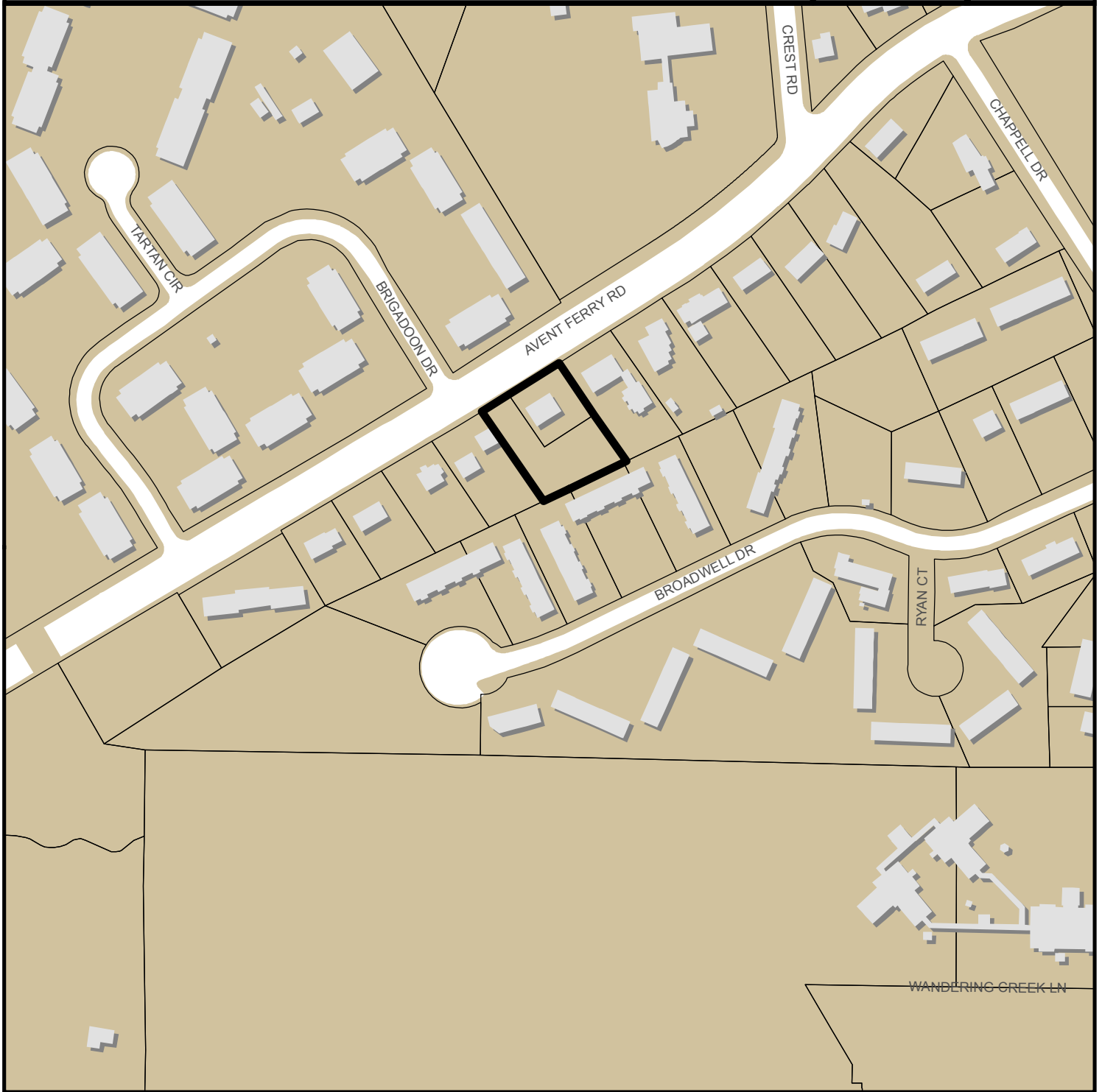


CENTENIAL BEND SR-97-2017



0 300 600 Feet

Zoning: **R-10 w/SRPOD**
CAC: **Southwest**
Drainage Basin: **Waknut Creek**
Acreage: **0.68**
Sq. Ft.: **11,543**

Planner: **Ryan Boivin**
Phone: **(919) 996-2681**

Applicant: **CAA Engineering**
Phone: **(919) 427-5227**





Administrative Approval Action

Case File / Name: SR-97-17, Centennial Bend
Transaction # 536046, AA # 3806

City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2495
DS.help@raleighnc.gov
www.raleighnc.gov

LOCATION: This site is comprised of two adjacent lots located on the south side of Avent Ferry Rd. The site is addressed at 2721 and 2723 Avent Ferry Rd.

REQUEST: Development of a 0.657-acre tract zoned R-10 into two attached residential buildings (referred to in plans as "Duplexes"). The two existing lots will be recombined, causing Lot #1 to be 13,649 SF/0.31 acres and Lot #2 to be 15,040 SF/0.35 acres. Duplex #1 on Lot 1 will be 2,448 SF in gross floor area, 3 stories, and 36' 5" in height. Duplex #2 on Lot 2 will be 2,448 SF in gross floor area, 3 stories, and 33' 7" in height.

DESIGN ADJUSTMENT(S)/ALTERNATES, ETC: Two Design Adjustments were approved as follows: 1) UDO Section 8.3.2 providing relief from block perimeter requirements, and 2) UDO Section 8.5 allowing an alternate streetscape section to retain the existing streetscape grass strip and sidewalk.

FINDINGS: City Administration finds that this request, with the below conditions of approval being met, conforms to the Unified Development Ordinance. This approval is based on a preliminary plan submitted by Mac McIntyre of Caa Engineers, Inc – dated 4/16/18.

CONDITIONS OF APPROVAL and NEXT STEPS:

Note: *This document must be applied to the second sheet of all future submittals with the exception of final plats.*

PRIOR TO THE ISSUANCE OF ANY SITE PERMITS OR APPROVAL OF CONCURRENT REVIEW PROCESS, WHICHEVER IS APPLICABLE:

ENGINEERING

1. Required NCDOT encroachment and/or driveway permits must be approved and copies provided to Development Services – Development Engineering prior to concurrent review approval.
2. Next Step: A right-of-way obstruction permit must be obtained from Right-of-way Services prior to the commencement of any construction activities within the right-of-way.

STORMWATER

3. In accordance with Part 10A Section 9.4.4 of the Unified Development Ordinance, a surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City.



Administrative Approval Action

Case File / Name: SR-97-17, Centennial Bend
Transaction # 536046, AA # 3806

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Development Services Department
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Raleigh, NC 27602
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PRIOR TO ISSUANCE OF BUILDING PERMITS:

GENERAL

4. A Final Plat shall be recorded with the Wake County Register of Deeds office for all Recombinations, Right of Way and/or Easement Dedications, and Tree Save Areas.
5. The City form document entitled Declaration of City of Raleigh Required City Code Provisions for Developments with Common Elements and Common Expenses shall be approved by the City and recorded with the county register of deeds office where the property is located and a copy of the recorded document shall be provided to the City by the end of the next business day following the recordation of the final plat; further recordings and building permit authorization will be withheld if the recorded document is not provided to the City.
6. A recombination map shall be recorded, recombining the existing two lots to allow for the proposed development of the site.
7. A demolition permit shall be obtained and placed on map(s) to be recorded.
8. Provide fire flow analysis.

ENGINEERING

9. The ½-104' right-of-way shall be dedicated to the City of Raleigh and shown on the map approved for recordation for Avent Ferry Road for an Avenue, 4-Lane Divided street.
10. In accordance with Part 10A Section 8.1.10, a fee-in-lieu for 1' sidewalk along Avent Ferry Road frontage for Lots 1 and 2 is paid to the City of Raleigh.
11. A shared driveway and parking cross-access agreement between the proposed lots owned by Timothy W. and Stacey Stephens shall be approved by the Development Services Department for recording in the Wake County Registry, and a copy of the recorded offer of shared driveway and parking cross-access easement shall be returned to the Development Services Department within 1 day of lot recordation. A recorded copy of these documents shall be provided to the Development Services Department within 14 days from authorization of lot recording. If a recorded copy of the documents is not provided within this 14-day period, further recordings and building permit issuance may be withheld.
12. A 5' slope easement being provided behind the right-of-way on private property shall be approved by City staff, and the location of the easement shall be shown on the map approved for recordation. The deed of easement shall be recorded at Wake County Register of Deeds within one day of recordation of the recorded plat. A recorded copy of these documents shall be provided to the Development Services Department within 14 days from authorization of lot recordation. If a recorded copy of the documents is not provided within this 14 day period, further recordings and building permit issuance may be withheld.



Administrative Approval Action

Case File / Name: SR-97-17, Centennial Bend
Transaction # 536046, AA # 3806

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STORMWATER

13. The previously recorded Private Drainage Easement on the lots should be abandoned or removed with recombination plat.

URBAN FORESTRY

14. No tree conservation area is required per UDO 9.1.2. No street trees on the public right of way are required because Avent Ferry Rd is an NCDOT roadway and a Type C-2 yard will be required.

Prior to issuance of building occupancy permit:

15. All Water, Sanitary Sewer and Reuse facilities shall be installed, inspected, tested and accepted by the City of Raleigh Public Utilities Department for operations and maintenance.
16. Next Step: Required public right-of-way infrastructure improvements shall be, at a minimum, sufficiently completed to provide the necessary, safe emergency and vehicular access.
17. Next Step: All street lights and street signs required as part of the development approval are installed.
18. Next Step: Copies of certified inspection reports for alleys and internal access ways are submitted to the City of Raleigh Development Services – Development Engineering program.

EXPIRATION DATES: The expiration provisions of UDO Section 10.2.8 E, including the ability to request extensions in the expiration date, apply to this site plan. If significant construction has not taken place on a project after administrative site review approval, that approval may expire and be declared void, requiring re-approval before permits may be issued. To avoid allowing this plan approval to expire the following must take place by the following dates:

3-Year Expiration Date: 6-27-2021

Obtain a valid building permit for the total area of the project, or a phase of the project.

4-Year Completion Date:

Within four years after issuance of the first building permit for the site plan, the construction of the entire site plan must be completed unless an applicant has been granted vested rights. Failure to complete construction within this specified time frame shall automatically void the approved site plan for which no building permits have been issued.

I hereby certify this administrative decision.

