SPECIAL USE PERMIT APPLICATION

TOWN OF CHAPEL HILL
Planning Department
405 Martin Luther King Jr. Blvd.
Chapel Hill, NC 27514
phone (919) 969-5066 *fax* (919) 969-2014
www.townofchapelhill.org

Parcel Identifier Number (PIN): 9778-93-3103 & 9778-93-4008 Date: 31 Aug 2017

Section A: Project Information

Project Name: Merritt Mill Affordable Housing

Property Address: 800 Merritt Mill Road Zip Code: 27516

Use Groups (A, B, and/or C): A Existing Zoning District: R-3

Project Description: Construction of two apartment buildings with a clubhouse, parking and other site amenities. Approximately 35% the project area is in Chapel Hill with 65% in Carrboro.

Section B: Applicant, Owner, and/or Contract Purchaser Information

Applicant Information (to whom correspondence will be mailed):

Name: George J. Retschle, PE

Address: 221 Providence Road

City: Chapel Hill State: NC Zip Code: 27516

Phone: 919-929-0481 Email: georger@bapa.eng.pro

The undersigned applicant hereby certifies that, to the best of their knowledge and belief, all information supplied with this application and accurate.

Signature: [signature] Date: 31 Aug 2017

Owner/Contract Purchaser Information:

☐ **Owner** ☑ **Contract Purchaser**

Name: CASA NC

Address: 624 West Jones Street

City: Raleigh State: NC Zip Code: 27603

Phone: 919-754-9960 x429 Email: jbrandes@casanc.org

The undersigned applicant hereby certifies that, to the best of their knowledge and belief, all information supplied with this application and accurate.

Signature: Jess Brandes for CASA Date: 8-30-2017

Click here for application submittal instructions.

PROJECT FACT SHEET

TOWN OF CHAPEL HILL
Planning Department

Section A: Project Information

Use Type: *(check/list all that apply)*

☐ Office/Institutional ☑ Residential ☐ Mixed-Use ☐ Other: _____

Overlay District: *(check all that apply)*

☐ Historic District ☑ Neighborhood Conservation District ☐ Airport Hazard Zone

Section B: Land Area

Net Land Area (NLA): Area within zoning lot boundaries		NLA=	*46,656	sq. ft.
Choose one, or both, of the following (a or b), not to exceed 10% of NLA	a) Credited Street Area (total adjacent frontage) x ½ width of public right-of-way	CSA=	4,666	sq. ft.
	b) Credited Permanent Open Space (total adjacent frontage) x ½ public or dedicated open space	COS=		sq. ft.
TOTAL: NLA + CSA and/or COS = Gross Land Area (not to exceed NLA + 10%)		GLA=	**51,322	sq. ft.

*86,888 SF of project in Carrboro (total project NLA = 133,544 SF) **total project GLA = 146,898

Section C: Special Protection Areas, Land Disturbance, and Impervious Area

Special Protection Areas: *(check all those that apply)*

☐ Jordan Buffer ☐ Resource Conservation District ☐ 100 Year Floodplain ☐ Watershed Protection District

Land Disturbance	**Total (sq. ft.)**
Area of Land Disturbance (Includes: Footprint of proposed activity plus work area envelope, staging area for materials, access/equipment paths, and all grading, including off-site clearing)	*135,000
Area of Land Disturbance within RCD	N/A
Area of Land Disturbance within Jordan Buffer	N/A

*For overall project. Includes approximately 25,000 SF of offsite disturbance for utilities & right-of-way improvements.

Impervious Areas	**Existing (sq. ft.)**	**Demolition (sq. ft.)**	**Proposed (sq. ft.)**	**Total (sq. ft.)**
Impervious Surface Area (ISA)	0	0	*25,000+/-	*25,000+/-
Impervious Surface Ratio: Percent Impervious Surface Area of Gross Land Area (ISA/GLA)%	0%	0%	*48.71%	*48.71%
If located in Watershed Protection District, % of impervious surface on 7/1/1993	N/A	N/A	N/A	N/A

*Chapel Hill side of project area only.

Section D: Dimensions

Dimensional Unit (sq. ft.)	Existing (sq. ft.)	Demolition (sq. ft.)	Proposed (sq. ft.)	Total (sq. ft.)
Number of Buildings	0	0	*1	*1
Number of Floors	0	0	3	3
Recreational Space	0	0	2,964	2,964

*Chapel Hill side of project area only.

Residential Space				
Dimensional Unit (sq. ft.)	**Existing (sq.ft.)**	**Demolition (sq. ft.)**	***Proposed (sq. ft.)**	***Total (sq. ft.)**
Floor Area (all floors – heated and unheated)	0	N/A	25,000	25,000
Total Square Footage of All Units	0	N/A	25,000	25,000
Total Square Footage of Affordable Units	0	N/A	25,000	25,000
Total Residential Density	0	N/A	20.34 du/ac	20.34 du/ac
Number of Dwelling Units	0	N/A	24	24
Number of Affordable Dwelling Units	0	N/A	24	24
Number of Single Bedroom Units	0	N/A	24	24
Number of Two Bedroom Units	0	N/A	0	0
Number of Three Bedroom Units	0	N/A	0	0

*Chapel Hill side of project area only.

Non-Residential Space *(Gross Floor Area in Square Feet)*					
Use Type	**Existing**	**Proposed**	**Uses**	**Existing**	**Proposed**
Commercial					
Restaurant			**# of Seats**		
Government					
Institutional					
Medical					
Office					
Hotel			**# of Rooms**		
Industrial					
Place of Worship			**# of Seats**		
Other					

Dimensional Requirements		*Required by Ordinance	Existing	Proposed
Setbacks (minimum)	Street	10	0	10
	Interior (neighboring property lines)	0	0	0
	Solar (northern property line)	N/A	0	N/A
Height (maximum)	Primary (CORE)	60	0	60
	Secondary	39	0	39
Streets	Frontages	N/A	0	N/A
	Widths	N/A	0	N/A

*Per R-SS-C Zoning District

Section F: Adjoining or Connecting Streets and Sidewalks

Note: For approval of proposed street names, contact the Engineering Department.

Street Name	Right-of-Way Width	Pavement Width	Number of Lanes	Existing Sidewalk*	Existing Curb/Gutter
N/A				☐ Yes	☐ Yes
N/A				☐ Yes	☐ Yes

List Proposed Points of Access (Ex: Number, Street Name): One 2-way drive to/from Merritt Mill Road.

*If existing sidewalks do not exist and the applicant is adding sidewalks, please provide the following information:

Sidewalk Information			
Street Names	**Dimensions**	**Surface**	**Handicapped Ramps**
			☐ Yes ☐ No ☐ N/A
			☐ Yes ☐ No ☐ N/A

Section G: Parking Information

Parking Spaces	Minimum	Maximum	Proposed
Regular Spaces	23	30	21
Handicap Spaces	1	N/A	5
Total Spaces	24	30	*26
Loading Spaces	0	N/A	0
Bicycle Spaces	6	N/A	34
Surface Type			Asphalt

*26 spaces located wholly within Chapel Hill

Section H: Landscape Buffers

Location (North, South, Street, Etc.)	Minimum Width	Proposed Width	Alternate Buffer	Modify Buffer
North	N/A	N/A	☐ Yes	☐ Yes
East	N/A	N/A	☐ Yes	☐ Yes
South	N/A	N/A	☐ Yes	☐ Yes
			☐ Yes	☐ Yes

Section I: Land Use Intensity

Existing Zoning District: R-3
Proposed Zoning Change *(if any)*: R-SS-C

Zoning – Area – Ratio			Impervious Surface Thresholds			Minimum and Maximum Limitations	
Zoning District(s)	**Floor Area Ratio (FAR)**	**Recreation Space Ratio (RSR)**	**Low Density Residential (0.24)**	**High Density Residential (0.50)**	**Non-Residential (0.70)**	**Maximum Floor Area (MFA) = FAR x GLA**	**Minimum Recreation Space (MSR) = RSR x GLA**
R-SS-C	1.10	0.05				56,454 SF	2,567 SF
TOTAL							
RCD Streamside		0.01					
RCD Managed		0.019					
RCD Upland							

Section J: Utility Service

Check all that apply:

Water	☑ OWASA	☐ Individual Well	☐ Community Well	☐ Other
Sewer	☑ OWASA	☐ Individual Septic Tank	☐ Community Package Plant	☐ Other
Electrical	☑ Underground	☐ Above Ground		
Telephone	☑ Underground	☐ Above Ground		
Solid Waste	☑ Town	☐ Private		

SPECIAL USE PERMIT APPLICATION
SUBMITTAL REQUIREMENTS
TOWN OF CHAPEL HILL
Planning Department

The following must accompany your application. Failure to do so will result in your application being considered incomplete. For assistance with this application, please contact the Chapel Hill Planning Department (Planning) at (919) 969-5066 or at planning@townofchapelhill.org.

N/A	**Application fee** (including Engineering Review fee) (refer to fee schedule)	Amount Paid $
TBD	**Pre-application meeting** –with appropriate staff	
✓	**Digital Files –** provide digital files of all plans and documents	
✓	**Recorded Plat or Deed of Property**	
✓	**Project Fact Sheet**	
N/A	**Traffic Impact Statement** – completed by Town's consultant (or exemption)	
N/A	**Description of Public Art Proposal**	
✓	**Statement of Justification**	
✓	**Response to Community Design Commission and Town Council Concept Plan comments**	
✓	**Affordable Housing Proposal, if applicable**	
N/A	**Provide existing Special Use Permit, if Modification**	
✓	**Mailing list of owners of property within 1,000 feet perimeter of subject property** (see GIS notification tool)	
N/A	**Mailing fee for above mailing list (mailing fee is double due to 2 mailings)**	Amount Paid $
✓	**Written Narrative describing the proposal**	
✓	**Resource Conservation District, Floodplain, & Jordan Buffers Determination** – necessary for all submittals	
N/A	**Jurisdictional Wetland Determination – if applicable**	
N/A	**Resource Conservation District Encroachment Exemption or Variance (determined by Planning)**	
N/A	**Jordan Buffer Authorization Certificate or Mitigation Plan Approval (determined by Planning)**	
✓	**Reduced Site Plan Set (reduced to 8.5" x 11")**	

Stormwater Impact Statement (1 copy to be submitted)

a) Written narrative describing existing & proposed conditions, anticipated stormwater impacts and management structures and strategies to mitigate impacts
b) Description of land uses and area (in square footage)
c) Existing and proposed impervious surface area in square feet for all subareas and project area
d) Ground cover and uses information
e) Soil information (classification, infiltration rates, depth to groundwater and bedrock)
f) Time of concentration calculations and assumptions
g) Topography (2-foot contours)
h) Pertinent on-site and off-site drainage conditions
i) Upstream and/or downstream volumes
j) Discharges and velocities
k) Backwater elevations and effects on existing drainage conveyance facilities
l) Location of jurisdictional wetlands and regulatory FEMA Special Flood Hazard Areas
m) Water quality volume calculations
n) Drainage areas and sub-areas delineated
o) Peak discharge calculations and rates (1, 2, and 25-year storms)
p) Hydrographs for pre- & post-development without mitigation, post-development with mitigation
q) Volume calculations and documentation of retention for 2-year storm

Project Narrative

CASA is developing 800 S Merritt Mill Road into an affordable multi-family development of 48 apartments. The existing site includes 1.18 acres in Chapel Hill and 2.04 acres in Carrboro. The development will consist of 2 buildings, each containing 24 units. On the Chapel Hill parcel, the site will include 1 of the buildings of approximately 25,000 square feet, and consisting of 24 one-bedroom units and an attached club house, laundry and management office.

The site will also include a playground, picnic area, courtyard and sitting areas, as well as indoor amenities inside the community building, which will also have a covered porch. Vehicular access is provided to the entire site through one driveway accessed off of Merritt Mill Road. 66 vehicular parking spaces and 10 Class II bicycle parking spaces will be provided. Class I bicycle parking will available in a lockable closet on the porch of each unit. The site is less than 1,000 feet from a Chapel Hill Transit stop (CM Route). Pedestrian access within the site and connecting from the site to Merritt Mill Road will be constructed and maintained.

To meet Town stormwater requirements, stormwater control measures will be constructed on the Carrboro parcel. An accessible dumpster enclosure will be located at the rear of the parking area.

Public sewer extension, of approximately 670 linear feet, will be installed along Merritt Mill Road to accommodate the site.

All 48 units will be permanently affordable to households under 60% of Area Median Income. Deed restrictions will be recorded ensuring affordability for 99 years.

STATEMENT OF JUSTIFICATION

As required by the Land Use Management Ordinance Section *4.5.2 Standards and Findings of Fact*, in order to receive recommendation of SUP modification approval by the town manager, the following findings shall be made concerning the Merritt Mill Apartments:

1. The proposed Merritt Mill Apartments will be ***located, designed and operated so as to maintain and promote public health, safety, and general welfare*.**

This project brings high-quality, permanently affordable homes to the Chapel Hill market that are sorely needed by low-income individuals and families in the community. Affordable housing is a public health intervention for combatting homelessness, the chronic stress of insecure housing, asthma and other diseases correlated to substandard housing. Affordable, well-located housing is the bedrock for families to stabilize their financial circumstances, improve their job prospects, keep their kids in the same school and ease transportation challenges. For people with disabilities, housing that is affordable and accessible opens doors for more full participation in the community, and improves access to healthcare and other needed supports.

2. Proposed modifications to the existing SUP will be designed to ***comply with all required regulations and standards of the Land Use Management Ordinance, including all applicable provisions of articles 3 and 5, and applicable specific standards contained in the supplemental use regulations (article 6), and all other applicable regulations.***

This site is very unique in that part of the site lies in Chapel Hill and part of the site lies in Carrboro. The Applicant, in coordination with staff from both Towns, has worked to create a cohesive development that feels like a unified community both in how the property functions for its residents and how it looks. The proposed development has 1 building of 24 one-bedroom units in Chapel Hill and 1 building of 24 2-bedroom units in Carrboro. To the greatest extent possible, the Applicant has tried to honor the requirements of both Towns while requesting Town flexibility as to where (which jurisdiction) those requirements are borne out (for example: storm water detention), and flexibility in which requirements can be counted as satisfied in just one jurisdiction rather than being duplicated in each. The Applicant requests that reviewers keep this concept in mind when evaluating compliance with Town standards.

Several examples of compliance are as follows as well as highlighted requests for modifications:

Compliance with Article 3:

- Multifamily apartments are a permitted use within R-SS-C
- The proposed development will meet the dimensional requirements of Sect. 3.8.

Compliance with Article 5

- The proposed developments meets the requirements of Sections 5.1, 5.2, 5.5, 5.8, 5.10, 5.11, 5.12, 5.14 through 5.19.
- Since the proposed development will be within R-SS-C, no buffers are required per Section 5.6.2 (b).

- The proposed development includes 66 spaces for the entire 48-unit development meeting requirements of the Chapel Hill LUMO Section 5.9 when the project is viewed as a whole (minimum 58, maximum 72 for 48 units) as well as when viewed just on the Chapel Hill side (minimum 24, maximum 30) since we are proposing 26 spaces wholly within Chapel Hill and 6 that straddle both municipalities.
- The proposed development includes bicycle parking in compliance with LUMO Section 5.9.

Article 5 Modification Requests

- The applicant anticipates needing to regrade approximately 2,000 square feet of steep slopes that are in the center of the site. ***This exceeds the disturbance limitation of Section 5.3 therefore we are requesting a modification.*** Temporary erosion control measures will be implemented during construction, and stormwater control measures will be provided for permanent stormwater management of development runoff.
- Since this is a site in both Chapel Hill and Carrboro, the Chapel Hill side of the site will not have a separate stormwater control measure. Instead all storm water will be treated on the Carrboro side, which is primarily lower in elevation than the Chapel Hill side. ***Therefore the Applicant requests a partial waiver from Section 5.4: Stormwater Management per Section 5.4.5. (a) given that alternative methods for off-site management are proposed, and that these measures will comply with Town of Carrboro requirement.***
- Site constraints mean this project will not meet the requirement of Sect. 5.7 for minimum tree canopy of 30% on the Chapel Hill side alone. The majority of existing steeper topography is on the Carrboro side of the project, meaning that the Chapel Hill side is more suitable for development, thus a greater percentage of tree clearing will take place on the Chapel Hill side. As a result, the minimum tree canopy will be met by including tree coverage on the Carrboro side. The Applicant is proposing 34% tree canopy when including both Chapel Hill and Carrboro (8,511SF on Chapel Hill side, 24,390SF on Carrboro side). ***The Applicant requests a modification of Section 5.7 since it is met inclusive of the entire site.*** The Applicant will develop and abide by a Landscape Protection Plan.
- In order to meet the Chapel Hill Fire Department's requirement that fire apparatus setup locations be close enough to the buildings, ***the Applicant requests a modification and waiver from the requirement of Section 5.9.6.(c)(2)A requiring a 5' planting strip between the buildings and parking.***
- Since this site is in both Chapel Hill and Carrboro, the Chapel Hill side of the site will not have a separate solid waste collection and recycling area. One area will be provided on the Carrboro side. Therefore ***the Applicant requests a modification of Section 5.13 since it is provided on the Carrboro side.***

3. The existing facility is ***located, designed and will be operated so as to maintain or enhance the value of contiguous property***. It is located in a residential area and maintains residential use of the parcel. Denser, more walkable development is found to enhance property values in

neighborhoods that have it. Tenants at Merritt Mill Apartments will be able to conveniently patronize nearby businesses, access the Lincoln School on foot, and boost transit use along Merritt Mill road. The design of Merritt Mill Apartments must pass multiple levels of scrutiny and meet the high design and quality standards of the NC Housing Finance Agency. The development will be operated by the Applicant with on-site staffing, and the project funders will provide similar oversight and scrutiny through annual site visits and property audits. In support of this finding, it should also be stated that our ***use & development is a public necessity,*** because CASA provides a very critical resource to the community – quality, permanently affordable rental housing.

4. The proposed development ***conforms with the general plans for the physical development of the town as embodied in*** the LUMO, ***and supports the following goals of the comprehensive plan:***

- PFE.3: A range of housing options for current and future residents
    - Chapel Hill has a chronic shortage of affordable rental units, in particular those affordable to households under 60% of AMI. This development will provide 48 units that are affordable to households under that income level.
- PFE.4: A welcoming and friendly community that provides all people with access to opportunities
    - If a family cannot afford to live in Chapel Hill, they cannot experience that access to opportunities.
- CPE.3: Promote a safe, vibrant and connected (physical and person) community
    - The development of 800 Merritt Mill Road will convert a vacant, underutilized urban infill lot into a vibrant residential community which connects tenants to walkable amenities in both downtown Chapel Hill and downtown Carrboro as well as convenient transit connectivity to the greater community.
- GA.2: A connected community that links neighborhoods, businesses, and schools through the provision of greenways, sidewalks, bike facilities, and public transportation
    - The development of 800 Merritt Mill Road will activate a vacant urban lot, and the provision of sidewalks and bicycle parking facilities will create non-vehicular connections to the many nearby amenities.
- GPNS.1: Low density, green Rural Buffers that exclude urban development and minimize sprawl
    - In order to minimize sprawl outside urban areas, the Town must maximize density within urban areas. This development will be moderate density of approximately 15 units/acre.
- GPNS.8: Future land use, form, and density that strengthens the community, social equity, economic prosperity and natural environment
    - Providing more high-quality affordable housing in Chapel Hill is critical to strengthening social equity and economic prosperity for many Chapel Hill households.
- TCG.4: Housing for students that is safe, sound, affordable and accessible and meets a demonstrated need conducive to educational and maturational needs of students, and ***housing***

for Town, University and the Health Care System employees that encourages them to reside in the community (emphasis mine)

- While this development will not provide housing to full-time students, it will help to fill a critical need in housing for the many employees of our local institutions who earn less than 60% of AMI (currently $30,840 for a single individual or $43,980 for a family of 4) such as grounds workers, cafeteria and food service workers, janitorial workers and nursing assistants.

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Carrboro CUP-CZ & Chapel Hill SUP Checklists

CASA - MERRITT MILL APARTMENTS

Town of Chapel Hill SUP Application

	Chapel Hill requirement	Status	Justifcation
1) FDC (Fire Department Connection)	Shared FDC required on Carrboro side per CFD & CHFD.	Modification Requested	Shared FDC shown on Carrboro side of project.
2) Tree Canopy	30% (10,997 sq. ft.)	Modification Requested	Applicant is proposing 23% (8,511 sq. ft.) on Chapel Hill side but a total of 34% (32,901 sq. ft. out of 96,989 area subject to canopy requirements) for the entire site
3) Stormwater Management	Adequate treatment per LUMO	Modification Requested	All stormwater from both sides will be treated in Carrboro
4) Solid Waste Management	Trash and recycling per LUMO	Modification Requested	provided on the Carrboro side
5) Vehicular Parking	Min. (1/DU) = 24 spaces Max. (1.25/DU) = 30 spaces	Requirement Met	26 spaces provided entirely on Chapel Hill side. 6 spaces are bisected by the Town line.
6) 5' Planting Strip	Required between building and parking	Modification Requested	Per the Chapel Hill Fire Department a 5' planting strip between buildings and parking would result in the proposal exceeding the minimum distance allowed between buildings and fire apparatus setup location(s).
7) Steep Slopes	No more than 25% disturbance of slopes greater than 25%	Modification Requested	There are approximately 2,000 sq. ft. of slopes greater than 25% on the Chapel Hill side of the site. The majority of these areas are in the center of the site and will need to be regraded, thus we are requesting a modification. Temporary erosion control measures will be used during construction, and permenant stormwater management facilities will control runoff to help protect undisturbed steep slopes on site and on neighboring properties.

Responses to Concept Plan Review Comments by Chapel Hill Community Design Commission
31 Aug 2017 (Revised 30 Jan 2018)

The following is a summary of key ideas raised during the Community Design Commission review of the concept plan for Merritt Mill East:

- Comment: The applicant should consider planning and presenting the site plans for the East and West projects together.

  Response: Agreed. Applicant and staff from both Towns have been planning the project as a unified site. All submittals going forward will show both east and west sides of the site.

- Comment: The buildings should be placed on the site to promote a sense of community. Think about how the buildings relate to each other and create a sense of community, perhaps by a common courtyard.

  Response: Agreed. The buildings have been reduced from 4 to 2 and reoriented to face each other. The community now has shared outdoor amenities in multiple locations and a shared community building with indoor and outdoor spaces (including a courtyard) available to all tenants.

- Comment: Recommend the parking and dumpster areas be looked at being placed in the rear or side.

  Response: The dumpster has been moved to the back of the parking area. The parking was unable to be moved to the rear of the buildings. Multiple attempts to do so yielded prohibitively expensive grading, the removal of virtually all tree-cover, and too much impervious surface.

- Comment: Provide a continuous sidewalk along the property frontage for pedestrian connectivity to Merritt Mill Road.

  Response: A continuous sidewalk along Merritt Mill Road is provided that connects with both buildings.

- Comment: The applicant noted that they may plan to move the driveway location near the 54 ramp, and there seemed to be support that this may be a better location.

  Response: Per NCDOT and the Town traffic engineer, the Applicant was advised not to move the driveway closer to the ramp and to put it in the current location.

- Comment: Provide plantings that are not labor-intensive.

  Response: Agreed. The Applicant aims to have their properties as low-maintenance as possible, to include low-maintenance, drought-tolerant plantings. The Landscaping Plan will be reflect this best practice.

27 Nov 2017 (REV 30 Jan 18)

Ballentine Associates, P.A.

