 107 jh, NC	Project No.: 70205044	- 1							

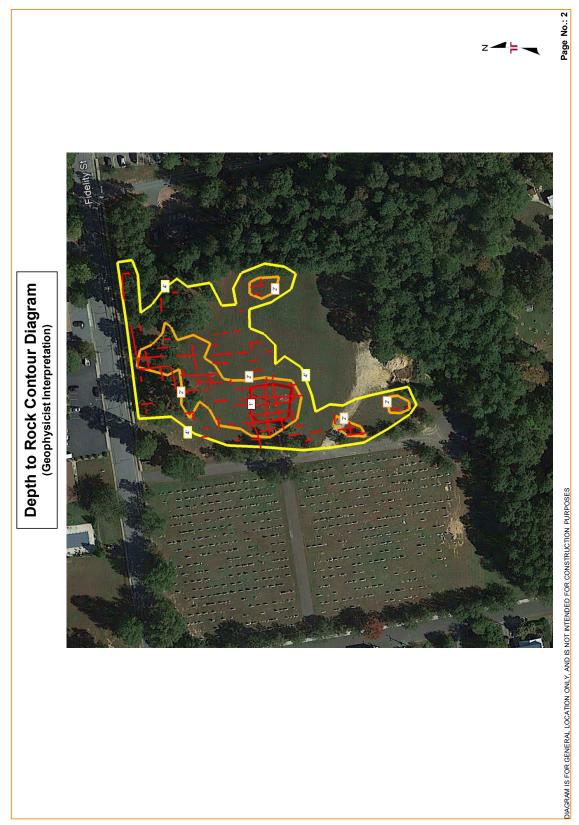
ATTERBERG LIMITS RESULTS





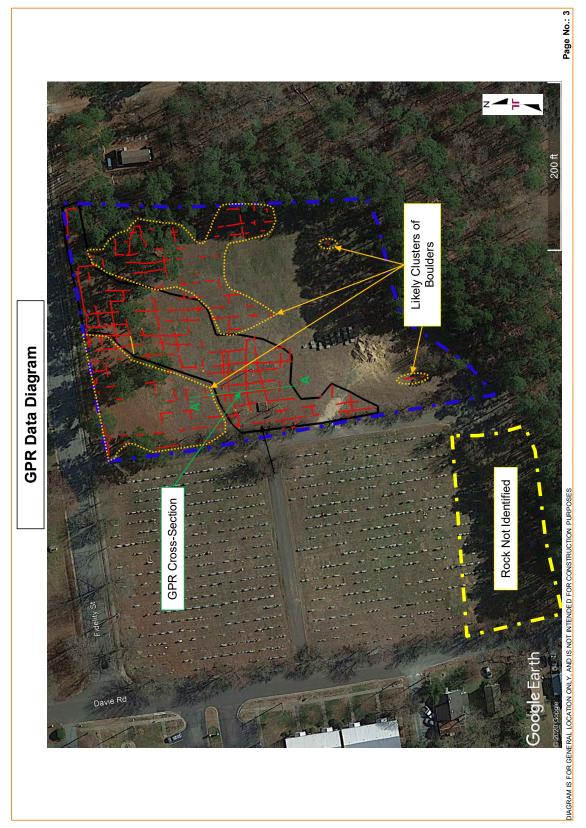






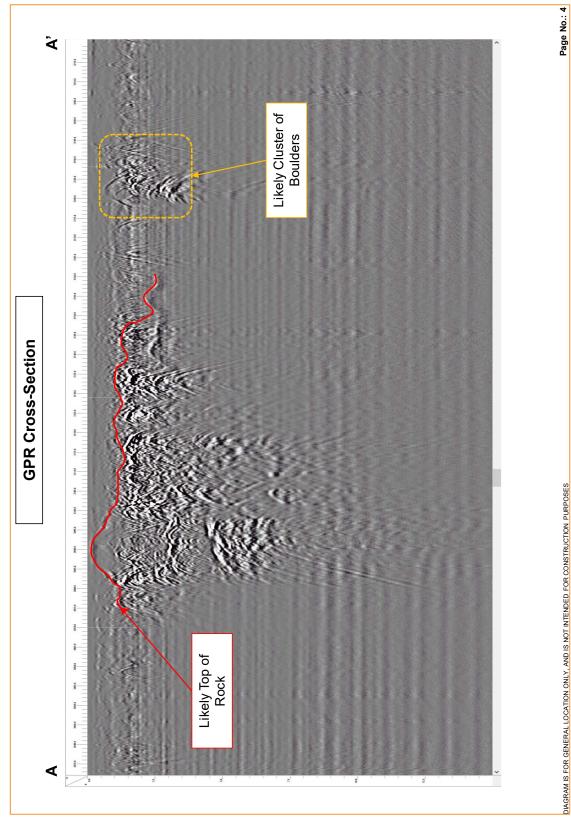
GEOPHYSICAL EXPLORATION RESULTS
Westwood Cemetery Carrboro, NC
August 21, 2020 Terracon Project No. 70205044





Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.





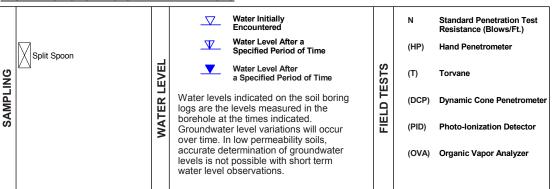
GEOPHYSICAL EXPLORATION RESULTS
Westwood Cemetery Carrboro, NC
August 21, 2020 Terracon Project No. 70205044

Appendix 2. Geotechnical Engineering Report by Terracon Consultants, Inc.

SUPPORTING INFORMATION

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS



DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

FRMS	(More than 50%	Y OF COARSE-GRAINED SOILS retained on No. 200 sieve.) y Standard Penetration Resistance		CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance						
	Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength Qu, (psf)	Standard Penetration or N-Value Blows/Ft.					
ļ	■ Very Loose	0 - 3	Very Soft	less than 500	0 - 1					
10	D Loose	4 - 9	Soft	500 to 1,000	2 - 4					
	Medium Dense	10 - 29	Medium Stiff	1,000 to 2,000	4 - 8					
6	Dense	30 - 50	Stiff	2,000 to 4,000	8 - 15					
	Very Dense	> 50	Very Stiff	4,000 to 8,000	15 - 30					
			Hard	> 8,000	> 30					

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term(s)</u> of other constituents	Percent of Dry Weight	Major Component of Sample	Particle Size
Trace With Modifier	< 15 15 - 29 > 30	Boulders Cobbles Gravel Sand Silt or Clay	Over 12 in. (300 mm) 12 in. to 3 in. (300mm to 75mm) 3 in. to #4 sieve (75mm to 4.75 mm) #4 to #200 sieve (4.75mm to 0.075mm Passing #200 sieve (0.075mm)
RELATIVE PROPORTIO	NS OF FINES	PLAS	TICITY DESCRIPTION

GRAIN SIZE TERMINOLOGY

Descriptive Term(s)	Percent of	<u>Term</u>	Plasticity Index
of other constituents	<u>Dry Weight</u>	Non-plastic	0
Trace	< 5	Low	1 - 10
With	5 - 12	Medium	11 - 30
Modifier	> 12	High	> 30



UNIFIED SOIL CLASSIFICATION SYSTEM

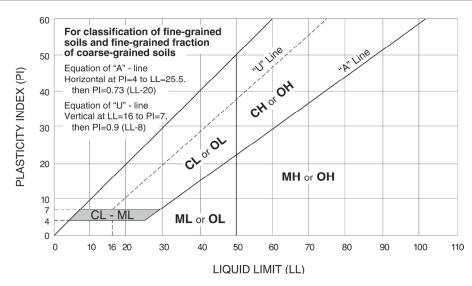
Soil Classification							
Criteria for Assigi	ning Group Symbols	s and Group Names	S Using Laboratory	Fests ^A	Group Symbol	Group Name ^B	
	Gravels:	Clean Gravels:	Cu ≥ 4 and 1 ≤ Cc ≤ 3 ^E		GW	Well-graded gravel F	
	More than 50% of	Less than 5% fines ^C	Cu < 4 and/or 1 > Cc > 3 ^E		GP	Poorly graded gravel F	
	fraction retained on	Gravels with Fines:	Fines classify as ML or M	IH	GM	Silty gravel F,G, H	
Coarse Grained Soils: More than 50% retained	No. 4 sieve	More than 12% fines ^C	Fines classify as CL or CH		GC	Clayey gravel F,G,H	
on No. 200 sieve	Sands:	Clean Sands:	Cu ≥ 6 and 1 ≤ Cc ≤ 3 ^E		SW	Well-graded sand ^I	
311110. 200 diove	50% or more of coarse fraction passes No. 4 sieve	Less than 5% fines D	Cu < 6 and/or 1 > Cc > 3	E	SP	Poorly graded sand I	
		Sands with Fines:	Fines classify as ML or M	IH	SM	Silty sand ^{G,H,I}	
		More than 12% fines D	Fines Classify as CL or C	:H	SC	Clayey sand G,H,I	
		Inorgania	PI > 7 and plots on or above "A" line J		CL	Lean clay K,L,M	
	Silts and Clays:	Inorganic:	PI < 4 or plots below "A" line J		ML	Silt K,L,M	
	Liquid limit less than 50	Owneries	Liquid limit - oven dried	< 0.75	OL	Organic clay K,L,M,N	
Fine-Grained Soils:		Organic:	Liquid limit - not dried	< 0.75	OL	Organic silt K,L,M,O	
50% or more passes the No. 200 sieve		Inorgania	PI plots on or above "A" li	ne	CH	Fat clay K,L,M	
. 10. 200 0.010	Silts and Clays:	Inorganic:	PI plots below "A" line		МН	Elastic Silt K,L,M	
	Liquid limit 50 or more	Organio:	Liquid limit - oven dried	< 0.75	ОН	Organic clay K,L,M,P	
		Organic:	Liquid limit - not dried	< 0.75	ОП	Organic silt K,L,M,Q	
Highly organic soils:	Primaril	y organic matter, dark in o	color, and organic odor		PT	Peat	

- ^A Based on the material passing the 3-in. (75-mm) sieve
- ^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- ^c Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
- D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

E
$$Cu = D_{60}/D_{10}$$
 $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

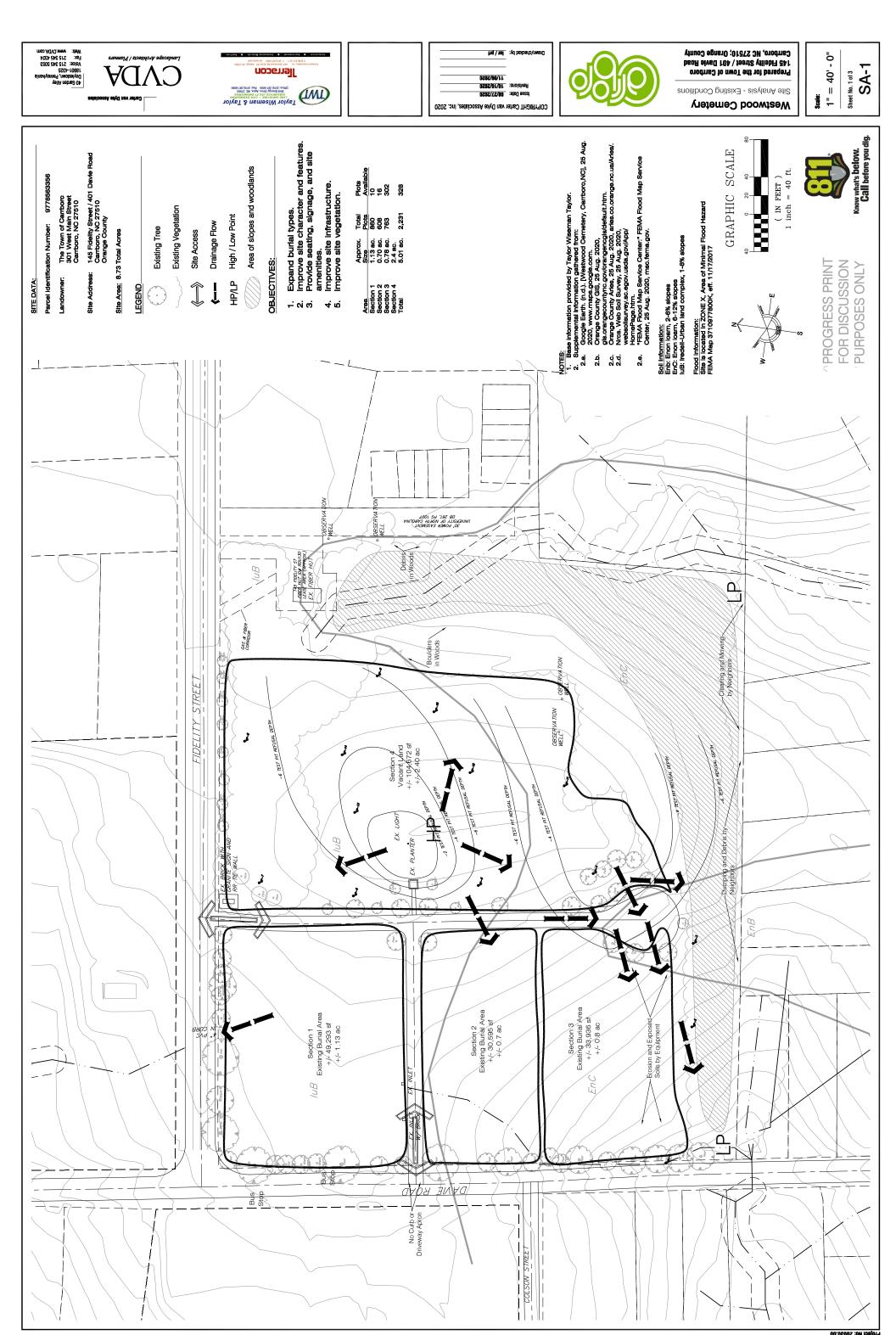
- $^{\text{F}}\,$ If soil contains \geq 15% sand, add "with sand" to group name.
- ^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

- $^{\rm H}$ If fines are organic, add "with organic fines" to group name.
- $^{\text{I}}$ If soil contains \geq 15% gravel, add "with gravel" to group name.
- J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.
- K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
- Let If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.
- $^{\text{M}}$ If soil contains \geq 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
- $^{\text{N}}$ PI \geq 4 and plots on or above "A" line.
- $^{\circ}$ PI < 4 or plots below "A" line.
- P PI plots on or above "A" line.
- Q PI plots below "A" line.



Terracon

Appendix 3.	Site Analysis I	Plans and	Concept	Master	Plans
-------------	-----------------	-----------	---------	--------	-------



The Town of Carrboro 301 West Main Street Carrboro, NC 27510

SITE DATA:

145 Fidelity Street / 4/ Carrboro, NC 27510 Orange County

Site Area: 8.73 Total Acres

Existing Vegetation

Site Access

Existing Tree

Prepared for the Town of Carrboro 145 Fidelity Street / 401 Davie Road Carrboro, NC 27510; Orange County Vegetation & Surrounding Land Use Westwood Cemetery Site Analysis -

GRAPHIC SCALE

1" = 40' - 0"

Sheet No. 2 of 3

SA-2

VolveT & nemesiw volveT

A same and service of the service of the

Area of slopes and woodlands

OBJECTIVES:

- ai a

High / Low Point Drainage Flow

Expand burial types.
Improve site character and features.
Provide seating, signage, and site amenities.
Improve site infrastructure.
Improve site vegetation.

Approx. Size 1.13 ac. 0.70 ac. 0.78 ac. 2.4 ac. 5.01 ac.

Area Section 1 Section 2 Section 3 Section 4 Total

COPYRIGHT Carter van Dyke Associates, Inc. 2020 Plots
Available
10
16
302 Total Plots 860 608 763 2,231

provided by Taylor Wiseman Taylor. ormation gathered from: . (n.d.). [Westwood Cemetery, Carrboro,NC], 25 Aug.

2 2 2 d. c. b

2.e.

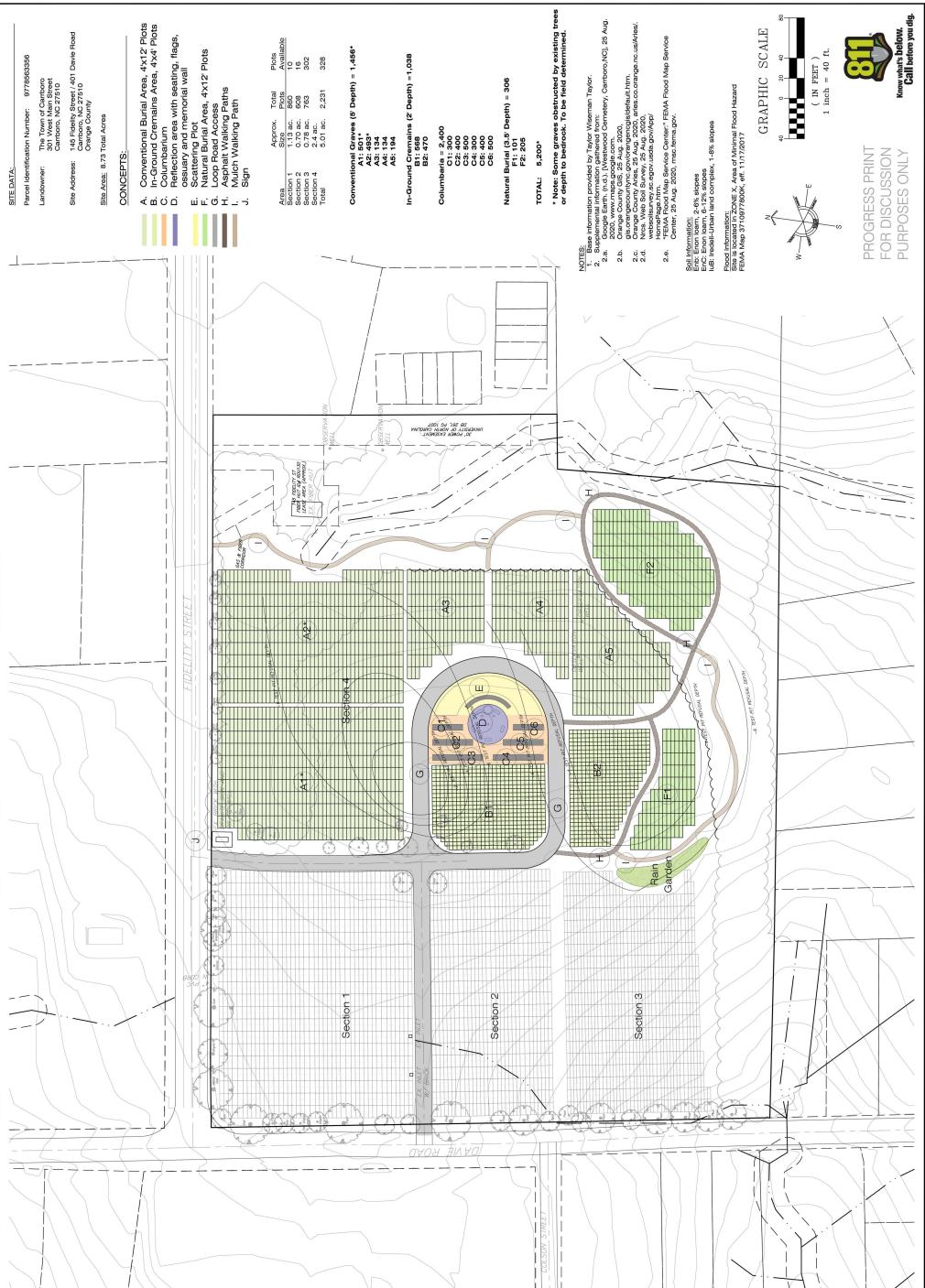
Soil Information: Enb: Enon loam, 2-6% slopes Enc: Enon loam, 6-12% slopes IuB: Iredell-Urban land complex, 1-6% slopes

Flood information: Site is located in ZONE X, Area of Minimal Flood Hazard FEMA Map 3710977800K, eff. 11/17/2017

PROGRESS PRINT FOR DISCUSSION PURPOSES ONLY

0 ð C00 T 10

AO Garden Alley
Doylestown, Pennsylvania
18901-4326
Volce: 215 345 5053
Fax: 215 345 4324
GW. Carrboro, NC 27510; Orange County Drawn/checked by: lar / prf = 40' - 0" Prepared for the Town of Carrboro 145 Fidelity Street / 401 Davie Road <u>გ</u> Terracon Sheet No. 1 of 1 11/09/2020 10/16/2020 Taylor Wiseman & Taylor
LAND SURVEYING | CIVIL ENGINEERING
SUBSURANCE CHILT'R REINBERERING
SOLD ENGRY DITHER, HOST 17862
OMINCE, (1919) 251-0050 Fex. (1919) 551-0050 Cemetery Expansion Concept Layout (IMI) 220e Date: 08/27/2020 Westwood Cemetery COPYRIGHT Carter van Dyke Associates, Inc. 2020 Conventional Burial Area, 4'x12' Plots
 In-Ground Cremains Area, 4'x4' Plots
 Columbarium
 Reflection area with seating, flags, ossuary and memorial wall
 Scattering Plot
 Natural Burial Area, 4'x12' Plots
 Loop Road Access
 Loop Road Access
 Asphalt Walking Paths
 Mulch Walking Path
 Sign SCALE * Note: Some graves obstructed by existing or depth to bedrock. To be field determined. 145 Fidelity Street / 401 Davie Road Carrboro, NC 27510 Orange County Conventional Graves (5' Depth) = 1,456*
A1: 501*
A2: 493*
A3: 134
A4: 134
A5: 194 40 0 20 40 In-Ground Cremains (2' Depth) =1,038 B1: 568 B2: 470 GRAPHIC The Town of Carrboro 301 West Main Street Carrboro, NC 27510 Natural Burial (3.5' Depth) = 306 F1: 101 F2: 205 Total Plots 860 608 763 2,231 Parcel Identification Number: Site Area: 8.73 Total Acres Approx. Size 1.13 ac. 0.70 ac. 0.78 ac. 2.4 ac. 5.01 ac. Columbaria = 2,400 C1:300 C2:400 C3: 500 C4:300 C5:400 C6: 500 TOTAL: 5,200* CONCEPTS: Site Address: Landowner: Area Section 1 Section 2 Section 3 Section 4 Total SITE DATA 4 5 0 0



40 Garden Alley Doylestown, Pennsylvania 18901-4325 Volce: 215 345 4524 Ex: 215 345 4324 Web: www.CVDk.com

nosenall Taylor Wiseman & Taylor Susception of Taylor Charletonic Susception of Cityle Anna Susception of Cityle Anna Susception of Cityle Anna Susception of Cityle Course, (919) 537-0290

(IMI)

Drawn/checked by: lar / prf Revisions: 11/09/2020 220e Date: 08/27/2020 COPYRIGHT Carter van Dyke Associates, Inc. 2020

Prepared for the Town of Carrboro 145 Fidelity Street / 401 Davie Road Carrboro, NC 27510; Orange County

1" = 40' - 0" <u>ე</u> Sheet No. 1 of 1

Cemetery Expansion Concept Layout Westwood Cemetery

The Town of Carrboro 301 West Main Street Carrboro, NC 27510 Parcel Identification Number: Landowner:

145 Fidelity Street / 401 [Carrboro, NC 27510 Orange County Site Area: 8.73 Total Acres

Site Address:

Conventional Burial Area, 4'x12' Plots In-Ground Cremains Area, 4'x4' Plots CONCEPTS:

Countribation of the factor of

Total Plots 860 608 763 2,231 Approx. Size 1.13 ac. 0.70 ac. 0.78 ac. 2.4 ac. 5.01 ac. Area Section 1 Section 2 Section 3 Section 4 Total Conventional Graves (i A1: 501 * A2: 493 * A3: 134 A4: 134 A5: 194

In-Ground Cremains (2' Depth) =1,038 B1: 568 B2: 470

Columbaria = 2,400 C1: 300 C2: 400 C3: 500 C4: 300 C5: 400 C6: 500

Natural Burial (3.5' Depth) = 306 F1: 101 F2: 205

* Note: Some graves obstructed by existing or depth to bedrock. To be field determined. TOTAL:

se information provided by Taylor Wiseman Taylor. polemental information gathered from: Google Earth. (n.d.). [Westwood Gemetery, Carrboro, NC], 25 Aug.

websollsurvey.sc.egov.usda.gov/App/ HomePage.htm. "FEMA Flood Map Service Center." FEMA | Center, 25 Aug. 2020, msc.fema.gov.

Soil Information: Enb: Enon loam, 2-6% slopes Enc: Enon loam, 6-12% slopes IuB: Iredell-Urban land complex, 1-8% slopes

Flood Information: Site is located in ZONE X, Area of Minimal Flood Hazard FEMA Map 3710977800K, eff. 11/17/2017

GRAPHIC SCALE

PROGRESS PRINT FOR DISCUSSION PURPOSES ONLY

0 b Ш Day of the second (a) (a)



Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-65

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Transportation Projects Update

PURPOSE: The purpose of this agenda item is to provide the Town Council with information about the status of various transportation projects around Town.

DEPARTMENT: Planning

CONTACT INFORMATION: Zachary Hallock, 919-918-7329, zhallock@townofcarrboro.org; Tina Moon, 919-918-7325, cmoon@townofcarrboro.org; Trish McGuire, 919-918-7327, pmcguire@townofcarrboro.org

INFORMATION:

The Transportation Projects Update memo can be found as Attachment A.

A summary of all bike-ped data collected by the ITRE automated counters (Dec 2014 through Nov 2020) on the Libba Cotten Bikeway and Old NC Hwy 86 can be found as Attachment B.

FISCAL & STAFF IMPACT: There is no impact associated with receiving the report.

RECOMMENDATION: Staff recommend that council receive the report and provide additional feedback both on the NC 54 crossing locations and potential bike share pilot hub locations.



TOWN OF CARRBORO NORTH CAROLINA

TRANSMITTAL

PLANNING DEPARTMENT

DELIVERED VIA: \square *HAND* \square *MAIL* \square *FAX* \boxtimes *EMAIL*

To: David Andrews, Town Manager

Mayor and Town Council

From: Zachary Hallock, Transportation Planner

Date: March 12, 2021

Subject: Update on Transportation Projects

Summary

In September 2015, (<u>Town of Carrboro - File #: 15-0325 (legistar.com</u>))staff began providing regular updates on transportation projects. This document is intended to provide the most recent update the Town Council on the status of a number of ongoing transportation projects. These include NCDOT managed projects, Town managed projects, bicycle projects & planning, development projects, pedestrian safety projects, and transit projects. The last update was provided on October 13, 2020; agenda materials can be found at <u>Town of Carrboro - File #: 20-367 (legistar.com)</u>

Detailed information was also presented at that meeting for Laurel Ave Parking, Traffic Calming Projects, Unpaved Streets Speed Limits, and Bike Share. Agenda materials can be viewed at Town of Carrboro - File #: 20-368 (legistar.com).

NCDOT Projects

Estes Drive/North Greensboro Street Roundabout Project (U-5846)

The project is ongoing. Staff remains in close contact with NCDOT and will continue to post updates on the Town website (<u>Estes Dr. & North Greensboro Roundabout | Carrboro, NC - Official Website (townofcarrboro.org)</u>. More urgent public information will be provided via news flashes.

[Update] As of early March 2021, work continues on the storm drain pipe and associated boxes.

Merritt Mill/Franklin/E Main/Brewer intersection project (U-5847)

This project is completed as of February 2020. For more information about upcoming changes to E Main Street and this intersection, see the East Main Street Restriping Plan.

NC 54 West – Corridor Study and TIP Projects

The final project report was completed as of December 20, 2019. More information on the study may be found at:

Town of Carrboro - File #: 19-321 (legistar.com)

The purpose of the study was to evaluate existing travel patterns along the NC 54 corridor from Carrboro to I-40, to help determine the need for and appropriate types of improvements, information that would be used to identify possible transportation projects for submittal in the NCDOT prioritization process for state/federal funding. To date, the DCHC MPO Board has decided not to assign points on a proposed project to widen NC 54 in the SPOT process, to allow Carrboro and Orange County an opportunity to reach consensus on a preferred cross section. Operational improvements to NC 54 at Orange Grove Road (R-4821B) have been completed. In August 2020, staff were informed via the DCHC MPO Technical Committee that the operational improvements along NC 54 from Old Fayetteville Road to W Main St (STIP# U-6071), has been delayed six years as a result of the changes HB 77 made to NCDOT finances. HB 77 delayed some projects by extending currently programmed projects over a longer period of time.

[Update] Staff recently learned that NCDOT has engaged a consultant to begin developing possible design options for U-6071; updates will be provided as additional information becomes available.

NC 54 Bike/Ped Safety Study: Old Fayetteville Road to Manning Drive (Chapel Hill)

The final project report was completed as of December 31, 2019. Project documents can be viewed online via the links below.

NC 54 Bike-Ped Safety Study Final Report NC 54 Bike-Ped Safety Study Appendices

[Update] Town staff are currently working with NCDOT Division 7 to prepare applications for Highway Safety Improvement Program (HSIP) funds for two signalized crossing locations: NC 54 @ Westbrook Drive and NC 54 @ Abbey Lane. NCDOT is considering two-phase traffic signals at these locations, which would stop traffic on NC 54 to allow people walking and biking to cross the street, as well as allow for left turn movements. The 2017 Orange County Transit Plan includes funding for a HAWK (High-intensity Activated WalK) signal, which would stop traffic for people walking and biking to cross but would provide a separate signal for left turn movements. Staff are working to confirm that the Orange County Transit Plan funds can be used to supplement NCDOT's application for HSIP funds.

Preliminary design work from NCDOT indicates that the anticipated costs for these crossings is much higher than previously expected, due to the severe grade on either side of the road. Based

on this information, it is likely that there may only be enough funding to install improvements at one crossing during the current funding cycle and the Town will have to confer with NCDOT with regard to the preferred location using a combination of safety data, existing and near future pedestrian infrastructure for connectivity, and public input.

Town Projects

Laurel Avenue Parking

Information about the conditions on Laurel Ave, with regard to on-street parking was provided to the Council on October 13, 2020. More information can be found at <u>Town of Carrboro - File #:</u> 20-368

[Update] Staff were directed to research the conditions on Short Street in Chapel Hill, which is also fairly narrow, but still has on street parking. The Carrboro Fire Department has expressed concern with the use of fire apparatus on narrow streets with prevalent on-street parking. The Chapel Hill Fire Department reported that the on-street parking on Short Street had been in place for a very long time; it is not expected that a similar condition could be created under the current fire code.

Starlite Drive Traffic Calming

Information about the Starlite Drive traffic calming project was last provided to council on October 13, 2020. More information can be found at Town of Carrboro - File #: 20-368

[Update] Staff sent out a mailing to residents of the Lloyd-Broad neighborhood, seeking feedback on a concept plan developed for Starlite Drive designed to address the concerns discussed at the neighborhood meeting that was held on March 7, 2020. There were multiple ways by which residents could provide feedback:

- Return the comment form in the mailing using an envelope address to Town Hall which included postage
- Scanning/emailing the form to Town Staff
- Attending a public meeting held over Zoom on Saturday, February 20
- Commenting on the online concept plan available in Remix
- Calling Town Staff and setting up a time to discuss the concept plan

Ten responses were received from residents: six mailed responses, three emails, and one phone call. Based on the feedback received, support for the proposed modifications were:

- 90% of responses were either "Somewhat Supportive" or "Highly Supportive" of installing a speed table
- 70% of responses were either "Somewhat Supportive" or "Highly Supportive" of installing curb extensions with paint and delineators at the curves in Starlite Drive
- 90% of responses were either "Somewhat Supportive" or "Highly Supportive" of painting a centerline through the curves on Starlite Drive

Staff are working to begin final design for this section. Additional feedback has been received requesting an assessment of possible traffic calming measures for the entire Lloyd-Broad neighborhood.

Barred Owl Creek Traffic Calming

Information about traffic calming for the Barred Owl Creek neighborhood was last provided to council on October 13, 2020. More information can be found at <u>Town of Carrboro - File #: 20-368</u>

[Update]: Staff are in the process of finalizing a plan to take back to the residents of that neighborhood, pending conversations with the Fire Department regarding the fire code.

Unpaved Roads Speed Limits

Information about changing the speed limits on unpaved roads was last provided to council on October 13, 2020. More information can be found at Town of Carrboro - File #: 20-368

[Update] Staff have prepared a survey to gather feedback from residents on the unpaved streets in Town. Once sufficient feedback has been received to identify a preferred speed limit, Town Code amendments to change the speed limit (by individual streets) will be brought back to Council for consideration at a later date. The unpaved streets in Town, that will be surveyed for local input include:

- B Street
- Bert Street
- Broad Street
- Colson Street
- Deer Street
- Dillard Street
- Dove Street

- Goldston Drive
- Hillcrest Avenue
- Hoisery Street
- Hunter Place
- Parker Street
- Rainbow Drive
- Watters Road

Bike Loop Detectors (U-4726-DF)

The Town has advertised the bike loop detector project (the installation of bike loop detectors at North Greensboro at Weaver and Main and Main at Roberson and at the intersection of Poplar at NC 54) twice, first in October 2017 and again in July 2019, without receiving any bids. Staff is working with NCDOT to determine if there may be other ways to move forward with the project, such as an add-on to the resurfacing project for East Main Street, or if the installation could be performed by NCDOT's traffic engineering division.

[Update] In December, Town staff met with NCDOT to discuss the possibility of incorporating the bike loop detectors as part of the East Main Street project—either the resurfacing or the restriping installation and associated signal work. NCDOT advised against combining the federally funded bike loop project with the state funded resurfacing project because of the different construction standards and the rigorous administrative requirements of federal projects.

See the E Main Street resurfacing section for more information. Staff will continue to seek ways to complete the bike loop project.

Homestead Road-Chapel Hill High School Multi-Use Path (U-4726-DE)

The project is completed.

Morgan Creek Greenway (EL-4828A)

The Morgan Creek Greenway is a multiphase greenway system connecting the neighborhoods around Smith Level Road to University Lake. The conceptual plan included two potential alignments for Phase 1: a preferred alignment and an alternate alignment. Challenges associated with the stream crossing intended for the preferred alignment for Phase 1 led the Town to advance a variation of the alternate alignment. This is approximately half-mile of paved multiuse path beginning at the cul-de-sac at Abby Lane, extending to the Smith Level Road Bridge, running under the bridge to connect with a future multi-use path in Chapel Hill, and beginning again, along the south side of Morgan Creek to a turnabout point before the soccer field at the Berryhill Subdivision. Phase 1 of the Morgan Creek Greenway was advertised in June 2019 and re-advertised in August 2019. Two bids came in higher than expected and, per NCDOT procedures, bids are not acceptable if higher than 10-percent above the Engineer's estimate.

[Update] As part of a November 17, 2020 project update (<u>Town of Carrboro - File #: 20-423</u>), staff reported that the Town Engineer, Sungate Design, had conducted a feasibility analysis of the potential Phase 1 crossing and determined that a pedestrian bridge could be permitted, allowing the Town to return to the original preferred alignment for the project, if preferred. Staff was directed to proceed with the original alignment and to refer the item to the Greenways Commission to host a meeting with neighboring residents to discuss the status of the project. The Greenways Commission meeting was held on December 7th, 2020. Staff is working with the Town Engineer to prepare responses to questions from the meeting, including determining the feasibility of the remaining crossings in the greenway system, and seeking additional funding for the redesign costs.

Jones Creek Greenway (C-5181)

Advertisement for engineering services, selection of Wetherill Engineering, and approval of the firm & cost estimate by NCDOT was completed in the fall of 2018. The contract was executed before the end of 2018 and a project kickoff meeting was at the end of January 2019. During this kickoff the public input process was established to include open house input sessions at 15%, 30%, and 60% design. At the beginning of March 2019, planning staff facilitated an internal staff discussion with the police department and school district to discuss issues related to greenway safety. The third public hearing for the project, at 65% design, was held on September 24, 2019. After further assessment for the greenway alignment and discussions with the County with regard to a potential staging areas and right of entry, updated plans, CE documents and environmental permit applications will be submitted to NCDOT in the near future. Staff continues to work with NCDOT to determine the status of CMAQ funds earmarked for construction.

Feedback from ITRE has indicated that if we wish to identify a location for a continuous bicyclepedestrian counter along this greenway, we would be better suited waiting until construction is completed.

[Update] Plans are approaching 90% design, and staff are working with the design consultant to begin the process for acquiring easements as part right-of-way certification. Staff continues to work with NCDOT on the necessary reviews and approvals.

Estes Drive Corridor Study and Bike/Ped Improvements (EB-5886)

This project to consider improvements to Estes Drive from N Greensboro St to the Town Limits was submitted in SPOT 4.0 and accepted to the State Transportation Improvement Program (STIP). Due to the current NCDOT budget crisis, the DCHC MPO has been asked to reprogram the years identified for projects in the STIP, as the previous funding schedule has been spread out over a longer period of time. Staff are working with NCDOT to determine how or if the schedule for this project will be pushed back, and will coordinate with Chapel Hill to ensure consistency between the jurisdictions. More information will be provided at a later date.

[Update] In the fall of 2020, NCDOT asked local governments to provide updated project timelines for locally administrated projects (LAP) delayed from NCDOT's funding suspension. Town staff worked with DCHC MPO to revise the schedule for this project, which is now design in FY 2022, ROW in FY 2024 and construction in FY 2026.

South Greensboro Street Sidewalk (C-5650)

The Town entered into a municipal agreement from NCDOT in the summer of 2018 and a contract with Ramey Kemp Associates (RKA) in 2019 for design services. The scope of work for RKA also include a capacity analysis for the southern section of the corridor from the roundabout at South Green to the bridge over Morgan Creek. The 15% design plans have been completed, and planning staff have coordinated review between Town departments, NCDOT, and external agencies to garner feedback on the design.

[Update] Public meetings were held remotely on the conceptual plan at 30% design on Thursday, January 28th and Saturday, January 30th. Staff have compiled feedback from these meetings and are currently working with the design engineer to develop responses to these comments. As the project moves forward, Town staff will work with the design engineer to incorporate the safety recommendations identified in the NC 54 Bike-Ped safety study, and transit stop improvements identified by Chapel Hill Transit where feasible. More information can be found on the project webpage at: http://townofcarrboro.org/2303/S-Greensboro-Sidewalk

West Main Street Sidewalk

As part of the development of the 2017 Durham and Orange county transit plans, the Town submitted a capital project request for funding to construct a sidewalk along West Main Street between Fidelity Street and Poplar Street. Staff requested delaying the funds for the Main Street

project to a later fiscal year in order to receive funds for the South Greensboro Street sidewalk in an earlier fiscal year. A schedule for moving forward with the West Main Street project has not yet been determined.

Barnes Street Sidewalk (EB-5890) & Jones Ferry Road Sidewalk (EB-5880)

The Barnes Street and Jones Ferry Road sidewalk projects have been programmed for funding in the 2019-2029 STIP. Staff has requested that the start date of these two projects begin in FY 2022, anticipating a schedule of design in FY 2022, ROW acquisition FY 2023 and construction FY 2024. The proximity of the two projects offers an opportunity to seek one contractor to construct both projects if such an arrangement provides an economy of scale benefit. The DCHC MPO is working with NCDOT and local governments to update the schedule for locally administrated projects (LAP) in the STIP, which have been delayed by the suspension.

[Update] In the fall of 2020, NCDOT asked local governments to provide updated project timelines for locally administrated projects (LAP) delayed from NCDOT's funding suspension. Conversations with NCDOT and DCHC MPO staff have altered the schedule for both projects, which is now design in FY 2023, ROW in FY 2024 and construction in FY 2025.

East Main Street Restriping Plan

Draft pavement marking plans were approved by NCDOT in April 2020 and we were informed of the need to prepare additional plans construction the necessary signal modifications that would be required due to the pavement marking changes. Staff are working with Stantec and NCDOT to finalize the pavement marking plans so that work on the signal timing plans can begin on schedule. The resurfacing for this project is anticipated to occur in the summer of 2021.

[Update] Final pavement marking plans have been submitted to NCDOT and signal plans are nearing completion and are expected to be submitted in time to meet necessary deadlines for NCDOT review and approval. As part of this process, there are some pavement markings (referred to as Standard Markings) that will be installed by NCDOT's resurfacing contractor. These include things like travel lane lines, bike lane markings, and crosswalks. Other work such as specialized markings (bike boxes, conflict markings, and green thermoplastic) and required traffic signal modifications will need funding and installation to be handled by the Town through a separate bidding process. Staff will bring a request for additional funding to the Council as part of approval of a contractor for construction. While the idea of incorporating the federal bike loop detectors into a single project with the state restriping project has proved problematic, Town staff are continuing to explore the feasibility of advertising the two separate projects at the same time with the hope that the combined cost of the two projects may increase the likelihood of receiving acceptable bids.

Coordination with NCDOT and OWASA has revealed that a water line replacement will be needed under the section of E Main Street where the resurfacing is to occur. Because of this, NCDOT is considering delaying the resurfacing of E Main St, as resurfacing the street prior to the water line replacement would result in tearing up a newly completed resurfacing. As to whether NCDOT would delay the entire resurfacing or just the portion impacted by the water

line replacement has yet to be determined. Staff will provide an update on the timing of the resurfacing and the water line replacement as more information becomes available.

Jones Ferry Road – Protected Bike Lanes

Town staff have been working with NCDOT Division 7 and Division of Bike/Ped Transportation to identify potential treatments for protected bike lanes on Jones Ferry Road, an interest identified as part of the Spot Safety Improvement Project for the corridor. To date, discussions with Public Works and NCDOT have focused on concerns over cost, maintenance, snow clearance, and transit operations. Based on feedback received from NCDOT during the Bike Plan Update, staff have currently identified a set of potential treatments which could be used as different test areas along the corridor. Town Staff met again with NCDOT Division 7 and NCDOT Bike/Ped on January 27th, 2020 to finalize test zones along the corridor as part of a pilot project. This pilot is expected to last at least one year and will include data collection of vehicle volumes, speeds, and bicycle volumes (before, during, and after the pilot); public input sessions; and survey to gauge public perceptions of safety and preferred treatment.

Recent communication with NCDOT Division 7 has indicated that, if desired, the Town could proceed with a protected bike lane installation using standard white delineator poles for vertical separation, installed through encroachment agreement. Staff are currently developing an encroachment agreement application, with the goal of starting the pilot before the end of this fiscal year.

[Update] Staff submitted an encroachment agreement to install the protected bike lane pilot project along Jones Ferry Road to NCDOT Division 7. Pending their review and approval, this pilot project could be installed at the beginning of the summer with the goal of being in place for one year. Staff anticipate collecting supporting data such as motor vehicle volumes/speed, bike/ped counts, and feedback from people who travel along the corridor regardless of mode. Additional information about this project will be provided as it develops.

Bicycle Projects and Planning

Bicycle Transportation Plan Update

On September 22nd, the Council set the public hearing to consider adoption for October 27th, this item was also referred to the Planning Board, Transportation Advisory Board, and Environmental Advisory Board for comment. A presentation was made to the Joint Advisory Boards on October 1st.

[Update] Council adopted the Updated Bicycle Plan on January 12, 2021. Town staff are working with the MPO to include this the projects identified in the plan in the DCHC MPO's Comprehensive Transportation Plan (CTP) and the DCHC MPO/CAMPO 2050 Metropolitan Transportation Plan (MTP) that is currently in development. Town staff also expect to work with the Transportation Advisory Board to provide recommendations on prioritizing some of the smaller projects identified in the plan for implementation by the Town.

Bicycle Friendly Communities Application

Staff will use information from the BFC scorecard and priority projects identified in the Updated Bike Plan to better situate the Town for the next application for the BFC program in 2023.

Bike Share

Staff have been continuing to coordinate with both the Town of Chapel Hill and Gotcha (the current bike share provider for UNC) to develop a potential pilot program to operate in both towns. Additional information as to the specifications of the program have been provided as a separate agenda item.

[Update] Staff from UNC and the Towns of Carrboro and Chapel Hill met with leadership from Bolt, the bikeshare/micromobility company which has acquired Gotcha. Discussions indicated that a pilot project as previously discussed could still be implemented, depending on the Town's interests. This pilot would run through the end of UNC's current contract with Bolt/Gotcha, in May 2022.

As another option, the Town of Chapel Hill and UNC have begun discussion with Bolt/Gotcha about relocating a currently underutilized bikeshare hub, and associated bikes, from its location on campus to the intersection of W Franklin St and Church St. The Town of Chapel Hill is developing a licensing agreement with Bolt/Gotcha to allow them to place a bikeshare hub on Town property. This would help expand the service area of the existing bikeshare system, with the hopes that it would increase utilization of the existing bikes. If desired, Carrboro can consider relocating the bikeshare hub that is located at the end of the Libba Cotten (as the UNC building there is now vacant). Possible locations to consider might include the parking lot at Town Hall, the Town-owned parking lots near the Century Center, or the on-street parking on E Weaver St. As with the e-bike pilot mentioned previously this program would only be expected to run through the end of UNC's current bikeshare contract in May 2022.

Pathway Drive Bike Boulevard

There has been no change on this item from the previous report.

Cobblestone Colfax Connector

There has been no change on this item from the previous report.

Cobblestone Drive Traffic Calming

This traffic calming project is completed. Follow up traffic count to assess the effectiveness of the installed devices will be scheduled at a later date, pending return to normal travel and commuting patterns.

[NEW] ITRE Continuous Bike-Ped Counters Data

Town staff have access to continuously collected Bike-Ped count data from two counters installed by NCDOT/ITRE at two locations in Town: Libba Cotten east of Brewer Lane and Old NC 86 north of Hillsborough Road. These locations use a combination of inductive loops (to detect bicycles) and infrared sensors (to detect people) to count bicycle and pedestrian activity at these locations 24/365. The data from these counters is subject to cleaning/validation, a task which is handled by the staff at the NC State Institute for Transportation Research and Education (ITRE). More information about this program which established these two counter in Carrboro can be found online at: https://itre.ncsu.edu/focus/bike-ped/nc-nmvdp/

A summary report of continuous count data collected at these two locations from Nov 2014 through Nov 2020 can be found as Attachment B.

This continuous count data is helpful for developing adjustment factors both daily (so that counts less than 24-hrs in length can be converted to a daily estimate) and seasonal (so counts collected during different times of the year can be converted to an annual average). This helps ensure consistent comparison between different count durations (peaks, 13-hr, 16-hr) and those collected during different times of year when travel patterns are different.

Development Projects

Lloyd Farm Development Traffic Mitigation

The approval of the conditional zoning for the Lloyd Farm development included a condition requiring the developer to provide \$15,000 to be used on traffic calming efforts in the Barred Owl Neighborhood. This was included due to the concerns of surrounding residents that the development would bring additional traffic into their neighborhood. Residents have expressed interest in modifying the access to/from Carol Street at Old Fayetteville Road. Staff are working to schedule a public meeting to gather input on resident preferences for changes to that location.

[Update] Staff are currently in the process of developing traffic calming solutions to address the existing conditions on Carol Street. Staff expect to re-assess conditions on the street after at least the first phase of the development is completed.

Pedestrian Safety Projects

Locations Based on Requests from Residents & TAB Members

Planning and Public Works continue to coordinate on the development of preliminary designs, to be used for encroachment agreement to make modifications to NCDOT streets or on Town Streets, for the following locations:

- N Greensboro St @ Pine St: High-visibility crosswalk markings and signage
- Culbreth Rd @ Rossburn Way: High-visibility crosswalk markings and signage
- Old Pittsboro Road: Shared Lane Markings and Bicycle Wayfinding

• Roberson Street @ Libba Cotten: Intersection Safety Markings

A number of other locations are still under consideration; however, both the current COVID-19 pandemic's impact on travel patterns and NCDOT's suspension of projects has had an impact on the previously anticipated schedule for these projects. Additionally, NCDOT has indicated that neither Rapid Rectangular Flashing Beacons (RRFBs) nor High-intensity Activated WalK (HAWK) signals are acceptable for installation within an intersection. Data collection is required to support a traffic signal warrant and will be scheduled when conditions are supportive.

- W Main St @ Hillsborough Rd: Traffic Signal and/or Pedestrian Median Island
- Hillsborough Rd @ James St: Traffic Signal
- N Greensboro St @ Shelton St: Traffic Signal
- W Main St @ W Weaver Street: Bike Boxes, Bike Loop Detectors, Bike Lane Intersection Markings, Curb Radii revisions, and Pedestrian Signal Heads where needed

The status of the pedestrian safety projects, which have been prioritized based on several factors: cost estimates, traffic volumes, bike-ped counts, safety data and input from the TAB is described in the table on the following page.

[Update]: Preliminary design work for crossing improvements on N Greensboro Rd @ Pine St and a pedestrian refuge island & ADA ramps on Old NC 86 @ Hillsborough Rd have been completed.

	NAME	Identified Improvement	Current Status		
_	Weaver @ E Main St	Pavement markings (NCDOT)	Resurfacing to occur in Summer 2021		
l e	N Greensboro @ Oak St	High-vis crosswalk (covered by STIP, includes PHB)	Fator Crossehous Boundahout to be soundated by Contourbou 2021		
erf	N Greensboro @ Williams St	High-vis crosswalk (covered by STIP, includes PHB)	Estes-Greensboro Roundabout to be completed by September 2021		
NCDOT to Perform	N Greensboro @ Hillsborough Rd	High-vis crosswalk (covered by ADA ramps) & RRFB			
b	Jones Ferry @ Bim St	High-vis crosswalk (covered by ADA ramps)	Timeline for ADA or and a consistent due to NCDOT had a to a constant		
8	W Main @ Poplar Ave	High-vis crosswalk	Timeline for ADA upgrades uncertain due to NCDOT budgetary constraints		
Z	N Greensboro @ Robert Hunt Dr	High-vis crosswalk (covered by ADA ramps)			
	S Greensboro @ Merritt Mill Rd	Bicycle improvements and ped signal heads	Improvements identified in the NC 54 Safety Study working to be incorporated into the		
	5 dicensors & Memic Min Na	bicycle improvements and ped signal nedds	Design of the S Greensboro Sidewalk Project		
	 Weaver @ E Main St	Ped heads or signal modifications	EMSOA will address pavement markings and signal timing modifications, will assess		
	Weaver & Liviani se		signal heads after completion of resurfacing		
	W Main @ W Weaver	High-vis crosswalks, bike lane markings, bike boxes, curb extensions & ped signal heads	Collect data to assess need for bike boxes; coordination with NCDOT ADA upgrades		
nent	W Main @ Jones Ferry Rd	Bicycle improvements, marked crosswalk ped signal heads	Beginning preliminary design to add missing crosswalk, other items on hold pending bike plan recommendation		
eeu	Merritt Mill Rd @ Cameron St	Bicycle improvements and ped signal heads	On hold pending future coordination with Chapel Hill		
Agr	N Greensboro @ Pine St	High-vis crosswalk, ADA ramps	Preliminary design Completed		
ment	Hillsborough @ James St	Traffic signal with pedestrian signals	Insufficient width for refuge island, collect data to assess signal warrant, survey needed		
Jach	Jones Ferry @ Davie Rd	Bicycle intersection improvements	On hold pending protected bike lane pilot		
n Encre	W Main @ Hillsborough Rd	Median island and/or traffic signal	Assessing width for refuge island, collect data to assess signal warrant, survey needed		
perform through Encroachment Agreement	N Greensboro @ Shelton St	Traffic signal	Collect data to assess signal warrant or crossing demand for RRFB, survey data needed		
Į į	NC 54 @ Westbrook Dr	PHB or HAWK or traffic signal	Recommendation identified in NC 54 Safety Study, funded through OC Transit Plan		
perfor	Hillsborough @ High/Cheek St	Hi-vis x-walk	Need to consider additional sidewalk due to lack of connection infrastructure needed for NCDOT to approve crosswalk		
Q	W Main @ Ashe St	Hi-vis x-walk and ada curb ramps	Beginning preliminary design		
Town to	Old NC 86 @ Hillsborough Rd	Pedestrian refuge island, ada curb ramps	Preliminary design Completed		
P	Jones Ferry Protected Bike Lane	Physical delineation to place in buffer	Sungate has completed exhibit, Staff identified budget, working to develop encroachment application		
	W Main @ High/Westview	Hi-vis crosswalk and RRFB (Rectangular Rapid Flashing Beacon)	Need to consider additional sidewalk due to lack of connection infrastructure needed for NCDOT to approve crosswalk		
	Homestead @ Claremont Rd	Lighting & RRFB plus median island	Beginning preliminary design		
	Culbreth Drive and Rossburn way	Hi-vis crosswalk	Preliminary design completed		
	Hillsborough @ McDougle Driveway	Pedestrian refuge island	Beginning preliminary design		
9 E	Roberson @ Libba Cotten	Raised intersection or green paint	Preliminary design completed		
Town to perform	Old Pittsboro Rd	Sharrows and bike route (or Bike Blvd)	Preliminary design completed		
Toy	Cobblestone Connector	Widen sidewalk to 10' Multi Use Path (MUP)	Sungate has completed concept design, on hold due to low priority.		
	- II I	nam - Danieu Camanlata d			

Preliminary Design Completed
Preliminary Design In Progress
Project on Hold
Additional data collection, survey work, or supporting infrastructure required

Downtown Safety Improvements/Slow Zone

Conversations with NCDOT have indicated that the State Traffic Engineer will generally not approve speed limits lower than 25 MPH on state maintained facilities due to the difficulties with enforcement. In light of this, staff are working to pursue engineering improvements to help manage vehicle speeds within and around downtown including: Leading Pedestrian Interval (LPI), the East Main Street Restriping Proposal, and Pedestrian Safety Projects (mentioned above). Additionally, implementing No Right Turn on Red (RToR) can be investigated but is a more detailed process, which will require approval from the State Traffic Engineer.

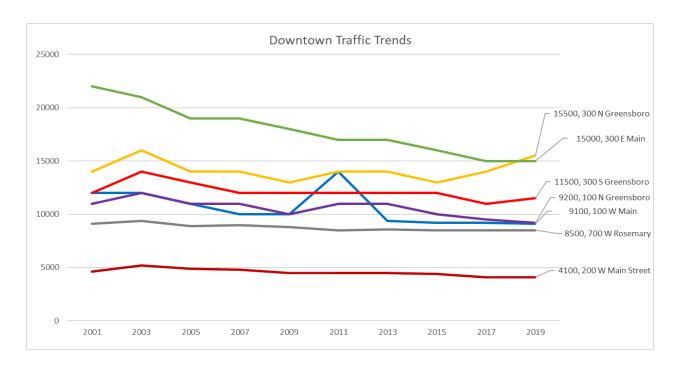
[Update] There has been renewed interest in pursuing a Slow Zone in the downtown area, noting the 20 MPH speed limit in downtown such as Asheville and Goldsboro. Research into these communities revealed that these speed limits have been in place for a long time and predate the existing NCDOT policy of not allowing speed limits less than 25 MPH, unless other roadway characteristics (such as on-street parking and presence of a roundabout) justify a lower speed limit.

Town staff have reached out to NCDOT for information on existing policies relating to speed limits in downtown areas, and have scheduled a meeting to discuss further on March 19th. In the interim, Town staff from Planning, Public Works, and Police departments met on March 5th to review initial comments from NCDOT, current Town-collected speed data, and the Police Department's current enforcement practices. Other measures that staff have been putting into practice to help reduce speeds and shift the priority traveler from motor vehicles to pedestrians and people on bicycles noted above. Projects to redesigning street cross sections to provide for fewer or narrower lanes of vehicular travel in exchange for bike lanes or other improvements are also underway, on East Main Street and South Greensboro Street/Smith Level Road. A segment of North Greensboro Street has also been identified for a possible feasibility analysis to determine if a different cross section would be suitable.

A more focused discussion on the slow zone has been tentatively scheduled for April 2021.

Downtown Traffic Volume Trends

In the past, the Board of Aldermen received updates on traffic volume counts and traffic operations within the downtown area. As an alternative to a detailed traffic analysis, a review of the historic trends in available Annual Average Daily Traffic (AADT) as collected by NCDOT can be an efficient way to gain useful insights. The table below displays the AADT volumes collected between 2001 and 2019 for locations at: 100 W Main St, 300 E Main St, 300 N Greensboro St, 100 N Greensboro St, 300 S Greensboro St, 700 W Rosemary St, and an aggregate total volume. While the majority of locations have seen flat or mild fluctuations in AADT, the 300 E Main Street location has consistently trended downwards during this period (a decrease of about 32%). This item has been updated with NCDOT 2019 AADT volumes.



Safe Routes to School Implementation Committee

Due to the restrictions in place to limit the spread of COVID-19, the call for applicants to the SRTS Implementation Committee is delayed. Staff are working to determine the best method to identify interested community members and reconvene this group as a subcommittee of the Transportation Advisory Board.

[Update] Staff currently expect to issue a call for applicants to the SRTS committee before the end of this school year, with the goal of inviting applicants to a Transportation Advisory Board meeting in June.

Transit Projects

2020 Orange County Transit Plan

The OCTP is funded by the transit dedicated half-cent sales tax that was approved by Orange County voters in 2012. The current OCTP was adopted in 2017 and can be viewed online at: https://gotriangle.org/sites/default/files/publications/orange-county-transit-plan_170424_app.pdf

While it can be unclear what improvements Carrboro is getting out of a transit plan, as our service is operated by Chapel Hill Transit, there are a number of capital improvements which enhance transit service (such as upgraded bus stops and greenways/sidewalks) that received funding from the 2017 plan. Summarized below are the projects in Carrboro:

Туре	Description	Year
Transit	Transit Bus stop improvements for the 405 Route in Carrboro	
Transit	Two new shelters for bus stops in Carrboro	FY18-20
Access	Morgan Creek Greenway	FY18-20
Access	S Greensboro St Sidewalk	FY18-20
Access	W Main St Sidewalk	FY18-20
Access	NC 54 Hawk Signal	FY18-20
Access	Estes Drive Corridor Study and Bike Ped Improvements	FY21-22

The framework for the 2020 Orange County Transit Plan (OCTP) was approved by the Orange County BOCC in November 2019, to update the plan due to the discontinuation of the Durham-Orange Light Rail project. On August 27, 2020, Orange County announced that it would begin public engagement and outreach to develop a new plan, including a public survey, which can be found online at https://www.surveymonkey.com/r/OCTransit. On Thursday, October 1st, 2020, the first Orange County Transit Summit was held via Zoom. Staff are working to coordinate with the Transit Plan team to ensure that capital projects from the previous plan are carried over to the new plan. For more information about the plan update and ways to get involved, visit the project website at https://octransit2020.com/

[Update] OCTP policy committee meetings were held on February 12, and March 12 2021. The Orange County Transit Plan 2020 is expected to be completed in June or July of 2021.

CHT Short Range Transit Plan (SRTP) Service Changes

Due to the restrictions in place to limit the spread of COVID-19, Chapel Hill Transit has only proceeded with partial implementation of the SRTP and is currently running a reduced schedule, which began on August 3rd.

- The following routes are running 7 days a week, plus some holidays: A, CM, CW, D, J, NS, NU, & U.
- The following routes are running Monday through Friday: FCX, HS, RU, & S
- The Senior Shuttle and EZ Rider are running on regular schedule.
- The Carrboro Plaza Park and Ride has ceased being a PnR lot as of August and will no longer be served. Riders should use the Jones Ferry Park and Ride lot, approximate three-quarters (3/4) mile away.

Several routes have no changes identified in the SRTP, these are the J, JFX, NS, RU, and U routes. Several routes will no longer run, but service will be provided by other routes. The routes and their substitutes are shown on the next page.

Route going out of service	Routes to switch to
CPX route	CM route, JFX route
HU route	B route
V route	NS route, N route
FG route (Saturday)	A route
JN route (Saturday)	J route, N route

More information can be found at:

https://www.townofchapelhill.org/government/departments-services/transit/service-changes

[Update] Chapel Hill Transit is assisting with access to vaccination sites in Chapel Hill, Carrboro, and UNC Health in Hillsborough. Some seniors (or other residents) may not be EZ Rider customers and for trips to vaccination sites, the EZ Rider certification process is waved. More information can be found at: https://www.townofchapelhill.org/government/departments-services/transit/transit-covid-19-update

North-South Bus Rapid Transit (NSBRT)

On September 22nd, the Chapel Hill Transit Partners received an update on the current status NSBRT Project. The following information was provided:

- Chapel Hill Transit staff applied for the NEPA Class of Action request on 8/13/20.
- CHT staff declined to request a project re-evaluation (declining does not have an impact on the project, unless the resubmittal is required by the FTA) as there are changes underway that could influence the rating in the future:
 - o Chapel Hill Future Land Use Map & Land Use Management Ordinance updates
 - o North Chapel Hill Master Plan
 - o East Rosemary Redevelopment
 - o Orange County Transit Plan
- The NSBRT has applied for \$35M in state funds under SPOT 6.0, there are \$14.1M in allocated funds from the Orange County Transit Plan, and the project will be seeking the maximum \$99M in Federal Funding through the Small Starts process.

[Update] On October 20, 2020 Chapel Hill Transit received word that the Federal Transit Administration (FTA) determined the National Environmental Protection Act (NEPA) class of action for the NSBRT as a Documented Categorical Exclusion (DCE). Completion of the DCE is required prior to undertaking any further design/engineering work.

On December 16, 2020 Chapel Hill Transit was selected to receive grant from the FTA to plan for transit-oriented development (TOD) around the NSBRT. More information about this grant program can be found at: https://www.transit.dot.gov/about/news/us-department-transportation-announces-over-6-million-grant-awards-improve-transit

Chapel Hill Transit staff are currently developing the Request for Qualifications (RFQ) for the final design of the NSBRT and a Request for Proposals (RFP) for the associated grant-funded TOD planning. The NEPA documentation, as required by the FTA, is also underway.