Signed: (Planning Dir./Designee) Ampie B. Long Date: 6/27/18

Staff Coordinator: Ryan Boivin


Design Adjustment Staff Response



**DEVELOPMENT
SERVICES
DEPARTMENT**

Per Section 10.2.18.C of the Unified Development Ordinance, the Development Services Director, or designee, shall consult with the heads of other City Departments regarding the review of the request. The Development Services Director, or designee, shall approve, approve with conditions or deny the request, but must do so within 60 days of the receipt of a completed application. Additional time may be necessary if a municipal or state entity is incorporated in the review process or if a detailed engineering study is submitted in conjunction with the request.

| | | | |
|--|---|--|--|
| PROJECT | Project Name | Centennial Bend Duplexes | |
| | Development Case Number | SR-97-2017 | |
| | Transaction Number | 536046 | |
| | Design Adjustment Number | DA - 21 - 2018 | |
| STAFF RESPONSE | Staff recommendation based upon the findings in the applicable code(s): | | |
| | <input checked="" type="checkbox"/> <u>UDO Art. 8.3 Blocks, Lots, Access</u> | <input checked="" type="checkbox"/> <u>UDO Art. 8.5 Existing Streets</u> | |
| | <input type="checkbox"/> <u>UDO Art. 8.4 New Streets</u> | <input type="checkbox"/> <u>Raleigh Street Design Manual</u> | |
| | Staff SUPPORTS <input checked="" type="checkbox"/> DOES NOT SUPPORT <input type="checkbox"/> the design adjustment request. | | |
| | DEPARTMENTS | | |
| | <input type="checkbox"/> <u>Dev. Services Planner</u> | <input type="checkbox"/> <u>City Planning</u> | |
| | <input checked="" type="checkbox"/> <u>Development Engineering</u> <i>KC Beard</i> | <input type="checkbox"/> <u>Transportation</u> | |
| | <input type="checkbox"/> <u>Engineering Services</u> | <input type="checkbox"/> <u>Parks & Recreation and Cult. Res.</u> | |
| | <input type="checkbox"/> <u>Public Utilities</u> | | |
| | CONDITIONS: | | |
| | | | |
| Development Services Director or Designee Action: <input checked="" type="checkbox"/> APPROVE <input type="checkbox"/> APPROVE WITH CONDITIONS <input type="checkbox"/> DENY | | | |


Daniel G. Kula, PE
6/27/18
Authorized Signature
ENGINEERING REVIEW MANAGER
Date

*The Development Services Director may authorize a designee to sign in his/her stead. Please print name and title next to signature. Appeal of the decision from the Development Services Director, or his or her designee, shall be made in writing within 30 days to the Board of Adjustment (see Section 10.2.18.C3b).

Staff Response

Article 8.3 Blocks Lots, Access



**DEVELOPMENT
SERVICES
DEPARTMENT**

The Development Services Director may in accordance with *Sec. 10.2.18*. approve a design adjustment, subject to all of the following findings.

- A. The requested design adjustment meets the intent of this Article;
YES NO
- B. The requested design adjustment conforms with the Comprehensive Plan and adopted City plans;
YES NO
- C. The requested design adjustment does not increase congestion or compromise Safety;
YES NO
- D. The requested design adjustment does not create any lots without direct street Frontage;
YES NO
- E. The requested design adjustment is deemed reasonable due to one or more of the following:
1. Topographic changes are too steep;
 2. The presence of existing buildings, stream and other natural features;
 3. Site layout of developed properties;
 4. Adjoining uses or their vehicles are incompatible;
 5. Strict compliance would pose a safety hazard; or
 6. Does not conflict with an approved or built roadway construction project
 7. adjacent to or in the vicinity of the site.
- YES NO

STAFF FINDINGS

These properties are zoned as R-10 which requires a block perimeter of 2,500 linear feet. Avent Ferry Road is an Avenue 4-Lane Divided street section per the Street Plan Map and provides a connective street between Western Boulevard (north terminus) and Tryon Road (south terminus). This street system provides a large number of apartment/ rental homes for NC State University and there are fewer connective streets based on the large areas of private parking lots and single family driveways. These duplexes are being constructed with a single shared driveway accessing Avent Ferry Road and would not be able to provide a beneficial street connection due to the existing residential lots and apartments immediately adjacent to these proposed duplexes. Additionally, the topography from Avent Ferry Road to the rear of the property drops 18' from elevation 311 to elevation 293 in 200 feet. Within the first 65' of the lot depth, there is an 8' drop which translates to a 12.3% grade which exceeds the maximum grade allowed for the Neighborhood street sections as per the City's Raleigh Street Design Manual.

Staff Response

Article 8.5 Existing Streets



DEVELOPMENT
SERVICES
DEPARTMENT

- A. The requested design adjustment meets the intent of this Article;
YES NO
- B. The requested design adjustment conforms with the Comprehensive Plan and adopted City plans;
YES NO
- C. The requested design adjustment does not increase congestion or compromise safety;
YES NO
- D. The requested design adjustment does not create additional maintenance responsibilities for the City; and
YES NO
- E. The requested design adjustment has been designed and certified by a Professional Engineer.
YES NO

STAFF FINDINGS

Avent Ferry Road is a State-maintained facility and has an existing grass strip at the back of curb and an existing 5' sidewalk. The Avenue, 4-Lane Divided street section is to provide a 6' planting strip with street trees at back of curb and a 6' sidewalk within the right-of-way. To maintain consistency along the street frontage, the existing streetscape would be retained and the proposed street trees required by the UDO street section would not be installed within the right-of-way per NCDOT. A C-2 streetyard would be installed outside the right-of-way. The 5' utility placement easement will not be required outside the right-of-way to eliminate conflicts with the streetyard installation due to NCDOT not allowing street trees in the right-of-way.

Design Adjustment Application



DEVELOPMENT SERVICES DEPARTMENT

The purpose of this request is to seek a Design Adjustment from the Development Services Director, or designee, for a specific project only and, if granted, may be approved with special conditions and provisions. This application and all further action shall be consistent with Section 10.2.18 in the Unified Development Ordinance (UDO). The consideration and decision of this request shall be based solely on the conformance of the findings, as outlined in Sec. 8.3.6, Sec. 8.4.1.E and Sec. 8.5.1.G of the UDO or the Raleigh Street Design Manual.

| | | |
|---|--|---------------------------------|
| PROJECT | Project Name CENTENIAL BEND DUPLEXES | |
| | Case Number SR 97-17 | |
| | Transaction Number 536046 | |
| OWNER | Name TIMOTHY AND STACEY STEPHENS | |
| | Address 574 CORLEYWOOD DRIVE | City RALEIGH |
| | State NC | Zip Code 27606 Phone 9194184454 |
| CONTACT | Name MAC MCINTYRE PE | Firm CAA ENGINEERS |
| | Address 4932 B WINDY HILL DRIVE | City RALEIGH |
| | State NC | Zip Code 27609 Phone 9194275227 |
| REQUEST | I am seeking a Design Adjustment from the requirements set forth in the following: | |
| | <input checked="" type="checkbox"/> UDO Art. 8.3 Blocks, Lots, Access | - See page 2 for findings |
| | <input checked="" type="checkbox"/> UDO Art. 8.4 New Streets | - See page 3 for findings |
| | <input type="checkbox"/> UDO Art. 8.5 Existing Streets | - See page 4 for findings |
| | <input type="checkbox"/> Raleigh Street Design Manual | - See page 5 for findings |
| | Provide details about the request; (please attach a memorandum if additional space is needed): | |
| THE REQUEST IS FOR DESIGN ADJUSTMENT IS FOR BLOCK PERIMETER AND FOR MODIFYING THE CITY'S NORMAL STREET SECTIONS | | |

It is the responsibility of the applicant to provide all pertinent information needed for the consideration of this request. Applicant must be the Property Owner.

By signing this document, I hereby acknowledge the information on this application is, to my knowledge, accurate.

Timothy and Stacey Stephens
 Owner/Owner's Representative Signature 3-15-18
Date

| CHECKLIST | |
|--|--|
| Signed Design Adjustment Application | <input checked="" type="checkbox"/> Included |
| Page(s) addressing required findings | <input checked="" type="checkbox"/> Included |
| Plan(s) and support documentation | <input type="checkbox"/> Included |
| Notary page (page 6) filled out; Must be signed by property owner | <input checked="" type="checkbox"/> Included |
| First Class stamped and addressed envelopes with completed notification letter | <input type="checkbox"/> Included |

Submit all documentation, with the exception of the required addressed envelopes and letters to designadjustments@raleighnc.gov.

Deliver the addressed envelopes and letters to:
 Development Services, Development Engineering
 One Exchange Plaza, Suite 500
 Raleigh NC, 27601

| | | |
|---------------------|----------------|--------|
| For Office Use Only | RECEIVED DATE: | DA - - |
|---------------------|----------------|--------|

Article 8.3, Blocks, Lots, Access

Administrative Design Adjustment Findings



**DEVELOPMENT
SERVICES
DEPARTMENT**

The Development Services Director may in accordance with *Sec. 10.2.18*, approve a design adjustment, subject to all of the following findings. Describe how each item is met:

- A. The requested design adjustment meets the intent of this Article;
THE INTENT OF THE ACCESS REGULATIONS PER SECTION 8.3.1 C AND 8.31.C ARE TO PROVIDE SAFE VEHICULAR /PEDESTRIAN ACCESS. DUE TO SEVERE GRADE DROP OFF ISSUES (18' DROP FROM AVENT FERRY TO REAR LOT LINE) AND MULTIFAMILY USES ON 2 SIDES, THE STEEP GRADES & HIGHER TRAFFIC ONTO AN UNSIGNALIZED AVENT FERRY RD WOULD NOT BE SAFE.
- B. The requested design adjustment conforms with the Comprehensive Plan and adopted City plans;
THE DESIGN ADJUSTMENT DOES CONFORM WITH THE 2030 COMPREHENSIVE PLAN AND WILL NOT IMPACT THE FUTURE LAND USE OR FUTURE STREET NETWORK
- C. The requested design adjustment does not increase congestion or compromise Safety;
THE DESIGN ADJUSTMENT WOULD DECREASE CONGESTION ON AVENT FERRY ROAD BY HAVING ONLY THE 2 DUPLEXES ACCESSING WITH A PRIVATE DRIVE ONTO AVENT FERRY ROAD WITH AN UNSIGNALIZED INTERSECTION. IN ADDITION THE SEVERE SLOPE FOR CONNECTING TO THE REAR PROPERTY WITH A DRIVE WOULD BE A POTENTIAL SAFETY ISSUE
- D. The requested design adjustment does not create any lots without direct street Frontage;
THE DESIGN ADJUSTMENT WILL NOT CREATE ANY LOTS WITHOUT DIRECT STREET FRONTAGE. THE MULTIFAMILY UNITS LOCATED AT REAR OF PROJECT HAVE DIRECT ACCESS TO PUBLIC ROADS. THE ADDITIONAL LOTS ALONG THE SIDES ALSO HAVE STREET FRONTAGE AND EXISTING DRIVEWAYS ALONG AVENT FERRY ROAD
- E. The requested design adjustment is deemed reasonable due to one or more of the following:
1. Topographic changes are too steep;
 2. The presence of existing buildings, stream and other natural features;
 3. Site layout of developed properties;
 4. Adjoining uses or their vehicles are incompatible;
 5. Strict compliance would pose a safety hazard; or
 6. Does not conflict with an approved or built roadway construction project
 7. adjacent to or in the vicinity of the site.
- THE DESIGN ADJUSTMENT IS DEEMED REASONABLE DUE TO FOLLOWING:
1. TOPOGRAPHIC CHANGES ONSITE OF 18' FROM FRONT TO BACK OF SITE IS SEVERE
 2. THERE ARE EXISTING MULTIFAMILY UNITS ON 2 SIDES AND SINGLE FAMILY ON OTHER SIDE
 3. THE SITE LAYOUT OF EXISTING DEVELOPED PROPERTIES: 2 WELL ESTABLISHED MULTIFAMILY DEVELOPMENTS ON SIDE AND REAR AND SINGLE FAMILY ON OTHER SIDE
 4. THE ADJOINING USE TO THE REAR IS A MULTIFAMILY UNIT BUILDING NEAR THE CENTENIAL BEND PROPERTY LINE. A CONNECTING DRIVE CAN NOT BECONNECTED TO THIS PROPERTY SINCE THE BUILDING BLOCKS ACCESS TO EXISTING PARKING LOTS OR STREETS
 5. STRICT COMPLIANCE WOULD RESULT IN STEEP DRIVE CONNECTING TO EXISTING BUILDING

Article 8.4, New Streets
Administrative Design Adjustment Findings



**DEVELOPMENT
SERVICES
DEPARTMENT**

The Development Services Director may in accordance with *Sec. 10.2.18*, approve a design adjustment, subject to all of the following findings. Describe how each item is met:

- A. The requested design adjustment meets the intent of this Article;

THE DESIGN ADJUSTMENT IS REQUESTED AS PER SECTION 8.4.2 D.4, THE NCDOT MAINTAINS THE PORTION OF AVENT FERRY ROAD WHERE THIS PROJECT IS BEING CONSTRUCTED. THE NCDOT HAS REQUESTED THAT NO TREES BE PLANTED BETWEEN THE CURB AND SIDEWALK, THEREFORE A TYPE C2 STREET YARD IS REQUIRED. THE EXISTING 5' SIDEWALK & PLANTER STRIP WILL REMAIN FOR CONSISTENCY ALONG AVENT FERRY ROAD

- B. The requested design adjustment conforms with the Comprehensive Plan and adopted City plans;

THE DESIGN ADJUSTMENT CONFORMS TO COMPREHENSIVE PLAN

- C. The requested design adjustment does not increase congestion or compromise safety;

THE DESIGN ADJUSTMENT DOES NOT INCREASE CONGESTION OR OR COMPROMISE SAFETY

- D. The requested design adjustment does not create additional maintenance responsibilities for the City;

THE DESIGN ADJUSTMENT DOES NOT CREATE ADDITIONAL MAINTENANCE RESPONSIBILITIES

- E. The requested design adjustment has been designed and certified by a Professional Engineer; and

THE DESIGN ADJUSTMENT HAS BEEN DESIGNED AND CERTIFIED BY A PROFESSIONAL ENGINEER

- F. The requested design adjustment shall address Stormwater collection and conveyance and not adversely impact Stormwater collection.