221 Providence Road
Eastowne Office Park
Chapel Hill, NC 27514

919/929-0481 Chapel Hill
919/489-4789 Durham
919/489-2803 Fax

Ms. Kay Pearlstein
Town of Chapel Hill Planning Department
405 Martin Luther King Jr. Blvd.
Chapel Hill, NC 27514

Subject: Merritt Mill Apartments
SUP Application
Responses to Technical Review Team (TRT) Comments

Dear Kay,

Thank you for reviewing the SUP application for the Merritt Mill Apartments and for working with staff to provide comments. This letter is written to provide responses to the TRT comments dated 12 Oct 2017. Below please find each of your comments followed by our responses in bold:

RECREATION:

1. There appears to be recreation elements on both sides of the jurisdictional boundary. I believe that we need to coordinate how best to help the applicant meet requirements in the most effective manner possible.

   Thank you, your assistance will be much appreciated.

STORMWATER MANAGEMENT:

2. The submitted plan set required more details in order for a thorough review to occur. The requested revisions reflect larger items. Subsequent reviews will look at further details when provided. All of the minimum design criteria (general MDC and the wetlands-specific) must be met. Please discuss if recommendations (recommended MDC) are met as well. Please document in report.

   Acknowledged; the required level of detail will be provided with ZCP drawings.

3. Please briefly discuss if other LID practices were considered for the site. Wetlands offer great stormwater management - why were they chosen over others? Please include brief discussion in report.

   Plans have been revised to show multiple stormwater control measures. Previous plans included a constructed wetland but site constraints including lack of available area necessitated revisions. Stormwater requirements will be met with a combination of a bioretention cell, underground StormFilter and underground detention.

4. Please indicate location(s) of SW maintenance easements and provide for access.

   Preliminary stormwater maintenance and access easements are shown on the grading plan.

5. Please indicate flow path and POA on drainage area maps. (A "study point" is referenced in the summary tables, but is not indicated on maps)

   The drainage area study point is indicated on maps DA-3 & DA-4.

6. Please show outlet pipe / riser structure in wetlands. Please provide details of riser structure.

   Stormwater control measure outlet pipe and riser structures are shown for the bioretention and underground StormFilter & detention. Details will be provided with construction drawings.

7. Please provide further details of wetland; flow path, different zones (deep pool, shallow water, etc.), riser/outlet, profile, plantings, etc. Please include temporary pool surface area as well as the permanent pool surface area on wet land enlargement.

   Plans have been revised and we are no longer planning a constructed wetland.

8. Please provide site-specific soils report and indicate SHWT on wetland profile.

   We have consulted with a soils scientist to locate the SHWT and prepare a soils report. The soils report will be included with stormwater report that will be provided with construction drawings.

9. It is preferred that SW pipe not pass through the retaining wall (access and long-term maintenance).

   Plans have been revised so that SD pipes do not pass through retaining wall(s).

INSPECTIONS:

10. Accessibility Requirements: That prior to issuance of a Certificate of Occupancy, the applicant shall provide the minimum required handicapped parking spaces and design all handicapped parking spaces, ramps, and crosswalks, and associated infrastructure according to Americans with Disabilities Act standards, North Carolina Building Code, American National Standards Institute (ANSI) Code, and Town standard. Parking - number of spaces to comply with NCBC 2012 section 1106.1, 1 per 6 compliant spaces or portion thereof must be van accessible, No slope to exceed 2% in any direction. Signage per NC requirements, MUT-CD and ICC A 117.1. Curb cuts and accessible routes Per ICC A117.1 2009 Ed. Cross slope limited to 2%, call for inspection before placement of concrete. Slope greater than 5% requires construction as a ramp.

    Acknowledged.

11. A fire hydrant shall be within 100 feet of the fire department connection as currently shown.

    A fire hydrant and a fire department connection are shown as required.

12. A monitored fire sprinkler system shall be installed to protect all residents.

    Acknowledged.

13. Rated separation shall be provided between the residential units and the clubhouse area.

    Acknowledged.

14. Key boxes shall be required on any building that has a fire alarm system, a fire sprinkler system, an elevator, or special locking arrangements. The key box shall be of an approved type as required from the Chapel Hill Fire Department. The size of the key box will be determined by the number of keys necessary to mitigate any emergency situation based on the building and its occupancy. An approved lock shall be installed on gates or similar barriers when required by the fire code official. Keys shall be changed out immediately if the locks are changed or rekeyed.

    Acknowledged.

15. Address numbers must be a minimum of 4 inches high and of contrasting color to their background. Reflective numbers are preferred and required on front and rear doors of strip shopping centers. When the distance from the street or fire department access lane to the front or address side of the building exceeds 25 feet, larger numbers are required. 26 feet to 50 feet shall have 8 inch numbers, 51-75 feet shall have 12 inch numbers and over 75 feet shall have 18 inch numbers. Where access is by private means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.

    Acknowledged.

CURRENT DEVELOPMENT:

17. Please complete the Project Fact Sheet, pages 4 and 5 in particular.

    The Project Fact Sheet has been completed as applicable and is enclosed.

18. You will need to submit a Stream Determination with your resubmittal.

    The Town Stream Determination is enclosed.

19. The buildings may need to move back to allow the required 5-0 foot planting strip between the buildings and parking (sidewalks are not included in the 5-0 ft. width).

    In order to meet the fire code requirement as noted under comment #60 (below), apparatus access shall be located within a minimum of 15' and maximum of 30' from one complete side of each building. In order to meet this requirement and maintain ADA sidewalks we must have several areas of 0' between the sidewalk(s) and building(s). Planting areas between building and parking/sidewalk will be provided to the extent practicable while still meeting the fire code.

20. Please provide sidewalk/pathway from the buildings to the dumpsters.

    Walkways have been added connecting the building accesses to the dumpster enclosure.

21. Site Plan - The Site Plan should include the overall plan for both sites at the same weight with the CH portion being clearly delineated. It is important to have an overall site plan that shows the site being developed as one.

    The Carrboro and CH sides are shown at the same line-weight. The CH side remains clearly delineated within the bold line.

22. Utility Overview - Darken the dumpsters, parking, and utility connections on the Carrboro side. It is important to see where they are heading and how eventually connected to manholes or larger lines. Label clubhouse, wetland, and dumpster areas as Shared or otherwise indicate for both portions of the site.

    Revisions have been made accordingly.

23. We support the modification for the Tree Canopy.

    Acknowledged.

24. The Landscape Plan is missing. It will show all the proposed landscaping around the perimeter of the site, between the parking and building, and parking lot. A chart with the variety of plants, quantity, size, and any other notes about colors, etc. needs to be included on the plan.

    A preliminary Landscape Plan is included. It should be noted that because the proposed development will be within R-SS-C, no buffers are required per LUMO Section 5.6.2 (b). Any project boundary plantings will be voluntary and shall not include invasive species listed in the Town Design Manual. A final Landscape Plan will be provided with Final/ZCP plans.

25. Elevations - Place dimension lines for height on all sides of the elevations and label according to direction rather then left, right, etc. Insert a key plan that shows which buildings are 1-bedroom and which are 2-bedroom.

    Dimensions have been added to the elevations.

26. Your requested modifications include recreation, tree canopy, and stormwater. If we identify any others, these would need to be added to your Statement of Justification.

    Acknowledged; all requested modifications are covered in the Statement of Justification.

URBAN FORESTRY:

27. We recommend that the Demolition Plan and storm drainage plan note clearly all proposed changes in the Merritt Mill Road right-of-way.

Additional notes have been added to sheets C0101, C1001, C1101 and C1201 for clarity on proposed changes within the Merritt Mill right-of-way. Construction drawing level detail will be provided with Final/ZCP Plans.

28. We recommend that critical root zones be shown for trees surveyed and shown on the Existing Conditions plan.

    Critical root zones for all trees surveyed are shown on the Existing Conditions sheet C0101.

29. Tree protection fencing must be 4 feet tall, not 3 feet. We recommend revising the detail on C0101.

    The tree protection detail has been revised to show 4 feet tall fencing per the Town's Design Manual.

30. On the Grading Plan, we recommend showing the tree protection fencing at the limits of disturbance and further suggest revising the grading (347 contour) proposed adjacent to the trunk of one of the two specimen trees to be protected on the site. Remove the tree symbol in the graded area west of the entrance; it does not appear to correspond to an existing surveyed tree. Indicate how proposed 2:1 slopes will be stabilized and maintained.

    Plans have been revised to show tree protection fencing at limits of disturbance. The erroneous tree symbol noted above has been removed. For stabilization and maintenance of 2:1 slopes, see notes #2 and #3 on the Grading Plan. More specific notes (including a seeding schedule) will be provided with Final/ZCP plans.

31. We recommend that the tree canopy coverage calculations be included on the landscape plan to demonstrate how the requested alternative 20 percent canopy coverage will be met.

    Tree canopy calculations are shown on L1001.

32. We recommend that all utilities be included on the utility plan, including overhead and underground electrical lines, telephone and CATV.

    Preliminary underground electric, telecom & cable TV lines have been added to the Utility Plan.

33. We recommend that Sheet C1401 be completed if it is to be entitled "Planting Plan." Indicate proposed plantings with species, quantities, spacing and sizes. We further suggest buffer plantings be added between the playground and proposed dumpster facilities.

    Please see L1001 Preliminary Landscape Plan. Note that no landscape buffers are required in R-SS-C zoning. Preliminary entrance, parking & building screening is shown. A final Landscape Plan (with a list of plant species, quantities, spacing and sizing) will be provided with Final/ZCP plans.

34. The Town of Chapel Hill would not be authorized to service dumpster facilities located outside Town limits as shown. If all 48 units were located in Chapel Hill's jurisdiction, the Town would require a minimum of one 8-cubic yard container collected once per week per 25 dwelling units. Please submit confirmation that the proposed refuse facility can be serviced as shown by either the Town of Carrboro or a private contractor.

    The site will be served by a private refuse and recycling collection vendor. A will serve letter has been included with this submittal.

35. We recommend that the final plan include a lighting plan.

    Please see C1102 for Preliminary Site Lighting. A final lighting plan meeting Chapel Hill & Carrboro ordinances will be provided with Final/ZCP drawings.

36. About 90 feet of the proposed sidewalk east of the entrance as well as the two curb ramps at the entrance are shown partially outside the public right-of-way. To allow public access and maintenance, we recommend that either additional public right of way be dedicated, or a public pedestrian access easement be provided. Provide details to show the required landing for each curb ramp and show how the new sidewalk, curb and gutter will be connected to the existing sidewalk and driveway apron at the eastern site boundary.

    Additional right-of-way will be dedicated so that the public sidewalks will be entirely within the public right-of-way. Curb and gutter, sidewalk and wheelchair ramp details meeting NCDOT standards will be provided with Final/ZCP plans.

CURRENT DEVELOPMENT (CONT.):

37. You may need a crosswalk on S. Merritt Mill to connect with bus stops on opposite side of the street.

    Crosswalks linking sidewalks along the north and south sides of Merritt Mill are shown on the approved Lincoln Center Campus Redevelopment plans. Please see C1/C0001 for reference.

38. Consider moving the picnic shelter and gazebo away from S. Merritt Mill to the playground at the rear of the property.

    The playground has been shifted to the Merritt Mill frontage, where it can be viewed from the community building. This is a requirement in order for CASA to obtain NC Housing Finance Agency tax credits and enable the project to happen.

39. You will need a modification for the parking numbers - appears 17 spaces on the Chapel Hill side so not enough.

Since the initial submittal, the parking count has been revised to show 66 total vehicular spaces with roughly half of these on the Chapel Hill side of the project. Parking is in compliance with LUMO Section 5.9:

	Minimum	Maximum
24 (1) bedroom units	**1.00/unit = 24**	**1.25/unit = 30**
24 (2) bedroom units	**1.25/unit = 30**	**1.75/unit = 42**
	54	**72**

40. Please take a look at the grading at the front of the property along S. Merritt Mill. If you could move picnic/gazebo to the playground, then grading for the catch basin may be moved further from the street.

    The gazebo has been removed from the plans. A courtyard and several seating areas have been added.

FIRE:

41. FIRE APPARATUS ACCESS FOR CHFD: All fire department access determinations shall be based upon CHFD apparatus specifications (data specs provided by Office of the Fire Marshal/Life Safety Division) and field verification. All proposed fire department access designs shall be reviewed and shall also pass field inspection.

    Acknowledged.

OC SOLID WASTE:

42. Solid Waste Management Plan Document - This document must be completed and returned to me for review and approval. A blank copy is attached to these review comments and will be emailed to you.

    The Orange County Solid Waste Management Plan is included with this submittal, along with a Solid Waste Management Narrative, Plan and private vendor will serve letter.

43. Plan Sheet C 1001 Revise the Refuse/Recycling enclosure to show 2 refuse dumpsters and 1 cardboard dumpster and label them as such. The Town's Ordinance requires 1 bulk garbage container (dumpster) for every 25 multi-family units so 2 will be required unless the town approves using only 1 (due to 1/2 the units being only 1 bedroom and the other 1/2 being only 2 bedrooms). Add the following standard OCSW notes: All existing structures 500 square feet and larger shall be assessed prior to the issuance of a demolition permit to ensure compliance with the County's Regulation Recyclable Materials Ordinance (RRMO) and to assess the potential for deconstruction and/or the reuse of salvageable materials. Pursuant to the County's RRMO, clean wood waste, scrap metal, and corrugated cardboard present in construction or demolition waste must be recycled. Pursuant to the County's RRMO, all haulers of mixed construction and demolition waste which includes any regulated recyclable materials shall be licensed by Orange County. Prior to any demolition or construction activity on the site, the applicant shall hold a pre-demolition/pre-construction conference with Solid Waste staff. This may be the same pre-construction meeting held with other

development/enforcement officials. The presence if any asbestos containing materials ('ACM') and/or other hazardous materials shall be handled in accordance with any and all local, state, and federal regulations and guidelines.

The project will be served by a private refuse and recycling collection vendor. The above notes have been added to C1001.

44. General Note - Add a detail of the Refuse/Recycling station that is dimensioned and at a scale of 1" = 10' or 1" = 20'.

Please see C5001 for preliminary dumpster area details.

NCDOT ORANGE COUNTY:

45. Intra-jurisdictional Coordination: It is noted that this development lies within jurisdiction of both Town of Chapel Hill and Town of Carrboro. Review and approval should be carefully coordinated between the various jurisdictions. I have copied Trish McGuire with Town of Carrboro for her information.

Acknowledged.

46. Trip Generation and Traffic Impacts: The site as proposed consists of 48 apartment units and clubhouse. The proposed access and existing roadway network is expected to adequately accommodate the anticipated site vehicle trips. The plan submittal indicates an existing sidewalk and construction of a new bike lane on Merritt Mill Road frontage. The submittal does not indicate locations of existing or proposed transit stops in proximity of the site. The Applicant should provide additional information on access to transit.

47. Prior to performing work in the NCDOT right of way, the Applicant will need to obtain the following:
    - Approved NCDOT Driveway Permit for proposed access on Merritt Mill Road.
    - Approved NCDOT Three-Party Encroachment Agreement with TOCH and TOC for proposed sidewalk and appurtenances
    - Approved NCDOT Three-Party Encroachment Agreement with OWASA for proposed utility construction (NC DOT Orange County)

Acknowledged.

48. Generally speaking, the plans lack sufficient design detail to facilitate comprehensive comments, however, I offer the following based on the information provided:
    - Sheet C1001 – Provide additional roadway design detail for proposed construction of bike lane including but not limited to:
        a) Typical section
        b) Pavement design

c) Drainage
d) Signing and marking
e) Transition to existing conditions on approach and trailing ends

- Provide additional geometric and pavement design detail for proposed driveway connection
- ADA curb ramps as indicated do not comply with current NCDOT standard. Please refer to 2012 edition of NCDOT RSD
- Sheet C1101 – Provide additional design detail per NCDOT and OWASA requirements for proposed utility construction
- Sheet C1201 – Locate proposed storm drain system outside of existing right of way. Tie existing roadway drainage in to system.
- Sheet C1401 – Indicate 10’ x 70’ sight distance easement per NCDOT standards.
- Indicate intersection sight lines per AASHTO requirements
- Keep sight lines free and clear of obstructions from landscaping, above ground utilities or other appurtenances

Details meeting the above standards will be provided with Final/ZCP drawings.

LONG RANGE / TRANSPORTATION:

50. Indicate the location of the proposed bike racks on the site plan.

    Proposed bike racks are shown on the site plan.

51. Show the tie-in/transition of proposed sidewalk to the existing sidewalk on either end along Merritt Mill Rd.

    These transitions have been added to the Site Plan.

52. The proposed bike lane appears to be 4' wide (outside of the gutter pan); while Town's standard is 5' wide. Modify the bike lane as needed to meet a 5' width.

    The bike lane has been widened to 5’ from the pavement marking to the outside of the gutter pan.

53. At the site driveway, include 'mini-skips' (thick dashed line) for the bike lane, and a striped crosswalk for pedestrians.

    These pavement markings have been added. Details will be provided with ZCP drawings.

54. Detail on Class I bike parking (layout, dimensions, access) will need to be provided at the time of Final Plans. Staff recommends that bike hooks be installed in the porch closets, allowing vertical storage of bikes.

Class I bike parking details will be provided with Final/ZCP Plans. A minimum of one bike hook will be installed inside each porch closet.

55. Please coordinate with Town of Carrboro staff on an appropriate solution for the end of the bike lane at the western site boundary (interim solution until future bike lane extension). Use signage, striping, etc. to ensure that cyclists can transition safely into mixed traffic.

    Signage, striping, etc. will be coordinated with Carrboro staff and finalized with Zoning Permit drawings.

56. Staff recommends an additional sidewalk connection from the western building to sidewalk along Merritt Mill Rd, more direct and not requiring a crossing of the site driveway.

    This sidewalk connection has been added.

57. Staff is interested in knowing what demand may be generated for visitor parking, and how that will be accommodated with 1 space being provided per unit. Considering designating some parking as carpool spaces to reduce parking demand.

    The parking count has been increased to 66 (1.375 per unit) and we feel this will be sufficient to accommodate anticipated occupant and visitor parking.

FIRE DEPARTMENT ACCESS:

58. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS: D104.1 Buildings exceeding three stories or 30 feet in height: Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.D104.2 Buildings exceeding 62,000 square feet in area: Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m2) shall be provided with two separate and approved fire apparatus access roads. Exception: Projects having a gross building area of up to 124,000 square feet (11 520 m2) that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems.D104.3 Remoteness: Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

    Access has been provided as required by the Chapel Hill and Carrboro Fire Departments.

59. FIRE APPARATUS ACCESS ROADS; Any fire apparatus access roads, (any public/private street, parking lot access, fire lanes and access roadways), used for fire department access shall be all weather and designed to carry the imposed load of fire apparatus weighing at least 80,000 lbs. Fire apparatus access roads shall have a minimum width of 20' with an overhead clearance of at least 13'-6" for structures not exceeding 30' in height and shall provide access to within 150' of all exterior portions of the building. Structures exceeding 30' in height shall be provided with an aerial apparatus access road 26' in width in the immediate vicinity of the building or portion thereof and shall provide

at least one of the required access roads to be located not less than 15' and not more than 30' from the structure parallel to one entire side of the structure. NC FPC 2012 502.1,503.1.1, 503.2.1, D102.1

Acknowledged.

60. AERIALS; Where a building exceeds 30' in height OR 3 stories above the lowest level of Fire Department Access, overhead power and utility lines shall not be allowed within the aerial apparatus access roadway and the roadway shall have an unobstructed width of 26' exclusive of the shoulders. At least one of the apparatus access roadways shall be located within a minimum of 15' and maximum of 30' from one complete side of the building. NC FPC 2012 D105.1, D105.2, D105.3

Access has been provided as required by the Chapel Hill and Carrboro Fire Departments.

FIRE SERVICE FEATURES:

61. GRADE AND APPROACH; Fire apparatus access roads shall not exceed 10% in grade unless approved by the fire chief and all approach and departure angles shall be within the limits established based on the Department's apparatus. NC FPC 2012, 503.2.7, 503.2.8 and D103.2

Access has been provided as required by the Chapel Hill and Carrboro Fire Departments.

62. FIRE APPARATUS ACCESS ROADS AUTHORITY; the fire code official shall have the authority to increase the minimum access widths where they are deemed inadequate for fire and rescue operations. NC FPC 503.2.2

Access has been provided as required by the Chapel Hill and Carrboro Fire Departments.

63. GATES AND BARRICADES; Where required or authorized by the fire code official and permanent or temporary (construction), any gates across fire apparatus access roads shall be a minimum width of 20', be of swinging or sliding type, have an emergency means of operation, shall be openable by either forcible entry or keyed, capable of being operated by one person, and shall be installed and maintained according to UL 325 and ASTM F 2200. NC FPC 2012, 503.5, 503.6, D103.5

Acknowledged.

64. FIRE LANES; Where required, approved marking signs including the words, NO PARKING-FIRE LANE signs shall be provided for fire apparatus access roads to identify such roads. NC FPC 2012, 503.3, D103.6, D103.6.1, D103.6.2

Acknowledged.

65. BUILDING HEIGHT; Buildings exceeding 30 feet or three stories in height must have at least two means of fire apparatus access separated by at least one half the diagonal distance of the building. NC FPC 2012, D104.1, D104.3

Access has been provided as required by the Chapel Hill and Carrboro Fire Departments.

66. PREMISE IDENTIFICATION; approved building address numbers, placed in acceptable position to the fire code official, shall be required on all new buildings. NC FPC 2012, 505.1

Acknowledged.

67. KEY BOXES; Where required by the fire code official, a secure key box, mounted on the address side of the building, near the main entrance, shall be provided to ensure adequate access to the building based on life safety and/or fire protection needs. NC FPC 2012, 506

Acknowledged.

FIRE PROTECTION:

68. SPRINKLERS: Any building with more than 6000 sf of floor space is required to have a sprinkler system. Town Ordinance 7-56.

Acknowledged.

69. FIRE PROTECTION AND UTILITY PLAN; shall include the fire flow report: for a hydrant within 500' of each building, provide the calculated gallons per minute of with a residual pressure of 20 pounds per square inch. The calculations should be sealed by a professional engineer licensed in the State of NC and accompanied by a water supply flow test conducted within one year of the submittal. Reference Town Design Manual for required gallons per minute.

Acknowledged.

70. FIRE DEPARTMENT CONNECTIONS, LOCATIONS; Any required FDC's for any buildings shall meet the design and installation requirements for the current, approved edition of NFPA 13, 13D, 13R, or 14 of the NC FPC 2012 and Town Ordinances; 7-38 for location. FDC's shall be installed on the street/ address side of the building and within 100' of a hydrant or unless otherwise approved by the fire code official and shall not be obstructed or hindered by parking or landscaping.

Acknowledged.

71. FIRE DEPARTMENT CONNECTIONS, INSTALLATION; A working space of not less than 36" in width and depth and a working space of 78" in height shall be provided on all sides with the exception of wall mounted FDC's unless otherwise approved by the fire code official. The FDC's where required must be physically protected by an approved barrier from impacts. NC FPC 2012, 912.1, 912.2 912.2.1, 912.3.2, 312

Acknowledged.

CONSTRUCTION/DEMOLITION:

72. FIRE WATCH; During construction and demolition where hot work, materials subject to spontaneous combustion, or other hazardous construction or demolition is occurring, the owner or their designee shall be responsible for maintaining a fire watch. The fire watch shall consist of at least one person with a means of communicating an alarm to 911, shall a written address posted in a conspicuous location and shall maintain constant patrols. NC FPC 2012 Section 1404

    Acknowledged.

Please don't hesitate to call me should you have any questions or if you require additional information in order to approve this application.

Yours very truly,
BALLENTINE ASSOCIATES, PA

George J. Retschle, P.E.
President

ENERGY MANAGEMENT PLAN

Merritt Mill Road Apartments
Chapel Hill, NC

INTRODUCTION

This project will utilize the following sustainable practices to maintain an energy efficiency that is 20% more efficient than ASHRAE standards. In addition, the measures noted below will insure adequate daylighting and indoor air quality is maintained throughout the buildings. The intent of the selected solutions is that they are long term and passive in nature without a need for extensive maintenance or sophisticated end-user implementation which should insure a reduced carbon footprint well into the future.