Carrboro Trolley

Based on conversations with previous Economic Development Director Annette Stone, and Chapel Hill Downtown Partnership director Matt Gladdek, this project has been defined as more of a cultural attraction amenity rather a transportation project. It is recommended that a service provider other than Chapel Hill Transit be considered to provide the type of service desired.



NCDOT Non-motorized Volume Data Program

Annual Data 02/20/2021

Carrboro - Libba Cotten Bikeway, Bicycles

North Carolina DOT

December 12, 2014 → November 30, 2020

Disclaimer for Annual Data Use

The annual data stored and accessed in Eco-Visio 5 are verified and validated. These data have been subjected to the NC NMVDP's quality control, quality assurance, and validation procedures and meet the criteria and standards of official NC NMVDP data. Invalid data resulting from equipment malfunction or other sources of error have been removed and sitespecific correction factors have been applied to adjust for undercounting or overcounting that may have occurred at a site.



Disclaimer for Public Dashboard Use

The data and visuals provided in this dashboard are publicly accessible. Please do not edit the layout or content. Please provide any questions, comments, or feedback to Sarah Searcy at NC State University

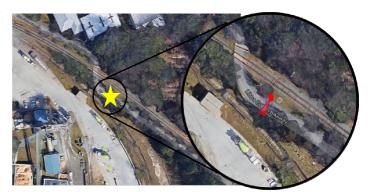




Location Diagram Description

The figure to the right represents the counting sensor configuration at this location. Stars = counting systems; red triangles = pedestrian detection zones; blue & yellow diamonds = bicycle detection zones.

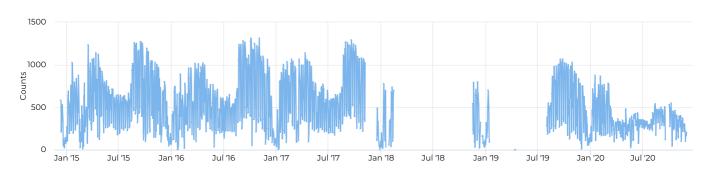




Count Locations



Annual Data



Average Daily Total Volume

Daily Average

511



Carrboro - Libba Cotten Bikeway, Bicycles

North Carolina DOT

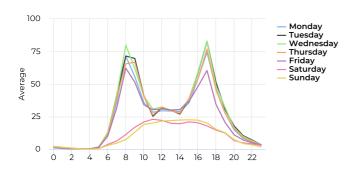
December 12, 2014 → November 30, 2020

Tabular Data

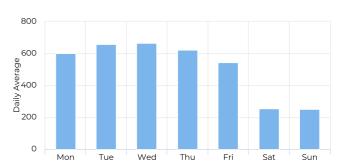
Time	Carrboro - Libba Cotten Bikeway, Bicycles Carrboro - Libba Cotten Bikeway, Bicycles
Dec 12, 2014 12:00 AM	1
Dec 12, 2014 1:00 AM	1
Dec 12, 2014 2:00 AM	0
Dec 12, 2014 3:00 AM	1
Dec 12, 2014 4:00 AM	0
Dec 12, 2014 5:00 AM	1
Dec 12, 2014 6:00 AM	7
Dec 12, 2014 7:00 AM	46
Dec 12, 2014 8:00 AM	56

Showing 1 to 10 out of 52,344 entries

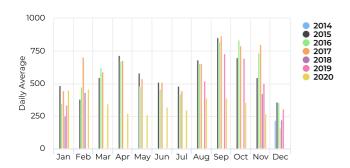
Average Volume by Hour of Day



Average Volume by Day of Week



Average Daily Volume by Month



Carrboro - Libba Cotten Bikeway, Pedestrians

North Carolina DOT

December 12, 2014 → November 30, 2020

Disclaimer for Annual Data Use

The annual data stored and accessed in Eco-Visio 5 are verified and validated. These data have been subjected to the NC NMVDP's quality control, quality assurance, and validation procedures and meet the criteria and standards of official NC NMVDP data. Invalid data resulting from equipment malfunction or other sources of error have been removed and sitespecific correction factors have been applied to adjust for undercounting or overcounting that may have occurred at a site.



Disclaimer for Public Dashboard Use

The data and visuals provided in this dashboard are publicly accessible. Please do not edit the layout or content. Please provide any questions, comments, or feedback to Sarah Searcy at NC State University

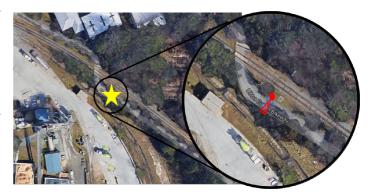




Location Diagram Description

The figure to the right represents the counting sensor configuration at this location. Stars = counting systems; red triangles = pedestrian detection zones; blue & yellow diamonds = bicycle detection zones.

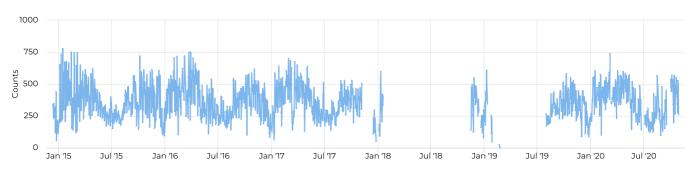




Count Locations



Annual Data



Average Daily Total Volume

Daily Average

355



Carrboro - Libba Cotten Bikeway, Pedestrians

North Carolina DOT

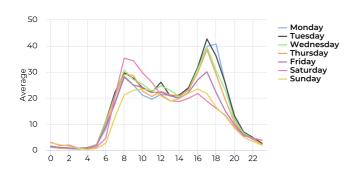
December 12, 2014 → November 30, 2020

Tabular Data

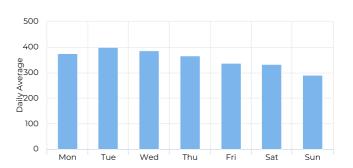
Time	Carrboro - Libba Cotten Bikeway, Pedestrians Carrboro - Libba Cotten Bikeway, Pedestrians
Dec 12, 2014 12:00 AM	2
Dec 12, 2014 1:00 AM	0
Dec 12, 2014 2:00 AM	0
Dec 12, 2014 3:00 AM	0
Dec 12, 2014 4:00 AM	0
Dec 12, 2014 5:00 AM	1
Dec 12, 2014 6:00 AM	7
Dec 12, 2014 7:00 AM	11
Dec 12, 2014 8:00 AM	58

Showing 1 to 10 out of 52,344 entries

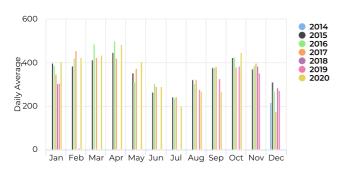
Average Volume by Hour of Day



Average Volume by Day of Week



Average Daily Volume by Month



Carrboro - Old Highway 86, Bicycles

North Carolina DOT

December 12, 2014 → November 30, 2020

Disclaimer for Annual Data Use

The annual data stored and accessed in Eco-Visio 5 are verified and validated. These data have been subjected to the NC NMVDP's quality control, quality assurance, and validation procedures and meet the criteria and standards of official NC NMVDP data. Invalid data resulting from equipment malfunction or other sources of error have been removed and site-specific correction factors have been applied to adjust for undercounting or overcounting that may have occurred at a site.



Disclaimer for Public Dashboard Use

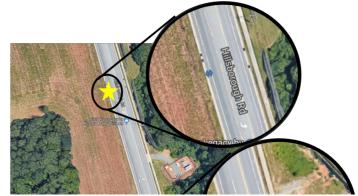
The data and visuals provided in this dashboard are publicly accessible. Please do not edit the layout or content. Please provide any questions, comments, or feedback to Sarah Searcy at NC State University



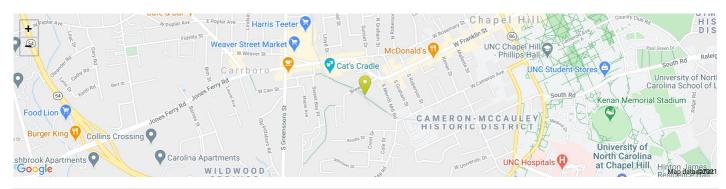
Location Diagram Description

The figure to the right represents the counting sensor configuration at this location. Stars = counting systems; red triangles = pedestrian detection zones; blue & yellow diamonds = bicycle detection zones.

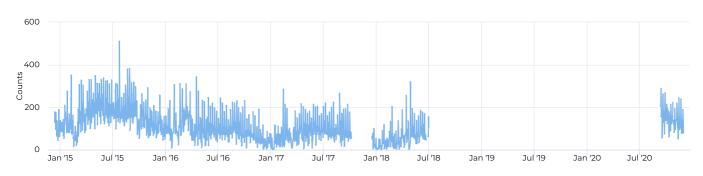




Count Locations



Annual Data



Average Daily Total Volume

Daily Average

112



Carrboro - Old Highway 86, Bicycles

North Carolina DOT

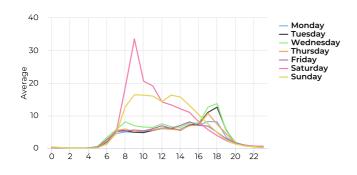
December 12, 2014 → November 30, 2020

Tabular Data

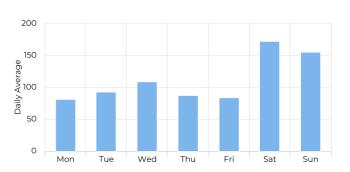
Time	Carrboro - Old Highway 86, Bicycles Carrboro - Old Highway 86, Bicycles
Dec 12, 2014 12:00 AM	1
Dec 12, 2014 1:00 AM	0
Dec 12, 2014 2:00 AM	0
Dec 12, 2014 3:00 AM	0
Dec 12, 2014 4:00 AM	0
Dec 12, 2014 5:00 AM	0
Dec 12, 2014 6:00 AM	0
Dec 12, 2014 7:00 AM	6
Dec 12, 2014 8:00 AM	8

Showing 1 to 10 out of 52,344 entries

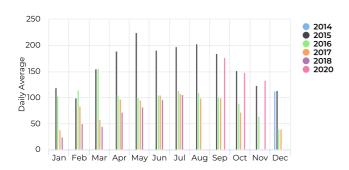
Average Volume by Hour of Day



Average Volume by Day of Week



Average Daily Volume by Month



Carrboro - Old Highway 86, Pedestrians

North Carolina DOT

December 13, 2014 → November 30, 2020

Disclaimer for Annual Data Use

The annual data stored and accessed in Eco-Visio 5 are verified and validated. These data have been subjected to the NC NMVDP's quality control, quality assurance, and validation procedures and meet the criteria and standards of official NC NMVDP data. Invalid data resulting from equipment malfunction or other sources of error have been removed and sitespecific correction factors have been applied to adjust for undercounting or overcounting that may have occurred at a site.

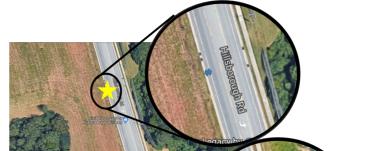




Disclaimer for Public Dashboard Use

The data and visuals provided in this dashboard are publicly accessible. Please do not edit the layout or content. Please provide any questions, comments, or feedback to Sarah Searcy at NC State University





Location Diagram Description

The figure to the right represents the counting sensor configuration at this location. Stars = counting systems; red triangles = pedestrian detection zones; blue & yellow diamonds = bicycle detection zones.

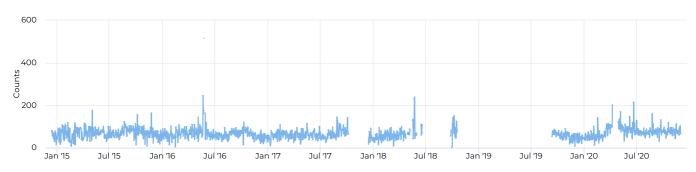




Count Locations



Annual Data



Average Daily Total Volume

Daily Average

67



Carrboro - Old Highway 86, Pedestrians

North Carolina DOT

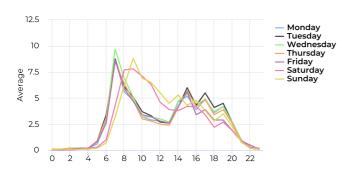
December 13, 2014 → November 30, 2020

Tabular Data

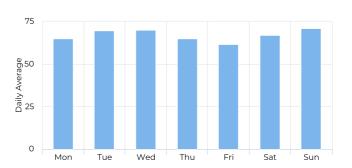
Time	Carrboro - Old Highway 86, Pedestrians Carrboro - Old Highway 86, Pedestrians
Dec 13, 2014 12:00 AM	0
Dec 13, 2014 1:00 AM	0
Dec 13, 2014 2:00 AM	0
Dec 13, 2014 3:00 AM	0
Dec 13, 2014 4:00 AM	0
Dec 13, 2014 5:00 AM	0
Dec 13, 2014 6:00 AM	1
Dec 13, 2014 7:00 AM	2
Dec 13, 2014 8:00 AM	3

Showing 1 to 10 out of 52,320 entries

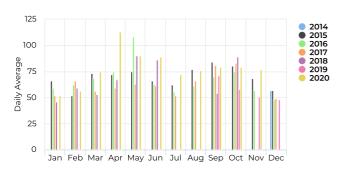
Average Volume by Hour of Day



Average Volume by Day of Week



Average Daily Volume by Month





Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-78

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Information on Text Amendments Required as part of G.S. Chapter 160D, Part 3

PURPOSE: The purpose of this item is provide the Town Council with the third installment of draft text amendments to the Land Use Ordinance required by the adoption of G.S. Chapter 160D.

DEPARTMENT: Planning Department

CONTACT INFORMATION: Christina Moon - 919-918-7325, cmailto:cmoon@townofcarrboro.org; Marty Roupe - 919-918-7333, mroupe@townofcarrboro.org; Patricia McGuire - 919-918-7327, pmcguire@townofcarrboro.org; Patricia McGuire - 919-918-7327, pmcguire@townofcarrboro.org; Nick Herman - 919-929-3905, gnherman@broughlawfirm.com

INFORMATION: This agenda item is provided as the third update on the preparation of amendments to the Land Use Ordinance to conform with new regulations from the G.S. adoption of Chapter 160D. As noted previously, since amendments are numerous and will be made throughout the Land Use Ordinance, a plan and schedule was offered to bundle the changes by topical areas and present in a series of installments during the winter/spring in preparation for a single public hearing in May/June. The schedule is designed to allow time for the Council to ask questions or request additional information so that action on the required amendments can occur before the deadline of July 1, 2021.

Agenda materials include a draft ordinance that incorporates all the currently anticipated changes for eight articles: I, II, XIII-XVI, XVIII and XIX (*Attachment A*). A copy of the working table providing information on the purpose of the change and specific section/provision(s) to be amended is provided as (*Attachment B*) and full copies of articles I, II, XIII-XVI, XVIII and XIX with the changes tracked (*Attachments C-J*).

Information from the previous installment on January 26th including full copies of articles III, IV, V, XVII, XX, and XXI, with proposed changes shown in tracking may be found here: (<u>Town of Carrboro - Meeting of Town Council on 1/26/2021 at 7:00 PM (legistar.com) https://carrboro.legistar.com/MeetingDetail.aspx?
lD=823936&GUID=D387AE20-BC4A-444C-A4C3-58F350776615&Options=&Search=>). Materials from February 16th including full copies of articles VI-XII may be found here: <a href="https://carrboro-Meeting of Town Council on 2/16/2021 at 7:00 PM (legistar.com) ">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.legistar.com/MeetingDetail.aspx?ID=823939&GUID=3D78913E-0653-46D9-A733-8346B5C8DC69&Options=&Search=>">https://carrboro.le</u>

It should be noted that the materials in the agenda packet are still in draft form, and additional revisions may be

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

required as staff continues to review Chapter 160D and the associated updates in S.L. 2020-15. Any substantive changes will be identified in the public hearing materials.

FISCAL & STAFF IMPACT: Staff and Town Attorney time and costs are associated with the preparation of this item; public notice costs and staff time will be associated with the future public hearing and advisory board review.

RECOMMENDATION: Staff recommends that the Town Council review the material and ask questions of staff and/or the Town Attorney as part of the discussion at the meeting.

AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO CONFORM WITH RECENT CHANGES IN STATE LEGISLATION RELATING TO THE ADOPTION OF CHAPTER 160D

DRAFT 03-12-2021

THE CARRBORO TOWN COUNCIL ORDAINS:

Section 1. Section 15-2, Authority, is amended to update the references to the North Carolina General Statutes to read as follows:

Section 15-2 Authority.

This chapter is adopted pursuant to the authority contained in Article 2 of N.C.G.S. Chapter 160D; Article 21 (Part 6) of G.S. Chapter 143; G.S. 143-215.6A; G.S. 143-214.5; Article 4 of G.S. Chapter 113A; as well as Chapter 527 of the Session Laws of 1953; Chapters 122 and 136 of the Session Laws of 1963; Chapter 260 of the Session Laws of 1977; Chapter 753 of the Session Laws of 1979; Chapters 233 and 476 of the 1987 Session Laws; Chapters 216 and 484 of the 2009 Session Laws; and other state and local laws. (AMENDED 4/27/82; (REWRITTEN 6/26/12).

Section 2. Section 15-3, Jurisdiction, is amended to update the references to the North Carolina General Statutes to read as follows:

Section 15-3 Jurisdiction.

- (a) This chapter shall be effective throughout the town's planning jurisdiction. The town's planning jurisdiction comprises the area described by Chapters 122 and 636 of the Session Laws of 1963, as modified from time to time in accordance with Section 160D-200; 202; 903 of the North Carolina General Statutes.
- (b) In addition to other locations required by laws, a copy of a map showing the boundaries of the town's planning jurisdiction shall be available for public inspection in the planning department.
- **Section 3.** Article I, General Provisions, is amended to replace all references to the 'Board of Aldermen,' or 'Board' with the 'Town Council,' or 'Council,' respectively.
 - **Section 4.** Subsection 15-8(a), Fees, is amended to delete the reference to conditional use permits.
- **Section 5.** Section 15-15 (Basic Definitions and Interpretations) of the Carrboro Land Use Ordinance is amended by adding eighteen new definitions and modifying eight existing definitions, "conditional use permit," "developer," development," "planning and development regulation," "special use permit," "subdivision," and "wireless facility", as shown below, and by renumbering the entire section in alphabetical order.

ADMINISTRATIVE DECISION. Decisions made in the implementation, administration, or enforcement of development regulations that involve the determination of facts and the application of objective standards set forth in this chapter, also referred to as administrative determinations.

ADMINISTRATIVE HEARING. A proceeding to gather facts needed to make an administrative decision.

BONA FIDE FARM. Agricultural activities as set forth in G.S. 160D-903.

CHARTER. As defined in G.S. 160A-1(2).

COMPREHENSIVE PLAN. A comprehensive plan that has been officially adopted by the Town Council pursuant to G.S. 1660D-501.

CONDITIONAL USE PERMIT. A permit that was issued by the Town Council, prior to January 1, 2021, authorizing the recipient to make use of property in accordance with the requirements of this chapter as well as any additional requirements imposed by the Town Council. Pursuant to N.C.G.S. Chapter 160D, all valid conditional use permits were automatically converted to a class A special use permits on January 1, 2021. See also special use permit.

CONDITIONAL ZONING. A legislative zoning map amendment with site-specific conditions incorporated into the zoning map amendment.

DETERMINATION. A written, final, and binding order, requirement, or determination regarding an administrative decision.

DEVELOPER. A person, including a governmental agency or redevelopment authority, who undertakes any development and who is the landowner of the property to be developed or who has been authorized by the landowner to undertake development on that property.

DEVELOPMENT. Unless the context clearly indicates otherwise, the term means any of the following:

- a. The construction, erection, alteration, enlargement, renovation, substantial repair, movement to another site, or demolition of any structure.
- b. The excavation, grading, filling, clearing, or alteration of land.
- c. The subdivision of land as defined in G.S. 160D-802.
- d. The initiation or substantial change in the use of land or the intensity of use of land.

DEVELOPMENT APPROVAL. An administrative or quasi-judicial approval made pursuant to this chapter that is written and that is required prior to commencing development or undertaking a specific activity, project, or development proposal. Development approvals include, but are not limited to, zoning permits, site plan approvals, special use permits, variances, and certificates of appropriateness. The term also includes all other regulatory approvals required by regulations adopted pursuant to this chapter, including plat approvals, permits issued, development agreements entered into, and building permits issued.

DEVELOPMENT REGULATION. A unified development ordinance, zoning regulation, subdivision regulation, erosion and sedimentation control regulation, floodplain or flood damage prevention regulation, mountain ridge protection regulation, stormwater control regulation, wireless telecommunication facility regulation, historic preservation or landmark regulation, housing code, State Building Code enforcement, or any other regulation adopted pursuant to N.C.G.S. Chapter 160D, this chapter or the Town Code or Town charter.

DWELLING. Any building, structure, manufactured home, or mobile home, or part thereof, used and occupied for human habitation or intended to be so used, and includes any outhouses and appurtenances belonging thereto or usually enjoyed therewith. This term does not include any manufactured home, mobile home, or recreational vehicle, if used solely for a seasonal vacation purpose.

EVIDENTIARY HEARING. A hearing to gather competent, material, and substantial evidence in order to make findings for a quasi-judicial decision required by a development regulation adopted under this chapter. [See Article VI.]

LANDOWNER OR OWNER. The holder of the title in fee simple. Absent evidence to the contrary, the Town may rely on the county tax records to determine who is a landowner. The landowner may authorize a person holding a valid option, lease, or contract to purchase to act as the agent or representative for the purpose of making applications for development approvals.

LEGISLATIVE DECISION. The adoption, amendment, or repeal of a regulation under N.C.G.S. Chapter 160D, and Article XX of this chapter. The term also includes the decision to approve, amend, or rescind a development agreement consistent with the provisions of Article 10 of N.C.G.S. Chapter 160D.

LEGISLATIVE HEARING. A hearing to solicit public comment on a proposed legislative decision. [See Article XX.]

MANUFACTURED HOME. A structure as defined in G.S. 143-145(7). [See also Mobile Home.]

PLANNING AND DEVELOPMENT REGULATION JURISDICTION. The area within the town limits as well as the area beyond the town limits within which the town is authorized to plan for and regulate development pursuant to the authority granted in Article 2 of Chapter 160D of the N.C. General Statutes and Chapter 122 of the Session Laws of 1963. (AMENDED 6/22/82)

QUASI-JUDICIAL DECISION. A decision involving the finding of facts regarding a specific application of a development regulation and that requires the exercise of discretion when applying the standards of the regulation. The term includes, but is not limited to, decisions involving variances, special use permits, certificates of appropriateness, and appeals of administrative determinations. Decisions on the approval of subdivision plats and site plans are quasi-judicial in nature if the regulation authorizes a decision-making board, Town Council or board of adjustment, to approve or deny the application based not only upon whether the application complies with the specific requirements set forth in the regulation, but also on whether the application complies with one or more generally stated standards requiring a discretionary decision on the findings to be made by the decision-making board.

SITE PLAN. A scaled drawing and supporting text showing the relationship between lot lines and the existing or proposed uses, buildings, or structures on the lot. The site plan may include site specific details such as building areas, building height and floor area, setbacks from lot lines and street rights-of-way, intensities, densities, utility lines and locations, parking, access points, roads, and stormwater control facilities that are depicted to show compliance with all legally required development regulations that are applicable to the project and the site plan review. A site plan approval based solely upon application of objective standards is an administrative decision and a site plan approval based in whole or in part upon the application of standards involving judgment and discretion is a quasi-judicial decision. A site plan may also be approved as part of a conditional zoning decision.

SPECIAL USE PERMIT. A permit issued to authorize development or land uses in a particular zoning district upon presentation of competent, material, and substantial evidence establishing compliance with one or more general standards requiring that judgment and discretion be exercised as well as compliance with specific standards. The term includes permits previously referred to as conditional use permits.

SUBDIVISION. The division of a tract of land into two or more lots, building sites, or other divisions when any one or more of those divisions is created for the purpose of sale or building development (whether immediate or future) and including all divisions of land involving the dedication of a new street or a change in existing

streets; but the following shall not be included within this definition nor be subject to the regulations of this chapter applicable strictly to subdivisions: (i) the combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the minimum standards set forth in this chapter, (ii) the division of land into parcels greater than ten acres where no street right-of-way dedication is involved; or (iii) the public acquisition by purchase of strips of land for widening or opening of streets or for public transportation system corridors; or (iv) the division of a tract in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the minimum standards set forth in this chapter; or (v) the division of a tract into parcels in accordance with the terms of a probated will or in accordance with intestate succession under Chapter 29 of the N.C.G.S.

WIRELESS FACILITY. Equipment at a fixed location that enables wireless communications between user equipment and a communications network, including (i) equipment associated with wireless communications and (ii) radio transceivers, antennas, wires, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration. The term includes small wireless facilities. Also refers to Wireless Telecommunications Facility. The term shall not include any of the following: (AMENDED 6/23/20)

- (1) The structure or improvements on, under, within, or adjacent to which the equipment is collocated.
- (2) Wireline backhaul facilities.
- (3) Coaxial or fiber-optic cable that is between wireless structures or utility poles or city utility poles or that is otherwise not immediately adjacent to or directly associated with a particular antenna.

Amateur radio antennas. See also, Section 15-150(5) Towers and antennas constructed on residential property and G.S. § 160D-931

ZONING MAP AMENDMENT OR REZONING. An amendment to a zoning regulation for the purpose of changing the zoning district that is applied to a specified property or properties. The term also includes (i) the initial application of zoning when land is added to the territorial jurisdiction of the town that has previously adopted zoning regulations and (ii) the application of an overlay zoning district or a conditional zoning district. The term does not include (i) the initial adoption of a zoning map by the town, (ii) the repeal of a zoning map and readoption of a new zoning map for the entire planning and development regulation jurisdiction, or (iii) updating the zoning map to incorporate amendments to the names of zoning districts made by zoning text amendments where there are no changes in the boundaries of the zoning district or land uses permitted in the district.

Section 6. Article XIII, Recreation Facilities and Open Space, is amended to replace all references to the 'Board of Aldermen,' or 'Board' with the 'Town Council,' or 'Council,' respectively.

Section 7. Subsection 15-202(b), is rewritten to read as follows:

- (b) Whenever the permit issuing authority authorizes some deviation from the standards set forth in this article pursuant to subsection (a), the official record of action taken on the development application shall contain a statement of the reasons for allowing the deviation.
- **Section 8.** Article XIV, Streets and Sidewalks, is amended to replace all references to the 'Board of Aldermen,' or 'Board' with the 'Town Council,' or 'Council,' respectively.

Section 9. Subsection 15-216(d1) is amended to replace the reference to a conditional use permit to a class A special use permit.

Section 10. Subsection 15-216(e) is rewritten to read as follows:

- (e) The Council may allow a deviation from the right-of-way minimums set forth in subsections (b) and (c) if it finds that (i) the deviation is needed because in order for a development to be served by a public street the street must be constructed within an area that is not of sufficient width to comply with the right-of-way criteria set forth above, (ii) a street that meets the pavement width criteria and substantially complies with the other criteria set forth above can be constructed within the right-of-way that can be made available; and (iii) that the applicant has shown that he has made a reasonable effort and attempted to purchase the necessary right-of-way.
- **Section 11.** Section 15-236, Utility Ownership and Easement Rights, is amended to include 'fiber optic cable or conduit' in the list of utilities installed by a developer and intended to be owned, operated or maintained by a public utility or entity other than the developer.
- **Section 12.** The table in Subsection 15-239(b), Determining Compliance With Section 15-238 is amended to change the reference to the Division of Environmental Management of the NC Department of Natural Resources and Community Development to the NC Department of Environmental Quality (DEQ).
- **Section 13.** The table in Subsection 15-240(b), Determining Compliance With Section 15-240 is amended to change the reference to the Division of Health Services of the NC Department of Human Resources to the Division of Public Health of the NC Department of Health and Human Services.
- **Section 14.** Section 15-242, Purpose and Intent, is amended to change the reference to the Board to the Town Council.
- **Section 15.** Subsection 15-242.5(b), General Standards, is amended to change the name for a conditional use permit to a class A special use permit.
- **Section 16.** Subsection 15-242.5(g), General Standards, is amended to replace the word Board with Council.
 - **Section 17.** Section 15-246, Underground Utilities is rewritten to read as follows:

Section 15-246 Underground Utilities.

- (a) All electric power lines, (not to include transformers or enclosures containing electrical equipment including, but not limited to, switches, meters or capacitors which may be pad mounted), telephone, gas distribution, fiber optic cable or conduit, and cable television lines in subdivisions developed after the effective date of this chapter shall be placed underground in accordance with the specifications and policies of the respective utility companies and located in accordance with Appendix C, Standard Drawing No. 6 or No. 7.
- (b) Whenever an unsubdivided development is hereafter constructed on a lot that is undeveloped on the effective date of this chapter, then all electric power, telephone, gas distribution, and cable television lines installed to serve the development site outside of a previously existing public street right-of-way shall be placed underground in accordance with the specifications and policies of the respective utility companies. (AMENDED 1/22/85)

- (c) Notwithstanding the foregoing, a developer or builder is not required to bury power lines meeting all of the following criteria:
 - (1) The power lines existed above ground at the time of first approval of a plat or development plan, whether or not the power lines are subsequently relocated during construction of the subdivision or development plan.
 - (2) The power lines are located outside the boundaries of the parcel of land that contains the subdivision or the property covered by the development plan.
- **Section 18.** Article XVI, Flood Damage Prevention, Stormwater Management, and Watershed Protection, is amended by changing the names of 'conditional use permits' and 'special use permits' to 'class A special use permits' and class B special use permits.'
- **Section 19.** Section 15-251.1, Definitions, is amended by correcting an error in definition (63), Substantial Damage, to read as follows:
- 63. Substantial Damage. Damage of any origin sustained by a structure during any one-year period whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of "Substantial Improvement."
- **Section 20.** The first paragraph under Section 15-251.6, Duties and Responsibilities of the Administrator is amended to be gender neutral, as follows:

As set forth in Part I of Article IV of this chapter, development permits (including permits for development within Special Flood Hazard Areas), shall not be issued unless the requirements of this chapter have been satisfied. In addition to permit responsibilities, the administrator's responsibilities relating to the administration and enforcement of the provisions of this part shall include but shall not be limited to the following duties:

- **Section 21.** Article XVIII, Parking, is amended to replace all references to the 'Board of Aldermen,' or 'Board' with the 'Town Council,' or 'Council,' respectively.
- **Section 22.** Article XVIII, Parking, is amended by changing the names of 'conditional use permits' and 'special use permits' to 'class A special use permits' and class B special use permits.'
- **Section 23.** Subsection 15-291(g), Number of Parking Spaces Required is amended by deleting the reference for 1 space per room plus additional space for restaurant or other facilities in the table under use 23.000, temporary structure or parking lots used in connection with the construction of a permanent building or for nonrecurring purpose.
- **Section 24.** Article XIX, Screening and Trees, is amended to replace all references to the 'Board of Aldermen,' or 'Board' with the 'Town Council,' or 'Council,' respectively.
- **Section 25.** Article XIX, Screening and Trees, is amended by changing the names of 'conditional use permits' and 'special use permits' and class B special use permits.'

Section 26. The first paragraph of Subsection 15-319(a), Minimum Canopy Coverage Standards is rewritten to read as follows:

(a) Minimum Canopy Coverage Standards

Subject to the remaining provisions of this section, the following minimum tree canopy coverage percentages are required within the boundaries of every lot or tract for which a zoning, special use, or conditional use permit was issued after June 24th, 2014 or a class A or class B special use permit is issued after July 1, 2021, exclusive of required cleared active recreation areas, water bodies, access easements, public and private right-of-way, stormwater and utility easements.

Section 27. The N.C.G.S. citation in subsection (a) under 15-321.1, Regulations of Forestry Activities is changed from G.S.160A-458.5 to G.S. 160D-921.

Section 28. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 29. This ordinance shall become effective upon adoption.



	Chapt 160D Subject/Topic	Status	Purpose	Recommended Action	LUO Article or Town Code Chapter	Specific Citation(s)
	and Use Administration General	Required	Chapter 160D Requirement. Update citations.	Amendments needed to reflect new citations. Consult with Town Attorney to ensure that all appropriate citations are included.	Article I	15-2 15-3
			Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article I	15-6
			Town administrative update.	Delete reference to conditional use permits.	Article I	15-8
	and Use Administration General		<u>Chapter 160D Requirement</u> . Update definitions.	Add new definitions and/or modify existing definitions to comply with 160D. Amendments to Chapter 17 of the Town Code, Housing Code may also be needed.	Article II	15-15
E	Boards	Required	Chapter 160D Requirement. Must keep minutes of	No change needed. The Rules of Procedure for Town of Carrboro Boards and		
			proceedings of each board. (G.S. 160D-308.)	Commissions was adopted as an administrative policy, 11-21-2017. http://www.townofcarrboro.org/DocumentCenter/View/5357/-Rules-of-Procedure-for-Town-of-Carrboro-Boards-and-Commissions-Approved-11-21-17		
E	Boards		<u>Chapter 160D Requirement</u> . Must update ETJ population estimate, at least with each decennial census (also calculation for proportional representation is simplified and process for appointment is clarified). (G.S. 160D-307.)	planning board (15-21(a1), and board of adjustment (15-29(a1) to meet requirement; boards where ETJ membership is a requirement part of the make up of the board. Consulting with Town Attorney as to whether similar language is needed for other advisory boards, such as the appearance commission and boards described in the	Article III	15-21(a1) 15-29(a1)
E	Boards	Required	<u>Chapter 160D Requirement</u> . Must provide proportional representation for ETJ on preservation commission if any districts or landmarks are designated in the ETJ. (G.S. 160D-307.)	Town Code. Add a new provision 15-42(d1) under the Article III, Part V. for the appointment and terms of Appearance Commission, to include an ETJ membership requirement when a local historic district(s) is located in the ETJ.	Article III	15-42(d1)
E	Boards	Required	Chapter 160D Requirement. Must have each board member take an oath of office before starting his or her duties. (G.S. 160D-309.)	Amend LUO Article III, PART VII. Membership Limitations on Boards, Committees, Advisory Groups, and Commissions with a new provision to require incoming advisory board members to receive the oath of office before begining to serve their duties. Requirement is provided in one central place for all advisory boards in association with the appointment process rather than repeated under the appointment language for each board. A less formal option would be to amend the Rules of Procedures for Advisory Board Rules to reflect this requirement.	Article III	Part VII
L	and Use Administration		Chapter 160D Requirement. New conflict of interest	Amendment needed. Add new provisions under the Land Use Administrator to	Article III	15-37
	General		provisions for administrative staff. (G.S. 160D-109(c)	include this new requirement.		15-37(a); (b)

Town administrative update.	Change references for the Board of Aldermen to the Town Council in Article III, Administration Mechanisms.	Article III	15-21(a), in two places; 15-25(a)(1); 15-25(a)(2); 15- 25(a)(3); 15-25(a)(5); 15-26(a) in two places; 15-26(b); 15-26(c) in two places; 15-27(a) in three places; 15- 27(h)(1), 15-27(h)(4); 15-27(h)(8); 15-29(a) in three places; 15-29(e) 15-38(b) in two places Part IV title; 15-40; 15-40(a); 15- 40(b); 15-40(c) 14-52(a); 15-42(d) in two places; 15-44(a)(3); 15-44(a)(4); 15- 44(a)(6); 15-45(a); 15-45(c)(3); 15-45.2(a); 15-45.2(d)
Town administrative update.	Use gender neutral language. Remove references for chairman and vice chairman an replace with chair and vice chair.	Article III	15-21(e)(1); 15-21(e)(2) in four places; 15-24(a); 15-29(d)(1); 15-29(d)(2) in four places; 15-30(b); 15-33(a); 15-33(b); 15-42(c)(2) in three places 15-30(b); 15-29(d)(1); 15-29(d)(2) in four places; 15-33(a); 15-33(b);
Town administrative update.	Amend LUO Section 15-22 to change CUP and SUP to Class A SUP and Class B SUP	Article III	15-22(e); 15-25(a) in three places; 15-40(a); 15-40(c)
Town administrative update.	Amend LUO Section 15-25(a) to add a new provision (4) to include make recommendations to Board of Adjustment concerning class B sup to list of Planning Board duties, and renumber existing provision (4) to (5).	Article III	15-25(a)(4)
Town administrative update.	Amend LUO Section 15-26 to update list of examples of long range planning documents; use this updated list throughout chapter.	Article III	15-26(a)

		Chapter 160D Requirement. Resolution of Objection. (G.S. 160D-109(e)).	Amendment needed, Subsection 15-32(f) is rewritten.	Article III	15-32
Substance of Zoning Ordinance	Required	prior zoning maps for public inspection (local government	Minor amendment provided in Article IX, Zoning Districts and Zoning Map, Part II. Zoning Map. New phrase or sentence under either 15-143(b) of 15-143(d) to clarify the historical and current copies of the zoning map shall be maintained in paper and digital forms.	Article IX	15-143(b)
Substance of Zoning Ordinance	Required	<u>Chapter 160D Requirement</u> . Must eliminate conditional use district zoning; existing conditional use district zoning converts to conditional district on January 1, 2021 upon adoption of updated local ordinances or July 1, 2021. (G.S. 160D-703; S.L. 2020-25; S.L. 2019-111, § 2.9(b).)	Amendments needed. New provision (a1) added under 15-46 in Article IV, Permits and Final Plat Approvals, to indicate the automatic conversation to Conditional Districts. Add a new provisision under the Section 141.3 Conditional Use Districts to indicate the automatic conversation to Conditional Districtsto match language in 15-46(a1) and repeal section. Review districts in Article IX, Zoning Districts and Zoning Maps and modify as needed, 3, specific districts such as the O/A, conditional use district and associated references throughout the ordinance. Scan LUO and make other updates as needed.	Article IV Article IX	15-46(a1) 15-141.3
Substance of Zoning Ordinance	Required	<u>Chapter 160D Requirement</u> . Must not set a minimum square footage for structures subject to the One- and Two-Family Residential Building Code. (G.S. 160D-703; S.L. 2019-174.)	Possible amendment to Chapter 17 of the Town Code, Housing Code, 17-6, Space and	Chapter 17 of Town Code	17-6
Substance of Zoning Ordinance	Optional	<u>Chapter 160D Option</u> . May incorporate maps officially adopted by state or federal agencies (such as floodinsurance rate maps (FIRMs)) into the zoning map; may incorporate the most recent officially adopted version of such maps so that there is no need for ordinance	No change needed. 15-251.2(b)(1) provides for such incorporation. (1) Those Special Flood Hazard Areas that are identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Maps (FIRM), for Orange County, dated 09/26/2017, which are adopted by reference and declared to be a part of this ordinance. (AMENDED 09/26/17)	Article XVI	15-251.2(b)(1)

Substance of Zoning Ordinance	Optional	Chapter 160D Option. May require certain dedications and performance guarantees for zoning approvals to the same extent as for subdivision approvals. (G.S. 160D-702.)	Amendments needed. G.S. 160D-702 allows local governments to use performance guarantees for zoning approvals, consistent with the provisions for performance guarantees for subdivision approvals, as provided for in G.S. 160D-804(g). Additional language needed to conform the existing standards for performance guaranteees for zoning permits (15-53) and SUPs (15-60(s), and subdivisions (15-60(b)) to the standards in 160D-804.	Article IV	15-53 (zoning permits) 15-60(a) (special use permit
Substance of Other Development Ordinances	Required	Chapter 160D Requirement. Must conform subdivision performance guarantee requirements with statutory standards. (G.S. 160D-804.1; S.L. 2020-25; S.L. 2019-79 (S.B. 313), to be incorporated into G.S. Chapter 160D.)	Language added in 15-60(b) to clarify maximum amount and allowable uses for bond money.	Article IV	15-60(b) subdivisions
Substance of Other Development Ordinances	Required	Chapter 160D Requirement. Must conform subdivision procedures for expedited review of certain minor subdivisions. (G.S. 160D-802, established prior to G.S. Chapter 160D.)	Amendment needed. New section 15-78.1 added which provisions related to expedited review provided directly from the language in 160D-802.	Article IV	15.78.1
		Town Administrative Update	Amendments needed. Fiber optic infrastructure needs to be added to Article XVI.	Article XV	15-236 15-246
		Tarrie Administrative Undets	Assembly onto a select to an electric terms of the selectric terms o	AL!l \/\\ /	4 F 220 /k\ T-1-1-
		Town Administrative Update	Amendments needed to update the state government reviewing/permitting agencies.		15-239 (b) - Table 15-241(b) - Table
-	Required	Town Administrative Update Chapter 160D Requirement. Must not require a developer, as a condition to subdivision approval, to bury a power line existing above ground and outside of property to be subdivided. (G.S. 160D-804(h); S.L. 2020-25.)	Amendment needed. Add new provision (c) under 15-246 to list exemptions as	Article XV Article XV	
Substance of Other Development Ordinances	Required	Chapter 160D Requirement. Must not require a developer, as a condition to subdivision approval, to bury a power line existing above ground and outside of property to be subdivided. (G.S. 160D-804(h); S.L. 2020-	Amendment needed. Add new provision (c) under 15-246 to list exemptions as		15-241(b) - Table

Substance of Other Development Ordinances	Required	<u>Chapter 160D Requirement</u> . Must exempt farm use on bona fide farm in ETJ from city zoning to the same extent it would be exempt from county zoning; Chapter 160D clarifies that other municipal development regulations may still apply. (G.S. 160D-903(c).)	Amendments needed. Bona fide farm definition added to Section 15-15. New provision 15-46(f) added with language clarifying exemption.	Article III	15-46(f)
Substance of Other Development Ordinances	Required	<u>Chapter 160D Requirement</u> . Must not exclude manufactured homes based on the age of the home. (G.S. 160D-910.)	Add definition of manufactured home from 160D to definitions in Article II. Amend table of permissible uses in Section 15-146 to allow manufactured homes.	Article II Article X	15-15 15-146
Substance of Other Development Ordinances	Required	<u>Chapter 160D Requirement</u> . Must follow standardized process for housing code enforcement to determine owner's abandonment of intent to repair and need for demolition. (G.S. 160D-1203(6).)	Review language in the Housing Code, Chapter 17 of the Town Code. Amendment may be needed.	Chapter 17 of Town Code	
Substance of Other Development Ordinances	Required	<u>Chapter 160D Requirement</u> . May adopt moratoria for development regulations (subject to limitation on residential uses); moratoria do not affect rights established by permit choice rule. (G.S. 160D-107.)	No amendment needed. The Town will follow requirements if a future moratoria is considered/adopted.	NA	
Development Agreements	Required	<u>Chapter 160D Requirement</u> . Must process a development agreement as a legislative decision. (G.S. 160D-105.)	Consider adding a reference to development agreements and requirement for legislative hearing procedures in Article XX. Note in Article IV and X for "breadcrumbs."	Article IV	
Quasi-Judicial Decisions Procedures	Required	<u>Chapter 160D Requirement</u> . Must follow statutory procedures for all quasi-judicial development decisions, including variances, special use permits, certificates of appropriateness, and appeals of administrative determinations. (G.S. 160D-102(28).)	Minor amendment provided to include the word "evidentiary" for hearings subject to quasi-judicial proceedings. The existing language described in Article VI describes a quasi-judicial process. This amendment seems to be sufficient for this requirement. Reference to adminstrative decisions and certificates of appropriateness added for clarity.	Article VI; Article IV; Article V; Article XXI	15-101(a)
Quasi-Judicial Decisions Procedures	Required	Chapter 160D Requirement. Must hold an evidentiary hearing to gather competent, material, and substantial evidence to establish the facts of the case; the evidentiary hearing must have testimony under oath; must establish written findings of fact and conclusions of law. (G.S. 160D-406.)	Consistent with the emphasis in 160D that hearings are either evidentiary for quasi-judicial proceedings or legislative hearings for amendments, the terms 'evidentiary' and 'quasi-judicial' have been added throughout Article VI. No substantive change needed. The existing language in 15-101 and 15-103 describes the elements of an evidentiary hearing.	Article VI	15-101
Quasi-Judicial Decisions Procedures	Required	<u>Chapter 160D Requirement</u> . Board chair must rule at the evidentiary hearing on objections to inclusion or exclusion of administrative material; such ruling may be appealed to the full board. (G.S. 160D-406(d).)	Amendment needed. New subsection added to 15-103, Evidence.	Article VI	15-103(d)
Quasi-Judicial Decisions Procedures	Required	Chapter 160D Requirement. Must allow parties with standing to participate fully in the evidentiary hearing, including presenting evidence, cross-examining witnesses, objecting to evidence, and making legal arguments; may allow non-parties to present competent, material, and substantial evidence that is not repetitive. (G.S. 160D-406(d).)	Amendment needed. New provisions added relating to evidence and standing,.	Article VI	15-103(b)(1) & 15-103(b)(15-104, 15-107.

Quasi-Judicial Decisions Procedures	Optional	, ,	No amendment needed for continuation; existing language in Section 101(d) provides for this.	Article VI	15-101(d) 15-101(e)
		place of the continued hearing is announced at a duly noticed hearing that has been convened; if quorum is not present at a meeting, the evidentiary hearing is automatically continued to the next regular meeting of the board with no notice. (G.S. 160D-406(b).)	New provision (e) added to provide for continuation if a quorum is not present.		
Quasi-Judicial Decisions Procedures	Optional	Chapter 160D Option. May distribute meeting packet to board members in advance of the evidentiary hearing; if this is done, then must distribute the same materials to the applicant and landowner at the same time; must present such administrative materials at the hearing and make them part of the hearing record. (G.S. 160D-406(c).)	Amended added for clarity. New subsection added as 15-102.1 added under the procedure for evidentiary hearing in Article VI.	Article VI	15-102.1
Quasi-Judicial Decisions Procedures	Optional	<u>Chapter 160D Option</u> . May have the planning board serve as a preliminary forum for review in quasi-judicial	No change needed. Existing provisions in the LUO provide for the Planning Board and other advisory boards to review SUP/CUPrevised as Class B Special Use Permits in 15-56 (Board of Adjustment) and Class A Special Use Permits in 15-57 (Town Council).		15-56(c); 15-57
Quasi-Judicial Decisions Procedures	Be Aware	Additional Information. Be aware that even if there is no objection before the board, opinion testimony from a lay witness shall not be considered competent evidence for technical matters such as property value and traffic impacts. (S.L. 2019-111, § 1.9.)		Article VI	15-103
Quasi-Judicial Decisions Certain Quasi-Judicial Decisions	Required	Must not impose conditions on special use permits that the local government does not otherwise have statutory authority to impose. (G.S. 160D-705(c); S.L. 2019-111, Pt. I.)	The existing language in 15-59, seems to state this limit, but an additional provision (1) has been added for clarity.	Article IV	15-59(b)(1)
Quasi-Judicial Decisions Certain Quasi-Judicial Decisions	Required	Must obtain applicant's/landowner's written consent to conditions related to a special use permit to ensure enforceability. (G.S. 160D-1402(k); G.S. 160D-1403.2; S.L. 2019-111, Pt. I.)	Additional provision (2) has been added under 15-59(b) to clarify this requirement.	Article IV	15-59(b)(2)
Quasi-Judicial Decisions Certain Quasi-Judicial Decisions	Required	Must set a thirty-day period to file an appeal of any administrative determination under a development regulation; must presume that if notice of determination is sent by mail, it is received on the third business day after it is sent. (G.S. 160D-405(c).)	No change needed. Subsection 15-91 seems to cover all decisions. Addition of "administrative decisions" to 15-101(a) provides "bread crumb" to the articles relating to appeals. Can add language relating to the three day mailing if needed.	Article V	15-91(d) 15-101(a)
Quasi-Judicial Decisions Certain Quasi-Judicial Decisions	Required	May use purely legislative conditional zoning and/or quasi-judicial special use permitting; must not use combined legislative and quasi-judicial process, such as conditional use district zoning. (G.S. 160D-102.)	Amendments needed. New provision (a1) added under 15-46, Permits Required, stating that existing conditional use districts automatically converted to conditional districts. Existing subsection 15-59(d) repealed. Additional language added in Article IX, Zoning Districts and Zoning Map.	Article IV	15-46(a1)

Administrative Decisions Development Approvals	Required	Must provide development approvals in writing; may provide in print or electronic form; if electronic form is	Amendment added for clarity. New sentence at the end of provision 15-46(b) added. Existing Section 15-106 currently requires written decisions for quasi-judicial	Article IV Article VI	15-46(b) 15-106
		used, then it must be protected from further editing. (G.S. 160D-403(a).)	descisions. The language in 160D-403 suggests that a written decision is needed for administrative decisionszoning permits as well.		
dministrative Decisions	Required	Must provide that applications for development	Additional language added to Section 15-48, Who May Submit Permit Application, to	Article IV	15-48
evelopment Approvals		approvals must be made by a person with a property interest in the property or a contract to purchase the property. (G.S. 160D-403(a).)	list all the potential applicants stated in the Chapter 160D.		
dministrative Decisions evelopment Approvals	Required	Must provide that development approvals run with the land. (G.S. 160D-104.)	No change needed. Section 15-63, Effect of Permit on Successors and Assigns provides for permits to runs with the land so long as the permit continues to be used for the purposes for which the permit was granted.	Article IV	15-63
dministrative Decisions evelopment Approvals	Required		No change needed. Section 15-115, Permit Revocation and Building Permit Denial speaks to the process for revocation. Subsection (b) speaks to the same process for	Article VII	15-115(b)
			special use permits as the approval process in Article VI.		
Administrative Decisions	Required	Must provide written notice of determination by	No change needed. Relating to special use permits, the process is described in 15-	Article VII	15-115(b);
Determinations		personal delivery, electronic mail, or first-class mail to	115(b) as the same for approval which includes written and posted notice and written		15-115(c)
		the property owner and party seeking determination, if	determination. Provisions relating to notice outlined in 15-115(b) for SUPs and 15-115		
		different from the owner. (G.S. 160D-403(b).)	(c) for zoning permits. New language added to 15-46(b) clarifies written approval for zoning permits.		
dministrative Decisions	Optional	May require owner to post notice of determination on	No change needed. Article 15-91(e) speaks to the posting of a sign meeting specific	Article V	15-91(e)
Determinations		the site for ten days; if such is not required, then owner	criteria.		
		has option to post on the site to establish constructive notice. (G.S. 160D-403(b).)			
dministrative Decisions	Required		No change needed. The existing language under Section 15-91, Appeals, seems to	Article V	15-91
Appeals of Administrative Decisions			cover all decisions. For clarity, however, "administrative decisions" has been added to	Article VI	15-101(a)
		of adjustment, unless provided otherwise by statute or ordinance. (Appeals relating to erosion and	the list of matters in subsection 15-101(a), Hearing Required on Appeals and Applications.		
		sedimentation control, stormwater control, or building	Applications.		
		code and housing code violations are not made to the			
		board of adjustment unless specified by local ordinance.) (G.S. 160D-405.)			
dministrative Decisions	Required	Must set a thirty-day period to file an appeal of any	No change needed. Existing language under Section 15-91 sufficient.	Article V	15-91(d)
ppeals of Administrative Decisions		administrative determination under a development			
		regulation; must presume that if notice of determination			
		is sent by mail, it is received on the third business day after it is sent. (G.S. 160D-405(c).)			
dministrative Decisions	Required	Must require the official who made the decision (or his or	No change needed. Existing language in 15-91(i) states that the administrator shall be	Article V	15-91(i)
ppeals of Administrative Decisions		her successor if the official is no longer employed) to appear as a witness in the appeal. (G.S. 160D-406.)	present at the hearing as a witness.		
dministrative Decisions	Required	Must pause enforcement actions, including fines, during	Amendment needed. Section 15-114(b)(3)(a) currently provides for the collection of	Article VII	15-114(b)(3)
ppeals of Administrative Decisions	,	the appeal. (G.S. 160D-405(f).)	civil penalties to be stayed, but not the accural. Subsection 15-114 to be rewritten to align with the new language is 160D and S.L. 2020-25.		\-/\-/
dministrative Decisions	Optional	May designate that appeals be filed with the local	No change needed. Section 15-91(c) provides for an appeal to be filed with the Town	Article V	15-91(c)
ested Rights		government clerk or another official. (G.S. 160D-405.)	Clerk.		
Administrative Decisions	Required	Must recognize that building permits are valid for six	No change needed. The Land Use Ordinance does not speak to building permits.	NA	
ested Rights		months, as under prior law. (G.S. 160D-1111 G.S. 160D-108(d)(1).)	Period of approval noted.		

Administrative Decisions Vested Rights	Required	Must recognize the default rule that development approvals/permits are valid for twelve months, unless altered by statute or extended by local rule adjusted by statute or local rule. (G.S. 160D-108(d)(2).)	No change needed. The LUO provides for approved land use permits to be valid for a period of two years and, subsequently, extended for another period of two years.	Article IV	15-62(a) and 15-62(c)
Administrative Decisions Vested Rights	Required	Must identify site-specific vesting plans (formerly site-specific development plans) with vesting for two to five years, as under prior law, except for specified exceptions. (G.S. 160D-108.1 G.S. 160D-108(d)(3); -108(f).)	Amendment needed. Provisions for vested rights are outlined in Section 15-128.2, under Article VIII, Nonconforming Situations. See also related vested rights upon issuance of building permits-15-128.3	Article VIII	15-128.2
Administrative Decisions Vested Rights	Required	Must recognize multi-phase developments—long-term projects of at least 25 acres—with vesting up to seven years, except for specified exceptions (160D-108(c)(d)(4); 108(f).) (The previously authorized phased-development plan is obsolete and should be deleted from ordinance.)	Amendment needed. New language added as subsection (d) under 15-61. Further consultation with the Town Attorney may be needed for addressing all of the elements of this requirement. The existing language relating to phased developments, is in Article IV under permits, and speaks more to the completion of requirements such as recreation facilities that are intended to either serve the entire development versus a particular phase. Vested Rights are discussed in Article VIII under nonconforming situations. It appears that the existing language should be repealed and replaced with the new requirements in 160D.	Article IV; Article VIII	15-61; 15-128.2
Administrative Decisions Vested Rights	'	May provide for administrative determination of vested rights and for appeal to the board of adjustment. (G.S. 160D-108(h)(c), -405.)	The existing language for vested rights in Article VIII provides for zoning permits-in subsection 15-128.2(b). This provision can be reworked into the updated language for vesting.	Article VIII	15-128.2
Administrative Decisions Permit Choice		Must not make an applicant wait for final action on the proposed change before proceeding if the applicant elected determination under prior rules. (G.S. 143-755; G.S. 160D-108(b).)	Amendment needed. New section 15-49.1 added with language in S.L. 2020-25.	Article IV	15-49.1
Administrative Decisions Permit Choice	Be Aware		Amendment needed. New section 15-49.1 added with language in S.L. 2020-25.	Article IV	15-49.1
Administrative Decisions Permit Choice	Be Aware	Be aware that an application for one development permit triggers permit choice for permits under any development regulation; such permit choice is valid for eighteen months after approval of the initial application. (G.S. 143-755; G.S. 160D-108(b); S.L. 2019-111, Pt. I.)	Article IV, phasing section or Article IV, 15-61. New language will be added in the rewritten section on vested rights: Article VIII.	Article VIII	15-128.2
Comprehensive Plan	Required	Chapter 160D Requirement. Must adopt a comprehensive plan or land-use plan by July 1, 2022, to maintain zoning (no need to re-adopt a reasonably recent plan). (G.S. 160D-501(a).)	No change needed. Work on the Town's comprehensive plan is underway and scheduled for adoption in time to meet this requirement. The legislative descision process for amendments (text and map) require a deteermination of consistency/ Once adopted, the comprehensive plan will be a key document for determining consistency	Article XX	

	decision. (G.S. 160D-501(c).)			
Required	,	Include a sentence at the end of the new subsection on the comprehensive plan in	Article XX Article I	15-320 15-10 or 15-6
Required	<u>Chapter 160D Requirement</u> . Must follow applicable procedures for legislative decisions under any development regulation authorized under Chapter 160D,	No change needed. The Town currently adopts amendments by ordinance, as is noted under 15-321(a). If needed, 15-325 could be rewritten to say, "In deciding whether to adopt a proposed	Article XX	15-321(a)
Required	Chapter 160D Requirement. Must adopt broadened conflict-of-interest standards for governing and advisory boards. (G.S. 160D-109.)		Article XX	15-322(d)
		Amend LUO Section 15-324(e) to expand the conflict of interest provisions for advisory board review of legislative decisions (text & map amendments) to include close familial, business or other associational relationship.		15-324(e)
Required		Amend the area subject to receive written notice to include the owners of abutting properties while retaining the existing provisions of 1000 feet of the property so as	Article XX	15-323(c)
Required	amendments, must provide posted notice during the time period running from twenty-five days prior to the hearing until ten days prior to the hearing. (G.S. 160D-	Amend the Section 15-323(e) to include the 10-25 day window for posting notice.	Article XX	15-323(e)
Optional		No change needed.	Article XX	
	Required Required Required	Required Chapter 160D Requirement. Must reasonably maintain a plan. (G.S. 160D-501(a).) Required Chapter 160D Requirement. Must follow applicable procedures for legislative decisions under any development regulation authorized under Chapter 160D, not just zoning; must adopt any development regulation by ordinance, not by resolution. (G.S. 160D-601.) Required Chapter 160D Requirement. Must adopt broadened conflict-of-interest standards for governing and advisory boards. (G.S. 160D-109.) Required Chapter 160D Requirement. For zoning map amendments, must provide notice not only to immediate neighbors but also to properties separated from the subject property by street, railroad, or other transportation corridor. (G.S. 160D-602.) Required Chapter 160D Requirement. For zoning map amendments, must provide posted notice during the time period running from twenty-five days prior to the hearing until ten days prior to the hearing. (G.S. 160D-602(c).) Optional Chapter 160D Option. For extension of ETJ, may use single mailed notice for ETJ and zoning-map amendment	manner in which it can be adopted and amended—the procedure for legislative decisions set out in Article XX. Include a sentence that the plan must be updated at regular intervals. Amend 15-320(a) to include the comprehensive plan. Required Chapter 160D Requirement. Must follow applicable procedures for legislative decisions under any development regulation authorized under Chapter 160D, not just zoning; must adopt any development regulation by ordinance, not by resolution. (G.S. 160D-601.) Required Chapter 160D Requirement. Must adopt broadened conflict-of-interest standards for governing and advisory boards. (G.S. 160D-109.) Required Chapter 160D Requirement. Must adopt broadened conflict-of-interest standards for governing and advisory board review of legislative decisions (text & map amendments) to include close familial, business or other associational relationship. Amend LUO Section 15-324(e) to expand the conflict of interest provisions for advisory board review of legislative decisions (text & map amendments) to include close familial, business or other associational relationship. Amend LUO Section 15-324(e) to expand the conflict of interest provisions for advisory board review of legislative decisions (text & map amendments) to include close familial, business or other associational relationship. Amend LUO Section 15-324(e) to expand the conflict of interest provisions for advisory board review of legislative decisions (text & map amendments) to include close familial, business or other associational relationship. Amend the Section 15-323(e) to include the owners of abutting properties while retaining the existing provisions of 1000 feet of the property so as not to reduce the area if "abutting" properties creates a smaller area for notice. Since the provision for renters is described as a reasonable effort the 1000 feet is left as is. Amend the Section 15-323(e) to include the 10-25 day window for posting notice. Amend the Section 15-323(e) to include the 10-25 day window for posting notice.	manner in which it can be adopted and amended—the procedure for legislative decisions set out in Article XX. Include a sentence that the plan must be updated at regular intervals. Amend 15-320(a) to include the comprehensive plan. Article XX. Amend 15-320(a) to include the comprehensive plan. Article I article XX. Include a sentence at the end of the new subsection on the comprehensive plan in Article I, that the plan must be updated at regular intervals. No change needed. No change needed. No change needed. No change needed or in deciding whether to adopt a proposed ordinance, not by resolution. (G.S. 160D-601.) Required Chapter 160D Requirement. Must adopt broadened conflict-of-interest standards for governing and advisory boards. (G.S. 160D-109.) Required Chapter 160D Requirement. For zoning map amendments, must provide notice not only to immediate neighbors but also to properties separated from the subject property by street, railroad, or other transportation corridor. (G.S. 160D-601.) Required Chapter 160D Requirement. For zoning map amendments, must provide posted notice during the time period running from twenty-five days prior to the hearing until ten days prior to the days prior to the single malled notice for ETJ a

Legislative Decisions	Optional			Article IX	
Notice		require applicant to notify neighbors and hold a	conditional zoning process. This could be incorporated into the process as a policy	Article XX	
		community meeting and may require report on the	(recommendation listed on a standard checklist), or formally incorporated into the		
		neighborhood communication as part of the application	ordinance. If the latter, the description of the conditional zoning process under Article		
		materials. (G.S. 160D-602(e).)	IX, Zoning Districts & Zoning Map seems to be an more appropriate location than Article XX.		
Legislative Decisions	Required	Chapter 160D Requirement. Must refer zoning	No change needed.	Article XX	15-322
Planning Board Comment		amendments to the planning board for review and	Section 15-322 refers amendments (zoning or map, and text) to the planning board		
		comment; must not have governing board handle	and other advisory boards.		
		planning board duty to review and comment on zoning			
		amendments. (G.S. 160D-604(c), (e).)			
Legislative Decisions	Required	Chapter 160D Requirement. Must have planning board	No change needed.	Article XX	15-322(b).
Planning Board Comment		consider any plan adopted according to G.S. 160D-501	Subsection 15-322(a) refers amendments to the Planning Board and other advisory		, ,
			boards when the matter involves an issue relating to their purview; subsections 15-		
		604(d).)	322(b) directs the Planning Board and other advisory boards to advise and comment		
		004(u).)	, · · ·		
			on consistency with adopted plans. This section will be amended to reflect the		
Logislativo Donisions	Doguirod	Chapter 160D Requirement. When adopting an	comprehensive planunderway.	Article XX	15 224/d\/1\ +bm, 15 224/
Legislative Decisions	Required		Amendment needed. Subsection 15-324(d) describes the required elements of the	Article XX	15-324(d)(1) thru 15-324(
Planning Consistency		amendment to the zoning ordinance, must adopt a brief	consistency statement for considering text/map amendments. As noted in the 160D		
		statement describing whether the action is consistent or	bullet, this language was rewritten in 2017 with three specific options: 15-324(d)-(1)		
		inconsistent with approved plans. (G.S. 160D-605(a).)	through 15-324(d)(3) including provisions ac. This section will need to be rewritten		
		(This eliminates the 2017 requirement that statements	again to go back to the earlier verisiona statement of consistency with adopted plans		
		take one of three particular forms.)	for text and map amendments, and an additional statement of reasonableness for		
			map amendments.		
Legislative Decisions	Required	<u>Chapter 160D Requirement</u> . Must adopt a statement of	Amendment needed. See note above regarding changes to Subsection 15-324(d).	Article XX	15-324(d)
Planning Consistency		reasonableness for zoning map amendments; for such	There may be interest in keeping the rational language for both types of amendments-		
		statements, may consider factors noted in the statutes;	map and text, although the requirement only applies to map.		
		may adopt a statement of reasonableness for zoning text			
		amendments. (G.S. 160D-605(b).)			
Legislative Decisions	Optional	Chapter 160D Option. May consider and approve a	No change needed. The current practise is to include both elements in a single	Article XX	15-324
Planning Consistency		statement of reasonableness and a plan consistency	consistency statement.		
		statement as a single, combined statement. (G.S. 160D-			
		605(c).)			
Legislative Decisions	Optional	Chapter 160D Option. May adopt plan consistency	No change needed. The current practice is to adopt the consistency statement first,	Article XX	15-324
Planning Consistency		statement when acting upon the zoning amendment or	followed by the amendment.		
		as a separate motion. (G.S. 160D-605(a).)			
Legislative Decisions	Optional	Chapter 160D Option. May meet the requirement for	No change needed. This is a policy question, but the formal adoption of a statement	Article XX	15-324
Planning Consistency		plan consistency even without formal adoption of a	of consistency provides clarity to the motion and decision.		
,		written statement if the minutes of the governing board			
		meeting reflect that the board was fully aware of and			
		considered the plan. (G.S. 160D-605(a).)			
		considered the plant (6.5. 1565 665(a).)			
Legislative Decisions	Optional	Chapter 160D Option. May adopt plan consistency	No change needed.	Article XX	15-324
Planning Consistency		statement when acting upon the zoning amendment or			
-		as a separate motion. (G.S. 160D-605(a).)			
Legislative Decisions	Optional	<u>Chapter 160D Option</u> . May concurrently consider a	Amendment needed. A separate statement for changes to the comprehensive plan,	Article XX	15-324
Planning Consistency	'	comprehensive plan amendment and a zoning	seems appropriate.		
3		amendment; must not require a separate application or			
		fee for plan amendment. (G.S. 160D-605(a).)			
		ice for plan amenament. (0.5. 1000-005(a).)			