THE DESIGN ADJUSTMENT HAS NO ADVERSE EFFECTS TO STORMWATER COLLECTION

Individual Acknowledgement



DEVELOPMENT
SERVICES
DEPARTMENT

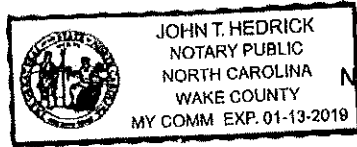
STATE OF NORTH CAROLINA
COUNTY OF Wake

INDIVIDUAL

I, John T Hedrick, a Notary Public do hereby certify that
Timothy Warren Stephens personally appeared before me this day and
acknowledged the due execution of the forgoing instrument.

This the 15 day of March, 2018.

(SEAL)



Notary Public

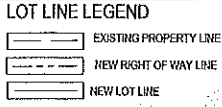
My Commission Expires: _____

Sign Distance Technique
 NO SIGN DISTANCE TECHNIQUE SHALL BE USED. THE SIGN DISTANCE TECHNIQUE IS THE DISTANCE BETWEEN THE HEIGHT OF THE SIGN AND THE POINT WHERE THE SIGN IS LOCATED. ON THE NEAREST TRAVELWAY WAY # 40 CURBSIDE, SIGN SHALL BE PLACED AT A SIGN THICKNESS OF APPROXIMATELY 10 FEET. SIGN DISTANCE IS CONTAINED TO BE ON THE PROPERTY OR ADJACENT PROPERTY.

FEE IN REM SIDEWALK
 THE CITY OF RALEIGH THE DEVELOPER SHALL BE RESPONSIBLE FOR THE PAYMENT FOR ADDITIONAL 1' OF SIDEWALK ALONG STREET FRONTAGE ALONG AVENUE FOR ROAD.

WASTE SERVICES PICK UP (PLAS)
 SOLID WASTE FOR EACH RESIDENCE WILL BE MANAGED THROUGH THE CITY OF RALEIGH WASTE MANAGEMENT PROGRAM. PER CITY OF RALEIGH ACCORD, HOUSEHOLD WASTE CONTAINERS ARE TO BE STORED BEHIND THE CURB ON A 3' x 3' x 3' CONCRETE PAD. SPECIAL DELIVERY TRUCKS FOR LARGE ITEMS OR EXCESSIVE WASTE WILL BE REQUIRED. ALL WASTE MUST BE TAKEN TO A WASTE TREATMENT PLANT FOR PICK UP BY WASTE SERVICES AND RETURNED IMMEDIATELY TO ORIGINAL LOCATION BEHIND UNITS AFTER REPLY.

HVAC EQUIPMENT LOCATION
 FOR SECTION 22.04 OF THE UDD DEALING WITH HVAC EQUIPMENT, THE HVAC EQUIPMENT SHALL BE SCREEN APPROPRIATELY AND SHALL BE LOCATED IN REAR OF UNITS.



INFILL DEVELOPMENT
 PER SECTION 22.13 OF THE UDD DEALING WITH INFILL DEVELOPMENT, THIS SITE RESOURCES THESE RULES AND THE SITE DESIGN CONFORM TO THESE RULES AS SHOWN.

IMPERVIOUS TABLE NEW LOT 1

| | |
|------------------------------|-----------------|
| NEW LOT 1 AREA | 13,848 SF |
| CONCRETE DRIVE | 301 SF |
| CONCRETE DRIVEWAY | 331 SF |
| CONCRETE SIDEWALK | 2,918 SF |
| TOTAL IMPERVIOUS AREA | 3,550 SF |

NOTE: IF IMPERVIOUS AREA PER LOT IS LESS THAN 5% OF TOTAL IMPERVIOUS AREA, NO TREATMENT OR DETENTION REQUIRED.

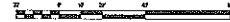
IMPERVIOUS TABLE NEW LOT 2

| | |
|------------------------------|-----------------|
| NEW LOT 2 AREA | 15,040 SF |
| CONCRETE DRIVE | 301 SF |
| CONCRETE DRIVEWAY | 331 SF |
| CONCRETE SIDEWALK | 2,918 SF |
| TOTAL IMPERVIOUS AREA | 3,550 SF |

NOTE: IF IMPERVIOUS AREA PER LOT IS LESS THAN 5% OF TOTAL IMPERVIOUS AREA, NO TREATMENT OR DETENTION REQUIRED.

STORMWATER REQUIREMENTS
 PER UDD SECTION 22.13.1 FOR STORMWATER COMPLIANCE, THE FOLLOWING ARE EXEMPT FROM ACTIVE STORMWATER CONTROL MEASURES:
 (1) A STORMWATER LOT OF ANY SIZE, INCLUDING GRASSY YARDED LOTS THAT ARE RECORDED WITH OTHER GRASSY YARDED LOTS FOR ANY DETACHED HOUSE USED FOR SINGLE UNIT LIVING OR ANY ATTACHED HOUSE USED FOR TWO UNIT LIVING, INCLUDING ACCESSORY USES.
 NOTE: LOTS EXEMPTED AS NOTED SHALL BE SUBJECT TO ACTIVE STORMWATER MEASURES WHEN MAXIMUM IMPERVIOUS AREA OF THE LOT EXCEEDS THE LIMITS FOR EACH LOT IN SECTION 22.14. COMPLIANCE FOR EACH LOT WILL BE DETERMINED AT BUILDING PERMIT.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS



CE ENGINEERS, INC.
 1211 Middle Lake Drive
 Wake Forest, North Carolina 27787
 P. 919.790.0000
 F. 919.790.0001
 C. 919.790.0002



| | | |
|-----|------------|-------------------|
| NO. | DATE | DESCRIPTION |
| 1 | 08/15/2021 | ISSUED FOR PERMIT |
| 2 | 08/15/2021 | ISSUED FOR PERMIT |
| 3 | 08/15/2021 | ISSUED FOR PERMIT |
| 4 | 08/15/2021 | ISSUED FOR PERMIT |
| 5 | 08/15/2021 | ISSUED FOR PERMIT |
| 6 | 08/15/2021 | ISSUED FOR PERMIT |
| 7 | 08/15/2021 | ISSUED FOR PERMIT |
| 8 | 08/15/2021 | ISSUED FOR PERMIT |
| 9 | 08/15/2021 | ISSUED FOR PERMIT |
| 10 | 08/15/2021 | ISSUED FOR PERMIT |

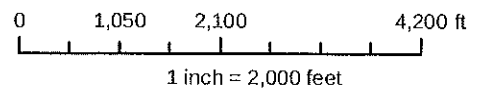


SITE AND STAKING PLAN
 Centennial Bend, LLC
 Centennial Bend, LLC
 2727 Avond Ferry Rd., Raleigh, NC, 27608

APP NO. 2021
 DRAW NO. **C-3**



Centennial Bend Duplex block perimeter



Disclaimer
 iMaps makes every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are NOT surveys. No warranties, expressed or implied, are provided for the data therein, its use, or its interpretation.

CENTENIAL BEND DUPLEX SITE PLAN SR - 97-17

TRANSACTION # 536046

2721 & 2723 AVENT FERRY ROAD
RALEIGH, NC 27606
WAKE COUNTY, NORTH CAROLINA

STORMWATER REQUIREMENTS

PER UDO SECTION 9.2.2.A.1.b.i - FOR STORMWATER COMPLIANCE, THE FOLLOWING ARE EXEMPT FROM ACTIVE STORMWATER CONTROL MEASURES

(b.i.) A STORMWATER LOT OF ANY SIZE, INCLUDING GRANDFATHERED LOTS THAT ARE RECOMBINED WITH OTHER GRANDFATHERED LOTS USED FOR ANY DETACHED HOUSE USED FOR SINGLE UNIT LIVING OR ANY ATTACHED HOUSE USED FOR TWO UNIT LIVING, INCLUDING ACCESSORY USES

NOTE: LOTS EXEMPTED AS NOTED SHALL BE SUBJECT TO ACTIVE STORMWATER MEASURES WHEN MAXIMUM IMPERVIOUS AREA OF THE LOT EXCEEDS THE LIMITS FOR EACH LOT IN SECTION 9.2.2.4. COMPLIANCE FOR EACH LOT WILL BE DETERMINED AT BUILDING PERMIT.

WASTE SERVICES PICK UP PLAN

SOLID WASTE FOR EACH RESIDENCE WILL BE MANAGED THROUGH THE CITY OF RALEIGH WASTE MANAGEMENT PROGRAM. PER MEETING WITH JOSEPH ACOSTA, ROLLOUT REFUSE CONTAINERS ARE TO BE STORED BEHIND THE DUPLEX UNITS ON A CONCRETE PAD. DURING DESIGNATED TRASH PICKUP DAYS ROLLOUT REFUSE CONTAINERS WILL BE ROLLED ALONG JOINT DRIVEWAY TO AVENT FERRY CURB FOR PICK UP BY WASTE SERVICES AND RETURNED IMMEDIATELY TO ORIGINAL LOCATION BEHIND UNITS AFTER PICKUP.

