

Case File / Name: SUB-0027-2024 DSLC - Mitchell Mill Apartments City of Raleigh
Development Services Department
One Exchange Plaza
Raleigh, NC 27602
(919) 996-2492
currentplanning@raleighnc.gov
www.raleighnc.gov

**LOCATION:** This 10.41-acre site is located northeast of I-540 East, south of Forestville Road

Crossing Shopping Center, east of Louisburg Road, and west of Forestville Road. It is adjacent to the Brighton Subdivision and specifically identified as 3805 Mitchell

Mill Road. The property is zoned RX-3-PL-CU. It is inside the city limits.

**REQUEST:** The plan proposes a two-lot subdivision with public street right-of-way associated

with proposed multi-unit living. New Lot 1 is 3.625 acres and New Lot 2 is 5.348 acres with remaining acreage for the extension of Caliber Woods Drive. The associated site plan, ASR-0015-2024, includes eight apartment buildings, a clubhouse with amenity areas, and associated site improvements including on-street and surface parking, stormwater management and tree conservation areas. A blue line stream (Neuse River) and a 50-foot buffer is located on and along

the eastern property line, part of New Lot 2.

**DESIGN** 

ADJUSTMENT(S)/

ALTERNATES, ETC: N/A

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 dated September 6, 2024 by

Advanced Civil Design.

### **CONDITIONS OF APPROVAL and NEXT STEPS:**

This document must be applied to the second sheet of all future submittals except for final plats. This is a preliminary plan and as such no permits have been issued with this approval. To obtain permits and/or completion of the project, the following steps are required:

☑ <u>SITE PERMITTING REVIEW</u> - For land disturbance of 12,000 square feet or greater, public or private infrastructure, shared stormwater devices, etc. Site Permitting Review may be submitted upon receipt of this signed approval document.

The following items are required prior to approval of Site Permitting Review plans:

#### **Engineering**

 Required NCDOT encroachment and/or driveway permits must be approved and copies provided to the City of Raleigh Transportation Department – Mobility Strategy and Infrastructure Division prior to Site Permit review approval.

#### Stormwater

- 2. The State of North Carolina shall approve any proposed disturbance within the riparian buffer prior to the issuance of any grading or site permit (UDO 9.2.3.E).
- 3. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).
- 4. A surety equal to of the cost of clearing, grubbing and reseeding a site, shall be paid to the City (UDO 9.4.4).



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- 5. A 100-year floodplain analysis shall be submitted and approved by the Engineering Services Department prior to the issuance of any grading or site permit (UDO 9.3).
- 6. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).

#### **Urban Forestry**

- 7. Submit a final tree conservation plan that includes metes and bounds descriptions of all tree conservation areas and tree protection fencing as required (UDO 9.1.5).
- 8. Tree protection fence must be inspected by Urban Forestry staff prior to the issuance of a grading permit.

☑ <u>LEGAL DOCUMENTS</u> - Email to legaldocumentreview@raleighnc.gov. Legal documents must be approved, executed, and recorded prior to or in conjunction with the recorded plat on which the associated easements are shown. Copies of recorded documents must be returned to the City within one business day of recording to avoid withholding of further permit issuance.

V	Right of Way Deed of Easement Required
Ø	Stormwater Maintenance Covenant Required

Ø	Utility Placement Deed of Easement Required

☑ <u>RECORDED MAP(S)</u> - Submit plat to record new property lines, easements, tree conservation areas, etc.). Plats may be submitted for review when the Site Permitting Review plans, if required, have been deemed ready for mylar signature.

The following items must be approved prior to recording the plat:

#### **Engineering**

- 1. A fee-in-lieu for sidewalk/MUP shortage along property frontage of Mitchell Mill Rd is paid to the City of Raleigh (UDO 8.1.10).
- 2. A public infrastructure surety shall be provided to City of Raleigh Transportation Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion and 125% of the improvement cost for the City of Raleigh infrastructure.
- 3. A public street right-of-way deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)



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4. A 5' utility placement easement deed of easement, in addition to a plat showing the location of the easement, shall be submitted to the Planning and Development Services Department for review, and if acceptable, approved for recordation. Approved plats must be recorded at the Wake County Register of Deeds Office on or before the 14th day following approval by the City. The 14-day expiration date shall be clearly indicated on the plat. By the end of the next business day following recordation of the plat, all required legal instruments (including deeds of easement) shall be recorded, and recorded copies of the plat and all legal instruments required by the City in association with development approval shall be provided to the City. (Reference: UDO 8.1.7.A; 10.2.5.F.4.d)

#### **Public Utilities**

5. Site Permit Review plans (SPR) must be approved by the City of Raleigh Public Utilities Department for all public water, public sewer and/or private sewer extensions.

#### **Stormwater**

- The riparian buffers, in accordance with the preliminary plan and the State of North Carolina regulations, shall be shown on plats for recording along with required buffer statement (Recorded Map Checklist).
- 7. All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).
- 8. The flood prone areas, as approved by the City Stormwater Engineer and shown on the preliminary plan, shall be shown on the recorded map (UDO 9.3.3.G).

#### **Urban Forestry**

- 9. A public infrastructure surety for 20 street trees shall be provided to City of Raleigh Transportation Development Engineering Division (UDO 8.1.3) in the amount of 100% of the improvement cost for the NCDOT portion, and a public infrastructure surety for 50 street trees shall be provided in the amount of 125% of the improvement cost for the City of Raleigh infrastructure.
- 10. A tree conservation plat shall be recorded with metes and bounds showing the designated tree conservation areas (UDO 9.1). This development proposes 0.90 acres of tree conservation area.
- 11. Vacate the part of the existing 10' Gas Easement (BK 012643 PG 00145 00148) that is within one of the designated Secondary Tree Conservation Areas.

☑ <u>BUILDING PERMITS</u> - For buildings and structures shown on the approved plans. Commercial building permit plans must include the signed, approved Site Permitting Review plans attached, if applicable. Permit sets may be reviewed prior to the recordation of required plats, but cannot be approved.

The following items must be approved prior to the issuance of building permits:

#### General



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1. The proposed subdivision showing the two new lots with right-of-way shall be recorded and all conditions of subdivision approval shall be met.

#### **Public Utilities**

A plat must be recorded at the Wake County Register of Deeds office for all utility easement dedications.