Legislative Decisions Planning Consistency	Required		Amendment needed. Rewritting the existing provisions of 15-324(d) to include a new provision for this purpose.	Article XX	15-324
Legislative Decisions Voting	Required		Subsection 15-324(c), under Council Action on Amendments, should be amended to remove the existing reference to 15-326 and the supermarjority vote required with a protest petition, since the provisions for protect petitions were removed in 2016.	Article XX	15-324
Legislative Decisions Certain Legislative Decisions	Required	<u>Chapter 160D Requirement</u> . Must prohibit third-party down-zonings; may process down-zonings initiated by the local government or landowner (G.S. 160D-601; S.L. 2019-111, Pt. I.)	Amendment needed. A new sentence has been added to the end of 15-321, Initiation of Amendments which clarifies that requests for downzoning can only be made by the property owner or the Town.		15-323(d)
Legislative Decisions Certain Legislative Decisions	Required	Chapter 160D Requirement. Must obtain applicant's/landowner's written consent to conditions related to a conditional zoning approval to ensure enforceability. (G.S. 160D-703(b); S.L. 2019-111, Pt. I	Existing provisions under conditional zoning districts, 15-141.4(e) speak to mutually approved conditions. New language needed to add requirement for written consent.	Article IX	15-141.4
Legislative Decisions Certain Legislative Decisions	Required	conditional zoning and/or quasi-judicial special use permitting; must not use combined legislative and quasi-	Amendment needed. Existing conditional use districts will be automatically converted to conditional districts will the adoption of this amendment process. The existing provisions for conditional use zoning, 15-141.3 will be largely deleted. Certain conditional use districts that have special standards may need to be modified.	Article IX	14-141-3(e)
Legislative Decisions Certain Legislative Decisions	Optional		The existing provisions under 15-141.4(e) limits conditions to (i) those that address the conformance of the development and use of the site to the provisions of this chapter or to applicable plans adopted by the Board, and (ii) those that address the impacts reasonably expected to be generated by the development or use of the site.	Article IX	14-141-3(e)
Legislative Decisions Certain Legislative Decisions & Substance of Zoning Ordinance & Certain Quasi-Judicial Decisions	Optional	Chapter 160D Option. May allow administrative minor modification of conditional zoning, special use permits, and other development approvals; if allowed, must define "minor modification: by ordinance, must not include modification of use or density, and major modifications must follow standard approval process. (G.S. 160D-403(d), -703(b), -705(c).)	Amendment needed. New language outlining clear standards/parameters for minor modifications would be beneficial.	Article IX	14

Substance of other Development Ordinances Historic Preservation	Required	<u>Chapter 160D Requirement</u> . Must follow standard quasi- judicial procedures when considering preservation certificates of appropriateness. (G.S. 160D-947(c).	Existing language in the LUO under 15-339(d) directs the Historic District Commission (Appearance Commission) when considering a certificate of appropriateness (COA) to follow the provisions for the Board of Adjustment considering a SUP (meaning a quasi-judicial process). New language under this subsection and under subsection 15-336 has been added, incorporating the terms quasi-judicial for clarity.		15-336; 15-339(d)
Substance of other Development Ordinances Historic Preservation	Required	<u>Chapter 160D Requirement</u> . Must frame preservation district provisions as "standards" rather than "guidelines." (G.S. 160D-947(c).	References to "guidelines" in Subsection 15-338 changed to "standards."	Article XXI	15-338(b) in two places 15-338(c); 15-338(d); 15-338(f)
Substance of other Development Ordinances Historic Preservation		160D Option. May choose for appeals of preservation commission decisions to go to board of adjustment. Default rule is that preservation appeals go directly to superior court rather than to board of adjustment. (G.S. 160D-947(e).)	No change needed. The existing language in the LUO under 15-339(g) provides for COA appeals to go to the Board of Adjustment.	Article XXI	15-339(g)
Judicial Review Appeals of Quasi-Judicial Decisions		Chapter 160D Requirement. Must update ordinance to address appeals of certificates of appropriateness for historic landmarks and historic districts; default rule is that such appeals go straight to court; local government may opt for such appeals to go to the board of adjustment, as under prior statutes. (G.S. 160D-947.)	No change needed. The existing language in the LUO under 15-339(g) provides for COA appeals to go to the Board of Adjustment.	Article XX Article V	15-339(g) 15-91(d)
Judicial Review Appeals of Quasi-Judicial Decisions	Required	<u>Chapter 160D Requirement</u> . Must provide that appeals of certificates of appropriateness must be filed within thirty days after the decision is effective or written notice is provided, the same as for appeals of other quasijudicial decisions. (G.S. 160D-947; -1405.)	No change needed. The existing language in the LUO under 15-339(g) outlines the procdure for COA appeals to go to the Board of Adjustment following the standard process for appeals in 15-91 (Article V) Subsection 15-91(d) speaks to the 30-day window.	Article XXI Article V	15-339(g) 15-91(d)
		Taura a duainistantii sa uu data	Characteristic Country Country December 1 Alders and 1 Al	Article IV	
		Town administrative update. Town administrative update.	Change references for the Board of Aldermen to the Town Council. Changes for gender neutral language.	Article IV	
		Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article V	
		Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article VI	
				A .: 1 .////	
		Town administrative update. Town administrative update.	Change references for the Board of Aldermen to the Town Council. Change references for the Board of Aldermen to the Town Council.	Article XIII Article XIV	
		·	Amend subsection 15-216(d1) and 15-216.1(a) to change the reference to a CUP to a class A SUP. In addition, delete the reference to a B-4-CU district in 15-216(d1).	Article XIV	15-216(d1) 151-216.1(a)
		Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XVI	
		Town administrative update.	Amendments needed to change CUP and SUP to class A SUP and class B SUP.	Article XVI	15-251.10(b)(2) 15-251.11(a); (b) 15-264(a)
		Town administrative update.	Amendments needed for gender neutral language.	Article XVI	15-251.6
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		15-15-271(b) in two place 15-273

Town administrative update.	Amend LUO Subsection 15-271(d) to update the provisons associated with a master	Article XVII	15-271(d);
	sign permits approved as part of a CUP to class A SUP and a new provision to clarify		15-271(d)(1) in three places;
	that existing CUPs will automatically be converted to SUPs.		
Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XVII	15-271(d); 15-271(d)(1); 15-271(d)(2) in two places; 15-271(d)(3); 15-272(4)
Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XVIII	
Town administrative update.	Amendments needed to change CUP and SUP to class A SUP and class B SUP.	Article XVIII	15-291(f)
			15-296(h)
Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XIX	
Town administrative update.	Amend LUO sections 15-311, 15-319 and 15-321.1 to change CUP and SUP to class A	Article XIX	15-311
	SUP and class B SUP		15-319
			15-321.1(c)
Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XX	
Town administrative update.	List other administrative changes for Article XX		
Town administrative update.	Change references for the Board of Aldermen to the Town Council.	Article XXI	

ARTICLE I

GENERAL PROVISIONS

Section 15-1 Short Title.

This chapter shall be known and may be cited as the **CARRBORO LAND USE ORDINANCE**.

Section 15-2 Authority.

This chapter is adopted pursuant to the authority contained in Article 2 of N.C.G.S. Chapter 160D Article 19 of G.S. Chapter 160A; Article 21 (Part 6) of G.S. Chapter 143; G.S. 143-215.6A; G.S. 143-214.5; Article 4 of G.S. Chapter 113A; as well as Chapter 527 of the Session Laws of 1953; Chapters 122 and 136 of the Session Laws of 1963; Chapter 260 of the Session Laws of 1977; Chapter 753 of the Session Laws of 1979; Chapters 233 and 476 of the 1987 Session Laws; Chapters 216 and 484 of the 2009 Session Laws; and other state and local laws. (AMENDED 4/27/82; (REWRITTEN 6/26/12).

Section 15-3 Jurisdiction.

- (a) This chapter shall be effective throughout the town's planning jurisdiction. The town's planning jurisdiction comprises the area described by Chapters 122 and 636 of the Session Laws of 1963, as modified from time to time in accordance with Section 160D-200; 202; 903160A-360 of the North Carolina General Statutes.
- (b) In addition to other locations required by laws, a copy of a map showing the boundaries of the town's planning jurisdiction shall be available for public inspection in the planning department.

Section 15-4 Effective Date.

The provisions in this chapter were originally adopted and became effective on November 25, 1980. (AMENDED 4/27/87).

Section 15-5 Relationship to Existing Zoning, Subdivision and Flood Control Ordinances.

To the extent that the provisions of this chapter are the same in substance as the previously adopted provisions that they replace in the town's zoning, subdivision, or flood control ordinances, they shall be considered as continuations thereof and not as new enactments unless otherwise specifically provided. In particular, a situation that did not constitute a lawful, non-conforming situation under the previously adopted zoning ordinance does not achieve lawful nonconforming status under this chapter merely by the repeal of the zoning ordinance.

Section 15-6 Relationship to Land Use Plan.

It is the intention of the <u>Town CouncilBoard</u> that this chapter implement the planning policies adopted by the <u>CouncilBoard</u> for the town and its extraterritorial planning area, as reflected in the Land Use Plan and other planning documents. While the <u>CouncilBoard</u> reaffirms its commitment that this chapter and any amendment to it be in conformity with adopted planning policies, the <u>CouncilBoard</u> hereby expresses its intent that neither this chapter nor any amendment to it may be challenged on the basis of any alleged nonconformity with any planning document.

Section 15-7 No Use of Land or Buildings Except in Conformity With Chapter Provisions

- (a) Subject to Article VIII of this chapter (Nonconforming Situations), no person may use, occupy, or sell any land or buildings or authorize or permit the use, occupancy, or sale of land or buildings under his control except in accordance with all of the applicable provisions of this chapter.
- (b) For purposes of this section, the "use" or "occupation" of a building or land relates to anything and everything that is done to, on, or in that building or land.

Section 15-8 Fees.

- (a) Reasonable fees sufficient to cover the costs of administration, inspection, publication of notice and similar matters may be charged to applicants for zoning permits, sign permits, conditional use permits, special use permits, subdivision plat approval, zoning amendments, variances and other administrative relief. The amount of the fees charged shall be as set forth in the town's miscellaneous fees and charges schedule.
- (b) Except as otherwise provided in this chapter or the miscellaneous fees and charges schedule, fees established in accordance with subsection (a) shall be paid upon submission of a signed application or notice of appeal. (AMENDED 05/26/98)
- (c) Notwithstanding the provisions of Section 15-66 (Applications to be Processed Expeditiously) the planning staff may delay action on any request for a certificate of occupancy or final subdivision approval until all fees (including without limitation, engineering review fees) arising out of the permit review process for that particular development have been paid. (AMENDED 05/26/98).

Section 15-9 Stricter Regulation Controls. (AMENDED 6/26/12)

The requirements of this chapter are in addition to the requirements of any other ordinance, rule, regulation or other provision of law. Where any provision of this chapter imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human or environmental health, safety, and welfare shall control.

Section 15-10 through 15-14 Reserved.

ARTICLE II

BASIC DEFINITIONS AND INTERPRETATIONS

<u>Section 15-15 Definitions of Basic Terms. (AMENDED 6/22/04; 5/24/05; 6/26/07; 6/24/08; 3/24/09; 6/22/10; 6/23/20)</u>

Unless otherwise specifically provided, or unless clearly required by the context, the words and phrases defined in this section shall have the meaning indicated when used in this chapter.

ACCESSORY USE. (See Section 15-150). (AMENDED 1/22/85)

ADMINISTRATIVE DECISION. Decisions made in the implementation, administration, or enforcement of development regulations that involve the determination of facts and the application of objective standards set forth in this chapter, also referred to as administrative determinations.

ADMINISTRATIVE HEARING. A proceeding to gather facts needed to make an administrative decision.

ADMINISTRATOR. (See Section 15-37).

ADULT CARE HOME, CLASS A. All group homes for adults other than Class B group homes, maternity homes, or nursing care homes. This definition specifically includes but is not limited to group homes for adults who are in need of such a residential arrangement because they are aged or infirm, or have a "handicap" as defined in the Fair Housing Act (42 U.S.C. § 3602), or are "handicapped" as that term is defined in N.C.G.S. § 168-21. (**AMENDED 6/22/05**)

ADULT CARE HOME, CLASS B. A group home for adults that serves primarily the needs of those who (i) are "dangerous to others" as those terms are defined in N.C.G.S. 122C-3(11) and (21), or (ii) are currently using or are addicted to controlled substances; or (iii) who have been assigned to a group home as a condition of probation, parole, or intermediate punishment; as defined in G.S. 15 A-1340.11(6). (AMENDED 6/22/04; 4/19/05)

ANTENNA. Equipment designed to transmit or receive electronic signals or energy over the air. (AMENDED 02/18/97)

ANTENNA ELEMENT REPLACEMENT. The replacement of any part or all of an antenna or antenna array with a model of the same manufacturer and model type or close specification. (**AMENDED** 6/23/20)

APPLICABLE CODES. The N.C. State Building Code uniform fire, building, electrical, plumbing or mechanical codes adopted by a recognized national code organization together with State, Orange County or Town of Carrboro amendments to those codes enacted solely to address imminent threats of destruction of property or injury to persons. (**AMENDED 6/23/20**)

AUTOMATIC TELLER MACHINE, FREESTANDING. A machine or device through which a customer can conduct certain banking transactions and which is not located on the same lot as the bank or financial institution with which such machine is associated. The purpose of this definition is to distinguish between teller machines operated as accessory uses to banks located in principal buildings where customers can choose to do their banking either inside the building or at the teller machine, and teller machines that are totally separate from bank buildings and therefore generate additional traffic. (AMENDED 09/01/92)

BASE FLOOD. The flood having a one percent chance of being equaled or exceeded in any given year. Also known as the 100-year flood.

BASE STATION. A station at a specific site authorized to communicate with mobile stations, generally consisting of radio receivers, antennas, coaxial cables, power supplies, and other associated electronics. (AMENDED 6/23/20)

BED AND BREAKFAST. A use that (i) takes place within a building that, before January 1, 1999, was designed and used as a single-family detached dwelling unit, (ii) consists of a single dwelling unit together with the rental of one (1) or more bedrooms on a daily or weekly basis to tourists, vacationers, or similar transients, (iii) where the provision of meals, if provided at all, is limited to registered guests, and (iv) where the bed and breakfast operation is conducted primarily by persons who reside within the dwelling unit, with the assistance of not more than an equivalent of two (2) full-time employees. (AMENDED 06/22/99)

BEDROOM. A private room planned and intended for sleeping, separated from other rooms by a door, and accessible to a bathroom without crossing another bedroom. (**AMENDED 10/07/97**)

BERM. A <u>humanman</u>-made mound of earth whose length exceeds its height by a factor or at least five and whose side slopes are constructed at a steepness ratio of 6:1 or steeper. (The side slope of a berm shall not be constructed steeper than 2:1) (**AMENDED 05/19/98**)

BOARDING HOUSE. A residential use consisting of at least one dwelling unit together with more than two rooms that are rented out or are designed or intended to be rented but which rooms, individually or collectively, do not constitute separate dwelling units. A rooming house or boarding house is distinguished from a tourist home in that the former is designed to be occupied by longer term residents (at least month-to-month tenants) as opposed to overnight or weekly guests.

BONA FIDE FARM. Agricultural activities as set forth in G.S. 160D-903.

BUILDING. A structure designed to be used as a place of occupancy, storage or shelter.

BUILDING, ACCESSORY. A minor building that is located on the same lot as a principal building and that is used incidentally to a principal building or that houses an accessory use.

BUILDING, PRINCIPAL. The primary building on a lot or a building that houses a principal use.

CABLE TELEVISION SATELLITE STATION. A site containing one or more satellite dishes and related equipment, operated by a cable television company and used for the reception of electronic signals from satellites. (AMENDED 02/18/97)

CABLE TELEVISION SIGNAL DISTRIBUTION CENTER. A fully enclosed building not exceeding 2500 square feet that houses equipment used in connection with the distribution of cable television signals, with no external antennas, towers, satellite dishes, or similar facilities located on site. (AMENDED 02/18/97)

CHARTER. As defined in G.S. 160A-1(2).

CERTIFY. Whenever this chapter requires that some agency certify the existence of some fact or circumstance to the town, the town may require that such certification be made in any manner that provides reasonable assurance of the accuracy of the certification. By way of illustration, and without limiting the foregoing, the town may accept certification by telephone from some agency when the circumstances warrant it, or the town may require that the certification be in the form of a letter or other document.

CHILD CARE HOME, CLASS A. All group homes for minor children other than Class B group homes. This definition specifically includes but is not limited to group homes for minor children who are in need of such a residential arrangement because they are orphaned, abused, neglected, or dependent, or who have a "handicap" as defined in the Fair Housing Act (42 U.S.C. § 3602), or are "handicapped" as that term is defined in N.C.G.S. § 168-21. (AMENDED 6/22/04)

CHILD CARE HOME, CLASS B. A group home for minor children that serves primarily the needs of those who (i) are "dangerous to others" as those terms are defined in N.C.G.S. § 122C-3(11) and (21), or (ii) are currently using or are addicted to controlled substances; or (iii) who have been assigned to a group home as a condition of probation, parole, or "intermediate punishment: as defined in G.S. 15A-1340.11(6). (AMENDED 6/22/04; 4/19/05)

CHILD CARE INSTITUTION. An institutional facility housing more than nine orphaned, abandoned, dependent, abused, or neglected children.

CHILD DAY CARE FACILITY. A program or arrangement where more than eight children less than 13 years old, who do not reside where the care is provided, receive care on a regular basis of at least once per week for more than two hours but less than 24 hours per day from persons other than their guardians or full-time custodians, or from persons not related to them by birth, marriage, or adoption. (AMENDED 6/26/07)

CHILD DAY CARE HOME. A program or arrangement where three to eight children less than 13 years old, who do not reside where the care is provided, receive care on a regular basis of at least once per week for more than two hours but less than 24 hours per day from persons other than their guardians or full-time custodians, or from persons not related to them by birth, marriage, or adoption. (AMENDED 6/26/07)

CIRCULATION AREA. That portion of the vehicle accommodation area used for access to parking or loading areas or other facilities on the lot. Essentially, driveways and other maneuvering areas (other than parking aisles) comprise the circulation area.

COLLOCATION. The placement, installation, maintenance, modification, operation or replacement of wireless facilities on, under, within, or on the surface of the earth adjacent to existing structures, including utility poles, Town utility poles, water towers, buildings, and other structures capable of structurally supporting the attachment of wireless facilities. (AMENDED 6/23/20)

COMBINATION USE. A use consisting of a combination on one lot of two or more principal uses separately listed in the Table of Permissible Uses, Section 15-146. (Under some circumstances, a second principal use may be regarded as accessory to the first, and thus a combination use is not established. See Section 15.150. In addition, when two or more separately operated enterprises occupy the same lot, and all such enterprises fall within the same principal use classification, this shall not constitute a combination use.)

COMMUNICATIONS FACILITY. The set of equipment and network components, including wires and cables and associated facilities used by a communications service provider to provide communications service. (AMENDED 6/23/20)

COMMUNICATIONS SERVICE. Cable service as defined in 47 U.S.C. § 522(6) (The one-way transmission to subscribers of video programming, or other programming service and subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service), and information service as defined in 47 U.S.C. § 153(24). (The term "information service" means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service), and telecommunications service as defined in 47 U.S.C. § 153(53) (The term "telecommunications service" means the offering of telecommunications for a fee directly to the public.) (AMENDED 6/23/20)

COMMUNICATIONS SERVICE PROVIDER. A cable operator as defined in "Communications Service" and 47 U.S.C. § 522(5); a provider of information service, as defined in "Communications Service" and 47 U.S.C. § 153(24); a telecommunications carrier, as defined in "Communications Service" and in 47 U.S.C. § 153(51); or a wireless provider. (**AMENDED 6/23/20**)

COMMUNITY CENTER. A publicly-sponsored, non-profit indoor facility providing for one or several of various types of recreational uses. Facilities in a Community Center may include, but are not limited to gymnasia, swimming pools, indoor court areas, meeting/activity rooms, and other similar uses. For the purposes of this section, the term publicly-sponsored means that a significant Town investment is involved in some fashion in the facility's development or operations. (AMENDED 02/02/88)

<u>COMPREHENSIVE PLAN.</u> A comprehensive plan that has been officially adopted by the Town Council pursuant to G.S. 1660D-501.

CONDITIONAL USE PERMIT. A permit that was issued by the Town Council Board of Aldermen, prior to January 1, 2021, authorizing that authorizes the recipient to make use of property in accordance with the requirements of this chapter as well as any additional requirements imposed by the Town Council Board of Aldermen. Pursuant to N.C.G.S. Chapter 160D, all valid conditional use permits were automatically converted to a class A special use permits on January 1, 2021. See also special use permit.

CONDITIONAL ZONING. A legislative zoning map amendment with site-specific conditions incorporated into the zoning map amendment.

CRITICAL AREA. The critical area of the University Lake Watershed is defined as all area of the watershed within the planning jurisdiction of the Town of Carrboro. (**AMENDED 07/06/93**)

DATA SERVICE PROVIDER FACILITY. An automated facility other than a utility facility or wireless telecommunication facility, including but not limited to a structure and ancillary I improvement used primarily for the purpose of transmitting and receiving data. Typically, such facilities resemble wireless telecommunications base stations and house equipment used to transmit and receive data via cable, fiber optic strands, or similar media. (**REPEALED 02/04/97**; **AMENDED 06/23/15**)

DESIGNATED BUFFER. An area of land adjacent to lakes or watercourses within the University Lake Watershed that pursuant to Section 15-265 remains undisturbed in order to reduce the sedimentation and pollution of such lakes or watercourses. (**AMENDED 12/7/83; 12/06/88**).

DETERMINATION. A written, final, and binding order, requirement, or determination regarding an administrative decision.

DEVELOPER. A person, including a governmental agency or redevelopment authority, who undertakes any development and who is the landowner of the property to be developed or who has been authorized by the landowner to undertake development on that property. A person who is responsible for any undertaking that requires a zoning permit, special use permit, conditional use permit, or sign permit.

DEVELOPMENT. Unless the context clearly indicates otherwise, the term means any of the following:

- <u>a.</u> The construction, erection, alteration, enlargement, renovation, substantial repair, movement to another site, or demolition of any structure.
- b. The excavation, grading, filling, clearing, or alteration of land.
- c. The subdivision of land as defined in G.S. 160D-802.
- d. The initiation or substantial change in the use of land or the intensity of use of land.

That which is to be done pursuant to a zoning permit, special use permit, conditional use permit, or sign permit.

DEVELOPMENT APPROVAL. An administrative or quasi-judicial approval made pursuant to this chapter that is written and that is required prior to commencing development or undertaking a specific activity, project, or development proposal. Development approvals include, but are not

limited to, zoning permits, site plan approvals, special use permits, variances, and certificates of appropriateness. The term also includes all other regulatory approvals required by regulations adopted pursuant to this chapter, including plat approvals, permits issued, development agreements entered into, and building permits issued.

DEVELOPMENT REGULATION. A unified development ordinance, zoning regulation, subdivision regulation, erosion and sedimentation control regulation, floodplain or flood damage prevention regulation, mountain ridge protection regulation, stormwater control regulation, wireless telecommunication facility regulation, historic preservation or landmark regulation, housing code, State Building Code enforcement, or any other regulation adopted pursuant to N.C.G.S. Chapter 160D, this chapter or the Town Code or Town charter.

DIMENSIONAL NONCONFORMITY. A nonconforming situation that occurs when the height, size, or minimum floor space of a structure or the relationship between an existing building or buildings and other buildings or lot lines does not conform to the regulations applicable to the district in which the property is located.

DRIVEWAY. That portion of the vehicle accommodation area that consists of a travel lane bounded on either side by an area that is not part of the vehicle accommodation area.

DUPLEX. (See Residence, Duplex)

DWELLING. Any building, structure, manufactured home, or mobile home, or part thereof, used and occupied for human habitation or intended to be so used, and includes any outhouses and appurtenances belonging thereto or usually enjoyed therewith. This term does not include any manufactured home, mobile home, or recreational vehicle, if used solely for a seasonal vacation purpose.

DWELLING UNIT. An enclosure containing sleeping, kitchen, and bathroom facilities designed for and used or held ready for use as a permanent residence by one family.

ELECTRONIC GAMING OPERATION. (See Section 15-180). Any business enterprise, whether as a principal or accessory use, where persons utilize electronic machines, including but not limited to computers and gaming terminals, to conduct games of chance, including sweepstakes, and where cash, merchandise or other items of value are redeemed or otherwise distributed, whether or not the value of such distribution is determined by electronic games played or by predetermined odds. Electronic gaming operations may include, but are not limited to, internet cafes, internet

sweepstakes, electronic gaming machines/operations, or cybercafés. This does not include any lottery approved by the State of North Carolina. (AMENDED 6/22/10).

ELIGIBLE FACILITIES REQUEST. A request for a modification of an existing wireless tower or base station that involves collocation of new transmission equipment or replacement of transmission equipment but does not include a substantial modification. (AMENDED 6/23/20)

EQUIPMENT COMPOUND. An area containing accessory equipment surrounding or near the base of a wireless support structure within which a wireless facility is located. (**AMENDED 6/23/20**)

EVIDENTIARY HEARING. A hearing to gather competent, material, and substantial evidence in order to make findings for a quasi-judicial decision required by a development regulation adopted under this chapter. [See Article VI.]

EXPENDITURE. A sum of money paid out in return for some benefit or to fulfill some obligation. The term also includes binding, contractual commitments to make future expenditures, as well as any other substantial changes in position.

EXTRATERRITORIAL PLANNING AREA. That portion of the town's planning jurisdiction that lies outside the town's corporate boundaries. (AMENDED 4/27/82).

FAMILY. One or more persons living together as a single housekeeping unit.

FLAG LOT. An irregularly shaped lot where the buildable portion of the lot is connected to its street frontage by an arm of the lot that is less than fifty percent of the presumptive minimum required lot width as set forth in Section 15-183 [or if no minimum lot width is specified therein, is less than the lesser of (i) fifty percent of the width of the buildable portion of the lot, or (ii) fifty feet]. (**AMENDED 11/21/95**)

FLEX SPACE. A building providing use flexibility for office and light industrial uses, such as printing, design, light assembly of products, artist space, or storage/warehousing. A flex space could also host a co-working center, where many individual small business owners or freelancers work alongside one another in common space, or a business incubator, where individuals working to launch new businesses can rent affordable space in which to perform office work and access shared resources such as printers, scanners, and other tools and services such as financial counseling and management training. (AMENDED 6/18/2019)

FLOODPLAIN. Any land area susceptible to being inundated by water from the base flood. As used in this chapter, the term refers to that area designated as subject to flooding from the base flood (one hundred year flood) on the "Flood Boundary and Floodway Map" prepared by the U.S. Department of Housing and Urban Development, a copy of which is on file in the planning department.

FLOODWAY. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. As used in this chapter, the term refers to that area designated as a

floodway on the "Flood Boundary and Floodway Map" prepared by the U.S. Department of Housing and Urban Development, a copy of which is on file in the planning department.

FLOOR. The top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in a frame construction. See the definition of "Floor" in Subsection 15-251 (5) for all matters pertaining to floodplain and floodway regulations. **(AMENDED 4/21/87; 4/8/03)**

GROUP HOME. A housing arrangement in which up to nine individuals, typically unrelated, live together as a single housekeeping unit in a single dwelling unit, under circumstances where such residents are under the care, control, and supervision of one or more other persons who are trained to provide such care, control, and supervision. (AMENDED 6/22/04; 4/19/05)

GROSS FLOOR AREA. The total area of a building measured by taking the outside dimensions of the building at each floor level intended for occupancy or storage.

HANDICAPPED, AGED OR INFIRM INSTITUTION. A facility that provides residential care for more than nine aged, disabled or handicapped persons whose principal need is a home with the sheltered or personal care their age or disability requires. Medical care at such a facility is only occasional or incidental, such as may be required in the home of any individual or family, but the administration of medication is supervised. The residents of such a facility do not occupy separate dwelling units, and this distinguishes such a facility from a multi-family development occupied by the elderly, handicapped or disabled. (AMENDED 5/10/83) (REPEALED 6/22/05)

HAZARDOUS SUBSTANCE. Any substance which may pose a danger to the public health or safety if contained in the public water supply. This includes all substances defined as hazardous chemicals by the community right to know reporting requirements under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986, and by the North Carolina Hazardous Chemicals Right to Know Act (G.S. 95-173 to 95-218). **(AMENDED 12/7/83; 06/21/88)**

HIGH VOLUME TRAFFIC GENERATION. All uses in the 2.000 classification other than low volume traffic generation uses.

HIGHEST ADJACENT GRADE. The highest natural elevation of the ground surface, prior to construction, next to proposed walls of the structure. (AMENDED 4/21/87)

HOME OCCUPATION. A commercial activity that: (*i*) is conducted by a person on the same lot where such person resides, and (*ii*) is not so insubstantial or incidental or is not so commonly associated with the residential use as to be regarded as an accessory use (see Section 15-150), but that can be conducted without any significantly adverse impact on the surrounding neighborhood. (**AMENDED 04/11/89**)

Without limiting the generality of the foregoing, a use may not be regarded as having an insignificantly adverse impact on the surrounding neighborhood if: (i) goods, stock in trade, or other commodities are displayed, (ii) any on- premises retail sales occur, (iii) more than one person not a

resident on the premises is employed in connection with the purported home occupation, (iv) it creates objectionable noise, fumes, odor, dust or electrical interference, or (v) more than twenty-five percent of the total gross floor area of the residential buildings plus other buildings housing the purported home occupation, or more than 500 square feet of gross floor area (whichever is less), is used for home occupation purposes.

The following is a non-exhaustive list of examples of enterprises that may be home occupations if they meet the foregoing definitional criteria: (i) the office or studio of a physician, dentist, artist, musician, lawyer, architect, teacher, or similar professional, (ii) workshops, greenhouses, or kilns, (iii) dressmaking or hairdressing studios.

HOME OCCUPATION, MAJOR. A Major Home Occupation is an accessory business use of a residentially-zoned property, that meets one or more of the following criteria: (i) employs up to four non-resident employees, who may work on site; (ii) utilizes outdoor storage of materials, supplies, products, or machinery; or (iii) generates noise, vibration, dust, odor, light, or glare that is visible from neighboring properties or the public right-of-way at any hour of the day. Examples of Major Home Occupations include: lawncare or landscaping services, woodworking shops, small engine repair, appliance repair, metalworking, and any home business with more than one non-resident employee. Major home occupation uses are only permissible with a zoning permit in the HR-R district, and are subject to the performance standards specified in Section 15-176.9. (AMENDED 6/18/2019)

INDEPENDENT AUTOMOBILE LOTS OR GARAGES. An area or garage (i) that is used for the temporary parking (not storage) of motor vehicles, (ii) that is located on a lot on which there is no other principal use to which the parking is related, and (iii) where the parking spaces are used by more than one enterprise or by the general public or where the lot is leased by one enterprise for a total period (including automatic renewals or renewal options) of not more than four years. (AMENDED 3/11/86)

INTERMEDIATE CARE INSTITUTION. An institutional facility maintained for the purpose of providing accommodations for more than seven persons needing medical care and supervision at a lower level than that provided in a nursing care institution but at a higher level than that provided in institutions for the handicapped or infirm.

INTERMITTENT STREAM. A stream or portion of a stream that flows only in direct response to precipitation. It receives little or no water from springs and only temporary supply from melting snows or other sources. It is dry for a large part of the year. (AMENDED 12/7/83)

JOINT PLANNING TRANSITION AREA. That portion of the town's planning jurisdiction which lies generally to the north of the town's corporate boundaries and extraterritorial planning area, and which is defined by the Joint Planning Agreement between Carrboro, Chapel Hill, and Orange County, and described on the Orange County Joint Planning Area Land Use Map. This area is further defined as being in transition from rural to urban or already urban in density. The Transition Area is divided into Transition Area I and Transition Area II on the Joint Planning Area Land Use Map. Under the terms of the Joint Planning Agreement, no tract in Transition Area II may, after the effective date of

the Agreement, be approved for development at a density that exceeds one housing unit per gross acre until at least 75% of the gross land area of Transition Area I consists of any combination of:

- (a) Lots containing one acre or less;
- (b) Residential developments approved for development at a density of at least one unit per acre;
- (c) Streets, roads, and utility easements located outside of lots containing one acre or less;
- (d) Lots or tracts that are used for commercial, industrial, institutional, or governmental purposes;
- (e) Tracts that are owned by the University of North Carolina or other non-profit entities and that are not available for development. (AMENDED 11/14/88)

KENNEL. A commercial operation that: (*i*) provides food and shelter and care of animals for purposes not primarily related to medical care (a kennel may or may not be run by or associated with a veterinarian), or (*ii*) engages in the breeding of animals for sale.

LAKE OR WATERCOURSE. Any stream, river, brook, swamp, creek, run, branch, waterway, reservoir, lake, or pond, natural or impounded, in which sediment may be moved or carried in suspension and which could be damaged by accumulation of sediment and pollutants. (**AMENDED 12/7/83**)

LANDOWNER OR OWNER. The holder of the title in fee simple. Absent evidence to the contrary, the Town may rely on the county tax records to determine who is a landowner. The landowner may authorize a person holding a valid option, lease, or contract to purchase to act as the agent or representative for the purpose of making applications for development approvals.

LEGISLATIVE DECISION. The adoption, amendment, or repeal of a regulation under N.C.G.S. Chapter 160D, and Article XX of this chapter. The term also includes the decision to approve, amend, or rescind a development agreement consistent with the provisions of Article 10 of N.C.G.S. Chapter 160D.

LEGISLATIVE HEARING. A hearing to solicit public comment on a proposed legislative decision. [See Article XX.]

LOADING AND UNLOADING AREA. That portion of the vehicle accommodation area used to satisfy the requirements of Section 15.300.

Lot. A parcel of land whose boundaries have been established by some legal instrument such as a recorded deed or a recorded map and which is recognized as a separate legal entity for purposes of transfer of title.

If a public body or any authority with the power of eminent domain condemns, purchases, or otherwise obtains fee simple title to or a lesser interest in a strip of land cutting across a parcel of land otherwise characterized as a lot by this definition, or a private road is created across a parcel of land otherwise characterized as a lot by this definition, and the interest thus obtained or the road so created is such as effectively to prevent use of this parcel as one lot, then the land on either side of this strip shall constitute a separate lot.

Subject to Section 15-123, the permit-issuing authority and the owner of two or more contiguous lots may agree to regard the lots as one lot if necessary or convenient to comply with any of the requirements of this ordinance.

LOT AREA. The total area circumscribed by the boundaries of a lot, except that: (i) when the legal instrument creating a lot shows the boundary of the lot extending to the center of a public street right-of-way or into a public street right-of-way, then the lot boundary for purposes of computing the lot area shall be the street right-of-way line, or a line running parallel to and thirty feet from the center of the traveled portion of the street if the right-of-way line cannot be determined, and (ii) in a residential district, when a private road that serves more than three dwelling units is located along any lot boundary, then the lot boundary for purposes of computing the lot area shall be the inside boundary of the traveled portion of that road.

LOW VOLUME TRAFFIC GENERATION. Uses such as furniture stores, carpet stores, major appliance stores, etc. that sell items that are large and bulky, that need a relatively large amount of storage or display area for each unit offered for sale, and that therefore generate less customer traffic per square foot of floor area than stores selling smaller items.

LOWEST FLOOR. The lowest floor of the lowest enclosed area (including basement). An unfurnished or flood resistant enclosure, usable solely for parking vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance. (**AMENDED 4/21/87**)

MANUFACTURED HOME. A structure as defined in G.S. 143-145(7). [See also Mobile Home.]

MATERNITY HOME. A group home licensed as a maternity home by the N.C. Department of Health and Human Services pursuant to N.C.G.S. § 131D-10.10. (AMENDED 6/22/04)

MICRO WIRELESS FACILITY. (See Section 15-176). A small wireless facility that is no larger in dimension than 24 inches in length, 15 inches in width, and 12 inches in height and that has an exterior antenna, if any, no longer than 11 inches. (**AMENDED 6/23/20**)

MOBILE HOME. (REPEALED 4/24/84)

MOBILE HOME. Any structure that: (i) consists of a single unit completely assembled at the factory, or of two (double-wide) or three (triple-wide) principal components totally assembled at the factory and joined together at the site; (ii) is designed so that the total structure (or in the case of double-wides or triple-wides, each component thereof) can be transported on its own chassis; (iii) is over 40 feet in length and over 8 feet in width; (iv) is designed to be used as a dwelling and provides complete, independent living facilities for one family, including permanent provisions for living, sleeping, eating, cooking, and sanitation; (v) is actually being used or held ready for use as a dwelling; (vi) is not constructed in accordance with the standards set forth in the North Carolina State Building Code. (**AMENDED 4/24/84**)

MOBILE HOME, CLASS A. A mobile home constructed after July 1, 1976 that meets or exceeds the construction standards promulgated by the U.S. Department of Housing and Urban Development that were in effect at the time of construction and that satisfies the following additional criteria:

- (a) The pitch of the mobile home's roof has a minimum vertical rise of two feet for each twelve feet of vertical run.
- (b) The exterior materials are of wood, hardboard, or aluminum comparable in composition, appearance, and durability to site-built houses in the vicinity.
- (c) A continuous, permanent masonry foundation, unpierced except for required ventilation and access, is installed under the mobile home; and
- (d) The tongue, axles, transporting lights, and removable towing apparatus are to be removed subsequent to final placement. (AMENDED 10/1/85).

MOBILE HOME, CLASS B. A mobile home constructed after July 1, 1976 that meets or exceeds the construction standards promulgated by the U.S. Department of Housing and Urban Development that were in effect at the time of construction. (AMENDED 10/1/85, 10/20/87)

MOBILE HOME, CLASS C. All mobile homes other than Class A or Class B mobile homes. (AMENDED 10/20/87)

MOBILE PREPARED FOOD VENDOR. A business in which food that is prepared and ready for consumption at the point of sale is sold from or out of a motor vehicle (as defined in Section 6-1 of the Town Code) that does not exceed eight feet in width or twenty-five feet in length and that is removed each day at the close of the food vendor business from the lot where the food is sold. In no case may a mobile prepared food vendor business operate between the hours of 2:30 a.m. and 6:00 a.m. (AMENDED 6/24/08)

MODULAR HOME. A dwelling unit constructed in accordance with the standards set forth in the North Carolina State Building Code and composed of components substantially assembled in a manufacturing plant and transported to the building site for final assembly on a permanent foundation. Among other possibilities, a modular home may consist of two sections transported to the site in a manner similar to a mobile home (except that the modular home meets the N.C. State Building Code), or a series of panels or room sections transported on a truck and erected or joined together on the site.

NONCONFORMING LOT. A lot existing at the effective date of this chapter (and not created for the purposes of evading the restrictions of this chapter) that does not meet the minimum area requirement of the district in which the lot is located.

NONCONFORMING PROJECT. Any structure, development, or undertaking that is incomplete at the effective date of this chapter and would be inconsistent with any regulation applicable to the district in which it is located if completed as proposed or planned.

NONCONFORMING SITUATION. A situation that occurs when, on the effective date of this chapter, any existing lot or structure or use of an existing lot or structure does not conform to one or more of the regulations applicable to the district in which the lot or structure is located. Among other

possibilities, a nonconforming situation may arise because a lot does not meet minimum acreage requirements, because structures exceed maximum height limitations, because the relationship between existing buildings and the land (in such matters as density and set-back requirements) is not in conformity with this chapter, because signs do not meet the requirements of this chapter (Article XVII), or because land or buildings are used for purposes made unlawful by this chapter.

NONCONFORMING USE. A nonconforming situation that occurs when property is used for a purpose or in a manner made unlawful by the use regulations applicable to the district in which the property is located. (For example, a commercial office building in a residential district may be a nonconforming use.) The term also refers to the activity that constitutes the use made of the property. (For example, all the activity associated with running a bakery in a residentially zoned area is a nonconforming use.)

NURSING CARE HOME. A group home licensed as a nursing home under the Nursing Home Licensure Act, N.C.G.S. § 131E-100 et. seq. (**AMENDED 6/22/04**)

NURSING CARE INSTITUTION. An institutional facility maintained for the purpose of providing skilled nursing care and medical supervision at a lower level than that available in a hospital to more than nine persons.

OUTSIDE DISPLAY OF GOODS FOR SALE OR RENT. Display outside of a fully enclosed building of the particular goods or pieces of merchandise or equipment that are themselves for sale. Outside display is to be distinguished from outside storage of goods that are not prepared and displayed for immediate sale or rent. (AMENDED 2/4/86)

OVERNIGHT SHELTER FOR HOMELESS. A shelter operated by a non-profit agency for not more than fifteen persons (in addition to not more than two resident managers) who are referred to such shelter by an established agency within the community such as OPM Mental Health, the Carrboro or Chapel Hill Police Departments, the Orange County Department of Social Services, the Interfaith Council, the Salvation Army, etc. (AMENDED 10/22/85)

PARKING AREA AISLES. A portion of the vehicle accommodation area consisting of lanes providing access to parking spaces.

PARKING SPACE. A portion of the vehicle accommodation area set aside for the parking of one vehicle.

PERFORMING ARTS SPACE. A commercial enterprise occurring within an existing building or buildings aged fifty years or older and adapted for reuse in which performance art/performance art programming is the primary and principal driver of its business activities as demonstrated by factors specified in Section 15-147(r). This use is distinguished from bar and nightclub uses in that performances are often geared toward standing audiences and the ratio of audience to stage space is approximately four to one. (AMENDED 11/27/18)

PLANNED INDUSTRIAL DEVELOPMENT. A development that (i) is constructed on a tract of at least twenty contiguous acres under single ownership located within a planned industrial district, (ii) is developed in accordance with a comprehensive and unified scheme of development covering the entire tract, (iii) consists of a single principal use or a combination of principal uses as described in the 2.130 wholesale sales, 4.100 manufacturing, 13.100 police station, or 13.200 fire station classifications, and (iv) is otherwise developed according to building height, setback and other regulations applicable to the M-1 zoning district, except that the performance standards (Article XI, Part I) applicable to 4.100 uses in business zones shall govern uses in a planned industrial development. (AMENDED 6/22/82)

PLANNED UNIT DEVELOPMENT. A development constructed on a tract of land at least twenty-five (25) acres under single ownership, planned and developed as an integral unit, and consisting of a combination of principal uses that could not be combined in any district other than a planned unit development district. (**AMENDED 6/22/82**)

PLANNING <u>AND DEVELOPMENT REGULATION</u> JURISDICTION. The area within the town limits as well as the area beyond the town limits within which the town is authorized to plan for and regulate development pursuant to the authority granted in <u>Article 2 of Chapter 160D Article 19 of Chapter 160A</u> of the N.C. General Statutes and Chapter 122 of the Session Laws of 1963. (**AMENDED** 6/22/82)

PROTECTIVE BUFFERS. An area of land along both sides of watercourses outside of the University Lake Watershed with drainage areas smaller than one square mile that pursuant to Section 15-268 remains undisturbed and naturally vegetated in order to minimize the likelihood of nuisance flooding, promote the infiltration of stormwater into the ground, and help maintain local streams' capacity for carrying off storm water. (**AMENDED 12/06/88**)

PUBLIC UTILITY SERVICE COMPLEX. A development consisting of a combination of offices and one more of the following types of uses, all of which are operated or conducted by a "public utility" as that term is defined in Section 62.3 of the N.C. General Statutes: motor vehicle repair (use classification 9.400), parking or storage (use classification 10.300), and towers and wireless support structures (use classification 18.000). **(AMENDED 10/25/83; AMENDED 06/23/2020)**

PUBLIC WATER SUPPLY SYSTEM. Any water supply system furnishing potable water to ten or more dwelling units or businesses or any combination thereof. (See G.S. 130-31)

QUASI-JUDICIAL DECISION. A decision involving the finding of facts regarding a specific application of a development regulation and that requires the exercise of discretion when applying the standards of the regulation. The term includes, but is not limited to, decisions involving variances, special use permits, certificates of appropriateness, and appeals of administrative determinations. Decisions on the approval of subdivision plats and site plans are quasi-judicial in nature if the regulation authorizes a decision-making board, Town Council or board of adjustment, to approve or deny the application based not only upon whether the application complies with the specific requirements set forth in the regulation, but also on whether the application complies with one or more generally stated standards requiring a discretionary decision on the findings to be made by the decision-making board.

RECEIVE ONLY EARTH STATION. (DELETED 02/18/97)

RESIDENCE, DUPLEX. (REPEALED 4/24/84)

RESIDENCE, MULTI-FAMILY. (REPEALED 4/24/84)

RESIDENCE, SINGLE-FAMILY. (REPEALED 4/24/84)

RESIDENCE, DUPLEX. A two-family residential use in which the dwelling units share a common wall (including without limitation the wall of an attached garage or porch) and in which each dwelling unit has living space on the ground floor and a separate, ground floor entrance. (**AMENDED 4/24/84**)

RESIDENCE, MULTI-FAMILY. A residential use consisting of a building containing three or more dwelling units. For purposes of this definition, a building includes all dwelling units that are enclosed within that building or attached to it by a common floor or wall (even the wall of an attached garage or porch). (**AMENDED 4/24/84**)

RESIDENCE, MULTI-FAMILY APARTMENTS. A multi-family residential use other than a multi-family conversion or multi-family townhome. (**AMENDED 4/24/84**)

RESIDENCE, MULTI-FAMILY CONVERSION. A multi-family residence containing not more than four dwelling units that results from the conversion of a single building containing at least 2,000 square feet of gross floor area that was in existence on the effective date of this provision and that was originally designed, constructed and occupied as a single-family residence. (**AMENDED 4/24/84**)

RESIDENCE, MULTI-FAMILY TOWNHOMES. A multi-family residential use in which each dwelling unit shares a common wall (including without limitation the wall of an attached garage or porch) with at least one other dwelling unit and in which each dwelling unit has living space on the ground floor and a separate, ground floor entrance. (**AMENDED 4/24/84**)

RESIDENCE, PRIMARY WITH ACCESSORY APARTMENT. A residential use having the external appearance of a single-family residence but in which there is located a second dwelling unit that comprises not more than twenty-five percent of the gross floor area of the building nor more than a total of 750 square feet.

PRIMARY WITH ACCESSORY DETACHED DWELLING. A residential use in which there is located on the same lot a primary, single family residence and a second dwelling that is detached from the primary residence but that may be attached to another accessory building such as a garage, and which second dwelling unit comprises not more than fifty percent of the gross floor area of the primary residence nor more than a total of 750 square feet, exclusive of garage. (AMENDED 05/28/02)

RESIDENCE, SINGLE-FAMILY DETACHED, MORE THAN ONE DWELLING PER LOT. A residential use consisting of two or more single-family detached dwelling units on a single lot.

RESIDENCE, SINGLE-FAMILY DETACHED, ONE DWELLING UNIT PER LOT. A residential use consisting of a single detached building containing one dwelling unit and located on a lot containing no other dwelling units.

RESIDENCE, SINGLE-ROOM OCCUPANCY. A multi-family, residential use in which each dwelling unit includes no more than 450 square feet. (**AMENDED 01/11/00**)

RESIDENCE, TWO-FAMILY. A residential use consisting of a building containing two dwelling units. If two dwelling units share a common wall, even the wall of an attached garage or porch, the dwelling units shall be considered to be located in one building.

RESIDENCE, TWO-FAMILY APARTMENT. A two-family residential use other than a duplex, two-family conversion, or primary residence with accessory apartment.

RESIDENCE, TWO-FAMILY CONVERSION. A two-family residence resulting from the conversion of a single building containing at least 2,000 square feet of gross floor area that was in existence on the effective date of this provision and that was originally designed, constructed and occupied as a single-family residence.

RESIDENCE, TRIPLEX. A three-family residential use in which the dwelling units share common vertical walls or horizontal floors/ceilings (including without limitation the wall of an attached garage or porch) and in which each dwelling unit has a living space on the ground floor and a separate, ground floor entrance. (**AMENDED 6/18/2019**)

ROAD. All private ways used to provide motor vehicle access to (i) two or more lots or (ii) two or more distinct areas or buildings in unsubdivided developments.

ROOMING HOUSE. (See Boarding House)

SATELLITE DISH. A dish-shaped antenna designed for the reception of electronic signals from satellites. (**AMENDED 02/18/97**)

SENIOR CITIZEN RESIDENTIAL COMPLEX. A residential development consisting of a combination of (i) two-family or multi-family dwelling units, at least 90% of which are one-bedroom units designed for and limited to occupancy by senior citizens, and (ii) an "intermediate care institution" for senior citizens (use classification 7.200) containing a number of bedrooms that does not exceed the number of dwelling units in the complex and that is designed to house a number of senior citizens that does not exceed twice the maximum permissible number of bedrooms in this intermediate care facility. For purposes of this subsection, the term "senior citizen" means a person who is sixty-two (62) years of age or older or a household composed of one or more persons at least one of whom is 62 years of age or older. (AMENDED 11/28/95)

SENIOR CITIZENS' DAY CARE FACILITY, CLASS A. Any day care arrangement or center which provides day care for more than three but not more than sixteen senior citizens at any one time, on a regular basis of at least once per week for more than two hours but less than 24 hours per day.

Operation of a class A day care facility for senior citizens is considered use 22.300 Senior Citizens Day Care in the Table of Permissible Uses. (AMENDED 02/04/97; 6/26/07)

SENIOR CITIZENS' DAY CARE FACILITY, CLASS B. Any day care arrangement or center which provides day care for more than sixteen senior citizens at any one time, on a regular basis of at least once per week for more than two hours but less than 24 hours per day. Operation of a class B day care facility for senior citizens is considered use 22.400 Senior Citizens Day Care in the Table of Permissible Uses. (AMENDED 02/04/97; 6/26/07)

SIGN, FREESTANDING. A sign that (i) is not directly attached to, erected on, or supported by a building or other structure having a principal function other than the support of such sign, but (ii) is instead attached to, erected on, or supported by some structure (such as a pole, mast, frame, or other structure) that is not itself an integral part of a building or other structure having a principal function other than the support of a sign. A sign that stands without supporting elements, such as a "sandwich sign", is also a freestanding sign.

SIGN, NONCONFORMING. A sign that, on the effective date of this chapter does not conform to one or more of the regulations set forth in this chapter, particularly Article XVII, Signs.

SIGN, OFF-PREMISES. A sign that draws attention to or communicates information about a business, service, commodity, accommodation, attraction, or other activity that is conducted, sold, or offered at a location other than the premises on which the sign is located.

SIGN PERMIT. A permit issued by the land use administrator that authorizes the recipient to erect, move, enlarge, or substantially alter a sign.

SITE PLAN. A scaled drawing and supporting text showing the relationship between lot lines and the existing or proposed uses, buildings, or structures on the lot. The site plan may include site specific details such as building areas, building height and floor area, setbacks from lot lines and street rights-of-way, intensities, densities, utility lines and locations, parking, access points, roads, and stormwater control facilities that are depicted to show compliance with all legally required development regulations that are applicable to the project and the site plan review. A site plan approval based solely upon application of objective standards is an administrative decision and a site plan approval based in whole or in part upon the application of standards involving judgment and discretion is a quasi-judicial decision. A site plan may also be approved as part of a conditional zoning decision.

SMALL WIRELESS FACILITY. (See Section 15-176). A wireless facility that meets both of the following qualifications: (**AMENDED 6/23/20**)

- (1) Each antenna is located inside an enclosure of no more than six cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all its exposed elements, if enclosed, could fit within an enclosure of no more than six cubic feet.
- (2) All other wireless equipment associated with the facility has a cumulative volume of no more than 28 cubic feet. (For purposes of this subdivision, the following types of ancillary equipment are not included in the calculation of equipment volume: electric meters, concealment elements, telecommunications demarcation boxes, ground-based

enclosures, grounding equipment, power transfer switches, cut-off switches, vertical cable runs for the connection of power and other services, or other support structures.)

SOCIAL SERVICES PROVIDER WITH DINING SERVICES. A facility that provides to the public, at little or no charge, various social services, which may include educational programs, counseling services, food pantry facilities, and other supportive services, and which includes dining wherein free meals are provided on-site on a regular basis to substantial numbers of individuals. This use is distinguished from other social service providers, categorized elsewhere within category 3.000, which may also include a kitchen facility but that are primarily oriented to servicing members of the organization, with only incidental service provided to the public. (**AMENDED 3/22/16**)

SOLAR ARRAY. A photovoltaic cell, module, panel or array that is accessory to the principal use of a property and is designed solely for the purpose of reducing or meeting on-site energy needs. Roof mounted or building integrated arrays must be on a permitted structure, or one that is exempt on the basis of its size. Roof mounted arrays may be no more than 2000 square feet in size. Ground mounted arrays may be no greater than: 500 square feet in R-2 and R-3 districts; 1000 square feet in R-7.5, R-10, and R-S.I.R districts; 2000 square feet in R-15 and R-20 districts; and 5000 square feet in other districts. In addition, ground mounted arrays may be no greater than 50% of the size of the building footprint of the primary structure. Solar water heating panels may also be accessory to the principal use of a property subject to the criteria described above. (**AMENDED 06/27/17**)

SOLAR ARRAY FACILITY – LEVEL 1. Level 1 roof mounted or building integrated arrays must be on a permitted structure. Level 1 ground mounted arrays may be no greater than 50% of the size of the building footprint of the primary structure. In addition, Level 1 roof mounted arrays may not be more than 10000 square feet and Level 1 ground mounted arrays must be not more than: 2000 square feet in R-10 and R-S.I.R; 3000 square feet in R-15 and R-20; and 10000 square feet in other districts. **(AMENDED 06/27/17)**

SOLAR ARRAY FACILITY – LEVEL 2. Level 2 facility has a solar array (roof-mounted/building integrated or ground mounted) that does not qualify as an accessory or Level 1 facility and is not more than 1 acre. (**AMENDED 06/27/17**)

SOLAR ARRAY FACILITY – LEVEL 3. Level 3 facility has a solar array greater than 1 acre. (**AMENDED 06/27/17**)

SOLAR WATER HEATER. A solar water heater is a system that uses a solar thermal collector to heat water. A solar water heater may also be accessory to the principal use of a property subject to the criteria described under "solar array" above. (**AMENDED 06/27/17**)

SPECIAL EVENTS. Circuses, fairs, carnivals, festivals, or other types of special events that (i) run for longer than one day but not longer that two weeks, (ii) are intended to or likely to attract substantial crowds, and (iii) are unlike the customary or usual activities generally associated with the property where the special event is to be located. (AMENDED 10/13/81)

SPECIAL EXCEPTION PERMIT. A permit issued by the board of adjustment that authorizes the recipient to deviate from the otherwise applicable requirements of this chapter under the specific

circumstances and in accordance with the conditions set forth in section 15-92.1. (AMENDED 06/21/94)

SPECIAL USE PERMIT. A permit issued to authorize development or land uses in a particular zoning district upon presentation of competent, material, and substantial evidence establishing compliance with one or more general standards requiring that judgment and discretion be exercised as well as compliance with specific standards. The term includes permits previously referred to as conditional use permits. A permit issued by the board of adjustment that authorizes the recipient to make use of property in accordance with the requirements of this chapter as well as any additional requirements imposed by the board of adjustment.

SPECIALTY HIGH VOLUME TRAFFIC GENERATION. Uses such as gift or craft stores, bookstores, music stores and similar uses, to the extent that each individual enterprise occupies (whether as tenant or owner occupant) a gross floor area of not more than 3,000 square feet. Without limiting the generality of the foregoing, pawn shops and firearms sales are specifically excluded from this definition. (AMENDED 04/27/99)

STORY. That portion of a building included between the surface of any floor and the surface of the floor above it, or if there is no floor above it, then the space between the floor and the ceiling next above it, a distance typically measuring between nine and fourteen feet. The term story does not include any building level(s) that are substantially enclosed below the finished grade at the front of the building, so long as the finished grade does not substantially differ from the pre-construction, natural grade. (AMENDED 11/14/00; 4/8/03)

STREAM. A body of water flowing in a natural surface channel. Flow may be continuous or only during wet periods. (**AMENDED 12/7/83**)

STREET. A public street or a street with respect to which an offer of dedication has been made.

STREET, ARTERIAL. A major street in the town's street system that serves as an avenue for the circulation of traffic onto, out, or around the town and carries high volumes of traffic. The following streets are arterial streets:

Culbreth Road Main Street
Dairyland Road Merritt Mill Road

Damascus Church Road Hwy 54

Estes Drive Old Greensboro Road

Eubanks Road Old Hwy 86

Greensboro Street Old Fayetteville Rd.

Hillsborough Road Rogers Road Homestead Road Smith Level Road

Jones Ferry Road Weaver Street (AMENDED 06/04/91)

STREET, COLLECTOR. A street whose principal function is to carry traffic between minor, local, and subcollector streets and arterial streets but that may also provide direct access to abutting properties.

It serves or is designed to serve, directly or indirectly, more than one hundred dwelling units and is designed to be used or is used to carry more than eight hundred trips per day.

STREET, CUL-DE-SAC. A street that terminates in a vehicular turn-around.

STREET, LOCAL. A street whose sole function is to provide access to abutting properties. It serves or is designed to serve at least ten but not more than twenty-five dwelling units and is expected to or does handle between seventy-five and two hundred trips per day.

STREET, MARGINAL ACCESS. A street that is parallel to and adjacent to an arterial street and that is designed to provide access to abutting properties so that these properties are somewhat sheltered from the effects of the through traffic on the arterial street and so that the flow of traffic on the arterial street is not impeded by direct driveway access from a large number of abutting properties.

STREET, MINOR. A street whose sole function is to provide access to abutting properties. It serves or is designed to serve not more than nine dwelling units and is expected to or does handle up to seventy-five trips per day.

STREET, SUBCOLLECTOR. A street whose principal function is to provide access to abutting properties but is also designed to be used or is used to connect minor and local streets with collector or arterial streets. Including residences indirectly served through connecting streets, it serves or is designed to serve at least twenty-six but not more than one hundred dwelling units and is expected to or does handle between two hundred and eight hundred trips per day.