SUSTAINABLE PRACTICES

The project will comply with Energy Star 2.0 program and be verified of compliance by a third-party energy rater. Rater will assist with the review of project details prior to construction, verify installation of rated materials, and test the final construction for compliance with methods accepted by the IBC and Energy Star program. A blower door test will be performed on 8 units inclusive of each type of unit and building location. Units that fail the test will be documented and corrected as verified by additional testing.

Site drainage will be designed to capture rainwater through a complete guttering system, swales, and a storm water management system reducing risk of water damage. Landscape plantings will be selected from indigenous plant species to help insure acceptable health without excessive watering demands. On-site recycling will be provided for tenant and management use.

Construction will include use of no or very low maintenance materials throughout including heavy-gauge vinyl siding and brick. Wood products with exterior exposure will be wrapped with aluminum coil stock to reduce weathering. Windows will be Energy Star rated, constructed of vinyl, and include a continuous silicone bead as well as traditional flashing at the head, jamb, and sill. Exterior railings will also be constructed of vinyl which utilize recycled material and eliminates on-site finishing. A 10 mil vapor barrier which exceeds code minimum thickness will be installed under slab with all penetrations sealed. A passive Radon ventilation system will be provided for each building to reduce potential of exposure to damaging Radon gas.

All bathroom faucets, shower heads, and toilets will be EPA WateSense labeled. Bathroom exhaust will be hard ducted to the exterior and carry a rating of a minimum of 70cfm. The bath fan will be tied to the overhead light in each bathroom to encourage use of the fan for removal of humidity. Energy Star rated refrigerators and dishwashers will be installed in all kitchens and within the clubhouse space. Water heaters will have an Energy Factor of 0.95 which will be achieved without the use of an insulated blanket. Bedrooms and living rooms will have ceiling fans installed with separate switching for the fan/light to encourage reduced dependency on mechanical cooling. A programmable thermostat will be installed on each HVAC system. Ductwork will be installed with mastic and fiberglass mesh. HVAC and Fire Sprinkler systems will be Chlorofluorocarbon (CFC) free.

An additional 5% of the total units will be constructed as ANSI Type A compliant accessible units with added mobility features including over-sized roll-in showers to serve increased demand without future construction.

This project is located and designed to minimize dependency on automobiles. Primarily, this site is a vacant infill lot that is being developed with residential density. The site is providing the minimum number of parking spaces required, and is located less than 1,000 feet from a free, year-round Chapel Hill Transit bus (CM route). Pedestrian connectivity to the public sidewalk is emphasized in the site plan. Bicycle parking is provided in excess of the Town of Chapel Hill requirements.

Prepared by
Jonathan T. LaCorte, AIA, LEED AP BD+C
Ross/Deckard Architects, P.A.

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Orange County
Solid Waste Management Plan

All development applications must provide a detailed solid waste management plan, including a recycling plan and a plan for management of construction debris. The following form must be completed to fulfill this requirement. This form must be completed and approved to satisfy the requirement of a plan for management of construction debris. Please complete all information in its entirety. Assistance in completing this form is available from the Orange County Solid Waste Staff at (919) 968-2788 x107 or x109.

COMPLETE ALL INFORMATION BELOW

(Incomplete contact information will delay plan review and approval.)

Project Name: Merritt Mill Housing

Property ID #: 9778-93-3103; 9778-93-4008; 9778-93-0153; 9778-93-1183 Permit: _____

Project Location: 742 S Merritt Mill Rd, Chapel Hill, NC 27516

Project Owner: CASA

Contact Person: Jess Brandes

Address: 624 W Jones Street

Raleigh, NC 27603

Telephone: (919) 307 - 3429

Fax/Mobile: (919) 754 - 9968 / (540) 220 - 1582

Design Firm: Ballentine Associates

Contact Person: George J. Retschle, PE

Address: 221 Providence Road

Chapel Hill, NC 27514

Telephone: (919) 929 - 0481

Fax/Mobile: (919) 489 - 2803 / (_____) _____-_____

Date: 21 Apr 2017

Provide a brief description of the work to be performed under this application:

(For example: construct a new commercial building [include use/sq. ft.], apartment complex [# units], place of worship, horizontal improvements for subdivision, etc.)

New construction of affordable housing apartments, intended for United States veterans and their families.

1. Site Preparation Wastes (landclearing, demolition, deconstruction)

During site preparation for a project the amount of waste destined for a construction waste landfill or an inert debris landfill should be minimized or diverted for reuse or recycling. Many materials can be reused, recycled, or salvaged, provided that materials are kept separate. This approach may also reduce overall project waste disposal costs. **Regulated Recyclable Materials (clean wood waste, scrap metal and corrugated cardboard) generated in Orange County must be recycled**. During demolition activities, metal and wood are often not "reasonably possible to separate" or doing so may present health and safety concerns (asbestos, lead paint, etc.). In these cases only, are regulated materials not required to be separated for recycling. Consider whether the following materials will be generated on this project, *in any quantity*, and indicate the management method(s).

☒	**1. Trees and Plant Materials:**
	No tree/plant wastes will be produced (proceed to # 2)
	Tree waste will be salvaged as timber, mulch, or boiler fuel
	Valuable plants will be removed for replanting
X	Landclearing and inert debris landfill (LCID)
X	Construction and demolition debris landfill (C&D)
	Other (specify):

☒	**2. Dirt, Rock, Clean Fill, Inert materials to be removed from site:**
	No inert materials will be removed from the site (proceed to # 3)
X	Site Needs Fill
	Will be hauled to site needing fill.
	Construction and demolition debris landfill (C&D)
X	Landclearing and inert debris landfill (LCID)
	Other (specify):

☒	**3. Asphalt Paving:**
	No asphalt wastes will be produced (proceed to # 4)

	Recycled at asphalt-paving producer
	Used on or off site. Describe use: Asphalt will be milled and reused in new asphalt.
X	Disposed in an approved landfill (Orange County Landfill charges no tipfee if clean)
	Other (specify):

☒	**4. Concrete, Brick, Block, other Aggregate materials:**
	No aggregate materials will be removed from the site (proceed to # 5)

	Recycled as scrap at an aggregate producer
	Used on or off site: Describe use:
X	Construction and demolition debris landfill (C&D)
X	Landclearing and inert debris landfill (LCID)
	Other (specify):

☒	**5. Metal Scrap** **(metal wastes are required by ordinance to be recycled)**
X	No metal waste will be produced (proceed to # 6)
	Segregated for on-site recycling collection
	Recycle at Orange County Landfill (no tip fee charged)
	Segregated for hauling to scrap dealer by general contractor
	Segregated for hauling to scrap dealer by sub-contractor
	Certified Commingled Recycling Facility
	Other (specify):

☒	**6. Clean Wood Wastes** **(clean wood wastes are required to be recycled)**
	No clean wood wastes will be produced (proceed to # 7)
	Segregated for on-site recycling collection
X	Recycle at Orange County Landfill (reduced tip fee charged)
	Saved and used on future jobs
	Separated for private salvage or charity
	Certified Commingled Recycling Facility
	Other (specify):

☒	**7. Demolition/Salvage of Buildings or Structures on the Site:**
X	No structure(s) will be removed (proceed to Construction Waste section)
	Structure(s) must be removed. Please describe (include square footage for each structure):

If any structure described above is greater than 500 ft^2, it must be assessed for deconstruction possibilities. Please call Solid Waste Staff at (919) 968-2788 x107 or x109 to arrange an assessment.

Could the structure(s) be moved from the site?	YES NO Don't Know
Has the sale or donation of the structures been considered? Please explain:	YES NO
How will the structure be removed otherwise?	
What is the timetable on removal of the structure(s)?	
Are there salvageable materials (hardwood floors, fixtures, molding, that can be removed for reuse prior to demolition? If Yes, Please list (use a separate sheet if necessary):	YES NO Don't Know
Have, or will, these materials been offered for sale or donation?	YES NO

2. Construction Wastes

During the construction phase there are multiple options for recycling building materials. **Regulated Recyclable Materials (clean wood waste, scrap metal and corrugated cardboard) generated in Orange County must be recycled.** Although other materials are not required to be recycled, you are highly encouraged to do so. One of the best methods of recycling is to separate the materials on the jobsite. You may also combine materials for delivery to a certified recycling facility. Specifying waste reduction/recycling practices on a project will assure better performance.

☒	**1. Clean Wood Wastes (clean wood wastes are required by ordinance to be recycled)**
	No clean wood wastes will be produced (proceed to # 2)
	Segregated for on-site recycling collection
X	Recycle at Orange County Landfill (reduced tip fee charged)
	Saved and used on future jobs
	Separated for private salvage or charity
	Certified Commingled Recycling Facility
	Other (specify):

☒	**2. Metal Scrap (metal wastes are required by ordinance to be recycled)**
	No metal waste will be produced (proceed to # 3)
	Segregated for on-site recycling collection
X	Recycle at Orange County Landfill (no tip fee charged)
	Segregated for hauling to scrap dealer by general contractor
X	Segregated for hauling to scrap dealer by sub-contractor
	Certified Commingled Recycling Facility
	Other (specify):

☒	**3. Concrete, Brick, Block, other Aggregate materials:**
	No aggregate materials will be removed from the site (proceed to # 4)

	Recycled as scrap at an aggregate producer
	Used on or off site: Describe use:
X	Construction and demolition debris landfill (C&D)
X	Landclearing and inert debris landfill (LCID)
	Other (specify):

☒	**4. Corrugated Cardboard (cardboard wastes are required to be recycled)**
	No cardboard waste will be produced (proceed to # 5)
	Segregated for on-site recycling collection
X	Recycle at Orange County Landfill (no tip fee charged)
	Segregated for hauling to paper dealer by general contractor
X	Segregated for hauling to paper dealer by sub-contractor
	Certified Commingled Recycling Facility
	Other (specify):

☒	**5. Drywall**
	No drywall waste will be produced (proceed to # 6)

	Segregated for on-site recycling collection
	Used on site as agricultural supplement
X	Disposed in an approved landfill
	Certified Commingled Recycling Facility
	Other (specify):

☒	**6. Other Materials**
X	No other wastes will be produced (proceed to # 7)

Please specify other wastes that will be produced and how they will be managed:

Plastics (including vinyl and shrink-wrap):
Carpet and padding:
Shingles:
Fixtures (sinks, tubs, lighting, etc):
Other (specify):
Other (specify):
Other (specify):

7. Bulk Containers (Dumpsters)

County ordinance requires that any bulk waste container be labeled to define what materials are intended or prohibited from being deposited in them and be serially numbered. Hauling Licenses are required for vehicles greater than 9000 GVW in Orange County. Ensure that your waste haulers is licensed. You may contact Orange County Solid Waste for a list of licensees at (919) 968-2788 x107 or x109.

X	There will be one or more bulk containers at the site for construction wastes.
	Contractors will be required to remove own wastes without the use of bulk containers.
	Corral or similar system will be used.

3. Recycling After Occupancy

Depending on the eventual use of the structure, different waste materials will be produced and available for recycling. Recyclable materials must be separated into categories based on collection methods.

PLANNING REQUIREMENTS:

- **Indicate location of all bulk waste containers for refuse and recycling. Plan must show location of all containers, even if using existing refuse/recycling enclosures. Standard details/notes for any of the following are available from Orange County Solid Waste Management (919-968-2788 x107 or x109).**
- **All refuse/recycling containers are required to be on concrete pads.**
- **Provide a detailed and scaled plan of all bulk waste containers areas that show: each container labeled, required screening, lighting, overhead clearances, bollards, and concrete pad.**
- **Indicate whether refuse/recycling area will be gated. Any doors/gates will need retainers to be latched open for refuse/recycling collection.**
- **Ensure adequate collection vehicle access to all containers for deposit and collection. Access templates are available from Orange County Solid Waste Management.**
- **Sharing of exterior recycling locations is acceptable if a joint access/shared-use agreement is filed and the deeds of all properties amended.**

☒	**Check materials that will be generated once the structure is ready for occupancy:**
X	Standard: glass bottles, metal cans, newspaper, glossy magazines, #1 plastics, #2 plastics
X	Corrugated Cardboard (not including waxed or single layer cardboard)
X	Mixed Paper: junk mail, cereal boxes
X	Office Paper: white or colored copy paper, confidential papers
	Restaurant: food wastes, cooking oil, disposable dining ware
	Other Plastics: #5, #7
	Business specific wastes (please describe):

Cardboard Recycling Requirement

Orange County Ordinance requires recyclable corrugated cardboard to be kept separate from all other refuse. All developments must provide for cardboard recycling. If the facility's garbage will be collected from a bulk container (dumpster), a second waste container is likely to be required for cardboard. Public recycling drop-off sites can accommodate a very limited amount of commercial use (no > 50 boxes per week).

X	Site Plan includes space for cardboard recycling container on Sheet # C1001
	Corrugated Cardboard will be handled in an alternate manner. Description Required:

☒	**Collection Type: This project will be served by the following collection methods. Check all that apply.**
	Exterior individual or cooperative-use bulk waste container site. May be suitable for apartment complexes, restaurants, places of worship, educational facility, office building, retail/office/restaurant combinations
X	Garbage dumpster
	Garbage compactor
X	Cardboard dumpster
	Cardboard compactor
X	Recycling carts for glass, cans, plastic bottles, newspaper, magazines, office paper (co-mingled)
	Cooking grease rendering container (required for any commercial kitchen facility)
	Food waste collection container (If qualify based on volume; contact OCSW staff for details of program)

	Standard "curbside" recycling collection. May be suitable for single-family developments and subdivisions, including some duplex, triples, and townhome developments.

Note: Collection of solid waste, mixed recycling and corrugated cardboard will be by a private vendor and managed on-site by property management.

Solid Waste Management Plan

Project Narrative

The following is a narrative of how solid waste, mixed recyclables, and corrugated cardboard will be handled for the Merritt Mill Affordable Housing project located partially in Chapel Hill and partially in Carrboro. The project includes two 24-unit affordable housing apartment buildings with associated parking and dumpster areas. It is the intent of the developer/applicant to utilize the services of a private company for the collection of solid waste, mixed recyclables and corrugated cardboard. In doing so, the project developer/applicant understands and agrees that they are waiving their rights to have Orange County Community Recycling collect mixed recyclables and that the project will not receive public recycling collection at any time now or in the future unless a recycling center is constructed to Orange County specifications or contingency for such a center is included on the development plans. Further the project developer/applicant understands that the fees for public recycling and waste management will not be waived. In addition, attached is a will-serve letter from Waste Industries acknowledging that they have reviewed the project plans and agree to the prescribed methods for storage and collection of these materials as stated herein.

The project is designed with one dumpster area where all residents will each deposit their own refuse, cardboard and recyclables. The refuse and recycling area is located to the north of the project adjacent to the provided parking areas. One refuse and one recycling dumpster will be provided. This area will be easily accessible by residents, garbage and recycling trucks. There will be no refuse or cardboard compactors associated with this project. Cardboard will be recycled along with glass, cans, plastics, newspapers, and other co-mingled recycling permitted by Waste Industries.

WASTE INDUSTRIES

www.wasteindustries.com

148 Stone Park Ct. | Durham, NC 27703

Merritt Mill
Chapel Hill, NC 27515
14 November 2017

To Whom It May Concern,

Waste Industries is a private waste collector headquartered in Raleigh, NC. We verify that we have reviewed the Preliminary Site Plan dated 18 August 2017 (Sheet C1001), prepared by Ballentine Associates, P.A. Based upon those plans, Waste Industries is prepared to provide solid waste and recycling services for Merritt Mill, located in Chapel Hill, NC.

Regards,

Jason McMillan
Account Manager
Waste Industries USA, Inc.

EXEMPTION FORM
ENGINEERING DEPARTMENT

Request for exemption received from: **Ballentine Associates,221 Providence Rd, Eastowne Office Park, Chapel Hill, NC 27514;** Telephone: (919)929-0481

Date: August 30, 2017

Type of exemption requested: TRAFFIC IMPACT ANALYSIS (TIA)

Type of justification submitted: a) Written Request with Trip Analysis
b) Site Plan

Key reasons why we support this exemption:

a) The proposed Affordable Housing is expected to generate 291 daily vehicular trips.
b) NCDOT in agreement wih Town for issuing TIA Exemption.
c) Meets the Town TIA Guidelines for an Exemption.

Based upon the attached request for exemption and supporting information, we recommend that the Town Manager approve an exemption for:

Merritt Mill Affordable Housing

Signed: _____ 8/30/17
Traffic Engineer ***Date***

Approved: _____ 8/30/17
Public Works Director ***Date***

Attachment(s): a) Written request from the Applicant/Developer
b) Site Plan and Fee

PUBLIC WORKS DEPARTMENT
STORMWATER MANAGEMENT DIVISION
405 Martin Luther King, Jr. Blvd.
Chapel Hill, NC 27514-5705
Telephone (919) 969-7246
Fax (919) 969-7276
www.townofchapelhill.org

11/21/2016

Jess Brandes
PO Box 12545
Raleigh, NC 27605

RE: Stream Determination for Parcel #'s 9778-93-3103, 9778-93-4008

Dear Ms. Brandes:

As requested, the Town Public Works Department has performed a stream determination on the properties identified on the attached forms. This determination indicates whether different types of streams (perennial, intermittent, and/or ephemeral) or perennial waterbodies are present on the property in question or on nearby properties. These streams and their classifications are shown on the accompanying map. Stream segments regulated by the Jordan Lake Stream Buffer ordinance are highlighted. **Locations of all features on the map are approximate and must be field surveyed for precise location.**

This stream determination information is used to determine the location and extent of the Resource Conservation District and the Jordan Lake Watershed Riparian Buffer. Specific land use regulations and restrictions apply within the boundaries of these protected areas. If you are considering any kind of work on your property, including clearing vegetation, paving, grading, or building, please consult with the Town Planning Department to determine the possible extent of the Resource Conservation District and Jordan Lake Watershed Riparian Buffer on your property and corresponding regulations.

This classification will remain in effect for five years from the date of the site visit before a request for reclassification will be considered, unless the stream channel characteristics are significantly altered as a result of watershed changes.

In accordance with the Town's procedures, you may appeal this administrative decision to the Town Manager. If you wish to do so, you must file your written appeal accompanied by any materials you believe support your appeal, within **30** days of receipt of this letter.

If you have questions regarding stream determinations, please contact me at (919) 969-5083. If you have questions regarding the Town's Resource Conservation Districts or the Jordan Watershed Riparian Buffer regulations, please contact the Planning Department at (919) 968-2728, or view information online at http://www.townofchapelhill.org/town-hall/departments-services/public-works/stormwater-management/regulations-ordinances.

Regards,

Dave Milkereit
Stormwater Specialist

PUBLIC WORKS DEPARTMENT
STORMWATER MANAGEMENT DIVISION
405 Martin Luther King, Jr. Blvd.
Chapel Hill, NC 27514-5705
Telephone (919) 969-7246
Fax (919) 969-7276
www.townofchapelhill.org

STREAM DETERMINATION SITE VISIT RESULTS

Property Information	
Parcel ID Number (PIN)	Address / Location Description
9778-93-3103	S Merritt Mill vacant lot
9778-93-4008	S Merritt Mill vacant lot

These are the results of a site visit to the properties listed above for a stream determination conducted on 11/16/2016 by Town Staff:

☐ No perennial, intermittent, or ephemeral streams or perennial waterbodies were identified on or near the property(ies) in question.

☒ Perennial, intermittent, or ephemeral streams, or perennial waterbodies, were identified on or near the property(ies) in question and shown on the attached map(s).

A map showing water features, their Town flow classifications, presence of Jordan Watershed Riparian Buffers, and their approximate locations is attached. Origins or breakpoints that have been flagged in the field are marked on the map. Stream classification forms and additional site visit notes and maps are also attached.

Other conditions exist which may affect the location of the Resource Conservation District or Jordan Watershed Riparian Buffer:

☐ FEMA floodzone is mapped in the area. Precise location of the Base Flood Elevation and associated Resource Conservation District must determined by a field survey commissioned by the owner or a representative.

☐ Segments of perennial or intermittent stream are piped in the area, as shown on the map. These segments do not have an associated Jordan Watershed Riparian Buffer.

☐ Possible Jurisdictional Wetlands have been identified in the area. A formal review by a professional certified in Jurisdictional Wetland Delineation is recommended.

_____ 11/21/2016
Town Staff signature date

Stream Determination Area Map

- Ephemeral Stream
- Intermittent Stream
- Culverts
- 2-foot Contours
- 10-foot Contours
- Buildings
- Parcels
- Site visited
- Ephemeral Breakpoint
- Intermittent Breakpoint
- Perennial Breakpoint

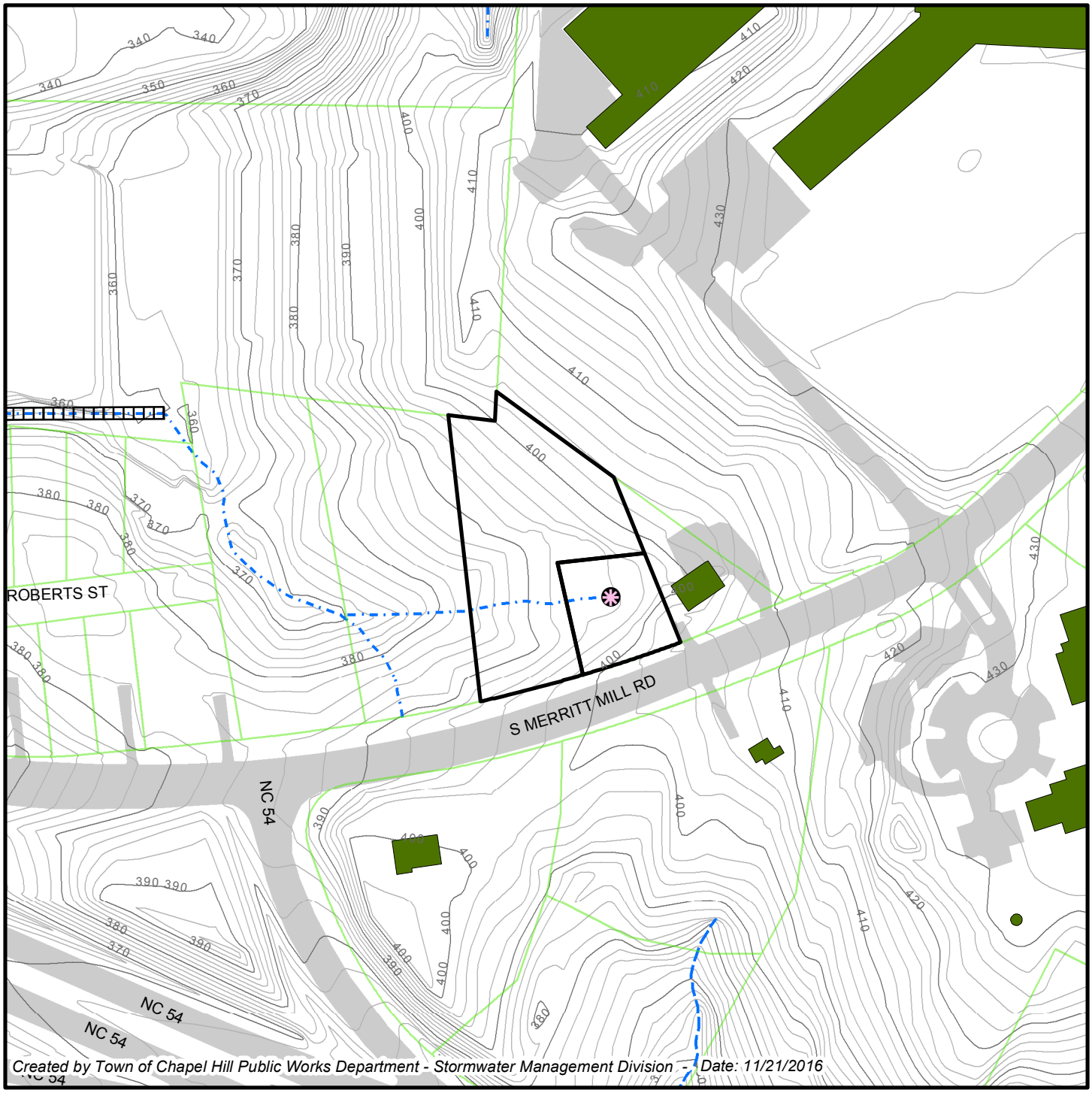
Address: S Merritt Mill vacant lots

Parcel ID's: 9778-93-3103, 9778-93-4008

0 75 150 300 Feet

1 inch = 150 feet

Stream locations are approximate and must be verified by survey.
Buffers are measured from top of bank.