#### **Stormwater**

- 3. A surety equal to 125% of the cost of the construction of a stormwater device shall be paid to the Engineering Services Department (UDO 9.2.2.D.1.d).
- The City form document entitled Declaration of Maintenance Covenant and Grant of Protection Easement for Stormwater Control Facilities shall be approved by the City and recorded with the county register of deeds office (UDO 9.2.2.G).
- 5. A 100-year floodplain analysis shall be submitted and approved by the Engineering Services Department prior to the issuance of any grading or site permit. (UDO 9.3).
- All stormwater control measures and means of transporting stormwater runoff to and from any nitrogen and stormwater runoff control measures shall be shown on all plats for recording as private drainage easements (UDO 9.2).

#### **Urban Forestry**

7. Tree impact permits must be obtained for the approved streetscape tree installations in the rights-of-way. This development proposes 20 street trees along Mitchell Mill Road and 50 street trees along Caliber Woods Drive.

#### The following are required prior to issuance of building occupancy permit:

#### General

1. 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.

#### **Stormwater**

- 2. As-built impervious survey is accepted by the Engineering Services Department (UDO 9.2).
- 3. As-built drawings and associated forms for all Stormwater devices are accepted by the Engineering Services Department (UDO 9.2.2.D.3).

EXPIRATION DATES: If significant construction has not taken place on a project after preliminary subdivision approval, that approval may "sunset" and be declared void, requiring re-approval before permits may be issued. To avoid allowing this preliminary approval to "sunset", the following must take place by the following dates:



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Date:

10/16/2024

3-Year Sunset Date: October 16, 2027 Record at least ½ of the land area approved.

5-Year Sunset Date: October 16, 2029

Record entire subdivision.

Signed: \_

I hereby certify this administrative decision.	
Keegan McDonald	_

Development Services Dir/Designee

Staff Coordinator: Jessica Gladwin

PROPERTY INFORMATION: 1747379686

ADDRESS: 3805 MITCHELL MILL RD. TOTAL SITE AREA: 10.462/455,731 ACRES/SF

**ZONING INFORMATION:** 

RX-3-PL-CU

(RESIDENTIAL MIXED USE-3 STORIES-CONDITIONAL USE)

PARKING LIMITED

CUD CASE NUMBER: Z-82-2022 **DEVELOPMENT INFORMATION:** FRONTAGE TYPE:

ZONE A PROTECTIVE YARD - TYPE BUFFER TYPE: ZONE A PROTECTIVE YARD - TYPE 2

EXISTING USE: MULTI-UNIT LIVING PROPOSED USE:

**EXISTING BUILDING AREA:** 

PRIMARY STREET: MITCHELL MILL ROAD

NO, FEMA MAP PANEL #3720174700K FLOOD HAZARD AREA:

LOT STANDARDS FOR RX-3-PL-CU (PER UDO 3.2.4):
MIN. LOT AREA: 7,500 SF MAX. LOT AREA: MIN. LOT WIDTH: 10% OUTDOOR AMENITY AREA:

Existing Site Data Table						
Owner:	Mitchell Mill, LLC					
Address:	3805 MITCHELL MILL RD					
PIN #:	1747-37-9686					
Tract Data:	D.B. 12985 Pg. 56					
Map Data:	B.M. 1981, Pg. 452 (Lot 6)					
Lot Area (square feet):	455,731					
Lot Area (acres):	10.462					

Proposed Site Data Table							
	Acres	Square Feet					
New Lot 1 Area:	3.625	157,910					
New Lot 2 Area:	5.348	232,941					
New R/W Area:	1.489	64,880					
Total Area:	10.462	455,731					

# **SOLID WASTE INSPECTION STATEMENT**

- SOLID WASTE SERVICES ARE TO BE PROVIDED BY GFL ENVIRONMENTAL.
- THE DEVELOPER WILL COMPLY WILL ALL REQUIREMENTS SET FORTH IN THE SOLID WASTE MANUAL
- C.O.1 FOR GFL WILL SERVE LETTER C.3.0 - FOR DUMPSTER PAD SPECIFICATIONS C.8.0 - FOR COLLECTION PATH EXHIBIT TCP - FOR TRASH COMPACTOR ENCLOSURE DETAILS

# ZONING CONDITIONS (Z-82-22):

Z-82-22 - 3805 Mitchell Mill Road, located on its north side approximately 1,000 feet west of Forestville Road, being Wake County PIN 1747379686. Approximately 10.41 acres rezoned to Residential Mixed Use—3 Stories—Parking Limited—Conditional Use (RX3-PL-CU).