STRUCTURE. Anything constructed or erected.

SUBDIVISION. The division of a tract of land into two or more lots, building sites, or other divisions when any one or more of those divisions is created for the purpose of sale or building development (whether immediate or future) and including all divisions of land involving the dedication of a new street or a change in existing streets; but the following shall not be included within this definition nor be subject to the regulations of this chapter applicable strictly to subdivisions: (i) the combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the minimum standards set forth in this chapter, (ii) the division of land into parcels greater than ten acres where no street right-of-way dedication is involved; or (iii) the public acquisition by purchase of strips of land for widening or opening of streets or for public transportation system corridors; or (iv) the division of a tract in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the minimum standards set forth in this chapter; or (v) the division of a tract into parcels in accordance with the terms of a probated will or in accordance with intestate succession under Chapter 29 of the N.C.G.S.; (AMENDED 10/24/06)

SUBDIVISION, ARCHITECTURALLY INTEGRATED NONRESIDENTIAL (REPEALED 4/24/84)

SUBDIVISION, ARCHITECTURALLY INTEGRATED RESIDENTIAL. (REPEALED 4/24/84)

SUBDIVISION, ARCHITECTURALLY INTEGRATED. A subdivision in which approval is obtained not only for the division of land into lots but also for a configuration of principal buildings to be located on such lots. The plans for an architecturally integrated subdivision shall show the dimensions, heights, and location of all such buildings to the extent necessary to comply with the purpose and intent of architecturally integrated subdivisions as set forth in Section 15-187.

SUBDIVISION, MAJOR. Any subdivision other than a minor subdivision.

SUBDIVISION, MINOR. A subdivision of property located outside of the watershed districts that does not involve the creation of more than a total of four lots or the creation of any new public streets. (AMENDED 7/21/87; 12/15/87; 6/22/10)

SUBSTANTIAL MODIFICATION. (See Section 15-176). The mounting of a proposed wireless facility on a wireless support structure that substantially changes the physical dimensions of the support structure. A mounting is presumed to be a substantial modification if it meets any one or more of the criteria listed below: (**AMENDED 6/23/20**)

- (1) Increasing the existing vertical height of the structure by the greater of (i) more than ten percent (10%) or (ii) the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet.
- (2) Except where necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable, adding an appurtenance to the body of a wireless support structure that protrudes horizontally from the edge of the wireless support structure the greater of (i) more than 20 feet or (ii) more than the width of the wireless support structure at the level of the appurtenance.
- (3) Increasing the square footage of the existing equipment compound by more than 2,500 square feet.

TEMPORARY HOME FOR HOMELESS. A home owned or operated by a non-profit agency for not more than fifteen persons who satisfy the following criteria and who are in need of temporary housing, together with not more than two resident managers. All residents of such home, other than the manager shall: (i) be accepted only upon referral from an established agency within the community such as the Carrboro or Chapel Hill Police Departments, Inter-Faith Council, Salvation Army, etc. (ii) need housing and intend to reside within the home for at least a week while looking for more permanent accommodations within the community, (iii) be in need of temporary shelter because of some temporary emergency or exigency (e.g., pregnant teenagers, battered wives, newly unemployed persons evicted from their homes) and not because of transiency, de-institutionalization, chronic unemployment, alcoholism, or drug abuse.

TEMPORARY SIGN. A sign that (i) is used in connection with a circumstance, situation, or event that is designed, intended or expected to take place or to be completed within a reasonably short or definite period after the erection of such sign, or (ii) is intended to remain on the location where it is erected or placed for a period of not more than fifteen days. If a sign display area is permanent but the message displayed is subject to periodic change, that sign shall be regarded as temporary.

TOWER. A structure whose principal function is to support one or more antennas. See also Wireless Support Structure. (AMMENDED 02/18/97) (AMENDED 6/23/20)

TOWN RIGHT-OF-WAY. A right-of-way owned, leased, or operated by a town, including any public street or alley that is not a part of the State highway system. (AMENDED 6/23/20)

TOWN UTILITY POLE. A pole owned by a town in the town right-of-way that provides lighting, traffic control, or a similar function. (AMENDED 6/23/20)

TRACT. A lot (see definition 37). The term is used inter-changeably with the term lot, particularly in the context of subdivisions, where one "tract" is subdivided into several "lots".

TREE DIAMETER. The width of a tree's trunk, measured four and one half $(4\frac{1}{2})$ feet above the ground. **(AMENDED 03/21/89)**

TRAVEL TRAILER. A structure that is (i) intended to be transported over the streets and highways (either as a motor vehicle or attached to or hauled by a motor vehicle), and (ii) is designed for temporary use as sleeping quarters, but that does not satisfy one or more of the definitional criteria of a mobile home.

UNDERGROUND UTILITY LINE. Any underground utility lines (including, but not limited to, electrical, cable television, telephone, and natural gas, but excluding water and sewer lines constructed by the Orange Water and Sewer Authority) that are installed outside of public street rights-of-way and are not permitted pursuant to any other land use permit, and where any lines would eventually be dedicated to a governmental entity, nonprofit organization, or any entity defined as a public utility for any purpose by Section 62.3 of the North Carolina General Statutes. (AMENDED 5/24/05)

UNIVERSITY LAKE WATERSHED. All the land area contributing water to University Lake. (AMENDED 12/7/83)

USE. The activity or function that actually takes place or is intended to take place on a lot.

USE, PRINCIPAL. A use listed in the table of permissible uses.

UTILITY FACILITIES. Any above-ground structures or facilities (other than buildings, unless such buildings are used as storage incidental to the operation of such structures or facilities) owned by a governmental entity, a nonprofit organization, corporation, or any entity defined as a public utility for any purpose by Section 62.3 of the North Carolina General Statutes and used in connection with the production, generation, transmission, delivery, collection, or storage of water, sewage, electricity, gas, oil, or electronic signals. Excepted from this definition are utility lines and supporting structures listed in subsection 15-151 (2).

UTILITY FACILITIES, NEIGHBORHOOD. Utility facilities that are designed to serve the immediately surrounding neighborhood and that must, for reasons associated with the purpose of the utility in question, be located in or near the neighborhood where such facilities are proposed to be located.

UTILITY FACILITIES, COMMUNITY OR REGIONAL. All utility facilities other than neighborhood facilities.

VARIANCE. A grant of permission by the board of adjustment that authorizes the recipient to do that which, according to the strict letter of this chapter, he could not otherwise legally do.

VEHICLE ACCOMMODATION AREA. That portion of a lot that is used by vehicles for access, circulation, parking and loading and unloading. It comprises the total of circulation areas, loading and unloading areas, and parking areas.

VEHICLE STORAGE AREA. That portion of a vehicle accommodation area used in connection with a 9.200 or 9.400 classification use as a place to park vehicles temporarily while they are waiting to be worked on or pending the pick- up of such vehicles by their owners. (**AMENDED 2/4/86**)

WATER DEPENDENT STRUCTURE (DELETED 3/24/09)

WATERSHED DISTRICTS. Those zoning districts that are applied to land within the University Lake Watershed, specifically, the C, B-5, WR, and WM-3 districts. (AMENDED 12/15/87; 05/15/90)

WATERSHED RESEARCH. Small scale research facilities owned by the federal, state, or local governments and operated by or under contract with such government, which facilities do not involve the use, production, storage, or disposition of toxic or hazardous substances and which facilities relate to the study of the environment of the watershed or some other activity compatible with a close proximity to the community's water source.

WHOLESALE SALES. On-premises sales of goods primarily to customers engaged in the business of reselling the goods.

WIRELESS FACILITY. Equipment at a fixed location that enables wireless communications between user equipment and a communications network, including (i) equipment associated with wireless communications and (ii) radio transceivers, antennas, wires, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration. The term includes small wireless facilities. Also refers to Wireless Telecommunications Facility. The term shall not include any of the following: (AMENDED 6/23/20)

- (1) The structure or improvements on, under, within, or adjacent to which the equipment is collocated.
- (2) Wireline backhaul facilities.
- (3) Coaxial or fiber-optic cable that is between wireless structures or utility poles or city utility poles or that is otherwise not immediately adjacent to or directly associated with a particular antenna.
- (4) Amateur radio antennas. See also, Section 15-150(5) Towers and antennas constructed on residential property and <u>G.S. § 160D-931G.S. § 160A 400.51</u>.

WIRELESS SUPPORT STRUCTURE. A new or existing structure, such as a monopole, lattice tower, or guyed tower, that is designed to support or capable of supporting wireless telecommunications facilities, radio or TV antennas. A utility pole is not a wireless support structure. (AMENDED 6/23/20)

WOODED AREA. An area of contiguous wooded vegetation where trees are at a density of at least one six-inch or greater caliper tree per 325 square feet of land where the branches and leaves form a contiguous canopy. (AMENDED 4/24/84)

ZONING MAP AMENDMENT OR REZONING. An amendment to a zoning regulation for the purpose of changing the zoning district that is applied to a specified property or properties. The term also includes (i) the initial application of zoning when land is added to the territorial jurisdiction of the town that has previously adopted zoning regulations and (ii) the application of an overlay zoning district or a conditional zoning district. The term does not include (i) the initial adoption of a zoning map by the town, (ii) the repeal of a zoning map and readoption of a new zoning map for the entire planning and development regulation jurisdiction, or (iii) updating the zoning map to incorporate amendments to the names of zoning districts made by zoning text amendments where there are no changes in the boundaries of the zoning district or land uses permitted in the district

ZONING PERMIT. A permit issued by the land use administrator that authorizes the recipient to make use of property in accordance with the requirements of this chapter.

Section 15-16 Lots Divided by District Lines.

- (a) Whenever a single lot two acres or less in size is located within two or more different zoning districts, the district regulations applicable to the district within which the larger portion of the lot lies shall apply to the entire lot.
- (b) Whenever a single lot greater than two acres in size is located within two or more zoning districts, then: (AMENDED 1/22/85; 3/12/85; 2/24/87)
 - (1) If each portion of the lot located within a separate district is equal to or greater than the minimum lot size for that district, then each portion of the lot shall be subject to all the regulations applicable to the district in which it is located.
 - (2) If any portion of the lot located within a separate district is smaller than the minimum lot size for that district, then such smaller portion shall be regarded as if it were in the same zoning district as the nearest larger portion to which it is attached.
- (c) This section applies only to lots created on or before the effective date of this chapter unless the board of adjustment, in a proceeding under Section 15-93 to determine district boundaries, concludes that a lot established after the effective date of this section was not created to bring additional lot area within a more intensive zoning district, or otherwise to take unfair or unwarranted advantage of the provisions of this section.

Section 15-17 through 15-20 Reserved.

ARTICLE XIII

RECREATIONAL FACILITIES AND OPEN SPACE

Section 15-196 Active Recreational Areas and Facilities Required (AMENDED 5/10/83; 4/24/84; 12/10/85; 10/22/13)

- (a) Subject to subsection (d) and Sections 15-197 and 15-203, all residential developments shall provide active recreational areas and facilities to such an extent that the sum total of recreation points assigned to each recreational area and facility [under subsection (b)] equals or exceeds the number of recreation points required of that development in accordance with the remaining provisions of this section.
- (b) For purposes of this section, a recreation point is a unit of measurement that allows various types of recreational areas and facilities to be compared to one another. As set forth more fully in Appendix G to this chapter, the principal criterion upon which recreation points are assigned to various facilities is the cost associated with the development of such facilities. The following table establishes the recreation points assignable to the facilities listed. Points for facilities not included in the table below shall be determined by the permit issuing authority by applying the methodology set forth in Appendix G.

TYPE FACILITY	POINTS/SQUARE FOOT	TYPICAL POINTS	SQUARE FEET
Swimming Pool	.463	356	(768)
Swimming Pool Patio	.020	6	(2820)
Tennis Court (1)	.034	245	(7200)
Tennis Court (2)	.028	403	(14400)
Tennis Court (4)	.025	720	(28800)
Basketball Court	.058	139	(2400)
Volleyball Court	.014	25	(1800)
Hiking/Biking Trail	.016	64	(4000)
Fitness Station	.022	9	(400)
Picnic Shelter	.148	37	(250)
Gazebo	.326	102	(314)
Clubhouse	.508	609	(1200)
Play Equipment	.107	136	(1275)
Slide	.514	8	(16)
Swing	.176	8	(48)
Climber	.160	8	(50)
Ladder	.108	5	(48)
Balance Beams	.075	3	(40)
Pullup Bars	.330	3	(8)
Seesaw	.076	6	(80)
Whirl	.333	9	(28)
Sandbox	.097	6	(64)
Baseball Field	.010	675	(67500)
Football/Soccer Field	.011	396	(36000)
Indoor Fitness Center	.81	810	(1000)

(c) The minimum total of recreation points required of any development shall equal the sum of the recreation points assigned to each type of dwelling unit or lot proposed for that development in accordance with the following (The methodology for determining the assignment of recreation points to residential type is set forth in Appendix G.):

TYPE OF RESIDENCE (By Use Classification)	POINTS PER DWELLING UNIT
1.100 Single Family detached	10.39
1.120 Includes mobile home parks	11.25
1.200 Two-family residences	10.39
1.300 Multi-family residences	
One Bedroom	5.94
Two Bedroom	9.47
Three or more Bedroom	11.81
1.340 Single-Room Occupancy	2.97

With respect to residential subdivisions other than architecturally integrated subdivisions, each lot that is large enough for only a single dwelling unit or that is limited by restrictive covenants to development only with a single dwelling unit shall be deemed to house one single-family detached dwelling unit. Subject to Section 15-197, lots that are large enough to accommodate more than one dwelling unit and are not so limited by restrictive covenants shall be deemed to house the largest number of two-bedroom multi-family units that could be approved under this chapter. (AMENDED 10/10/00)

- (d) The <u>CouncilBoard</u> recognizes that some developments will contain such a small number of dwelling units that the active recreational areas and facilities required pursuant to this section would be of minimal practical value and that maintenance of such areas for so small a development would likely prove problematic. Therefore, the following types of residential developments shall not be required to provide active recreational areas and facilities under this section but shall be required to pay to the town's open space and recreational facilities fund a fee in lieu thereof in accordance with Section 15-203 if the town determines that it will be feasible to provide active recreational areas and facilities on land that can reasonably be expected to serve the residents of such developments:
 - (1) Unsubdivided developments that are small enough so that the minimum amount of recreation points required of such developments is not more than 80. (AMENDED 2/24/87)
 - (2) Subdivided residential developments of less than fifteen dwelling units. (AMENDED 06/27/95)
 - (3) For purposes of this subsection, the term "development" refers to the entire project developed on a single tract or contiguous multiple tracts under common ownership or control, regardless of whether the development is constructed in phases or stages. (AMENDED 2/24/87)

- (e) If the proposed development contains land subject to the provisions of 15-198(e), then a bike and pedestrian path that has the potential of connecting with similar type facilities on adjoining tracts that also have lands subject to the provisions of 15-198(e) shall be provided within this area, unless the permit issuing authority concludes that such a bike and pedestrian path would be environmentally undesirable or economically unfeasible. (AMENDED 06/27/95)
- (f) Play equipment suitable for children under 12 should comprise at least 10% of the total required recreation points of single-family units and 5% of the points required of multi-family units in a development. Residential developments consisting of solely single-room occupancy units shall be exempt from the requirement to provide play equipment suitable for children. (AMENDED ON 10/10/00)
- (g) Active recreational facilities and areas should be located throughout the development so that they can be reached safely and easily by their anticipated users. Such facilities and areas should be on land that is suitable for the intended use, have a minimum of 1200 square feet per area, and be sufficiently screened to minimize the impacts on adjacent residences.
- (h) When the cost of the land associated with recreational facilities is included in calculating the recreational points for such facilities under this section, then such land may generally not also be credited toward the fulfillment of the mandatory open space requirements set forth under Section 15-198. Exceptions to this policy are as follows:
 - (1) Play fields, including without limitation baseball fields, soccer fields, and football fields;
 - (2) Bike and pedestrian paths constructed pursuant to subsection (e) of this section. (Only the area that is within the width of the dedicated easement for the bike and pedestrian area is subject to the double counting provision.) (AMENDED 06/27/95)
 - (i) (AMENDED 4/8/03; REPEALED 6/12/07)

Section 15-197 Exception to Recreational Facilities and Open Space Requirements.

- (a) If an application is submitted for a subdivision and the application does not also seek approval for the development of improvements to the subdivision (such as the extension of water and sewer facilities or the creation of public streets or private roads) or the construction of buildings or other substantial improvements on any lot so subdivided, then the CouncilBoard (for a major subdivision) or the planning director (for a minor subdivision) may approve the subdivision without requiring the provision of active recreational areas and facilities (Section 15-196) or the provision of usable open space (Section 15-198) if the subdivision approval authority finds that the property is being subdivided for purposes other than the desire to accommodate a present plan to develop any of the lots so created in any manner other than the use as a single-family detached residence. (AMENDED 10/08/96)
- (b) The requirements of this article shall not apply to the reconstruction or enlargement of pre-existing single-family residential dwelling units or to the reconstruction or renovation of

pre-existing multi-family units, except to the extent that such reconstruction or renovation of multi-family residences increases the number of dwelling units or bedrooms within any such residential development. (AMENDED 10/08/96)

<u>Section 15-198 Open Space</u> (AMENDED 04/24/84; 03/26/85; 12/10/85; 11/11/86; REWRITTEN 06/27/95; 06/20/06; AMENDED 3/24/09; 3/23/10)

- (a) The <u>Council Board</u> finds that when land is developed for residential purposes, the public health, safety, and welfare are best served when substantial portions of the tracts so developed remain as common open space. The preservation of such open space areas serves the following important objectives, to the benefit of the residents of such developments as well as the general public:
 - (1) Preservation of open vistas, providing relief from an urban landscape;
 - (2) Preservation of environmentally sensitive lands;
 - (3) Preservation of habitat for wildlife;
 - (4) Preservation of historically or archaeologically significant areas;
 - (5) Provision of areas for passive recreation, such as walking or jogging.
 - (b) For purposes of this section:
 - (1) Open space refers to an area that:
 - a. Is not encumbered with any substantial structure;
 - b. Is not devoted to use as a roadway, parking area, or sidewalk;
 - c. Is not part of any privately owned lot that is used or intended for use for residential purposes;
 - d. Is legally and practicably accessible to the general public or to the residents of the development where the open space is located.
 - (2) Narrow strips of common area that separate lots within a development from each other, from streets, or from adjoining tracts shall generally not be regarded as open space within the meaning of this section unless such areas:
 - a. Are at least 50 feet in width and capable of functioning as a substantial visual buffer; or
 - b. Are configured and/or improved (e.g. through the installation of trails) in such a way as to be conducive to actual use for passive recreational purposes (i.e. walking or jogging) by residents of the development where located.

- (3) The following areas shall be regarded as open space if such areas satisfy at least the criteria set forth in Subdivision (1) a, b, and c of subsection (b) of this section:
 - a. Utility easements located outside of street rights of way;
 - b. Cemeteries located on a tract prior to its development.
 - c. Areas used for the growing of crops, such as hay, corn, or vegetables, if and to the extent that such uses occur within an area that is subject to the control of a homeowners association and such uses are approved by the homeowners association. (AMENDED 05/25/99)
- (4) The term "primary conservation areas" shall mean: (AMENDED 05/25/99; 6/20/99)
 - a. Areas containing slopes greater than 25%
 - b. Hardwood areas as designated in the Geographic Information System (GIS) of the Town of Carrboro. (AMENDED 3/24/09)
 - c. Wetlands as defined pursuant to Section 404 of the Clean Water Act
 - d. Floodplains
 - e. Water quality buffers on perennial and intermittent streams. (AMENDED 3/24/09)
 - f. Lakes and ponds;
 - g. Road buffers as required by Section 15-312 of this Chapter, except for those portions of the buffers that must be included in road or utility crossings.
- (5) The term "secondary conservation areas" shall mean: (AMENDED 05/25/99)
 - a. Areas containing slopes greater than 15% but not more than 25%;
 - b. Wooded areas other than hardwood areas as designated in the Geographic Information System (GIS) of the Town of Carrboro. (AMENDED 3/23/10)
 - c. Vistas along entranceways to the town;
 - d. Other areas containing unusual natural features (such as major rock formations);

- e. With respect to streams designated on the adopted Stream Classification Map of the Town of Carrboro, those areas within an average perpendicular distance of sixty feet from the edge of the floodway of the stream, if the floodway is designated on the "Flood Boundary and Flood Map" prepared by the U.S. Department of Housing and Urban Development or sixty feet from the centerline of the stream where the floodway is not designated on the map.
- f. Other environmentally, historically, or archaeologically significant or unique areas, including water quality buffers on ephemeral streams. (AMENDED 3/24/09)
- (c) Except as otherwise provided in subsection (j) and Section 15-203, every residential development in zoning districts other than the R-2, ORMU, B-1(c), B-1(G), B-2, and CT zoning districts shall be developed so that at least forty percent (40 percent) of the total area of the development remains permanently in open space. Every residential development in the R-2 and ORMU district shall be developed so that at least twenty percent (20 percent) of the total area of the development remains permanently as open space. (AMENDED 09/05/95; 06/20/06; 6/12/07)
- (d) Subject to subsection (g), every residential development containing at least 25 lots or dwelling units shall contain, as part of its required open space, one or more areas that are relatively flat, well drained, grassed, and otherwise well suited for use as a play field:
 - (1) Each such area shall contain a minimum of 20,000 square feet configured in such a manner as to be useful as a play field.
 - (2) Every development covered by this subsection shall set aside in one or more play fields meeting the criteria of this subsection a minimum of 400 square feet of area per lot or dwelling unit within the development.
 - (3) Play fields provided under this section shall be located with due regard for the safety and convenience of those using such facilities as well as the welfare of residents living nearby. The play fields required by this subsection shall be located such that 90% of the lots or dwelling units within any development that is required to install such play field are within 1,500 feet of a play field installed to meet the requirements of this subsection, unless the developer demonstrates by clear and convincing evidence that adherence to this requirement would not be feasible.
 - (4) Play fields constructed to meet the requirements of this subsection may be used by the developer to satisfy the active recreational requirements set forth in Section 15-196 as well as the open space requirements of this section. However, the recreation points assigned to such play fields shall be based upon the actual cost of constructing such play fields, exclusive of land costs. (AMENDED 05/25/99)

- (5) Notwithstanding the foregoing, the playfield requirement will not apply to residential mixed use developments located within the OR-MU zoning district. (AMENDED 6/20/06)
- (e) Subject to subsection (g), if a tract where a residential development is proposed contains any areas defined above as primary conservation areas, then such areas shall be designated as open space. (AMENDED 05/25/99)

(f) **RESERVED** (AMENDED 05/25/99)

- A developer shall not be required to set aside as open space under the provisions of (g) subsections (d) and (e) more than the minimum required percentage of open space set forth in subsection (c). If the sum total of open space otherwise required under the provisions of subsections (d) and (e) exceeds forty percent of the development tract (twenty percent in the R-2 district), then the permit issuing authority shall allow the developer to set aside a smaller area of open space under subsections (d) and (e), individually or collectively, so that the developer is not required to preserve as open space more than forty percent of the development tract (twenty percent in the R-2 district). However, if areas that constitute primary conservation areas have not been set aside as open space, then the development plans shall otherwise provide for the preservation of such areas even though they may be located within privately owned lots (e.g. by specifying buildable areas within individual lots). Notwithstanding the foregoing, hardwood areas identified in the Geographic Information System (GIS) of the Town of Carrboro that are not set aside as common open space shall be preserved except to the extent that removal of such hardwood trees is necessary to accommodate the permitted uses created out of land not set aside as common open space. ((AMENDED 09/05/95; 05/25/99; 3/23/10)
- (h) If the area of open space required to be preserved under subsections (d) and (e) does not exceed forty percent (40%) of the area of the development tract (20% in the R-2 district), then the permit issuing authority may require that the developer set aside from among the areas that constitute secondary conservation areas as defined above an amount of open space equal to the difference between the amount of open space preserved under subsections (d) and (e) and forty percent (40%) of the development tract (20% in the R-2 district). (AMENDED 09/05/95; 05/25/99)
- (i) Except as otherwise set forth in this section, the choice as to the areas to be set aside as open space shall remain with the developer.
- (j) Subdivided residential developments of less than fifteen dwelling units are exempt from the requirements of this section unless the town agrees that it will accept an offer of dedication of such open space, and in that case the offer of dedication shall be made. Subdivided residential developments exempted by this subsection from the requirement of providing usable open space shall be required to make a payment in lieu thereof to the town's open space and recreational facilities fund in accordance with Section 15-203 if the town determines that it will be possible to provide usable open space areas that are reasonably expected to benefit or serve the residents of such developments. For purposes of this subsection, the term "developments" shall have the same meaning as is set forth in subsection 15-196(d)(3).

(k) Residential developments consisting solely of multi-family, single-room occupancy units (1.340) shall be exempt from the requirements of this section. (AMENDED 01/11/00)

<u>Section 15-199 Ownership and Maintenance of Recreational Facilities and Open Space Not Dedicated to the Town (REWRITTEN 06/27/95)</u>

- (a) Unless the town requires that recreational facilities or open space be dedicated to the town or agrees to accept an offer of dedication voluntarily made by the developer, such recreational facilities and open space shall remain under the ownership and control of the developer (or his successor) or a homeowners' association or similar organization that satisfies the criteria established in Section 15-201. If such recreational facilities and open space are not publicly dedicated, they shall be made available to all residents of the development under reasonable rules and regulations established to encourage and govern the use of such facilities and open space by the residents without payment of separate optional fees or charges other than membership fees in a homeowners' association. Such facilities and open space may be made available to a limited extent on a fee basis to persons who are not residents of the development where such facilities or open space are located, so long as such use does not become so extensive as to remove the facilities and open space from the category of an accessory use to a residential development and transform the use to a separate principal use classification (see use classification 6.000) under the Table of Permissible Uses.
- (b) The person or entity identified in subsection (a) as having the right of ownership and control over such recreational facilities and open space shall be responsible for the continuing upkeep and proper maintenance of the same.

Section 15-200 Dedication of Open Space (AMENDED 11/26/85; REWRITTEN 06/27/95; REPEALED 09/05/95)

Section 15-201 Homeowners' Association (AMENDED 11/26/85)

Homeowners' associations or similar legal entities that, pursuant to Section 15-199, are responsible for the maintenance and control of common areas, including recreational facilities and open space, shall be established in such a manner that:

- (1) Provisions for the establishment of the association or similar entity is made before any lot in the development is sold or any building occupied;
- (2) The association or similar legal entity has clear legal authority to maintain and exercise control over such common areas and facilities;
- (3) The association or similar legal entity has the power to compel contributions from residents of the development to cover their proportionate shares of the costs associated with the maintenance and upkeep of such common areas and facilities; and
- (4) The association will establish a capital fund for the maintenance and upkeep of common areas and facilities and a method of contributing to that fund which

will spread the costs of said maintenance and upkeep to the residents over a number of years. (AMENDED 11/26/85)

Section 15-202 Flexibility in Administration Authorized.

- (a) The requirements set forth in this article concerning the amount, size, location and nature of recreational facilities and open space to be provided in connection with residential developments are established by the CouncilBoard as standards that presumptively will result in the provision of that amount of recreational facilities and open space that is consistent with officially adopted town plans. The CouncilBoard recognizes, however, that due to the particular nature of a tract of land, or the nature of the facilities proposed for installation, or other factors, the underlying objectives of this article may be achieved even though the standards are not adhered to with mathematical precision. Therefore, the permit issuing body is authorized to permit minor deviations from these standards whenever it determines that: (i) the objectives underlying these standards can be met without strict adherence to them; and (ii) because of peculiarities in the developer's tract of land or the facilities proposed it would be unreasonable to require strict adherence to these standards.
- (b) Whenever the permit issuing <u>authority</u> authorizes some deviation from the standards set forth in this article pursuant to subsection (a), the official record of action taken on the development application shall contain a statement of the reasons for allowing the deviation.

<u>Section 15-203 Fees in Lieu of Active Recreational Areas and Facilities or Usable Open Space.</u>

- (a) When the permit-issuing authority determines (upon the recommendation of the recreation director) that the recreational needs of a development required by Section 15-196 to construct active recreational areas and facilities could also be adequately met by facilities constructed on town property that is located close enough to such development to reasonably serve its residents, the town may authorize the developer to pay a fee to the town's open space and recreational facilities fund in lieu of providing on-site facilities. For purposes of this subsection, "town property" means property that is owned by the town or that the town has made plans to acquire within a reasonable time. (AMENDED 2/20/90)
- (b) With respect to residential developments that are exempt from the requirement of providing on-site active recreational areas and facilities under Subsection 15-196(d) or exempt from the requirement of providing usable open space under Subsection 15-198(j) and that choose not to provide such facilities or open space, the town shall accept and the developer shall pay a fee to the town's open space and recreational facilities fund if the permit-issuing authority determines that the town has acquired or has made plans to acquire within a reasonable time the necessary land to provide usable open space or a site for recreational facilities that can be expected to benefit or serve such developments.
- (c) The minimum amount of the fee paid under this section in lieu of active recreational areas and facilities shall be determined by multiplying the amount of recreation points that would otherwise be required of the development under Section 15-196 by the dollar value per point established in the town's miscellaneous fees and charges schedule. However, nothing herein shall prevent a developer from paying a fee that exceeds the minimum fee established pursuant to this

subsection, and the town's willingness to allow a payment of fees in lieu of on-site provisions of facilities or open space under subsection (a) may depend upon the developer's agreement to pay fees in excess of the minimum.

- (d) The minimum amount of the fee paid under this section in lieu of usable open space shall be determined by multiplying the square footage of open space that would otherwise be required of the development under Subsection 15-198(c) by the dollar value per square foot established in the town's miscellaneous fees and charges schedule.
- (e) With respect to any development that is authorized or required by this section to pay a fee in lieu of providing recreational facilities or usable open space, no use may be commenced, lot sold, or building occupied unless the fee has been paid. If a development is intended to be sold or occupied on a phase-by-phase basis, payment of the fee relating to each phase must first be made.

Section 15-204 Downtown Livability Area and Urban Amenities Provisions

- (a) The CouncilBoard concludes that when land is developed substantially for residential purposes in the downtown, defined for purposes of this section as those areas zoned B-1(G), B-1(c), B-2, or CT, the public health, safety, and welfare are best served when portions of such properties are developed as "downtown livability areas" and improved with "urban amenities" as those terms are used in this section. The development of such properties in this way may serve some or all of the following important objectives, to the benefit of downtown business owners, shoppers, workers, pedestrians, and residents, as well as the general public:
 - (1) provide relief from the high-density built environment (for example by mitigating urban temperature, pollution, glare);
 - (2) enhance the pedestrian experience;
 - (3) promote walking and biking in the downtown area;
 - (4) decrease stormwater runoff;
 - (5) provide food or habitat for wildlife;
 - (6) provide opportunities for artistic expression or the enjoyment of the same;
 - (7) provide opportunities for social gathering.
- (b) For purposes of this section, "downtown livability area" (DLA) refers to an outdoor area that (i) is not devoted to use as a roadway, parking area, required sidewalk, or required shade tree islands in parking lots; (ii) is legally and practically accessible to all of the residents, occupants, tenants, and owners of the property to which the DLA appertains (except that balconies and roof areas developed as DLA with or without urban amenities need not be so accessible); (iii) is not encumbered with any substantial structure other than an urban amenity; and (iv) with or without the improvement of an urban amenity, achieves one or more of the objectives set forth in subsection (a) of this section. An "outdoor area" means an area that is either not under roof or, if

under roof, is permanently open to the outdoors on at least 50 percent of the circumference of such area. A "green roof" means a roof of a building or structure (or portion thereof) that is covered with vegetation and soil, or a growing medium, planted over a waterproofing membrane.

- (c) For purposes of this section, "urban amenities" refers to improvements that (i) are located or constructed within downtown livability areas, and (ii) are designed, installed, and maintained to achieve one or more of the objectives set forth in subsection (a) of this section, together with any improvements necessary to support the function or safety of or provide access to such amenities. Urban amenities include but shall not be limited to the following: water features (reflecting pools, fountains); special visual or environmental exterior features incorporated into building architecture, public art; historic markers, features, or places; shade-producing street trees; outdoor furniture for seating, playing games, or picnicking; arbors, trellises, or pergolas with live plants; balcony plantings; birdfeeders, birdhouses, and birdbaths; widened sidewalks; covered bike racks; garden perimeter walls low and wide enough to accommodate sitting and lounging; green roofs.
- (d) For downtown developments in which 25 percent or more of the gross floor area is for residential use only, the downtown livability area and urban amenities requirements are as follows:
 - (1) The site shall be developed so that an area (measured in square feet) equal to at least 12 percent of the total land area remains permanently as downtown livability area, provided that:
 - a. DLA can be reduced to 10 percent of the land area if the DLA is substantially landscaped with grass, vegetative ground cover, plants, shrubs, bushes, or other vegetative landscaping and that is shaded to the extent of at least 35 percent of such area at noon on June 21st by building, awnings, pergolas, other structures, or shade trees, constructed or planted within or adjacent to such DLA.

For purposes of this subsection a "shade tree" means a tree whose height at maturity can be expected to exceed 20 feet, and of a species, according to its shape, size, and leaf size, that can be expected to provide shade during the growing season. (Please refer to LUO Appendix E, page E-13, "Trees for Shading" for examples of appropriate tree species for provision of shade.)

- b. DLA can be reduced to 10 percent of the land area if it is legally, practically, and visually accessible to the general public.
- c. The DLA can be reduced to 7 percent of the land area if it meets both the criteria set forth in (d)(1)b and (d)(1)c.
- (2) The dollar value of the urban amenities to be installed within the downtown livability area shall equal an amount to 7 percent of the assessed value of the land

that constitutes the development site, determined as of the date the development permit is approved.

When a development that is subject to this requirement contains a residential component, and the developer either provides recreation facilities or makes a payment in lieu to satisfy the requirements of this article, then such developer shall receive a credit toward the fulfillment of such developer's urban amenities obligation, if the amenities are publicly accessible, in the amount of 50 percent of the dollar value of the recreational facilities installed (determined by multiplying the recreational points associated with the facilities installed by the dollar value of such points as set forth in the town's miscellaneous fees and charges schedule) or the dollars paid in lieu of installing facilities.

- (e) Notwithstanding the foregoing, when property is developed pursuant to Section 15-160.1(b) the dollar value of urban amenities, required by Subsection 15-204(d)(2) may be reduced to 3.5 percent of the assessed value of the land that constitutes the development site. (Amended 06/02/20)
- (f) The dollar value of the urban amenities shall be determined in the permit review process. The developer shall submit sufficiently detailed information as to the particular amenities to be installed and the cost of such amenities to allow the permit issuing authority to determine whether the requirements of this section will be satisfied.
- (g) The requirements of this section shall not apply to permits issued for single-family or two-family dwellings or to those developments described in Section 15-197 of this article.
- (h) The requirements of this section shall not apply to previously developed lots if the developer demonstrates to the reasonable satisfaction of the permit issuing authority that the cost of the work proposed under the new permit is less than 50 percent of the assessed value of the improvements already on the lot when the applications for the new permit is filed.
- (i) For the purposes of this section, the term "development site" shall mean the lot where the development occurs, except that if less than 50 percent of such lot is proposed to be the subject of improvements authorized under the requested permit (including the construction of buildings, parking, landscaping, and/or significant improvements), then the term "development site" shall refer just to the portion of such lot where the improvements authorized by the permit are to be constructed.

Section 15-205_Fees in Lieu of Downtown Livability Area and Urban Amenities

(a) When the permit-issuing authority determines that it is physically impossible or impracticable for a development to satisfy the downtown livability area and urban amenities requirements of Section 15-204, then the permit-issuing authority may authorize the developer to pay a fee to the town's downtown livability area and urban amenities fund in lieu of complying with such requirements. The permit authority may allow such a payment in lieu only if it concludes that the objectives set forth in Subsection 15-204(a) could also be adequately met by having the town construct urban amenities on town property that is located within the downtown area. For

purposes of this subsection, "town property" means property that is owned by the town or that the town has made plans to acquire within a reasonable time.

- (b) The amount of the fee paid under this section in lieu of downtown livability area shall be equal to the product of the number of normally required square footage of DLA that is not being provided times the per square foot assessed value of the lot on which such development is proposed. The amount of the fee paid under this section in lieu of urban amenities shall be determined as follows: the dollar amount of urban amenities that would otherwise be required to be constructed on the development site in accordance with the provisions of Section 15-204 shall be calculated, and from this amount shall be subtracted the dollar amount of urban amenities (if any) that are placed on the development site within any downtown livability areas that are provided.
- (c) With respect to any development that is authorized to pay a fee in lieu of providing downtown livability area or urban amenities, no use may be commenced, lot sold, or building occupied unless the fee has been paid. If a development is intended to be sold or occupied on a phase-by-phase basis, payment of the fee relating to each phase must first be made.

<u>Section 15-206 Ownership and Maintenance of Downtown Livability Areas and Urban Amenities</u>

- (a) Downtown livability areas and urban amenities provided in accordance with Section 15-204 shall remain under the ownership and control of the developer (or his successor) or a property owners' association or similar organization that satisfies the criteria established in Section 15-201. Such downtown livability areas and urban amenities shall be made available to all owners, residents, occupants, and tenants of the development under reasonable rules and regulations established to encourage and govern the use of such downtown livability areas and urban amenities by the users without payment of separate optional fees or charges other than membership fees in a property owners' association.
- (b) The person or entity identified in subsection (a) as having the right of ownership and control over such downtown livability areas and urban amenities shall be responsible for the continuing upkeep and proper maintenance of the same.

Sections 15-207 through 15-209 Reserved.

ARTICLE XIV

STREETS AND SIDEWALKS

Section 15-210 Street Classification.

- (a) In all new subdivisions, streets that are dedicated to public use shall be classified as provided in subsection (b).
 - (1) The classification shall be based upon the projected volume of traffic to be carried by the street, stated in terms of the number of trips per day;
 - (2) The number of dwelling units to be served by the street may be used as a useful indicator of the number of trips but is not conclusive;
 - (3) Whenever a subdivision street continues an existing street that formerly terminated outside the subdivision or it is expected that a subdivision street will be continued beyond the subdivision at some future time, the classification of the street will be based upon the street in its entirety, both within and outside of the subdivision.
 - (b) The classification of streets shall be as follows:
 - (1) **MINOR**: A street whose sole function is to provide access to abutting properties. It serves or is designed to serve not more than nine dwelling units and is expected to or does handle up to seventy-five trips per day.
 - (2) **Local**: A street whose sole function is to provide access to abutting properties. It serves or is designed to serve at least ten but not more than twenty-five dwelling units and is expected to or does handle between seventy-five and two hundred trips per day.
 - (3) **CUL-DE-SAC**: A street that terminates in a vehicular turn-around.
 - (4) **SUBCOLLECTOR:** A street whose principal function is to provide access to abutting properties but is also designed to be used or is used to connect minor and local streets with collector or arterial streets. Including residences indirectly served through connecting streets, it serves or is designed to serve at least twenty-six but not more than one hundred dwelling units and is expected to or does handle between two hundred and eight hundred trips per day.
 - (5) **COLLECTOR:** A street whose principle function is to carry traffic between minor, local, and subcollector streets and arterial streets but that may also provide direct access to abutting properties. It serves or is designed to serve,

directly or indirectly, more than one hundred dwelling units and is designed to be used or is used to carry more than eight hundred trips per day.

(6) **ARTERIAL**: A major street in the town's street system that serves as an avenue for the circulation of traffic into, out, or around the town and carries high volumes of traffic. The following streets are arterial streets:

Culbreth Road	Main Street
Dairyland Road	Merritt Mill Road
Damascus Church Road	N.C. Hwy 54
Estes Drive	Old Greensboro Road
Eubanks Road	Old Hwy 86
Greensboro Street	Old Fayetteville Rd.
Hillsborough Road	Rogers Road
Homestead Road	Smith Level Road
Jones Ferry Road	Weaver Street

(AMENDED 06/04/91)

- (7) MARGINAL ACCESS STREET: A street that is parallel to and adjacent to an arterial street and that is designed to provide access to abutting properties so that these properties are somewhat sheltered from the effects of the through traffic on the arterial street and so that the flow of traffic on the arterial street is not impeded by direct driveway access from a large number of abutting properties.
- (8) **LOOP STREET.** A street having two points of intersection with the same street. **(AMENDED 06/21/94)**
- (9) **ALLEY.** A one-way service road providing a secondary means of public access to abutting property and not intended for general traffic circulation with a maximum length of 550 feet. **(AMENDED 09/27/94)**

Section 15-211 Access to Public Streets in General.

Every lot shall have access to it that is sufficient to afford a reasonable means of ingress and egress for emergency vehicles as well as for all those likely to need or desire access to the property in its intended use. (AMENDED 5/10/83; 4/24/84)

Section 15-212 Access to Arterial Streets.

Whenever a major subdivision that involves the creation of one or more new streets borders on or contains an existing or proposed arterial street, no direct driveway access may be provided from the lots within this subdivision onto this street.

Section 15-213 Entrances to Streets.

- (a) All driveway entrances and other openings onto streets within the town's planning jurisdiction shall be constructed so that:
 - (1) Vehicles can enter and exit from the lot in question without posing any substantial danger to themselves, pedestrians, or vehicles traveling on abutting streets; and
 - (2) Interference with the free and convenient flow of traffic in abutting or surrounding streets is minimized.
 - (3) In considering (1) and (2) above, the following factors shall be considered: (AMENDED 2/4/86)
 - a. The nature of the abutting street, its capacity, use, speed and flow, and reasonably anticipated changes to the street; and
 - b. The nature of the proposed use of the land, the traffic generated, the existence and number of drive-in window(s), the internal system for moving vehicles while on the lot; and
 - c. The nature of the exit and entrance, the site distance, the distance from intersections, the alignment with other drives and streets, turning controls or limitations.
 - d. As a minimum, no drive should be located within 250 feet of an intersection of an existing or planned arterial or collector road.
- (b) As provided in G.S. 136-93, no person may construct any driveway entrance or other opening onto a state-maintained street except in accordance with a permit issued by the North Carolina Department of Transportation. Issuance of this permit is prima facie evidence of compliance with the standard set forth in subsection (a).
- (c) If driveway entrances and other openings onto town-maintained streets are constructed in accordance with the specifications set forth in Appendix B to this chapter, this shall be deemed prima facie evidence of compliance with the standard set forth in subsection (a).
- (d) For purposes of this section, the term "prima facie evidence" means that the permit-issuing authority may (but is not required to) conclude from this evidence alone that the proposed development complies with subsection (a).

Section 15-214 Coordination with Surrounding Streets.

- (a) The street system of a subdivision shall be coordinated with existing, proposed and anticipated streets outside the subdivision or outside the portion of a single tract that is being divided into lots (hereinafter, "surrounding streets") as provided in this section.
- (b) Collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations.

- (c) Subject to subsection 15-217(a), subcollector, local, and minor residential streets shall connect with all surrounding streets to permit safe, convenient movement of traffic between residential neighborhoods and to facilitate access to neighborhoods by emergency and other service vehicles. The connections shall be created in such a way that they do not encourage the use of such streets by substantial through traffic. (AMENDED 09/16/97; 05/06/03)
- (d) Whenever connections to anticipated or proposed surrounding streets are required by this section, the street right-of-way shall be extended and the street developed to the property line of the subdivided property (or to the edge of the remaining undeveloped portion of a single tract) at the point where the connection to the anticipated or proposed street is expected. In addition, the permit-issuing authority may require temporary turnarounds to be constructed at the end of such streets pending their extension when such turnarounds appear necessary to facilitate the flow of traffic or accommodate emergency vehicles. Notwithstanding the other provisions of this subsection, no temporary dead-end street in excess of 1,000 feet may be created unless no other practicable alternative is available.

Section 15-215 Relationship of Streets to Topography.

- (a) Streets shall be related appropriately to the topography. In particular, streets shall be designed to facilitate the drainage and stormwater runoff objectives set forth in Article XVI, and subject to the design requirements relating to maximum grades set forth in subsection (b), street grades shall conform as closely as practicable to the original topography.
- (b) As indicated in Section 15-216, the maximum grade at any point on a street constructed without curb and gutter shall be 8%. On streets constructed with curb and gutter the grade shall not exceed 8% unless no other practicable alternative is available. However, in no case may streets be constructed with grades that, in the professional opinion of the public works director, create a substantial danger to the public safety.

Section 15-216 Street Width, Sidewalk, and Drainage Requirements in Subdivisions (AMENDED 08/27/96, 10/23/2018)

- (a) Minor and local streets where the grade does not exceed 8% may be constructed without curb and gutter in accordance with the standards set forth in subsection (b). All other streets shall be constructed in accordance with the standards set forth in subsection (c). (AMENDED 05/12/98)
- (b) Subject to subsections (d), (e), and (f), streets constructed without curb and gutter shall conform to the following standards as well as the specifications referenced in Section 15-219. To the extent practicable, the side slope of the drainage swale shall not exceed 4:1 on the street side and on the back side shall not exceed 3:1. When necessary, the minimum right-of-way shall be expanded to accommodate the proper construction of the travel lane, shoulders, swales, and (if applicable) a sidewalk within the right-of-way.

TYPE STREET with Swales	MINIMUM ROW WIDTH	MINIMUM PAVEMENT WIDTH	BIKE LANES	MINIM 1	IUM SHOU WIDTH	LDER 2	SIDEWALK REQUIREMENT
MINOR	47'	18'	NONE	6'		8'	NONE
LOCAL	47'	20'	NONE	6'		8'	ONE SIDE

(AMENDED 11/19/96; 05/12/98)

(c) Subject to subsections (d), (d1), (e), and (f), collector streets and other streets not constructed according to the requirements of subsection (b) shall conform to the requirements of this subsection and the specifications referenced in Section 15-219. Only standard 90° curb may be constructed, except that roll-type curb may be authorized by the permit issuing authority. Street pavement width shall be measured from curb face to curb face where 90° curb is used, and from the back of one curb to the back of the opposite curb where roll-type curb is used.

TYPE STREET	MINIMUM ROW	MINIMUM PAVE-	BIKE	SIDEWALK
with Curb & Gutter	WIDTH	MENT WIDTH	LANES	REQUIREMENT
ALLEY (One-way)	20'	12'	NONE	NONE
Minor	37'	18'	NONE	NONE
Local	43'	20'	NONE	ONE SIDE
Subcollector	50'	26'	NONE	BOTH SIDES
Collector	60'	34'	BOTH SIDES	BOTH SIDES
Arterial	NCDOT Standards	NCDOT Standards	BOTH SIDES	BOTH SIDES

(AMENDED 11/19/96; 05/12/98)

- (d) The <u>CouncilBoard</u> may allow a deviation from the standards set forth in subsections (b) and (c) to allow the construction of a street divided by a landscaped median with one-way traffic proceeding in opposite directions on either side of the median. The <u>CouncilBoard</u> may allow such a street if it finds that, if completed as proposed, such a street will (i) adequately and safely serve the functions streets are designed to serve, and (ii) will not impose on the town any undue or unreasonable costs or burdens relating to repair and maintenance.
- (d1) The <u>CouncilBoard</u> may, for any development approved with a <u>class A</u> <u>specialeonditional</u> use permit on property zoned <u>B-4-C U or B-4-CZ</u>, authorize a deviation from the standards set forth in subsection (b) and Appendix C relative to streets and sidewalks if the <u>CouncilBoard</u> concludes that (i) the proposed streets and sidewalks would serve the functions they are designed to serve as well as or better than streets and sidewalks constructed in conformity with subsection (b) and Appendix C; and (ii) such streets and sidewalks will not impose on the town any undue or unreasonable costs or burdens relating to repairs and maintenance.
- (e) The <u>CouncilBoard</u> may allow a deviation from the right-of-way minimums set forth in subsections (b) and (c) if it finds that (i) the deviation is needed because in order for a development to be served by a public street the street must be constructed within an area that is not of sufficient width to comply with the right-of-way criteria set forth above, (ii) a street that meets the pavement width criteria and substantially complies with the other criteria set forth above can be constructed within the right-of-way that can be made available; and (iii) that the applicant <u>has</u> shown that he has made a reasonable effort and attempted to purchase the necessary right-of-way.

- (f) The <u>CouncilBoard</u> may allow a deviation from the standard right-of-way minimums set forth in subsections (b) and (c) if it finds that the developer has obtained an agreement from the utility companies whose lines will need to be located within a street right-of-way to install such lines in a single trench or in some other fashion that allows the street right-of-way to serve all of its intended purposes with a lesser width than that specified in subsections (b) and (c).
- (g) The sidewalks required by this section shall be at least five feet wide and constructed with concrete according to the specification set forth in Appendix C, except that the permit issuing authority may permit the installation of walkways constructed with mortarless laid brick pavement according to specifications set forth in Appendix C when it concludes that: (AMENDED 12/08/98)
 - (1) Such walkways shall serve the residents of the development as adequately as concrete sidewalks; and
 - (2) Such walkways shall be more environmentally desirable or more in keeping with the overall design of the development.
- (h) Whenever the permit issuing authority finds that a means of pedestrian access is necessary from the subdivision to schools, parks, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the streets, the developer may be required to reserve an unobstructed easement of at least ten feet in width to provide such access.
- (i) In subdivision developments that abut a public street, sidewalks shall be constructed adjacent to such street if a sidewalk in that location is required by the officially adopted town sidewalk master plan. Whenever possible, such sidewalk shall be constructed within the public right-of-way.
- (j) The sidewalks required by this section along streets with curb and gutter shall be constructed with a planting strip at least three feet in width, unless the permit-issuing authority allows the strip to be omitted or constructed at a lesser width upon a finding that such deviation from the presumptive standard is warranted to avoid environmental damage or to promote public safety. For purposes of this subsection, a planting strip shall mean a strip of land located between the back of the curb and the walkway. Such planting strips shall be planted with grass or otherwise landscaped. (AMENDED 11/19/96; 12/08/98)

<u>Section 15-216.1 Street Widths, Sidewalk and Drainage Requirements in Certain Developments (AMENDED 05/06/03)</u>

(a) When any tract of land is developed under circumstances requiring the issuance of a <u>class A or class B</u> special <u>or conditional</u> use permit, the street and road design requirements for streets other than collector streets that would otherwise be determined in accordance with the provisions of Sections 15-216 and 15-221 may be modified, by approval of the permit-issuing authority, to alternative street width and construction specifications, sidewalk and drainage requirements, as illustrated in Appendix C, for developments that

- involve the extension of, or connection to, existing Town streets, the construction specifications of which do not meet the minimum standards established in Section 15-216 in association with Section 15-210 Street Classification;
- 2) meet the following low-impact development criteria:
 - a. preserves open space and minimizes land disturbance;
 - b. protects natural systems and preserves natural processes (including, but not limited to, drainage ways, vegetation, soils, and other sensitive areas);
 - c. maximizes the incorporation of natural site elements (including, but not limited to, wetlands, stream corridors, and mature forests), and;
 - d. decentralizes and micromanages stormwater at its source to the maximum extent practicable.
- 3) include a minimum of 15 percent affordable housing units (as defined in Section 15-182.4(a).
- (b) Streets constructed in accordance with this Section shall conform to the following standards as well as specifications presented in Appendix C.

Type Street Alternative	Minimum ROW Width	Minimum Pavement Width	Bike Lanes	Minimum Shoulder Width 12	Sidewalk Requirement
Local	59'	20'	NONE	9 (2)	ONE SIDE
Subcollec- tor	73'	26'(1)	NONE	9 (2)	BOTH SIDES (3)

- (1) Minimum pavement width may include the concrete grade beam illustrated in Standard Drawing No. 27, or structural equivalent as approved by the Town Engineer.
- Nine feet of width may include a 3-foot planting strip, 5-foot sidewalk, and 1-foot separation between sidewalk and drainage/water quality structure.
- (3) May be modified by the permit-issuing authority.
- (4) Construction requirements as required in Appendix C and D of the Land Use Ordinance, unless otherwise specifically modified by these provisions or the notes included on standards in Appendix C and D.
- (c) The permit-issuing authority may reduce the sidewalk requirement for subcollector streets meeting the alternative street standard from both sides to one side of the road if

- a. The development contains a parallel system that is integrally designed and provides pedestrian access to the interior of the site;
- b. Any new public street passing through the development and the bulk of the facilities and activities are to occur on one side of the road;
- c. Any new public street connects to an existing street that does not meet publics street standards and where the site conditions indicate that the full upgrade of the street to the town standards would not be practicable; and
- d. The developer is participating in off-site construction of, or improvements to public sidewalks that will connect the new development with the town's sidewalk system.

Section 15-217 General Layout of Streets.

- (a) To the extent practicable, all streets shall be interconnected. Cul-de-sacs shall not be used unless the topography of the land does not allow a design that would make an interconnecting street practicable. (AMENDED 09/16/97; 09/28/99)
- (b) All permanent dead-end streets [as opposed to temporary dead-end streets, see subsection 15-214(d)] shall be developed as cul-de-sacs in accordance with the standards set forth in subsection (c), unless construction of such cul-de-sacs is not reasonably possible given such factors as steep slopes or right-of-way limitations. Under such circumstances, the town may approve alternative designs that will provide a safe and convenient means for vehicular traffic to turn around (alternatives are suggested in Appendix C, Standard Drawing No. 19). Except where no other practicable alternative is available, such streets may not extend more than 550 feet (measured to the center of the turn-around). (AMENDED 09/27/94, 09/16/97)
- curb and gutter or a radius of 52 feet if constructed with curb and gutter. The radius of the paved portion of the turn-around for streets constructed without curb and gutter shall be 42' (measured to the outer edge of pavement) and for streets constructed with curb and gutter shall be 44.5' (measured to the back of the outer curb). If a developer chooses to provide an unpaved center island in the culde-sac, the island shall be landscaped and shall not be dedicated to the public; it shall remain under the ownership and control of the developer (or his successor) or a homeowners association or similar organization that satisfies the criteria established in Section 15-201. Cul-de-sacs containing center islands shall have a minimum pavement width of 18 feet if constructed without curb and gutter or 20 feet if constructed with curb and gutter (measured from inner edge of pavement to face of curb). Mountable 45° curbing shall be installed around the island in accordance with Town of Carrboro design specifications. Minimum design and construction specifications for cul-de-sacs are set forth in Appendix C.

Asymmetrical cul-de-sacs may be allowed with the approval of the public works director, town engineer, fire chief, and the applicable permit issuing authorities. (AMENDED 2/20/90; 08/08/95; 09/16/97)

- (d) Half streets (i.e., streets of less than the full required right-of-way and payment width) shall not be permitted except where such streets, when combined with a similar street (developed previously or simultaneously) on property adjacent to the subdivision, creates or comprises a street that meets the right-of-way and payment requirements of this chapter. (AMENDED 09/16/97)
- (e) Streets shall be laid out so that residential blocks do not exceed 1,000 feet, unless no other practicable alternative is available. (AMENDED 09/16/97)
- (f) Alleys shall not intersect with any arterials and shall meet the "Entrances to Streets" standards of Section 15-213. Alley radii at street intersections shall not be less than 15 feet. Alleys may run adjacent to lot line boundaries only and not parallel and adjacent to street right-of-way or front property boundaries. In determining conformance with Section 15-184(a), Setback Requirements, the right-of-way lines associated with alleys shall be regarded as lot boundary lines and not street right-of-way lines. (AMENDED 09/27/94; 09/16/97)
- (g) To the extent practicable, portions of subcollector and collector streets that consist of stretches of 800 feet or more uninterrupted by intersections suitable for stop signs shall contain design features intended to discourage speeding and cut-through traffic, including but not limited to one or more of the following:
 - (1) Curves with radius of 800 feet or less; or
 - (2) Design features described in the town's Residential Traffic Management Plan. (AMENDED 09/16/97)

Section 15-218 Street Intersections.

- (a) Streets shall intersect as nearly as possible at right angles, and no two streets may intersect at less than 60°. Not more than two streets shall intersect at any one point, unless the public works director certifies to the permit issuing authority that such an intersection can be constructed with no extraordinary danger to public safety.
- (b) Whenever possible, proposed intersections along one side of a street shall coincide with existing or proposed intersections on the opposite side of such street. In any event, where a center line offset (jog) occurs at an intersection, the distance between centerlines of the intersecting streets shall be not less than 150 feet except as provided in subsection (d). (AMENDED 4/26/88)
- (c) Except as otherwise provided in subsection (d) and (e): (AMENDED 4/26/88; REWRITTEN 1/26/10)
 - (1) No two streets may intersect with any other street on the same side at a distance of less than 400 feet measured from centerline to centerline of the intersecting street.
 - When the intersected street is an arterial, the distance between intersecting streets shall be at least 1,000 feet.

- (d) The provisions of this section shall not operate to prohibit any property from having direct access onto an adjacent public street, and when a literal application of the provisions of this section would otherwise prohibit all such access, the permit-issuing authority may allow the minimum deviation from the requirements of this section that is necessary to provide reasonable access. (AMENDED 4/26/88)
- (e) Notwithstanding the foregoing, two streets may intersect with another street on the same side at a distance of less than 400 feet, measured from centerline to centerline of the intersecting streets, if the street with which the two streets intersect is connected to a street within a village mixed use development and a development itself is adjacent to a village mixed use development. However, in no event, may the two streets intersect at a distance of less than 125 feet. (AMENDED 1/26/10).

Section 15-219 Construction Standards and Specifications.

Construction and design standards and specifications for streets, sidewalks, and curbs and gutters are contained in Appendix C, and all such facilities shall be completed in accordance with these standards.

Section 15-220 Public Streets and Private Roads in Subdivisions.

- (a) Except as otherwise provided in this section, all lots created after the effective date of this section shall abut a public street at least to the extent necessary to comply with the access requirement set forth in Section 15-211. For purposes of this subsection, the term "public street" includes a pre-existing public street as well as a street created by the subdivider that meets the public street standards of this chapter and is dedicated for public use. Unless the recorded plat of a subdivision clearly shows a street to be private, the recording of such a plat shall constitute an offer of dedication of such street. (AMENDED 2/14/84)
- (b) Architecturally integrated residential subdivisions containing either twenty-five or more units, or consisting of four or more multi-family townhomes, may be developed with private roads that do not meet the public street and sidewalk standards of this chapter as long as: (AMENDED 11/26/85; 6/25/02)
 - (1) The proposed development will have direct access onto a public street or, if the tract has access to a public street only via a private road, such private road is improved to public street standards;
 - (2) No road intended to be private is planned to be extended to serve property outside that development; and
 - (3) The standards applicable to unsubdivided developments set forth in Section 15-221 and 15-222 are complied with.

- (c) Subdivisions containing any number of lots may be developed with private roads that do meet the public street and sidewalk standards of this chapter but that are not intended for dedication to the public so long as:
 - (1) The proposed development will have direct access onto a public street or, if the tract has access to a public street only via a private road, such private road is improved to public street standards;
 - (2) No road intended to be private is planned or expected to be extended to serve property outside the development; and
 - (3) The subdivider demonstrates to the reasonable satisfaction of the CouncilBoard that the private roads will be properly maintained.
- (d) A subdivision in which the access requirement of Section 15-211 is satisfied by a private road that meets neither the public street standards nor the standards set forth in Section 15-221 may be developed so long as, since the effective date of this chapter, not more than three lots have been created out of that same tract.
 - (1) The intent of this subsection is primarily to allow the creation of not more than three lots developed for single-family residential purposes. Therefore, the permit-issuing authority may not approve any subdivision served by a private road authorized under this subsection in which one or more of the lots thereby created is intended for (i) two-family or multi-family residential user or (ii) any non- residential use that would tend to generate more traffic than that customarily generated by three single-family residences.
 - (2) To ensure that the intent of this subsection is not subverted, the permit-issuing authority may, among other possible options, require that the approved plans show the types and locations of buildings on each lot or that the lots in a residential subdivision served by a private road authorized under this subsection be smaller than the permissible size lots on which two-family or multi- family developments could be located or that restrictive covenants limiting the use of the subdivided property in accordance with this subsection be recorded before final plat approval.
- (e) No final plat that shows lots served by private roads may be recorded unless the final plat contains the following notations:
 - (1) "Further subdivision of any lot shown on this plat as served by a private road may be prohibited by the Carrboro Land Use Ordinance."
 - (2) "The policy of the Town of Carrboro is that, if the town improves streets (i) that were never constructed to the standards required in the Carrboro Land Use Ordinance for dedicated streets, and (ii) on which 75% of the dwelling

units were constructed after July 1, 1979, 100% of the costs of such improvements shall be assessed to abutting landowners."

- (f) The recorded plat of any subdivision that includes a private road shall clearly state that such road is a private road. Further, the initial purchaser of a newly created lot served by a private road shall be furnished by the seller with a disclosure statement outlining the maintenance responsibilities for the road, in accordance with the requirements set forth in G.S. 136-102.6(f). The intention of this subsection is to afford the same protection to purchasers of lots on private roads within the town as is provided to purchasers of lots outside the town by G.S. 136-102.6(f).
- (g) For purposes of this section, a private road meets the public street and sidewalk standards of this chapter if it is designed and constructed and sufficient setbacks are provided so that, if intended for dedication, it could be accepted as a public street in conformity with the requirements of this chapter. (AMENDED 11/26/85)
- (h) Notwithstanding the other provisions of this section, the town may prohibit the creation of a private road if the creation of such a road would avoid the public street interconnection requirements set forth in Sections 15-214 and 15-217(a). (AMENDED 6/25/02)

<u>Section 15-220.1 Design Standards for Village Mixed Use Developments</u> (AMENDED 5/28/02)

- (a) Village mixed use developments may be designed in accordance with the North Carolina Department of Transportation Traditional Neighborhood Development (TND) Guidelines, August 2000. Where specific NCDOT TND design guidelines have been established, these may supercedesupersede any related street design standards contained in this Ordinance, as well as standards and guidelines for utilities, landscaping and similar considerations. In the absence of TND specific design guidelines, the existing standards, criteria, guidelines or policies shall be applied.
- (b) For purposes of implementing the NCDOT TND Guidelines, a village mixed use development shall be deemed to be a "classic" TND.