Created by Town of Chapel Hill Public Works Department - Stormwater Management Division - Date: 11/21/2016

USGS 24K Topographic / County Soil Survey Maps

Site Parcel Boundary

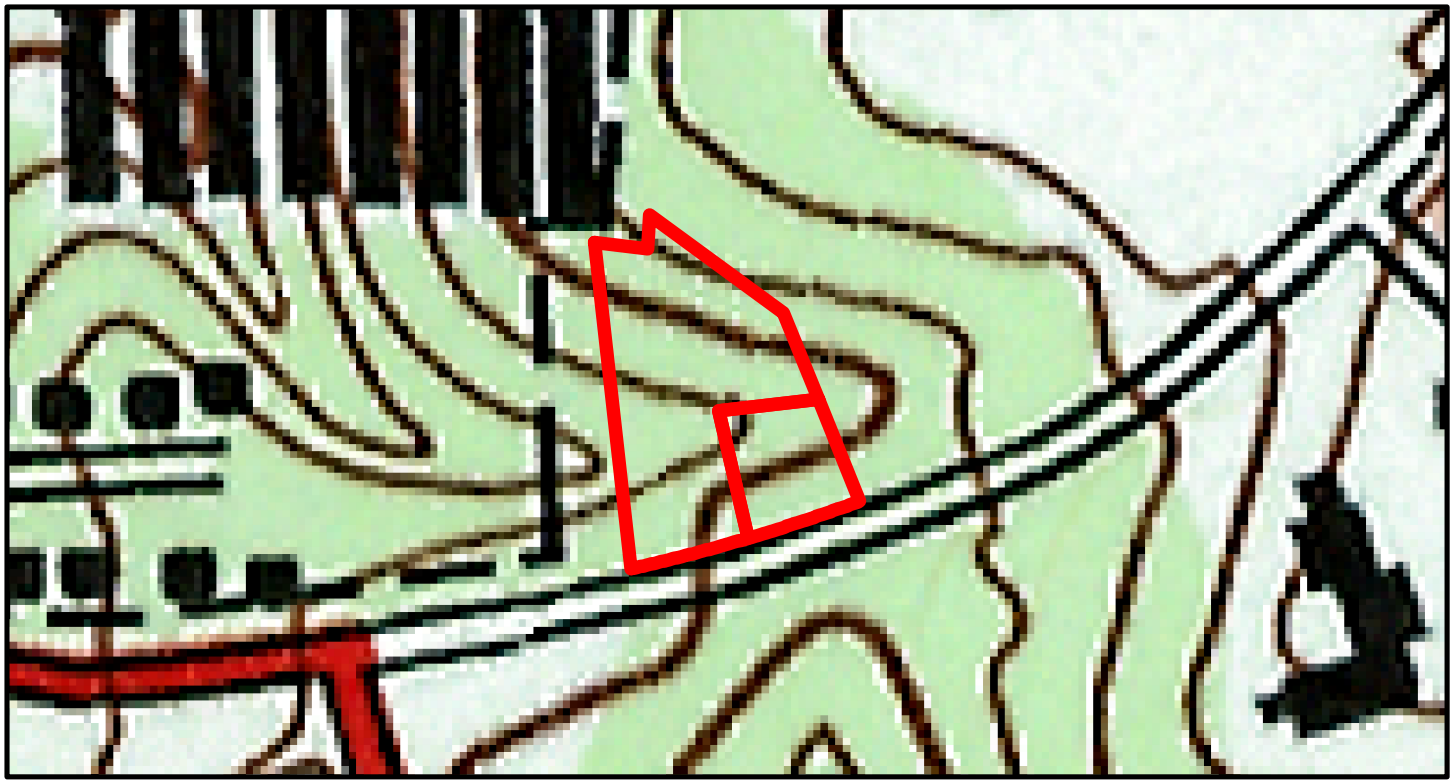
0 50 100 150 200 Feet

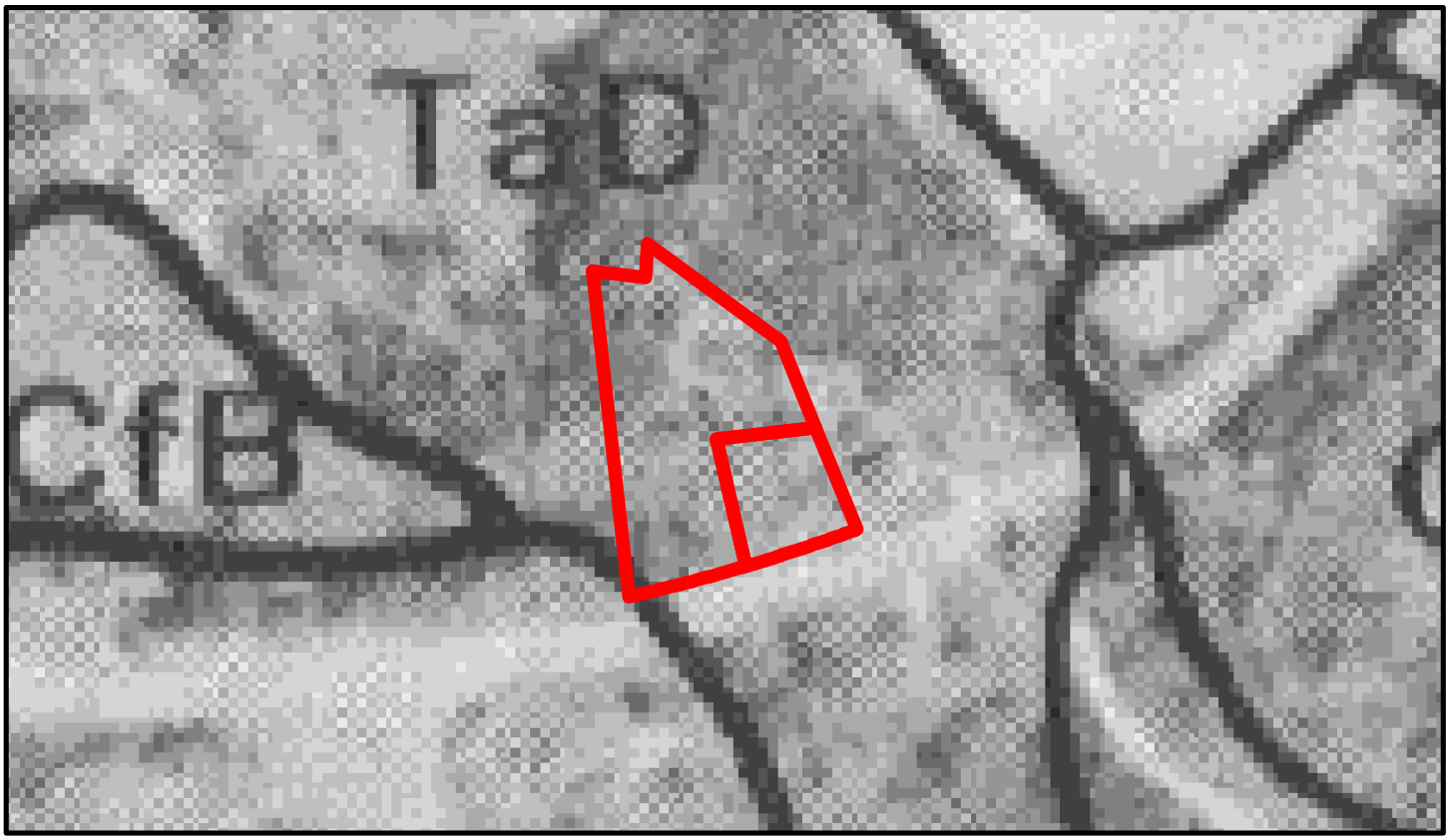
1 inch = 175 feet

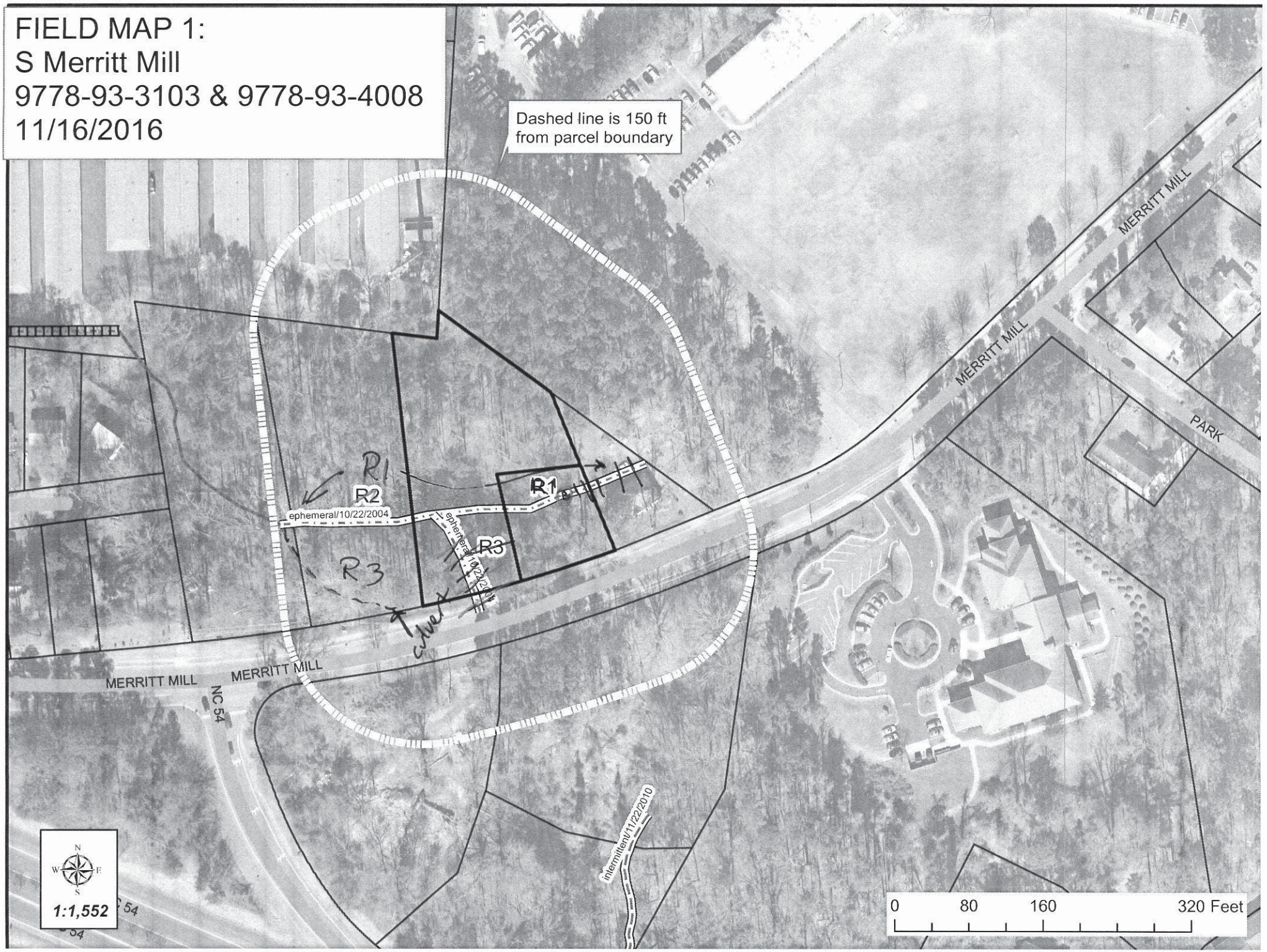
Address: S Meritt Mill vacant lots

Parcel ID: 9778-93-3103, 9778-93-4008

Created by Town of Chapel Hill Public Works Department - Stormwater Management Division- 11/21/2016






FIELD MAP 1:
S Merritt Mill
9778-93-3103 & 9778-93-4008
11/16/2016
Dashed line is 150 ft from parcel boundary
MERRITT MILL
MERRITT MILL
PARK
R1
R2
R1
ephemeral/10/22/2004
ephemeral/10/22/2004
R3
R3
river
MERRITT MILL
MERRITT MILL
NC 54
intermitent/11/22/2010
1:1,552
0
80
160
320 Feet

2016 11 16 1911

R1

NC DWQ Stream Identification Form Version 4.11

Date: 11/16/16	**Project/Site:**	**Latitude:**
Evaluator: AW, DM	**County:**	**Longitude:**
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 9	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 5.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

20161116 1420

R3

NC DWQ Stream Identification Form Version 4.11

Date: 11/16/16	Project/Site:	Latitude:
Evaluator: AW, DM	County:	Longitude:
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 16.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other *e.g. Quad Name:*

A. Geomorphology (Subtotal = 9)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	(2)	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	1	(2)	3
9. Grade control	0	0.5	(1)	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 1.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	(0.5)	1	1.5
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

PUBLIC WORKS DEPARTMENT
STORMWATER MANAGEMENT DIVISION
405 Martin Luther King, Jr. Blvd.
Chapel Hill, NC 27514-5705
Telephone (919) 969-7246
Fax (919) 969-7276
www.townofchapelhill.org

REQUEST FOR STREAM DETERMINATION

Stream determinations provide information used to determine whether the Town's Resource Conservation District (RCD) or Jordan Watershed Riparian Buffer Protection regulations apply to a property. Town staff will typically conduct a field visit to classify streams on the property(ies) indicated below within two weeks of a request, depending on weather conditions, staff availability, and scope of the request. Please note that stream determinations cannot be conducted within 48 hours of a rain event. There is no fee for stream determinations conducted by Town staff.

A stream determination report indicates the results of a stream classification. Stream classifications expire after five years. If a stream determination has been completed on or near the property(ies) listed below within the last five years, a site visit may not be required unless local hydrology has changed significantly or the stream classification has expired. If a site visit is not required, the stream determination will be based on a records review.

Requests may be emailed (dmilkereit@townofchapelhill.org), faxed, dropped off at Town Hall or the Stormwater Office, or mailed to the above address in care of the "Stormwater Specialist."

Requestor's Name: Jess Brandes

Mailing Address: PO Box 12545

City, State, ZIP: Raleigh, NC 27605

Phone / FAX / Email: 919-307-3429 jbrandes@casanc.org

Check method(s) for report to be sent: ☐ US Mail ☒ Email ☐ FAX ☐ Call for pickup

Signature of property owner or designated legal agent granting permission to Town Staff to enter the property(ies) indicated below for purposes of a Stream Determination:

(Signature) Pres 11-7-16 (Date)

Owner Name(s): Glen Grossmoor, Pres. Grossmoor Builders Inc
(Please print)

Company Name (if applicable): Grossmoor Builders, Inc

Property Information

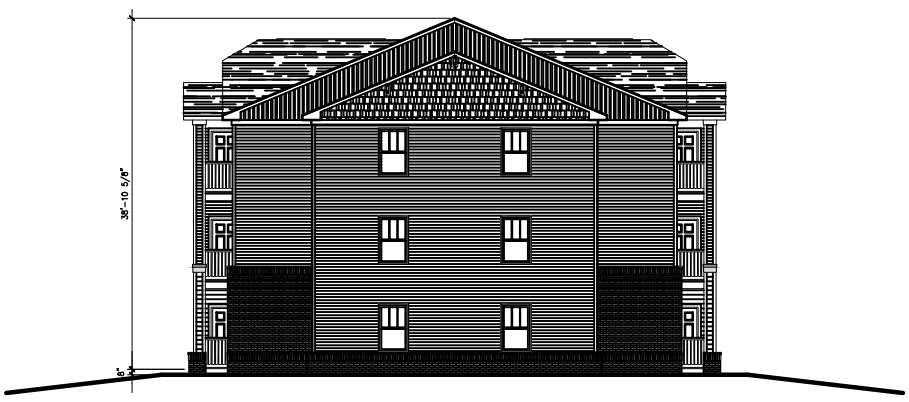
Fill in both columns, *or* fill in Parcel ID Number (PIN) and attach a site map indicating location.

Parcel ID Number (PIN)	Address / Location Description
9778933103	S. Merritt Mill vacant lot
9778934008	S. Merritt Mill vacant lot

Where the **total area** of the property(ies) to visit is **over 3 acres,** please attach an as-built drawing or a topographic map with current landmarks.

Front Elevation

Rear Elevation



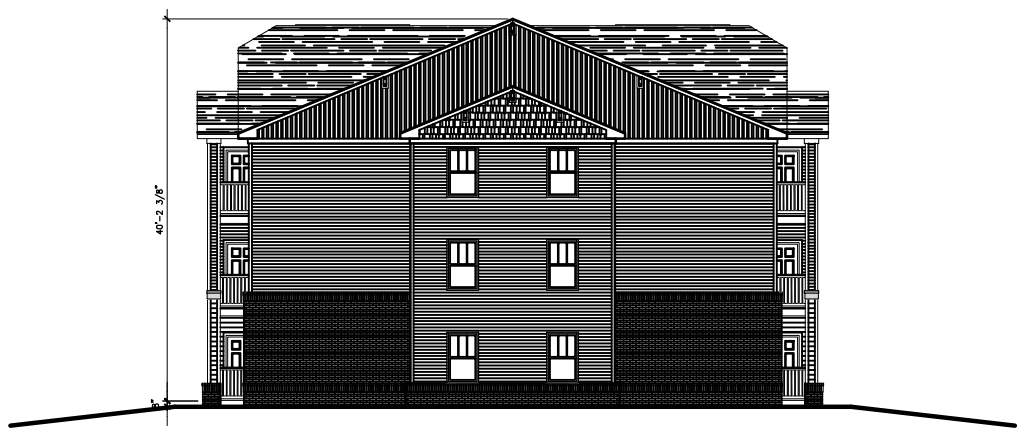
Side Elevation

Right Elevation

BUILDING 1 BR - 3 STORY

40'-2 3/8"
8"
4'-0"
40'-2 3/8"
8"

40'-2 3/8"
8"
4'-0"
40'-2 3/8"
8"


40'-2 3/8"
8"

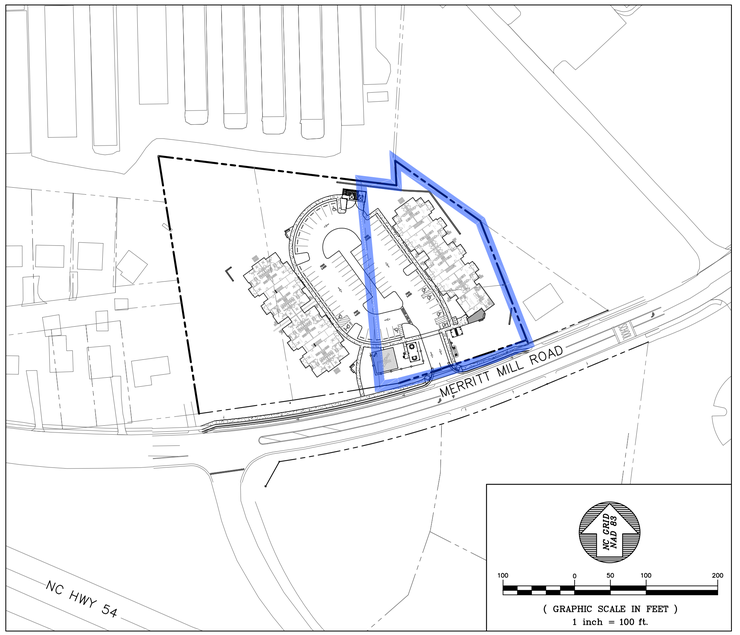
SPECIAL USE PERMIT DRAWINGS

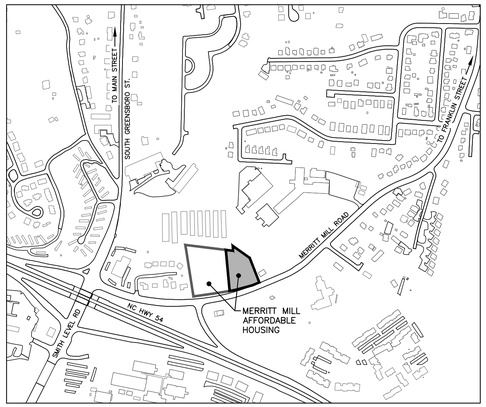
FOR

MERRITT MILL AFFORDABLE HOUSING

CHAPEL HILL & CARRBORO

PINs: 9778-93-3103
9778-93-4008
9778-93-0153
9778-93-1183





VICINITY MAP
SCALE: 1"=500'

DRAWING LIST

SHEET	DRAWING TITLE
G0001	COVER
C0001	AREA MAP
C0101	EXISTING CONDITIONS, DEMOLITION & LANDSCAPE PROTECTION PLAN
C1001	PRELIMINARY SITE PLAN
C1101	UTILITY OVERVIEW
C1102	PRELIMINARY LIGHTING PLAN
C1201	GRADING & STORMWATER MANAGEMENT PLAN
C4201	STORMWATER CONTROL MEASURE ENLARGEMENTS
C5001	SITE DETAILS
C5002	SITE DETAILS
C5201	STORM DRAINAGE DETAILS
L1001	PRELIMINARY LANDSCAPE PLAN
A-3.1	BUILDING ELEVATIONS - EAST
A-3.2	BUILDING ELEVATIONS - WEST

CIVIL ENGINEER:
BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD CHAPEL HILL, N.C. 27514
(919) 929-0481 www.bapa.eng.pro

DEVELOPER:
CASA
624 W Jones Street
Raleigh NC 27603
Direct line: 919.307.3429

ARCHITECT:
R/DA
Ross/Deckard Architects
4010 Wake Forest Rd
Raleigh, NC 27609
919.875.0001

REVIEW DRAWING
NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 929-0481 FAX (919) 968-4789

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BALLENTINE ASSOCIATES P.A. CORPORATE SEAL C328 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE
NOT FOR CONSTRUCTION
029127