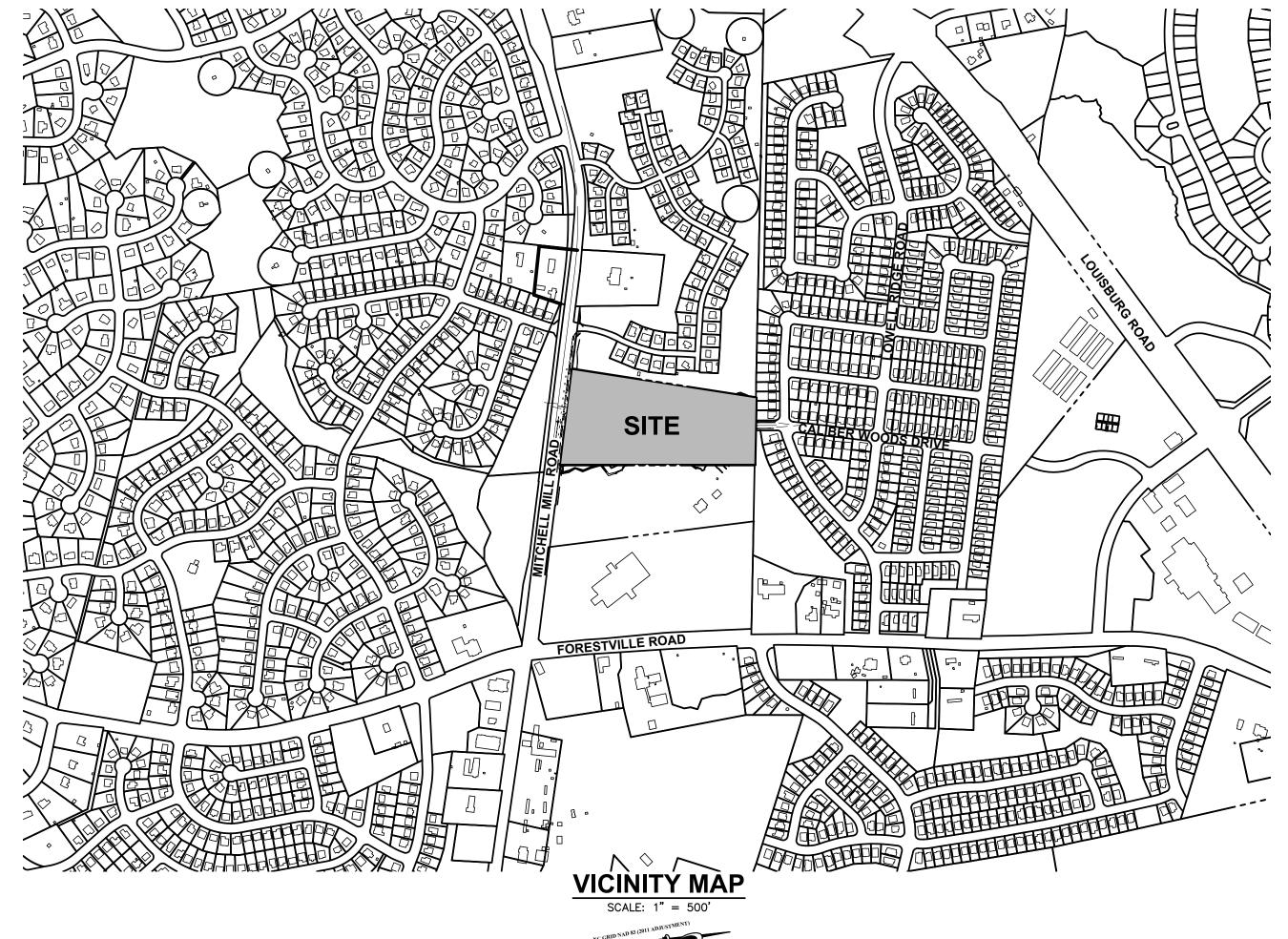
CONDITIONS DATED: MARCH 10, 2023

The following Principal Uses as listed in UDO Section 6.1.4. that are permitted, limited, or special uses in the RX— District shall be prohibited: (i) cemetery.
RESPONSE: USE IS MULTI-UNIT LIVING, NO CEMETERY PROPOSED.

There shall be no more than twenty—four (24) residential units within any singlebuilding that is located within five hundred (500) feet of the northern boundary of the property. There shall be no more than thirty—six (36) residential units within any single building that is located on all other portions of the property. RESPONSE: BUILDINGS 3, 4, 5, & 6 HAVE TWENTY-FOUR UNITS PER BUILDING. NO BUILDINGS HAVE MORE THAN 36 UNITS. For those buildings fronting along Mitchell Mill Road, there shall be no private, on—site vehicular parking areas located between the Mitchell Mill Road right—ofway and the building facade located closest and most parallel to the Mitchell Mill Road right-of-way.response: NO PARKING AREAS PROPOSED BETWEEN FACADE OF BUILDINGS AND MITCHELL MILL R/W.

For those buildings fronting along Caliber Woods Drive, there shall be no private, on—site vehicular parking areas located between the Caliber Woods Drive right—ofway and the building facade located closest and most parallel to the Caliber Woods Drive right—of—way. However, this condition shall not prohibit vehicular parking areas located closer to the Caliber Woods Drive right-of-way than the closest and most parallel building facade so long as the vehicular parking areas are located to the sides of each building's facade located closest and most parallel to the Caliber Woods Drive right-of-way. RESPONSE: NO PARKING AREAS PROPOSED BETWEEN FACADE OF BUILDINGS AND CALIBER WOODS R/W.

The property owner shall pay to the City a total of \$20,000.00 to be placed in the fund designated for the City's Affordable Housing Program. The \$20,000.00 amount may be payable in four annual installments of \$5,000.00, with the first payment being due prior to the issuance of the first certificate of occupancy and with each other annual installment due on or before the same day of the successive years, although the property owner has a right to prepay any amounts due. Prior to the issuance of any building permit, this payment obligation shall be evidenced by a promissory note to the City. If a sale of the project or the property (or a portion thereof), including a sale of controlling interests of an ownership entity within the project, occurs subsequent to the issuance of the first building permit and prior to the payment in full of the sum described within this condition, any outstanding amount shall be paid prior to the change of ownership RESPONSE: UNDERSTOOD, PAYMENT WILL BE MADE TO CITY'S AFFORDABLE HOUSING PROGRAM.



# **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH AND/OR NCDOT STANDARDS AND SPECIFICATIONS.
- 2. CONTACT NC 811 FOR FIELD LOCATION OF UNDERGROUND UTILITIES.
- 3. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES TO VERIFY LOCATIONS, DEPTHS, AND ELEVATIONS PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES. ANY DIFFERENCES SHALL BE REPORTED TO THE OWNER, ENGINEER, AND ARCHITECT.
- 4. NO INFRASTRUCTURE TO BE CONSTRUCTED PRIOR TO CONSTRUCTION PLAN APPROVAL AND UTILITY PERMIT ISSUANCE BY THE CITY OF RALEIGH ENGINEERING DEPARTMENT.
- LOCATIONS AND SIZES SHOWN FOR STORMWATER DEVICES ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL LAYOUT AND
- 6. LOCATIONS AND SIZES SHOWN FOR WATER AND SEWER DEVISES ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL LAYOUT AND
- PROPOSED GRADES SHOWN ARE PRELIMINARY AND SUBJECT TO
- 8. THESE PLANS AND ALL CALCULATIONS HEREIN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL CONSTRUCTION PLAN DESIGN.
- HANDICAP ACCESS RAMPS WILL BE PROVIDED IN ACCORDANCE WITH CURRENT RALEIGH ENGINEERING STANDARD DRAWING STANDARD
- 10. NO TEMPORARY OR PERMANENT ENCROACHMENTS (INCLUDING BUT NOT LIMITED TO CLEARING, GRADING, FENCING, AND THE INSTALLATION OF RETAINING WALLS OR OTHER STRUCTURES) ARE PERMITTED WITHIN THE GREENWAY EASEMENT AREA WITHOUT PRIÓR APPROVAL BY THE CITY OF RALEIGH.