Section 15-221 Road and Sidewalk Requirements in Unsubdivided Developments.

- (a) Within unsubdivided developments, all private roads and access ways shall be designed and constructed to facilitate the safe and convenient movement of motor vehicle and pedestrian traffic. Width of roads, use of curb and gutter, and paving specifications shall be determined by the provisions of this chapter dealing with parking (Article XVIII) and drainage (Article XVI). To the extent not otherwise covered in the foregoing articles, and to the extent that the requirements set forth in this article for subdivision streets may be relevant to the roads in unsubdivided developments, the requirements of this article may be applied to satisfy the standards set forth in the first sentence of this subsection.
- (b) Whenever (i) a lot is proposed to be developed residentially for more than four dwelling units or non-residentially in such a fashion as to generate more than 40 vehicle trips per day, and (ii) if the lot were to be subdivided, a street would be required running through the lot to provide

a connection between existing or planned adjacent streets in accordance with the provisions of Sections 15-214 and 15-217(a), then the developer shall be required to construct and dedicate the same street that would have been required had the property been subdivided. On Town-owned properties, the <u>Town Council Board of Aldermen</u> may eliminate or reduce the requirements of this section for reservation and/or connection of right-of-way.

(AMENDED 6/25/02; 06/06/17)

- (c) In all unsubdivided residential developments, sidewalks shall be provided linking dwelling units with other dwelling units, the public street, and on-site activity centers such as parking areas, laundry facilities, and recreational areas and facilities. Notwithstanding the foregoing, sidewalks shall not be required where pedestrians have access to a road that serves not more than nine dwelling units. (AMENDED 4/24/84)
- (d) Whenever the permit issuing authority finds that a means of pedestrian access is necessary from an unsubdivided development to schools, parks, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the roads, the developer may be required to reserve an unobstructed easement of at least ten feet to provide such access.
- (e) In unsubdivided nonresidential developments that abut a public street, sidewalks shall be constructed adjacent to such street if a sidewalk in that location is required by the officially adopted town sidewalk master plan. Whenever possible, such sidewalk shall be constructed within the public right-of-way.
- (f) The sidewalks required by this section shall be at least five feet wide, except that, where practicable, the sidewalks in the B-l(c), B-l(g), B-2, and C-T zoning districts shall be at least ten feet wide. Sidewalks are to be constructed according to the specifications set forth in Appendix C, except that the permit issuing authority may permit the installation of walkways constructed with other suitable materials when it concludes that: (AMENDED 12/08/98; 4/8/03)
 - (1) Such walkways would serve the residents of the development as adequately as concrete sidewalks; and
 - (2) Such walkways could be more environmentally desirable or more in keeping with the overall design of the development.

Section 15-222 Attention to Handicapped in Street and Sidewalk Construction.

- (a) As provided in G.S. 136-44.14, whenever curb and gutter construction is used in public streets, wheelchair ramps for the handicapped shall be provided at intersections and other major points of pedestrian flow. Wheelchair ramps and depressed curbs shall be constructed in accordance with published standards of the N.C. Department of Transportation, Division of Highways.
- (b) In unsubdivided developments sidewalk construction for the handicapped shall conform to the requirements of Section (11X) of the North Carolina State Building Code.

Section 15-223 Street Names and House Numbers.

- (a) Street names shall be assigned by the developer subject to the approval of the permit issuing authority. Proposed streets that are obviously in alignment with existing streets shall be given the same name. Newly created streets shall be given names that neither duplicate nor are phonetically similar to existing streets within the town's planning jurisdiction, regardless of the use of different suffixes [such as those set forth in subsection (b)].
 - (b) Street names shall include a suffix such as the following:
 - (1) Circle: A short street that returns to itself.
 - (2) Court or Place: A cul-de-sac or dead-end street.
 - (3) Loop: A street that begins at the intersection with one street and circles back to end at another intersection with the same street.
 - (4) Street: All public streets not designated by another suffix.
- (c) Building numbers shall be assigned by the town as provided in Section 7-32 of the Town Code.

Section 15-224 Bridges.

All bridges in subdivided and unsubdivided developments shall be constructed in accordance with the standards and specifications of the N.C. Department of Transportation, except that bridges on roads not intended for public dedication in unsubdivided developments may be approved if designed by a licensed architect or engineer.

Section 15-225 Utilities.

Utilities installed in public rights-of-way or along private roads shall conform to the requirements set forth in Article XV, Utilities.

Section 15-226 Road Standards in the University Lake Watershed.

Notwithstanding any provision in this ordinance to the contrary, roads in the University Lake Watershed shall not be constructed with curb and gutter. (AMENDED 11/11/86)

Section 15-227 through 15-235 Reserved.

ARTICLE XV

WATER AND WASTEWATER, OUTDOOR LIGHTING, AND MISCELLANEOUS UTILITIES (REWRITTEN 4/20/10)

PART 1. WATER AND WASTEWATER

Section 15-236 Utility Ownership and Easement Rights.

In any case in which a developer installs or causes the installation of water, sewer, electric power, telephone, <u>fiber optic cable or conduit</u>, or cable television facilities and intends that such facilities shall be owned, operated or maintained by a public utility or any entity other than the developer, the developer shall transfer to such utility or entity the necessary ownership or easement rights to enable the utility or entity to operate and maintain such facilities.

Section 15-237 Lots Served by OWASA-Owned Water and Sewer Lines.

- (a) Subject to subsection (d), whenever it is legally possible and practicable in terms of topography to connect a lot with a water or sewer line owned by the Orange Water and Sewer Authority (OWASA) by running a connecting line not more than the distance specified in subdivision (1) below from the lot to the point of connection, then no use requiring water or sewage disposal service may be made of such lot unless connection is made to the OWASA line. (AMENDED 2/24/87)
 - (1) If the tract in question is proposed to be developed for residential purposes, then the distance within which connection must be made shall be 200 feet plus 10 feet for each unit in excess of 4 units on the development tract. If the tract in question is proposed to be developed for nonresidential purposes, then the distance within which connection must be made shall be determined by transposing the projected demand of the proposed non-residential use into the demand created by an equivalent number of average residential units and using the foregoing formula.
 - (2) In determining units in a development, tracts proposed to be subdivided and not using architecturally integrated subdivisions shall have their total unit potential determined by calculating the maximum number of units allowable for each proposed lot. The total number of units proposed on other developments shall be shown on the proposed site plan.
- (b) Connection to the OWASA line is not legally possible if, in order to make connection with the OWASA line by a connecting line that does not exceed a distance

determined in accordance with subsection (a), it is necessary to run the connecting line over property not owned by the owner of the property to be served by the connection, and after diligent effort, the easement necessary to run the connecting line cannot reasonably be obtained.

- (c) For purposes of this article, a lot is "served" by the OWASA system if the lot is connected to that system or if connection is required by this section.
- (d) This section shall not operate either to require or prevent the extension of water or sewer lines to lots within the WR, C, B-5, or WM-3 zoning districts. (AMENDED 05/15/90)

Section 15-238 Sewage Disposal Facilities Required.

- (a) Every principal use and every lot within a subdivision shall be served by a sewage disposal system that is adequate to accommodate the reasonable needs of such use or subdivision lot, and that complies with all applicable health regulations.
- (b) Notwithstanding any other provisions of this article, no sewage treatment system other than individual on—site septic systems or individual on site alternative disposal systems approved by the Orange County Health Department or the appropriate state or federal agency and serving a single unit shall be allowed within the WR, C, B-5, and WM-3 zoning districts, except that any lots in the Rangewood Subdivision that were benefited by OWASA's previous water and sewer extension project and which appear on OWASA's final assessment role for that project may be connected to OWASA's water and/or sewer lines as long as all assessments, fees, and charges have been paid or are up-to-date. (AMENDED 09/01/92)
- (c) Notwithstanding any other provisions of this article, no sewage collection system shall be allowed within the WR, C, B-5, and WM-3 zoning districts except to remedy a public health emergency not otherwise correctable such as (but not limited to) a failing septic system or failing package treatment plant as determined by the Orange County Health Department or appropriate state or federal agency. (AMENDED 5/3/88; 6/23/88; 5/15/90)

Section 15-239 Determining Compliance With Section 15-238.

- (a) Primary responsibility for determining whether a proposed development will comply with the standard set forth in Section 15-238 often lies with an agency other than the town, and the developer must comply with the detailed standards and specifications of such other agency. The relevant agencies are listed in subsection (b). Whenever any such agency requires detailed construction or design drawings before giving its official approval to the proposed sewage disposal system, the authority issuing a permit under this chapter may rely upon a preliminary review by such agency of the basic design elements of the proposed sewage disposal system to determine compliance with Section 15-238. However, construction of such system may not be commenced until the detailed plans and specifications have been reviewed and any appropriate permits issued by such agency.
- (b) In the following table, the column on the left describes the type of development and the column on the right indicates the agency that must certify to the town whether the proposed sewage disposal system complies with the standards set forth in Section 15-238.

	IF	THEN
1.	The use is located on a lot that is served by the OWASA sewer system or a previously approved, privately owned packaged treatment plant, and the use can be served by a simple connection	No further certification is necessary
to	the system (as in the case of the single-family residence) rather than the construction of an internal collection	
	system (as in the case of a shopping center or apartment complex)	
2.	The use (other than a subdivision) is located on a lot that is served by the OWASA sewer system but service to	
the	use necessitates construction of an internal collection system (as in the	
case	of a shopping center or apartment complex); and	
by	 a. The internal collection system is to be transferred to and maintained OWASA; 	OWASA must certify to the Town that the proposed internal collection system meets OWASA's specifications and will be accepted by OWASA. (A "Permit to Construct" must be obtained from the Division of Environmental Management of the NC Department of Environmental Quality (DEQ)Natural Resources and
to	b. The internal collection system is be privately maintained.	Community Development.) The public works director must certify that the proposed collection system is adequate.
3. not	The use (other than a subdivision) is served by the OWASA system but is to be served by a privately operated	The Orange County Health Department (OCHD) must certify to the Town that the proposed system complies with all applicable State and local health regulations. If the
previ	treatment system (that has not iously been approved) with 3000 gallons per day or less design capacity, the effluent	proposed use is a single dwelling other than a mobile home, the developer must obtain an improvements permit from the OCHD. If the proposed use is a single family mobile home, the developer must present to the Town a certificate of completion from the OCHD.

		m which does not discharge to	
surfa		,	
	wa	iters.	
4	701-	(-1111	The Division of Fusion was at 1 Marson and
4. be	Ι'n	e use (other than a subdivision is to	The Division of Environmental Management of the NC Department of Natural Resources
De	ser	ved by a privately operated sewage	and Community Development must certify to
		eatment system (not previously	the Town that the proposed system complies
		proved) that has a design capacity of	with all applicable State regulations, (A
		ore than 3000 gallons per day or that	"Permit to Construct" and a "Permit to
	d1S	scharges effluent into surface waters.	Discharge" must be obtained from DEM.)
5.	The	e proposed use is a subdivision; and	
be	a.	Lots within the subdivision are to	No further certification is necessary
De		served by simple connection into	
		existing OWASA lines or lines of a	
		previously approved private system;	
	b.	Lots within the subdivision are to	OWASA must certify to the Town that the
be	٠.	Zots William the Subdivision are to	pro-posed system meets OWASA's
		served by the OWASA system butt	specifications and will be accepted by
		the developer will be responsible	OWASA. (A "Permit to Construct" must be
for		installing the passessory additions to	obtained from the Division of Environmental
		installing the necessary additions to the OWASA system;	Management of the NC Department of Environmental Quality (DEQ)Department of
		the Switch system,	Natural Resources and Community
			Development.)
	c.	Lots within the subdivision are to be	The OCHD must certify that the proposed
C****		served by a sewage treatment	system complies with all applicable State and
syste	2111	that has not been approved, that has	local health regulations. If each lot within the
a		and has not occir approved, that has	subdivision is to be served by separate on-site
		design capacity of 3000 gallons per	disposal system, the OCHD must certify that
		day or less, and that does not	each lots shown on a major subdivision
		discharge into surface waters;	preliminary plat can probably be served, and
			each lot on a major or minor subdivision final

	plat can be served by an on-site disposal system.
d. Lots within the subdivision are to be served by a privately operated sewage treatment system (not previously approved) that has a design capacity in excess of 3000 gallons per day or that discharges effluent into surface waters.	The Division of Environmental Management of the NC Department of Environmental Quality (DEQ)Natural Resources and Community Development must certify that the proposed system complies with all applicable State regulations. (A "Permit to Construct" and a "Permit to Discharge" must be obtained from DEQM.)

(c) Any certification by OWASA pursuant to (b)2.a. or (b)5.b. of this section shall identify on appropriate project plans, the locations of all easements which OWASA will require from the developer. (AMENDED 5/3/88)

Section 15-240 Water Supply System Required.

Every principal use and every lot within a subdivision shall be served by a water supply system that is adequate to accommodate the reasonable needs of such use or subdivision lot and that complies with all applicable health regulations.

Section 15-241 Determining Compliance with Section 15-240.

- (a) Primary responsibility for determining whether a proposed development will comply with standards set forth in Section 15-240 often lies with an agency other than the town and the developer must comply with the detailed standards and specifications of such other agency. The relevant agencies are listed in subsection (b). Whenever any such agency requires detailed construction or design drawings before giving its official approval to the proposed water supply system, the authority issuing a permit under this chapter may rely upon a preliminary review by such agency of the basic design elements of the proposed water supply system to determine compliance with Section 15-240. However, construction of such system may not be commenced until the detailed plans and specifications have been reviewed and any appropriate permits issued by such agency.
- (b) In the following table, the column on the left describes the type of development and the column on the right indicates the agency that must certify to the town whether the proposed water supply system complies with the standards set forth in section 15-240.

	IF	THEN
1.	The use is located on a lot that is	No further certification is necessary
serv	ed	·
	by the OWASA water system or a	
	previously approved, privately owned	
	public water supply system and the use	
	can be served by a simple connection	
to		
	the system (as in the case of a single	
	family residence) rather than the	
	construction of an internal distribution	
	system (as in the case of shopping	
	center of apartment complex).	
2.	The use (other than a subdivision) is	
	located on a lot that is served by the	
.1	OWASA water system but service to	
the		
	use necessitates construction of an	
	internal distribution system (as in the	
	case of a shopping center or apartment	
	complex); and	OWASA must contify to the Town that the
to	a. The internal distribution system is	OWASA must certify to the Town that the proposed internal distribution system meets
to	be transferred to and maintained	OWASA's specifications and will be
by	be transferred to and maintained	accepted by OWASA. (A "Permit to
Оу	OWASA;	Construct" must be obtained from the
	OWIGH,	Division of Public Health Services of the NC
		Department of Health and Human
		Services Resources .)
	b. The internal distribution system is	The public works director must certify that
	to be privately maintained.	the proposed distribution system is adequate.
3.	The use (other than a subdivision) is	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	located on a lot not served by the	
	OWASA system or a previously	
	approved, privately owned public	
	water supply system; and	
	a. The use is to be served by a	The Division of Public Health Services of the
	privately owned public water	NC Department of Health and Human
	supply that has not previously	Services Resources must certify that the
	been approved.	proposed system complies with all applicable
		State and federal regulations. (A "Permit to
		Construct" must be obtained from DHHS.)
		The Division of Environmental Management
		of the NC Department of Environmental

4.	b. The use is to be served by some other source (such as an individual well). The proposed use is a subdivision; and	Quality (DEQ)Natural Resources and Community Development must also approve the plans if the water source is a well and the system has a design capacity of 100,000 gallons per day or is located in certain areas designated by DEQM. OWASA must also approve the distribution lines for possible future addition to the OWASA system. The OCHD must certify that the proposed system meets all applicable State and local regulations.
be a	a. Lots within the subdivision are to served by simple connection to existing OWASA lines or lines of previously approved public water supply system;	No further certification is necessary.
be	b. Lots within the subdivision are to served by the OWASA system, developer will be responsible for installing the necessary additions to the OWASA system;	OWASA must certify to the Town that the proposed system meets OWASA's specifications and will be accepted by OWASA. (A "Permit to Construct" must be obtained from the Division of Health Services of the NC Department of Human Resources.
	c. Lots within the subdivision are serve by a privately owned public water supply system that has not previously been approved.	The Division of Health Services of the NC Department Human Resources must certify that the proposed system complies with all applicable State and federal regulations. (A "Permit to Construct" must be obtained from DHS.) The Division of Environmental Management of the NC Department of Natural Resources and Community Development must also approve the plans if the water source is a well and the system has a design capacity of 100,000 gallons per day or is located within certain areas designated by DEM. OWASA must also approve the distribution lines for possible future addition to the OWASA system.
C	d. Lots within the subdivision are to be served by individual wells.	The OCHD must certify to the Town that each lot intended to be served by a well can be served in accordance with applicable health regulations.

PART II. OUTDOOR LIGHTING

Section 15-242 Purpose and Intent (AMENDED 4/20/10)

- (a) The <u>Town CouncilBoard</u> finds that outdoor lighting serves a number of beneficial purposes. For work or recreation, it enables people to see essential detail in order that they may undertake their activities at night. It facilitates the safety and security of persons and property, for example through lighting on roads and pathways and the entrances to buildings. It may be used to emphasize features of architectural or historical significance, and to light parks and gardens. It is used for advertising or display to promote products or services, or to call attention to commercial premises by means of area lighting or signs. However, excessive or inappropriately directed lighting may create unwanted glare, interfere with observation of the nighttime sky, waste valuable energy supply, and otherwise interfere with the use or enjoyment of adjoining or nearby public or private property.
- (b) It is the intent of this part to preserve, protect, and enhance the lawful nighttime use and enjoyment of any and all property through the use of appropriate lighting practices and systems by providing for the installation of individual fixtures and lighting systems that are designed and installed to maintain safety, security and productivity, and to curtail the degradation of the nighttime visual environment.

Section 15-242.1_ Definitions

Unless otherwise specifically provided, or unless clearly required by the context, the words and phrases defined in this section shall have the meaning indicated when used in this part.

- (1) Direct Light: Light emitted directly from the lamp, off of the reflector diffuser, or through the refractor or diffuser lens, of a luminaire.
- (2) Fixture: The assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and/or a refractor or lens.
- (3) Floodlight: A form of lighting designated to direct its output more or less in a specific direction.
- (4) Footcandle: (fc) The total amount of light or illuminance cast on a surface and equivalent to the light produced by a source of one (1) candle measured at a distance of one (1) foot
- (5) Full cut-off luminaries: A luminaire designed and installed where no light is emitted at or above a horizontal plane running through the lowest point on the luminaire.
- (6) Fully Shielded: Outdoor light fixtures with opaque top and sides, capable of only emitting light in the lower photometric hemisphere as installed.

- (7) Glare: Light emitting from a luminaire with an intensity great enough to reduce a viewer's ability to see, or cause annoyance and discomfort, and, in extreme cases, causing momentary blindness.
- (8) IESNA: Illuminating Engineering Society of North America, a non-profit society of professional lighting specialists that has developed a series of recommended standards for a variety of lighting applications.
- (9) Lamp: The component of the luminaire that produces the light and commonly referred to as the "bulb."
- (10) Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located.
- (11) Lumen: The unit used to quantify the amount of light energy produced by a lamp at the lamp. Lumen output of most lamps is listed on the packaging. For example, a 60-watt incandescent lamp produces 950 lumens while a 55-watt low-pressure sodium lamp produces 8000 lumens.
- (12) Luminaire: A complete lighting system that includes light source and all necessary mechanical, electrical, and decorative parts.
- (13) Maintained Foot Candle: Illuminance of lighting fixtures adjusted for dirt buildup and lamp output depreciation.
- (14) Wall Pack: A type of light fixture typically flush-mounted on a vertical wall surface.

Section 15-242.2 Applicability

- (a) The provisions of this part apply to developments for which permits are issued after the effective date of this part; therefore developments that exist on the effective date of this part that do not comply with its provisions shall not be regarded as nonconforming. However, when new luminaries are installed or existing luminaries are replaced, they shall comply with this part.
- (b) Notwithstanding the provisions of subsection (a) of this section, luminaires installed prior to the effective date of this part that violate the following provisions shall be brought into compliance or removed within three months after the date of notification of the violation: Section 15-242.5 (d).
- (c) Regulations applicable to the lighting of signs are found in Article XVII of this chapter, particularly Section 15-281.
 - (d) The provisions of this part do not apply to:

- (1) Streetlights installed on public streets.
- (2) Traffic control signals and devices.
- (3) Temporary emergency lighting (i.e. fire, police, repair workers, etc.).
- (4) Moving vehicle lights.
- (5) Navigation lights (i.e. airports, heliports, radio/television towers, etc.).
- (6) Seasonal decorations with individual lights in place no longer than 60 consecutive days.
- (7) Security lights that are controlled by a motion-sensor switch that does not allow the lights to remain on longer than 12 minutes after activation, so long as the lamps do not exceed 150 watts and 2,200 lumens.

Section 15-242.3 Minimum Lighting Requirements for Security

- (a) All streets, sidewalks, and other common areas or facilities in subdivisions shall be sufficiently illuminated to ensure the security of property and the safety of persons using such streets, sidewalks, and other common areas or facilities.
- (b) All roads, driveways, sidewalks, parking lots, and other common areas or facilities in unsubdivided developments shall be sufficiently illuminated to ensure the security of property and the safety of persons using such roads, driveways, sidewalks, and other common areas or facilities.
- (c) All entrances and exits in buildings used for non-residential purposes and in multifamily residential dwellings containing more than four dwelling units shall be adequately lighted to ensure the safety of persons and the security of such buildings.

Section 15-242.4 Subdivisions

- (a) With respect to street lighting for subdivision streets that (i) are located on property within the town at or about the time of final plat approval, and (ii) are intended to be dedicated to the town, the developer shall coordinate with the electric utility company to ensure that all facilities necessary for the installation of street lights in accordance with the town's street lighting policy are put in place. "As a condition of construction plan approval, all public street lighting is to be installed by the developer prior to street acceptance by the town. The developer shall be responsible for all installation cost and monthly billing until the public streets are accepted onto the town's street maintenance system."
- (b) With respect to street lighting for subdivision streets that (i) are located on property that is not within the town at or about the time of final plat approval, and (ii) are intended to be dedicated to the public (i.e. to the N.C. Department of Transportation initially and eventually to the town when the subdivision is annexed), the developer shall coordinate with the electric utility

company to see that all facilities necessary for the installation of street lights in accordance with the town's street lighting policy are put in place. The installation of street lights that are consistent with town policies may then be provided for either by an arrangement between the developer or a property owners association and the electric utility company until such time as the subdivision is annexed.

(c) With respect to street lighting for subdivision streets that are not intended to be dedicated to the town, the developer shall provide for the installation and maintenance (either by the developer or a successor property owners association) of a street lighting system that will provide sufficient lighting for safety and security purposes.

Section 15-242.5 General Standards (AMENDED 10/23/2018)

- (a) Unless otherwise specified, under no circumstances may the light level at a lot line exceed .2 foot candles. A limitation of 2.0 footcandles shall generally apply to lot lines in the B-1(c) and B-1(g) zoning districts. However, a limitation of .2 footcandles shall apply to lot lines of properties zoned B-1(c) or B-1(g) under any of the following circumstances:
 - (1) Where such lot lines separate properties zoned B-1(c) or B-1(g) from properties zoned residential;
 - (2) If and to the extent that properties zoned residential lie directly across a street from the lot lines of properties zoned B-1(c) or B-1(g);
 - (3) Where such lot lines separate properties zoned B-1(c) or B-1(g) from properties that are not zoned residential but that are used for residential purposes and were so used on the effective date of this subsection;
 - (4) If and to the extent that properties that are not zoned residential but are used for residential purposes and were so used on the effective date of this subsection lie directly across a street from the lot lines of properties zoned B-1(c) or B-1(g).
- (b) Notwithstanding the foregoing, the permit-issuing authority may allow or require deviations from the lot line foot candle limitations described in Subsection 15-242.5(a), along public rights-of-way, where such rights-of-way are located within a unified commercial or mixed-use development operating under a single <u>class A special conditional</u> use permit. The right-of-way must extend through the development, not along the perimeter, and it must be dedicated to the Town.
- (c) Vegetative buffers shall not be used to satisfy the standards set forth in subsection (a) of this section.
- (d) Any luminaire with a lamp or lamps rated at a total of more than 1,800 lumens shall be fully shielded and shall be located to prevent glare and light trespass beyond the property boundary (including onto adjacent streets).

- (e) The recommended maximum light output is 70,000 lumens per acre for lots developed for commercial or multi-family purposes and 6,500 lumens per acre for lots developed for all other purposes. This recommended maximum does not apply to those uses regulated by Sections 15-242.6, 15-242.7, and 15-242.8.
- (f) Floodlights with external shielding shall be angled provided that no light is directed above a twenty-five (25) degree angle measured from the vertical line from the center of the light extended to the ground, and only if the luminaire does not cause glare or light to shine on adjacent property or public or private rights-of-way. Photocells with timers that allow a floodlight to go on at dusk and off by 11:00 p.m are encouraged.
- (g) The presumptive standard for the maximum height of light poles is fifteen (15) feet in height. The CouncilBoard recognizes that due to the particularities of any given development, the inflexible application of a height maximum for lighting fixtures may result in a development with excessive energy consumption or light fixtures that are incompatible with the scale or style of a development. These situations can result in a waste of money that could more desirably be used for valuable development amenities or environmentally useful features. Therefore, the permit-issuing authority may permit deviations from the presumptive requirements and may require shorter light fixtures or allow taller light fixtures whenever it finds that such deviations are more likely to satisfy the standard set forth in subsections 15-242 (a) and (b) and that the lighting complies in all other respects with the requirements of this part.
 - (1) Without limiting the generality of the foregoing, the permit-issuing authority may allow or require deviations from the light fixture height maximum set forth in Subsection 15-242.5 (f) when it finds that:
 - a. An existing multi-family residential development of greater than four (4) units is seeking to improve security and safety for residents by increasing the number of light fixtures and is also seeking to utilize light fixtures that are similar in size and style to existing fixtures; or
 - b. Lighting fixtures on neighboring property are substantially lower in height than the maximum that would be allowed and taller light fixtures would result in a discernible negative impact in terms of excessive illumination and glare.
 - Whenever the permit-issuing authority allows or requires a deviation from the presumptive lighting fixture height requirements set forth in Subsection 15-242.5(e) it shall enter on the face of the permit the lighting fixture height requirement that it imposes and the reasons for allowing or requiring the deviation.
 - (g) All wall packs shall be fully shielded.

- (h) All luminaires shall be shielded or oriented in such a way as to direct light toward the earth's surface and away from reflective surfaces.
- (i) Luminaires designed to illuminate building facades, architectural features, or landscaping shall be oriented and shielded so that direct illumination is focused exclusively on such building façade, architectural feature, or landscaping and away from adjoining properties, public or private way, and the night sky.
- (j) Upward flagpole lighting is permitted for governmental flags, either publicly or privately owned, provided that the maximum lumen output is 1,300 lumens. It is encouraged that flags be taken down at sunset to avoid the need for lighting.
- (k) Any luminaire must be installed in such a manner that the light emitting source is not visible from any residence not located on the same lot as the luminaire or from any public street.

Section 15-242.6 Vehicular Canopies

- (a) The light level beneath vehicular canopies (e.g. for gas stations or convenience stores) shall not exceed 10 foot candles average maintained at the perimeter of the canopy and measured at ground level. Acceptable ways of achieving this objective include, but are not limited to, one or more of the following:
 - (1) Recessed fixtures incorporating a lens cover that is either recessed or flush with the bottom surface (ceiling) of the vehicular canopy.
 - (2) Surface mounted fixtures incorporating a flat glass that provides a full cutoff or fully shielded light distribution.
 - (3) Indirect lighting where light is beamed upward and then reflected down from the underside of the vehicular canopy. Such fixtures shall be shielded such that direct illumination is focused exclusively on the underside of the vehicular canopy.
 - (4) Any other method approved by the permit issuing authority that achieves an effect similar to the foregoing illustrations.
- (b) During hours when the business is not open, the lighting level shall be reduced to security lighting only.

Section 15-242.7 Outdoor Display Areas

(a) All display area lighting shall utilize fully shielded luminaires that are installed in a fashion that maintains the fully shielded characteristics.

- (b) Display area lighting shall be installed such that glare is not visible from residential properties.
- (c) The display area shall not be illuminated in a manner that exceeds the minimal illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA Rp-33, or as updated).
- (d) For purposes of this section, an "outdoor display area" is an outdoor area where nighttime sales activity regularly occurs and where accurate color perception of merchandise by customers is required. Examples include sales areas for automobiles, boats, building supplies, or plants.
- (e) During hours when the business is not open, the lighting level shall be reduced to security lighting only.

Section 15-242.8 Outdoor Sports Fields and Performance Areas

- (a) The mounting height of outdoor sports fields and outdoor performance area lighting fixtures shall not exceed 60 feet from finished grade unless approved by the permit-issuing authority after receipt of substantial information justifying the need for additional height.
- (b) All outdoor sports field and outdoor performance area lighting fixtures shall be equipped with a glare control package (louvers, shields, or similar devices). The fixtures must be aimed so that their beams are directed and fall within the primary playing or performance area.
- (c) Outdoor sports field and performance area lighting systems shall not be operated between the hours of eleven p.m. and sunrise.

Section 15-242.9 Prohibited Uses of Light

The following are prohibited:

- (1) The use of laser source light or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizon;
- (2) The operation of searchlights for advertising purposes;
- (3) Use of mercury vapor luminaires.

Section 15-242.10 Light Measurement Techniques

a) Light measurements shall be made at finished grade (ground level), with the light-registered portion of the meter held parallel to the ground pointing up. The meter shall have cosine and color correction and have an accuracy tolerance of no greater than plus or minus five (5) percent. Measurements shall be taken with a light meter that has been calibrated within the year.

Light levels are specified, calculated and measured in footcandles (FC). All FC values are maintained footcandles unless otherwise specified.

b) Compliance with an approved light plan associated with a permit can be verified in the field by confirming that the light fixtures and bulbs do not exceed those shown on the engineered plans. When there is no approved light plan then compliance can be verified by enforcing that the light source is blocked and/or directed in compliance with this Part or by the owner obtaining and providing a professional engineer's certification that verifies that the existing conditions comply with the ordinance.

Section 15-243 RESERVED (AMENDED 4/20/10)

PART III: MISCELLANEOUS UTILITIES (AMENDED 4/20/10)

Section 15-244 Electric Power.

Every principal use and every lot within a subdivision shall have available to it a source of electric power adequate to accommodate the reasonable needs of such use and every lot within such subdivision. Compliance with this requirement shall be determined as follows:

- (1) If the use is not a subdivision and is located on a lot that is served by an existing power line and the use can be served by a simple connection to such power line (as opposed to a more complex distribution system, such as would be required in an apartment complex or shopping center), then no further certification is needed.
- (2) If the use is a subdivision or is not located on a lot served by an existing power line, or a substantial internal distribution system will be necessary, then the electric utility company must review the proposed plans and certify to the town that it can provide service that is adequate to meet the needs of the proposed us and every lot within the proposed subdivision.

Section 15-245 Telephone Service.

Every principal use and every lot within a subdivision must have available to it a telephone service cable adequate to accommodate the reasonable needs of such use and every lot within such subdivision. Compliance with this requirement shall be determined as follows:

- (1) If the use is not a subdivision and is located on a lot that is served by an existing telephone line and the use can be served by a simple connection to such power line (as opposed to a more complex distribution system, such as would be required in an apartment complex or shopping center), then no further certification is necessary.
- (2) If the use is a subdivision or is not located on a lot served by an existing telephone line or a substantial internal distribution system will be necessary, then the electric utility company must review the proposed plans and certify to the town that it can provide service that is adequate to meet the needs of the proposed use and every lot within the proposed subdivision.

Section 15-246 Underground Utilities.

(a) All electric power lines, (not to include transformers or enclosures containing electrical equipment including, but not limited to, switches, meters or capacitors which may be pad mounted), telephone, gas distribution, <u>fiber optic cable or conduit</u>, and cable television lines in subdivisions developed after the effective date of this chapter shall be placed underground in accordance with the specifications and policies of the respective utility companies and located in accordance with Appendix C, Standard Drawing No. 6 or No. 7.

- (b) Whenever an unsubdivided development is hereafter constructed on a lot that is undeveloped on the effective date of this chapter, then all electric power, telephone, gas distribution, and cable television lines installed to serve the development site outside of a previously existing public street right-of-way shall be placed underground in accordance with the specifications and policies of the respective utility companies. (AMENDED 1/22/85)
- (c) Notwithstanding the foregoing, a developer or builder is not required to bury power lines meeting all of the following criteria:
 - (1) The power lines existed above ground at the time of first approval of a plat or development plan, whether or not the power lines are subsequently relocated during construction of the subdivision or development plan.
 - (2) The power lines are located outside the boundaries of the parcel of land that contains the subdivision or the property covered by the development plan.

Section 15-247 Utilities To Be Consistent With Internal and External Development.

- (a) Whenever it can reasonably be anticipated that utility facilities constructed in one development will be extended to serve other adjacent or nearby development, such utility facilities (e.g., water or sewer lines) shall be located and constructed so that extensions can be made conveniently and without undue burden or expense or unnecessary duplication of service.
- (b) All utility facilities shall be constructed in such a manner as to minimize interference with pedestrian or vehicular traffic and to facilitate maintenance without undue damage to improvements or facilities located within the development.

Section 15-248 As-Built Drawings Required.

- (a) Whenever a developer installs or causes to be installed any utility line in any public right-of-way, the developer shall, as soon as practicable after installation is complete, furnish the town with a copy of a drawing that shows the exact location of such utility lines. Such drawings must be certified as accurate by the utility company. Compliance with this requirement shall be a condition of the continued validity of the permit authorizing such development.
- (b) If any utility in any right-of-way is installed by a utility company, the company shall maintain accurate as-built drawings and shall make these available to the town upon request.

Section 15-249 Fire Hydrants.

(a) Every development, subdivided or unsubdivided, that is served by a public water system shall include a system of fire hydrants sufficient to provide adequate fire protection for the buildings located or intended to be located within such development. (AMENDED 4/27/82)

- (b) The presumption established by this ordinance is that to satisfy the standard set forth in subsection (a), fire hydrants must be located so that every building within the development is not more than 500 feet from a hydrant. However, the fire chief may authorize or require a deviation from this standard if, in his professional opinion, another arrangement more satisfactorily complies with the standard set forth in subsection (a).
- (c) The fire chief shall determine the precise location of all fire hydrants, subject to the other provisions of this section. In general, fire hydrants shall be placed six feet behind the curb line of publicly dedicated streets that have curb and gutter.
- (d) All hydrants shall have two 2½ inch hose connections and one 4½ inch hose connection. The 2½ inch hose connection shall be located at least 21½ inches from the ground level. All hydrant threads shall be national standard threads.
- (e) Water lines that serve hydrants shall be at least six inch lines, and unless no other practicable alternative is available, no such lines shall be dead-end lines.
- (f) When hydrants are required under this section to be located within a public street right-of-way, the installation of such hydrants by the developer shall constitute an offer of dedication of such hydrant to OWASA, and the town and OWASA shall thereafter deal with such hydrant in the same manner as other hydrants located within public rights-of-way within the town. The developer or his successor shall be responsible for ensuring that such hydrant is properly maintained and kept in good working order, and that any costs associated with providing water to such hydrant are paid so that the hydrant can at all times serve its intended function. The developer or his successor may arrange with OWASA or any other entity to have such hydrants properly maintained, but ultimate responsibility for compliance with this section remains on the developer or his successor. (AMENDED 5/10/83)
- (g) Fire hydrants required under this section shall be installed and in working condition, subject to OWASA approval, prior to framing of any buildings in each phase. (AMENDED 11/26/85)

Section 15-250 Screening of Dumpsters (AMENDED 5/26/81)

- (a) Every development that, under Chapter 11 of the Town Code, is or will be required to provide one or more dumpsters for solid waste collection shall provide sites for such dumpsters that are:
 - (1) Located so as to facilitate collection and minimize any negative impact on persons occupying the development site, neighboring properties, or public rights-of-way; and
 - (2) Constructed according to specifications established by the public works director to allow for collection without damage to the development site or the collection vehicle.

- (b) All such dumpsters shall be screened if and to the extent that, in the absence of screening, they would be clearly visible to:
 - (1) Persons located within any dwelling unit on residential property other than that where the dumpster is located.
 - (2) Occupants, customers, or other invitees located within any building on non-residential property other than that where the dumpster is located, unless such other property is used primarily for purposes permitted exclusively in an M-1 or M-2 zoning district.
 - (3) Persons traveling on any public street, sidewalk, or bikeway within the Town of Carrboro.
- (c) When dumpster screening is required under this section, such screening shall be constructed, installed, and located to prevent or remedy the conditions requiring the screening.

ARTICLE XVI

FLOOD DAMAGE PREVENTION, STORMWATER MANAGEMENT, AND WATERSHED PROTECTION

PART I. FLOOD DAMAGE PREVENTION (REWRITTEN) 1/16/07)

Section 15-251 Purpose and Objective.

- (a) It is the purpose of this part to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:
 - (1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;
 - (2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
 - (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters:
 - (4) Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and
 - (5) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.
 - (b) The objectives of this part are:
 - (1) To protect human life and health;
 - (2) To minimize expenditure of public money for costly flood control projects;
 - (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - (4) To minimize prolonged business losses and interruptions;
 - (5) To minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;
 - (6) To minimize damage to private and public property due to flooding;

- (7) To make flood insurance available to the community through the National Flood Prevention Program;
- (8) To maintain the natural and beneficial functions of floodplains;
- (9) To ensure that potential buyers are aware that property is in a Special Flood Hazard Area. (AMENDED 09/26/17)

Section 15-251.1 Definitions (REWRITTEN 09/26/17)

Unless otherwise specifically provided, or unless clearly required by the context, the words and phrases defined in this section shall have the meaning indicated when used in this article.

- 1. Accessory Structure (Appurtenant Structure). A structure located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.
- 2. <u>Addition (to an existing building)</u>. An extension or increase in the floor area or height of a building or structure.
- 3. <u>Alteration of a Watercourse</u>. A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.
- 4. <u>Appeal</u>. A request for a review of the administrator's interpretation of any provision of this ordinance.
- 5. Area of Special Flood Hazard. See "Special Flood Hazard Area (SFHA)"
- 6. <u>Basement</u>. Any area of the building having its floor subgrade (below ground level) on all sides.
- 7. <u>Base Flood</u>. The flood having a one (1) percent chance of being equaled or exceeded in any given year.
- 8. <u>Base Flood Elevation (BFE)</u>. A determination of the water surface elevations of the base flood as published in the Flood Insurance Study or, for areas not covered in the Flood Insurance Study, as may be obtained from engineering studies available from a Federal or State or other source using FEMA approved engineering methodologies. This elevation, when combined with the "Freeboard," establishes the "Regulatory Flood Protection Elevation."
- 9. <u>Chemical Storage Facility</u>. A building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.
- 10. Design Flood. See "Regulatory Flood Protection Elevation."

- 11. <u>Development</u>. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.
- 12. <u>Development Activity</u>. Any activity defined as Development which will necessitate a Floodplain Development Permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.
- 13. <u>Development Permit</u>. A zoning, <u>class A or class B</u> special use, conditional use, or sign permit required under the provisions of Article IV of this chapter.
- 14. <u>Digital Flood Insurance Rate Map (DFIRM)</u>. The digital official map of the Town, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.
- 15. <u>Disposal</u>. As defined in NCGS 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.
- 16. <u>Elevated Building</u>. A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
- 17. <u>Encroachment</u>. The advance or infringement of uses, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.
- 18. Existing Building and Existing Structure. Any building and/or structure for which the "start of construction" commenced before the date the Town's first floodplain management ordinance was adopted.
- 19. Existing Manufactured Home Park or Manufactured Home Subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the original effective date of the floodplain management regulations adopted by the town.
- 20. <u>Flood or Flooding</u>. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (a) the overflow of inland waters; and/or
 - (b) the unusual and rapid accumulation of runoff of surface waters from any source.
- 21. <u>Flood Insurance</u>. The insurance coverage provided under the National Flood Insurance Program.

- 22. <u>Flood Insurance Rate Map (FIRM)</u>. An official map provided to the town by the Federal Emergency Management Agency, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.
- 23. <u>Flood Insurance Study (FIS)</u>. An examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data provided to the town by the Federal Emergency Management Agency. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.
- 24. <u>Flood Prone Area</u>. See Floodplain.
- 25. <u>Floodplain</u>. Any land area susceptible to being inundated by water from any source.
- 26. <u>Floodplain Management</u>. The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.
- 27. <u>Floodplain Management Regulations</u>. This ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.
- 28. <u>Floodproofing</u>. Any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.
- 29. <u>Flood-resistant Material.</u> Any building product, material, component, or system capable of withstanding direct and prolonged contact (minimum of 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements*, available from FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.
- 30. <u>Floodway</u>. The channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.
- 31. <u>Floodway Encroachment Analysis</u>. An engineering analysis of the impact that a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge.

- The evaluation shall be prepared by a qualified North Carolina licensed engineer using standard engineering methods and models.
- 32. <u>Flood Zone</u>. Means a geographical area shown on a Flood Hazard Boundary map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.
- 33. <u>Freeboard</u>. The height added to the Base Flood Elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization on the watershed. The Base Flood Elevation plus the freeboard establishes the "Regulatory Flood Protection Elevation". The freeboard shall be two feet.
- 34. <u>Functionally Dependent Facility</u>. A facility which cannot be used for its intended purpose unless it is located in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.
- 35. <u>Hazardous Waste Facility</u>. As defined in NCGS 130A-290(a)(9), a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.
- 36. <u>Highest Adjacent Grade (HAG)</u>. The highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.
- 37. <u>Historic Structure</u>. Any structure that is:
 - (a) listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register; or
 - (b) certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; or
 - (c) certified as contributing to the historical significance of any historic district that may be designated by the town.
- 38. <u>Letter of Map Change (LOMC)</u>. An official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:
 - (a) Letter of Map Amendment (LOMA): An official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the based flood elevation. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

- (b) <u>Letter of Map Revision (LOMR)</u>: A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.
- (c) <u>Letter of Map Revision based on Fill (LOMR-F)</u>: A determination that a structure or parcel of land has been elevated by fill above the BFE and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.
- (d) <u>Conditional Letter of Map Revision (CLOMR)</u>: A formal review and comment as to whether a proposed project complies with minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.
- 39. <u>Light Duty Truck.</u> Any motor vehicle rated at 8,500 pounds Gross Vehicular Weight or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:
 - (a) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle; or
 - (b) Designed primarily for the transportation of persons and has a capacity of more than 12 persons; or
 - (c) Available with special features enabling off-street or off-highway operation and use.
- 40. <u>Lowest Adjacent Grade (LAG)</u>. The elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.
- 41. <u>Lowest Floor</u>. Lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.
- 42. <u>Manufactured Home</u>. A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "Manufactured Home" does not include a "Recreational Vehicle."
- 43. <u>Manufactured Home Park or Subdivision</u>. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- 44. <u>Market Value</u>. The building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by

- independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.
- 45. <u>New Construction</u>. Structures for which the "Start of Construction" commenced on or after April 22, 1975 and includes any subsequent improvements to such structures.
- 46. Non-Encroachment Area. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.
- 47. <u>Post-FIRM</u>. Means construction or other development for which the "Start of Construction" occurred on or after April 22, 1975.
- 48. <u>Pre-FIRM</u>. Construction or other development for which the "Start of Construction" occurred before April 22, 1975.
- 49. <u>Principally Above Ground</u>. At least 51% of the actual cash value of the structure is above ground.
- 50. <u>Public Safety Hazard and/or Nuisance</u>. Anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal, or basin.
- 51. Recreational Vehicle (RV). A vehicle, which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projection; (iii) designed to be self-propelled or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use, and (v) is fully licensed and ready for highway use.
- 52. <u>Reference Level</u>. The top of the lowest floor for structures within the Special Flood Hazard Area designated as Zone AE.
- 53. <u>Regulatory Flood Protection Elevation</u>. The "Base Flood Elevation" plus the "Freeboard." In "Special Flood Hazard Areas" where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus two (2) feet of freeboard.
- 54. Remedy a Violation means to bring the structure or other development into compliance with State and community floodplain management regulations, or if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the

- structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.
- 55. <u>Riverine</u>. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.
- 56. <u>Salvage Yard</u>. Any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.
- 57. Solid Waste. Solid waste as defined in NCGS 130A-290(a) (35).
- 58. <u>Solid Waste Management Facility</u>. As defined in NCGS 130A-290(a) (35), any facility involved in the disposal of solid waste.
- 59. <u>Solid Waste Disposal Site</u>. As defined in NCGS 130A-290(a) (36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.
- 60. <u>Special Flood Hazard Area (SFHA)</u>. The land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year, as determined in Section 15-251.2(b) of this part.
- 61. Start of Construction. This term includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.
- 62. <u>Structure</u>. A walled and roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.
- 63. <u>Substantial Damage</u>. Damage of any origin sustained by a structure during any one-year period whereby the cost of restoring the structure to its <u>sectoring</u> before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of "Substantial Improvement."

- 64. <u>Substantial Improvement</u>. Any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one-year period for which the cost equals or exceeds 50 percent of the market value of the structure before the "Start of Construction" of the improvement. This term includes structures which have incurred "Substantial Damage," regardless of the actual repair work performed. The term does not, however, include either: (i) any correction of existing violations of State or community health, sanitary, or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or (ii) any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- 65. Technical Bulletin and Technical Fact Sheet. A FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.
- 66. <u>Temperature Controlled.</u> Having the temperature regulated by a heating and/or cooling system, built-in or appliance.
- 67. <u>Variance</u>. A grant of relief from the requirements of this ordinance as authorized in Section 15-92 of this chapter. See also Section 15-251.5.
- 68. <u>Violation</u>. The failure of a structure or other development to be fully compliant with the provisions of this part. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this part is presumed to be in violation until such time as that documentation is provided.
- 69. <u>Water Surface Elevation (WSE)</u>. The height, in relation to mean sea level, of floods of various magnitudes and frequencies in the floodplains of riverine areas.
- 70. <u>Watercourse</u>. A lake, river, creek, stream, wash, channel, or other topographic feature on or over which waters flow at least periodically.

Section 15-251.2 General Provisions.

- (a) This part shall apply to all Special Flood Hazard Areas within the town's planning jurisdiction and joint planning transition area (as those latter terms are defined in Section 15-15), as well as the Town's Extra-Territorial Jurisdiction (ETJ). (AMENDED 9/26/17)
- (b) The provisions of this part shall apply to the following two types of Special Flood Hazard Areas:

- (1) Those Special Flood Hazard Areas that are identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Maps (FIRM), for Orange County, dated 09/26/2017, which are adopted by reference and declared to be a part of this ordinance. (AMENDED 09/26/17)
- (c) As set forth in Part I of Article IV of this chapter, no development may take place within Special Flood Hazard Areas unless an appropriate permit has been issued authorizing such development, and no such permit shall be issued unless the proposed development is in full compliance with the provisions of this chapter.
- (d) The provisions of this part are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where the provisions of this part and the provisions or another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- (e) In the interpretation and application of this part, all provisions shall be considered as minimum requirements, liberally construed in favor of the town, and deemed neither to limit nor repeal any other powers granted under State statutes.
- (f) The degree of flood protection required by this part is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the town or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.
- remedies set forth in Article VII of this chapter. Additionally, violations of the provisions of this part or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variances or special exceptions, shall constitute a Class 1 Misdemeanor pursuant to N.C.G.S. § 143-215.58. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100.00 or imprisoned for not more than thirty (30) days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Town from taking such other lawful action as is necessary to prevent or remedy any violation. (REWRITTEN 09/26/17)

Section 15-251.3 Application Requirements

As provided in Section 15-46, no development may occur without a development permit, and no such permit shall be issued unless the administrator determines, based upon the plans and information submitted, that the development will comply with all the provisions of this chapter, including those applicable to development within Special Flood Hazard Areas. Appendix A to this chapter sets forth requirements related to the information that must generally be submitted with a permit application in order to demonstrate compliance with the requirements of this chapter.

However, when the lot or tract with respect to which a development permit is sought contains a SFHA, the following information shall also be submitted to the administrator:

- (1) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - a. The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - b. The boundary of the Special Flood Hazard or a statement that the entire lot is within the Special Flood Hazard Area;
 - c. Flood zone(s) designation of the proposed development area as determined on the Flood Insurance Rate Map;
 - d. The boundary of the floodway(s) or non-encroachment area(s);
 - e. Base Flood Elevation (BFE) information;
 - f. The old and new location of any watercourse that will be altered or relocated as a result of proposed development and any changes in Special Flood Hazard Areas that occur as a consequence of such changes.
- (2) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to: (**REWITTEN 09/26/17**)
 - a. Elevation in relation to North American Vertical Datum (NAVD) 1988 of the proposed reference level (including basement) of all structures;
 - b. Elevation in relation to NAVD 1988 to which any non-residential structure in Zone AE will be flood-proofed; and
 - c. Elevation in relation to NAVD 1988 to which any proposed utility systems will be elevated or floodproofed.
- (3) If floodproofing, a Floodproofing Certificate (*FEMA Form 81-65*) with supporting data and an operational plan that includes, but is not limited to, installation, exercise, and maintenance of floodproofing measures.
- (4) Plans drawn to scale, shall include details of the proposed construction or development, and must demonstrate, among other things, that the foundation system requirements and other provisions of this ordinance are met. These details include but are not limited to:
 - a. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls);
 - b. Openings to facilitate equalization of hydrostatic flood forces on walls in accordance with Subsection 15-251.9(e) (3) when solid foundation perimeter walls are used in Zone AE;
 - c. Usage details of any enclosed areas below the regulatory flood protection elevation.

- d. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage;
- e. Copies of all other Local, State and Federal permits required prior to development permit issuance (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.)
- f. A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on the plot plan) showing the location of the proposed watercourse alteration or relocation and any changes in Special Flood Hazard Areas that occur as a consequence of such changes.

Section 15-251.4 Permit Requirements.

To the extent that a development permit is issued for a lot or tract that includes a SFHA, such permit (including the plans incorporated into the permit) shall contain at least the following information:

- (1) A description of the development to be permitted under the floodplain development permit, (including but not limited to a house, garage, pool, septic, bulkhead, cabana, pier, bridge, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.). (AMENDED 09/26/17)
- (2) The location of the Special Flood Hazard Area.
- (3) The regulatory flood protection elevation required for the reference level and all attendant utilities.
- (4) The regulatory flood protection elevation required for the protection of all public utilities.
- (5) All certification submittal requirements with timelines.
- (6) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, unless the requirements of Section 15-251.10 of this ordinance have been met. (AMENDED 09/26/17)
- (7) The flood openings requirements, if in Zone AE.

Section 15-251.5 Certification Requirements

(a) Elevation certificates or information shall be required for the construction of structures on properties where Special Flood Hazard Areas are located, as set forth in this section.

- (1) An application for a development permit authorizing the construction of a structure on a lot containing a SFHA shall include information designating the elevation of the reference level in relation to mean sea level and demonstrating that the reference level will be elevated to a level that is consistent with the requirements of Section 15-251.9.
- (2) Upon completion of the foundation survey, the permit holder shall calculate the elevation of the reference level, in relation to mean sea level, based upon the foundation survey and the approved flooring system and shall certify to the administrator that the reference level will be elevated to a level that is consistent with the requirements of Section 15-251.9.
- (3) A final as-built Elevation Certificate is required after construction is completed and prior to issuance of a Certificate of Compliance/Occupancy. For construction within a FEMA established Special Flood Hazard Area, FEMA Form 81-31 shall be used. For other construction covered by this subsection (a), the administrator may designate an alternative form. It shall be the duty of the permit holder to submit to the administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior Certificate to Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

(b) Floodproofing Certificate. (**REWRITTEN 09/26/17**)

- (1) If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a Floodproofing Certificate (FEMA Form 086-0-34), with supporting data and an operational plan, is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data and plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make any required corrections shall be cause to deny a building permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
- (2) A final Finished Construction Floodproofing Certificate (FEMA form 086-0-34), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a Certificate of

Compliance/Occupancy. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certificate shall be prepared by or under the direct supervision of a professional engineer or architect certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to Certificate of Occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a Floodplain Development Permit. Failure to construct in accordance with the certified design shall be cause to deny a Certificate of Compliance/Occupancy.

- (c) Foundation Certificate. If a manufactured home is placed within Zone AE, and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required per Section 15-253.9(d).
- (d) Certificate Exemption. Accessory structures of less than 150 square feet in size, if located within Zone AE, are exempt from the elevation/floodproofing certification requirements specified in subsections (a) and (b) of this section.
- (e) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.
- For applications for building permits to improve buildings and structures, including (f) alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall: (i) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made; (ii) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined cost of improvements and repairs, if applicable, to the market value of the building or structure; (iii) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and (iv) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC Building Code and this ordinance is required. (AMENDED 09/26/17)

Section 15-251.6 Duties and Responsibilities of the Administrator

As set forth in Part I of Article IV of this chapter, development permits (including permits for development within Special Flood Hazard Areas), shall not be issued unless the requirements of this chapter have been satisfied. In addition to his or her permit responsibilities, the administrator's responsibilities relating to the administration and enforcement of the provisions of this part shall include but shall not be limited to the following duties:

- (1) Advise permit recipients that additional Federal or State permits (Wetlands, Endangered Species, Erosion and Sedimentation Control, Riparian Buffers, Mining, etc.) may be required, and require that copies of such permits be provided and maintained on file with the development permit.
- (2) Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- (3) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (4) Prevent encroachments into floodways and non-encroachment areas except as authorized under Section 15-251.10.
- (5) Obtain actual elevation (in relation to mean sea level) of the reference level (including basement) and all attendant utilities of all new or substantially improved structures, in accordance with Subsection 15-251.5(a)(3).
- (6) Obtain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with Subsection 15-251.5(b).
- (7) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with Subsection 15-251.5(a) (3).
- (8) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with Section 15-251.5 and Subsection 15-251.9(b).
- (9) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation in accordance with the following principles:
 - a. In areas between official cross-sections on the Flood Insurance Rate Maps, SFHA, floodway, and non-encroachment area boundaries shall be determined by scaling distances on these maps.

- b. The base flood elevation shall in all cases be the controlling factor in locating the outer limits of a SFHA boundary.
- c. Interpretations of floodway and non-encroachment area boundaries shall be based on the current procedures for interpreting such boundaries in accordance with FEMA guidelines.
- d. Appeals of the determinations of the administrator under this subsection may be taken to the board of adjustment in accordance with the provisions of Section 15-91 of this chapter.
- (10) When the lowest ground elevation of a parcel or structure in a Special Flood Hazard Area is above the Base Flood Elevation, advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the Letter of Map Amendment (LOMA) issued by FEMA in the floodplain development permit file.
- (11) Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection.
- (12) Make on-site inspections of work in progress. As the work pursuant to a development permit progresses, the administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of this chapter and the terms of the permit.
- (13) Issue stop-work orders as pursuant to Section 15-117 of this chapter.
- (14) Revoke or recommend the revocation of development permits for violations of the provisions of this part as set forth in Section 15-115.
- (15) Otherwise enforce the provisions of this part as provided in Article VII of this chapter.
- (16) Review, provide input, and make recommendations for variance requests.
- (17) Maintain a current map repository to include, but not limited to, the FIS Report, historical and effective FIRM and other official flood maps and studies adopted in accordance with Subsection 15-251.2(b) of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs. (AMENDED 09/26/17)
- (18) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-F) and Letters of Map Revision (LOMR).

Section 15-251.7 Variance Procedures

Variances from the restrictions of this part may be granted by the board of adjustment in accordance with the provisions of Section 15-92 of this chapter.

Section 15-251.8 General Standards for Flood Hazard Reductions

In all Special Flood Hazard Areas, if and to the extent any development is allowed, the following requirements shall be applicable:

- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure.
- (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (3) All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, appliances (washers, dryers, refrigerators, freezers, etc.), hot water heaters, and electric outlets/switches. (REWRITTEN 09/26/17)
 - (a) Replacements part of a substantial improvement, electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall also meet the above provisions.
 - (b) Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements only comply with the standards for new construction consisted with the code and requirements for the original structure.
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, appliances (washers, dryers, refrigerators, freezers, etc.), hot water heaters, and electric outlets/switches.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

- (8) Nothing in this article shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this article and located totally or partially within the floodway or non-encroachment area, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway or non-encroachment area, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this article. (AMENDED 09/26/17)
- (9) New solid waste management facilities and sites, hazardous waste facilities, salvage yards, and chemical storage facilities shall not be permitted. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified according to Subsection 15-251.5(b) of this part.
- (10) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.
- (11) All subdivision proposals and other development proposals shall have utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (12) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (13) All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. (AMENDED 8 THRU 13 ON 09/26/17)

Section 15-251.9 Specific Standards for Flood Hazard Reductions

- (a) New structures generally prohibited within SFHAs. Within a Special Flood Hazard Area, no new structure (as defined in this part) may be constructed or located, and no substantial improvement of an existing structure may take place, unless and to the extent that the permit issuing authority for the proposed use determines that, in the absence of an authorization to do so, the owner would be deprived of all reasonable use of the subject property. Notwithstanding the foregoing, manufactured homes that are nonconforming because they are located within a SFHA may be replaced with another manufactured home. If such construction (or replacement of manufactured homes) is authorized, all such construction (or replacement) shall be in conformity with the remaining provisions of this section in addition to those set forth in Section 15-251.8.
- (b) <u>Residential construction</u>. New construction and substantial improvement of any residential structure (including manufactured homes) located within a Special Flood Hazard Area

or on any lot where a SFHA is located shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation.

- (c) <u>Non-residential construction</u>. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation as defined by this ordinance. Structures located in the AE Zone may be flood proofed to the regulatory flood protection elevation Regulatory Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Regulatory Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the administrator along with the operational and maintenance plans. (AMENDED 09/26/17)
- (d) Manufactured homes. Manufactured homes that are located within a SFHA or on a lot where a SFHA is located shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by engineer certification, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required. Finally, all enclosures or skirting below the lowest floor shall meet the requirements of subsection (e).
- (e) <u>Elevated buildings</u>. Fully enclosed areas of new construction and substantially improved structures that are below the lowest floor of buildings located with a SFHA: (**AMENDED 09/26/17**)
 - (1) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
 - (2) Shall not be temperature controlled or conditioned;
 - (3) Shall be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
 - (4) Shall include flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a

professional engineer or architect or meet or exceed the following minimum design criteria:

- a. A minimum of two flood openings on different sides of each enclosed area subject to flooding;
- b. The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
- c. If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
- d. The bottom of all required flood openings shall be no higher than one (1) foot above the adjacent grade;
- e. Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
- f. Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

(f) Fill/Grading. (AMENDED 09/26/17)

- (1) Fill is prohibited in the SFHA, consistent with this Ordinance.
- (2) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished, or otherwise converted to habitable space; the Town will have the right to inspect the enclosed area. The Town will conduct annual inspections. This agreement shall be recorded with the Orange County Register of Deeds and shall transfer with the property in perpetuity.
- (3) Release of Restrictive Covenants. If a property which is bound by a non-conversion agreement is modified to remove enclosed area below BFE, then the owner may request release of restrictive covenants after staff inspection and submittal of confirming documentation.
- (g) <u>Additions/Improvements</u>. With respect to additions and improvements to structures that are nonconforming because they are located within a Special Flood Hazard Area: (AMENDED 09/26/17)
 - (1) When the addition or improvement constitutes a substantial improvement as defined in Section 15-251.1, both the existing structure and the addition or improvement must comply with the standards for new construction.

- (2) When the addition or improvement does not constitute a substantial improvement, the addition or improvement must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.
- (h) <u>Accessory Structures</u>. When accessory structures (sheds, detached garages, etc.) are allowed to be placed within a Special Flood Hazard Area pursuant to the provisions of subsection (a) of this section, the following criteria shall be met: (AMENDED 09/26/17)
 - (1) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - (2) Accessory structures shall not be temperature-controlled;
 - (3) Accessory structures shall be designed to have low flood damage potential;
 - (4) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (5) Accessory structures shall be firmly anchored in accordance with Section 15-251.8;
 - (6) All service facilities such as electrical shall be installed in accordance with Section 15-251.8; and
 - (7) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with Subsection (e) of this section.
 - (8) An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures.
- (i) <u>Tanks</u>. When gas and liquid storage tanks are to be placed within a SFHA, the following criteria shall be met: (AMENDED 09/26/17)
 - (1) <u>Underground Tanks</u>. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;
 - (2) <u>Above-ground Tanks, Elevated</u>. Above-ground tanks in flood hazard areas shall be elevated to or above the Regulatory Flood Protection Elevation on a supporting structure that is designed to prevent flotation, collapse, or lateral movement during conditions of the design flood. Tank-supporting

structures shall meet the foundation requirements of the applicable flood hazard area;

- (3) Above-ground Tanks, Not Elevated. Above-ground tanks that do not meet the elevation requirements of Section (2) of this ordinance shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of the contents in the floodwaters or infiltration of floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.
- (4) <u>Tank Inlets and Vents</u>. Tank inlets, fill openings, outlets, and vents shall be:
 - a. At or above the Regulatory Flood Protection Elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and
 - b. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.
- (j) Subsequent to the effective date of this subsection, no portion of any Special Flood Hazard Area outside of the floodway may be filled in with fill dirt or similar material for the purpose of elevating buildings. Whenever fill is placed within a SFHA for any other permitted purpose, slopes shall be adequately stabilized to withstand the erosive force of the base flood. (AMENDED 09/26/17)

(k) Other Development.