ARCHITECT CONTACT

DYNAMIC DESIGN GROUP
DAVID GRORUD
P.O. BOX 1361
CARY N.C. 27512
dynamicdesigngroup@gmail.com
919-601-1406

OWNER/DEVELOPER CONTACT

TIMOTHY & STACEY STEPHENS
574 CORLEY WOOD DRIVE
RALEIGH, NC 27606
(919) 418-4454
SAMMYSTAPROOMANDGRILL@GMAIL.COM

CIVIL ENGINEER

Caa Engineers, Inc
MAC MCINTYRE, P.E.
4932-B WINDY HILL DRIVE
RALEIGH, NC 27609
PH. (919) 427-5227
MACMCINTYREPE@GMAIL.COM

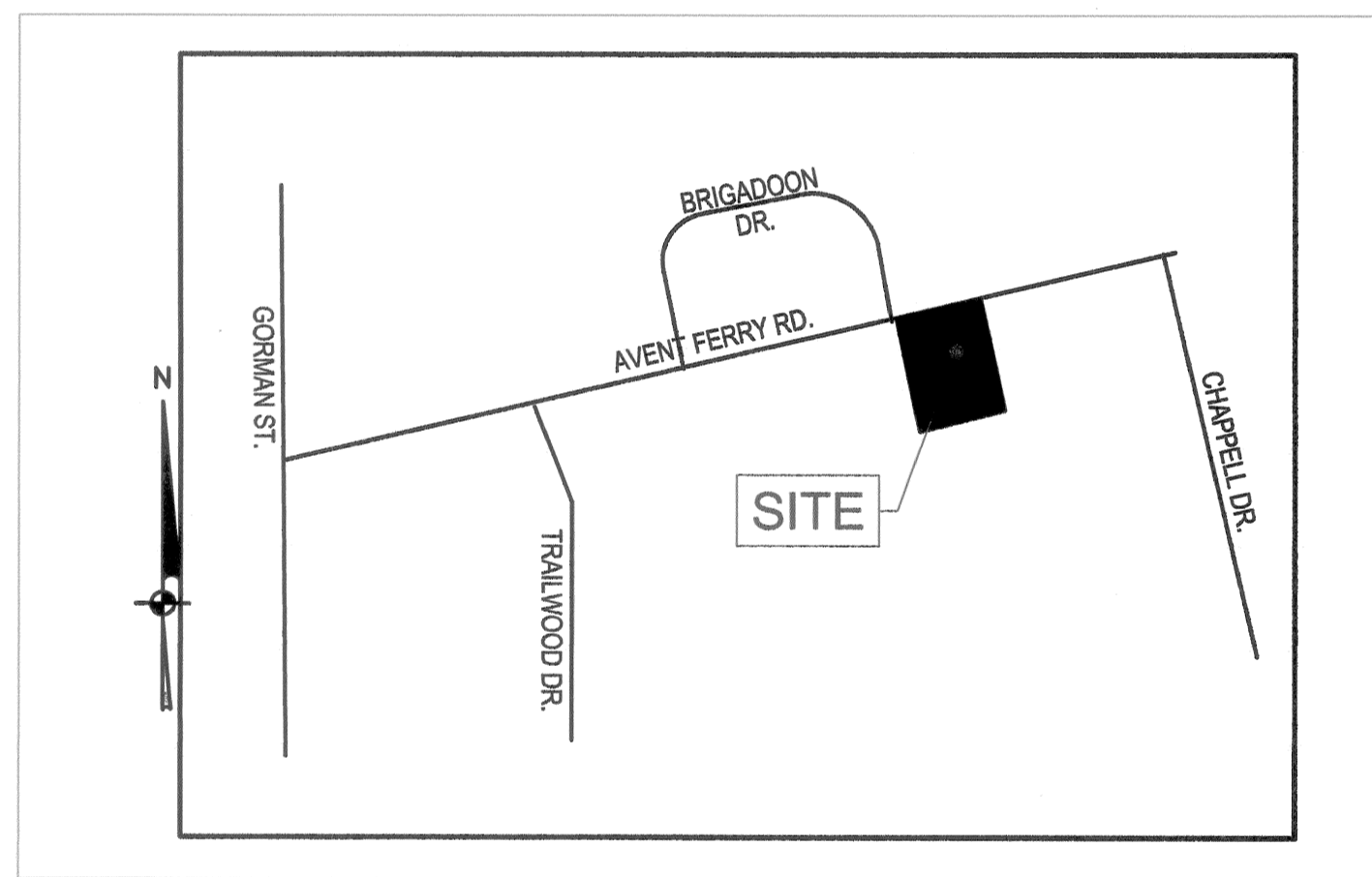
SHEET INDEX

| | |
|-------|---------------------------------|
| C-0 | COVER SHEET |
| C-1 | EXISTING SITE & DEMOLITION PLAN |
| C-2 | RECOMBINATION PLAN |
| C-3 | SIGHT PLAN |
| C-4 | GRADING AND STORMWATER PLAN |
| C-5 | UTILITY PLAN |
| C-6 | LANDSCAPE PLAN |
| D-1 | SITE DETAIL SHEET |
| A-1 A | ARCHITECTURAL ELEVATIONS |
| A-1 B | ARCHITECTURAL ELEVATIONS |

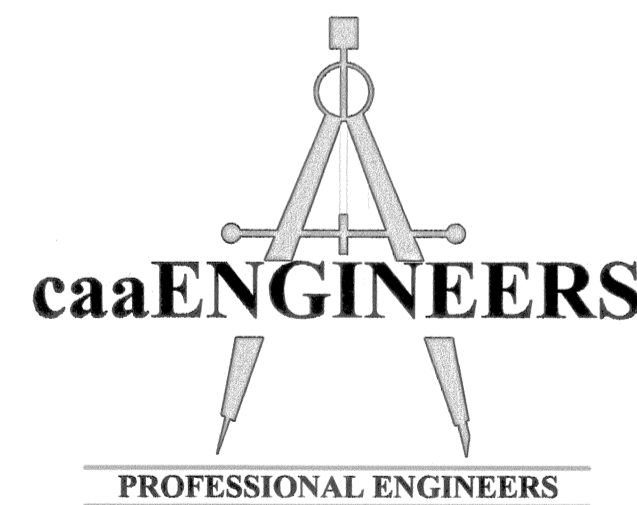
SKETCH PLAN TRANSACTION NUMBER
478691

PROJECT INFORMATION

| | | |
|---|--------------------------------------|---------------------|
| PROJECT ADDRESS: | 2721 & 2723 AVENT FERRY ROAD | |
| PIN: | 0793259742 0793259682 | |
| ZONING: | R-10 | |
| FLOOD ZONE: | N/A | |
| | NO FEMA FLOOD HAZARDS AREAS PER FIRM | |
| DISTURBED AREA: | NEW LOT 1 - 10,400 SF | NEW LOT 2 - 9798 SF |
| EXISTING LOT AREA (2 EXISTING LOTS) | 28,845 SF (.657 ACRES) | |
| R/W DEDICATION ALONG AVENT FERRY ROAD | 2,460 SF +/- | |
| PROPOSED USE | 2 DUPLEXES | |
| EXISTING USE | DUPLEX / VACANT LOT | |
| DENSITY ALLOWED - R-10 (10 UNITS/ ACRE) | | |
| PROPOSED DENSITY = 4 UNITS / .657 = 6.08 UNITS PER ACRE | | |
| PROPOSED IMPERVIOUS AREA NEW LOT 1 | (43%) | |
| PROPOSED IMPERVIOUS AREA NEW LOT 2 | (38%) | |
| PROPOSED RECOMBINED LOTS / EXISTING LOTS | 2 | |
| AMENITY AREA (REQUIRED 10%) | N/A | |
| AMENITY AREA (PROVIDED) | N/A | |
| TCA REQUIRED | N/A | |
| TCA PROVIDED | N/A | |
| LOT WIDTH (MIN) | 50 FT | |
| LOT WIDTH - PROVIDED | 75 FT | |
| INSIDE CITY LIMITS | YES | |
| RIVER BASIN | NEUSE | |
| PARKING REQ'D (4 DUPLEX UNITS @ 2 SPACES / UNIT) | 8 SPACES | |
| PARKING PROVIDED | 16 SPACES / 8 SPACES ON EACH LOT | |
| BIKE PARKING REQUIRED- 1 SPACE PER 20 UNITS | 0 | |



VICINITY MAP



caaENGINEERS, Inc.
Professional Engineers
1233 Heritage Links Drive
Wake Forest, North Carolina 27587
919-625-6755
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C-2151

PROJECT NOTES

- THIS PROJECT IS NOT A SUBDIVISION. THERE ARE 2 EXISTING LOTS THAT ARE BEING RECOMBINED. EACH NEW LOT WILL HAVE ONE DUPLEX UNIT
- PRIOR TO RECOMBINATION PLAT FINAL APPROVAL DEMOLITION PERMITS MUST BE OBTAINED FOR THE EXISTING STRUCTURE AND SUPPORTING INFRASTRUCTURE AND THEY MUST BE REMOVED PRIOR TO PLAT RECORDATION.
- WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, NO OBSTRUCTION BETWEEN 2 FEET AND 8 FEET IN HEIGHT ABOVE THE CURB LINE ELEVATION SHALL BE LOCATED IN WHOLE OR PART. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO ANY BERM, FOLIAGE, FENCE, WALL SIGN, PARKED VEHICLE OR OTHER OBJECT.
- TREE CONSERVATION PLAN IS NOT REQUIRED SINCE THE PROJECT SITE IS LESS THAN 2.0 ACRES PER ARTICLE 9.1.2 OF THE UDO.
- THIS PROJECT FALLS UNDER THE SPROD REQUIREMENTS

Administrative Site Review Application
(for UDO Districts only)

Development Services Customer Service Center | 1 Exchange Plaza, Suite 400 | Raleigh, NC 27601 | (919) 427-5227 | www.raleighnc.gov | 919-996-1831
Litchford Satellite Office | 8321 - 1301 Litchford Road | Raleigh, NC 27601 | (919) 996-4200

When submitting plans, please check the appropriate building type and include the Plan Checklist document.

| BUILDING TYPE | FOR OFFICE USE ONLY |
|---|--|
| <input type="checkbox"/> Detached <input checked="" type="checkbox"/> Attached <input type="checkbox"/> Apartment <input type="checkbox"/> Townhouse | Transaction Number Assigned Project Coordinator Assigned Team Leader |
| <input type="checkbox"/> General <input type="checkbox"/> Mixed Use <input type="checkbox"/> Open Lot | |

Has your project previously been through the Due Diligence or Sketch Plan Review process? If yes, provide the transaction # 478691

GENERAL INFORMATION

Development Name: CENTENIAL BEND LLC
 Zoning District: R-10 Overlay District (if applicable): SPROD Inside City Limits? Yes No
 Proposed Use: 2 DUPLEXES
 Property Address(es): 2721 & 2723 AVENT FERRY ROAD Major Street Location: AVENT FERRY ROAD
 Wake County Property Identification Number(s) for each parcel to which these guidelines will apply:
 P.I.N. 0793259742 P.I.N. 0793259682 P.I.N. P.I.N.