NUM	REVISIONS	DATE

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

ISSUED	DATE
SUP SUBMITTAL #1	31 AUG 17
SUP SUBMITTAL #2	27 NOV 17
SUP SUBMITTAL #3	7 DEC 17
SUP SUBMITTAL #4	30 JAN 18

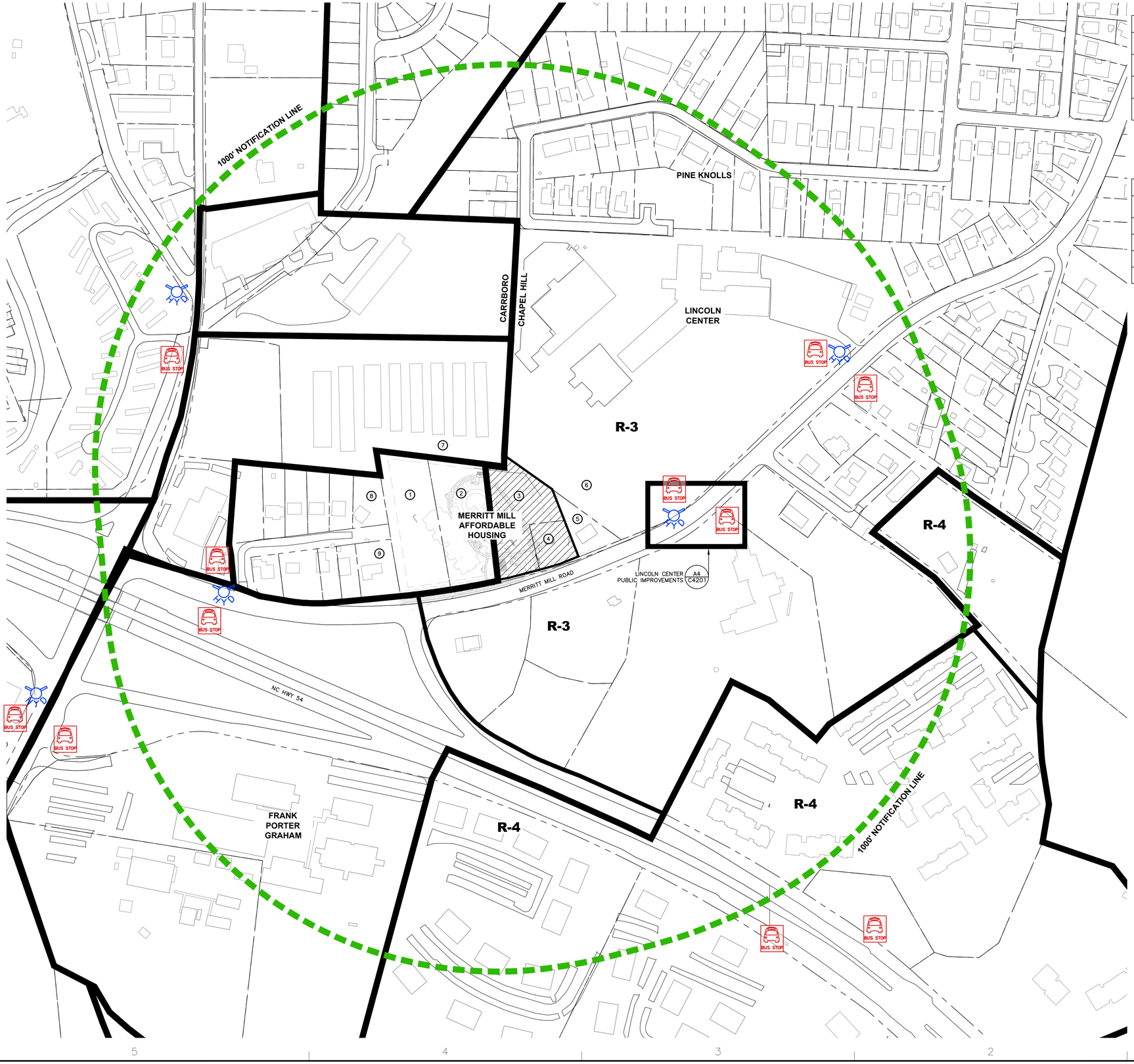
MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
G0001

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files_G0001-Cover-MMH.dwg, 1/30/2018 8:10:11 PM, DavidB, 1:1

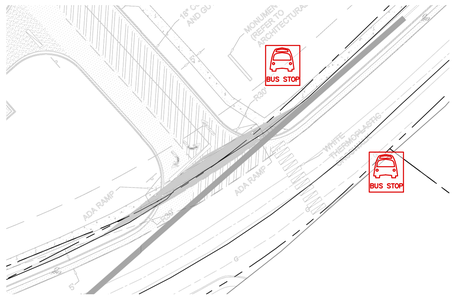


SITE PARCEL DATA

LABEL #	OWNER	PIN #	ZONING	DB./PG.	PARCEL ACREAGE	CURRENT LAND USE
1	GREENSTREET BUILDERS INC.	9778-93-0153	R-3	4964/476	45,401	VACANT
2	GREENSTREET BUILDERS INC.	9778-93-1183	R-3	4964/476	41,432	VACANT
3	GREENSTREET BUILDERS INC.	9778-93-3103	R-3	4964/476	36,586	VACANT
4	GREENSTREET BUILDERS INC.	9778-93-4008	R-3	4965/277	10,070	VACANT

ADJOINER PARCEL DATA

LABEL #	OWNER	PIN #	ZONING	CURRENT LAND USE
5	TERRY CARVER	9778-93-4164	CHAPEL HILL R-3	SINGLE-FAMILY RESIDENTIAL
6	CHAPEL HILL BOARD OF EDUCATION	9778-93-6524	CHAPEL HILL R-3	SCHOOL, OFFICE
7	PS NC III LP	9778-83-9403	CARRBORO M1	STORAGE
8	RUTHENA STANFORD	9778-83-9117	CARRBORO R75	SINGLE-FAMILY RESIDENTIAL
9	ROSCOE B. FARROW II	9778-83-9033	CARRBORO R75	VACANT



C1 C0001

LINCOLN CENTER PUBLIC IMPROVEMENTS

SCALE: 1"=40'

DRAWING LEGEND

SYMBOL	DESCRIPTION
	1000' NOTIFICATION LINE
	ZONING BOUNDARY
	PROPERTY LINE
	RIGHT-OF-WAY
	ADJACENT PROPERTY LINE
R-1	ZONING CLASSIFICATION
BUS STOP	EXISTING BUS STOP
	EXISTING FIRE HYDRANT

NC GRID NAD 83

AREA MAP

120 0 60 120 240

(GRAPHIC SCALE IN FEET)
1 inch = 120 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 967-4789 FAX (919) 967-8816

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Ballentine Associates P.A. CORPORATE SEAL C328 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE
NOT FOR CONSTRUCTION
029127

REVISIONS

NUM	DATE

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

ISSUED	DATE
SUP SUBMITTAL #1	31 AUG 17
SUP SUBMITTAL #2	27 NOV 17
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SUP SUBMITTAL #4	30 JAN 18

MERRITT MILL APARTMENTS AFFORDABLE HOUSING

CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C0001

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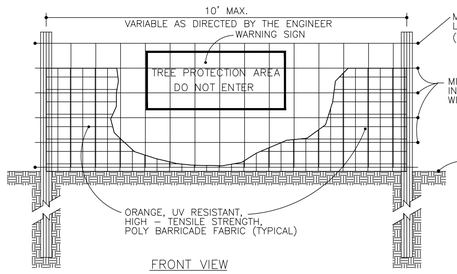
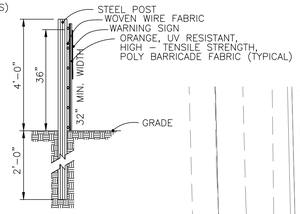
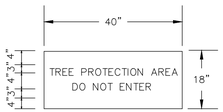


FRONT VIEW



SIDE VIEW



WARNING SIGN DETAIL

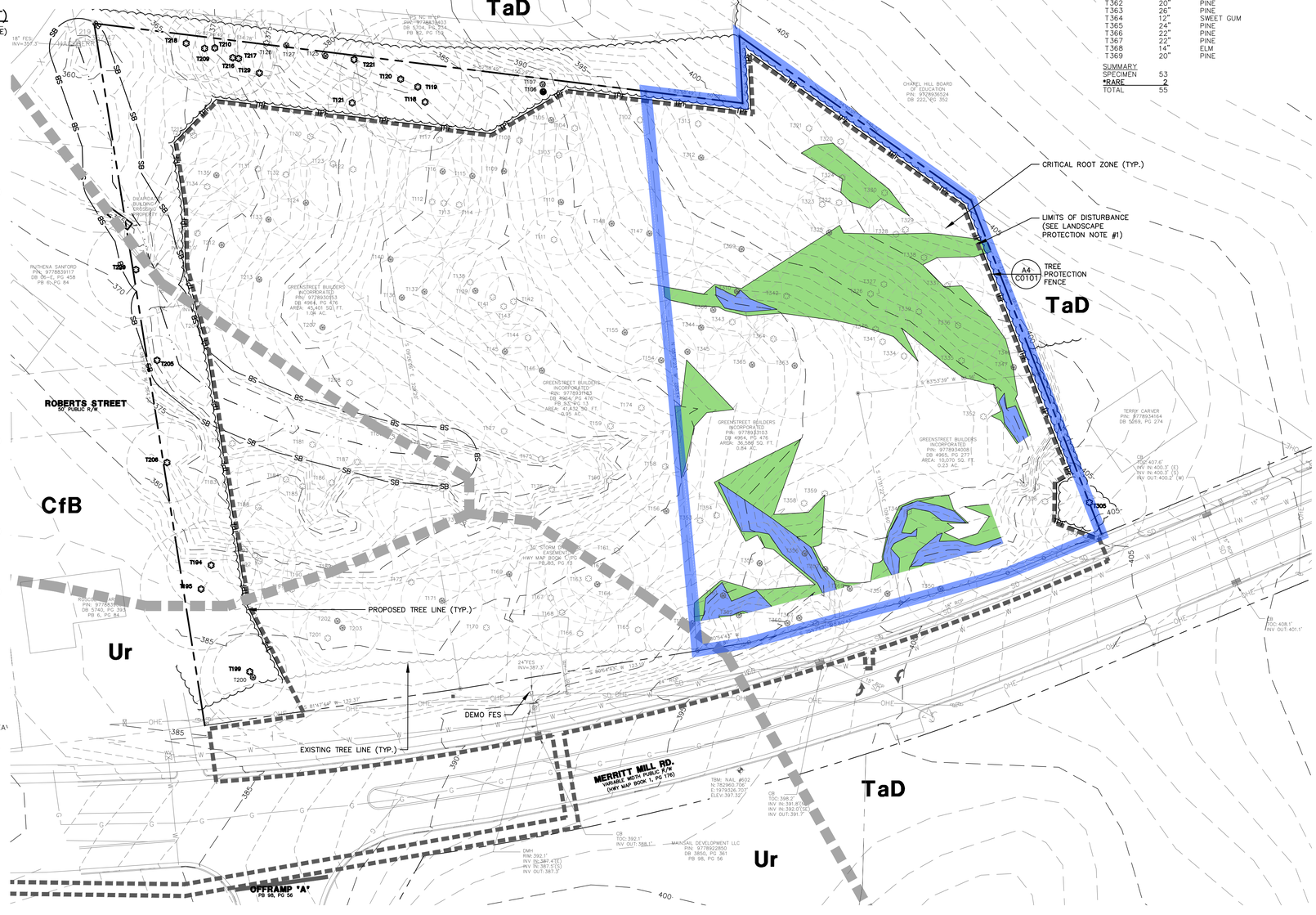
NOTES:
1. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
2. LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
4. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
8. ADDITIONAL SIGNS MAY BE REQUIRED BY TOWN OF CARRBORO, CHAPEL HILL INSPECTIONS DEPARTMENT(S) BASED ON ACTUAL FIELD CONDITIONS.
9. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.

C5 / C0101 TEMPORARY TREE PROTECTION FENCE
N.T.S.

EXISTING TREES (WEST)

TAG #	DBH	NAME (*RARE)
T102	8"	BEECH
T103	14"	HICKORY
T104	8"	BEECH
T105	18"	PINE
T106	16"	CEDAR
T107	8"	CEDAR
T108	30"	POPLAR
T109	22"	PINE
T110	26"	PINE
T111	14"	POPLAR
T112	18"	POPLAR
T113	22"	POPLAR
T114	14"	ELM
T115	18"	PINE
T116	22"	PINE
T117	18"	OAK
T118	24"	POPLAR
T119	32"	POPLAR
T120	30"	POPLAR
T121	24"	POPLAR
T122	26"	POPLAR(X2)
T123	28"	POPLAR
T124	18"	PINE
T125	24"	PINE
T126	9"	DOGWOOD
T127	24"	PINE
T128	16"	OAK
T129	18"	HICKORY
T130	14"	OAK
T131	18"	POPLAR
T132	12"	BASSWOOD
T133	20"	PINE
T134	14"	ELM
T135	22"	PINE
T136	20"	PINE
T137	18"	PINE
T138	14"	POPLAR
T139	26"	PINE
T140	26"	PINE
T141	12"	POPLAR
T142	14"	POPLAR
T143	24"	POPLAR
T144	16"	POPLAR
T145	20"	PINE
T146	20"	PINE
T147	22"	PINE
T148	18"	PINE
T154	18"	PINE
T155	20"	PINE
T156	18"	PINE
T157	24"	PINE
T158	18"	SWEET GUM
T159	22"	HICKORY
T160	22"	POPLAR(X2)
T161	24"	POPLAR
T162	20"	SYCAMORE
T163	22"	SYCAMORE
T164	18"	PINE
T165	22"	POPLAR
T166	19"	POPLAR
T167	28"	SYCAMORE
T168	12"	POPLAR
T169	18"	PINE
T170	36"	SYCAMORE
T171	20"	PINE
T172	24"	POPLAR(X3)
T173	34"	POPLAR
T174	20"	POPLAR
T175	30"	POPLAR
T176	26"	POPLAR
T177	14"	HICKORY
T178	14"	POPLAR
T179	34"	SYCAMORE
T180	26"	POPLAR(X2)
T181	22"	ASH
T182	32"	POPLAR
T183	14"	ELM
T184	24"	POPLAR
T185	12"	POPLAR
T186	18"	POPLAR
T187	22"	POPLAR
T188	22"	POPLAR
T189	26"	POPLAR
T190	14"	POPLAR
T191	14"	ELM
T192	18"	POPLAR
T193	14"	HICKORY
T194	22"	OAK
T195	30"	ELM
T199	18"	POPLAR
T200	26"	PINE
T201	14"	TREE OF HEA
T202	22"	PINE
T203	18"	PINE
T204	16"	HACKBERRY
T205	12"	ELM
T206	20"	POPLAR
T207	24"	PINE
T208	18"	POPLAR
T209	26"	POPLAR
T210	24"	POPLAR
T211	24"	POPLAR
T212	22"	PINE
T213	24"	PINE
T214	30"	POPLAR
T215	16"	POPLAR
T216	20"	POPLAR
T217	16"	OAK
T218	18"	POPLAR
T220	24"	SYCAMORE
T221	9"	DOGWOOD

SUMMARY	
SPECIMEN	51
*RARE	60
TOTAL	101



EXISTING TREES (EAST)

TAG #	DBH	NAME (*RARE)
T301	20"	ELM
T305	28"	*OAK
T306	20"	OAK
T307	20"	POPLAR
T309	24"	PINE
T310	22"	PINE
T312	22"	PINE
T313	18"	POPLAR
T320	16"	OAK
T321	20"	SWEET GUM
T322	14"	POPLAR
T323	12"	SWEET GUM
T324	14"	SWEET GUM
T325	22"	PINE
T326	18"	POPLAR
T327	16"	POPLAR
T328	16"	POPLAR
T329	18"	POPLAR
T330	8"	MAGNOLIA
T334	16"	SWEET GUM
T335	22"	POPLAR
T336	22"	POPLAR
T337	18"	POPLAR
T338	18"	SWEET GUM
T339	16"	POPLAR
T340	16"	POPLAR
T341	16"	POPLAR
T342	22"	POPLAR
T343	16"	SWEET GUM
T344	20"	PINE
T345	18"	PINE
T346	12"	HACKBERRY
T347	20"	PINE
T348	16"	SWEET GUM(X2)
T349	20"	OAK
T350	18"	PINE
T351	28"	PINE
T352	36"	*OAK
T353	12"	ELM
T354	6"	BLUE BEECH
T355	20"	PINE
T356	20"	PINE
T357	20"	PINE
T358	20"	OAK
T359	14"	ELM
T360	24"	PINE
T361	18"	PINE
T362	20"	PINE
T363	26"	PINE
T364	12"	SWEET GUM
T365	24"	PINE
T366	22"	PINE
T367	22"	PINE
T368	14"	ELM
T369	20"	PINE

SUMMARY	
SPECIMEN	53
*RARE	2
TOTAL	55

EXISTING CONDITIONS & DEMOLITION NOTES

1. EXISTING CONDITIONS SHOWN ARE BASED UPON A SITE SURVEY PERFORMED BY BALLENTINE ASSOCIATES AND DATED 25 AUG 17, AND UPON DATA OBTAINED FROM TOWN OF CHAPEL HILL, CARRBORO AND ORANGE COUNTY GIS.
2. REFER TO SHEET C1301 FOR EROSION CONTROL NOTES, CONSTRUCTION SEQUENCE, AND FOR MORE INFORMATION ABOUT LIMITS OF DISTURBANCE AND TREE PROTECTION.
3. FOR NEAREST EXISTING FIRE HYDRANTS & BUS SHELTERS REFER TO SHEET C0101.

LANDSCAPE PROTECTION NOTES

1. PRIOR TO ANY LAND-DISTURBING ACTIVITY ON SITE, TREE PROTECTION FENCING MUST BE INSTALLED AND A PRE-CONSTRUCTION CONFERENCE HELD WITH THE TOWN'S URBAN FORESTER (FOR APPROVAL OF TREE PROTECTION FENCING LOCATIONS). CONTACT EMILY CAMERON AT 919-969-5114 FOR INSPECTION.
2. ANY TREE ROOTS EXPOSED BY CONSTRUCTION WILL BE SEVERED CLEANLY WITH AN APPROPRIATE PRUNING TOOL.
3. THE SOIL WITHIN THE CRITICAL ROOT ZONES OF EXISTING TREES TO REMAIN WILL NOT BE DRIVEN ON OR OTHERWISE DISTURBED DURING THE INSTALLATION OF LANDSCAPING.
4. A LANDSCAPE PROTECTION SUPERVISOR WHO IS REGISTERED WITH THE TOWN OF CHAPEL HILL WILL BE PRESENT ON SITE AT ALL TIMES WHEN THE FOLLOWING ACTIVITIES ARE TAKING PLACE: CLEARING, GRUBBING, EXCAVATION, GRADING, TRENCHING, MOVING OF SOIL, INSTALLATION AND REMOVAL OF TREE PROTECTION FENCING, AND THE DELIVERY TRANSPORTING AND PLACEMENT OF CONSTRUCTION MATERIALS AND EQUIPMENT.
5. ALL DEMOLITION AND CONSTRUCTION ACTIVITIES OUTSIDE THE LIMITS OF THE TREE PROTECTION FENCING SHALL BE PERFORMED WITHOUT THE USE OF HEAVY EQUIPMENT.
6. MINIMUM TREE CANOPY COVERAGE OF 30% OF NET LAND AREA TO BE PROVIDED BY COMBINATION OF EXISTING TREES TO REMAIN AND TREES TO BE PLANTED.

DRAWING LEGEND

SYMBOL	DESCRIPTION
461	MINOR CONTOUR
460	MAJOR CONTOUR
WV	WATER VALVE
	FIRE HYDRANT
	FIRE DEPT. CONNECTION
	UTILITY POLE
	WATER METER
	SIGN POST
5	PARKING COUNT
	SITE LIGHTING POST
	PROPERTY LINE
	ADJOINING PROPERTY LINE
	RIGHT-OF-WAY LINE
OHE	OVERHEAD ELECTRIC LINE
UE	UNDERGROUND ELECTRIC LINE
W	WATER LINE
G	GAS LINE
SD	STORM DRAINAGE PIPE
	EXISTING TREE LINE
	SLOPES LESS THAN 15%
	SLOPES BETWEEN 15% AND 25%
	SLOPES GREATER THAN 25%
TaD / CfB	SOILS TYPE DELINEATION (SEE SOIL TYPE LEGEND)
	SPECIMEN TREE SAVE
	RARE TREE SAVE
	R-SS-C REZONE AREA
	LIMITS OF DISTURBANCE

SOIL TYPE LEGEND

MAP SYMBOL	SOIL NAME	HYDROLOGIC GROUP
TaD	TARRUS SILT LOAM (8% TO 15% SLOPES)	B
Ur	URBAN LAND COMPLEX	
CfB	CECIL FINE SANDY LOAM (2% TO 6% SLOPES)	A

NC GRID NAD 83

EXISTING CONDITIONS, DEMOLITION & LANDSCAPE PROTECTION PLAN

30 0 15 30 60
(GRAPHIC SCALE IN FEET)
1 inch = 30 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 968-4331 FAX (919) 968-4789
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BALLENTINE ASSOCIATES P.A. CORPORATE SEAL C328 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — NOT FOR CONSTRUCTION 029127 — GEORGE J. RETSCHLE

NUM	REVISIONS	DATE

ISSUED	DATE
SUP SUBMITTAL #1	31 AUG 17
SUP SUBMITTAL #2	27 NOV 17
SUP SUBMITTAL #3	7 DEC 17
SUP SUBMITTAL #4	30 JAN 18

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C0101

NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE TOWN OF CHAPEL HILL AND NCDOT STANDARDS AND SPECIFICATIONS
2. TRUNCATED DOMES ARE REQUIRED AT ALL CROSSWALKS AND RAMPS.
3. THE TOWN OF CHAPEL HILL, ITS ASSIGNS OR THE COUNTY SHALL NOT BE RESPONSIBLE FOR ANY PAVEMENT DAMAGE THAT MAY RESULT FROM SERVICE VEHICLES.
4. NO CERTIFICATES OF OCCUPANCY SHALL BE ISSUED UNTIL ALL REQUIRED PUBLIC IMPROVEMENTS ARE COMPLETED.
5. SOLID WASTE & RECYCLING COLLECTION TO BE PROVIDED FOR BY A PRIVATE VENDOR.

PUBLIC RECYCLING WAIVER

1. APPLICANT ELECTS TO PROVIDE RECYCLING SERVICES TO RESIDENTS/TENANTS OF THIS PROPERTY IN LIEU OF BUILDING A RECYCLING STATION CONSTRUCTED TO ORANGE COUNTY SPECIFICATIONS. THE SITE WILL NOT RECEIVE PUBLIC RECYCLING COLLECTION NOW OR IN THE FUTURE UNLESS SUCH A RECYCLING STATION IS CONSTRUCTED OR CONTINGENCY FOR SUCH A STATION IS INCLUDED ON THE DEVELOPMENT PLANS.
2. APPLICANT MUST REQUIRE AT THE LEAST THE SAME LEVEL OF SERVICE (CURRENT OR FUTURE) TO ITS RESIDENTS AS THAT PROVIDED BY ORANGE COUNTY.
3. COUNTY FEES FOR RECYCLING AND WASTE MANAGEMENT ASSOCIATED WITH THIS PROJECT/PROPERTY WILL NOT BE WAIVED.
4. APPLICANT AGREES TO ENTER INTO A SERVICE AGREEMENT WITH A PRIVATE SOLID WASTE/RECYCLING COLLECTION CONTRACTOR THAT IS ACCEPTABLE TO ORANGE COUNTY. FURTHER, THE AGREEMENT SHALL PROVIDE FOR THE COLLECTION AND RECYCLING OF CORRUGATED CARDBOARD IN ADDITION TO THE OTHER CO-MINGLED RECYCLABLES AND AN EXECUTED COPY OF THE AGREEMENT SHALL BE PROVIDED TO AND APPROVED BY ORANGE COUNTY PRIOR TO APPROVAL OF FINAL CONSTRUCTION PLANS FOR THE PROPERTY/PROJECT.