- (1) Fences in regulated floodways and NEAs that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Section 15-251.10 of this ordinance.
- (2) Retaining walls, sidewalks, and driveways in regulated floodways or NEAs that involve the placement of fill in regulated floodways shall meet the limitations of Section 15-251.10 of this ordinance.
- (3) Roads and watercourse crossings in floodways and NEAs, including roads, bridges, culverts, low-water crossings, and similar means for vehicles and pedestrians to travel from one side of a watercourse to the other, that encroach into regulated floodways shall meet the limitations of Section 15-251.10 of this ordinance. (AMENDED 09/26/17)

Section 15-251.10 Floodways and Non-Encroachment Areas

- (a) Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Subsection 15-251.2(b) (1). The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The requirements set forth in the remaining provisions of this section, in addition to the standards set forth in Sections 15-251.8 and 15-251.9 shall apply to all development within such areas.
- (b) No encroachments, including fill, new construction, substantial improvements or other development shall be permitted within a floodway or non-encroachment area unless: (AMENDED 11/23/10).
 - (1) The proposed encroachment would not result in any impact to the flood levels during the occurrence of the base flood, as demonstrated by hydrologic and hydraulic analysis performed in accordance with standard engineering practice and presented to the administrator prior to approval of construction plans authorizing such encroachment; or
 - (2) A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. Prior to the issuance of a zoning, <u>class A or class B</u> special, <u>or conditional</u> use permit, the developer must demonstrate to the permit issuing authority, by the submission to the town of the CLOMR study, that it is reasonably likely that a CLOMR will be issued. The CLOMR must be received by the town prior to approval of construction plans authorizing such encroachment.
- (b1) When an encroachment within a floodway or non-encroachment area is authorized pursuant to a CLOMR as provided in subsection (b)(2) of this section, then upon completion of the encroachment, the developer must obtain from FEMA a Letter of Map Revision (LOMR) pertaining to such encroachment. If such a LOMR is required for an encroachment, then (i) if the encroachment occurs within a subdivided development, a final plat for the phase of the subdivision where the encroachment occurs shall not be approved until the LOMR has been received by the town, and (ii) if the encroachment occurs within an unsubdivided development, such property may not be used or occupied until the LOMR has been received by the town, except that such occupancy, use, or sale of lots shall be allowed if sufficient security is provided pursuant to Sections 15-53 or 15-60 to ensure that the developer does what is necessary to obtain the LOMR (AMENDED 11/23/10).
- (c) Any development within a floodway or non-encroachment area that is authorized by this section shall comply with all applicable flood hazard reduction provisions of this part.
- (d) No manufactured homes shall be permitted, except replacement manufactured homes in an existing manufactured home park or subdivision, provided the following provisions are met:
 - (1) The anchoring and the elevation standards of Subsection 15-251.9(d); and

(2) The no encroachment standard of Subsection 15-251.10(b) (1).

Section 15-251.11 Special Provisions for Subdivisions

- (a) An applicant for a <u>class A or class Beonditional use permit or</u> special use permit authorizing a major subdivision and an applicant for minor subdivision final plat approval shall be informed by the planning department of the use and construction restrictions contained in this Article if any portion of the land to be subdivided lies within a Special Flood Hazard Area.
- (b) A <u>class A or class conditional use permit or</u> special use permit for a major subdivision may not be issued, and final plat approval for any subdivision may not be granted, if any portion of one or more lots lies within a Special Flood Hazard Area unless it reasonably appears that:
 - (1) With respect to each lot that lies wholly or partly within a Special Flood Hazard area, either (i) a building of the type that is consistent with the zoning of the property can practicably be located in accordance with applicable regulations on the portion of such lot that is located outside the SFHA, or (ii) such lot has already been developed, or (iii) such lot is formed as the result of an adjustment of lot lines between lots in existence on the effective date of this section, and such readjustment does not result in a previously developable lot being rendered undevelopable, or (iv) it plainly appears that such lot is intended to be devoted to a permissible use that does not involve the construction of any building (e.g. that such lot is reserved or dedicated for open space purposes).
 - (2) Creation of each lot that does not satisfy the criteria set forth in subdivision (1) of this subsection is necessary to avoid depriving the owner of the property of all reasonable use of the tract taken as a whole.
- (c) Final plat approval for any subdivision containing land that lies within a Special Flood Hazard Area may not be given unless the plat shows the boundary of the SFHA according to the best information available at the time the final plat is approved and contains in clearly discernible print the following statement: "Use of land within a special flood hazard area is substantially restricted by Article XVI of Chapter 15 of the Carrboro Town Code." If, at the time final plat approval is granted, a Conditional Letter of Map Revision (CLOMR) affecting such subdivision has been approved, or the town is otherwise aware that some action is pending that would likely alter the location of the boundary of the SFHA as it affects such subdivision, then the statement on such plat referenced immediately above shall include a note similar to the following: "The location of the boundary of the special flood hazard area may be altered by a request for a special flood hazard map revision now pending before the Federal Emergency Management Agency."

Section15-252 through 15-260 Reserved.

PART II. STORM WATER MANAGEMENT

<u>Section 15-261 Natural Drainage System Utilized to Extent Feasible</u> (REWRITTEN 6/27/07) AMENDED 2/21/12).

- (a) To the extent practicable, all development shall conform to the natural contours of the land and natural drainage ways shall remain undisturbed.
- (b) To the extent practicable, lot boundaries shall be made to coincide with natural drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such natural drainage ways.
- (c) Drainage or filling in of existing ponds, under circumstances where the requirements of Section 15-263 are not applicable, shall only be allowed if the stormwater management benefits of the pond are otherwise provided for through installation of other stormwater management devices or practices deemed suitable by the Administrator. (AMENDED 2-21/12)

Section 15-262 Development Must Drain Properly (REWRITTEN 6/27/07)

- (a) All development shall be provided with a stormwater management system containing drainage facilities that are adequately designed and constructed to prevent the undue retention of surface water on the development site. Surface water shall not be regarded as unduly retained if:
 - (1) The retention results from a technique, practice or device deliberately installed as part of an approved sedimentation or stormwater management plan, or
 - (2) The retention is not substantially different in location or degree than that experienced by the development site in its pre-development stage, unless such retention presents a danger to health or safety.
- (b) No surface water may be channeled or directed into the OWASA sanitary sewer system.
- (c) Whenever practicable, the drainage system of a development shall coordinate with the drainage system or drainage ways on surrounding properties or streets.
- (d) Use of drainage swales rather than curb and gutter and storm sewers in subdivisions is provided for in Section 15-216. Private roads and access ways within unsubdivided developments shall utilize curb and gutter and storm drains to provide adequate drainage if the grade of such roads or access ways is too steep to provide drainage in another manner or if other sufficient reasons exist to require such construction.
- (e) The minimum design storm frequency for all drainage systems shall be the 10 year storm, except that those facilities crossing streets shall be designed for the 25 year storm.

(f) Drainage culverts and associated facilities shall be suitably sized to accommodate designated storm frequencies and shall be suitably constructed and installed to insure that the facilities will function adequately and will not deteriorate within an unreasonably short period of time. (AMENDED 04/03/90)

<u>Section 15-263 Management of Stormwater</u> (REWRITTEN 6/26/07; AMENDED 6/24/08; AMENDED 10/28/08; 6/22/10; 11/23/10; REWRITTEN 6/26/12)

- (a) The requirements of this section shall apply to developments to the extent provided in this subsection.
 - (1) For purposes of this subsection, "impervious surface" means that portion of the development of a lot or tract that is covered by a surface or material that substantially or completely prevents rainwater from reaching and being absorbed into the underlying soil. Impervious surfaces include but are not limited to streets, driveways, sidewalks, parking lots, buildings, and other roofed, paved, or graveled areas. Wooden slatted decks and the water area of swimming pools are considered pervious, as are detention ponds.
 - (2) For purposes of this subsection, "net addition of impervious surface" shall be determined by subtracting the total square footage of impervious surface prior to commencement of construction authorized by a development permit from the total square footage of impervious that is proposed to be located on the development site when all construction authorized by the development permit (including all phases thereof) is completed. If the permit issuing authority reasonably concludes that a permit applicant is seeking or has sought separate permits (simultaneously or sequentially) for different components of what is demonstrably intended to be a single development in an attempt to stay below the impervious surface threshold that triggers the requirements set forth in this section, then the permit issuing authority shall treat such multiple applications as a single application for purposes of determining whether the requirements of this section are applicable.
 - (3) All unsubdivided developments that involve a net addition of more than 5,000 square feet of impervious surface shall be subject to the requirements of this section, except that these requirements shall not apply if the total of the net addition of impervious surface area plus the previously existing impervious surface area on the lot does not exceed (i) six percent (6%) of the lot area within a B-5 or WM-3 zoning district, or (ii) for lots in all other zoning districts, the amount of impervious surface area permissible on lots within the C or WR zoning districts under subsection 15-266(b) of this part.
 - (4) When land is subdivided, and the permit authorizing the subdivision does not itself authorize the net addition of more than 5,000 square feet of impervious surface to the tract to be subdivided, then the requirements of this section shall not be applicable to the subdivision. The applicability of the requirements of this section to each of the individual lots so created shall then be determined as development permits are issued for each such lot.

- (5) When land is subdivided, and the permit authorizing the subdivision itself authorizes the net addition of more than 5,000 square feet of impervious surface to the tract to be subdivided (regardless of whether such impervious surface consists of a road or other facilities external to the lots so created, or buildings, parking lots, and other facilities constructed within the lots so created, or a combination of the two), then the subdivision shall comply with the requirements of this section. Furthermore, the stormwater management system that is installed to comply with the provisions of this section shall be required to take into account all the stormwater reasonably expected to be generated by the development (according to generally accepted engineering standards) when all subdivided lots five acres or less in size are fully developed. When such lots are subsequently developed, they shall be exempt from further review under the provisions of this section. However, any lot within such subdivision that is greater than five acres in size and that was not included in the stormwater calculations for purposes of designing a stormwater management system that satisfies the requirements of this section shall be required to comply with the requirements of this section at the time such lot is developed, if and to the extent required to do so under subsection (a)(3) of this section.
- (6) Notwithstanding the other provisions of this subsection, if (i) a lot is within a commercial district described in Section 15-136 or a manufacturing district described in 15-137, (ii) on the date that a development permit application is submitted and the fees paid the lot is already developed to the extent that the lot contains at least 10,000 square feet of impervious surface area, and (iii) the reasonably estimated cost of the redevelopment of the lot as proposed in the development permit application exceeds the greater of \$100,000, or fifty percent (50%) of the appraised value of the existing improvements on the lot, then the requirements of this section shall be applicable to such redevelopment. For purposes of this subdivision (a)(6), the terms "cost" and "appraised value" shall have the same meaning as provided in Subsection 15-125(c) of this chapter.
- (7) Notwithstanding the other provisions of this subsection, the requirements of this section shall apply to any development involving the reconstruction of a previously paved area comprising at least 10,000 square feet (repaving or resurfacing shall not be considered reconstruction).
- (8) Notwithstanding the other provisions of this subsection (but subject to the provisions of subsection (a)(8)f below), the requirements of this section shall apply to all proposed new development that cumulatively disturbs one acre or more for single family and duplex residential property and recreational facilities, and one-half acre for commercial, industrial, institutional, multifamily residential, or local government property. For purposes of this subsection (a)(8) only:
 - a. Development means any land disturbing activity which adds to or changes the amount of impervious or partially impervious cover on a

- land area or which otherwise decreases the infiltration of precipitation into the soil.
- b. New development means any development project that does not meet the definition of existing development set forth immediately below.
- c. Existing development means development not otherwise exempted from the provisions of this section that meets one of the following criteria: (i) it either is built or has established a vested right based on statutory or common law grounds as of the effective date of this section, or (ii) it occurs after the effective date of this section but does not result in a net increase in impervious surface area and does not increase the infiltration of precipitation into the soil..
- d. Land disturbing activity means any use of the land that results in a change in the natural cover or topography that may cause or contribute to sedimentation.
- e. Larger common plan of development or sale means any area where multiple separate and distinct construction or land-disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, or computer design) or physical demarcation (including but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.
- f. Redevelopment means any development on previously developed land.
- (b) Developments must install and maintain stormwater management systems that will control and treat runoff from the first one inch of rain as follows:
 - (1) Draw down the treatment volume in accordance with the requirements of the North Carolina Division of Water Quality Best Management Practices (NC DWQ BMP) Manual.
 - (2) Achieve an eighty-five percent (85%) average annual removal rate for Total Suspended Solids.
- (c) Subject to subsections (d) and (f), developments must install and maintain stormwater management systems that ensure that the nutrient load contributed by the development is limited to not more than 2.2 pounds per acre per year of nitrogen and 0.82 pounds per acre per year of phosphorus.
- (d) Subject to subsection (f), developments that (i) would otherwise be required under subsection (a) to comply with the stormwater treatment standards set forth in subsection (c), and (ii) involve the replacement or expansion of existing structures or improvements, shall have the option of either satisfying the requirements of subsection (c) of this section or achieving a thirty-five percent (35%) nitrogen and five percent (5%) phosphorous reduction in the loading rates for these nutrients when comparing the situation that exists on the date a completed application is submitted to the post redevelopment situation for the entire project site.

- (e) The need for engineered stormwater controls to meet the nutrient loading rate standards set forth in subsections (c) and (d) shall be determined by using the loading calculation methods and other standards established by the Division of Water Quality as set forth in Sub-Item (4)(a) of 15A NCAC 2B.0265, including the current version of the Stormwater Best Management Practices Manual published by the Division.
- (f) Developers shall have the option of offsetting part of their nitrogen and phosphorus loads by implementing or funding offsite management measures as follows:
 - (1) Before using offsite offset options, a development shall attain a maximum nitrogen loading rate on-site of six pounds per acre per year for single-family detached and duplex residential development and ten pounds per acre per year for other development, including multi-family residential, commercial and industrial, and shall meet any requirement for engineered stormwater controls required by this Article.
 - (2) Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to the remaining reduction needed onsite to comply with the loading rate standards set forth in subsection (c) of this section.
 - (3) A developer may make offset payments to the N.C. Ecosystem Enhancement Program contingent upon acceptance of payments by that Program. A developer may use an offset option provided by the Town of Carrboro, or may propose other offset measures including providing the developer's own offsite offset or utilizing a private seller. All offset measures shall meet the requirements of 15A NCAC 02B.0273(2) through (4) and 15A NCAC 02B.0240.
- (g) Developments shall be constructed and maintained so that their stormwater management systems meet the following minimum standards:
 - (1) The post-development discharge rates shall be less than or equal to the predevelopment discharge rates for the 1-, 2-, 5-, 10-, and 25-year 24-hour design storms.
 - (2) For upstream properties, the 1% chance flood elevation may not be increased.
 - (3) The <u>CouncilBoard</u> finds that increases in the total annual volume of runoff associated with new development results in decreased groundwater recharge, increased stream channel instability/erosion and significant water quality degradation. Therefore to the maximum extent practicable developments shall install and maintain stormwater management systems such that the post-development total annual stormwater runoff volume shall not exceed the predevelopment volume by more than the limits set forth in the table below. The predevelopment and post-development annual

stormwater runoff volume shall be calculated using the most up to date guidance and accounting methodology from North Carolina environmental regulatory agencies with stormwater management oversight. (AMENDED 6/26/12, AMENDED 2/26/13, AMENDED 5/28/19)

A composite curve number shall be assigned to the development site in the pre-development stage using the runoff curve number method described in USDA NRCS Technical Release 55, Urban Hydrology for Small Watersheds (June, 1986). See also Chapters 4 through 10 of NEH-4, SCS (1985).

Preexisting Composite	Maximum allowable
Curve Number*	increase in annual
	stormwater runoff volume
> 78	50%
>70-78	100%
> 64-70	200%
<=64	400%

(AMENDED 2/26/13)

- (h) The presumption established by this section is that, to satisfy the standards set forth herein, the applicant shall design and construct all stormwater management systems required by this section in accordance with the guidelines set forth in the Town of Carrboro Storm Drainage Design Manual (Appendix I to this chapter). However, the permit issuing authority may establish different requirements when it concludes, based upon (i) the information it receives in the consideration of the specific development proposal, and (ii) the recommendations of the public works director or the town engineer, that such deviations from the presumptive guidelines are necessary to satisfy the standards set forth in this section, or that the standards can still be met with such deviations and the deviations are otherwise warranted.
- (i) Approval by the town of an applicant's stormwater management plans, and construction by the applicant of the stormwater management system as shown in such plans, shall not relieve the applicant of the responsibility of complying with the standards set forth in this section. If at any time prior to two years after the date that the town concludes that a stormwater management system (or any component thereof) has been constructed in accordance with approved plans, the town determines that the stormwater management system (or any component thereof) installed to meet the requirements of this section does not achieve that objective, the town may require the submission of revised plans and the installation of new, altered, or additional facilities to bring the development into compliance. Prior to issuance of a certificate of occupancy or approval of a final plat, the town may require the applicant to post a performance bond or other sufficient surety to guarantee compliance with this section. (AMENDED 1/29/13)
- (j) Upon completion of construction of the stormwater management facilities, the permit recipient shall submit to the town "as built" plans for all such facilities in the form required by the town. Compliance with this requirement must occur prior to issuance of a certificate of

occupancy, or prior to final plat approval (if applicable), unless adequate security is otherwise provided in accordance with the provisions of Sections 15-53 or 15-60.

- (k) Proposed new development undertaken by the Town solely as a public road project shall be deemed compliant with the provisions of this section if it meets the buffer protection requirements of Part III of this Article. All other developments shall comply with both the requirements of this section and the provisions of Part III of this Article.
- (l) Variances from the provisions of this section may only be granted in accordance with the requirements of Section 15-92, including subsection (l) of that section.

Section 15-263.1 Maintenance of Structural BMPs.

- (a) For purposes of this section, a "structural BMP" is a device constructed or installed to trap, settle out, or filter pollutants from stormwater runoff or to reduce stormwater discharge volume or velocity in order to satisfy one or more of the requirements of Section 15-263.
- (b) The owner of each structural BMP installed pursuant to this ordinance shall maintain and operate it so as to preserve and continue its function in controlling stormwater quality and quantity at the degree or amount of function for which the structural BMP was designed. Such operation and maintenance shall be in accordance with the Operation and Maintenance Agreement specified in subsection (e) of this section.
- (c) The owner of each structural BMP shall ensure that each such facility is inspected in accordance with the Operation and Maintenance Agreement specified in subsection (e) of this section by a qualified registered North Carolina professional or other individual specially qualified by an appropriate training, testing, and certification program. The person performing the inspections shall submit annually to the administrator a report certifying the results of such inspections. The report shall be in a format and shall contain the information prescribed by the administrator. The first report shall be due one year from the date of the as built certification required by Subsection 15-263(i), and subsequent reports shall be due on or before that anniversary date.
- (d) The owner of each structural BMP shall ensure that, in accordance with the Operation and Maintenance Agreement, funds are set aside in an escrow account, sinking fund, or other arrangement, sufficient to pay major, non-routine costs associated with keeping such BMPs in proper operational condition, such as the cost of sediment removal, structural, biological, or vegetative replacement, major repair, or reconstruction. The owner shall submit annually to the administrator a report certifying that such funds have been set aside. The report shall be in a format and shall contain the information prescribed by the administrator. The first report shall be due one year from the date of the as-built certification required by Subsection 15-263(i), and subsequent reports shall be due on or before that anniversary date.
- (e) Prior to final plat approval, in the case of a subdivision, or prior to the issuance of a certificate of occupancy, in the case of an unsubdivided development, the owner of a development that contains a structural BMP shall enter into an Operation and Maintenance Agreement with the town (and shall record such agreement in the Orange County Registry) that specifies that the owner, and his or her successor and assigns:
 - (1) Agrees to comply with the obligations set forth in subsections (b), (c), and (d) of this section;
 - (2) Authorizes the town and its employees or agents to enter the property where the structural BMPs are located at reasonable times to inspect the same for compliance with the requirements of this section, the permit issued pursuant thereto, and the provisions of the Operation and Maintenance Agreement;

- (3) Agrees that, if the owner fails to operate and maintain such structural BMPs in accordance with the requirements of this section, the permit issued pursuant thereto, and the provisions of the Operation and Maintenance Agreement, the town is authorized (but not obligated) to enter the property to perform such work as is necessary to bring such BMPs into compliance and to charge the owner with the costs of such work.
- (f) If structural BMPs are to be owned by a property owners or homeowners association or similar entity, then the covenants applicable to such association shall clearly reference the obligations of the association, as owner of such BMPs, to fulfill the obligations of the owner relating to such BMPs as required by the provisions of this section, the permit issued pursuant thereto, and the provisions of the Operation and Maintenance Agreement.
- (g) If a structural BMP is located within a subdivision, then the recorded plat of such subdivision shall include a reference to the book and page number where the Operation and Maintenance Agreement is recorded. (AMENDED 6/26/12)
- (h) Where appropriate in the determination of the Administrator to assure compliance with this section, structural BMPs shall be posted with a conspicuous sign stating who is responsible for required maintenance and annual inspection. The sign shall be maintained so as to remain visible and legible. (AMENDED 6/26/12)

Section 15-264 Sedimentation and Erosion Control

- (a) No zoning, <u>class A or class B</u> special use, <u>or conditional use</u> permit may be issued and final plat approval for subdivisions may not be given with respect to any development that would cause land disturbing activity subject to the jurisdiction of the Orange County Erosion Control Officer or the North Carolina Sedimentation Control Commission unless such officer or agency has certified to the town; either that:
 - (1) Any permit required by such officer or agency has been issued or any erosion control plan required by such officer or agency has been approved; or
 - (2) Such officer or agency has examined the preliminary plans for the development and it reasonably appears that any required permit or erosion control plan can be approved upon submission by the developer of more detailed construction or design drawings. However, in this case, construction of the development may not begin (and no building permits may be issued) until such officer or agency issues any required permit or approves any required erosion control plan.
- (b) For purposes of this section, "land disturbing activity" means any use of the land by any person in residential, industrial, educational, institutional or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation. Sedimentation occurs whenever solid particulate matter, mineral or organic, is transported by water, air, gravity, or ice from the site of its origin.

- (c) The Orange County Erosion Control Officer is authorized by resolution of the Carrboro <u>Town CouncilBoard of Aldermen</u> to enforce within the town the Orange County Soil Erosion and Sedimentation Control Ordinance. (AMENDED 12/7/83)
 - (d) **(REPEALED 12/7/83)**

Section 15-265 (REPEALED 3/24/09).

Section 15-266 Impervious Surface Limitations (AMENDED 12/7/83; 05/15/90)

- (a) Within a B-5 or WM-3 zoning district (the total area of which comprises less than one percent of the area of the University Lake Watershed and all of which is located more than one-half mile from the normal pool elevation of University Lake), not more than twenty-four percent (24%) of the land on any lot may be covered by an impervious surface such as a street, drive, sidewalk, parking lot, building, or other roofed structure, etc. In the event that the area of impervious surface is greater than six percent (6%) of the total lot, stormwater management techniques must be employed that would retain the first one inch of rainfall running off of all impervious surfaces on a lot. A registered engineer must certify that the stormwater techniques used will accomplish this objective before a permit is issued, and it shall be a continuing condition of the permit that the owner provide necessary maintenance so that the stormwater retention techniques continue to function effectively. Such stormwater retention techniques shall be subject to inspection by the Town at least annually. In granting the class A specialconditional use permit authorizing such facilities, the CouncilBoard shall require the developer to post a cash bond or other sufficient security to guarantee that the developer or his successor shall adequately maintain such stormwater retention facilities so that such facilities will continue to operate as intended. (AMENDED 07/06/93; 10/15/96)
- (b) Subject to subsections (c) and (d), within a C or WR zoning district the maximum impervious surface coverage permissible on any lot shall be as shown in the following Table of Impervious Surface Calculations, which establishes a sliding scale of permissible impervious surface coverage based on lot size. For purposes of applying the table, lot sizes shall be rounded to the nearest tenth of an acre. Lot sizes of less than 0.5 acres may not exceed 4200 square feet of impervious surface, and lot sizes in excess of five acres may not exceed an impervious surface area equal to 4% of the lot size. For purposes of this subsection, impervious surface includes but is not limited to areas such as a street, driveway, sidewalk, parking lot, building, or other roofed or paved structure.

LOT	SIZE	IMPERVIOUS SURFACE		
ACRES	SQUARE FOOTAGE	SQUARE FOOTAGE	PERCENTAGE	
0.5	21,780	4,200	19.28	
0.6	26,136	4,300	16.45	
0.7	30,492	4,400	14.43	
0.8	34,848	4,500	12.91	
0.9	39,204	4,600	11.73	
1.0	43,560	4,700	10.79	
1.1	47,916	4,800	10.02	
1.2	52,272	4,900	9.37	
1.3	56,628	5,000	8.83	
1.4	60,984	5,100	8.36	
1.5	65,340	5,200	7.96	
1.6	69,696	5,300	7.60	
1.7	74,052	5,400	7.29	
1.8	78,408	5,500	7.04	
1.9	82,764	5,600	6.77	
2.0	87,120	5,700	6.54	
2.1	91,476	5,800	6.34	
2.2	95,832	5,900	6.16.	
2.3	100,188	6,000	5.99	
2.4	104,544	6,100	5.83	
2.5	108,900	6,200	5.69	
2.6	113,256	6,300	5.56	
2.7	117,612	6,400	5.44	
2.8	121,968	6,500	5.33	
2.9	126,324	6,600	5.22	
3.0	130,680	6,700	5.13	
3.1	135,036	6,800	5.04	
3.2	139,392	6,900	4.95	
3.3	143,748	7,000	4.87	
3.4	148,104	7,100	4.79	
3.5	152,460	7,200	4.72	
3.6	156,816	7,300	4.66	
3.7	161,172	7,400	4.59	
3.8	165,528	7,500	4.53	
3.9	169,884	7,600	4.47	
4.0	174,240	7,700	4.42	
4.1	178,596	7,800	4.37	
4.2	182,954	7,900	4.32	
4.3	187,308	8,000	4.27	
4.4	191,664	8,100	4.23	
4.5	196,020	8,200	4.18	
4.6	200,376	8,300	4.14	
4.7	204,732	8,400	4.10	
4.8	209,088	8,500	4.07	
4.9	213,244	8,600	4.03	
5.0	217,800	8,712	4.00	

- (c) If a tract is subdivided, then impervious surface shall be calculated as follows:
 - (1) The area of each lot shown on a proposed final plat shall be calculated. For purposes of this calculation, all street right-of-way created as part of the subdivision shall be allocated to the adjoining lots by extending lot lines. If lots are created on either side of a proposed street, lot lines shall be extended to the centerline of the right-of-way.
 - (2) Maximum impervious surface area for each lot shall be determined in accordance with subsections (a) or (b).
 - (3) The sum total of impervious surface area permissible on the entire tract shall be determined by adding together the impervious surface area available to each lot as determined under subsections (a) or (b).
 - (4) The impervious surface area within streets and other areas, (such as common areas) outside of individual lot boundaries shall be subtracted from the total area calculated pursuant to subsection (3).
 - (5) Following the calculation set forth in subsection (4), the remaining permissible impervious surface area shall be allocated by the subdivide to each lot, subject to the applicable limitations set forth in this section, and subject to the further limitation that, with respect to a cluster subdivision, in no case may the overall impervious surface area allocation for the subdivided tract exceed 4% of the area of that tract. For purposes of this calculation, the area of each lot shall exclude street right-of-way. The allocation assigned to each lot shall be indicated on the face of the subdivision final plat, and purchasers of each lot shall be bound by such allocation.
- (d) If a development is completed in phases or stages, the percentage restrictions set forth in this section shall apply to each separate phase or stage.
- (e) All development within the JLWP that requires a sedimentation and erosion control plan under 15A NCAC 4 or the Orange County Sedimentation and Erosion Control Ordinance shall be subject to the following requirements:
 - (1) Density and built-upon area shall be limited as follows:
 - a. For single family residential subdivisions, minimum lot sizes of 20,000 square feet or maximum of two dwelling units per acre; or
 - b. Twenty-four percent built-upon area for all other residential and non-residential development; or
 - c. Three dwelling units per acre or thirty-six percent built-upon area for properties without curb and gutter systems.

- (2) Stormwater runoff from such developments shall be transported by vegetated conveyances to the maximum extent practicable. (AMENDED 10/15/96)
- (f) For purposes of this section, the term "built-upon area" means that portion of a development project that is covered by impervious or partially impervious cover, including buildings, pavement, gravel areas (e.g. roads, parking lots, paths), recreation facilities (e.g. tennis courts), etc. Wooden slatted decks and the water area of a swimming pool are considered pervious. (AMENDED 10/15/96)

Section 15-267 Additional Development Standards Within C and WR District (AMENDED 11/11/86; 05/15/90)

- (a) Buildings and other impervious surfaces within the C and WR zoning districts shall be located, to the extent reasonably possible, so as to (i) take full advantage of the assimilative capacity of the land and (ii) avoid areas described in subsection 15-198(e) and (f). (AMENDED 09/05/95).
- (b) To avoid the creation of lots that will be difficult to build upon in a manner that complies with the standard set forth in subsection (a) and the impervious surface limitations set forth in Section 15-266, preliminary and final plats for the subdivision of land within the C and WR zoning districts shall show buildable area and approximate driveway locations for all lots within such subdivision. Thereafter, no zoning permit may be issued for construction of buildings or driveways outside the buildable areas so designated on the final plat unless the zoning administrator makes a written finding that the proposed location complies with the provisions of subsection (a) of this section as well as section 15-266.

Section 15-268 (REPEALED 3/24/09).

PART III. WATER QUALITY BUFFERS

<u>Section 15-269 Findings, Purpose and Applicability</u> (REPEALED AND REWRITTEN 3/24/09; REWRITTEN 10/26/10; AMENDED 3/4/14)

- (a) The CouncilBoard finds that:
 - (1) Soil and pollutants carried overland from upstream land uses can be effectively trapped by leaving a relatively undisturbed strip of vegetation parallel and adjacent to a drainage feature.
 - (2) Properly managed overland water flow can be directed into this water quality buffer area in a manner that will minimize the concentration of flow and promote diffuse flow and infiltration of the water.
 - (3) Sediments and other pollutants carried by water will be reduced as a result of the dispersion and infiltration of flow and associated filtering, absorption, and uptake of pollutants.
- (b) The purpose of this part is to protect, preserve, and enhance water quality buffers in order to maintain their pollutant removal functions and protect the quality of surface waters and water supplies. With regard to the Jordan Buffer Rules, it should be noted that nutrient removal is the primary function of riparian buffers. The NC Division of Water Quality shall administer the portion of these requirements of Rule 15 A NCAC 02B .0267 and .0268 (Jordan Water Supply Nutrient Strategy: Protection of Existing Riparian Buffers and Mitigation of Existing Riparian Buffers, respectively) for activities conducted under the authority of the State, the United States, multiple jurisdictions, or local units of governments, and forest harvesting and agricultural activities. The Town of Carrboro shall administer those provisions for all other landowners and shall administer the remaining provisions of this Article for all other land disturbing activities and developments.
- (c) Wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered as part of the water quality buffers but are also regulated pursuant to other State and Federal regulations.

Section 15-269.1 Definitions

For purposes of this part, the following terms shall have the meaning as indicated:

(a) 'Access Trails' means pedestrian trails constructed of pervious or impervious surfaces, and related structures to access a surface water including boardwalks, steps, rails, signage.

- (b) Archaeological Activities' means activities conducted by a Registered Professional Archaeologist (RPA).
- (c) 'Buffer' means a water quality buffer, or an undeveloped area parallel and adjacent to a drainage feature to protect and enhance water quality.
- (d) 'DBH' means diameter at breast height of a tree measured at 4.5 feet above ground surface level.
- (e) 'Development' means the same as defined in Rule 15A NCAC 2B .0202(23).
- (f) 'Diffuse flow' means flow that generally moves down slope via sheet flow rather than concentrating in rills, gullies, and ditches and in doing so is able to infiltrate into the soil and plant root zone.
- (g) 'Ditch' means a man-made channel other than a modified natural stream.
- (h) 'Ephemeral stream' means a drainage feature that carries only surface runoff in direct response to precipitation. An ephemeral stream may or may not have a well-defined channel and the stream bed is always above the water table. An ephemeral stream lacks the biological, hydrological, and physical characteristics commonly associated with perennial or intermittent streams.
- (i) 'Existing development' means development, other than that associated with agricultural or forest management activities that meets one of the following criteria:
 - 1. It either is built or has established a vested right based on statutory or common law as interpreted by the courts, for projects that do not require a state permit, as of the effective date of either local new development stormwater programs implemented under Rule 15A NCAC 2B .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development) or, for projects requiring a state permit, as of the applicable compliance date established in Rule 15A NCAC 2B .0271 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development), Items (5) and (6); or
 - 2. It occurs after the compliance date set out in Sub-Item (4)(d) of Rule .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development) but does not result in a net increase in built-upon area.
- (j) 'Greenway / Hiking Trails' means pedestrian and bicycle trails constructed of pervious or impervious surfaces and related structures including but not limited to boardwalks, steps, rails, and signage and that generally run parallel to the shoreline.
- (k) 'High Value Tree' means a tree that meets or exceeds the following standards: for pine species, 14-inch DBH or greater or 18-inch or greater stump diameter; or for

hardwoods and wetland species, 16-inch DBH or greater or 24-inch or greater stump diameter.

- (l) 'Intermittent stream' means a well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the water table. The flow may be heavily supplemented by stormwater runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.
- (m) 'New development,' for the purpose of this Article, means any development project that does not meet the definition of existing development set out in this Section.
- (n) 'Perennial stream' means a well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
- (o) For purposes of this Article only, 'Public utility' means any governmental entity, nonprofit organization, corporation, or any entity defined as a public utility for any purpose by Section 62.3 of the North Carolina General Statutes that is engaged in the production, generation, transmission, delivery, collection, or storage of water, sewage electricity, gas, oil, or electronic signals 'Riparian buffer enhancement' is defined as the process of converting a non-forested riparian area, where woody vegetation density is greater than or equal to 100 trees per acre but less than 200 trees per acre, to a forested riparian buffer area. The enhanced, forested riparian buffer area shall include at least two native hardwood tree species planted at a density sufficient to provide 320 trees per acres at maturity, and diffuse flow through the riparian buffer shall be maintained.
- (p) 'Riparian buffer restoration' is defined as the process of converting a non-forested riparian area, where woody vegetation density is less than 100 trees per acre, to a forested riparian buffer area. The restored, forested riparian buffer area shall include predominately native hardwood tree species planted at a density sufficient to provide 320 trees per acres at maturity, and diffuse flow through the riparian buffer shall be maintained.
- (q) 'Shoreline stabilization' is the in-place stabilization of an eroding shoreline. Stabilization techniques which include "soft" methods or natural materials (such as root wads or rock vanes) may be considered as part of a restoration design. However, stabilization techniques that consist primarily of "hard" engineering, such as concrete line channels, riprap or gabions, while providing bank stabilization, shall not be considered stream restoration.
- (r) 'Stream' means a body of concentrated flowing water in a natural low area or natural channel on the land surface.

- (s) 'Stream restoration' is defined as the process of converting an unstable, altered or degraded stream corridor, including adjacent riparian zone and flood-prone areas to its natural or referenced, stable conditions considering recent and future watershed conditions. This process also includes restoring the geomorphic dimension, pattern, and profile as well as biological and chemical integrity, including transport of water and sediment produced by the stream's watershed in order to achieve dynamic equilibrium. 'Referenced' or 'referenced reach' means a stable stream that is in dynamic equilibrium with its valley and contributing watershed. A reference reach can be used to develop natural channel design criteria for stream restoration projects.
- (t) 'Stump diameter' means the diameter of a tree measured at six inches above the ground surface level.
- (u) 'Surface waters' means any ephemeral, intermittent, or perennial stream, lake, pond, or reservoir, and including waters of the state as defined in G.S. 143-212 except underground waters'.
- (v) 'Temporary road' means a road constructed temporarily for equipment access to build or replace hydraulic conveyance structures or water dependent structures, or to maintain public traffic during construction.
- (w) 'Tree,' for the purposes of this Part, means a woody plant with a DBH equal to or exceeding five inches or a stump diameter exceeding six inches.
- (x) 'Water dependent structures' are those structures for which the use requires access or proximity to or siting within surface waters to fulfill its basic purpose, such as boat ramps, boat houses, docks and bulkheads.

Section 15-269.2 Required Buffers

- (a) Subject to the remaining provisions of this part, the water quality buffer areas described in this section are hereby designated as described below. The width of these buffers shall be as prescribed in Section 15-269.3. Disturbance of the area within, or outside causing hydrologic impacts upon, these buffers is restricted or prohibited as provided in Sections 15-269.4 and 15-269.5.
- (b) Buffers shall be established adjacent to all surface waters designated as such on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture, ii the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS), or iii other more accurate mapping approved by the Geographic Information Coordinating Council (GICC) and the N.C. Environmental Management Commission (EMC). Prior to approving a map under item iii., the EMC shall provide a 30-day public notice and opportunity for public comment.

- (1) If surface water is not designated as such on any of the foregoing maps, then the buffer requirements of this article applicable to perennial streams, intermittent streams, lakes, or ponds that are shown on such maps shall not apply, but buffers applicable to ephemeral streams may apply.
- (2) Where the specific origination point of a stream is in question, a publication of the N.C. Division of Water Quality entitled *Identification Methods* for the Origins of Intermittent and Perennial Streams shall be used by town representatives who have successfully completed the Division's Surface Water Identification Training Certification course to establish that point.
- (3) When a landowner or other affected party believes that surface waters shown on the above described maps have been inaccurately depicted as perennial streams, intermittent stream, lakes or ponds, then such landowner or other affected party may have an on-site evaluation completed by a party who has successfully completed the NC Division of Water Quality *Surface Water Identification Training Certification* course, its successor, or other equivalent training curriculum approved by the Division, and submit the results of that evaluation to the town. Any disputes over onsite determinations made according to this Item shall be referred to the Director of the Division of Water Quality c/o the 401 Oversight Express Permitting Unit, or its successor, in writing. The Director's determination is subject to review as provided in Articles 3 and 4 of G.S. 150B.
- (c) Buffers shall also be established adjacent to all ephemeral streams and ponds not shown on the above described maps that have a contributing drainage area that is at least five acres in size, as depicted in the Town's GIS database.
 - (1) When a landowner or other affected party believes that the designation of an area by the town as an ephemeral stream or pond with a contributing drainage area of at least five acres is in error, such landowner or other affected party may request that Town staff perform an onsite visit and/or submit to the Town data sufficient to make this case. Upon request, Town staff shall make a site visit and consider the information submitted by the landowner or other affected party as well as other relevant information.
 - (2) The decision as to the existence of an ephemeral stream or pond with a contributing drainage area of at least five acres shall be made by the permit issuing authority when it makes a final decision on the issuance of the permit.
- (d) The administrator may require that the precise location of any surface water be Surveyed and accurately shown on development plans whenever necessary to ensure that a proposed development complies with the provisions of this article.

Section 15-269.3 Width of Buffers

- (a) ZONES OF THE RIPARIAN BUFFER. The protected riparian buffer shall have two zones as follows:
 - (1) A streamside zone ("Zone 1") shall consist of an undisturbed area except as provided for in Section 15-269.5. The function of the streamside zone is to protect the physical and ecological integrity of the stream ecosystem, and filter runoff received from Zone 2. The desired vegetation for Zone 1 is mature forest. The location of Zone 1 shall be as follows:
 - a. Zone 1 shall begin at the most landward limit of the top of the bank. Zone 1 shall extend landward on either side of perennial and intermittent stream, and ephemeral streams with clearly defined streambanks, as indicated in Table 1, measured horizontally on a line perpendicular to a vertical line marking the origin of the buffer as defined above. For ephemeral streams without clearly defined streambanks, Zone 1 shall be measured from the centerline of the stream.
 - b. For ponds, lakes and reservoirs, Zone 1 shall begin at the most landward limit of the normal water level and extend landward as indicated in Table 1, measured horizontally on a line perpendicular to a vertical line marking the edge of the surface water.
 - (2) Zone 2 shall consist of an undisturbed area except as provided for in Section 15-269.5. The functions of this zone are to: protect the streamside zone, to filter runoff from upland development, and deliver runoff to Zone 1 in a dispersed fashion. Grading and revegetating Zone 2 is allowed provided that the health of the vegetation in Zone 1 is not compromised. Zone 2 shall begin at the outer edge of Zone 1 and extend landward as indicated in Table 1 as measured horizontally on a line perpendicular to the surface water. The desired vegetation for this zone is mature native vegetation; forest cover is encouraged.
 - (3) The total buffer width shall be the sum of the widths of the two zones, as indicated in Table 1, and shall extend on all sides of the waterbody.

Table 1: Red	guired Minimur	n Buffer Width (*	k)
I dole 1. Itel		ii Dailei Wiadii (,

Waterbody type	Zone 1	width	Zone 2 width		Zone 2 width Total width	
	Watershed	Outside of Watershed	Watershed	Outside of Watershed	Watershed	Outside of Watershed
Perennial Streams, Ponds, Lakes, Reservoirs	100'	50'		50'	100'	100'
Intermittent Streams, Ponds	60'	30'		30'	60'	60'
Ephemeral Streams, Ponds			30'	15'	30'	15'

^{* &}quot;Watershed" means within the University Lake Watershed, and "Outside of watershed" means the remainder of the Town's planning jurisdiction. For streams, the width indicated is in one direction from the stream channel; the total width is therefore twice the width indicated.

(4) Notwithstanding the other provisions of this section, in no case shall the width of any buffer be less extensive than the special flood hazard area for the same stream, pond, or lake drainage feature designated in accordance with the provisions of Part I of this article.

Section 15-269.4 Diffuse Flow Requirement

Concentrated runoff from new ditches or man-made conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters the buffer, and maintained in the buffer by dispersing runoff that has concentrated into rills, gullies, and ditches, and reestablishing vegetation where concentrated flow has displaced vegetation Corrective action to restore diffuse flow shall be taken if necessary to impede the formation or expansion of erosion rills or gullies. Where site conditions constrain the ability to ensure diffuse flow through both Zones 1 and 2, emphasis will be placed on ensuring diffuse flow through Zone 1, as provided for in 15-269.3. No new engineered stormwater devices or conveyances are allowed in the buffers except as provided for in Section 15-269.5.

Section 15-269.5 Exempt and Allowable Activities

(a) The table set forth in subsection (d) below sets out the activities and their designation under this part as exempt, allowable, or allowable with mitigation, except as provided for in 15-269.2. All activities not designated as exempt, allowable, or allowable with mitigation are prohibited within the buffer unless a variance is granted pursuant to Section 15-269.8.

- (b) Activities designated in the table below as exempt, allowable, and allowable with mitigation shall be subject to the following requirements. All activities shall be designed, constructed and maintained to minimize soil and vegetation disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities. Activities designated in the table as allowable and allowable with mitigation require written authorization from the Town.
 - (1) Exempt. Activities designated as exempt are allowed within the buffer. In addition, exempt uses shall meet the requirements listed in the table and the accompanying notes for the specific use.
 - (2) Allowable. Activities designated as allowable are permissible within the buffer provided that there are no practical alternatives to the requested use as determined in accordance with Section 15-269.6.
 - (3) Allowable With Mitigation. Activities designated as allowable with mitigation are permissible within the buffer provided that there are no practical alternatives to the requested use as determined in accordance with Section 15-269.6, and an appropriate mitigation strategy has been approved pursuant to Section 15-269.7.
- (c) For public utilities as defined in this Article, the activities and their designation as set forth in the table in subsection (d) apply to expansions and extensions. The requirements do not apply to routine or emergency maintenance and repairs.

(d) Table of Exempt and Allowable Activities in Water Quality Buffers (AMENDED 3/4/14)

Activity	Exempt	Allowable	Allowable with Mitigation
Drainage, Stormwater, Erosion Control, and other Water-based activities			
 Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3 Dam maintenance activities that do cause additional buffer disturbance beyond the footprint 	X		
of the existing dam or those not covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3		X	
Drainage ditches, roadside ditches and stormwater conveyances through buffers: New stormwater flows to existing drainage ditches, roadside ditches, and stormwater conveyances provided that flows do not alter or result in the need to alter the conveyance and are managed to minimize the sediment, nutrients and other pollution that convey to surface waters Realignment of roadside drainage ditches retaining the design dimensions provided that no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations. New or altered drainage ditches, roadside ditches and stormwater outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian buffer. New drainage ditches, roadside ditches and stormwater conveyances applicable to linear projects that do not provide a stormwater management facility due to topographic constraints provided that other practicable BMPs have been employed.	X	X	X
 Ponds created by impounding streams and not used as stormwater BMPs: New ponds in Zone 2 only provided that a riparian buffer meeting the requirements of 		N/	
Section 15-269.3 and 15-269.4 is established adjacent to the pond • All other new ponds		X	X

Activity	Exempt	Allowable	Allowable with Mitigation
• Drainage of a pond in a natural drainage way provided that a new riparian buffer that meets the requirements of this section is established adjacent to the new channel. [Ponds that are not in a natural drainage way are not subject to the buffer requirements of this part.] AMENDED 2/21/12)	X		
Scientific studies and stream gauging	X		
Stormwater BMPs:			
• Constructed wetlands in Zone 1, if not closer than 30' to surface waters and diffuse flow is provided into the remainder of Zone 1.		X	
• Wet detention, bioretention, and constructed wetlands in Zone 2 if diffuse flow of discharge is provided into Zone 1		X	
See Wetland, stream and buffer restoration			
Shoreline stabilization, including armoring of stream banks with rip rap or retaining walls			X
Temporary sediment and erosion control devices provided that the disturbed area is restored to preconstruction topographic and hydrologic conditions and comparable vegetation is replanted immediately after construction is complete. Tree planting may occur during the dormant season; the restored buffer shall comply with Section 15-269.7(g) within five years: • In Zone 2, provided that the vegetation in Zone 1 is not compromised, that discharge is released as diffuse flow in accordance with Section 15-269.5, and that ground cover is established within time frames required by the Sedimentation and Erosion Control Act In Zones 1 and 2 to control impacts associated with uses approved by the	X		
Town or that have received a variance provided that sediment and erosion control for upland areas is addressed, to the maximum extent practical, outside the buffer. • In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Water Pollution Control Act. • In-stream temporary erosion and sediment control measures for work within a stream channel. Water dependent structures where installation and	X	X X	
use result in disturbance to riparian buffers.		Λ	

Activity	Exempt	Allowable	Allowable with Mitigation
Water wells			
Single family residential water wells	X		
• All other water wells		X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers:			
Wetland, stream and buffer restoration that requires DWQ approval for the use of a 401 Water Quality Certification	X		
Wetland, stream and buffer restoration that does not require DWQ approval for the use of a 401 Water Quality Certification		X	
Miscellaneous			
Archaeological activities	X		
Fences:			
• Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in Section 15-316	X		
• Fences provided that disturbance is minimized and installation results in removal of trees as defined in Section 15-316		X	
Grading and revegetation in Zone 2 only provided that diffuse flow and the health of existing vegetation in Zone 1 is not compromised and disturbed areas are stabilized until they are revegetated		X	
Maintenance access on modified natural streams: a grassed travel way on one side of the water body where less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		X	
Mining activities: • Mining activities that are covered by the Mining Act provided that new buffers that meet the requirements of this section are established adjacent to the relocated channels Mining activities that are not covered by the Mining Act OR where new buffers that meet the requirements of this section are not established adjacent to the relocated channels Wastewater or mining dewatering wells with approved NPDES permit	X	X	X

Activity	Exempt	Allowable	Allowable with Mitigation
Preservation or maintenance of historic or cultural sites	X		
Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian buffer or the stream channel		X	
Removal of previous fill or debris provided that diffuse flow is maintained, a stabilizing ground cover sufficient to restrain erosion is established, and any woody vegetation removed is restored		X	
Wildlife passage structures		X	

Recreation			
 Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities: Pedestrian access trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, and provided that installation and use does not result in removal of trees as defined in Section 15-316 and no impervious surface is added to the buffer. Pedestrian access trails that exceed 4 feet in width of buffer disturbance, the installation or use results in removal of trees as defined in this Section or impervious surface is added to the buffer. 	X	X	
Canoe Access provided that installation and use does not result in removal of trees as defined in Section 15-316 and no impervious surface is added to the buffer.	X		
Greenway / hiking trails¹ designed, constructed and maintained to maximize nutrient removal and erosion protection, minimize adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practical		X	
Playground equipment: • Playground equipment on single family lots provided that installation and use does not result in removal of vegetation • Playground equipment installed on lands other than single-family lots or that requires removal of vegetation	Х	X	
Transportation			
Bridges		X	

¹ To the extent practicable, greenway easements shall be located a minimum of 10 feet from the top of bank; surfaces shall be a minimum of 15 feet from the top of bank

Driveway crossings of streams and other surface waters subject to this Section: • Individual driveway crossings that disturb equal to or less than 25 linear feet or 2,500 square feet of buffer	X		
 Individual driveway crossings that disturb greater than 25 linear feet or 2,500 square feet of buffer Multiple driveway crossings in any development 		X X	
that cumulatively disturbs equal to or less than 150 linear feet or one-third of an acre of buffer Multiple driveway crossings in any development that cumulatively disturbs greater than 150			X
linear feet or one-third of an acre of buffer • Driveway impacts other than crossing of a stream or other surface waters subject to this Section			X
Railroad impacts other than crossings of streams and other surface waters subject to this Part.			X
Railroad crossings of streams and other surface water drainage features subject to this Part: Railroad crossings that impact equal to or less than 40 linear feet of riparian buffer Railroad crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer Railroad crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer	X	X	X
Road relocation: Relocation of existing private access roads associated with public road projects where necessary for public safety: • Less than or equal to 2,500 square feet of buffer impact • Greater than 2,500 square feet of buffer impact		X	X

Temporary roads, provided that restoration activities, including re-establishment of preconstruction topographic and hydrologic conditions and replanting with comparable vegetation occur immediately after construction. Tree planting may occur during the dormant season; the restored buffer shall comply with Section 15-269.7(g) within five years: • Less than or equal to 2,500 square feet of buffer disturbance • Greater than 2,500 square feet of buffer disturbance	X	X	
Associated with culvert installation of bridge construction or replacement		X	
Transportation (vehicular, bike) crossings of streams and other surface waters subject to this Section: • Transportation crossings that impact equal to or less than 40 linear feet of riparian buffer • Transportation crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer • Transportation crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer	X	X	X
Transportation impacts other than crossings of streams and other surface waters subject to this Section			X
Vehicle access roads and boat ramps leading to the surface water, docks, fishing piers, and other water dependent activities, but not crossing the surface water and having a minimum practicable width of not more than 10 feet.		X	

Utilities			
Electric utility, aerial, perpendicular crossings ^{2,3,4} : • Disturb equal to or less than 100 linear feet of buffer • Disturb greater than 100 linear feet of buffer	Х	X	
Electric utility, aerial, other than perpendicular crossings ³ : • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters	X	X	X
Electric utility, underground, perpendicular crossings ^{3,4,6} : • Disturb less than or equal to 40 linear feet of buffer • Disturb greater than 40 linear feet of buffer	X	X	

- No heavy equipment shall be used within 30 feet of surface waters.
- A tree protection plan shall be developed and approved by Administrator that will protect the buffer to the maximum extent practicable.
- Trees shall be: 1) felled so as not to damage trees not intended for removal or stream banks; and 2) removed by chain.
- No permanent felling of trees occurs in protected buffers or streams.
- Stumps shall be removed only by grinding.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- At the completion of the project the disturbed area shall be stabilized with native vegetation.
- The condition and use of the area within 50 feet of surface waters shall be consistent with Sections 15-269.3 and 15-269.4

² Provided that within 30 feet of surface waters, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the Administrator as defined in Section 15-269.6.

[•] A zone at least 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.

[•] Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.

[•] Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees are cut.

[•] Riprap shall not be used unless it is necessary to stabilize a tower.

[•] No fertilizer shall be used other than a one-time application to re-establish vegetation.

[•] Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.

[•] Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.

[•] In wetlands, mats shall be utilized to minimize soil disturbance.

³ Perpendicular crossings are those that intersect the surface water at an angle between 75 degrees and 105 degrees.

⁴ Provided that poles or aerial infrastructure shall not be installed within 10 feet of a water body unless the Administrator completes a no practical alternative evaluation as defined in Section 15-269.6

⁵ Provided that:

⁶ •A tree protection plan shall be developed and approved by Administrator that will protect the buffer to the maximum extent practicable.

[•]Trees shall be felled so as not to damage trees not intended for removal or stream banks.

[•]Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.

[•]Stump grinding is allowable only for stumps more than 30 feet from surface waters.

Electric utility, underground, other than			
perpendicular crossings ^{3,6} :			
• Impacts greater than 50 feet from surface	X		
waters			
• Impacts within 30-50 feet of surface waters		X	
• Impacts within 30 feet of surface waters ⁵			X

[•] Within 30 feet of surface water, all of the following BMPs for underground utility lines shall be used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the Administrator, as defined in Section 15-269.6.

[•] Trees shall be removed by chain. Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.

^{.•} Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench created for the line installation.

[•] Underground cables shall be installed by vibratory plow or trenching.

[•] The trench shall be backfilled with the excavated soil material immediately following cable installation.

[•] No fertilizer shall be used other than a one-time application to re-establish vegetation.

[•] In wetlands, mats shall be utilized to minimize soil disturbance.

[•] At the completion of the project the disturbed area shall be stabilized with native vegetation.

[•]The condition and use of the area within 50 feet of surface waters shall be consistent with Sections 15-269.3 and 15-269.4

⁷ All sewer crossings shall be protected from damage and risk of future leakage to the maximum extent practicable using ductile iron and other appropriate construction materials and practices.

⁸ The width of the corridor that is maintained to exclude woody vegetation will not exceed 20 feet in width except to accommodate vehicle turnaround, preparedness for emergency situations, and state and federal regulatory standards.

Disturb equal to or less than 40 linear feet of buffer with a maintenance corridor equal to or less than 10 feet in width Disturb equal to or less than 40 linear feet of 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 buffer with a maintenance corridor equal to or less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 36; Impacts within 30-50 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30-50 f				
buffer with a maintenance corridor equal to or less than 10 feet in width Disturb equal to or less than 40 linear feet of 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 buffer with a maintenance corridor equal to or less than 150 linear feet of buffer with a maintenance corridor equal to or less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 50 linear feet of buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 50 linear feet of buffer Non-electric utility, other than perpendicular crossings ³⁶ : Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters The pross harvesting — See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation Management: Emergency fire control measures provided that topography is restored Mowing and harvesting of plant products in Zone 2 only Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	Non-electric utility, perpendicular crossings ^{3,4,6,7} :			
than10 feet in width • Disturb equal to or less than 40 linear feet of 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 buffer with a maintenance corridor equal to or less than 150 linear feet but equal to or less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 36. • Impacts within 30-50 feet of surface waters • Impacts within 3				
• Disturb equal to or less than 40 linear feet of 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 buffer with a maintenance corridor equal to or less than 150 linear feet of buffer with a maintenance corridor equal to or less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 40 linear feet of buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings ^{3.6} : • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30-feet of surface waters • Vegetation Management • Vegetation Management • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in X vegetation • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal o		X		
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 buffer with a maintenance corridor equal to or less than 150 linear feet of buffer with a less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings ³⁶ . Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Torest harvesting—See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: Emergency fire control measures provided that topography is restored Mowing and harvesting of plant products in Zone 2 only Planting vegetation to enhance the riparian buffer Werning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
feet in width Disturb greater than 40 linear feet but equal to or less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 36. Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet from surface waters	•		X	
• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings ^{3.6} : • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters • Impacts within 30-50 feet of surface waters • X X **X **Vegetation Management** Vegetation Management • Emergency fire control measures provided that to surface waters • Pruning forest vegetation provided that the health and function of the forest vegetation in not compromised • Pruning forest vegetation provided that the health and function of the forest vegetation in not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or a				
less than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings ^{3.6} . • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters • Vegetation Management • Emeryal placetion: • Emeryal placetion to establish water of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of poison of Parks and Recreation Raleigh, N.C. Guideline # 30, or a more recent version or				
ress than 150 linear feet of 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 buffer with a maintenance corridor greater than 10 feet in width * Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 3.6: * Impacts greater than 50 feet from surface waters * Impacts within 30-50 feet of surface waters * X * Vegetation Management * Emergency fire control measures provided that toopography is restored * Mowing and harvesting of plant products in * Zone 2 only * Planting vegetation to enhance the riparian buffer * Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised * Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank * Removal of poison ivy * R			X	
in width Disturb greater than 40 linear feet but equal to or less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 3.6.; Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30-50 feet of su				
Disturb greater than 40 linear feet but equal to or less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 3.6: Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within				
less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width bisturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 36; Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet o				X
maintenance corridor greater than 10 feet in width • Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 3.6; • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters 5.8 **X **X **X **Yegetation Management Forest harvesting — See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation **Nowing fertilizer application to establish vegetation **Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of pioson ivy • Removal of pioson ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
• Disturb greater than 150 linear feet of buffer Non-electric utility, other than perpendicular crossings 36: • Impacts greater than 50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters • Impacts within 30-50 feet from surface waters • Impacts within 30-50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30-50 feet from surface waters • Impacts within 30-50 feet of surface waters • Emergency fire control to establish • Emergency fire control measures provided that to copy and harvesting of plant products in X to too 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy				*7
Non-electric utility, other than perpendicular crossings 3.6; Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters X X X X X X X X X X X X X				X
crossings 3.6: Impacts greater than 50 feet from surface waters Impacts within 30-50 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30 feet of surface waters Impacts within 30 feet of surface waters Vegetation Management Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: Impacts within 30 feet of surface waters 5.8 X X X X X X X X X X X X				
• Impacts within 30-50 feet from surface waters • Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters • Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	1			
• Impacts within 30-50 feet of surface waters • Impacts within 30 feet of surface waters • Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		X		
• Impacts within 30 feet of surface waters 5.8 Vegetation Management Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		74	X	
Vegetation Management Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or			71	X
Forest harvesting – See Section 15-319.1 Fertilizer application: One-time fertilizer application to establish vegetation Vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
Fertilizer application: One-time fertilizer application to establish vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of pioson ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
One-time fertilizer application to establish vegetation Vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in				
Vegetation Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		**		
Vegetation management: • Emergency fire control measures provided that topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		X		
Emergency fire control measures provided that topography is restored Mowing and harvesting of plant products in Zone 2 only Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	vegetation			
Emergency fire control measures provided that topography is restored Mowing and harvesting of plant products in Zone 2 only Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	Vegetation management:			
topography is restored • Mowing and harvesting of plant products in Zone 2 only • Planting vegetation to enhance the riparian buffer • Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	1 -	X		
 Mowing and harvesting of plant products in Zone 2 only Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 				
Zone 2 only Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		X		
 Planting vegetation to enhance the riparian buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 				
 buffer Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 	l			
 Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 		X		
health and function of the forest vegetation is not compromised • Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
 compromised Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 		X		
 Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank Removal of poison ivy Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 	_			
diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	_			
damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	The state of the s	X		
life, or are imminently endangering the stability of the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
the streambank • Removal of poison ivy • Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or				
 Removal of poison by Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or 				
• Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	• Removal of poison ivy	X		
in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or	- · · · · · · · · · · · · · · · · · · ·			
DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or		X		
N.C. Guideline # 30, or a more recent version or				
	-			
	alternative reference approved by the NC EMC.			

(e) Additional Setback Requirements for Specific Water Pollution Hazards

The following activities are designated as potential water pollution hazards, and must be set back from any stream or waterbody by the required buffer width provided in 15-269.3 or the distance indicated below, whichever is greater:

Activity	Setback
Above or below ground storage of hazardous substances, petroleum or	150 feet
biofuels	
Animal feedlot operations	250 feet
Land application of biosolids	100 feet
Solid waste landfills or junkyards	300 feet

(f) **(REPEALED 2/21/12)**

- (g) No new lot may be created through a major or minor subdivision process that would be undevelopable under the provisions of this part because of the amount or dimensions of protective buffer land included in it, unless such lot has already been developed, or it plainly appears that such lot is intended to be devoted to permanent open space use.
- (h) Areas set aside as protective stream buffers as required by this part may be counted towards required open space as set out in Sections 15-198, so long as they meet all the provisions of that section.
- (i) Nothing in this part shall prevent a single family residence (including a mobile home) from being located within the required protective stream buffer areas if such home: 1) replaces a home that had been located within such buffer prior to the effective date of this part and is located on the same location as the previous home; or 2) is located on a mobile home pad or foundation that was in existence on the effective date of this part.
- (j) Nothing in this part shall prevent the expansion of an existing single family detached residence (including an attached garage) into any buffer area that adjoins an ephemeral stream, if and to the extent that such area was not a regulated stream buffer under the provisions of this chapter in effect prior to the effective date of this section.