### **INDEX OF DRAWINGS GRAPHIC SCALE**

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WILL SERVE LETTER	C.0.1
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SITE PLAN	
LOTS & EASEMENTS PLAN	
GRADING AND DRAINAGE PLAN	
SCM PLAN - WET POND	
SCM PLAN - UNDERGROUND DETENTION	
SCM PLAN - UNDERGROUND DETAILS	
PRE-DEVELOPED STORMWATER PLAN	C.6.0
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ACCESS PLAN	C.8.0
SITE LIGHTING PLAN	SL1.0
TREE CONSERVATION PLAN	L1.20
LANDSCAPE PLAN	L4.00
COR STANDARD DETAILS FOR CITY TREES	L9.10
TRASH COMPACTOR ENCLOSURE DETAILS	TCP

# OWNER

MITCHELL MILL, LLC 3301 BENSON DRIVE, SUITE 304 RALEIGH, NORTH CAROLINA 27619

**DEVELOPER** DEWITT CAROLINAS, INC. 3301 BENSON DRIVE, SUITE 103 RALEIGH, NORTH CAROLINA 27609 PHONF: 919-863-1000 CONTACT: NEIL KING NEIL.KING@DEWITTCAROLINAS.COM

# CONTACT: JAKE BUZZEL

#### CIVIL ENGINEER ADVANCED CIVIL DESIGN, INC. 51 KILMAYNE DRIVE, SUITE 102 CARY, NORTH CAROLINA 27511 PHONE: 919-481-6290



#### **ARCHITECT** PLANWORX ARCHITECTURE PA 1 SIX FORKS ROAD, SUITE 100 LEIGH, NORTH CAROLINA 27609 PHONE: 919-424-1946 CONTACT: TATE HOLT

#### 510 SOUTH WILMINGTON STREET RALEIGH, NORTH CAROLINA 2760 PHONE: 919-835-1500 THOLT@PLANWORX.COM CONTACT: SAWAKO BUSH SAWAKOB@JDAVISARCHITECTS.COM

LANDSCAPE

**ARCHITECT** 

# **Preliminary Subdivision Application**

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500

**INSTRUCTIONS:** This form is used when submitting a Preliminary Subdivision (UDO Section 10.2.5). Please check the appropriate review type and include the plan checklist document. Please email all documents and your preliminary subdivision plans to SiteReview@raleighnc.gov. **DEVELOPMENT OPTIONS (UDO Chapter 2)** Compact Development Conventional Subdivision Conservation Development Frequent Transit Development Option Cottage Court NOTE: Subdivisions may require City Council approval if located in a Historic Overlay District. **GENERAL INFORMATION** Scoping/sketch plan case number(s): SCOPE-0102-2023, Associated Case: ASR-0015-2024 Development name (subject to approval): MITCHELL MILL SUBDIVISION Property Address(es): 3805 MITCHELL MILL ROAD Recorded Deed PIN(s): 1747-37-9686 ✓ Apartment Detached House Attached House Mixed Use Building Civic Building Tiny House CURRENT PROPERTY OWNER/APPLICANT/DEVELOPER INFORMATION Current Property Owner(s) Names: MITCHELL MILL LLC Company: MITCHELL MILL LLC Title: OWNER Address: 3301 BENSON DRIVE, STE 304 Phone #: (919)533-5341 Email: neil.king@dewittcarolinas.com Applicant Name (If different from owner. See "who can apply" in instructions): Relationship to owner: Lessee or contract purchaser 🖊 Owner's authorized agent Easement holder Company: Dewitt Carolinas, Inc. Address: 3301 Benson Dr, Ste 102 Raleigh, NC 27609 Phone #: (919)533-5341 Email: neil.king@dewittcarolinas.com NOTE: please attach purchase agreement or contract, lease or easement when submitting this form Developer Contact Names: Neil King Title: Pre-Dev Manager Company: Dewitt Carolinas, Inc. Address: 3301 Benson Dr, Ste 102 Raleigh, NC 27609 Phone #: (919)533-5341 Email: neil.king@dewittcarolinas.com

Gross site acreage: 10.462							
Zoning districts (if more than on	e, pr	ovide acreage of ea	ch):				
RX-3-PL-CU (10.462 AC)							
Overlay district(s):		Inside City Limits?	~	Yes		No	Historic District/Landmark: N/A
Conditional Use District (CUD) Case # Z-82-22		Board of Adjustmen BOA-	t Ca	se #			Design Alternate Case # DA-
		STORMWATE	R IN	IFORI	MATI	ION	
Imperious Area on Parcel(s):  Existing (sf) Proposed total (sf) 201,226			Impervious Area for Compliance (includes right-of-way): Existing (sf)   Proposed total (sf)   248,857				
		NUMBER OF LO	OTS	AND	DEN	ISIT	Υ
# of Detached House Lots: # of Attached House			use	Lots:			# of Townhouse Lots:
# of Tiny House Lots:	# o	# of Open Lots:					ots (Apartment, General, Civic): 2
Total # of Lots: 2	To	Total # Dwelling Units: 216					
# of bedroom units (if known): 1	or <u>84</u>	2br <sub>108</sub>	3	br <u>24</u>			4br <u>0</u>
Proposed density for each zonir	ng di	strict (UDO 1.5.2.F):	216	3/10.4	462	= 2	0.6 units/acre

**DEVELOPMENT TYPE + SITE DATE TABLE - ZONING INFORMATION** 

# APPLICANT SIGNATURE BLOCK

Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for such development as is authorized by the easement. Acting as an authorized agent requires written permission from the property owner for the purposes of making

this development approval and/or permit application. Written permission from the property owner to act as an authorized agent must be made available to the City of Raleigh upon request. By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in

the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that development approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen.

The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.

The undersigned hereby acknowledges that, pursuant to state law (N.C.G.S. 143-755(b1), if this permit application is placed on hold at the request of the applicant for a period of six consecutive months or more, or if the applicant fails to respond to comments or provide additional information requested by the City for a period of six consecutive months or more, then the application review is discontinued, and a new application is required to proceed and the development regulations in effect at the time permit processing is resumed shall apply to the new application.

Signature: Date: 5/15/24 Printed Name: Neil King Printed Name:



Revision 03.01.24 raleighnc.gov

**PLAN** 

SUBDIVISION

RELIMINAR

BDIV

SU

SUB-0027-2024 **ASSOCIATED CASE: ASR-0015-2024** 

**Date:** 09/06/2024 **Scale:** 1" = 500' Drawn By:

Checked By Project Number: 18-0004-742 **Subdivision Number** SUB-0027-2024



July 15, 2024

Neil King

Dewitt 3301 Benson Dr. Suite #103

Attn: Neil

Raleigh, NC 27609

This is a letter of support for trash and recycling services for your new project being planned for Mitchell Mill Apartments located at 3805 Mitchell Mill Rd, Raleigh, NC.

We have reviewed the plans and have found that GFL Environmental will be able to safely perform all commercial waste and recycling services for this project. The site calls for a single corral with a recycling dumpster and a compactor. The frequency of service is to be determined.

If the project design changes, this letter is void and a new letter must be issued. Additionally, this letter is non-transferable.

We want to visit the site during the initial phases of construction to ensure that the site will continue to be safe to service and the trash enclosure will be large enough to accommodate the volume of trash that will be produced.