CONSTRUCTION WASTE NOTES

1. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DECONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS.
2. PURSUANT TO THE COUNTY'S RRMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
3. PURSUANT TO THE COUNTY'S RRMO, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE (WHICH INCLUDES ANY REGULATED RECYCLABLE MATERIALS) SHALL BE LICENSED BY ORANGE COUNTY.
4. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
5. THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS ('ACM') AND/OR OTHER HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

SITE DATA – EAST (CHAPEL HILL PARCELS)

APPLICANT:	CASA	
PROPERTY OWNER:	GREENSTREET BUILDERS, INC.	
PROPERTY ADDRESS:	800 MERRITT MILL ROAD, CHAPEL HILL, NC	
PIN NUMBERS:	9778933103	9778934008
DEED REFERENCES:	DB 4964 PG 476	DB 4964 PG 277
EXISTING ZONING:	R-3	R-3
PROPOSED ZONING:	R-SS-C	R-SS-C
EXISTING USE:	VACANT	VACANT
PROPOSED USE:	MULTI-FAMILY	MULTI-FAMILY
LAND AREA SUMMARY:		
NET LAND AREA	46,656 SF (1.07 AC)	
CREDITED STREET AREA	4,666 SF (0.11 AC)	
GROSS LAND AREA	51,322 SF (1.18 AC)	
FLOOR AREA SUMMARY:		
MAX. FLOOR AREA	1.10 (FAR) X 51,322 SF (GLA) = 56,454 SF	
PROPOSED FLOOR AREA	±25,000 SF	
VEHICLE PARKING SUMMARY:	REGULAR	ACCESSIBLE
MINIMUM REQUIRED (CH SIDE)	24	1 (VAN)
MAXIMUM ALLOWED (CH SIDE)	30	1 (VAN)
PROPOSED (CH SIDE ONLY)	26	5 (1 VAN)
PROPOSED (OVERALL SITE)	66	7 (2 VAN)
BICYCLE PARKING SUMMARY:	REQUIRED	PROPOSED
CLASS I	5	*24
CLASS II	1	**10
TOTAL	6	34
*EACH UNIT WILL HAVE A LOCKABLE PORCH CLOSET		
**3 INVERTED "Us" AT COMMUNITY BUILDING + INVERTED "U" @ EACH STAIRWELL		
IMPERVIOUS SUMMARY:		
EXISTING	0 SF (0.000 AC)	
POST DEVELOPED TOTAL	±25,000 SF (0.574 AC)	
NET IMPERVIOUS INCREASE	±25,000 SF (0.574 AC)	
RECREATION SPACE SUMMARY:		
REQUIRED (0.05 X GLA)	2,567 SF	
PROVIDED:		
COMMUNITY BUILDING	965 SF	
COVERED PATIO	254 SF	
PLAYGROUND	930 SF	
PICNIC AREA	350 SF	
SITTING AREAS	465 SF	
TOTAL REC. SPACE PROVIDED:	2,964 SF	

DRAWING LEGEND

SYMBOL/ABBREVIATION

EXISTING	PROPOSED	DESCRIPTION
		IRON PIPE/PROPERTY CORNER
		LANDSCAPE BUFFER
		BUILDING SETBACK
		SIGN
		PROPERTY LINE
		RIGHT-OF-WAY
		EASEMENT
		SUP / R-SS-C REZONE AREA

DETAIL REFERENCE

PLAN KEY NOTES

1. CONCRETE WHEELSTOP (TYP.)
2. 30" CONCRETE CURB & GUTTER
3. ADA DUMPSTER PLAN BY R/DA
4. RETAINING WALL – DESIGN BUILD
5. ACCESSIBLE RAMP
6. INVERTED "U" BIKE PARKING
7. FIRE LANE STRIPING (SEE NOTE #6)
8. TEMPORARY CONSTRUCTION INFORMATION KIOSK
9. PLAYGROUND EQUIPMENT
10. PRIVATE PLAYGROUND
11. COVERED PICNIC AREA –350 SF WITH TABLES AND GRILL
12. ENTRY SIGN
13. SITTING AREA
14. MAIL KIOSK
15. 4' HIGH FENCE

NC GRID NAD 83

PRELIMINARY SITE PLAN

30 0 15 30 60

(GRAPHIC SCALE IN FEET)
1 inch = 30 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

MERRITT MILL TYPICAL SECTION A–A C1001
H: 1" = 4'
V: 1" = 2'

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 967-4789

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NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE NOT FOR CONSTRUCTION 029127

DATE | REVISIONS | NUM

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MERRITT MILL APARTMENTS AFFORDABLE HOUSING

CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
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SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C1001

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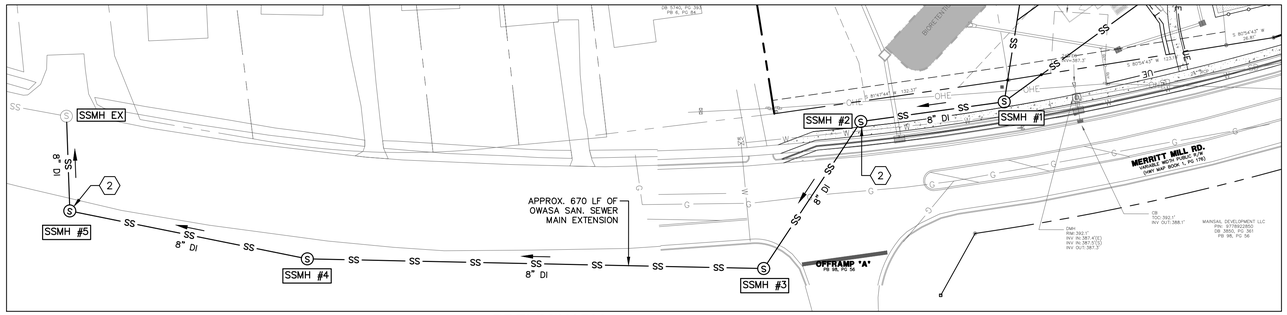
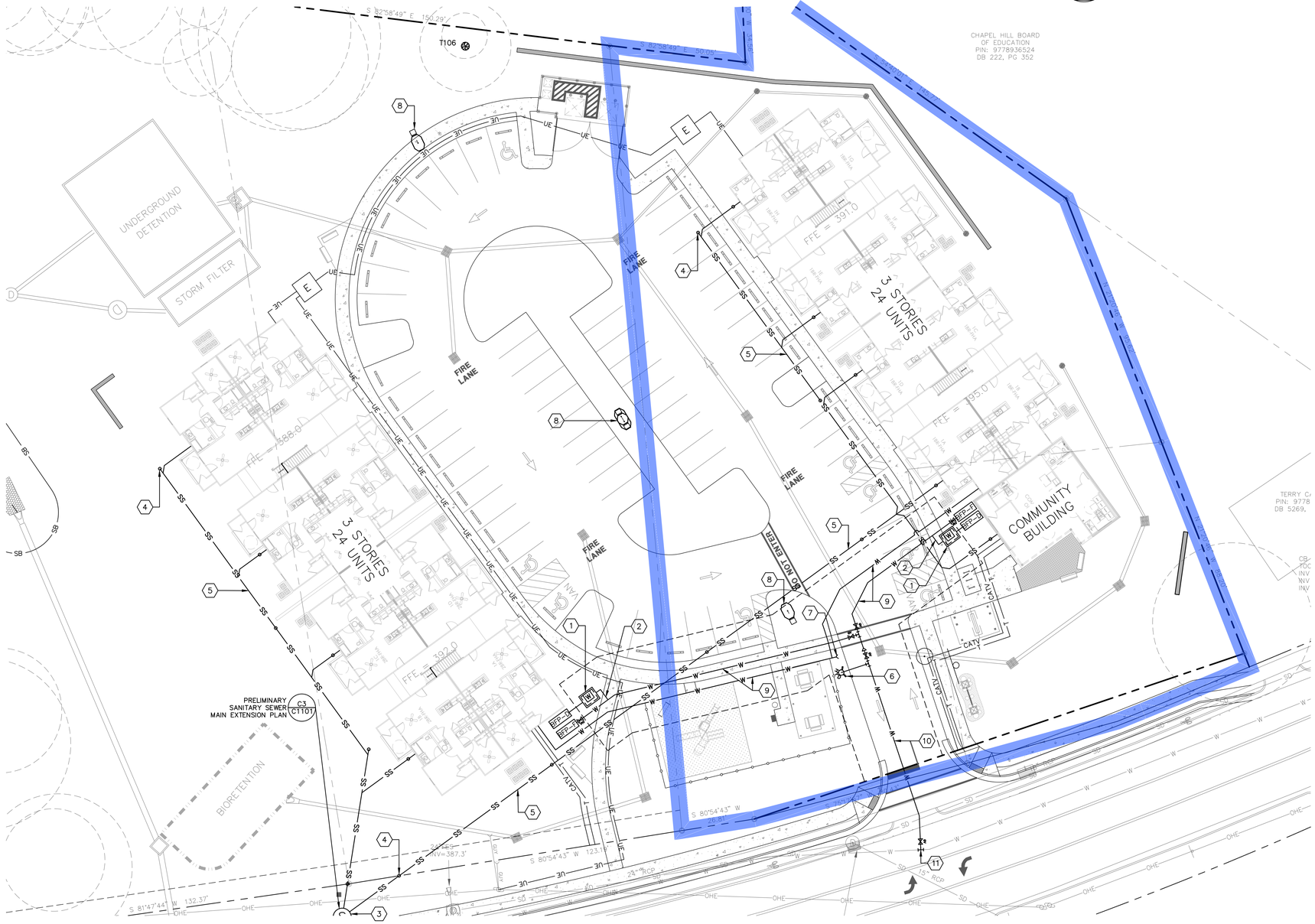


PRELIMINARY
SANITARY SEWER MAIN EXTENSION PLAN

D3 / C1101 SCALE: 1" = 40'

NC GRID NAD 83



UTILITY NOTES

1. OWASA SANITARY SEWER MAIN EXTENSION PLANS TO BE FINALIZED WITH ZONING COMPLIANCE PERMIT DRAWINGS.
2. WATER & SEWER SERVICES SHOWN ARE PRELIMINARY. SIZING TO BE FINALIZED WITH ZONING COMPLIANCE PERMIT DRAWINGS.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH OWASA STANDARDS AND SPECIFICATIONS, TOWN OF CHAPEL HILL DESIGN GUIDELINES, AND OTHER APPLICABLE UTILITY PROVIDER STANDARDS AND SPECIFICATIONS.
4. ALL NEW UTILITY LINES SHALL BE PLACED UNDERGROUND.
5. THE LOCATION OF THE EXISTING UTILITIES SHOWN SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION (PRIVATE AND PUBLIC) AND PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
6. WATER & SEWER (OWASA):
   - 6.1. CONTACT: NICK PARKER – (919) 537-4201
   - 6.2. MINIMUM UTILITY VERTICAL SEPARATION DISTANCES: SANITARY SEWER MAINS AND STORM SEWER – 24" SANITARY SEWER MAINS AND WATER – 18" STORM SEWER AND WATER – 18"
   - 6.3. ALL SANITARY SEWER SERVICE LINES WITHIN OWASA EASEMENTS SHALL BE DUCTILE IRON PIPES.
   - 6.4. ALL SANITARY SEWER SERVICE LINE OUTSIDE OWASA EASEMENTS OR RIGHT-OF-WAY SHALL BE SCH. 40 PVC.
   - 6.5. ALL DOMESTIC WATER SERVICE LINES SHALL HAVE A RPZ BACKFLOW PREVENTER.
   - 6.6. ALL PRIVATE FIRE LINES SHALL HAVE A RPDA BACKFLOW PREVENTER
7. OTHER UTILITY PROVIDER CONTACTS:

DUKE ENERGY: SHANE SMITH –	(919) 678-3385
PSNC ENERGY: BRIAN SMITH –	(919) 598-7454
SPECTRUM: GEORGE STOTLER –	(919) 427-5506
AT&T: GRANT SMITH –	(919) 788-2768

8. THE FIRE HYDRANT WEST OF THE NEW DRIVEWAY MUST BE INSTALLED, ACTIVE, AND ACCESSIBLE FOR THE FIRE DEPARTMENT USE PRIOR TO THE ARRIVAL OF COMBUSTIBLE MATERIALS ON SITE.
9. AN ALL-WEATHER TRAVEL SURFACE MUST BE IN PLACE ON THE DRIVEWAY PRIOR TO RECEIVING BUILDING PERMITS.

DRAWING LEGEND

EXISTING	PROPOSED	DESCRIPTION
SS	S	SANITARY SEWER MANHOLE
	○	SEWER CLEANOUT
	BFP-F	RPDA BACK FLOW PREVENTER
	BFP-D	RPZ BACK FLOW PREVENTER
	◁	REDUCER
		TEE – BEND PIPE
		TAPPING SLEEVE
		FIRE HYDRANT
	GV	WATER VALVE
	PIV	INDICATOR VALVE
	W	WATER METER VAULT
W 8" PVC	W	WATER LINE
SS	SS	SANITARY SEWER LINE
T	T	TELECOMMUNICATIONS LINE
OHE	OHE	OVERHEAD ELECTRIC LINE
UE	UE	UNDERGROUND ELECTRIC LINE
SD	SD	STORM DRAIN PIPE/STRUCTURE
		UTILITY EASEMENTS
	CBTV	CABLE TV LINE
		REZONE AREA
	E	REZONE AREA
		SITE LIGHTING

PLAN KEY NOTES

1. 1.5" DOMESTIC WATER METER IN UNDERGROUND VAULT
2. 2" TYPE "K" COPPER DOMESTIC WATER SERVICE LINE
3. SAN. SEWER MANHOLE (TYP.)
4. SAN. SEWER CLEANOUT (TYP.)
5. 6" SCH. 40 PVC SAN. SEWER SERVICE
6. FIRE HYDRANT (SEE NOTE #5)
7. FIRE DEPT. CONNECTION
8. SITE LIGHTING (SEE C1102)
9. 4" DI WATER LINE
10. 8" DI WATER LINE
11. TAPPING SLEEVE & VALVE

811 Know what's below. Call before you dig.

NC GRID NAD 83

UTILITY OVERVIEW

20 0 10 20 40

(GRAPHIC SCALE IN FEET)
1 inch = 20 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
PH: (919) 967-4789 FAX: (919) 967-8816

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BALLENTINE ASSOCIATES, P.A. CORPORATE SEAL C3128 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE

NOT FOR CONSTRUCTION
029127

NUM	DATE

REVISIONS

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

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SUP SUBMITTAL #4	30 JAN 18

MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C1101

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files\C1100-Utility-MMR.dwg, 1/30/2018 6:51:47 PM, DavidB.

C2 C1102 OPEN DELUXE ACORN LED N.T.S.

C1 C1102 LED SHOEBOX N.T.S.

Luminaire Location Summary						
UserField5	Label	X	Y	Mounting Height	Orient	Tilt
	220 LED Shoebox dbl	1979283	783172.3	25	121.072	0
	220 LED Shoebox	1979207	783274.2	25	295.346	0
	220 LED Shoebox	1979343	783101.2	25	117.783	0
	Open Deluxe Acorn LED	1979399	783087.9	12	197.613	0

Luminaire Schedule						
Symbol	Qty	Label	Description	Arrangement	Lumens	LLF
	2	220 LED Sh	GAN-AE-04-LED-U-T4W	SINGLE	N.A.	0.850
	1	220 LED Sh	GAN-AE-04-LED-U-T4W	BACK-BACK	N.A.	0.850
	1	Open Delux	WFL0704KXXXL3X	SINGLE	N.A.	0.850

PHOTOMETRIC PLAN AND DETAILS ON THIS SHEET PROVIDED BY:

Tom Grantham, LC, CEM
Tom.Grantham@duke-energy.com
Business Development Sales Manager
4601 Corporate Dr. NW. #105
Concord NC
704 519 6702 Mobile

DUKE ENERGY.

DETAIL REFERENCE

PLAN KEY NOTES

C1 C1102	1	LED SHOEBOX
C2 C1102	2	OPEN DELUXE ACORN LED

NC GRID NAD 83

PRELIMINARY LIGHTING PLAN

20 0 10 20 40

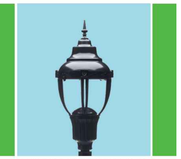
(GRAPHIC SCALE IN FEET)
1 inch = 20 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

DUKE ENERGY.

Outdoor Lighting

Open Deluxe Acorn LED



Subject to variance from manufacturer. Contact us for region-specific details.

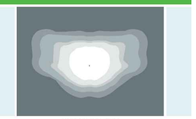
The Open Deluxe Acorn LED is a graceful Victorian-style fixture that enhances the character and prestige of streetscapes, greenways and pedestrian areas. This energy-efficient luminaire limits unwanted uplight and will complement any neighborhood or park with its classic, elegant design.

LED *(Light Emitting Diode)*	70 watts
Mounting height	12'
Colors	Black Green
Poles	Style A, B, C, D, E, F
Applications	Neighborhoods Parks Shopping centers

Outdoor Lighting

Open Deluxe Acorn LED

Light source: LED (white)
Wattage: 70
Lumens: 6,500
Light pattern: IESNA Type III (oval)
IESNA cutoff classification: Cutoff
Color temperature: 4,000K



light distribution pattern

Pole available:

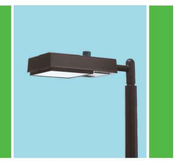
Type	*Mounting height*	*Color*
Aluminum	12'	Black Green

Features	Benefits
No installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

DUKE ENERGY.

Outdoor Lighting

Shoebox



Subject to variance from manufacturer. Contact us for region-specific details.

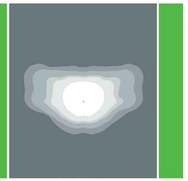
The Shoebox combines a decorative, contemporary style with versatility and ample lighting effect. This blend of form and function is perfect for streets, parking lots, commercial buildings and residential communities. The Shoebox provides excellent color rendition with a controlled light pattern that reduces glare and keeps the light directed where you want it.

High-pressure sodium	100 | 150 | 250 | 400 watts
Mounting heights	15', 20', 25', 30', 35'
Colors	Bronze Black Gray Green
Pole	Style A
Applications	Streets Parking lots Commercial buildings Residential communities

Outdoor Lighting

Shoebox

Light source: High-pressure sodium *(golden yellow)*
Wattage: 100 \| 150 \| 250 \| 400
Lumens: 9,500 \| 16,000 \| 27,500 \| 50,000
Light pattern: IESNA Type III *(oval)*
IESNA cutoff classification: Cutoff, full cutoff



light distribution pattern

Poles available:

Type	*Mounting height*	*Color*
Aluminum	15', 20', 25', 30', 35'	Black Green Bronze Gray

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

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NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE NOT FOR CONSTRUCTION 029127

NUM	REVISIONS	DATE

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

ISSUED	DATE
SUP SUBMITTAL #3	7 DEC '17
SUP SUBMITTAL #4	30 JAN '18

MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C1102

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files\C1102 Lighting-MMR.dwg, 1/30/2018 6:09:21 PM, DavidB, 1:1

NOTES:

1. ALL ASPECTS OF THE STORM DRAINAGE SYSTEM DESIGN SHOWN ARE PRELIMINARY AND WILL BE FINALIZED DURING THE CONSTRUCTION DRAWING / ZONING PERMIT PHASE.
2. ALL DISTURBED AREAS TO BE STABILIZED PER NPDES CONSTRUCTION STORMWATER GENERAL PERMIT NCG010000.
3. ALL 2:1 AND GREATER SLOPES SHALL BE MONITORED FOR EROSION AND VEGETATION RESTORED AS NEEDED.
4. PRIOR TO CO APPROVAL, ALL SCM'S WILL NEED TO BE CERTIFIED BY A LICENSED ENGINEER

DRAWING LEGEND

SYMBOL/ABBREVIATION EXISTING	PROPOSED	DESCRIPTION
		CATCH BASIN / CURB INLET
		DROP INLET
(D)	(D)	STORM DRAINAGE MANHOLE
OHE		OVERHEAD ELECTRIC
	UE	UNDERGROUND ELECTRIC LINE
SD		STORM DRAINAGE LINE
391	391	MINOR CONTOUR
390	390	MAJOR CONTOUR
	392.3	SPOT ELEVATION
	393.9 TOP OF CURB 393.4 BOTTOM OF CURB	SPOT ELEVATION AT CURB
		RIPRAP APPRON
		FLARED END SECTION

DETAIL REFERENCE — B3 / C5201

PLAN KEY NOTES

(1) NCDOT CATCH BASIN (TYP.)

ROBERTS STREET
50' PUBLIC R/W

MERRITT MILL RD.
VARIABLE WIDTH PUBLIC R/W
(HWY MAP BOOK 1, PG 176)

PS NC III LP
PIN: 9778839403
DB 5704, PG 234
PB 82, PG 150

CHAPEL HILL BOARD OF EDUCATION
PIN: 9778936524
DB 222, PG 352

TERRY CARVER
PIN: 9778934164
DB 5269, PG 274

COE B FARROW II
N: 9778839033
I 5740, PG 393
PB 6, PG 84

UNDERGROUND DETENTION
STORM FILTER
UD OUT
UD IN
SF IN
SF OUT
BIO OUT
BIORETENTION
BIORETENTION ENLARGEMENT A4 C4201
A4 C4201 UNDERGROUND STORMFILTER & DETENTION ENLARGEMENT
VARIABLE WIDTH STORMWATER MAINTENANCE AND ACCESS EASEMENT
30' STORM DRAINAGE EASEMENT (HWY MAP BOOK 1, PG 176)
FFE = 388.0
FFE = 392.0
FFE = 391.0
FFE = 395.0
FFE = 396.0
3 STORIES 24 UNITS
COMMUNITY BUILDING
FIRE LANE
CONVERT EX. YARD INLET TO JUNCTION BOX. REMOVE 24" FES.
EX. 24" RCP TO REMAIN
CONVERT EX. CATCH BASIN TO JUNCTION BOX
EX. 15" RCP TO REMAIN
EX. 18" RCP TO REMAIN
CB TOC: 407.6' INV IN: 400.3' (E) INV IN: 400.3' (S) INV OUT: 400.2' (W)
CB TOC: 398.2' INV IN: 391.8'(NE) INV IN: 392.0'(SE) INV OUT: 391.7'
TBM: NAIL #602 N: 782960.706' E: 1979326.707' ELEV: 397.32'
SSMH #1
SSMH #2
24" FES INV=387.3'

NC GRID NAD 83

GRADING & STORMWATER MANAGEMENT PLAN

(GRAPHIC SCALE IN FEET)
1 inch = 20 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 968-4331 FAX: (919) 968-4789

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 029127 GEORGE J. RETSCHLE
NOT FOR CONSTRUCTION

NUM	REVISIONS	DATE

ISSUED	DATE
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SUP SUBMITTAL #2	27 NOV 17
SUP SUBMITTAL #3	7 DEC 17
SUP SUBMITTAL #4	30 JAN 18