What is your project type?
 Mixed Residential Non-Residential Condo School Shopping Center Office Industrial Building
 Office Retail Cottage Court
 Other: _____
 If other, please describe: _____

WORK SCOPE
Per City Code Section 10.2.8.0.1, summarize the project work scope. For additions, changes of use, or enclosures (see Chapter 9 of the UDO), indicate impacts on parking requirements.
PROPOSED DEVELOPMENT CONSIST OF THE DEVELOPMENT OF 2 DUPLEX UNITS ON 2 EXISTING RECOMBINED LOTS

DESIGN ADJUSTMENT OR ADMIN ALTERNATE
Administrative AE
NONE KNOWN OF AT THIS TIME

CLIENT/DEVELOPER/OWNER
Company: CENTENIAL BEND LLC Name (s): SAMMY STEPHENS
Address: 2574 CORLEY WOOD DRIVE
Phone: 919-418-4454 Email: SAMMYSTAPROOMANDGRILL@GMAIL.COM Fax: N/A

CONSULTANT
(Contact Person for Plans)
Company: Caa Engineers, Inc Name (s): Mac McIntyre
Address: 4932 b WINDY HILL DRIVE, RALEIGH NC 27609
Phone: 919-427-5227 Email: macmcintyrepe@gmail.com Fax: N/A

PAGE 1 OF 3 WWW.RALEIGHNC.GOV REVISION 05.13.16

DEVELOPMENT TYPE & SITE DATA TABLE (Applicable to all developments)

| Zoning Information | Building Information |
|---|--|
| Zoning District(s) R-10 | Proposed building use(s) DUPLEXES |
| If more than one district, provide the acreage of each: N/A | Existing Building(s) sq. ft. gross: 1,856 SF |
| Overlay District: SPECIAL HIGHWAY OVERLAY DISTRICT | Proposed Building(s) sq. ft. gross: 4,896 SF |
| Total Site Acres: Inside-City Limits: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Total sq. ft. gross (existing & proposed): 4,896 SF |
| Off street parking: Required: 8 Provided: 16 | Proposed height of building(s): 32'-2" (HEIGHT): 3 STORY |
| COA (Certificate of Appropriateness) case # N/A | # of stories: 3 STORY |
| BOA (Board of Adjustment) case # A- N/A | Calling height of 1 st Floor: 9' |
| CUD (Conditional Use District) case # 2- N/A | |

Stormwater Information

Existing Impervious Surface: 4,982 SF acres/square feet
 Proposed Impervious Surface: 11,543 SF acres/square feet
 Flood Hazard Area: Yes No
 If Yes, please provide:
 Flood Study: N/A
 FEMA Map Panel #
 Neuse River Buffer: Yes No Wetlands: Yes No

FOR RESIDENTIAL DEVELOPMENTS

| | |
|--|---|
| 1. Total # of Apartment, Condominium or Residential Units: 4 | 5. Bedroom Units: 1br 2br 3br 4br or more: 4 |
| 2. Total # of Congregate Care Or Life Care Dwelling Units: N/A | 6. Infill Development: 2, 3, 7 |
| 3. Total Number of Hotel Units: N/A | 7. Open Space (only) or Amenity: N/A |
| 4. Overall Total # of Dwelling Units (1-6 Above): 4 | 8. Is your project a cottage court? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

SIGNATURE BLOCK (Applicable to all developments)

In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed development plan as approved by the City.

I hereby designate: **MAC MCINTYRE PE** to act as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf and to represent me in any public meeting regarding this application.

I/we have read, acknowledge and affirm that this project is conforming to all application requirements applicable with the proposed development plan.

Signed: *Sammy Stephens* Date: 4/7/17
 Printed Name: **SAMMY STEPHENS**
 Signed: _____ Date: _____
 Printed Name: _____

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS

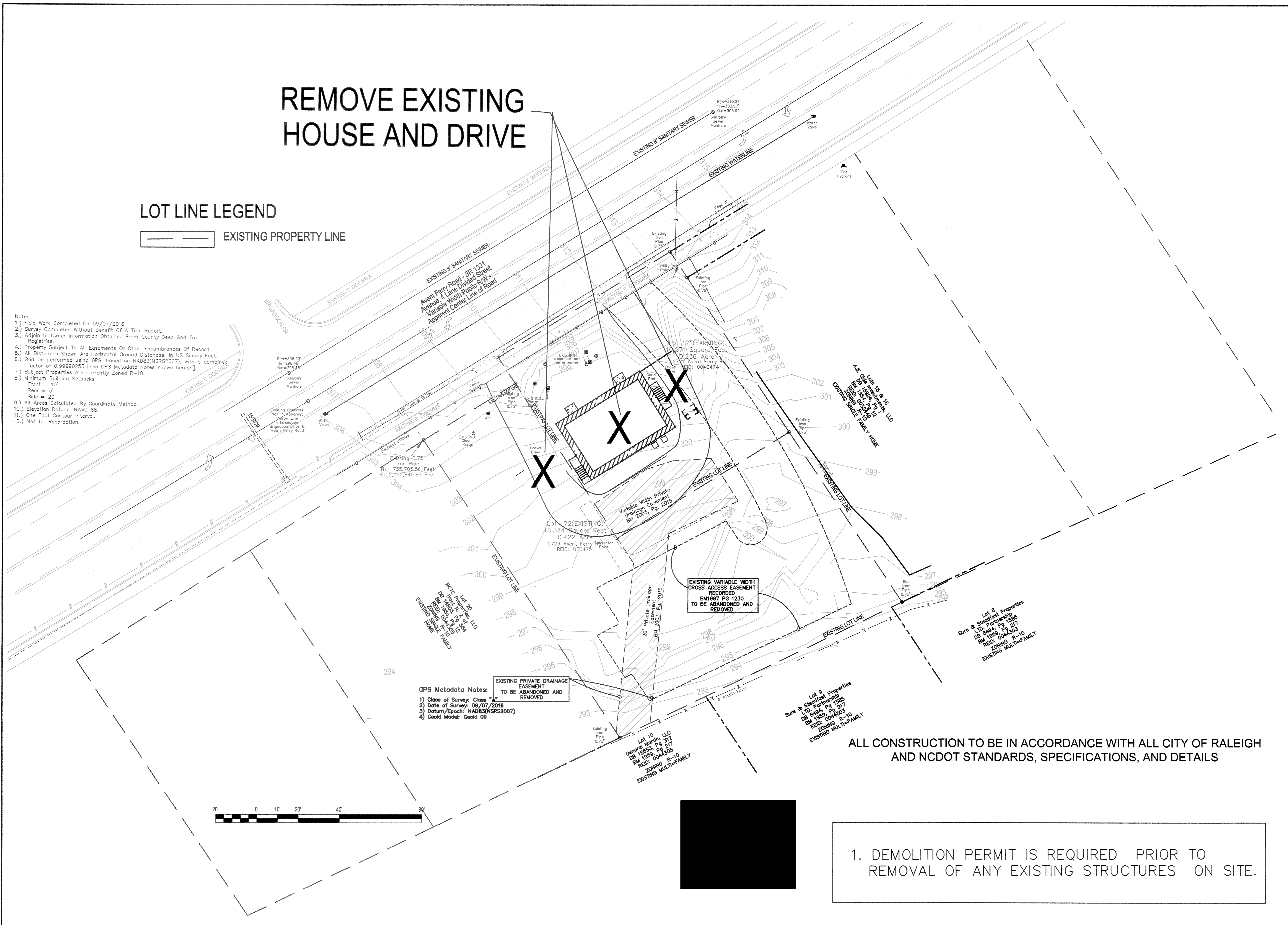
REVISION DATE OF PLANS - APRIL 16, 2018

REMOVE EXISTING HOUSE AND DRIVE

LOT LINE LEGEND

— — — — — EXISTING PROPERTY LINE

- Notes:
- 1.) Field Work Completed On 09/07/2016.
 - 2.) Survey Completed Without Benefit Of A Title Report.
 - 3.) Adjoining Owner Information Obtained From County Deed And Tax Registries.
 - 4.) Property Subject To All Easements Or Other Encumbrances Of Record.
 - 5.) All Distances Shown Are Horizontal Ground Distances, in US Survey Feet.
 - 6.) Grid tie performed using GPS, based on NAD83(NSRS2007), with a combined factor of 0.99990253 [see GPS Metadata Notes shown hereon].
 - 7.) Subject Properties Are Currently Zoned R-10.
 - 8.) Minimum Building Setbacks:
Front = 10'
Side = 5'
Rear = 20'
 - 9.) All Areas Calculated By Coordinate Method.
 - 10.) Elevation Datum: NAVD 88.
 - 11.) One Foot Contour Interval.
 - 12.) Not for Recordation.



GPS Metadata Notes:
 1) Class of Survey: Class **
 2) Date of Survey: 09/07/2016
 3) Datum/Epoch: NAD83(NSRS2007)
 4) Geoid Model: Geoid 09

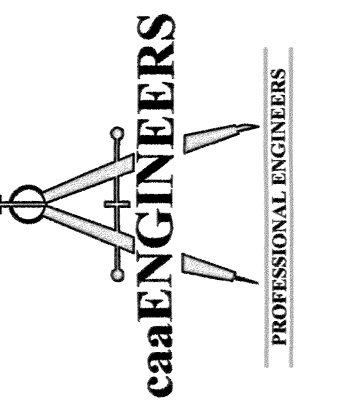
EXISTING VARIABLE WIDTH CROSS ACCESS EASEMENT RECORDED BM1897 PG 1230 TO BE ABANDONED AND REMOVED

EXISTING PRIVATE DRAINAGE EASEMENT TO BE ABANDONED AND REMOVED

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS

1. DEMOLITION PERMIT IS REQUIRED PRIOR TO REMOVAL OF ANY EXISTING STRUCTURES ON SITE.

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| NO. | DATE | REVISION/DESCRIPTION | BY |
|-----|----------|----------------------|----|
| 1 | 09/07/16 | REVISED PER CITY | BY |
| 2 | 09/08/16 | REVISED PER CITY | BY |
| 3 | | Comment | BY |
| 4 | | Comment | BY |
| 5 | | Comment | BY |
| 6 | | Comment | BY |
| 7 | | Comment | BY |
| 8 | | Comment | BY |

PRELIMINARY PLANS
 NOT FOR CONSTRUCTION

Existing Site and Demo Plan
 Centennial Bend
 Centennial Bend, LLC
 2721 Avent Ferry Rd, Raleigh NC, 27606

Job No. 3501
 Dwg No. **C-1**

Sight Distance Triangles
 NO SIGHT OBSTRUCTING OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERMING, PARKED VEHICLES OR SIGN BETWEEN THE HEIGHTS OF TWENTY-FOUR (24) INCHES AND EIGHT (8) FEET ABOVE THE CURB LINE ELEVATION, OR THE NEAREST TRAVELED WAY IF NO CURBING EXISTS, SHALL BE PLACED WITHIN A SIGHT TRIANGLE OF A PUBLIC STREET, PRIVATE STREET OR DRIVEWAY CONTAINED EITHER ON THE PROPERTY OR ON AN ADJOINING PROPERTY.

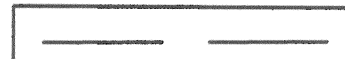


FEE IN-LIEU SIDEWALK
 PER CITY OF RALEIGH, THE DEVELOPER SHALL BE RESPONSIBLE FOR FEE IN-LIEU PAYMENT FOR ADDITIONAL 1' OF SIDEWALK ALONG STREET FRONTAGE ALONG AVENT FERRY ROAD.