We look forward to providing waste and recycling services at your new property once it has been completed.

Should you have any questions or need more information, please contact me at <a href="mailto:tara.zents@gflenv.com">tara.zents@gflenv.com</a>.

Sincerely,

Tara Jents

Account Manager

GFL Environmental – Raleigh

(M) 919-427-2399

SEE SHEET C.3.0 FOR DUMPSTER PAD SPECIFICATIONS
SEE SHEET C.8.0 FOR VEHICLE TURNING EXHIBIT & COLLECTION PATH
SEE SHEET TCP FOR TRASH COMPACTOR ENCLOSURE DETAILS

ADMINISTRATIVE SITE REVIEW
CITY OF RALEIGH, WAKE COUNTY, NORTH CAROLINA
MITCHELL MILL APARTMENTS
FOR
DEWITT CAROLINAS
WILL SERVE LETTERS

Date: 02/14/2024
Scale: NO SCALE

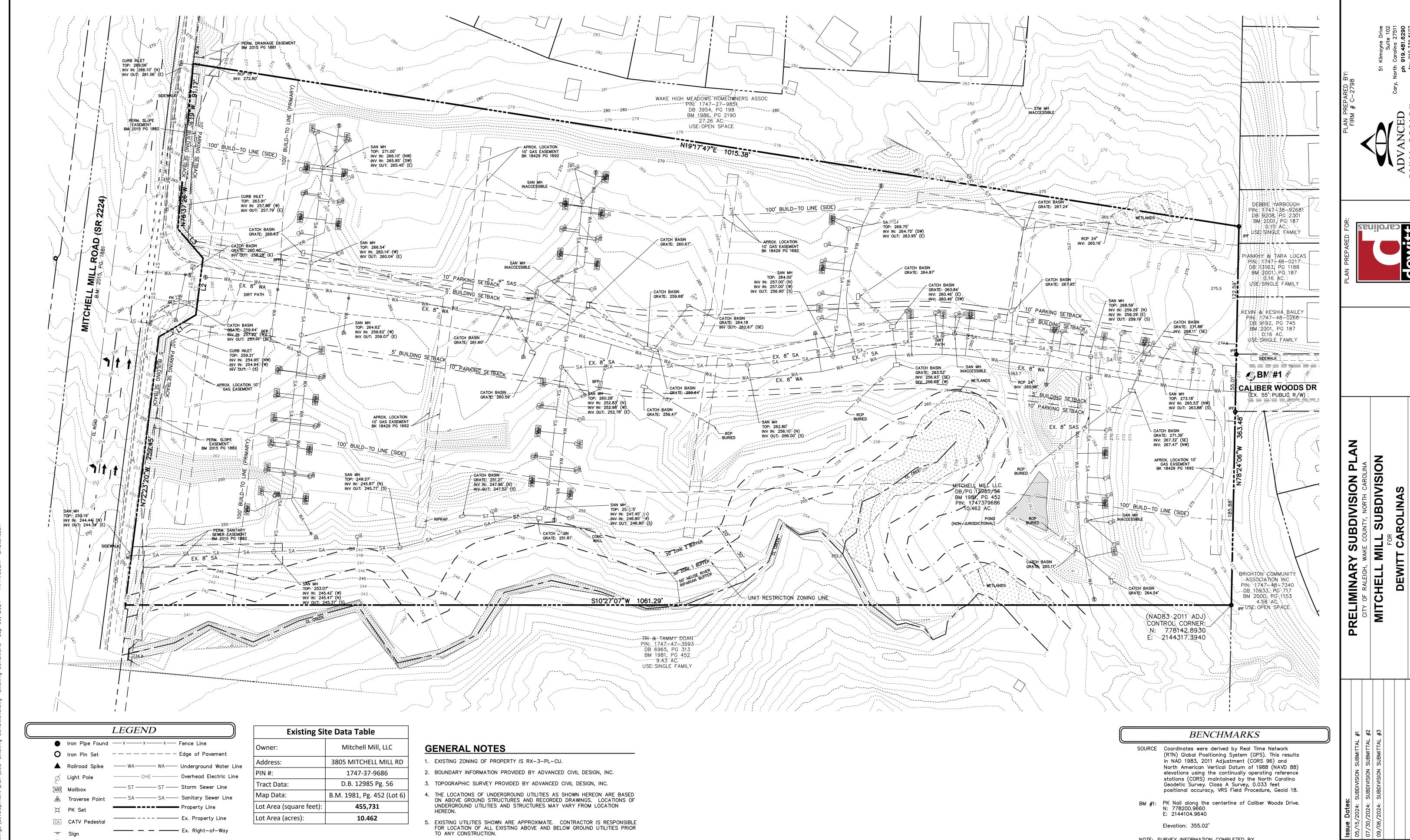
Drawn By: Checked By: JDW

Project Number:

18-0004-742

Drawing Number:

C.0.1



— — — Ex. Easement Line Pole Elec -- Ex. Major Contour(s) Pole Elec - Ex. Minor Contour(s) ☐ Catch Basin —— G —— G —— Underground Gas Curb Inlet -----FO ------ Underground Fiber Optic WM Water Meter —— E — Underground Electric ---- OHE------ Overhead Electric M Air Release Manhole ⊕ Water Valve Sanitary Cleanout Sanitary Manhole

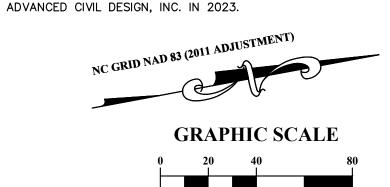
	LINE TA	ABLE
LINE	DISTANCE	BEARING
L1	41.17'	N20°10'59"V
L2	55.00'	N72°23'19"V
L3	37.03'	S59°39'01"W

6. EXISTING VEGETATION AND NATURAL AREAS WILL BE PROTECTED TO THE GREATEST EXTENT POSSIBLE AND MINIMUM CLEARING OF LAND SHALL BE UNDERTAKEN DURING DEVELOPMENT.