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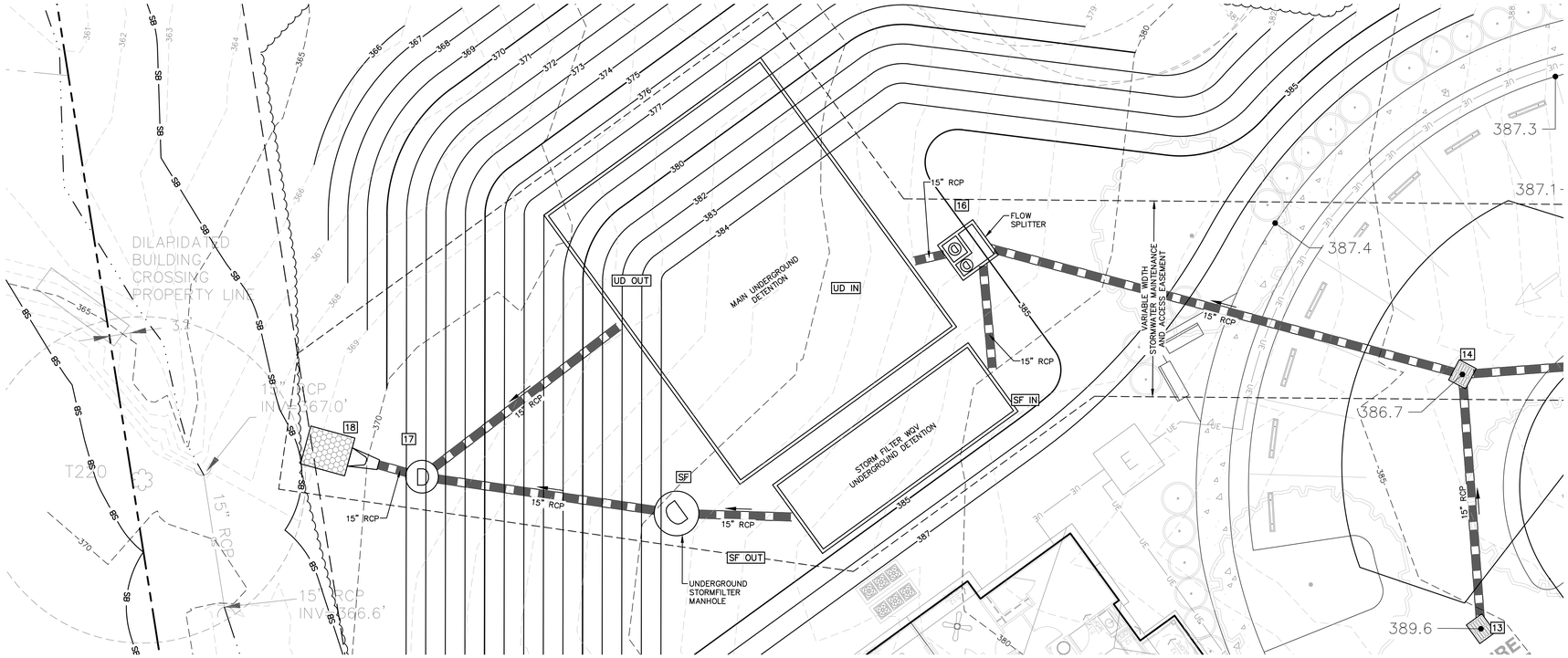
MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

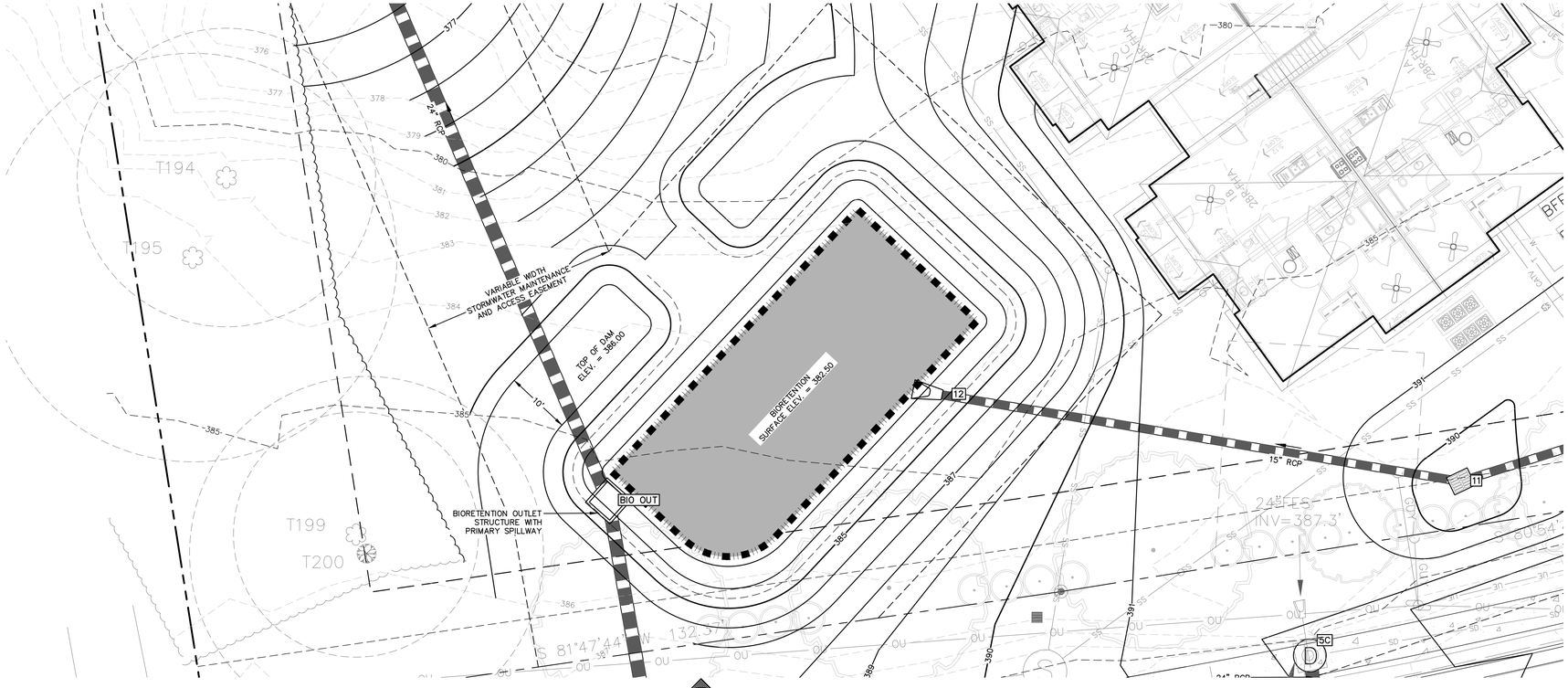
JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C1201



C4 / C4201 STORMFILTER & UNDERGROUND DETENTION ENLARGEMENT

SCALE: 1"=10'



A4 / C4201 BIORETENTION ENLARGEMENT

SCALE: 1"=10'

UNDERGROUND STORMFILTER & DETENTION NOTES:

1. ALL ASPECTS OF THE STORMFILTER & DETENTION DESIGN ARE PRELIMINARY. THE DESIGN WILL BE FINALIZED AND ADDITIONAL INFORMATION (INCLUDING PLANTING PLAN, DAM SPECIFICATIONS, ETC.) WILL BE PROVIDED DURING THE CONSTRUCTION DRAWING / ZONING PERMIT PHASE.

DRAWING LEGEND

SYMBOL/ABBREVIATION EXISTING	PROPOSED	DESCRIPTION
		DROP INLET
SD		STORM DRAINAGE LINE
391	391	MINOR CONTOUR
390	390	MAJOR CONTOUR
		MICRO CONTOUR
		RIPRAP APRON
		FLARED END SECTION
		EPHEMERAL STREAM
SB	SB	STREAM BUFFER
		TREE LINE

BIORETENTION NOTES:

1. ALL ASPECTS OF THE BIORETENTION DESIGN ARE PRELIMINARY. THE DESIGN WILL BE FINALIZED AND ADDITIONAL INFORMATION (INCLUDING PLANTING PLAN, DAM SPECIFICATIONS, ETC.) WILL BE PROVIDED DURING THE CONSTRUCTION DRAWING / ZONING PERMIT PHASE.

NC GRID NAD 83

STORMWATER CONTROL MEASURE ENLARGEMENTS

10 0 5 10 20

(GRAPHIC SCALE IN FEET)
1 inch = 10 ft.

REVIEW DRAWING NOT FOR CONSTRUCTION

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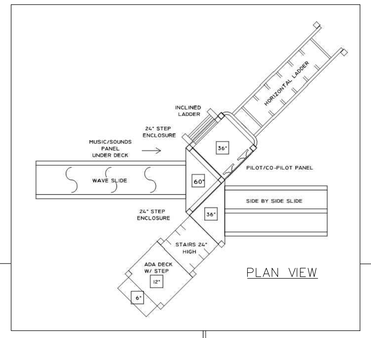
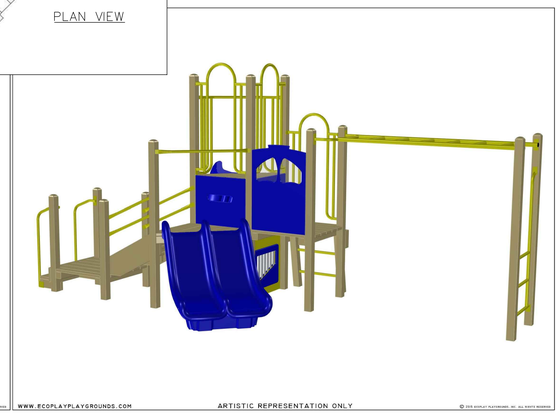
SHEET
C4201

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files\C4201-BMP Enlargement-MMH.dwg, 1/30/2018 8:22:48 PM, DavidB,

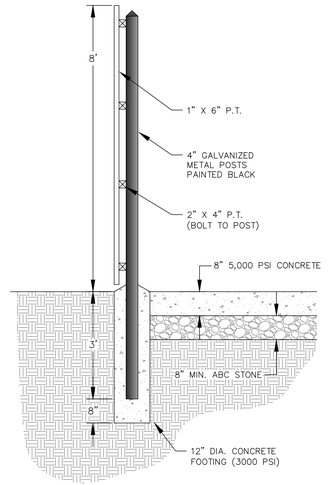


PLAN VIEW

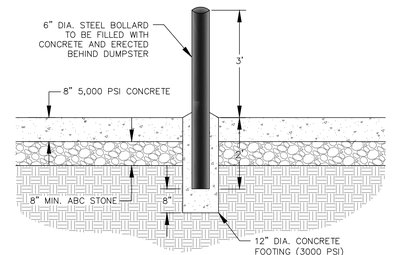


NOTE: FINAL PLAYGROUND EQUIPMENT DETAILS WILL BE SUBMITTED WITH ZCP AND MUST SHOW COMPLIANCE WITH TOWN GUIDELINES.

C4 / C5001 PRELIMINARY PLAYGROUND EQUIPMENT
N.T.S.

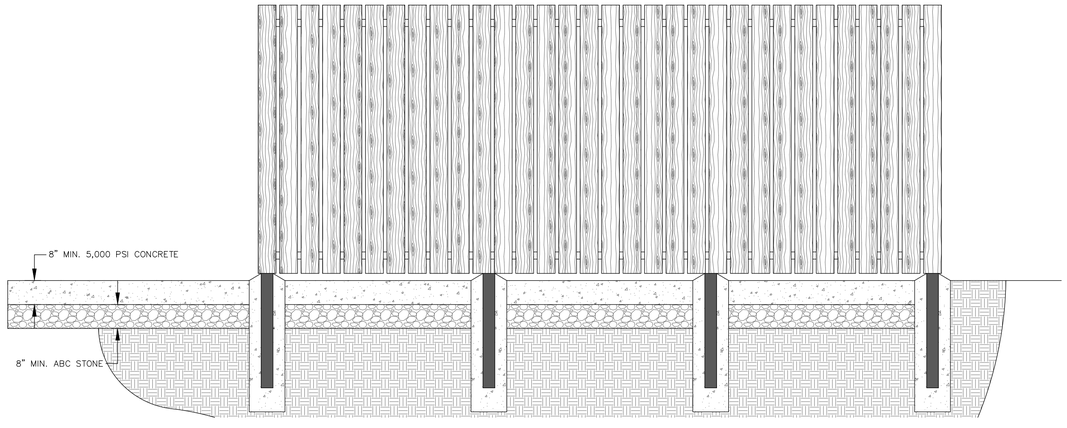


C2 / C5001 DUMPSTER ENCLOSURE SECTION
1" = 2'



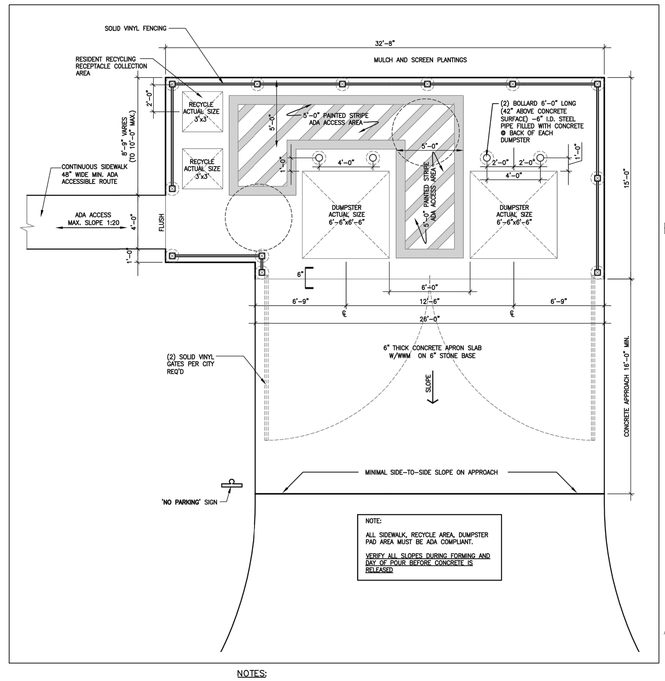
6" PIPE BOLLARD

C1 / C5001 6" DIA. BOLLARD
1" = 2'



NOTE: FINAL DUMPSTER ENCLOSURE DETAILS WILL BE SUBMITTED WITH ZCP.

A3 / C5001 DUMPSTER ENCLOSURE ELEVATION
1" = 5'



NOTES:

1. ADA DUMPSTER PLAN BY R/DA ARCHITECTS.
2. FINAL DUMPSTER ENCLOSURE DETAILS WILL BE SUBMITTED WITH ZCP.

A1 / C5001 ADA DUMPSTER PLAN
SCALE: 3/16" = 1'-0"

SITE DETAILS

REVIEW DRAWING
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NORTH CAROLINA PROFESSIONAL ENGINEER GEORGE J. RETSCHLE

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029127

NUM	REVISIONS	DATE

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

ISSUED	DATE
SUP SUBMITTAL #2	27 NOV 17
SUP SUBMITTAL #3	7 DEC 17
SUP SUBMITTAL #4	30 JAN 18

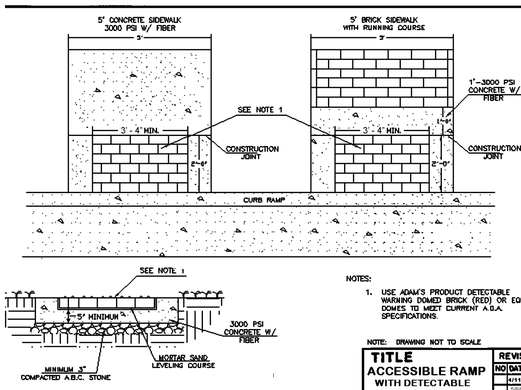
MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C5001

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files\C5001-Site Details-MMH.dwg, 1/30/2018 7:32:27 PM, DavidB,



NOTES:

1. USE ADAM'S PRODUCT DETECTABLE WARNING DOMED BRICK (RED) OR EQUAL. DOMES TO MEET CURRENT A.D.A. SPECIFICATIONS.

NOTE: DRAWING NOT TO SCALE

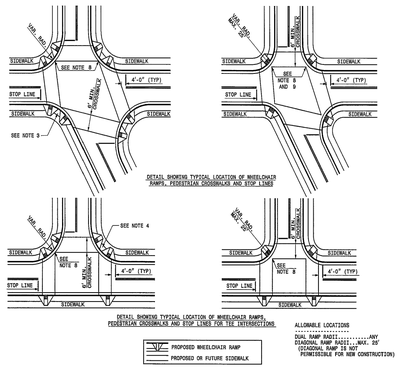
TITLE
ACCESSIBLE RAMP WITH DETECTABLE WARNING DOMES

REVISIONS		
NO	DATE	BY
4	7/11/06	MCR
5	9/07	LRH

DET.NO. ST-5.1

TOWN OF CHAPEL HILL

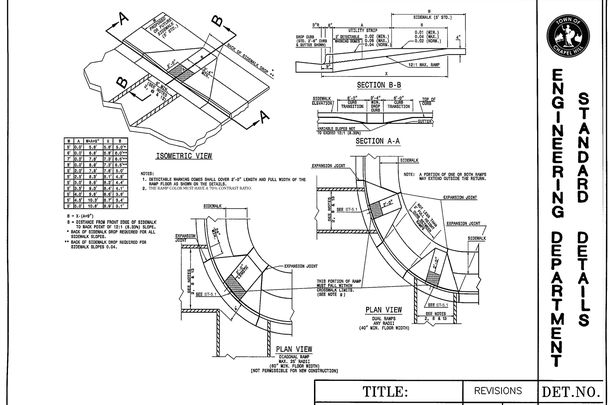
ENGINEERING DEPARTMENT STANDARD DETAILS



NOTE: DRAWING NOT TO SCALE
SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03	JH	ST - 5.2

ENGINEERING DEPARTMENT STANDARD DETAILS



NOTE: DRAWING NOT TO SCALE
SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03 02/08	JH ER	ST - 5.3

ENGINEERING DEPARTMENT STANDARD DETAILS

NOTES:

1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION MAY VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. PROVIDE WHEELCHAIR RAMPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATE WHEELCHAIR RAMPS AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. WHERE TWO RAMPS ARE INSTALLED, PLACE NOT LESS THAN TWO FEET OF FULL HEIGHT CURB BETWEEN THE RAMPS. PLACE DUAL RAMPS AS PERPENDICULAR TO THE TRAVEL LANE BEING CROSSED AS POSSIBLE
4. DO NOT EXCEED 0.08 (12:1) SLOPE ON THE WHEELCHAIR RAMP IN RELATIONSHIP TO THE GRADE OF THE STREET.
5. CONSTRUCT WHEELCHAIR RAMPS 40" (3'-4") OR GREATER FOR DUAL RAMPS AND 60" (5'-0") OR GREATER FOR DIAGONAL RAMPS.
6. USE CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON-SKID TYPE SURFACE.
7. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB AS SHOWN ON DETAIL ST-5A.
8. PLACE THE INSIDE PEDESTRIAN CROSSWALK LINES NO CLOSER IN THE INTERSECTION BY BISECTING THE INTERSECTION RADII, WITH ALLOWANCE OF A 4' CLEAR ZONE IN THE VEHICULAR TRAVELWAY WHEN ONE RAMP IS INSTALLED. (SEE NOTE 13)
9. COORDINATE THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SO THE FLOOR OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. PLACE DIAGONAL RAMPS WITH FLARED SIDES SO 24" OF FULL HEIGHT CURB FALLS WITHIN THE CROSSWALK MARKINGS ON EACH SIDE OF THE FLARES.
10. CONSTRUCT THE PEDESTRIAN CROSSWALK A MINIMUM OF 6 FEET. A CROSSWALK WIDTH OF 8 FEET OR GREATER IS DESIRABLE.
11. USE STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH SKEW MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTION ROADWAY.
12. TERMINATE PARKING A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
13. PLACE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03	JH	ST - 5.4

ENGINEERING DEPARTMENT STANDARD DETAILS

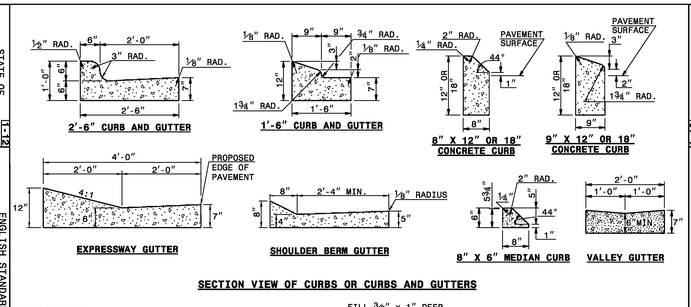
B4 / C5001 WHEEL CHAIR RAMP
SCALE: N.T.S.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

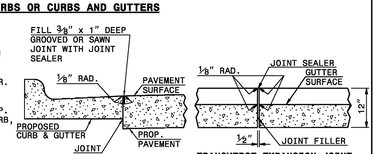
ENGLISH STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER

SHEET 1 OF 3
846.01



SECTION VIEW OF CURBS OR CURBS AND GUTTERS

GENERAL NOTES:
-PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS.
CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1½" DEEP.
-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



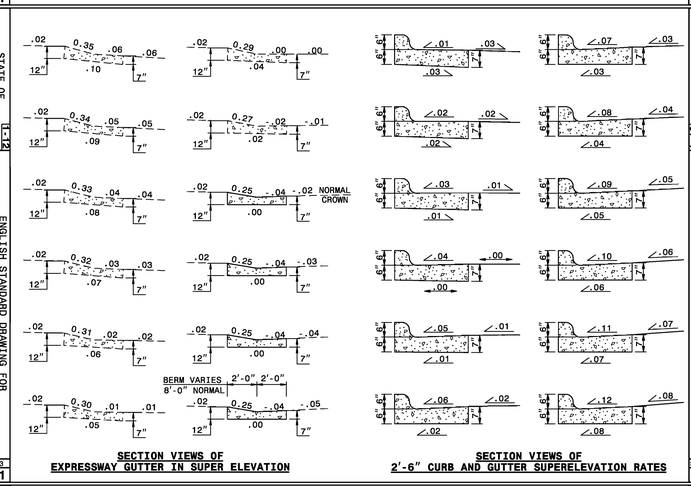
SECTION VIEW OF JOINTS

SHEET 1 OF 3
846.01

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER



SECTION VIEWS OF EXPRESSWAY GUTTER IN SUPER ELEVATION

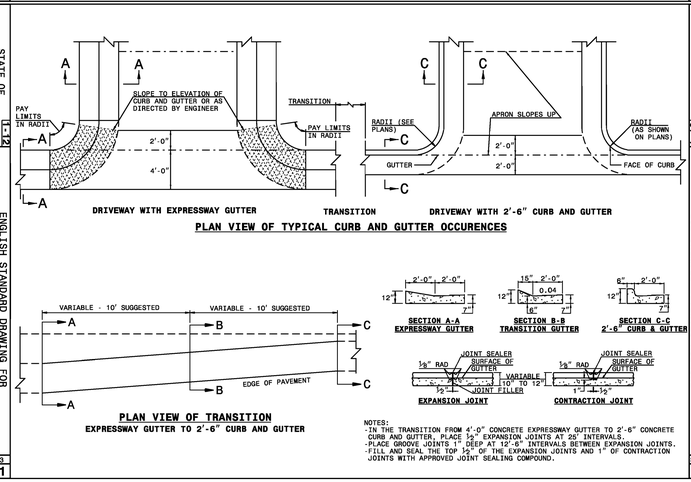
SECTION VIEWS OF 2'-6" CURB AND GUTTER SUPERELEVATION RATES

SHEET 2 OF 3
846.01

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER



NOTES:
-IN THE TRANSITION FROM 4'-0" CONCRETE EXPRESSWAY GUTTER TO 2'-6" CONCRETE CURB AND GUTTER, PLACE ½" EXPANSION JOINTS AT 20' INTERVALS.
-PLACE GROOVE JOINTS 1" DEEP AT 12'-6" INTERVALS BETWEEN EXPANSION JOINTS.
-FILL AND SEAL THE TOP ½" OF THE EXPANSION JOINTS AND 1" OF CONTRACTION JOINTS WITH APPROVED JOINT SEALING COMPOUND.

SHEET 3 OF 3
846.01

A2 / C5001 NCDOT CONCRETE CURB & GUTTER
N.T.S.