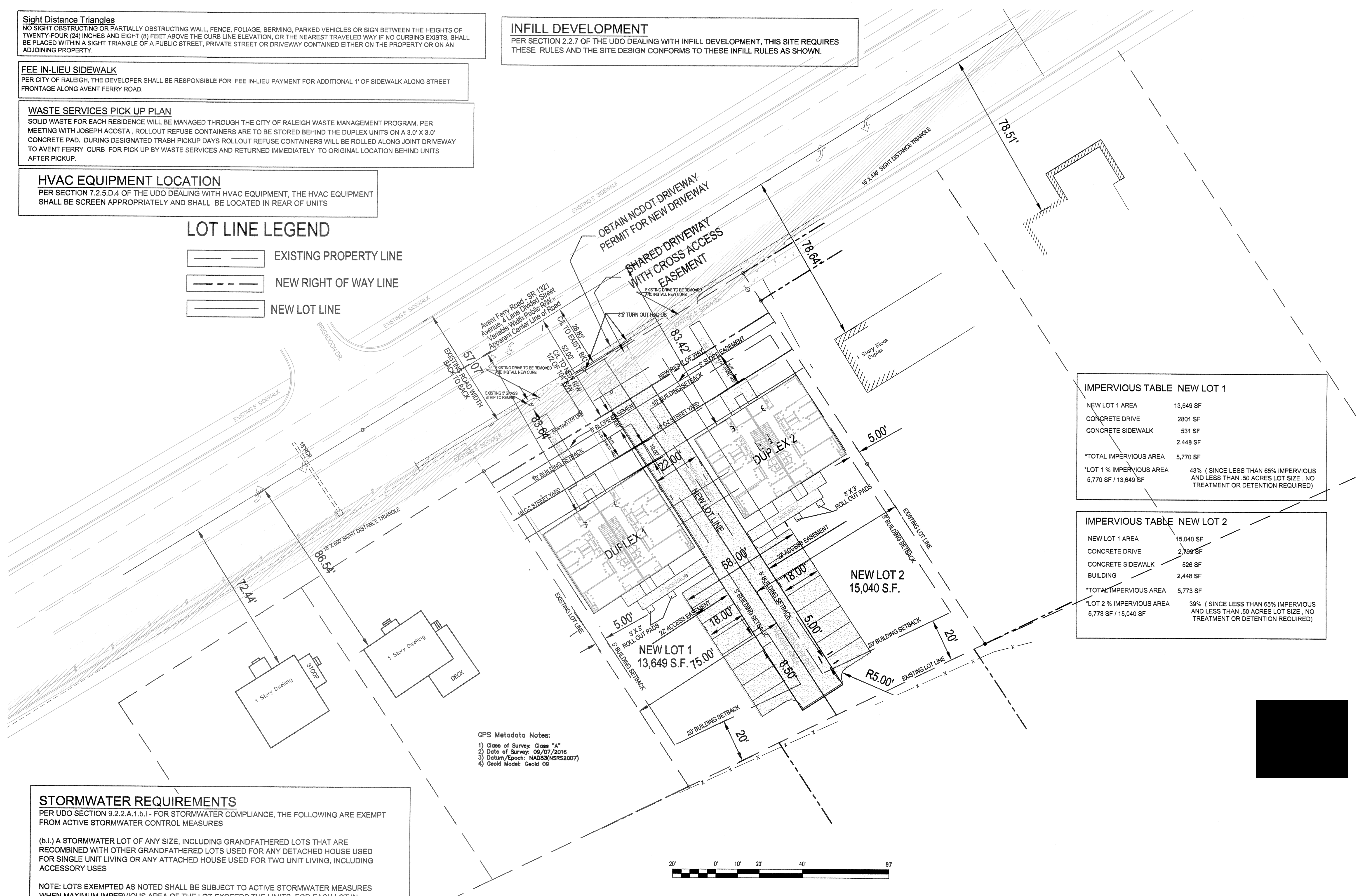
WASTE SERVICES PICK UP PLAN
 SOLID WASTE FOR EACH RESIDENCE WILL BE MANAGED THROUGH THE CITY OF RALEIGH WASTE MANAGEMENT PROGRAM. PER MEETING WITH JOSEPH ACOSTA, ROLL-OUT REFUSE CONTAINERS ARE TO BE STORED BEHIND THE DUPLEX UNITS ON A 3.0' X 3.0' CONCRETE PAD. DURING DESIGNATED TRASH PICKUP DAYS ROLL-OUT REFUSE CONTAINERS WILL BE ROLLED ALONG JOINT DRIVEWAY TO AVENT FERRY CURB FOR PICK UP BY WASTE SERVICES AND RETURNED IMMEDIATELY TO ORIGINAL LOCATION BEHIND UNITS AFTER PICKUP.

HVAC EQUIPMENT LOCATION
 PER SECTION 7.2.5.D.4 OF THE UDO DEALING WITH HVAC EQUIPMENT, THE HVAC EQUIPMENT SHALL BE SCREEN APPROPRIATELY AND SHALL BE LOCATED IN REAR OF UNITS

INFILL DEVELOPMENT
 PER SECTION 2.2.7 OF THE UDO DEALING WITH INFILL DEVELOPMENT, THIS SITE REQUIRES THESE RULES AND THE SITE DESIGN CONFORMS TO THESE INFILL RULES AS SHOWN.

LOT LINE LEGEND

-  EXISTING PROPERTY LINE
-  NEW RIGHT OF WAY LINE
-  NEW LOT LINE



IMPERVIOUS TABLE NEW LOT 1

| | |
|---------------------------------|--|
| NEW LOT 1 AREA | 13,649 SF |
| CONCRETE DRIVE | 2801 SF |
| CONCRETE SIDEWALK | 531 SF |
| | 2,448 SF |
| *TOTAL IMPERVIOUS AREA | 5,770 SF |
| *LOT 1 % IMPERVIOUS AREA | 43% (SINCE LESS THAN 65% IMPERVIOUS AND LESS THAN .50 ACRES LOT SIZE , NO TREATMENT OR DETENTION REQUIRED) |

IMPERVIOUS TABLE NEW LOT 2

| | |
|---------------------------------|--|
| NEW LOT 1 AREA | 15,040 SF |
| CONCRETE DRIVE | 2,799 SF |
| CONCRETE SIDEWALK | 526 SF |
| BUILDING | 2,448 SF |
| *TOTAL IMPERVIOUS AREA | 5,773 SF |
| *LOT 2 % IMPERVIOUS AREA | 39% (SINCE LESS THAN 65% IMPERVIOUS AND LESS THAN .50 ACRES LOT SIZE , NO TREATMENT OR DETENTION REQUIRED) |

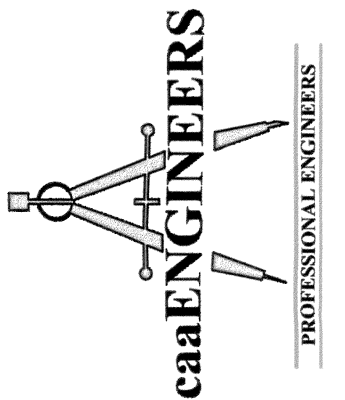
GPS Metadata Notes:
 1) Class of Survey: Class "A"
 2) Date of Survey: 09/07/2016
 3) Datum/Epoch: NAD83(NSRS2007)
 4) Geoid Model: Geoid 09



STORMWATER REQUIREMENTS
 PER UDO SECTION 9.2.2.A.1.b.i - FOR STORMWATER COMPLIANCE, THE FOLLOWING ARE EXEMPT FROM ACTIVE STORMWATER CONTROL MEASURES
 (b.i.) A STORMWATER LOT OF ANY SIZE, INCLUDING GRANDFATHERED LOTS THAT ARE RECOMBINED WITH OTHER GRANDFATHERED LOTS USED FOR ANY DETACHED HOUSE USED FOR SINGLE UNIT LIVING OR ANY ATTACHED HOUSE USED FOR TWO UNIT LIVING, INCLUDING ACCESSORY USES
 NOTE: LOTS EXEMPTED AS NOTED SHALL BE SUBJECT TO ACTIVE STORMWATER MEASURES WHEN MAXIMUM IMPERVIOUS AREA OF THE LOT EXCEEDS THE LIMITS FOR EACH LOT IN SECTION 9.2.2.4 . COMPLIANCE FOR EACH LOT WILL BE DETERMINED AT BUILDING PERMIT.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS

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 7-21



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| 1 | 12/15/2017 | REVISIONS PER CITY | By |
| 2 | 03/02/2018 | REVISIONS PER CITY | By |
| 3 | 04/10/2018 | REVISIONS PER CITY | By |
| 4 | 04/10/2018 | Comment | By |
| 5 | Date | Comment | By |
| 6 | Date | Comment | By |
| 7 | Date | Comment | By |
| 8 | Date | Comment | By |




PRELIMINARY PLANS
 NOT FOR CONSTRUCTION

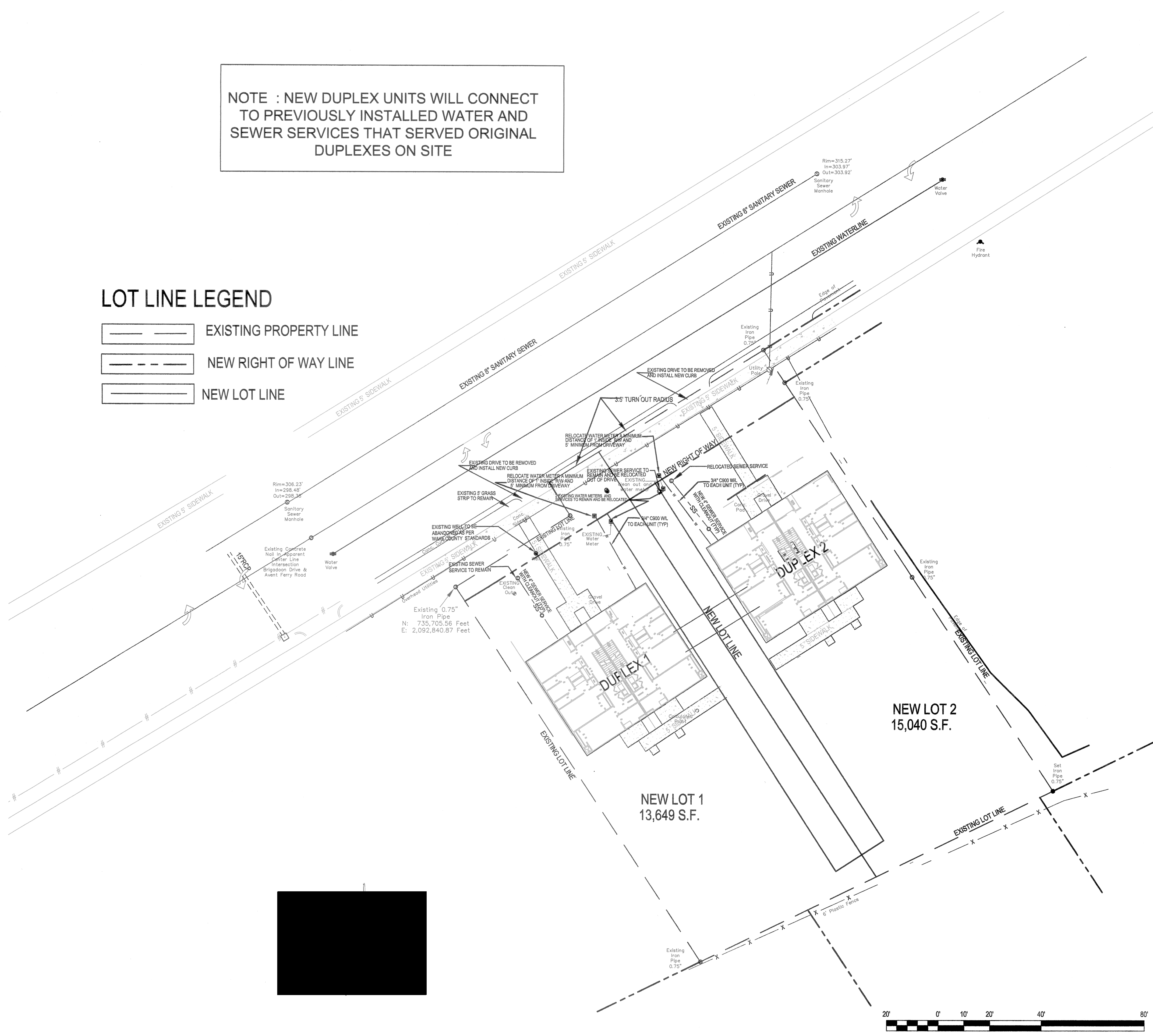
SITE AND STAKING PLAN
 Centennial Bend
 Centennial Bend, LLC
 2721 Avent Ferry Rd, Raleigh NC, 27606

Job No. 3501
 Dwg No. C-3

NOTE : NEW DUPLEX UNITS WILL CONNECT TO PREVIOUSLY INSTALLED WATER AND SEWER SERVICES THAT SERVED ORIGINAL DUPLEXES ON SITE

LOT LINE LEGEND

-  EXISTING PROPERTY LINE
-  NEW RIGHT OF WAY LINE
-  NEW LOT LINE



CITY OF RALEIGH - GENERAL UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION).
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATER MAIN, DIP MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MINIMUM CLEARANCE (PER CORPUD DETAILS W-41 & S-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS.
- 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL 1/2" COPPER* WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2' X 2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE.
- INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.