# **FLOOD NOTE**

BY GRAPHIC PLOTTING ONLY THIS PROPERTY IS NOT LOCATED IN SPECIAL FLOOD HAZARD ZONE BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 3720174700K WITH AN EFFECTIVE DATE OF JULY 19, 2022, IN WAKE COUNTY NORTH CAROLINA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

NOTE: SURVEY INFORMATION COMPLETED BY

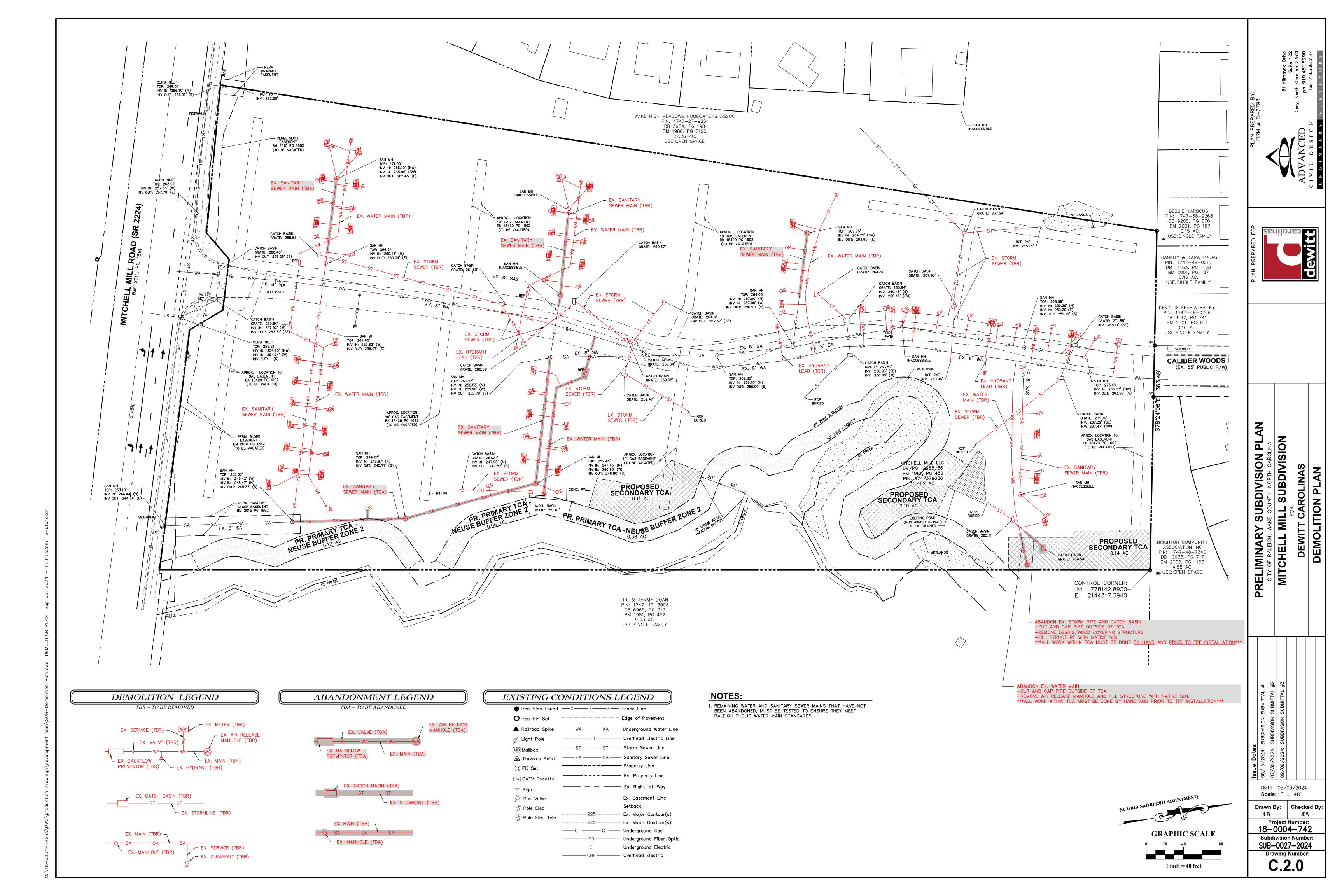


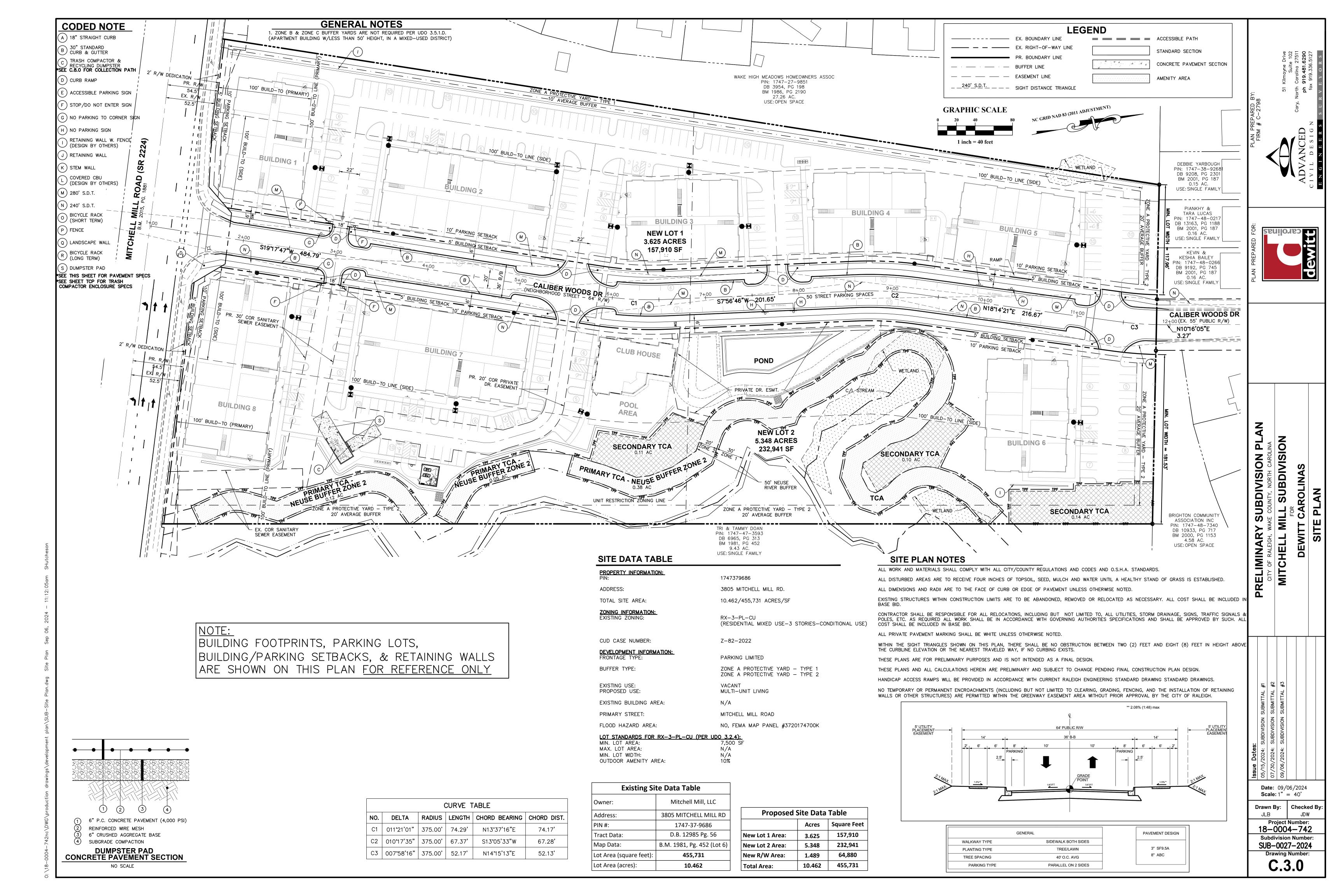
1 inch = 40 feet

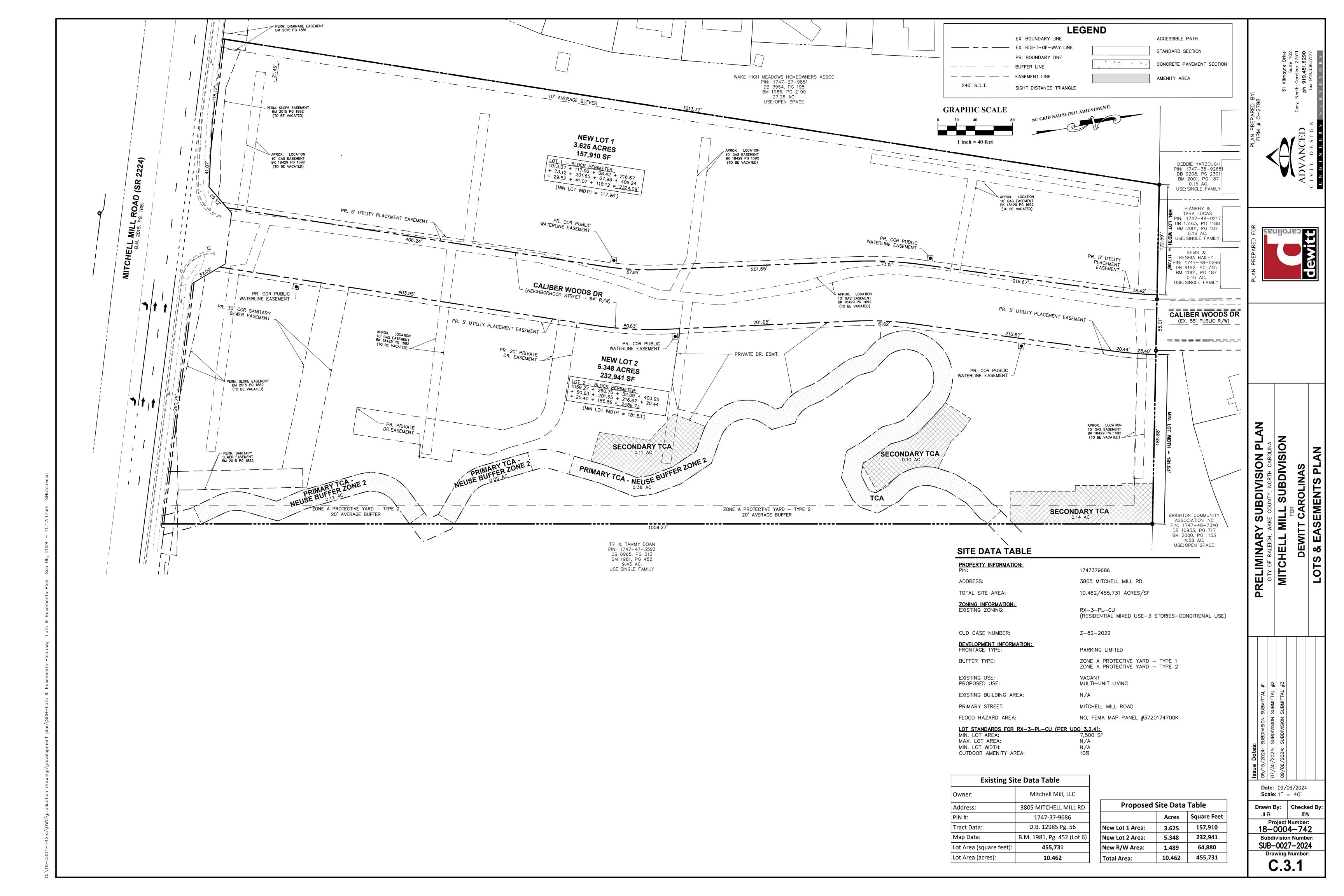
**Date:** 09/06/2024 **Scale:** 1" = 40'Drawn By: Checked By Project Number: 18-0004-742 **Subdivision Number:** 