SITE DETAILS

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
(919) 967-4949 FAX (919) 967-4789
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BALLENTINE ASSOCIATES P.A. CORPORATE SEAL C328 NORTH CAROLINA Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 029127 GEORGE J. RETSCHLE

NOT FOR CONSTRUCTION

NUM	REVISIONS	DATE

ISSUED	DATE
SUP. SUBMITTAL #3	7 DEC 17
SUP. SUBMITTAL #4	30 JAN 18

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MERRITT MILL APARTMENTS
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SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

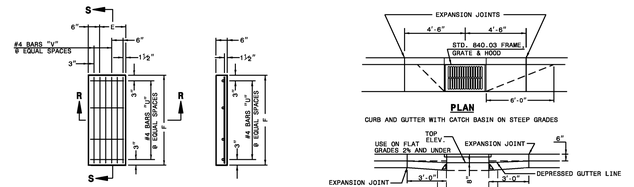
SHEET
C5002

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

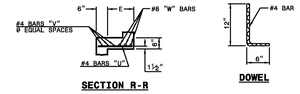
ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 2 OF 2
840.02



PLAN OF TOP SLAB

SECTION S-S



SECTION R-R

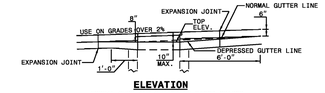
DOWEL

PLAN

CURB AND GUTTER WITH CATCH BASIN ON STEEP GRADES

ELEVATION

NORMAL CURB AND GUTTER ON LIGHT GRADES



ELEVATION

NORMAL CURB AND GUTTER ON STEEP GRADES

MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN(BASED ON MIN. HEIGHT, H, WITH NO RISER) *

DIMENSIONS OF BOX AND PIPE						COVER DIMENSION		BARS-U		BARS-V		BARS-W		TOTAL LBS.	CU.YDS. CONC. IN BOX		DEDUCTIONS ONE PIPE	
PIPE	SPAN	WIDTH	WIDTH	SPAN	MIN. HEIGHT										TOP SLAB	BOTTOM SLAB	C.W.	R.C.
D	A	B	C	G	H	E	F	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		(SEE NOTE 2)	(SEE NOTE 3)		
12"	3'-0"	2'-2"	--	--	2'-9"	--	--	--	--	--	--	--	--	--	--	0.235	0.015	0.026
15"	3'-0"	2'-2"			3'-0"											0.235	0.033	0.036
18"	3'-0"	2'-2"			3'-3"											0.235	0.033	0.049
24"	3'-0"	2'-2"			3'-9"											0.235	0.059	0.085
30"	3'-0"	2'-2"	3'-4"		4'-3"	1'-2"	4'-0"	4	1'-5"	2	3'-9"	3	3'-9"	39	0.123	0.321	1.433	0.092	0.127
36"	3'-0"	2'-2"	3'-10"		4'-9"	1'-8"	4'-0"	4	1'-11"	3	3'-9"	3	3'-9"	43	0.161	0.358	1.714	0.132	0.178
42"	3'-0"	2'-2"		4'-5"	5'-3"	1'-5"	3'-2"	4	1'-8"	2	2'-11"	3	2'-11"	32	0.112	0.318	1.738	0.180	0.243
48"	3'-0"	2'-2"		6'-0"	5'-9"	2'-0"	3'-2"	4	2'-3"	3	2'-11"	3	2'-11"	35	0.145	0.352	2.052	0.235	0.317
54"	3'-0"	2'-2"		6'-7"	6'-3"	2'-7"	3'-2"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.180	0.396	2.387	0.297	0.401

* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

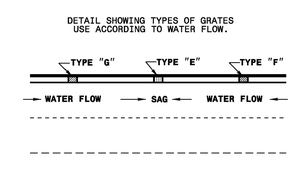
SHEET 2 OF 2
840.02

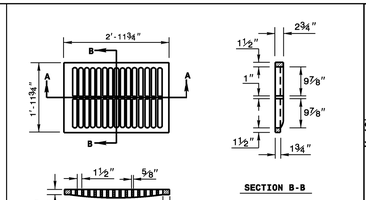
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

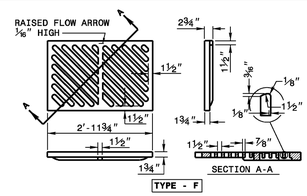
1-12

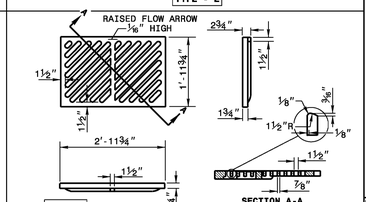
ENGLISH STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN

SHEET 2 OF 2
840.03







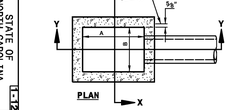


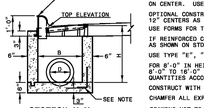
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02





GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 3" KEYWAY, ON #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.

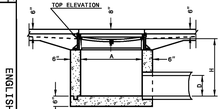
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.

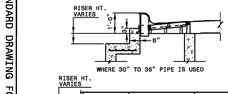
FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 10'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.

CONSTRUCT WITH PIPE CROWNS MATCHING.

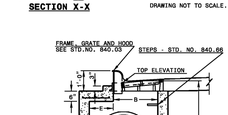
CHAMFER ALL EXPOSED CORNERS 1".

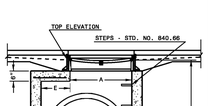
DRAWING NOT TO SCALE.

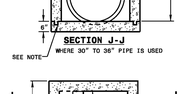


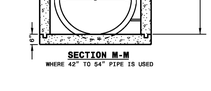


DETAIL SHOWING METHOD OF RISER CONSTRUCTION









STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
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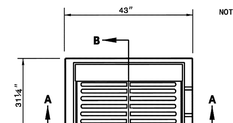
RALEIGH, N.C.

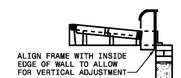
1-12

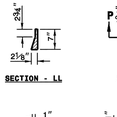
ENGLISH STANDARD DRAWING FOR
FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN

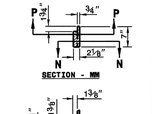
SHEET 1 OF 2
840.03

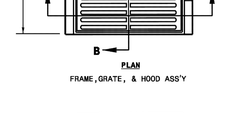


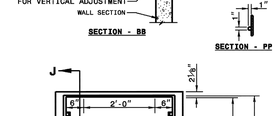
NOTE: USE TYPE "E", "F" AND "G" GRATE UNLESS OTHERWISE NOTED.

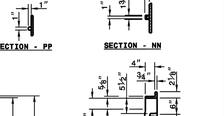


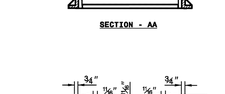


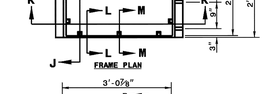


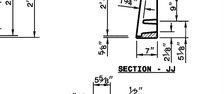












NOTE: USE US FOUNRY 5181 FRAME & HOOD WITH 6430 GRATE OR APPROVED EQUAL.

NCDOT STD. DETAIL 840.01
(CATCH BASIN BASE STRUCTURE)

B3
C5201
NCDOT CATCH BASIN

NCDOT STD. DETAIL 840.03
(FRAME, GRATE, AND HOOD)

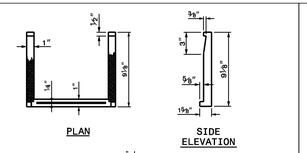
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

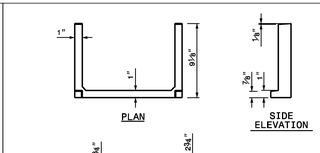
1-12

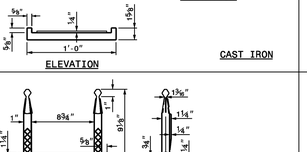
ENGLISH STANDARD DRAWING FOR
DRAINAGE STRUCTURE STEPS

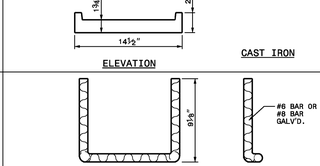
SHEET 1 OF 1
840.66

NOTES:
INSTALL ALL STEPS PROTRUDING 4" FROM INSIDE FACE OF STRUCTURE WALL.
STEPS DIFFERING IN DIMENSIONS, CONFIGURATION, OR MATERIALS FROM THOSE SHOWN MAY ALSO BE USED PROVIDED THE CONTRACTOR HAS FURNISHED THE ENGINEER WITH DETAILS OF THE PROPOSED STEPS AND HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER FOR THE USE OF SUCH STEPS.









NOTE:
DO NOT USE IN SANITARY SEWER MANHOLES.

A5
C5201
STORM MANHOLE STEPS
N.T.S.

GENERAL NOTES

USE 4000 PSI MINIMUM COMPRESSIVE STRENGTH CONCRETE.

FABRICATE, ASSEMBLE AND DESIGN PRECAST MANHOLE COMPONENTS ACCORDANCE WITH AASHTO M199.

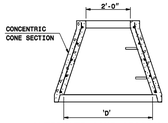
ASSEMBLE RISER AND GRADE RINGS WITH THE STEPS SPACED 12" FROM THE TOP TO THE BOTTOM OF THE MANHOLE.

WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, CONSTRUCT THE TOP OF THE MANHOLE FLUSH WITH THE GROUND AND A MINIMUM OF 9" ABOVE THE GROUND AT OTHER LOCATIONS.

LIMIT DEPTH OF FILL TO 30'-0" FROM FINSH GRADE TO TOP OF BOTTOM SLAB.

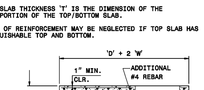
THE MIN. SLAB THICKNESS 'T' IS THE DIMENSION OF THE THINNEST PORTION OF THE TOP/BOTTOM SLABS.

* TOP MAT OF REINFORCEMENT MAY BE NEGLECTED IF TOP SLAB HAS A DISTINGUISHABLE TOP AND BOTTOM.

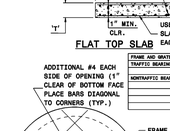


D	W	T	As
INTERNAL DIAMETER (FT.)	MIN. WALL THICKNESS (IN.)	MIN. TOP/BOTTOM SLAB THICKNESS (IN.)	MIN. CIRCUMFERENTIAL AREA OF STEEL PER VERTICAL FT. (SQ. IN.)
4	4	6	0.12
5	5	8	0.15
6	6	8	0.18

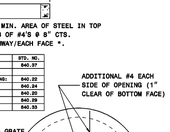
ALTERNATE CONE SECTION



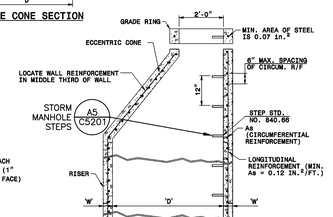
FLAT TOP SLAB



GRATED INLET OPTION



MANHOLE OPTION



TYPICAL MANHOLE SECTION

A3
C5201
PRECAST STORM JUNCTION BOX
N.T.S.

GENERAL NOTES:

USE STANDARD OR JUMBO BRICK FOR WALL CONSTRUCTION. SOLID CONCRETE BRICK OR BLOCK ARE OPTIONAL WALL CONSTRUCTION MATERIAL

PRECAST UNITS MADE OF CLASS "AA" CONCRETE MAY BE USED IN LIEU OF BRICK MASONRY CONTRUCTION. SUBMIT DESIGN OF PRECAST UNITS FOR APPROVAL PRIOR TO CONSTRUCTION.

INCLUDE ALL ADJUSTMENTS TO WALLS, SLABS OR REINFORCING MATERIAL IN THE UNIT PRICE BID FOR EACH UNIT.

INSTALL OPTIONAL MANHOLE IN POSITION AS DIRECTED BY THE ENGINEER. CUT OR BEND ALL REBAR CROSSING THIS OPENING TO ALLOW 2" MINIMUM CONCRETE COVERAGE. ENCLOSE THE OPENING WITH 8 "A" BARS TIED TO TO THE REBAR MAT AND SET SO A MINIMUM OF 3" CONCRETE COVER IS ATTAINED. REFERENCE STD. NO. 840.54 FOR MANHOLE INFORMATION.

PROVIDE JUNCTION BOXES WITH MANHOLES OVER 3'-6" IN DEPTH WITH STEPS PLACED ON 12" CENTERS. REFERENCE STD. NO. 840.66.

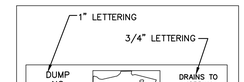
SPACE DOWEL "C" BARS AT A MAXIMUM OF 12" CENTERS.

MAXIMUM DEPTH OF THIS UNIT AS SHOWN IS 12'.

CONSTRUCT THE JUNCTION BOX IN ACCORDANCE WITH SECTIONS 830, 832, 834 AND 840 OF THE STANDARD SPECIFICATIONS.

BILL OF MATERIAL

BAR	QTY.	SIZE	LENGTH	WEIGHT
A	8	#5	1'-2"	9.7
B	14	#5	5'-0"	80.3
C	26	#4	1'-6"	26.1
Y	14	#5	6'-11½"	101.5
STEEL TOTAL WEIGHT				217.6
CU. YDS. CLASS "AA" CONC.				2.6
CU. YDS. BRICK/FT. HT. (8")				0.53
CU. YDS. BRICK/FT. HT. (12")				0.84



NOTE:
ALL STORMDRAIN INLET HOODS AND COVERS INSTALLED OR REPLACED WITHIN THE CHAPEL HILL PLANNING JURISDICTION AFTER JULY 31, 2000 SHALL BE PRE-CAST WITH THE MESSAGE: "DUMP NO WASTE ! DRAINS TO JORDAN LAKE" (INCLUDING THE CAST IMAGE OF A FISH).

JORDAN LAKE STAMP

STORM DRAINAGE DETAILS

REVIEW DRAWING NOT FOR CONSTRUCTION

BALLENTINE ASSOCIATES, P.A.
221 PROVIDENCE ROAD, CHAPEL HILL, N.C. 27514
PHONE: (919) 967-4949 FAX: 967-4789

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BALLENTINE ASSOCIATES P.A.
CORPORATE SEAL C3128
NORTH CAROLINA
Chapel Hill

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL
NOT FOR CONSTRUCTION
029127
GEORGE J. RETSCHLE

NUM	REVISIONS	DATE

ISSUED	DATE
SUP. SUBMITTAL #3	7 DEC 17
SUP. SUBMITTAL #4	30 JAN 18

OWNER INFORMATION
GREENSTREET BUILDERS, INC.
206 OAK PARK DRIVE
CHAPEL HILL, NC 27517

OWNERS REPRESENTATIVE:
JESS BRANDES, CASA NC
PH. (919) 307-3429
FAX
EMAIL jbrandes@casanc.org

MERRITT MILL APARTMENTS
AFFORDABLE HOUSING
CHAPEL HILL/CARRBORO, ORANGE COUNTY, NORTH CAROLINA

SPECIAL USE PERMIT DRAWINGS

JOB NUMBER: 116031.02
DATE: 18 AUG 2017
SCALE: AS NOTED
DRAWN BY: ZHG / DBB
REVIEWED BY: GJR

SHEET
C5201

N:\Projects\116031.00 Merritt Mill Housing\1_Dwg\BA-Model Files\C5201-SD Details-MMH.dwg, 1/30/2018 8:23:45 PM, DavidB.

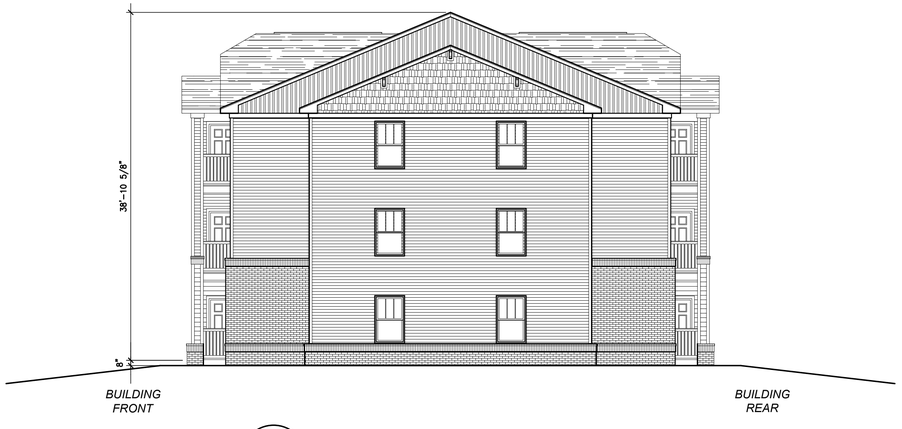
ROBERTS STREET
50' PUBLIC R/W
MERRITT MILL RD.
VARIABLE WIDTH PUBLIC R/W
(VARY MAP BOOK 1, PG 116)
OFFRAMP "A"
PB 86, PG 56
UNDERGROUND DETENTION
STORM FILTER
3 STORIES 24 UNITS
3 STORIES 24 UNITS
COMMUNITY BUILDING
FIRE LANE
DELUXE FOR CO
RETENTION
CHAPEL HILL BOARD OF EDUCATION
PIN: 9778836324
DB 222, PG 352
PS NC R-L-P
PIN: 9778836403
DB 5704, PG 754
PB 82, PG 159
RUTHENA SANFORD
PIN: 9778839117
DB 08-E, PG 458
PB 6, PG 64
ROSCOE B FARROW II
PIN: 9778839033
DB 5740, PG 393
PB 6, PG 84
TERRY CARVER
PIN: 9778934164
DB 5269, PG 274
MAINSAIL DEVELOPMENT LLC
PIN: 9778922850
DB 5850, PG 361
PB 86, PG 56
DILAPIDATED BUILDING CROSSING PROPERTY LINE
18" FES INV=397.3'
15" RCP
18" RCP
24" RCP
T218
T210
T209
T217
T216
T129
T221
T120
T119
T118
T121
T106
T205
T206
T194
T195
T199
T200
T305
DMH RIM: 392.1' INV IN: 387.4'(E) INV IN: 387.5'(S) INV OUT: 387.3'
CB TOC: 392.1' INV OUT: 388.1'
TBM: NAIL, #922 N: 782960.706' E: 1979326.707' ELEV: 397.32'
CB TOC: 398.2' INV IN: 391.8'(NC) INV IN: 392.0'(SE) INV OUT: 391.7'
CB TOC: 407.6' INV IN: 400.3' (E) INV IN: 400.3' (S) INV OUT: 400.2' (W)
SS STORM DRAINAGE DETENTION PIPE SYSTEM INV IN: 376.5' INV OUT: 376.3'
SS
W
G
OU
S
SS
SS
SS

1 West Elevation

Scale: 1/8" = 1'-0"

2 East Elevation

Scale: 1/8" = 1'-0"



3 North Elevation

Scale: 1/8" = 1'-0"

4 South Elevation

Scale: 1/8" = 1'-0"

ELEVATION KEY

MARK (M1) ROOF
OC WEATHERED WOOD COLOR (OR SIMILAR) 30 YEAR ARCHITECTURAL, DIMENSIONAL ANTI-FUNGAL ASPHALT SHINGLES, ON ONE LAYER OF 15# BUILDING FELT ON 7/16" OSB TYP.

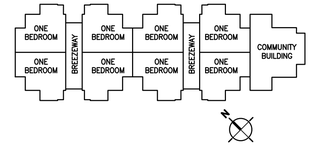
MARK (M2) VINYL SIDING
MIN. .044 HEAVY GAUGE CEDAR SHAKE PROFILE

MARK (M3) VINYL SIDING
MIN. 044 HEAVY GAUGE BOARD AND BATTEN PROFILE

MARK (M4) VINYL SIDING
HORIZONTAL SIDING – MIN. 044 HEAVY GAUGE DOUBLE 5 EXPOSURE

MARK (M5) BRICK VENEER
BRICK VENEER WITH MASONRY TIES @ 1'-4" O.C. BOTH DIRECTIONS

KEY PLAN



SEALS

NOT FOR CONSTRUCTION

CONSULTANTS

PROJECT
Merritt Mill

Chapel Hill/Carrboro, North Carolina

18-502.00

REVISIONS

DATE
DATE: JANUARY 19, 2018
ISSUE FOR: NCHFA Application

SET#

SHEET
Exterior Elevations
- 1 Bedroom Bldg
- Office

A 3.1

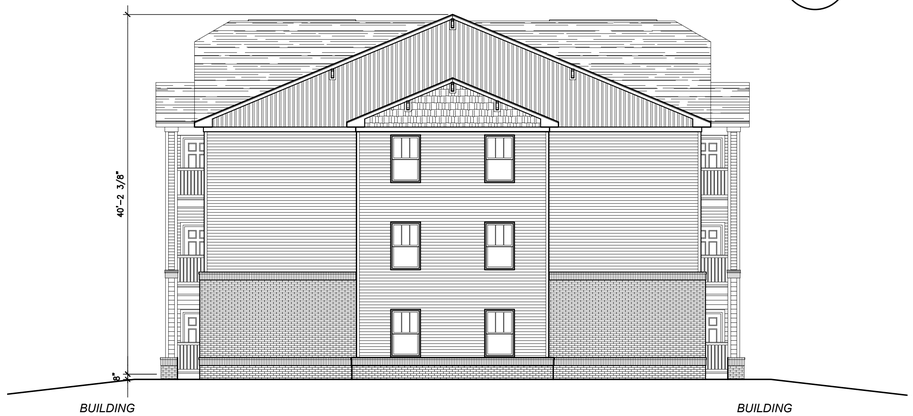
@ Copyright 2018 Ross/Deckard Architects, PA
Mailing Address: P.O. Box 98044, Raleigh, North Carolina 27624-8044
Street Address: 4010 Wake Forest Road, Raleigh, North Carolina 27609
E-mail: mail@RossDeckardArchitects.com
Fax: 919.875.9200
Phone: 919.875.0001
Architecture Planning Interiors
Ross/Deckard Architects

1 West Elevation

Scale: 1/8" = 1'-0"

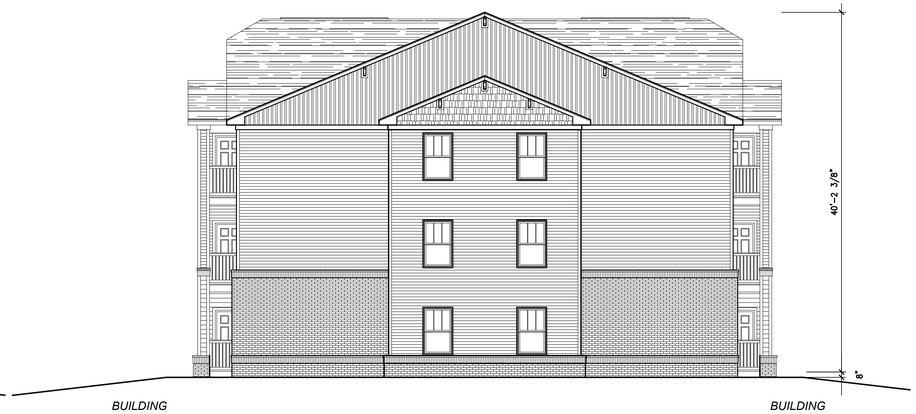
2 East Elevation

Scale: 1/8" = 1'-0"



3 North Elevation

Scale: 1/8" = 1'-0"



4 South Elevation

Scale: 1/8" = 1'-0"

ELEVATION KEY

MARK (M1) ROOF
OC WEATHERED WOOD COLOR (OR SIMILAR) 30 YEAR ARCHITECTURAL, DIMENSIONAL ANTI-FUNGAL ASPHALT SHINGLES, ON ONE LAYER OF 15# BUILDING FELT ON 7/16" OSB TYP.

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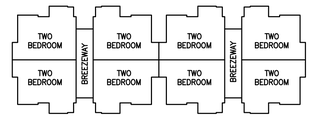
MIN. 044 HEAVY GAUGE BOARD AND BATTEN PROFILE

MARK (M4) VINYL SIDING
HORIZONTAL SIDING – MIN. 044 HEAVY GAUGE DOUBLE 5 EXPOSURE

MARK (M5) BRICK VENEER
BRICK VENEER WITH MASONRY TIES @ 1'-4" O.C. BOTH DIRECTIONS

KEY PLAN



SEALS

NOT FOR CONSTRUCTION

CONSULTANTS

PROJECT

Merritt Mill

Chapel Hill/Carrboro, North Carolina

18-502.00

REVISIONS

DATE

DATE: JANUARY 19, 2018
ISSUE FOR: NCHFA Application

SET#

SHEET

Exterior Elevations - 2 Bedroom Bldg

A 3.2

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Architecture
Planning
Interiors
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