*EDIT TYPICAL SERVICE SIZE & MATERIAL AS APPROPRIATE.

PUBLIC UTILITY NOTES

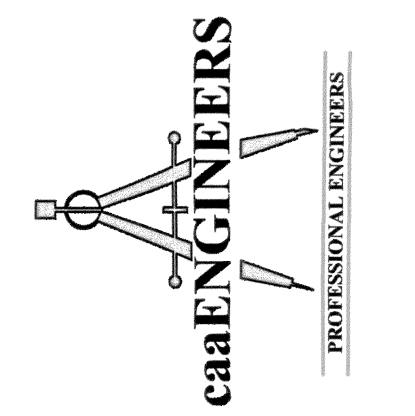
- UTILITY LAYOUT IS PRELIMINARY AND IS SUBJECT TO VARY WITH FINAL SITE PLANS AND CONSTRUCTION DRAWINGS.
- ALL PUBLIC WATER AND SEWER EXTENSIONS SHALL BE SUBMITTED AND APPROVED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- ALL WATER SERVICES ARE TO BE 3/4" WITH A 5/8" METER PER THE CITY OF RALEIGH STANDARDS.
- ALL SEWER SERVICE LINES TO EACH INDIVIDUAL PROPERTY ARE TO BE 4" IN DIAMETER.
- NO PERSON SHALL PLACE ANY PART OF A STRUCTURE, CONSTRUCTION FILL MATERIAL, PERMANENT EQUIPMENT, OR IMPOUNDMENT OR PLANT TREES, SHRUBS OR ANY OTHER PLANT ON SANITARY SEWER EASEMENTS OR MAINS.

PRIVATE UTILITY NOTES

- HVAC UNITS TO BE LOCATED AT THE REAR OF EACH TOWNHOME UNIT AND NOT BE VISABLE TO THE PUBLIC RIGHT OF WAY.
- UTILITY SERVICE AREAS LOCATED OUTSIDE OF PUBLIC RIGHT OF WAYS THAT EXCEED 42" IN HEIGHT AND 42" IN ANY OTHER DIMENSION MUST BE SCREENED FROM THE PUBLIC RIGHT OF WAY.

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS

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 Wake Forest, North Carolina 27587
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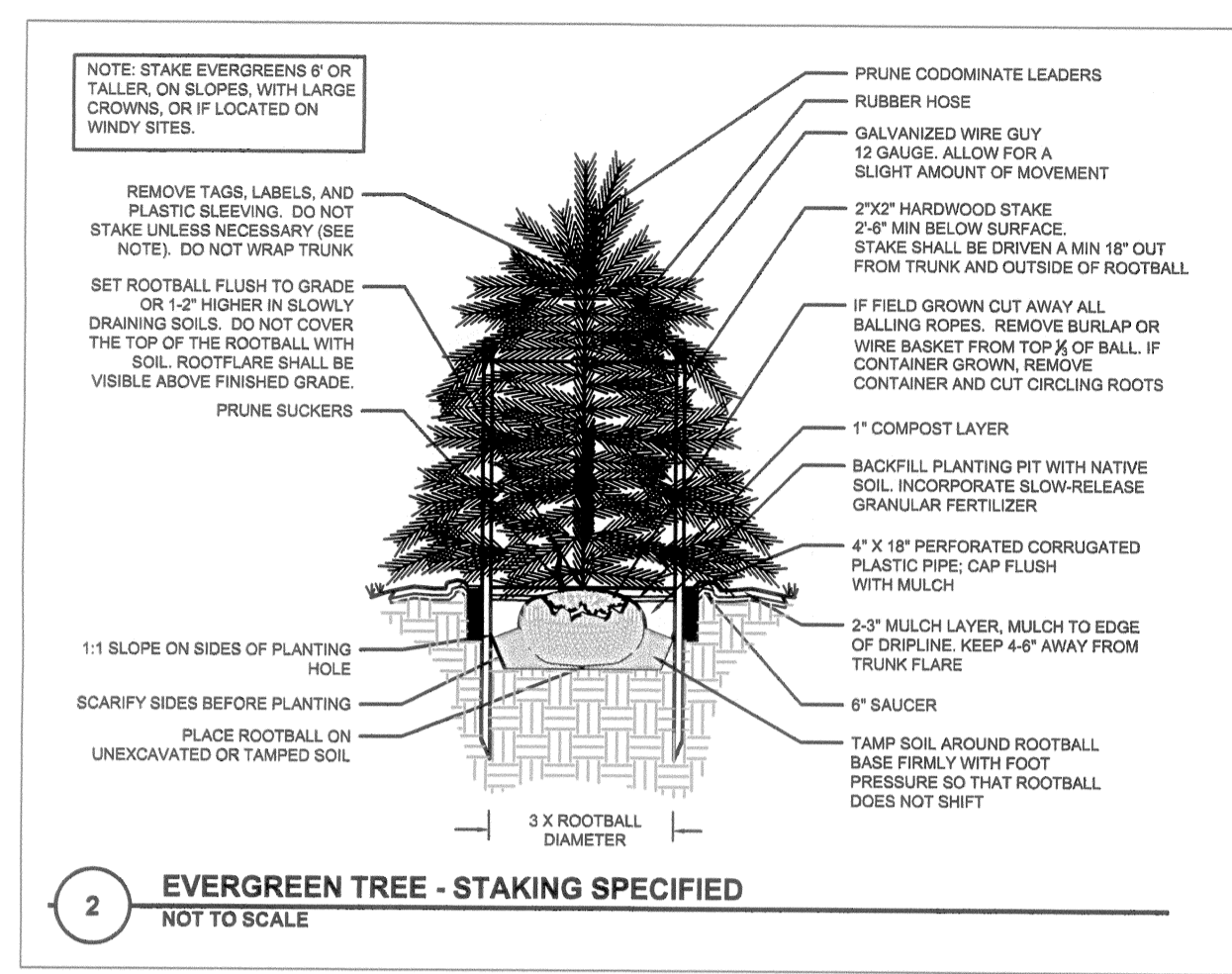
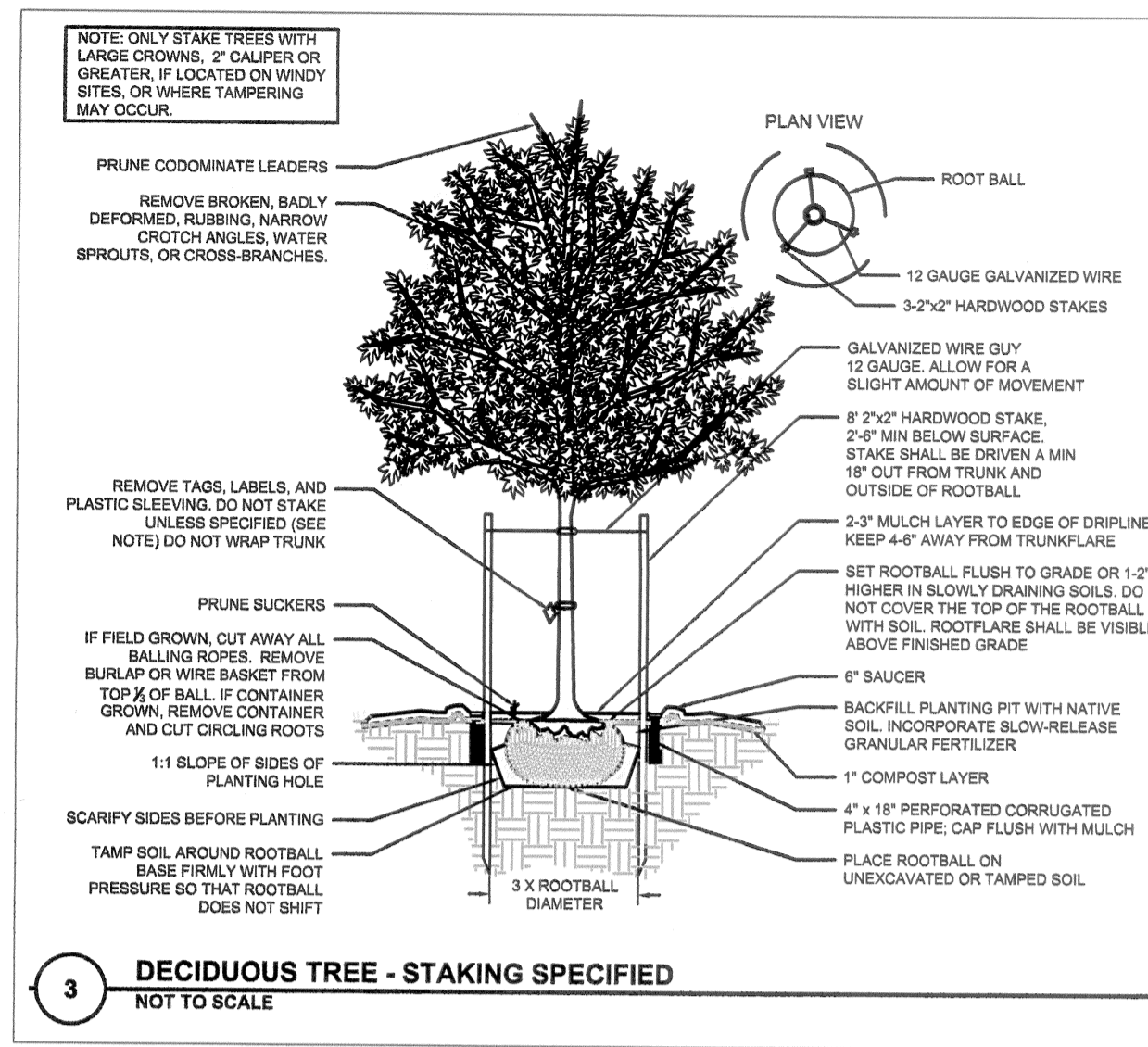


| NO. | DATE | REVISION/DESCRIPTION |
|-----|------------|----------------------|
| 1 | 12/22/2017 | REVISIONS PER CITY |
| 2 | 03/09/2018 | REVISIONS PER CITY |
| 3 | 03/09/2018 | REVISIONS PER CITY |
| 4 | Date | Comment |
| 5 | Date | Comment |
| 6 | Date | Comment |
| 7 | Date | Comment |
| 8 | Date | Comment |

PRELIMINARY PLANS
 NOT FOR CONSTRUCTION

UTILITY PLAN
 Centennial Bend
 Centennial Bend, LLC
 2721 Avent Ferry Rd, Raleigh NC, 27606

Job No. 3501
 Dwg No. **C-5**



GENERAL PLANTING NOTES

1. ALL LAWN AREAS TO BE SEED WITH "REBEL IV", CONFEDERATE PLUS, OR FESCO TALL TURF TYPE FESCUE.
2. ALL MULCH TO BE DOUBLE SHREDDED HARDWOOD. NO PINE STRAW MULCH ADJACENT TO STRUCTURES.
3. PLANT MATERIAL ON THIS SITE MUST BE INSTALLED IN CONFORMANCE WITH THE GENERAL PLANTING NOTES AND DETAILS ON THIS PLAN OR TO THE STANDARDS OF THE CITY OF RALEIGH CODE OF ORDINANCES.
4. ALL PLANTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
5. OWNERS SHALL MAINTAIN ALL PLANT BEDS AND PLANT MATERIAL IN GOOD HEALTH, AND ANY DEAD, UNHEALTHY, OR MISSING PLANTS SHALL BE REPLACED WITH LOCALLY ADAPTED VEGETATION WHICH CONFORMS TO THE INITIAL PLANTING STANDARDS OF THE LANDSCAPING ORDINANCE.
6. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR LOCATING ANY UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK.
7. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND UTILITIES, SITE FEATURES, OR STRUCTURES.
8. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED PERMITS AND LICENSES TO PERFORM THE REQUIRED WORK.
9. ALL PLANT BEDS SHALL BE TREATED WITH PRE-EMERGENT WEED CONTROL (I.E. TRIFLALIN).
10. ALL PLANTS SHALL BE VIGOROUS, HEALTHY MATERIAL FREE FROM PESTS AND DISEASE.