Section 15-269.6 Determination of "No Practical Alternatives"

- (a) Persons who wish to undertake uses designated as allowable or allowable with mitigation under Section 15-269.5 or wish to meet a mitigation requirement provided under Section 15-269.7(g) shall submit a written request to the permit issuing authority for a "no practical alternatives" determination. The applicant shall certify that the criteria identified in subsection (b) are met and may submit any information deemed relevant to the permit issuing authority determination, in addition to the plans and other information submitted as part of the application for a permit under Article IV of this chapter.
- (b) The permit issuing authority shall make a "no practical alternatives" determination if, after reviewing the project plans and any other applicable information, it concludes that:

- (1) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality, and;
- (2) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat, and protect water quality.
- (c) Requests for a "no practical alternatives" determination shall be reviewed and either approved or denied. The permit issuing authority shall issue the decision in writing.
- (d) If the "no practical alternatives" determination is issued in the context of a zoning permit, then the determination is to be made within 60 days of the submission of a completed application, unless:
 - (1) The applicant agrees, in writing, to a longer period;
 - (2) The local government determines that the applicant has failed to furnish requested information necessary to the local government's decision;
 - (3) The applicant refuses access to its records or premises for the purpose of gathering information necessary to the local government's decision.
- (e) Any appeals of determinations regarding determinations of "no practical alternatives" shall be referred to the Director of DWQ. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

Section 15-269.7 Mitigation for Water Quality Buffers (REWRITTEN 5/22/12)

- (a) PURPOSE. The purpose of this section is to set forth the mitigation requirements for water quality buffer protection in relation to either a use shown in Section 15-269.5(d) as "allowable with mitigation" or a use for which a variance has been granted pursuant to Section 15-92(j).
- (b) THE AREA OF MITIGATION. Staff shall determine the required area of mitigation, which shall apply to all mitigation options identified in this section, according to the following:
 - (1) The impacts in square feet to each zone of the buffer shall be determined by adding the area of the footprint of the activity causing the impact to the riparian buffer, including any clearing and grading within the buffer necessary to accommodate other activities, and the area of any ongoing maintenance corridors within the buffer associated with the activity.
 - (2) The required area of mitigation shall be determined by applying the following multipliers to the impacts determined in subsection (b)(1) to each zone of the riparian buffer:
 - a. Impacts to Zone one of the riparian buffer shall be multiplied by three;

- b. Impacts to Zone two of the riparian buffer shall be multiplied by one and one-half.
- (c) THE LOCATION OF MITIGATION. The mitigation effort shall be located within the Town's planning jurisdiction, and as close to the location of the impact as feasible.
- (d) OPTIONS FOR MEETING THE MITIGATION DETERMINATION. (AMENDED 5/22/12)
 - (1) For impacts to buffers on intermittent and perennial streams, payment of a compensatory mitigation fee to the Riparian Buffer Restoration Fund (pursuant to 15A NCAC 02B .0269, Jordan Water Supply Nutrient Strategy: Riparian Mitigation Fees to the NC Ecosystem Enhancement Program), contingent upon acceptance of payments by the NC Ecosystem Enhancement Program, or to a private mitigation bank so long as the mitigation programs alternative to the Riparian Buffer Restoration Fund comply with the most current banking requirements of the US Army Corps of Engineers and the most current applicable trading criteria associated with water quality mitigation. For impacts to ephemeral streams, payment may be made only to the Town's Water Quality Enhancement Fund.
 - (2) Donation of real property or of an interest in real property pursuant to subsection (f) of this Section;
 - (3) Riparian buffer enhancement, or riparian buffer restoration. This shall be accomplished by the applicant after submittal and approval of a restoration plan pursuant to subsection (g) of this Section.
- (e) PAYMENT TO THE WATER QUALITY ENHANCEMENT FUND. Persons who choose to satisfy their mitigation determination by paying a compensatory mitigation fee to the Water Quality Enhancement Fund as allowed here shall use the following procedure:
 - (1) The Town shall establish annually, and include on the Miscellaneous Fees and Charges Schedule, a per square foot buffer mitigation fee. The fee shall be based upon a reasonable estimate of the per square foot cost of accomplishing riparian buffer restoration.
 - (2) The amount of the compensatory mitigation fee due shall be determined by multiplying the area in square feet of mitigation calculated in accordance with subsection (b) by the per square foot buffer mitigation fee.
 - (3) The required fee shall be submitted to the Town prior to construction plan approval.
- (f) DONATION OF PROPERTY. Persons who choose to satisfy their mitigation determination by donating real property or an interest in real property to the Town 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 the Riparian Buffer Restoration Fund, the Water Quality Enhancement Fund, or another alternative, private mitigation bank. The value of the property interest shall be determined by an appraisal performed in accordance with subsection (f)(4)d of this Section. The donation shall satisfy the mitigation determination if the appraised value of the donated property interest is equal to or greater than the required fee. If the appraised value of the donated property interest is less than the required fee, the applicant shall pay the remaining balance due.
- (2) The donation of conservation easements to satisfy compensatory mitigation requirements shall be accepted only if the conservation easement is granted in perpetuity.
- (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. 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 Cape Fear River Basin developed by the NC Division of Water Quality.
 - b. The property shall contain riparian buffers not currently protected by the State's riparian buffer protection program that are in need of restoration.
 - c. The restorable riparian buffer on the property shall have a minimum length of 1000 linear feet along a surface water and a minimum width of 50 feet as measured horizontally on a line perpendicular to the surface water.
 - d. The size of the restorable riparian buffer on the property to be donated shall equal or exceed the acreage of riparian buffer required to be mitigated under the mitigation responsibility determined pursuant to Item (b) of this Section.
 - e. The property shall not require excessive measures for successful restoration, such as removal of structures or infrastructure. Restoration of the property shall be capable of fully offsetting the adverse impacts of the requested use.
 - f. The property shall be suitable to be successfully restored, based on existing hydrology, soils, and vegetation.
 - g. The estimated cost of restoring and maintaining the property shall not exceed the value of the property minus site identification and land acquisition costs.
 - h. The property shall not contain any building, structure, object, site, district that is listed in the National Register of Historic Places established pursuant to Public Law 89-665, 16 U.S.C. 470 as amended.

- i. The property shall not contain any hazardous substance or solid waste.
- j. The property shall not contain structures or materials that present health or safety problems to the general public. If wells, septic, water or sewer connections exist, they shall be filled, remediated or closed at owner's expense in accordance with state and local health and safety regulations.
- k. The property and adjacent properties shall not have prior, current, and known future land use that would inhibit the function of the restoration effort.
- 1. The property shall not have any encumbrances or conditions on the transfer of the property interests.
- (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 subsection (f)(3) of this Section;
 - b. USGS Survey 1:24,000 scale topographic map, county tax map, USDA Natural Resource Conservation Service County Soil Survey Map, and county road map showing the location of the property to be donated along with information on existing site conditions, vegetation types, presence of existing structures and easements;
 - 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, 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; and
 - e. A title certificate from a licensed NC attorney.
- (5) The deed conveying the real property interest must be delivered to the Town prior to final plat approval (for mitigation that is required in connection with a subdivision) or to the issuance of a certificate of occupancy (for mitigation that is required in connection with an unsubdivided development) (AMENDED 5/22/12).

- (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:
 - a. The area of riparian buffer restoration is equal to the required area of mitigation determined pursuant to subsection (b) of this Section; or
 - b. The area of riparian buffer enhancement is three times larger than the required area of mitigation determined pursuant to subsection (b) of this Section.
 - (2) The location of the riparian buffer restoration or enhancement shall comply with the requirements in subsection (d) of this Section.
 - (3) The width of the riparian buffer restoration or enhancement site shall comply with Section 15-269.3 as measured horizontally on a line perpendicular to the surface water.
 - (4) The applicant shall submit a restoration or enhancement plan for approval. The restoration or enhancement plan shall contain the following:
 - a. A map of the proposed restoration or enhancement site;
 - b. A vegetation plan. The vegetation plan shall include a minimum of at least two native hardwood tree species planted at a density sufficient to provide 320 trees per acre at maturity;
 - c. A grading plan. The site shall be graded in a manner to ensure diffuse flow through the riparian buffer;
 - d. A fertilization plan; and
 - e. A schedule for implementation.
 - (5) Within one year after the permit issuing authority has approved the restoration or enhancement plan, the applicant shall present proof that the riparian buffer has been restored or enhanced. If proof is not presented within this timeframe, then the person shall be in violation of the riparian buffer protection program.
 - (6) The mitigation area shall be placed under a perpetual conservation easement that will provide for protection of the property's nutrient removal and other water quality enhancement functions.
 - (7) The applicant shall submit annual reports for a period of five years after the restoration or enhancement showing that the trees planted have survived and that diffuse flow through the riparian buffer has been maintained. The applicant shall replace trees that do not survive and restore diffuse flow if needed during that five-year period.

(h) The Town may determine that the option described in 15-269.7(e) does not apply to a public utility as defined in this Article if the mitigation options specified above in 15-269.7(f) and (g) are found to not be feasible.

Section 269.8 Permits and Enforcement of Buffer Requirements.

Like the other requirements of this chapter, the provisions of Part III of Article XVI (water quality buffers) shall ordinarily be enforced by requiring compliance as development permits (i.e., zoning, class A or class B special use, or conditional use permits) are issued. Accordingly, a determination as to whether a proposed disturbance of a buffer is exempt, allowable, or allowable with mitigation will ordinarily be made in the context of the review process for such a development permit. To the extent that the activities identified in the Table of Exempt and Allowable Activities (set forth in Subsection 15-269.5(d) above) are proposed to be conducted or undertaken under circumstances where no such development permit is likely to be required (e.g., archeological activities or the installation of playground equipment), such activities may not be conducted or undertaken until a buffer disturbance permit has been issued by the zoning administrator. Such permit shall be issued if the administrator concludes, based upon the information submitted with the application for such permit, that the proposed disturbance will be consistent with the requirements of this article.

ARTICLE XVIII

PARKING

Section 15-290 Definitions.

Unless otherwise specifically provided or unless clearly required by the context, the words and phrases defined below shall have the meaning indicated when used in this section.

- (1) **CIRCULATION AREA.** That portion of the vehicle accommodation area used for access to parking or loading areas or other facilities on the lot. Essentially, driveways and other maneuvering areas (other than parking aisles) comprise the circulation area.
- (2) **DRIVEWAY**. That portion of the vehicle accommodation area that consists of a travel lane bounded on either side by an area that is not part of the vehicle accommodation area.
- (3) **GROSS FLOOR AREA.** The total area of a building measured by taking the outside dimensions of the building at each floor level intended for occupancy or storage.
- (4) **LOADING AND UNLOADING AREA**. That portion of the vehicle accommodation area used to satisfy the requirements of Section 15-300.
- (5) **PARKING AREA AISLES.** That portion of the vehicle accommodation area consisting of lanes providing access to parking spaces. (AMENDED 2/4/86)
- (6) **PARKING SPACE.** A portion of the vehicle accommodation area set for the parking of one vehicle.
- (7) **VEHICLE ACCOMMODATION AREA.** That portion of a lot that is used by vehicles for access, circulation, parking and loading and unloading. It comprises the total of circulation areas, loading and unloading areas, and parking areas.
- (8) **VEHICLE STORAGE AREA.** That portion of a vehicle accommodation area used in connection with a 9.200 or 9.400 classification use as a place to park vehicles temporarily while they are waiting to be worked on or pending the pick-up of such vehicles by their owners.

Section 15-291 Number of Parking Spaces Required.

- (a) Subject to Section 15-292.1, all developments shall provide a sufficient number of parking spaces to accommodate the number of vehicles that ordinarily are likely to be attracted to the development in question. In addition, all 9.200 and 9.400 classification uses shall provide sufficient vehicle storage area to accommodate the number of vehicles likely to be on the premises awaiting work or pending removal of their owners. (AMENDED 2/4/86; 5/18/04)
- (b) The presumptions established by this article are that: (i) a development must comply with the parking standards set forth in subsection (g) to satisfy the requirement stated in subsection (a), and (ii) any development that does meet these standards is in compliance. However, the Table of Parking Standards is only intended to establish a presumption and should be flexibly administered, as provided in Section 15-292.
- (c) Uses in the Table of Parking Requirements [subsection (g)], are indicated by a numerical reference keyed to the Table of Permissible Uses, Section 15-146. When determination of

the number of parking spaces required by this table results in a requirement of a fractional space, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as one parking space.

- (d) With respect to any parking lot that is required to be paved (see Section 15-296): (AMENDED 9/13/83)
 - (1) The number of parking spaces required by this article may be reduced by a total of one space if the developer provides a bike rack or similar device that offers a secure parking area for at least five bicycles.
 - (2) In non-residential districts, the number of parking spaces required by this article may be reduced by one space for each motorcycle pad provided, up to a total of five percent of the required number of spaces.
- (e) Whenever a building is constructed with the intention that it be used in whole or in part for use classification 2.120, 2.220, 2.320, 3.120, or 3.220, the building shall be constructed on the lot in such a manner that sufficient usable space remains on the lot to add the additional parking spaces that would be required to convert the use of the building entirely to use classification 2.110, 2.210, 2.310, 3.110, or 3.210. In addition, whenever a developer proposes to construct a building to be used for purposes that require a lesser number of parking spaces than other uses to which the building might well be put at some future date, the administrator shall send to the developer a certified letter explaining that sufficient space should be left on the lot to add parking spaces at a later time if required. (AMENDED 2/4/86)
- (f) The <u>CouncilBoard</u> recognizes that the Table of Parking Requirements set forth in subsection (g) cannot and does not cover every possible situation that may arise. Therefore, in cases not specifically covered, the permit-issuing authority is authorized to determine the parking requirements using this table as a guide. In addition, the <u>Town CouncilBoard of Aldermen</u> may authorize a reduction of up to 25 percent in the parking requirement when approving a Village Mixed Use Master Plan or <u>Class A Special Conditional</u> Use Permit or an Office/Assembly development <u>Class A SpecialConditional</u> Use Permit. Land necessary to meet the full, presumptive, parking requirement must be identified during the plan approval process and must be reserved should the need for additional parking arise in the future. (AMENDED 05/25/99)
 - (g) Table of Parking Requirements (AMENDED 11/28/06)

	Part I.		
<u>Use</u>	PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)		
1.100	2 spaces per dwelling unit plus one space per room rented out in each dwelling unit (see Accessory Uses, Section 15-150). These required spaces shall be in addition to any space provided within an enclosed or partially enclosed garage. (AMENDED 2/24/84; 08/27/96)		
1.200	2 spaces for each dwelling unit, except that one bedroom units require only one space.		
1.300	With respect to multi-family units located in buildings where each dwelling unit has an entrance and living space on the ground floor, the requirement shall be 1½ spaces		

<u>Use</u>	PART I. PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)
	for each one bedroom unit and 2 spaces for each unit with two or more bedrooms. Multi-family units limited to persons of low- or moderate-income or the elderly require only 1 space per unit. All other multi-family units require 1 space for each bedroom in each unit plus 1 additional space for every four units in the development. (AMENDED 5/10/83)
1.340 1.350	1 space per every four dwelling units. (AMENDED 01/11/00) 2 spaces for each dwelling unit, except that one bedroom units require only one space. (AMENDED 10/22/19)
1.410 1.420	1 space for each bedroom.
1.430	1 space for each room to be rented.
1.510	1 space per room plus additional spaces for restaurant or other facilities. (AMENDED 11/28/06)
1.61 1.62 1.63	3 spaces for every five beds except for uses exclusively servicing children under 16, in which case 1 space for every 3 beds shall be required.
1.900 1.910	 4 spaces for offices of physicians or dentists; 2 spaces for attorneys; 1 space for all others. 4 spaces for offices of physicians or dentists; 2 spaces for attorneys; 1 space for all others, plus one space for each non-resident employee. (AMENDED 10/22/19)
2.110	1 space per 200 square feet of gross floor area.
2.120 2.130	1 space per 400 square feet of gross floor area.
2.140	1 space per 200 square feet of gross floor area plus reservoir lane capacity equal to three spaces per window. (AMENDED 2/4/86)
2.150	1 space per 200 square feet in the portion of the building to be used for retail sales plus 1 space for every two employees on the maximum shift. (AMENDED 04/15/97)
2.210	1 space per 200 square feet of gross floor area. (AMENDED 2/4/86)
2.220 2.230	1 space per 400 square feet of gross floor area.
2.240 2.250	1 space per 200 square feet of gross floor area plus reservoir lane capacity equal to three spaces per window. (AMENDED 10/23/18)
2.310	1 space per 200 square feet of gross floor area.
2.320	1 space per 400 square feet of gross floor area.
2.330	1 space per 400 square feet of gross floor area.
3.110	1 space per 200 square feet of gross floor area.

<u>Use</u>	PART I. PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)			
3.120	1 space per 400 square feet of gross floor area.			
3.130 3.131	1 space per 150 square feet of gross floor area. (AMENDED 10/23/18)			
3.150	1 space per 200 square feet of ground floor area. (AMENDED 06/20/95)			
3.210	1 space per 200 square feet of gross floor area.			
3.220	1 space per 400 square feet of gross floor area.			
3.230	1 space per 200 square feet of area within main building plus reservoir lane capacity equal to five spaces per window (10 spaces if window serves two stations).			
3.250	3 spaces arranged in close proximity to this use. (AMENDED 09/01/92)			
3.260	1 space for every full time employee; 1 space for every 2 part time employees; 1 space for every 3 volunteers; 1 space for every 20 seats in the portion of the building used for dining and 1 space for every 100 square feet of the building dedicated toward meeting or educational space (depending on programming needs, this requirement may apply to the kitchen and dining spaces). (AMENDED 03/22/16)			
4.100 4.200	1 space for every two employees on the maximum shift except that in the B-1-G, B-2, B-3, and B-4 zones, such uses may provide 1 space per 200 square feet of gross floor area.			
5.110	1.75 spaces per classroom in elementary schools 5.0 spaces per classroom in high schools.			
5.120	1 space per 100 square feet of gross floor area.			
5.130	1 space per 150 square feet of gross floor area.			
5.200	1 space per every four seats in the portion of the church building to be used for services plus spaces for any residential use as determined in accordance with the parking requirements set forth above for residential uses, plus 1 space for every 200 square feet of gross floor area designed to be used neither for services nor residential purposes.			
5.310 5.320	1 space per 300 square feet of gross floor area.			
5.400	1 space per 300 square feet of gross floor area.			
6.110	1 space for every 3 persons that the facilities are designed to accommodate when fully utilized (if they can be measured in such a fashion example tennis courts or bowling alleys) plus 1 space per 200 square feet of gross floor area used in a manner not susceptible to such calculation.			
6.120 6.130	1 space for every four seats.			

USE	PART I. PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)		
6.140	1 space for every 200 square feet of gross floor area within enclosed buildings (AMENDED 2/2/88)		
6.210 6.220	1 space per 200 square feet of area within enclosed buildings, plus 1 space for every 3 persons that the outdoor facilities are designed to accommodate when used to the maximum capacity.		
6.230	Miniature golf course – 1 space per 300 square feet of golf course area plus 1 space per 200 square feet of building gross floor area; Driving range 1 space per tee plus 1 space per 200 square feet in building gross floor area; Par Three Course 2 spaces per golf hole plus 1 space per 200 square feet of building gross floor area.		
6.240	1 space per horse that could be kept at the stable when occupied to maximum capacity.		
6.250	1 space for every three seats.		
6.260	1 space per speaker outlet.		
7.100	2 spaces per bed.		
7.200	3 spaces for every 5 beds		
7.300 7.400	1 space for every two employees on maximum shift.		
8.100	1 space per 100 square feet of gross floor area. (AMENDED 2/24/87)		
8.200	1 space for every four outside seats. (AMENDED 2/24/87)		
8.300	1 space for each drive-in service spot. (AMENDED 2/24/87)		
8.400	Reservoir lane capacity equal to five spaces per drive-in window. (AMENDED 2/24/87)		
8.500	Spaces to be determined according to projected level of carry-out service. (AMENDED 2/24/87)		
8.600	1 space per 200 square feet of floor area plus one space per employee engaged in delivery service. (AMENDED 2/24/87)		
8.800	1 space per 100 square feet of performing arts space plus additional spaces for associated and accessory uses as indicated in this table, either Part I or Part II, whichever is less. (AMENDED 11/27/18)		
9.100	1 space per 200 square feet of gross floor area plus an extra 810 square foot vehicle storage area per repair bay.		
9.200	2 regular spaces per bay plus a 1,540 square foot vehicle storage area per bay. (AMENDED 2/4/86)		
9.300	1 space per 200 square feet of gross floor area of building devoted primarily to gas sales operation; plus sufficient parking area to accommodate 2 vehicles per pump without interfering with other parking spaces.		

USE	PART I. PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)			
9.400	2 regular spaces per bay and office plus an 810 square foot vehicle storage area per bay. (AMENDED 2/4/86, 10/20/92)			
9.500	Conveyer type1 space for every three employees on the maximum shift plus reservoir capacity equal to five times the capacity of the washing operation. Self-service type2 spaces for drying and cleaning purposes per stall plus two reservoir spaces in front of each stall.			
10.210 10.220	1 space for every two employees on the maximum shift but not less than 1 space per 5,000 square feet of area devoted to storage (whether inside or outside).			
11.000	1 space per 200 square feet of gross floor area.			
12.100 12.200	1 space per 200 square feet of gross floor area.			
13.100 13.200 13.300 13.400	1 space per 200 square feet of gross floor area.			
14.100 14.200 14.300 14.400	1 space for every 2 employees on maximum shift.			
15.100 15.200	1 space per 200 square feet of gross floor area.			
15.300	1 space for every 2 employees on maximum shift.			
15.400	1 space per 100 square feet of gross floor area.			
15.500	1 space per 400 square feet of gross floor area of the collection facility plus 1 space per employee or attendant. (AMENDED 6/28/83)			
16.100	1 space per 200 square feet of gross floor area plus reservoir lane capacity equal to three spaces per window.			
16.200	1 space per 200 square feet of gross floor area.			
19.000	1 space per 1,000 square feet of lot area used for storage, display, or sales. (AMENDED 5/12/81)			
20.000 21.000	1 space per 200 square feet of gross floor area.			
22.000	1 space for every employee plus 1 space per 250 square feet of floor area used for day care in addition to spaces for any residential use as determined in accordance with the parking requirements set forth above for residential uses.			
23.000	1 space per 200 square feet of gross floor area. 1 space per room plus additional space for restaurant or other facilities.			

	PART II. (APPLIES TO PROPERTIES LOCATED WITHIN THE B-1(c), B-			
	1(g), AND B-2 ZONING DISTRICTS			
<u>Use</u>	PARKING REQUIREMENT			
1.100	1 per bedroom and no more than 2			
1.200	1 per bedroom and no more than 2			
1.300	1 per bedroom and no more than 2			
1.500	.75 per room (Note: This does not include parking for associated conference and/or			
	restaurant facilities.)			
2.000	1 per 300 square feet of gross floor area			
3.000	1 per 400 square feet of gross floor area			
	Part I.			
USE	PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)			
34.000 34.100 34.200	1 space per room plus additional spaces for restaurant or other facilities. 2 spaces per main dwelling unit plus 1 space per room. (AMENDED 06/22/99; 11/28/06)			

(AMENDED 02/04/97; 01/11/00; 5/18/04)

(h) Bicycle parking shall be provided in accordance with the provisions of this subsection by all developments that fall within the use classifications shown in the following Table of Bicycle Parking Standards.

When determination of the number of spaces required by this table results in a requirement of a fractional space, any fraction of one-half or less shall be disregarded, while a fraction in excess of one-half shall be counted as one space.

TABLE OF BICYCLE PARKING STANDARDS (AMENDED 11/27/18)			
Use	Bicycle Parking Requirement		
1.300	1.5 spaces per unit		
2.100	1 space per 10 presumptively required auto spaces, with a minimum of 5 spaces		
2.200			
2.300			
3.100	1 space per 10 presumptively required auto spaces, with a minimum of 5 spaces		
3.200			
3.260	1 space for every 5 seats in the portion of the building used for dining		
5.100	1 space per 10 students plus 1 space per 10 employees		

6.200	1 space per 4 presumptively required auto spaces		
8.100	1 space per 10 presumptively required auto spaces, with a minimum of 5 spaces		
8.200			
8.800			
10.100	1 space per 10 auto spaces, with a minimum of 5 spaces		
34.100	1 space per 5 rooms, up to 50 rooms; 1 space per 10 rooms above 50 rooms		
-	(ALEDNOTE CHOMA AIRAM)		

(AMENDED 6/19/12; 3/22/16)

Section 15-292 Flexibility in Administration Required (AMENDED 10/23/18)

- (a) The CouncilBoard recognizes that due to the particularities of any given development, the inflexible application of the parking standards set forth in Subsection 15-291(g) may result in a development either with inadequate parking space or parking space far in excess of its needs. The former situation may lead to traffic congestion or parking violations in adjacent streets as well as unauthorized parking in nearby private lots. The latter situation results in a waste of money as well as a waste of space that could more desirably be used for valuable development or environmentally useful open space. Therefore, as suggested in Section 15-191, the permit-issuing authority may permit deviations from the presumptive requirements of Subsection 15-291(g) and may require more parking or allow less parking whenever it finds that such deviations are more likely to satisfy the standard set forth in subsection 15-291(a). In addition, that same flexible approach shall be followed with respect to the vehicle storage area requirements set forth in the preceding table.
- (a1) The <u>CouncilBoard</u> also recognizes that due to the particularities of any given development, the inflexible application of bicycle parking standards set forth in Subsection 15-291(h) and 15-295.1 may result in a development either with inadequate parking space or parking space in excess of its needs. Therefore, the permit-issuing authority may permit deviations from the presumptive requirements of Subsection 15-291(h) and 15-295.1 may require more or less bicycle parking subject to the criteria in Subsection 15-292(b1).
- (b) Without limiting the generality of the foregoing, the permit-issuing authority may allow deviations from the parking requirements set forth in Subsection 15-291(g) when it finds that:
 - (1) A residential development is irrevocably oriented toward the elderly;
 - (2) A residential development is located on a bus line, is located in close proximity to the central business district, and is committed to a policy of placing restrictions on the vehicle ownership of its tenants.
 - (3) A business is primarily oriented to walk-in trade.
- (b1) The permit-issuing authority may allow deviations from the bicycle parking requirements set forth in Subsection 15-291(h) when it finds at least one of the following:
 - (1) A residential development is irrevocably oriented toward the elderly, and or persons with disabilities; or

- (2) A residential or commercial development is located on a lot, constrained by size or topography, such that the installation of the presumptive number bicycle parking spaces that comply with the Design Standards for Bicycle Parking in Section 15-295.1 is impracticable. In those cases, the development shall instead provide the maximum number of bicycle parking spaces practicable.
- (c) Whenever the permit-issuing authority allows or requires a deviation from the presumptive parking requirements set forth in subsections 15-291(g), 15-291(h) and 15-295.1, it shall enter on the face of the permit the parking requirement that it imposes and the reasons for allowing or requiring the deviation.
- (d) If the permit-issuing authority concludes, based upon information it receives in the consideration of a specific development proposal, that the presumption established by subsections 15-291(g) and 15-291(h) for a particular use classification is erroneous, it shall initiate a request for an amendment to the Table of Parking Requirements in accordance with the procedures set forth in Article XX.

Section 15-292.1 Payment of Fee In Lieu of Providing Parking Spaces

- (a) With respect to properties within the B-1(C), B-1(G), and B-2 districts that are developed for commercial purposes, the permit issuing authority may authorize the developer to forego the construction of parking spaces otherwise required on the developer's property pursuant to the provisions of Section 15-291 of this Article for commercial uses if (i) the permit issuing authority finds that the parking needs of such development can be met by public parking facilities that are located or expected to be constructed within a reasonable time within reasonable proximity to the proposed development, and (ii) the developer pays to the town for each such space that is not constructed a fee in lieu of providing that space in an amount determined as provided in subsection (b) of this section. This fee shall be paid before an occupancy permit is issued to the development, unless the permit issuing authority by condition establishes another time.
- (b) The amount of the fee authorized by this section shall be determined by estimating the cost of providing a paved parking space (including land and improvement costs) that meets the requirements of this Article. This determination shall be made annually and the fee shall be included in the Miscellaneous Fees and Charges Schedule adopted by the Town CouncilBoard-of-Aldermen.
- (c) Any fees collected in accordance with this section shall be reserved and used exclusively to meet the purposes for which they have been obtained as specified above in subsection (a).

Section 15-293 Parking Space Dimensions (AMENDED 9/13/83)

(a) Subject to subsection (b) and (c), parking spaces shall contain a rectangular area at least eight and one-half feet wide and eighteen feet long. Lines demarcating parking spaces may be

drawn at various angles in relation to curbs or aisles, as long as the parking spaces so created contain within them the rectangular area required by this section. (AMENDED 2/5/08)

- (b) In parking areas containing ten or more spaces, up to 40% of the parking spaces may be set aside for the exclusive use of compact cars, provided the compact car area is designated for exclusive use by compact cars, and that adequate signs are provided designating and informing the public of the exclusive use. A compact parking space shall contain a rectangular area eight feet wide and fifteen feet long. (AMENDED 4/24/12)
- (c) Wherever parking consists of spaces set aside for parallel parking, one foot shall be added to the minimum required width, and three feet to the minimum required length.
- (d) Motorcycle pads shall contain a rectangular area at least four feet wide and eight feet long. Spaces shall be located at either end of parking aisles and shall have, centered, a concrete or metal strip one square foot in area to accommodate the use of kick stands.

Section 15-294 Required Width of Parking Area Aisles (AMENDED 5/18/04)

(a) Subject to subsections (b) and (c) parking area aisles shall have a minimum width between parking spaces as follows: (AMENDED 6/26/84)

	STANDARD, OR NON-SUBCOMPACT AREA PARKING ANGLE			
AISLE TYPE	0 °	45°	60°	90°
ONE WAY	13	13	18	24
TWO WAY	19	21	23	24

(b) In parking areas where subcompact spaces are provided pursuant to 15-293(b) of this ordinance, parking aisle spaces adjoining subcompact spaces shall have a minimum width between such parking spaces as follows:

	STANDARD AREA PARKING ANGLE			
AISLE TYPE	0 °	45°	60°	90°
ONE WAY	13	13	14	20
TWO WAY	19	21	23	24

- (c) The width of a parking aisle serving 90° angle parking may be reduced to eighteen feet if (i) not more than ten spaces are to be served by an aisle with such reduced width, and (ii) the aisle "dead ends", i.e., is not used as an access way to other areas. (AMENDED 6/26/84)
- (d) Driveways shall be not less than ten feet in width for one way traffic and eighteen feet in width for two way traffic, except that ten foot wide driveways are permissible for two way traffic

when (i) the driveway is not longer than fifty feet, (ii) it provides access to not more than ten spaces, and (iii) sufficient turning space is provided so that vehicles need not back into a public street. (AMENDED 6/26/84)

(e) Notwithstanding the other provisions of this section, the permit issuing authority may allow the use of geometric standards other that those specified in this section if the permit issuing authority finds that (i) the plans for the vehicle accommodation area are sealed by a registered engineer with recognized expertise in parking facility design, and (ii) the alternative design will satisfy off-street parking requirements as adequately as would a facility using the specifications set forth in this section and would otherwise be consistent with public safety.

Section 15-295 General Design Requirements (AMENDED 5/18/04)

- (a) Vehicle accommodation areas shall be designed so that, without resorting to extraordinary movements, vehicles may exit such areas without backing onto a public street. This requirement does not apply to parking areas consisting of driveways that serve one or two dwelling units.
- (b) Every vehicle accommodation area shall be designed so that vehicles cannot extend beyond the perimeter of such area onto adjacent properties or public rights-of-way. Such areas shall also be designed so that vehicles do not extend over sidewalks or tend to bump against or damage any wall, vegetation, or other obstruction.
- (c) Circulation areas shall be designed so that vehicles can proceed safely without posing a danger to pedestrians or other vehicles and without interfering with parking areas.
- (d) Vehicle storage areas are not required to observe any particular configuration but shall be so located and designed so that the entire amount of required square footage of such areas can be used for the purpose intended without creating any substantial danger of injury to persons or property and without impeding vehicular movement in the adjacent street. (AMENDED 2/4/86)
- (e) To the extent practicable, parking shall not be allowed between a building façade and a street right-of-way in the B-1(c), B-1(g), and B-2 zoning districts.

Section 15-295.1 Design Standards for Bicycle Parking (AMENDED 6/19/12; 11/19/13)

- (a) Bicycle parking may be located in any parking area or in other locations that are easily accessible, clearly visible from the entrance it serves, and do not impede pedestrian or motorized vehicle movement into or around the site. At least 50 percent of bicycle parking shall be sheltered. Designating space for bicycle parking within buildings is an option to consider when feasible.
- (b) When a percentage of the required motorized vehicle spaces are provided in a structure, an equal percentage of the required bicycle spaces shall be located inside that structure, unless an equivalent number of other accessible covered bicycle parking spaces are located elsewhere on the site.

- (c) Where bicycle parking facilities are not clearly visible to approaching cyclists, signs shall be posted to direct cyclists to the facilities.
- (d) Facilities shall provide at least a 30 inch clearance from the centerline of each adjacent bicycle rack/support structure and at least 24 inches from walls or other obstructions.
- (e) An aisle or other space shall be provided for bicycles to enter and leave the facility. The aisle shall have a width of at least four feet to the front or the rear of a standard six-foot bicycle parked in the facility.
- (f) Each bicycle parking space shall be sufficient to accommodate a bicycle at least six feet in length and two feet wide. Overhead clearance shall be at least seven feet.
- (g) Bicycle parking spaces shall be clearly marked as such and shall be separated from motorized vehicle parking by some form of physical barrier designed to protect a bicycle from being hit by a motorized vehicle.
- (h) Each bicycle parking space shall be provided with some form of stable frame permanently anchored to a foundation to which a bicycle frame and both wheels may be conveniently secured using either a chain and padlock or a U-lock. The frame shall support a bicycle in a stable position without damage to the frame, wheels, or components. The rack designs commonly known as "inverted U", "A", and "post-and-loop" are preferred types. The "wave", "toast", and "comb" racks, as described in Chapter 7, Figure 7-60, of the Comprehensive Bicycle Transportation Plan, are discouraged and shall not count toward fulfillment of the requirements in Sec. 15-291(h). (AMENDED 11/19/13)
- (i) Bicycle racks should be designed and constructed according to Design Guidelines of the Carrboro Bicycle Plan.

Section 15-296 Vehicle Accommodation Area Surfaces

- (a) Subject to subsections (e), (f), (g), and (h) vehicle accommodation areas that (i) include lanes for drive-in windows; (ii) are required to contain more than 1,000 square feet of vehicle storage area; or (iii) contain parking areas that are required to have more than ten parking spaces and that are used regularly at least five days per week shall be graded and surfaced with asphalt, concrete or other material that will provide equivalent protection against potholes, erosion, and dust. Specifications for surfaces meeting the standard set forth in this subsection are contained in Appendix D. (AMENDED 2/4/86; 3/4/86; 6/26/90; 5/6/03)
- (b) Vehicle accommodation areas that are not provided with the type of surface specified in subsection (a) shall be graded and surfaced with crushed stone, gravel, or other suitable material (as provided in the specifications set forth in Appendix D) to provide a surface that is stable and will help to reduce dust and erosion. The perimeter of such parking areas shall be defined by bricks, stones, railroad ties, or other similar devices. In addition, whenever such a vehicle accommodation area abuts a paved street, the driveway leading from such street to such area (or, if there is no

driveway, the portion of the vehicle accommodation area that opens onto such streets), shall be paved as provided in subsection (a) for a distance of fifteen feet back from the edge of the paved street. This subsection shall not apply to single-family residences, duplexes, multi-family residences consisting of two dwelling units, homes for the handicapped or infirm, or other uses that are required to have only one or two parking spaces.

- (c) Parking spaces in areas surfaced in accordance with subsection (a) shall be appropriately demarcated with painted lines or other markings. Parking spaces in areas surfaced in accordance with subsection (b) shall be demarcated whenever practicable.
- (d) Vehicle accommodation areas shall be properly maintained in all respects. In particular, and without limiting the foregoing, vehicle accommodation area surfaces shall be kept in good condition (free from potholes, etc.) and parking space lines or markings shall be kept clearly visible and distinct.
- (e) Vehicle accommodation areas that constitute 10.100 classification uses (independent automobile parking lots or garages) and that contain more than ten parking spaces shall meet the surfacing requirements set forth in subsection (a) unless it clearly appears that the 10.100 classification use is intended to be temporary (not exceeding four years). In no event may the 10.100 use continue for more than four years unless the lot is paved in accordance with this subsection. Notwithstanding the provisions of Article VIII (Nonconforming Situations), (i) any parking lot made nonconforming by this subsection on its effective date shall be brought into compliance within twelve months after the effective date, and (ii) unpaved temporary 10.100 uses in operation on the effective date of this subsection must be paved or terminated within one year thereafter or four years from the initial use of such lot, whichever comes later. (AMENDED 3/11/86)
- (f) The paving requirement of subsection (a) shall not apply to parking areas owned or leased by the town that are used for public parking for a period of time less than four years. If such areas are used for parking for a period in excess of four years, then such areas must be paved if otherwise required under the standards set forth in subsection (a). (AMENDED 3/4/86)
- (g) The paving requirement of subsection (a) shall not apply to any lot within the B-1(c) zoning district. However, lots that would otherwise be required to be paved but for this exception shall be required to comply with the shading provisions set out in Subsection 15-317. (AMENDED 6/26/90)
- (h) When any tract of land is developed under circumstances requiring the issuance of a <u>class A or class B</u> special or conditional use permit, and paving is required per Section 15-296(a), the vehicle overhang area located behind a parking stop may be unpaved as shown in Appendix D-3. (AMENDED 5/6/03)

Section 15-297 Joint Use of Required Parking Spaces (AMENDED 5/18/04)

(a) One parking area may contain required spaces for several different uses, but except as otherwise provided in this section, the required space assigned to one use may not be credited to any other use.

- (b) To the extent that developments that wish to make joint use of the same parking spaces operate at different times, the same spaces may be credited to both uses. For example, if a parking lot is used in connection with an office building on Monday through Friday but is generally 90% vacant on weekends, another development that operates only on weekends could be credited with 90% of the spaces on that lot. Or, if a church parking lot is generally occupied only to 50% of capacity on days other than Sunday, another development could make use of 50% of the church lot's spaces on those other days.
- (c) With respect to properties within the B-1(c), B-1(g), and B-2 districts where two or more use classifications on the same site have two or more distinct peak parking usage periods, the number of parking spaces required may be reduced to the amount that results from dividing the total number of spaces otherwise required by the following ratios:

Use Classifications	Reduction Ratio
2.000 and 3.000 uses	1.2
2.000 and 1.500 uses	1.3
2.000 and 1.100/1.200/1.300 uses	1.2
3.000 and 1.500 uses	1.7
3.000 and 1.100/1.200/1.300	1.4
1.500 and 1.100/1.200/1.300	1.1

(d) If the joint use of the same parking spaces by two or more principal uses involves satellite parking spaces, then the provisions of Section 15-298 are also applicable.

<u>Section 15-297.1 Creation of Public Parking Lots from Private Parking Areas</u> (AMEND-MENT 4/15/03)

Notwithstanding any other provision of this chapter, within the B-1(c) and B-1(g) zoning districts:

- (1) The town may acquire through lease or purchase portions of one or more lots and create out of the area so acquired an independent parking lot (use classification 10.100).
- (2) Acquisition by the town and use of portions of lots as provided in this section shall not be regarded as creating a non-conforming situation with respect to parking on such lots or making any existing situation more non-conforming with respect to parking.
- (3) When the town acquires and uses portions of lots as provided in this section, the number of spaces within the public parking lot so created that are attributable to the portion of the parking lot acquired from each "donor" lot shall be regarded as still being located on each "donor" lot for purposes of determining whether each "donor" lot complies with the parking requirements of this article.

Section 15-298 Satellite Parking

- (a) If the number of off-street parking spaces required by this chapter cannot reasonably be provided on the same lot where the principal use associated with these parking spaces is located, then spaces may be provided on adjacent or nearby lots in accordance with the provisions of this section. These off- site spaces are referred to in this section as "satellite" parking spaces.
- (b) All such satellite parking (except spaces intended for employee use or spaces required in relation to use 8.800, Performing Arts Space) may be located within 1000 feet of the public entrance of a principal building housing the use associated with such parking. (AMENDED 11/27/18)
- (c) The developer wishing to take advantage of the provisions of this section must present satisfactory written evidence that he has the permission of the owner or other person in charge of the satellite parking spaces to use such spaces. The developer must also sign an acknowledgment that the continuing validity of his permit depends upon his continuing ability to provide the requisite number or parking spaces.
- (d) Subject to subsection (e), persons who obtain satellite parking spaces in accordance with this section shall not be held accountable for ensuring that the satellite parking areas from which they obtain their spaces satisfy the design requirements of this article. (AMENDED 3/11/86)
- (e) Satellite parking may be obtained from an independent automobile parking lot or garage [use classification 10.100, see definition subdivision 15-15(32.1)]. However, if a separate lot is owned by an enterprise needing off-site parking and is leased by that enterprise for a period of more than four years (including automatic renewals or renewal options) and is used as a parking lot by that enterprise (and others may lawfully be excluded), then such off-site lot shall be regarded as part of the lot on which the enterprise is located for purposes of the paving and other design requirements of this chapter. (AMENDED 3/11/86)

<u>Section 15-299 Special Provisions for Lots With Existing Buildings and Lots within Neighborhood Preservation Districts (AMENDED 9/26/89)</u>

(a) Notwithstanding any other provisions of this chapter, whenever (i) there exists a lot with one or more structures on it constructed before the effective date of this chapter, and (ii) a change in use to other than a performing arts space (use classification 8.800) that does not involve any enlargement of a structure is proposed for such lot, and (iii) the parking requirements of Section 15-291 that would be applicable as a result of the proposed change cannot be satisfied on such lot because there is not sufficient area available on the lot that can practicably be used for parking, then the developer need only comply with the requirements of Section 15-291 to the extent that (i) parking space is practicably available on the lot where the development is located, and (ii) satellite parking space is reasonably available as provided in Section 15-298. However, if satellite parking subsequently becomes reasonably available, then it shall be a continuing condition of the permit authorizing development on such lot that the developer obtain satellite parking when it does become available. (AMENDED 11/27/18)

(b) Whenever the neighborhood preservation district commission determines that the number of parking spaces otherwise required by this article for a development within the neighborhood preservation district would render such development incongruous with the special character of the district, it may recommend that the permit-issuing authority wholly or partially waive such parking requirements. Upon such recommendation, the permit-issuing authority may authorize a lesser number of parking spaces than that presumptively required under this article if it concludes that such deviation (i) will not create problems due to increased on-street parking and (ii) will not constitute a threat to public safety. (AMENDED 09/26/89)

Section 15-300 Loading and Unloading Areas.

- (a) Whenever the normal operation of any development requires that goods, merchandise, or equipment be routinely delivered to or shipped from that development, a sufficient off-street loading and unloading area must be provided in accordance with this section to accommodate the delivery or shipment operations in a safe and convenient manner.
- (b) The loading and unloading area must be of sufficient size to accommodate the numbers and types of vehicles that are likely to use this area, given the nature of the development in question. The following table indicates the number and size of spaces that, presumptively, satisfy the standard set forth in this subsection. However, the permit-issuing authority may require more or less loading and unloading area if reasonably necessary to satisfy the foregoing standard.

GROSS LEASABLE AREA OF BUILDING	NUMBER OF SPACES WITH MINIMUM DIMENSIONS OF 12'x 55' AND OVERHEAD CLEARANCE OF 14' FROM THE STREET GRADE	
1,000 - 19,999	1	
20,000 - 79,999	2	
80,000 - 127,999	3	
128,000 - 191,999	4	
192,000 - 255,999	5	
256,000 - 319,999	6	
320,000 - 391,999	7	
Plus one (1) for each additional 72,000 square feet or fraction thereof.		

- (c) Loading and unloading areas shall be so located and designed that the vehicles intended to use them can (i) maneuver safely and conveniently to and from a public right-of-way, and (ii) complete the loading and unloading operations without obstructing or interfering with any public right-of-way or any parking space or parking lot aisle.
- (d) No area allocated to loading and unloading facilities may be used to satisfy the area requirements for off-street parking, nor shall any portion of any off-street parking area be used to satisfy the area requirements for loading and unloading facilities.

Section 15-301 No Parking Indicated Near Fire Hydrants.

Whenever a fire hydrant is located adjacent to any portion of a vehicle accommodation area required to be paved under subsection 15-296(a), the pavement shall be clearly marked to indicate that parking within fifteen feet of such hydrant is prohibited. (AMENDED 4/27/82)

Section 15-302 Limitation on the Total Lot Coverage Devoted to Surface Parking

No development approved after the effective date of this section may construct more than 110 percent of the number of parking spaces determined by the permit issuing authority to be necessary to satisfy the requirements of Section 15-291.

Section 15-303 Reserved.

ARTICLE XIX

SCREENING AND TREES

PART I. SCREENING

Section 15-304 Council Board Findings Concerning the Need for Screening Requirements.

The CouncilBoard finds that:

- (1) Screening between two lots lessens the transmission from one lot to another of noise, dust, and glare.
- (2) Screening can lessen the visual pollution that may otherwise occur within an urbanized area. Even minimal screening can provide an impression of separation of spaces, and more extensive screening can shield entirely one use from the visual assault of an adjacent use.
- (3) Screening can establish a greater sense of privacy from visual or physical intrusion, the degree of privacy varying with the intensity of the screening.
- (4) The provisions of this part are necessary to safeguard the public health, safety, and welfare.

Section 15-305 General Screening Standards

Every development shall provide sufficient screening so that:

- (1) Neighboring properties are shielded from any adverse external effects of that development;
- (2) The development is shielded from the negative impacts of adjacent uses such as streets or railroads.

Section 15-306 Compliance with Screening Standards

- (a) The table set forth in Section 15-308, in conjunction with the explanations in Section 15-307 concerning the types of screens, establishes screening requirements that, presumptively, satisfy the general standards established in Section 15-305. However, this table is only intended to establish a presumption and should be flexibly administered, as provided in Section 15-309.
- (b) The numerical designations contained in the Table of Screening Requirements (Section 15-308) are keyed to the Table of Permissible Uses (Section 15-146), and the letter designations refer to types of screening as described in Section 15-307. This table indicates the type of screening that may be required between two uses. Where such screening is required, only

one of the two adjoining uses is responsible for installing the screening; the use assigned this responsibility is referred to as the "servient" use in Section 15-308, and the other use is the "dominant" use. To determine which of the two adjoining uses is required to install the screening, find the use classification number of one of the adjoining uses in the servient column and follow that column across the page to its intersection with the use classification number in the dominant use column that corresponds to the other adjoining use. If the intersecting square contains a letter, then the use whose classification number is in the servient column is responsible for installing that level of screening. If the intersecting square does not contain a letter, then begin the process again, starting this time in the servient column with the other adjoining use.

- (c) If, when the analysis described in subsection (b) is performed, the servient use is an existing use, but the required screening is not in place, then this lack of screening shall constitute a nonconforming situation, subject to all the provisions of Article VIII of this ordinance.
- (d) Notwithstanding any other provision of this article, a multi-family development shall be required at the time of construction, to install any screening that is required between it and adjacent existing uses according to the table set forth in Section 15-308, regardless of whether, in relation to such other uses, the multi-family development is the dominant or servient use.

Section 15-307 Descriptions of Screens.

The following three basic types of screens are hereby established and are used as the basis for the Table of Screening Requirements set forth in Section 15-308.

- (1) **OPAQUE SCREEN. TYPE "A".** A screen that is opaque from the ground to a height of at least six feet, with intermittent visual obstructions from the opaque portion to a height of at least twenty feet. An opaque screen is intended to exclude completely all visual contact between uses and to create a strong impression of spatial separation. The opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetation screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The opaque portion of the screen must be opaque in all seasons of the year. At maturity, the portion of intermittent visual obstruction should not contain any completely unobstructed openings more than ten feet wide. The portion of intermittent visual obstructions may contain deciduous plants. Suggested planting patterns that will achieve this standard are included in Appendix E.
- (2) **SEMI-OPAQUE SCREEN. TYPE "B".** A screen that is opaque from the ground to a height of three feet, with intermittent visual obstruction from above the opaque portion to a height of at least twenty feet. The semi-opaque screen is intended to partially block visual contact between uses and to create a strong impression of the separation of spaces. The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetation screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field

observation of existing vegetation. At maturity, the portion of intermittent visual obstructions should not contain any completely unobstructed openings more than ten feet wide. The zone for intermittent visual obstruction may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E.

obstructions from the ground to a height of at least twenty feet. The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces. It may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Compliance of planted vegetative screens or natural vegetation will be judged on the basis of the average mature height and density of foliage of the subject species, or field observation of existing vegetation. The screen may contain deciduous plants. Suggested planting patterns which will achieve this standard are included in Appendix E.

Section 15-308 Table of Screening Requirements (AMENDED 06/26/07)

[PLEASE REFER TO THE NEXT TEN PAGES]

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

			1.000		1		l						Ī		ſ	2.000
	SERVIENT US	ıncı	1.100					1.200	1.300	1.400	1.500	1.600	1.700	1.800	1.900	2.100
	(PROPOSED)		1.111	1.112	1.113	1.121	1.122	1.200	1.500	1.400	1.500	1.000	1.700	1.000	1.900	2.100
1.000	1.100	1.111	1.111	1,112	1.113	1.121	1,122									
1.000	1.100	1.112														
		1.113														
		1.121														
	 	1.122	В	В				С					С	С	С	
	1.200	11122	<u> </u>					ű					ũ	ű	Ü	
	1.300		С	С	С	С		С					С	С	С	
	1.400		C	C	C	C		C					C	C	C	
	1.500		A	A	A	A	В	A	В	A		A	A	A	A	
	1.600						_						C	C	C	
	1.700		A	A	A	В	В	A	В	В		В		A	A	
	1.800		_		· -	_	_					_			_	
	1.900															
2.000	2.100		A	A	A	A	В	A	В	A		A	A	A	A	
	2.200		A	A	A	A	В	A	В	A		A	A	A	A	В
3.000			A	A	A	A	В	A	В	A		A	A	A	A	
4.000			A	A	A	A	A	A	A	A	A	A	A	A	A	A
5.000	5.100		A	A	A	A	В	A	В	В		В	A	A	A	
	5.200		A	A	A	A	В	A	В	В		В	A	A	A	
	5.300		A	A	A	A	В	A	В	В		В	A	A	A	
	5.400		A	A	A	A	В	A	В	A		A	A	A	A	
6.000	6.100		A	A	A	A	В	A	В	A		A	A	A	A	
	6.200	6.210	A	A	A	A	A	A	A	A	В	A	A	A	A	В
		6.220	В	В	В	В	В	В	C	C		C	A	A	A	
		6.230	A	A	A	A	A	A	A	A	C	A	A	A	A	В
		6.240	A	A	A	A	A	A	A	A	C	A	A	A	A	В
		6.250	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		6.260	A	A	A	A	A	A	A	A	A	A	A	A	A	A
7.000			В	В	В	В	В	В	В	В		В	В	В	В	
8.000			A	A	A	A	В	A	В	A		A	A	A	A	
9.000			A	A	A	A	A	A	A	A		A	A	A	A	
10.000			A	A	A	A	A	A	A	A	В	A	A	A	A	В
11.000			A	A	A	A	A	A	A	A	A	A	A	A	A	A
12.000			A	A	A	A	A	A	A	A		A	A	A	A	В
13.000			A	A	A	В	В	A	В	A		A	A	A	A	
14.000	14.100		В	В	В	В	В	В	В	В		В	В	В	В	
	14.200		В	В	В	В	В	В	В	В		В	В	В	В	
	14.300		A	A	A	A	A	A	A	A	A	A	A	A	A	A

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

		1.000													2.000
S	ERVIENT USE	1.100					1.200	1.300	1.400	1.500	1.600	1.700	1.800	1.900	2.100
	(PROPOSED)	1.111	1.112	1.113	1.121	1.122									
	14.400	A	A	A	A	A	A	A	A	A	A	A	A	A	A
15.000	15.100	A	A	A	A	A	A	A	A		A	A	A	A	
	15.200	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	15.300	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	15.400	A	A	A	A	A	A	A	A	A	A	A	A	A	A
16.000		A	A	A	A	A	A	A	A		A	A	A	A	
17.000		A	A	A	A	A	A	A	A	A	A	A	A	A	A
18.000	18.100	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	18.200	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	18.300	A	A	A	A	A	A	A	A	A	A	A	A	A	A
19.000		A	A	A	В	В	A	В	A		A	A	A	A	В
20.000		A	A	A	В	В	A	В	A		A	A	A	A	
21.000	21.100	A	A	A	В	В	A	В	В		В	A	A	A	
	21.200	A	A	A	A	A	A	A	A	A	A	A	A	A	A
22.000	22.100	C	C	C	C	C	C	C	C		C	C	C	C	
	22.200	В	В	В	В	В	В	В	В	В	В	В	В	В	В
	22.300														
23.000															
24.000		A	A	A	A	A	A	A	A		A	A	A	A	
25.000		A	A	A	В	В	A	В	A		A	A	A	A	В
26.000															
34.000	34.100	A	A	A	A	В	A	В	A		A	A	A	A	
	34.200	A	A	A	A	В	A	В	A		A	A	A	A	A
	STREETS														
	RAILROAD	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

				3.000	4.000	5.000				6.000						
Ş	SERVIENT US	SE.	2.200	2.000	11000	5.100	5.200	5.300	5.400	6.100	6.200					
	(PROPOSED)		2.200			2.100	2.200	2.200	2.100	0.100	6.210	6.220	6.230	6.240	6.250	6.260
1.000	1.100	1.111									0.210	0.220	0.200	0.2.10	0.220	0.200
1.000	1.100	1.112														
		1.113														
		1.121														
		1.122														
	1.200															
	1.300															
	1.400															
	1.500			В		A	A	A	С			В				
	1.600															
	1.700															
	1.800															
	1.900															
2.000	2.100			С		A	A	A	С			В				
	2.200			В		A	A	A	В	С		В				
3.000						A	В	В				В				
4.000			A	A		A	A	A	A	A	В	A	C	A		
5.000	5.100															
	5.200															
	5.300															
	5.400			C		A	A	A				В				
6.000	6.100			C		A	A	A	C			C				
	6.200	6.210		В		A	A	A	В	C		В				
		6.220					В	В								
		6.230	C		C	A	A	A	В	C	A	A				
		6.240	В	В		A	A	A	C	В	C	В	C			
		6.250	A	A	A	A	A	A	A	A	A	A	A	A		
		6.260	A	A	A	A	A	A	A	A	A	A	A	A	A	
7.000						В										
8.000				C		A	A	A	C			В				
9.000				С		A	A	A	В	A		A				
10.000			В	В		В	В	В	В	В	В	A	В	В		
11.000			A	В	A	A	A	A	A	A	A	A	A	A	A	A
12.000				A		A	A	A	A	В	В	A				
13.000				В		A	A	A	С	C	С	В				
14.000	14.100															
	14.200															
	14.300		A	A	В	A	A	A	A	A	A	A	A	A	A	A

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

			3.000	4.000	5.000				6.000						
S	SERVIENT USE	2.200			5.100	5.200	5.300	5.400	6.100	6.200					
	(PROPOSED)									6.210	6.220	6.230	6.240	6.250	6.260
	14.400	A	A	В	A	A	A	A	A	A	A	A	A	A	A
15.000	15.100		C		A	A	A				В				
	15.200	A	A		A	A	A	A	A	A	A	A	A		
	15.300	A	A	В	A	A	A	A	A	A	A	A	A	A	A
	15.400	A	A		A	A	A	A	A	A	A	A	A		
16.000			C		A	A	A	C			В				
17.000		A	A	В	A	A	A	A	A	A	A	A	A		
18.000	18.100	A	A	C	A	A	A	A	A	A	A	A	A	A	A
	18.200	A	A	C	A	A	A	A	A	A	A	A	A	A	A
	18.300	A	A	C	A	A	A	A	A	A	A	A	A	A	A
19.000			В		A	A	A	В	С		В				
20.000					A	В	В				В				
21.000	21.100														
	21.200	A	A		A	A	A	A	A	В	A	C	A		
22.000	22.100														
	22.200	В	В		В	В	В	В	В	В	В	В	В		
	22.300														
23.000															
24.000			С		A	A	A	В	С		A				
25.000			В		A	A	A	В	C		В				
26.000											В				
34.000	34.100	A	A	A	A	A	В	A	В	A		A	A	A	A
	34.200	A	A	A	A	A	В	A	В	A		A	A	A	A
	STREETS														
	RAILROAD	A	A	C	A	A	A	A	A	A	A	A	A	A	A

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

			7.000	8.000	9.000	10.000	11.000	12.000	13.000	14.000				15.000		
9	SERVIENT US	SE								14.100	14.200	14.300	14.400	15.100	15.200	15.300
	(PROPOSED									111100	11,200	211000	111100	101100	10.200	10.000
1.000	1.100	1.111														
		1.112														
		1.113														
		1.121														
		1.122														
	1.200															
	1.300															
	1.400															
	1.500		A							A	A			C		
	1.600															
	1.700									C	C					
	1.800															
	1.900															
2.000	2.100		A							A	A					
	2.200		A							A	A			C		
3.000			A													
4.000			A	A	A	В		A	A	A	A			A	С	
5.000	5.100									C	C					
	5.200		C													
	5.300		C													
	5.400		A							A	A					
6.000	6.100		A							A	A					
	6.200	6.210	A							A	A			В		
		6.220	С	_					-:	В	С			_		
		6.230	<u>A</u>	В	C			A	C	A	A			В		
		6.240	A	В	C	_			C	A	A			C	~	
		6.250	A	A	A	В		A	A	A	A			A	C	
7.000		6.260	A	A	A	A		A	A	A	A			A	A	
7.000																
8.000			A						A	A				D.		
9.000			A	Th.	C			C	C	A	A			В		
10.000			В	В	C			C	C	В	В	C		В	A	
11.000			A	A	A			A	A	A	A	С		A	A	
12.000 13.000			A	A	В				В	A	A			A		
14.000	14.100															
14.000	14.100															
				A	Α	ъ		Α	Α	Α	Α			A	ъ	
	14.300		A	A	A	В		A	A	A	A			A	В	

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

		7.000	8.000	9.000	10.000	11.000	12.000	13.000	14.000				15.000		
S	SERVIENT USE								14.100	14.200	14.300	14.400	15.100	15.200	15.300
	(PROPOSED)														
	14.400	A	A	A	В		A	A	A	A			A	В	
15.000	15.100	A							A	A					
	15.200	A	A	A	C		A	C	A	A			В		
	15.300	A	A	A	В		A	A	A	A			A	В	
	15.400	A	A	A	C		A	C	A	A			В		
16.000		A							A	A			C		
17.000		A	A	В	В		В	A	A	A			A	В	
18.000	18.100	A	A	A	A		A	A	A	A			A	С	
	18.200	A	A	A	A		A	A	A	A			A	C	
	18.300	A	A	A	A		A	A	A	A			A	С	
19.000		A							A	A			C		
20.000		A													
21.000	21.100	С													
	21.200	A	A	A	В		A	A	A	A			A	C	
22.000	22.100								C	C					
	22.200	В	В	В	В		В	В	В	В			В	В	
	22.300														
23.000															
24.000		A						C	A	A			В		
25.000		A							A	A			С		
26.000															
34.000	34.100		A	A	A	A	A	В	A	В	A		A	A	A
	34.200	A	A	A	A	A	A	В	A	В	A		A	A	A
	STREETS														
	RAILROAD	A	A	A	A		C	A	C	C			A	C	

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

				16.000	17.000	18.000			19.000	20.000	21.000		22.000			23.000
S	SERVIENT US	SE	15.400			18.100	18.200	18.300			21.100	21.200	22.100	22.200	22.300	
	(PROPOSED)															
1.000	1.100	1.111														
		1.112														
		1.113														
		1.121														
		1.122														
	1.200															
	1.300															
	1.400															
	1.500									В	A		A			
	1.600															
	1.700															
	1.800															
	1.900															
2.000	2.100									С	A		A			
	2.200									В	A		A			
3.000											В		A			
4.000			С	A					A	A	A		A			
5.000	5.100															
	5.200															
	5.300															
	5.400									С	A		A			
6.000	6.100									С	A		A			
	6.200	6.210		В						В	A		A			
		6.220									В					
		6.230		С					С	В		С	A	С	С	
		6.240		С					В	В	A		A			
		6.250	С	A					A	A	A	A	A	A	A	
		6.260	A	A	A				A	A	A	A	A	A	A	
7.000													В			
8.000										C	A		A			
9.000										С	A		A			
10.000				В					В	В	В		В			
11.000			A	A	С		С	С	A	A	A	В	A	В	В	
12.000				В						A	A		A			
13.000										В	A		A			
14.000	14.100															
	14.200															
	14.300		В	A					A	A	A	В	A	В	В	

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

				16.000	17.000	18.000			19.000	20.000	21.000		22.000			23.000
S	SERVIENT USE	15.	.400			18.100	18.200	18.300			21.100	21.200	22.100	22.200	22.300	
	(PROPOSED)															
	14.400	(C	A					A	A	A	В	A	В	В	
15.000	15.100									C	A		A			
	15.200			A					A	A	A		A			
	15.300]	В	A					A	A	A		A			
	15.400			A					A	A	A		A			
16.000										C	A		A			
17.000]	В	A					A	A	A	В	A	В	В	
18.000	18.100		C	A					A	A	A	C	A	C	C	
	18.200	. A	A	A					A	A	A	C	A	C	C	
	18.300	(C	A					A	A	A	C	A	C	C	
19.000										В	A		A			
20.000											В		A			
21.000	21.100															
	21.200		C	A					A	A	A		A			
22.000	22.100															
	22.200]	В	В					В	В	В		В			
	22.300															
23.000																
24.000										C	A		A			
25.000										В	A		A			
26.000																
34.000	34.100	A	A		A	A	A	A	A	В	A	В	A	В	В	
	34.200	A	A	A	A	A	A	A	A	В	A	В	A	В	В	
	STREETS															
ı	RAILROAD	(C	A					A	A	A	C	A	C	C	

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

			24.000	25.000	26.000	34.000		STRT	RAIL.
S	ERVIENT US	SE				34.100	34.200		
	(PROPOSED))							
1.000	1.100	1.111							
		1.112							
		1.113							
		1.121							
		1.122						С	A
	1.200								В
	1.300							С	A
	1.400							С	A
	1.500							C	A
	1.600							C	A
	1.700								A
	1.800								A
	1.900								A
2.000	2.100							C	
	2.200						C	C	
3.000								C	
4.000			A			A	A	A	
5.000	5.100							C	
	5.200							C	
	5.300							C	
	5.400							C	
6.000	6.100							C	
	6.200	6.210						C	
		6.220						C	
		6.230	C			C	C	C	
		6.240	C			В	C	В	
		6.250	A			A	A	A	
		6.260	A			A	A	A	
7.000								C	
8.000								C	
9.000							C	C	
10.000			C			В	В	В	
11.000			A			A	A	A	C
12.000			В				В	В	
13.000								C	
14.000	14.100								
	14.200								
	14.300		A			A	A	A	C

Section 15-308 Table of Screening Requirements (Amended 6/26/07)

		24.000	25.000	26.000	34.000		STRT	RAIL.
S	SERVIENT USE				34.100	34.200		
	(PROPOSED)							
	14.400	A			A	A	A	C
15.000	15.100						С	
	15.200	A			A	A	A	
	15.300	A			A	A	A	C
	15.400	A			A	A	A	
16.000							С	
17.000		В			A	A	A	
18.000	18.100	A			A	A	A	C
	18.200	A			A	A	A	C
	18.300	A			A	A	A	C
19.000						C	C	
20.000							C	
21.000	21.100						C	
	21.200	A			A	A	A	
22.000	22.100						C	
	22.200	В			В	В	В	
	22.300							
23.000								
24.000						C	C	
25.000						C	C	
26.000							C	
34.000	34.100	A			A	A	A	
	34.200	A			A	A	A	A
	STREETS							
	RAILROAD	A	A	A			A	

Section 15-309 Flexibility in Administration Required.