SCOPE OF WORK
FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED OR INDICATED BY THE DRAWINGS AND SPECIFICATIONS TO COMPLETE THE WORK INCLUDING INSTALLATION OF ALL TREES, SHRUBS, GROUNDCOVER, ANNUALS, SEED, SOD AND MULCH.

MATERIALS AND WORK
THE SELECTION OF ALL MATERIALS AND THE EXECUTION OF ALL WORK REQUIRED UNDER THE CONTRACT SHALL BE SUBJECT TO APPROVAL BY THE OWNER. THE OWNER SHALL HAVE THE RIGHT TO REJECT AND SUBSTITUTE ALL MATERIALS AND ANY AND ALL WORK, WHICH IN HIS OPINION, DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT.

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

BUFFERS AND TRANSITIONAL YARDS

1. TRANSITIONAL PROTECTIVE YARDS ARE NOT REQUIRED.
2. STREET PROTECTIVE YARDS ARE NOT REQUIRED.
3. VEHICULAR SURFACE AREA PLANTINGS ARE NOT REQUIRED.
4. STREET TREES ARE PROVIDED AT 40' ON CENTER.

GENERAL NOTES

1. FEE IN LIEU FOR STREET TREES WILL BE REQUIRED ON ST. MARY'S STREET AT 40' ON CENTER PER FOOT OF TREE LAWN.

LOT LINE LEGEND

- EXISTING PROPERTY LINE
- NEW RIGHT OF WAY LINE
- NEW LOT LINE

PLANT SCHEDULE

| TREES | QTY | BOTANICAL NAME | COMMON NAME | MINIMUM INSTALLED SIZE | REMARKS |
|-------|-----|-----------------|-------------|------------------------|-----------|
| WO | 6 | QUERCUS PHELLOS | WILLOW OAK | 3" CAL. | C-2 YARD |
| SM | 4 | ACER SACCHARUM | SUGAR MAPLE | 3" CAL. | VSA TREES |

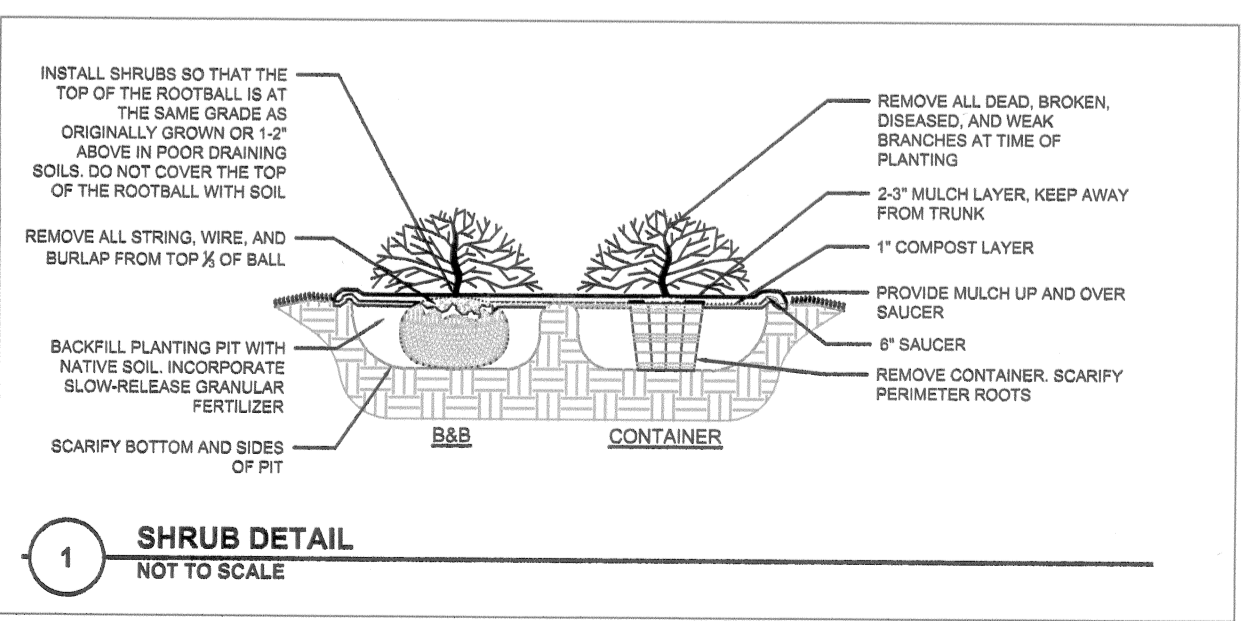
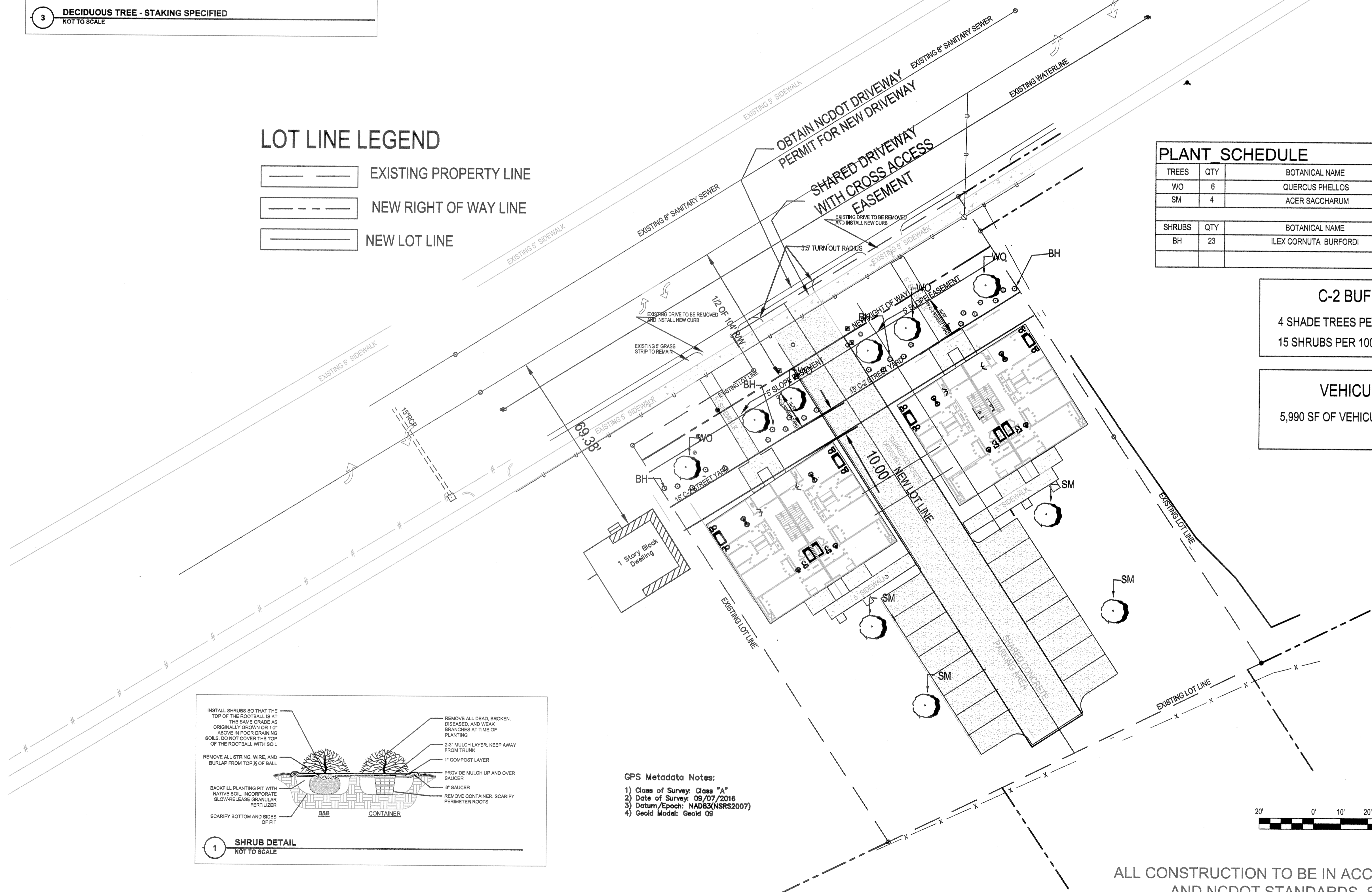
| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME | MIN. INSTALLED SIZE | REMARKS |
|--------|-----|-----------------------|---------------|---------------------|----------|
| BH | 23 | ILEX CORNUTA BURFORDI | BURFORD HOLLY | 5' HT/SPRD | C-2 YARD |

C-2 BUFFER YARD CALCULATIONS

4 SHADE TREES PER 100' X 150 LF OF FRONTAGE = 6 SHADE TREES
 15 SHRUBS PER 100' X 150 LF OF FRONTAGE = 23 SHRUBS

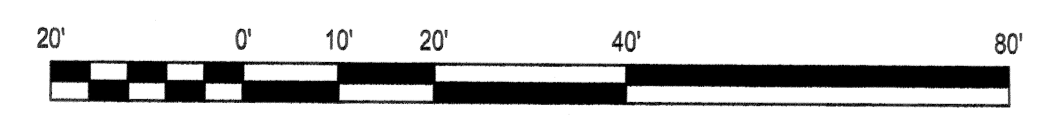
VEHICULAR SURFACE AREA CALCULATIONS

5,990 SF OF VEHICULAR SURFACE AREA X 1 TREE PER 2,000 SF = 3 SHADE TREES



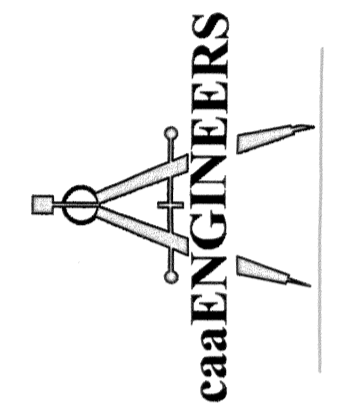
GPS Metadata Notes:

- 1) Class of Survey: Class "A"
- 2) Date of Survey: 09/07/2016
- 3) Datum/Epoch: NAD83(NSRS2007)
- 4) Geoid Model: Geoid 09



ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS

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| NO. | DATE | REVISION/PERQTY | BY |
|-----|------------|-----------------|----|
| 1 | 12/16/2017 | REVISION PERQTY | By |
| 2 | 02/02/2018 | REVISION PERQTY | By |
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