- (a) The <u>CouncilBoard</u> recognizes that because of the wide variety of types of developments and the relationships between them, it is neither possible nor prudent to establish inflexible screening requirements. Therefore, as provided in Section 15-306, the permit-issuing authority may permit deviations from the presumptive requirements of Section 15-308 and may require either more intensive or less intensive screening whenever it finds such deviations are more likely to satisfy the standard set forth in Section 15-308 without imposing unnecessary costs on the developer.
- (b) Without limiting the generality of subsection (a), the permit-issuing authority may modify the presumptive requirements for:
 - (1) Commercial developments located adjacent to residential uses in business zoning districts.
 - (2) Commercial uses located adjacent to other commercial uses within the same zoning district.
 - (3) Uses located within planned unit developments.
 - (4) For use classification 1.320 constructed pursuant to 15-160.1(b) by allowing a less stringent street right-of-way screening. (Amended 06/02/20)
- (c) Whenever the permit-issuing authority allows or requires a deviation from the presumptive requirements set forth in Section 15-308, it shall enter on the face of the permit the screening requirement that it imposes to meet the standard set forth in Section 15-308 and the reasons for allowing or requiring the deviation.
- (d) If the permit-issuing authority concludes, based upon information it (or the appearance commission) receives in the consideration of a specific development proposal, that a presumption established by Section 15-308 is erroneous, it shall initiate a request for an amendment to the Table of Screening Requirements in accordance with the procedures set forth in Article XX.

Section 15-310 Combination Uses.

- (a) In determining the screening requirements that apply between a combination use and another use, the permit-issuing authority shall proceed as if the principal uses that comprise the combination use were not combined and reach its determination accordingly, relying on the table set forth in Section 15-308, interpreted in the light of Section 15-309.
- (b) When two or more principal uses are combined to create a combination-use, screening shall not be required between the composite principal uses unless they are clearly separated physically and screening is determined to be necessary to satisfy the standard set forth

in Section 15-305. (For example, screening may be required in a residential combination use consisting of single-family and multi-family components.)

Section 15-311 Landscaping Plan.

Any person who has been issued a permit under this chapter for any development in a non-residential district involving the construction of new buildings or parking areas or additions to or exterior modifications of existing buildings or parking areas, as well as (i) any similar development in a residential district, if such development requires a class A or class B special or conditional use permit, shall prepare and file a landscaping plan prior to the issuance of a building permit for such development. No building permit shall be issued for such development until the Appearance Commission has had the opportunity, pursuant to regular agenda procedures, to review and comment upon such landscaping plan. (AMENDED 2/4/86)

Section 15-311.1 Screening of Flag Lots in the Historic District (HD) (AMENDED 11/21/95).

Notwithstanding the provisions of Section 15-308, every flag lot in the Historic District (HD) shall provide a Type B screen [as described in Section 15-307 (1)] between the flag lot and adjacent property [see Section 15-175.10(c)].

Section 15-312 Protective Buffer Along Major Roads (AMENDED 05/25/99; 10/23/07)

Notwithstanding the provisions of Section 15-308, but subject to the remaining provisions of this section, an undisturbed protective buffer shall be maintained along Old N.C. 86, Dairyland Road, Union Grove Church Road, Homestead Road, Eubanks Road and Smith Level Road south of Ray Road that will help preserve the scenic views and elements of this area. With respect to each property that fronts one of the named streets, any development other than use classification 13.200, Fire Station, that occurs after the effective date of this section shall provide an undisturbed buffer (except for necessary crossings) that is a minimum of 50 feet in width and on average is 100 feet in width along such frontage. If the buffer area does not provide the equivalent of a Type 'A' screen, the developer shall provide a Type 'A' screen on the development's side of the buffer (one hundred (100) feet from the right-of-way)

Section 15-313 Reserved.

PART II. SHADING AND TREE PROTECTION

Section 15-314 CouncilBoard Findings and Declaration of Policy on Protecting Trees and Other Plants (REWRITTEN 06/24/14)

- (a) The CouncilBoard finds that:
 - (1) Trees, shrubs, and other plants are proven producers of oxygen, a necessary element for human survival; and
 - (2) Trees, shrubs, and other plants appreciably reduce carbon emissions by shading buildings and thereby lowering energy use to cool buildings; and
 - (3) Trees, shrubs, and other plants improve air quality by lowering air temperatures and removing air pollutants; and
 - (4) Trees, shrubs, and other plants transpire considerable amounts of water each day and thereby maintain the natural hydrologic cycle; and
 - (5) Trees, shrubs, and other plants through their canopies and root systems intercept precipitation and encourage rain to infiltrate into the soil and maintain soil water for plants and recharge ground water and play an important and effective part in soil conservation, erosion control, creek protection and flood control; and
 - (6) Trees, especially large, old trees, provide invaluable beneficial physical, aesthetic, historic, and psychological counterpoint to the urban setting, making urban life more comfortable by providing shade and cooling the air and land, and built environment, reducing noise levels and glare, shielding people from high winds, and breaking the monotony of human developments on the land, particularly for parking areas and streets; and
 - (7) Trees, shrubs and other plants help improve soil quality by breaking up heavy soils, mining nutrients and remediating soils at contaminated sites by absorbing, transforming and containing a number of contaminants; and
 - (8) Tree stands create habitats that support a diversity of plants and animals; and
 - (9) Trees, shrubs and other plants make important contributions to the vitality and character of the Town and its neighborhoods and create a more aesthetic, pleasant and emotionally satisfying place in which to live, work and spend leisure time; and

- (10) Trees, shrubs and other plants provide numerous human health benefits such as shading ultraviolet radiation, reducing rates of respiratory disease and illness and stress management; and
- (11) Trees, shrubs and other plants have an important impact on the desirability of land and, consequently, on property values, as well as benefitting commercial activity by creating a more enjoyable environment. (AMENDED 03/21/89)
- (b) Based upon the findings set forth in subsection (a), the <u>CouncilBoard</u> declares that it is not only desirable but essential to the health, safety, and welfare of all persons living or working within the town's planning jurisdiction, present and future, to protect certain existing trees and tree stands and, under the circumstances set forth in this article, to require the planting of new trees in certain types of developments.

Section 15-315 Definitions (REWRITTEN 06/24/14)

Unless otherwise specifically provided, or unless the context clearly indicates otherwise, the words and phrases defined below shall have the meaning indicated when used in this Part.

- (1) Canopy tree: A healthy evergreen or deciduous tree species that matures at a height of at least thirty (30) feet.
- (2) Dripline: Perimeter formed by the points farthest away from the trunk of a tree where precipitation falling from the branches of that tree lands on the ground).
- (3) Clearcutting: The large-scale, indiscriminate removal of trees, shrubs, and undergrowth with the intention of preparing real property for nonagricultural purposes. (AMENDED 05/25/99)
- (4) A specimen or rare tree is defined as any healthy tree that:
 - i. has a trunk diameter at breast height (dbh) of thirty-six (36) inches or more for pine tree species; or
 - ii. has a trunk dbh of 18" inches or more for any species; or
 - iii. has a trunk dbh of 12 inches or more in the case of the species from the following list of North Carolina native canopy tree genera; or

Aesculus (Ohio Buckeye)
Chamaecyparis (Atlantic White Cedar)
Carya (Southern Shagbark Hickory)
Diospyros (Persimmon)
Fagus (Beech)
Juniperus (Eastern Red Cedar)
Magnolia (Magnolia)
Pinus (Longleaf pine)

Quercus (Swamp Chestnut Oak)
Taxodium (Bald cypress)
Tsuga (Hemlock)
Ulmus (American Elm)

iv. has a trunk dbh of six inches or more in the case of the species from the following list of North Carolina native understory tree genera: or

Amelanchier (Serviceberry)

Asimina (Pawpaw)

Carpinus (Hornbeam)

Cercis (Redbud)

Chionanthus (Fringetree)

Cornus (Dogwood)

Crataegus (Hawthorn)

Halesia (Silverbell)

Hamamelis (Witch-hazel)

Ilex (Holly)

Ostrya (Hophornbeam)

Oxydendrum (Sourwood)

Sassafras (Sassafras)

- v. is listed as a State or National Champion by the North Carolina Forest Service or the American Forestry Association; or
- vi. provides unique habitat for any endangered or threatened wildlife species protected by Federal law; or
- vii. has been cited by the <u>Town CouncilBoard of Aldermen</u> as being historically significant; or
- viii. any other tree species listed in the North Carolina Natural Heritage Program as being significantly rare, of special concern, threatened, or endangered.
- (5) Tree. A perennial woody plant, single or multiple trunks, with few if any branches on its lower part, which at maturity will obtain a minimum six (6) inch caliper.
- (6) Tree canopy. The combined area encompassing the drip zones of all canopy trees.
- (7) Tree Protection Perimeter: That area within a circle drawn with the tree 's trunk as the center. Radius is dependent upon site conditions and the relative tolerance of tree species to construction damage. Standard accepted radius is 1-1.5 feet per diameter inch of tree to be retained.

Section 15-316 Required Trees Along Dedicated Streets.

Along both sides of all newly created streets with respect to which an offer of dedication is required to be made by this chapter, the developer shall either plant or retain sufficient trees so

that, between the paved portion of the street and a line running parallel to and fifty feet from the center line of the street, there is for every thirty feet of street frontage at least an average of one deciduous tree that has or will have when fully mature a trunk at least twelve inches in diameter. Trees planted to satisfy this section shall not be placed uniformly but in an irregular pattern with a minimum of one twelve inch (12") diameter tree (when fully mature) every one hundred feet (100'). When trees are planted by the developer pursuant to this section, the developer shall choose trees that meet the standards set forth in Appendix E. (AMENDED 11/19/96)

Section 15-317 Retention and Protection of Specimen and Rare Trees

- (a) Every development shall retain all existing specimen and rare trees unless the retention of such trees would unreasonably burden the development. When a site would be so unreasonably burdened by the retention of all such trees that a choice must be made as to which trees will be retained, the following criteria shall be used by the applicant, in consultation with the land use administrator and landscape or forestry profession also to evaluate the trees for the purpose of deciding which to retain: (AMENDED 06/24/14)
 - (1) The rareness of the tree species, both relative to the species representation on the site and relative to the species representation within the region and the state. This shall be the most important criterion in the evaluation;
 - (2) The tree's relative size and age, large old trees being considered more valuable than smaller, younger trees of the same species;
 - (3) The trees' relative expected longevities, including such factors as the trees' relative health at the time of the evaluation;
 - (4) The relative hardiness of the trees in question, including wind firmness, climatic requirements, susceptibility to insects and diseases;
 - (5) The trees' relative aesthetic values, including flowers, fruit, form characteristics, potential for autumn coloration;
 - (6) The trees' relative sizes at maturity;
 - (7) The trees' relative contribution to summertime comfort through their potential to provide shading. (AMENDED 03/21/89)
- (b) Flexible approaches such as adjustments to lot layout, placement of buildings and paved surfaces and location of utilities should be pursued in order to save rare and specimen trees. (AMENDED 03/21/89; 06/24/14)
- (c) No excavation or other subsurface disturbance may be undertaken within the Tree Protection Perimeter around any tree to be retained in accordance with (a) above. In addition, no impervious surface (including but not limited to equipment, paving, and structures) may be located

within the Tree Protection Perimeter, either during construction or after completion of the development. (AMENDED 03/21/89; 06/24/14)

- (d) There shall be no clearcutting in any development within the Transition Area portion of the Carrboro Joint Development Area as identified in the Joint Planning Agreement. The term "clearcutting" shall refer to the large-scale, indiscriminate removal of trees, shrubs, and undergrowth with the intention of preparing real property for nonagricultural purposes. (AMENDED 05/25/99; 06/24/14)
- (e) If space that would otherwise be devoted to parking cannot be so used because of the requirements of subsections (a) or (b), and, as a result, the parking requirements set forth in Article XVIII cannot be satisfied, the number of required spaces may be reduced by the number of spaces "lost" because of the provisions of subsections (a) and (b), up to a maximum of fifteen percent of the required spaces. (AMENDED 06/24/14)

Section 15-318 Shade Trees In Parking Areas.

- (a) Vehicle accommodation areas containing more than four parking spaces that are required by Section 15-296 must be shaded by deciduous trees (either retained or planted by developer) that have or will have when fully mature a truck at least twelve inches in diameter. When trees are planted by the developer to satisfy the requirements of this subsection, the developer shall choose trees that meet the standards set forth in Appendix E. (AMENDED 11/10/81; 06/24/14)
- (b) Each tree of the type described in subsection (a) shall be presumed to shade a circular area having a radius of fifteen feet with the trunk of the tree as the center, and there must be sufficient trees so that, using this standard, thirty-five percent of the vehicle accommodation area will be shaded. (AMENDED 06/24/14)
- (c) No paving may be placed within 15 feet (measured from the trunk) of any tree retained to comply with subsection (a), unless such tree is eighteen inches or greater in diameter or a very rare species as described in Section 15-316, in which case no paving may be placed within the Tree Protection Perimeter for such trees as described in 15-316(b). New trees planted to comply with subsection (a) shall be located so that they are surrounded by at least 200 square feet of unpaved area. (AMENDED 5/10/83; 03/21/89)
- (d) Vehicle accommodation areas shall be laid out and detailed to prevent vehicles from striking trees. Vehicles will be presumed to have a body overhang of three feet six inches.
- (e) The foregoing requirements shall not apply to 19.100 classification uses where such uses do not involve the construction of a permanent structure and are conducted not more than two days per week on the site of a vehicle accommodation area that is used primarily in connection with another use. Furthermore, when a 19.100 classification use meeting the foregoing requirements is installed on a lot that is nonconforming with respect to the shading requirements of this section, the lot shall not be required to comply with these shading requirements solely

because of installation of such use, even thought a new permit applicable to the entire lot may be required. (AMENDED 9/2/86)

Section 15-319 Tree Canopy Coverage Standards (REWRITTEN 06/24/14)

(a) Minimum Canopy Coverage Standards

Subject to the remaining provisions of this section, the following minimum tree canopy coverage percentages are required within the boundaries of every lot or tract for which a zoning, special use, or conditional use permit wasis issued after June 24th, 2014 or a class A or class B special use permit is issued after July 1, 2021, exclusive of required cleared active recreation areas, water bodies, access easements, public and private right-of-way, stormwater and utility easements.

Table 1: Minimum Tree Canopy Coverage Standards

Land Use	Minimum Canopy Coverage
Residential	40%
Other than residential excluding districts (B-	30%
1(c), (B-1(g), (B-2))	
Other than residential in districts (B-1(c), (B-	15%
1(g), (B-2)	

(1) When a tract is subdivided and pursuant to the provisions of Article XIII the developer sets aside open space areas or recreation areas that contain canopy trees (with a minimum caliper of six inches) or when a developer of a subdivision plants canopy trees to comply with the shading requirements of Article XIII, the total tree canopy area so preserved or established shall be credited against the minimum canopy coverage percentages set forth above. The remaining required tree canopy coverage area shall be allocated by the subdivider among the subdivided lots, and this allocation shall be shown on the recorded plat of such subdivision.

(b) Modifications to Canopy Coverage Standards

- (1) The permit issuing authority may approve a development application that does not fully comply with the canopy coverage standards when it finds that the application substantially complies with these standards and that such a deviation enables the development to better achieve other Town objectives, such as the promotion of solar access to encourage active and passive solar technology for water and space heating and renewable energy generation, improved stormwater management, and the preservation of established managed landscapes, or established streetscapes, and the development of affordable housing under 15-161.1(b).
- (2) Modifications for canopy coverage standards may be approved for the development of affordable housing under Subsection 15-161.1(b) so long as the application provides for an increase in canopy coverage by at least double. (Amended 06/02/20

(c) Implementation of Standards

Compliance with the tree canopy standards shall be achieved as follows:

- (1) Protection of existing tree canopy. The extent of existing tree canopy coverage retained at the time of permit application may be documented by survey or by using current aerial photographs available on the Town's web page or similar resource. Protection of the existing tree canopy will be demonstrated by the tree protection plan required by Section 15-320;
- (2) Replacement of canopy. If the existing protected tree canopy is less than the minimum standard as shown in Table 1, the deficit shall be made up by the planting of additional trees as provided herein:
 - a. One (1) replacement tree per 500 square feet of tree canopy coverage deficit shall be planted in accordance with an approved planting plan.
 - b. All canopy trees planted to meet the Town's screening and parking lot shading standards can be counted when calculating replacement canopy trees provided.
 - c. Supplemental canopy trees planted to complete the canopy coverage requirements shall be planted no less than twenty (20) feet from any other proposed or existing canopy tree.
 - d. Replacement trees that are planted in an adjacent right-of-way may count toward total tree canopy.
 - e. Replacement tree caliper shall be two and one-half (2.5) inches at installation. A replacement tree with a caliper of four (4) inches or greater may count for two replacement trees.

Section 15-320 Protection of Trees During Construction.

- (a) The permit recipient shall be responsible for ensuring that all existing trees specifically shown on approved plans as being retained to comply with this article are protected, during the construction process, from removal, destruction, or injury. As described in Appendix A, a tree protection plan detailing the methods for such protection shall be submitted as part of the land use permit application and construction plan package. Tree protection methods shall meet accepted industry standards in accordance with ANSI A300 and associated Best Practices. (AMENDED 3/12/85; 2/24/87; 03/21/89; 06/24/14)
 - (1) The permit recipient shall ensure that, before any excavation takes place on the site, a barrier is erected around the Tree Protection Perimeter of all trees to be retained on the site that are within the area to be disturbed by construction activities, and other provisions made such as are necessary and

sufficient to put on notice all construction personnel that the area within the Tree Protection Perimeter of all such trees is to be retained is not be disturbed. During the construction process, the permit recipient shall ensure that all activities are kept outside the Tree Protection Perimeter of all such trees. The barrier required by this subsection shall be installed before the issuance of any grading or construction permits for such site. (AMENDED 06/24/14)

- (2) The permit recipient shall ensure that all such trees to be retained on the site that are within the area to be disturbed by construction activities, or near roads within the development, shall be further protected from accidental equipment damage by wrapping their trunks with sections of snow fence or boards wired together from the ground to a height six (6) feet above the ground. (AMENDED 06/24/14)
- (3) The permit recipient shall ensure that land disturbing activity shall not occur, and that building materials, construction trailers, vehicles, equipment or machinery, dirt, fill, and/or other debris shall not be stored within the Tree Protection Perimeter of such trees as are to be retained.
- (4) The permit recipient shall ensure that all such trees as are to be preserved shall not be used as supports for roping, cable, signs, or fencing, and that nails shall not be driven into the trunks of trees.
- (5) The permit recipient shall ensure that any damage done during construction to the limbs or trunks of such trees as are to be retained shall be properly treated so as to assure the continued health of the trees. The land use administrator shall be consulted, and may suggest that the applicant seek advice from landscape or forestry professionals as to the appropriate method for such treatment. (AMENDED 06/24/14)
- (6) Prior to the commencement of any land alteration on a site for which a Tree Protection Plan has been approved, including all clearing or grading activities, the land use administrator shall certify in writing based on an inspection of the site that all tree protection measures required by the approved Tree Protection Plan have been put in place properly and accurately. The land use administrator shall provide this certification in a timely fashion on being notified by the permit recipient that the site is ready for such inspection and certification. (AMENDED 03/21/89)
- (b) If a violation of subsection (a) occurs, and as a result (b) rare or specimen tree(s) specifically shown on approved plans as being retained die or otherwise must be removed within four years after a certificate of occupancy is granted for that portion of a development on which the trees are or were located, then the permit recipient shall be required to replace such trees with trees of the same species, if available, or of a similar species. The choice of the replacement species, where necessary, shall be made subject to approval by the Town. Each replacement tree

shall be at least of tree diameter equivalent in size to one (1) inch per every four (4) inches of tree diameter of the tree it replaces, up to a maximum replacement tree diameter of five inches. In cases where the tree to be replaced had a diameter greater than twenty inches, it shall be replaced by more than one tree, such that the ratio of one inch of replacement tree diameter to four inches of original tree diameter is satisfied, and at least one of the replacement trees is of the maximum replacement tree diameter of five inches. In addition, no replacement tree may be smaller than one inch in diameter. For example, a twenty-eight inch diameter tree would be replaced by one five inch diameter tree and one two-inch diameter tree of the same species. Tree replacement shall be performed by either a landscape contractor or forester licensed to practice in the State of North Carolina, or by an arborist certified by the International Society of Arboriculture or National Arborists Association. Such replacement must take place within one year after the death or removal of the trees occur, and this obligation shall be a continuing condition of the validity of the permit. Violators of the tree protection requirements described in subsection (a) shall be subject to the penalties and remedies for all land use ordinance and land use permit condition violations described in Section 15-114. (AMENDED 03/21/89; 06/24/14)

Section 15-321 Performance Security May Be Required (AMENDED 03/21/89; 10/24/06; 06/24/14)

- (a) In cases when the land use administrator has reasonable cause to believe that a Tree Protection Plan has been violated, he or she may require that the developer post a security, for the five year period (four years plus one year in which replacement may occur) described in subsections (b) and (c) of section 15-318, to cover the potential replacement of all such large and rare species trees as are called out in the Tree Protection Plan as being protected. The purpose of this security is to ensure that the financial capability will exist, during the full five year period described in subsections (b) and (c) of section 15-318, to replace any large or rare species trees as are called out on a Tree Protection Plan as being protected during construction, and which have died due to construction damage caused by a violation of the Tree Protection Plan.
- (b) It is the intent of this section that the removal and replacement of such trees that die due to construction damage shall be arranged by the Town only when the developer cannot be located at the time when the removal and replacement becomes necessary.
- (c) The required security shall be in the form of an interest-bearing account or certificate of deposit payable to the Town, in the amount necessary for the removal of all of the large and rare species trees as are called out in the Tree Protection Plan as being preserved, their replacement as described in subsections (b) and (c) of section 15-318, and the one-time violation penalty described in section 15-114 at the time the security is required. At such time as the four year period described in subsections (b) and (c) of section 15-318 is complete, and no deaths of trees called out in the Tree Protection Plan as being preserved have occurred, the security and all interest accrued on it shall revert to the developer. In the event that some but not all of the security amount is used or needed for tree removal and replacement at the end of the four year period described in subsections (b) and (c) of section 15-318, the remaining security amount and the interest it has accrued shall revert to the developer at the end of that four year period.

Section 15-321.1 Regulation of Forestry Activities. (AMENDED 06/24/14)

- (a) The terms "forestry," "forestry activity," "forestland," "forest management plan" and "timber harvest" shall be defined by and used in the same manner as in G.S. <u>160D-921</u><u>160A-458.5</u>.
- (b) Notwithstanding any other provisions of this chapter, this chapter does not regulate either:
 - (1) Forestry activity on forestland that is taxed on the basis of its present-use value as forestland under G.S. Chapter 105, Art. 12; or
 - (2) Forestry activity that is conducted in accordance with a forest management plan that is prepared or approved by a forester registered in accordance with G.S. Chapter 89B.
- (c) Notwithstanding subsection (b) above, the Town may deny a zoning, <u>class A or class B</u> special use, <u>conditional use</u>, or building permit for a tract of land for a period of up to three years after the completion of a timber harvest if the harvest results in the removal from that tract of all or substantially all of the trees protected by this chapter. If the removal of such trees was in willful violation of the requirements of this chapter, then such permits may be refused for a period of five years.



Town of Carrboro

Town Hall 301 W. Main St. Carrboro, NC 27510

Agenda Item Abstract

File Number:21-83

Agenda Date: 3/16/2021 File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Appointments to the Affordable Housing Advisory Commission

PURPOSE: The purpose of this agenda item is for the Town Council to make appointments to the

Affordable Housing Advisory Commission.

DEPARTMENT: Town Clerk

CONTACT INFORMATION: Cathy Dorando, 919-918-7309

INFORMATION: The Affordable Housing Advisory Commission currently has three seats available for appointment with one of those being a first term expiration seat.

Applications were received from Khadijah Amina, Glorija Gladney, Ben Gear, Heather Nash, Amy Singleton, James Smith. Amy Singleton has a first term expiring seat and has indicated the desire to be reappointed.

Quinton Harper is the chair of the Affordable Housing Advisory Commission and provided the chair forms for the Council's review. Chair forms are located directly in front of the application.

Town Council members are encouraged to review the <u>Advisory Board Recruitment and Appointment Policy</u> http://townofcarrboro.org/DocumentCenter/View/5358/Town-of-Carrboro-Advisory-Board-Recruitment-and-Appointment-Policy-.

All applicant and chair information is attached.

A matrix is also included.

FISCAL & STAFF IMPACT: N/A

RECOMMENDATION: It is recommended that the Mayor and Council review the applications and consider making appointments.

A RESOLUTION MAKING AN APPOINTMENT TO THE AFFORDABLE HOUSING ADVISORY COMMISSION

THE TOWN COUNCIL HEREBY APPOINTS THE FOLLOWING APPLICANT(S) TO THE AFFORDABLE HOUSING ADVISORY COMMISSION:

Appointee	Term Expiration	
	2/2023	
	2/2024	
	2/2024	

Section 2. This resolution shall become effective upon adoption.

Current makeup of the Affordable Housing Advsiory Committee:

NAME	ADDRESS	TERM EXPIRATIO N	DOB	RACE	SEX	OCCUPATION
Amy Singleton (Reapplied)	1215 Hillsborough	2/2021	7/9/1968	Caucasian	Female	Administrator
Cain Twyman	112 Hwy 54	2/2023	12/10/1994	Black	Woman	Content Marketing
Quinton Harper	501 Jones Ferry	2/2022	7/8/1985	Black	Male	Community Organizer
Betty Curry	501 Jones Ferry	2/2022	7/25/1960	Black	Female	Bookseller
Pamela Atwood	306 Yorktown Drive	2/2024	3/11/1979	Asian	Female	Policy Director
VACANT						
VACANT						

Applicant summary information (full detail in application):

NAME	ADDRESS	Advisory Board Preference	DOB	RACE	SEX	OCCUPATION
Khadijah Amina	300 S Camilla	Planning Board	NA	AA	Female	Retired
Glorija Gladney	301 Jones Ferry	Affordable Housing	9/8/1979	White	Female	Stay at home mom
Benjamin Gear	1101 N Greensboro	Affordable Housing	7/21/1980	Black	Male	Program Coordinator
Heather Nash	103 West Main	Various	7/26/1975	Indigenous	Female	Student
Amy Singleton	See Above					
James Smith	112 NC HWY 54	Affordable Housing	8/19/1987	White	Male	Asst Manager Arby's Carrboro

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5242

Advisory Board Name:*	Chair Name*
AHAC	Quinton Harper
Applicant First Name:*	Applicant Last Name:
Khadijah	Amina
1. Has the applicant previously served on this or another advisory board?* Yes	2. If yes, how many total years have they served? This should be available on the application or by asking the applicant.
3. Is the applicant already serving on this advisory board and seeking reappointment to their second, full term? Yes (Skip to Last Question)	4. Is the applicant already serving on this advisory board and completed their two full terms? Yes No
To some second of the second of the advisor of the second	ory board?* 6. If yes, which seat?
7. Did the applicant attend an advisory board meeting?* Yes No	8. If applicant did not attend an advisory board meeting, did you contact them via phone or email? Yes No

9. Applicant has demonstrated a clear understanding of the	10. If no, briefly explain:
time commitment, roles, and responsibilities of serving on	
the advisory board:	
Yes	
No	
11. In addition to your comments above, please check other qualiti	es that the applicant offers that would help the Advisory Board meet
its goals for community representation. Please note that caudidat	es who do not meet any of these qualities are still eligible for
appointment. Please communicate any urgent needs and priorities	; for Advisory Board composition to your fown Council traison.
Diversity	
₹	
Occupation, Experience, or Special Skills	
Other	
If other, please explain:	

Applicant is a Black female, who has worked with people attempting to assist them with housing and homeless. Applicant wants to help advocate for community members needing Affordable housing.

Advisory Board Application - Submission #5030

Date Submitted: 11/1/2020

First Name*	Last Name*	Date*	
khadijah	Amina	10/28	/2020
		Select to	oday's date
Address1*			
300 S camellia st			
Address2			
apt 308			
City*		State	Z ip*
cnapel Hill		NC	27516
Is this address located within Town of Carrboro?*	n the corporate limits of the	Is this address located within Jurisdiction, or Northern Tra	
Please select Yes or No.		Official	
Telephone*	Email Address*		
9199239476	kamina0123@yahoo.com		
Please enter your primary contact phone number.	Enter your primary email addr	ess.	
		at because your elected officials applicant pool is a priority of the	
Date of Birth*	Race*	Sex*	
10/28/2020	AA	Female	
10,20,2020	Please enter your race.	Please enter your sex.	
Please enter your Month/Day/Year of Birth			
Occupation*	Are you a registered Orange County Voter?*	Length of Residence in Orange County*	Length of Residence in the Town of Carrboro*
Retired Please enter your	Yes <u></u> ▼	17 years	17 years
occupation.	Please answer Yes or No	How long have you been a resident of Orange County?	How long have you been a resident of the Town of Carrboro?

- Luish to be considered for appointment to the fall	
—I wish to be considered for appointment to the foll	
Affordable Hausing Advisors Commission	Northern Transition Area Advisory Committee
Affordable Housing Advisory Commission	Northern Transition Area Advisory Committee
Appearance Commission/NRDC	OWASA Board of Directors
Appearance Commission/NPDC	Wasa Board of Directors
Arts Committee	
_	Planning Board
Board of Adjustment	Recreation and Parks Commission
Board of Adjustment	Trecreation and Fairs Commission
Economic Sustainability Commission	Stormwater Advisory Commission
Economic Sustainability Commission	The state of the s
Environmental Advisory Board	Tourism Development Authority*
Enviormental Advisory Board	iodisin bevelopinent Additionty
Human Services Commission	Transportation Advisory Board
FIGURE 3 SOMMISSION	Harisportation Advisory Bodita
Greenways Commission	
B) () () () () () () () () () (the state of the s
	y board at a time. You shall not be considered for appointment to ation or you are in the last six months of your current term.
another board unless you resign before filing an applica	
another board unless you resign before filing an applica	ation or you are in the last six months of your current term.
another board unless you resign before filing an applica Other (advisory board not listed): Please indicate by typing the advisory board that you are	Advisory Board Preference* Planning Board
another board unless you resign before filing an application. Other (advisory board not listed): Please indicate by typing the advisory board that you are applying for.	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice.
another board unless you resign before filing an application. Other (advisory board not listed): Please indicate by typing the advisory board that you are applying for.	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards).
another board unless you resign before filing an application of the property o	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards).
another board unless you resign before filing an application. Other (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed Retired Please enter your employment information. This is a requirement for application for the Tourism Development Authority.	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the
Authority. Ther (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed Retired Please enter your employment information. This is a requirement for application for the Tourism Development Authority. * Provide examples of how you are involved in the	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro.
another board unless you resign before filing an application of the advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed Retired Please enter your employment information. This is a requirement for application for the Tourism Development Authority. * Provide examples of how you are involved in the application only for the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the application of the Tourism Development Authority Agreement and the Authority Agreement and the application of the Tourism Dev	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro.
Ther (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed Retired Please enter your employment information. This is a requirement for application for the Tourism Development Authority. * Provide examples of how you are involved in the required only for the Tourism Development Authority Agrangement Authority Agrangemen	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. pplication.**
another board unless you resign before filing an application. Other (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed Retired Please enter your employment information. This is a requirement for application for the Tourism Development Authority. * Provide examples of how you are involved in the community Activities/Organizational Memberships* Management of Winmore Garden, Community Food Distance.	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. pplication.**
another board unless you resign before filing an application. Description of the Tourism Development Authority Agreement Authority Agreement Activities/Organizational Memberships*	Advisory Board Preference* Planning Board Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. pplication.**

I would like to be involved in the growth and development of our city.

any Town of Carrboro Committee or Board?*	If yes, which one(s)?	
Are you currently serving	on a Town Board or _	If yes, are you applying for a third consecutive
and the state of t		
Yes		Yes
7		
No		No
Marie and the second se		

If yes, please describe how you meet one, or more, of the following exceptions noted below.

After completing two full terms, a member must take off one year before applying for re-appointment to the same advisory board. However, a board member may apply to serve on another advisory board if he/she desires. The Board of Aldermen may make exceptions to this rule under the following circumstances: 1. To retain diversity on an advisory board; 2. A lack of applicants.

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5243

Advisory Board Name:*	Chair Name*	
AHAC	Quinton Harper	
Applicant First Name:*	Applicant Last Na	ame:
Glorija	Gladney	
1. Has the applicant previously served on this or another advisory board?*	2. If yes, how man	y total years have they served?
Yes	This should be a applicant.	available on the application or by asking the
☑ No		
3. Is the applicant already serving on this advisory board andseeking reappointment to their second, full term?	4. Is the applic	ant already serving on this advisory board and r two full terms?
	di da	
Yes (Skip to Last Question)	Yes	
	9	TO A STATE OF THE
No	No	MANUFACTOR OF THE PARTY OF THE
5. Is the applicant applying for a special or expert seat on the advis	sory board?*	6. If yes, which seat?
Yes		
.		
No		
7. Did the applicant attend an advisory board meeting?*	8. If applicant of you contact the	aid not attend an advisory board meeting, did em via phone or email?
Par	-	Delining
Yes	W Yes	
☑	Yes	
No	No	
	INO	nanah.h

9. Applicant has demonstrated a clear understanding of the time commitment, roles, and responsibilities of serving on the advisory board:	10. If no, briefly explain:
Yes No	
its goals for community representation. Please note that candi-	lities that the applicant offers that would help the Advisory Board meet dates who do not meet any of these qualities are still eligible for ties for Advisory Board composition to your Town Council liaison.
Diversity	
Occupation, Experience, or Special Skills	
Other	
If other, please explain:	
Applicant has several years of real-estate experience. Interes	sted in affordable housing

Date Submitted: 1/22/2021

Advisory Board Application - Submission #5149

First Name* Last Name* Date* Glorija Gladney 1/22/2021 Select today's date Address1* 301 Jones Ferry Road Address2 City* State Zip* CARRBORO NC 27510 Is this address located within the corporate limits of the Is this address located within the Town's ETJ, Planning Town of Carrboro?* Jurisdiction, or Northern Transition Area?* Yes Unsure Please select Yes or No. Telephone (111)-111-1111* **Email Address*** 3125938437 glorija.gladney@gmail.com Please enter your primary Enter your primary email address. contact phone number. The demographic information provided below is of interest because your elected officials want the Town's advisory boards to reflect the diversity of the Town. Diversity of the applicant pool is a priority of the Board. **Current Age*** Race* Sex* White Female 9/8/1979 Please enter your race. Please enter your sex. Length of Residence in Occupation* Are you a registered Length of Residence in **Orange County Voter?* Orange County*** the Town of Carrboro* Stay at home mom Please enter your occupation. Please answer Yes or No How long have you been a How long have you been a resident of Orange County? resident of the Town of

Carrboro?

☑	
Affordable Housing Advisory Commission	Greenways Commission
7	
Appearance Commission/NPDC	Northern Transition Area Advisory Committee
Arts Committee	OWASA Board of Directors
Board of Adjustment	Planning Board
Climate Action Team	Recreation and Parks Commission
Economic Sustainability Commission	Stormwater Advisory Commission
	["ম
Environmental Advisory Board	Tourism Development Authority*
11	
Human Services Commission Please note that membership is limited to one advisory another board unless you resign before filing an application	Transportation Advisory Board board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term.
Please note that membership is limited to one advisory another board unless you resign before filing an application	board at a time. You shall not be considered for appointment to
Please note that membership is limited to one advisory another board unless you resign before filing an application	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term.
Please note that membership is limited to one advisory another board unless you resign before filing an applicate Differ (advisory board not listed): Please indicate by typing the advisory board that you are	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing
Please note that membership is limited to one advisory another board unless you resign before filing an application. Other (advisory board not listed): Please indicate by typing the advisory board that you are applying for.	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice.
Please note that membership is limited to one advisory	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards).
Please note that membership is limited to one advisory another board unless you resign before filing an applicate Dither (advisory board not listed): Please indicate by typing the advisory board that you are applying for.	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed
Please note that membership is limited to one advisory another board unless you resign before filing an applicate of the content of the conte	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed NA Enter the number of years you have been employed at the
Please note that membership is limited to one advisory another board unless you resign before filing an applicate of the content of the conte	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed NA Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro.
Please note that membership is limited to one advisory another board unless you resign before filing an applicate of their (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed NA Please enter your employment information. This is a requirement for application for the Tourism Development Authority. **Provide examples of how you are involved in the part of the possible of the provide examples of the possible of the provide examples of the possible of the possible of the provide examples of the possible of the provide examples of the possible of the provide examples of the possible of the possible of the provide examples of the possible of the provide examples of the possible of the provide examples of the provide e	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed NA Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. the area
Please note that membership is limited to one advisory another board unless you resign before filing an applicate Dther (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed NA Please enter your employment information. This is a requirement for application for the Tourism Development Authority. *Provide examples of how you are involved in the plant of the couple of properties in the plant only for the Tourism Development Authority Application on the plant of the Tourism Development Authority Application on the Tourism Development Authority Application of the Tourism Develop	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed NA Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. the area
Please note that membership is limited to one advisory another board unless you resign before filing an applicate Dther (advisory board not listed): Please indicate by typing the advisory board that you are applying for. *Employer/Self Employed NA Please enter your employment information. This is a requirement for application for the Tourism Development Authority. *Provide examples of how you are involved in the plant of the properties in the properties in the properties in the properties.	board at a time. You shall not be considered for appointment to tion or you are in the last six months of your current term. Advisory Board Preference* Affordable housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed NA Enter the number of years you have been employed at the organization listed to the left. promotion of travel and tourism in the Town of Carrboro. the area

Accountant and an MBA with several years of real-estate experience. Interested in affordable housing and sensible living environments.

Reasons You Wish to be Appointed*

		"·· ·· ·
Affordable housing in the area	needs support.	
	and why they are important i	equity and diversity and inclusion are important. Please tell not only in advisory board/commission work but also in all
Long-term advocate for the is:	sue, before it became a popular	attitude to promote.
Have you ever served on any Town of Carrboro Committee or Board?* No	If yes, which one(s)?	If yes, are you applying for a third consecutive
Committee?*		term?*
Yes		Yes
7		
No		No

If yes, please describe how you meet one, or more, of the following exceptions noted below.

After completing two full terms, a member must take off one year before applying for re-appointment to the same advisory board. However, a board member may apply to serve on another advisory board if he/she desires. The Board of Aldermen may make exceptions to this rule under the following circumstances: 1. To retain diversity on an advisory board; 2. A lack of applicants.

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5241

Advisory Board Name:*	Chair Name*
AHAC	Quinton Harper
Applicant First Name:*	Applicant Last Name:
Ben	Gear
1. Has the applicant previously served on this or another advisory board?*	2. If yes, how many total years have they served?
Yes No	This should be available on the application or by asking the applicant.
3. Is the applicant already serving on this advisory board and seeking reappointment to their second, full term? Yes (Skip to Last Question) No 5. Is the applicant applying for a special or expert seat on the advisory	4. Is the applicant already serving on this advisory board and completed their two full terms? Yes No No 6. If yes, which seat?
Yes No	
7. Did the applicant attend an advisory board meeting?* Yes No	8. If applicant did not attend an advisory board meeting, did you contact them via phone or email? Yes No

9. Applicant has demonstrated a clear understanding of the time commitment, roles, and responsibilities of serving on the advisory board:	10. If no, briefly explain:
Yes No	
its goals for community representation. Please note that candidat appointment. Please communicate any urgent needs and prioritie	
Diversity	
Occupation, Experience, or Special Skills Other	
If other, please explain:	
Applicant is a Black male and was encouraged to apply by AH	AC liaison, Rebecca Buzzard

Date Submitted: 2/2/2021

Advisory Board Application - Submission #5185

First Name* Last Name* Date* Gear Benjamin 2/2/2021 Select today's date Address1* 1101 North Greensboro Street Address2 Apt C City* State Zip* Carrboro NÇ 27510 Is this address located within the Town's ETJ, Planning Is this address located within the corporate limits of the Town of Carrboro?* Jurisdiction, or Northern Transition Area?* Yes Unsure Please select Yes or No. Telephone (111)-111-1111* Email Address* 9198868400 bgear238@gmail.com Please enter your primary Enter your primary email address. contact phone number. The demographic information provided below is of interest because your elected officials want the Town's advisory boards to reflect the diversity of the Town. Diversity of the applicant pool is a priority of the Board. **Current Age*** Race* Sex* Black 7/21/1980 Please enter your race. Please enter your sex. Occupation* Are you a registered Length of Residence in Length of Residence in the Town of Carrboro* **Orange County Voter?* Orange County*** Program Coordinator 36 Yes 7 5 Please enter your How long have you been a How long have you been a occupation. Please answer Yes or No resident of Orange County? resident of the Town of

Carrboro?

▼	
Affordable Housing Advisory Commission	Greenways Commission
Appearance Commission/NPDC	Northern Transition Area Advisory Committee
Arts Committee	OWASA Board of Directors
Board of Adjustment	Planning Board
Climate Action Team	Recreation and Parks Commission
	[max]
Economic Sustainability Commission	Stormwater Advisory Commission
	(F)
Environmental Advisory Board	Tourism Development Authority*
5	
Human Services Commission Please note that membership is limited to one advisory bo another board unless you resign before filing an application	Transportation Advisory Board pard at a time. You shall not be considered for appointment to n or you are in the last six months of your current term.
Please note that membership is limited to one advisory bo	pard at a time. You shall not be considered for appointment to
Please note that membership is limited to one advisory bo another board unless you resign before filing an application	pard at a time. You shall not be considered for appointment to n or you are in the last six months of your current term.
Please note that membership is limited to one advisory bo another board unless you resign before filing an application of their (advisory board not listed): Please indicate by typing the advisory board that you are	pard at a time. You shall not be considered for appointment to n or you are in the last six months of your current term. Advisory Board Preference*
Please note that membership is limited to one advisory bo another board unless you resign before filing an application of their (advisory board not listed): Please indicate by typing the advisory board that you are applying for.	pard at a time. You shall not be considered for appointment to n or you are in the last six months of your current term. Advisory Board Preference* Affordable Housing Please indicate your preference by typing your first choice.
Please note that membership is limited to one advisory bo another board unless you resign before filing an application	Advisory Board Preference* Affordable Housing Please limit your selection above to two boards).
Please note that membership is limited to one advisory bo another board unless you resign before filing an application of the control of the	pard at a time. You shall not be considered for appointment to n or you are in the last six months of your current term. Advisory Board Preference* Affordable Housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed
Please note that membership is limited to one advisory bo another board unless you resign before filing an application of the resign before filing an application of the resign board not listed): Please indicate by typing the advisory board that you are applying for. Employer/Self Employed Reintegration Support Network Please enter your employment information. This is a requirement for application for the Tourism Development Authority.	Advisory Board Preference* Affordable Housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the
Please note that membership is limited to one advisory bo another board unless you resign before filing an application of the resign before filing an application of the resign board not listed): Please indicate by typing the advisory board that you are applying for. Employer/Self Employed Reintegration Support Network Please enter your employment information. This is a requirement for application for the Tourism Development Authority.	Advisory Board Preference* Affordable Housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left.
Please note that membership is limited to one advisory bo another board unless you resign before filing an application other (advisory board not listed): Please indicate by typing the advisory board that you are applying for. Employer/Self Employed Reintegration Support Network Please enter your employment information. This is a equirement for application for the Tourism Development Authority. Provide examples of how you are involved in the pro-	Advisory Board Preference* Affordable Housing Please indicate your preference by typing your first choice. Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left.

Well, I'm poor and finding repectable living spaces in my price range wasn't a particulary easy process. I think I can offer perspective and voice for those who love this town for the culture it offers but can't necessarily afford to pay for its justifiable

Relevent Experience:*

Reasons You Wish to be Appointed*

I was actually approached by Ms. Buzzard after a post I made on Nextdoor about Carrboro losing it's culture of community. This avenue of service had never crossed my mind but I'm a huge believer in stepping through doors of opportunity when opened.

We believe as a Town and as a Town Council that racial equity and diversity and inclusion are important. Please tell us your thoughts about this and why they are important not only in advisory board/commission work but also in all facets of local government and community work.*

LOL, I could write a dissertation on this topic but to keep it simple: Diversity, equity, and inculsion are paramount to any offices accurate representation of its community/consituents. EVERYone matters.

Have you ever served on any Town of Carrboro Committee or Board?*	If yes, which one(s)?	
No 💌		
Are you currently serving Committee?*	on a Town Board or	If yes, are you applying for a third consecutive term?*
Yes		Yes
7		V
No		No

If yes, please describe how you meet one, or more, of the following exceptions noted below.

After completing two full terms, a member must take off one year before applying for re-appointment to the same advisory board. However, a board member may apply to serve on another advisory board if he/she desires. The Board of Aldermen may make exceptions to this rule under the following circumstances: 1. To retain diversity on an advisory board; 2. A lack of applicants.

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5239

Advisory Board Name:*	Chair Name*
AHAC	Quinton Harper
Applicant First Name:*	Applicant Last Name:
Heather	Nash
1. Has the applicant previously served on this or another advisory board?* The served on this or another advisory board?* No	2. If yes, how many total years have they served? Not for Carrboro. Currently serves on Chapel Hill Reimagining Safety Taskforce (less than 6 months) This should be available on the application or by asking the applicant.
3. Is the applicant already serving on this advisory board and seeking reappointment to their second, full term? Yes (Skip to Last Question)	4. Is the applicant already serving on this advisory board and completed their two full terms? Yes No
5. Is the applicant applying for a special or expert seat on the advisery Yes No	ory board?* 6. If yes, which seat?
7. Did the applicant attend an advisory board meeting?* Yes No	8. If applicant did not attend an advisory board meeting, did you contact them via phone or email? Yes No

9. Applicant has demonstrated a clear understanding of the time commitment, roles, and responsibilities of serving on the advisory board: Yes No	10. If no, briefly explain:
its goals for community representation. Please note that candidate appointment. Please communicate any urgent needs and priorities	ies that the applicant offers that would help the Advisory Board meet es who do not meet any of these qualities are still eligible for s for Advisory Board composition to your Town Council liaison.
Diameter .	
Diversity	
Occupation, Experience, or Special Skills	
Other	
If other, please explain: Applicant is an Indigenous American, advocate and is a long-ti	me resident of Carrboro.

Date Submitted: 1/4/2021

Advisory Board Application - Submission #5123

Last Name* Date* First Name* heather nash 1/4/2021 Select today's date Address1* 103 west main street Address2 club nova apartments 2d City* State Zip* NC Carrboro 27510 Is this address located within the Town's ETJ, Planning Is this address located within the corporate limits of the Town of Carrboro?* Jurisdiction, or Northern Transition Area?* Yes Unsure Please select Yes or No. **Email Address*** Telephone (111)-111-1111* 9192653479 heathnash37@yahoo.com Please enter your primary Enter your primary email address. contact phone number. The demographic information provided below is of interest because your elected officials want the Town's advisory boards to reflect the diversity of the Town. Diversity of the applicant pool is a priority of the Board. **Current Age*** Race* Sex* indigenous female 7/26/1975 Please enter your race. Please enter your sex. Length of Residence in Are you a registered Length of Residence in Occupation* the Town of Carrboro* **Orange County Voter?*** Orange County* student Yes 4. 6 years 20 years Please enter your How long have you been a How long have you been a occupation. Please answer Yes or No resident of Orange County? resident of the Town of

Carrboro?

─I wish to be considered for appointment to the follow	ing committee/board(s) (Select no more than two (2)):
₽	
Affordable Housing Advisory Commission	Greenways Commission
Appearance Commission/NPDC	Northern Transition Area Advisory Committee
 Ø	
Arts Committee	OWASA Board of Directors
Board of Adjustment	Planning Board
Climate Action Team	Recreation and Parks Commission
Economic Sustainability Commission	Stormwater Advisory Commission
Environmental Advisory Board	Tourism Development Authority*
	7
Human Services Commission	Transportation Advisory Board
Please note that membership is limited to one advisory be another board unless you resign before filing an application	pard at a time. You shall not be considered for appointment to nor you are in the last six months of your current term.
Other (advisory board not listed):	Advisory Board Preference*
	affordable housing, arts committee and transportation
Please indicate by typing the advisory board that you are applying for.	Please indicate your preference by typing your first choice. Please limit your selection above to two boards).
**Employer/Self Employed	Number of Years Employed
on disablity	
Please enter your employment information. This is a requirement for application for the Tourism Development	Enter the number of years you have been employed at the organization listed to the left.

** Provide examples of how you are involved in the promotion of travel and tourism in the Town of Carrboro.

I dont drive so I take buses from Carrboro to chapel hill, Durham and Raleigh . I shop local.

Community Activities/Organizational Memberships*

I am on the re imaging task force advisory committee, member of club nova, volunteered at club nova thrift shop for 15 years until it closed in 2020 due to covid 19, been a mental health advocate in the area for 20 years, I was in the affordable housing musical, been on numerous boards NCAPSE, OPC area board, Club Nova, CFAC, and some others. I am involved currently with IFC- activate and a advocate at CEF. I have been volunteering for Table, INC for over 5 years. I have worked at open eye. I am artist, my work is being shown at Venico in Carrboro for the month of January. I have shown art work with Brushes with Life, at unc hospital. I had my art work on cef s news letter, and I have spoken at the rape crisis shout out event to raise awareness for rape victims.

Please enter the requested information.

Authority.

^{**}Required only for the Tourism Development Authority Application.**

Relevent Experience:*

I am in school at ACC and will be transferring to NCCU in the fall 2021 to start my bachelors in social work . I am gay, indigenous person.

Reasons You Wish to be Appointed*

I m a long time advocate and I want to help my community. I love Carrboro.

We believe as a Town and as a Town Council that racial equity and diversity and inclusion are important. Please tell us your thoughts about this and why they are important not only in advisory board/commission work but also in all facets of local government and community work.*

I am gay and indigenous person, and a person living with mental health issues . I have friends who are too.so I strive for racial equity and want everyone to be treated with respect , love and kindness. We has human beings deserve this.

Have you ever served on any Town of Carrboro Committee or Board?*	If yes, which one(s)?	
No 🔻		
Are you currently serving Committee?*	g on a Town Board or	If yes, are you applying for a third consecutive term?*
7		
Yes		Yes
		②
No		No
10 may 20		

If yes, please describe how you meet one, or more, of the following exceptions noted below.

After completing two full terms, a member must take off one year before applying for re-appointment to the same advisory board. However, a board member may apply to serve on another advisory board if he/she desires. The Board of Aldermen may make exceptions to this rule under the following circumstances: 1. To retain diversity on an advisory board; 2. A lack of applicants.

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5240

Advisory Board Name:*	Chair Name*
AHAC	Quinton Harper
Applicant First Name:*	Applicant Last Name:
Amy	Singleton
1. Has the applicant previously served on this or another advisory board?* Yes No	2. If yes, how many total years have they served? 3 This should be available on the application or by asking the applicant.
3. Is the applicant already serving on this advisory board and seeking reappointment to their second, full term? Yes (Skip to Last Question)	4. Is the applicant already serving on this advisory board and completed their two full terms? Yes No
To Solve the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat on the advice of the applicant applying for a special or expert seat or	8. If applicant did not attend an advisory board meeting, did you contact them via phone or email? Yes No

9. Applicant has demonstrated a clear understanding of the	10. If no, briefly explain:
- time commitment, roles, and responsibilities of serving on the advisory board:	
the auxisory board:	
₹	
Yes	
No	
its goals for community representation. Please note that candidat appointment. Please communicate any urgent needs and prioritie	es who do not meet any of these qualities are still engible for ss for Advisory Board composition to your Town Council liaison.
Diversity	
☑	
Occupation, Experience, or Special Skills	
Other	
other, please explain:	
Applicant is applying for reappointment and has experience wo	orking in real estate and with developers

Advisory Board Chair Report (Complete One Per Applicant) - Submission #5238

Advisory Board Name:*	Chair Name*	
AHAC	Quinton Harper	
Applicant First Name:*	Applicant Last Name:	
James	Smith	
1. Has the applicant previously served on this or another advisory board?*	2. If yes, how many total years have they served?	
Yes	This should be available on the application or by asking the applicant.	
No No		
3. Is the applicant already serving on this advisory board and seeking reappointment to their second, full term?	4. Is the applicant already serving on this advisory board and completed their two full terms?	
Yes (Skip to Last Question)	Yes	
	7	
No	No	
5. Is the applicant applying for a special or expert seat on the advis	ory board?* 7 6. If yes, which seat?	
Yes		
No		
7. Did the applicant attend an advisory board meeting?*	8. If applicant did not attend an advisory board meeting, did you contact them via phone or email?	
Yes	2	
	Yes	
No	□ No	

9. Applicant has demonstrated a clear understanding of the	10. If no, briefly explain:
time commitment, roles, and responsibilities of serving on	
the advisory board:	
Yes	
The state of the s	
No	
TO THE THE PROPERTY OF THE PRO	
11. In addition to your comments above, please check other of	ualities that the applicant offers that would help the Advisory Board meet
its goals for community representation. Please note that can	didates who do not meet any of these qualities are still eligible for
appointment. Please communicate any urgent needs and price	orities for Advisory Board composition to your Town Council liaison.
Diversity	
Occupation, Experience, or Special Skills	
Other	

If other, please explain:

Applicant participate in January AHAC meeting and was encouraged to apply by AHAC member (Cain). Applicant is a young, white male who works in the food service industry. Applicant has lived in Carrboro for 5 years and is interested in "getting into politics" and "getting involved in community" Applicant has further engaged AHAC Chair by asking questions via email.

Date Submitted: 12/15/2020

Advisory Board Application - Submission #5064

Last Name* Date* First Name* James Smith 12/15/2020 Select today's date Address1* 112 NC 54 Address2 ٧4 Zip* State City* NC 27510 Carrboro Is this address located within the Town's ETJ, Planning Is this address located within the corporate limits of the Jurisdiction, or Northern Transition Area?* Town of Carrboro?* Yes Unsure Please select Yes or No. Telephone (111)-111-1111* **Email Address*** Js151041@gmail.com 9197246051 Enter your primary email address. Please enter your primary contact phone number. The demographic information provided below is of interest because your elected officials want the Town's advisory boards to reflect the diversity of the Town. Diversity of the applicant pool is a priority of the Board. Race* Sex* **Current Age*** White Male 8/19/1987 Please enter your race. Please enter your sex. Length of Residence in Occupation* Are you a registered Length of Residence in the Town of Carrboro* Orange County Voter?* Orange County* Assistant Manager Arbyâ 5 years 5 years €™s Carrboro Yes How long have you been a How long have you been a Please enter your Please answer Yes or No resident of Orange County? resident of the Town of occupation. Carrboro?

₹	
Affordable Housing Advisory Commission	Greenways Commission
[PM]	
Appearance Commission/NPDC	Northern Transition Area Advisory Committee
Arts Committee	OWASA Board of Directors
Board of Adjustment	Planning Board
Climate Action Team	Recreation and Parks Commission
Economic Sustainability Commission	Stormwater Advisory Commission
₹	
Environmental Advisory Board	Tourism Development Authority*
Human Services Commission	Transportation Advisory Board
her (advisory board not listed):	Advisory Board Preference*
her (advisory board not listed):	Advisory Board Preference* Affordable Housing Advisory Commission
lease indicate by typing the advisory board that you are	Affordable Housing Advisory Commission
ease indicate by typing the advisory board that you are oplying for.	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice
ther (advisory board not listed): lease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Arby's Carrboro	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards).
lease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Arby's Carrboro lease enter your employment information. This is a equirement for application for the Tourism Development	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed
ease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Arby's Carrboro lease enter your employment information. This is a quirement for application for the Tourism Development uthority.	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the
lease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Arby's Carrboro lease enter your employment information. This is a equirement for application for the Tourism Development uthority.	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left. romotion of travel and tourism in the Town of Carrboro.
ease indicate by typing the advisory board that you are oplying for. Employer/Self Employed rby's Carrboro ease enter your employment information. This is a quirement for application for the Tourism Development athority. Provide examples of how you are involved in the provide examples of the Tourism Development Authority Application only for the Tourism Development Authority Application only for the Tourism Development Authority Application only for the Tourism Development Authority Application of the Tourism Devel	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left. romotion of travel and tourism in the Town of Carrboro.
ease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Inby's Carrboro ease enter your employment information. This is a quirement for application for the Tourism Development authority. Provide examples of how you are involved in the provide examples of how you are involved in the provided in the provided in the Tourism Development Authority Approximation only for the Tourism Development Authority Approximation of the	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left. romotion of travel and tourism in the Town of Carrboro.
ease indicate by typing the advisory board that you are oplying for. Employer/Self Employed Arby's Carrboro lease enter your employment information. This is a quirement for application for the Tourism Development uthority. Provide examples of how you are involved in the provide examples of how you are involved	Affordable Housing Advisory Commission Please indicate your preference by typing your first choice Please limit your selection above to two boards). Number of Years Employed 2 Enter the number of years you have been employed at the organization listed to the left. romotion of travel and tourism in the Town of Carrboro.

Reasons You Wish to be Appointed*

l'm interested in getting into politics or helping my community in any way I can. A former coworker (Cain Twyman) told me there is an opening on the affordable housing advisory board and would be a great way for me to get involved in the community.

We believe as a Town and as a Town Council that racial equity and diversity and inclusion are important. Please tell us your thoughts about this and why they are important not only in advisory board/commission work but also in all facets of local government and community work.*

I went to a private liberal arts college so I am educated in the subject of racial equality and diversity. I believe it is crucial in order for a community to be successful. I am a registered Democrat and one of our main ideologies is racial equality and diversity. Through racial equality and diversity, we are able to learn points of view from a wide plethora of our community. We are stronger when we work together. As long as society exists, there will be racism. However, it is up to each individual how they approach it. We cannot approach it with prejudice or violence. We will be a better community if we include all walks of life in decision making because it will affect everyone in the community, not just your race of people. We can also help those less fortunate by including all races. We can also help a persons socioeconomic situation by including them and treating everyone as equal.

Have you ever served on any Town of Carrboro Committee or Board?*	If yes, which one(s)?	
Are you currently serving Committee?*	on a Town Board or	If yes, are you applying for a third consecutiveterm?*
	The second secon	
Yes	The state of the s	Yes
No		No

If yes, please describe how you meet one, or more, of the following exceptions noted below.

After completing two full terms, a member must take off one year before applying for re-appointment to the same advisory board. However, a board member may apply to serve on another advisory board if he/she desires. The Board of Aldermen may make exceptions to this rule under the following circumstances: 1. To retain diversity on an advisory board; 2. A lack of applicants.