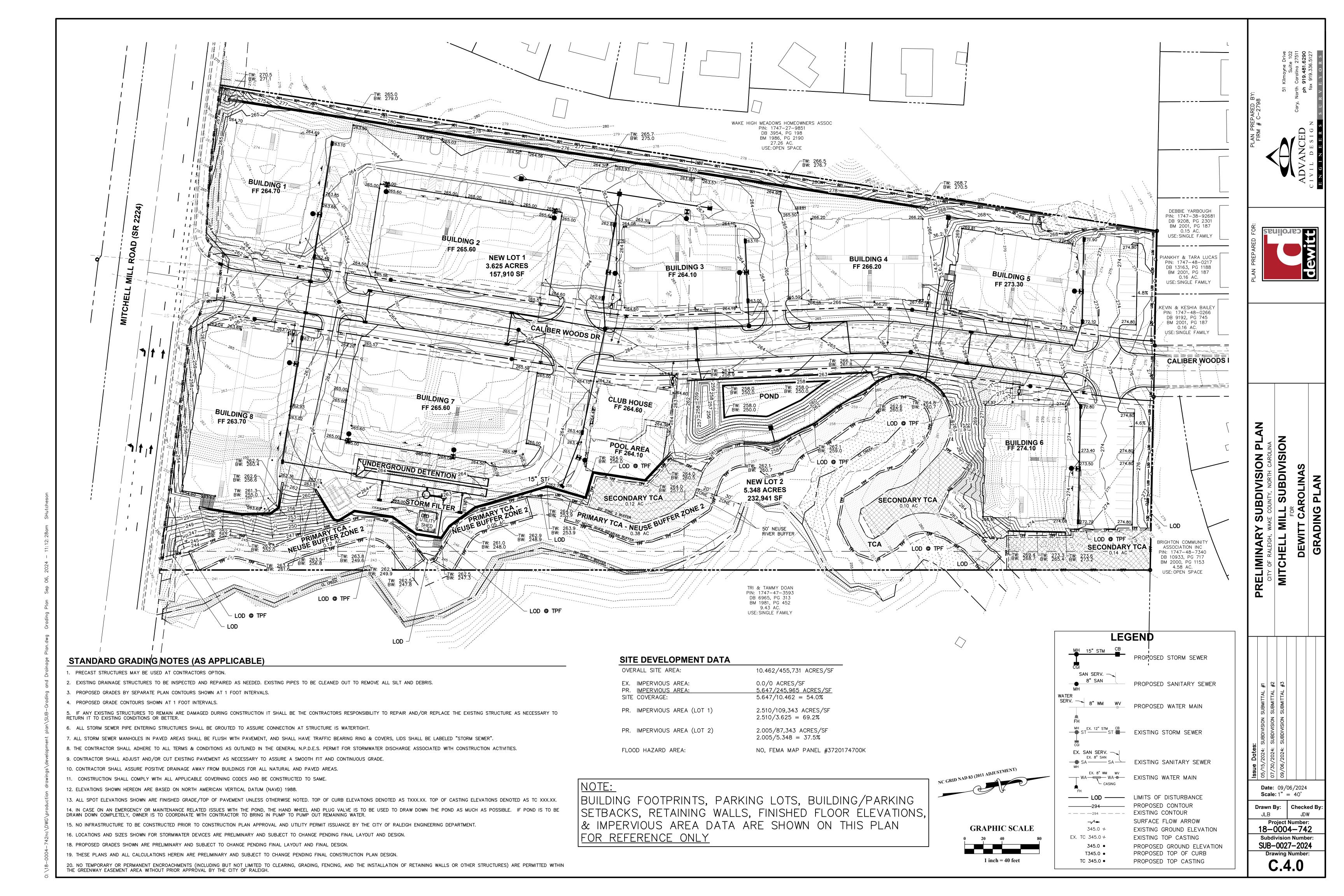
Drawing Number:

SUB-0027-2024









(2) LO EL  TYPICAL AQUATIC SHELF PLANTING LAYOUT  SCALE: NTS	TYPICAL AQUATIC SHELF PLANTING LAYOUT
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CODE	QTY.	BOT. NAME / COMMON NAME	SIZE	COND	SPACING
	MIX A	EMERGENT DEEP (6"-3" BELOW WATI	ED LEVEL\		
PE VI	42	Peltandra virginica	18"	plug	24" o.c.
		-	1	plug	
SA LA	28	Arrow Arum	9"		Field Loco
	20	Sagittaria latifolia	1	plug	24" o.c.
PO CO	40	Broad-Leaf Arrowhead Pontederia cordata	9"		Field Loca
	42		9	plug	24" o.c.
		Pickerel Weed			Field Loco
	MIX B	EMERGENT SHALLOW (3"-0" BELOW	WATER LEVEL	.)	
IR VI	42	Iris virginica	18"	plug	24" o.c.
		Blue Flag Iris			Field Loca
JU EF	28	Juncus effusus	9"	plug	24" o.c.
		Common Rush			Field Loca
SA LA	28	Sagittaria latifolia	9"	plug	24" o.c.
		Broad-Leaf Arrowhead		, ,	Field Loca
40.11	MIX C	EDGE (0"-3" ABOVE WATER LEVEL)			
AS IN	42	Asclepias incarnata	24"	plug	24" o.c
		Swamp Milkweed			Field Loc
CA TE	28	Carex Tenera	18"	plug	24" o.c
		Quill Sedge			Field Loc
LO EL	28	Lobelia Elongata	18"	plug	24" o.c
		Longleaf Lobelia			Field Loc
	MIX D	SATURATED (3"-6" ABOVE WATER LE	 'VFL')		
CA TE	28	Carex Tenera	18"	plug	24" o.c.
		Quill Sedge		Pidg	Field Loca
LO CA	42	Lobelia cardinalis	18"	plug	24" o.c.
		Cardinal Flower		plug	
LO SI	28	Lobelia siphilitica	24"	1.	Field Loca
	20	Lobolia diprinicioa	47	plug	24" o.c.

SUBDIVISION PLAN

RELIMINAR

SUBDIVISION

**Date:** 09/06/2024

**Project Number:** 

18-0004-742

**Subdivision Number:** 

SUB-0027-2024

Drawing Number:

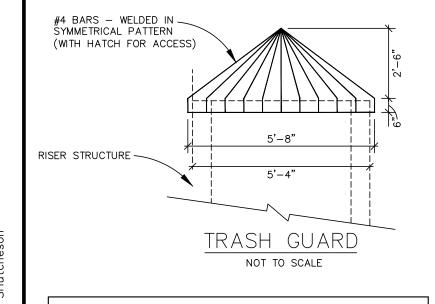
C.5.0

Checked By

**Scale:** 1" = 20'

Drawn By:

NOTE: 1. SIZE INDICATED AT TIME OF PLANTING.



		TER MANAGE Y - OUTLET P	
RETURN EVENT (YR)	PRE-DEV. RELEASE RATE (CFS)	BASIN POST-DEV. RELEASE RATE (CFS)	TOTAL POST-DEV. RELEASE RATE (CFS)
2	14.25	5.80	13.43
10	39.96	22.15	39.64
100	78.04	33.31	63.93

# WET DETENTION POND: BASIN SIZING, CALCULATIONS, AND REQUIREMENTS

# REQUIRED SURFACE AREA FOR PERMANENT POOL

TOTAL DRAINAGE AREA TO BASIN: 5.1 AC
IMPERVIOUS AREA DRAINING TO BASIN: 3.4 AC
PERCENT OF IMPERVIOUS FOR DRAINAGE AREA: 66.8%
PERMANENT POOL AVERAGE DEPTH: 6 FT.
SURFACE AREA/DRAINAGE AREA RATIO (SA/DA): 1.56
REQUIRED SURFACE AREA: SA = (1.56/100)\*(5.104 AC)\*(43,560 SF/AC)
= 3,468 SF

PROVIDED SURFACE AREA: SA = 3,870 SF

SURFACE AREA PROVIDED > SURFACE AREA REQUIRED 3,870 SF > 3,468 SF

# REQUIRED VOLUME TO CONTROL THE 1" STORM

RUNOFF COEFFICIENT (RV): STORM RUNOFF (IN) / STORM RAINFALL (IN)
PERCENT IMPERVIOUS (I): DRAINAGE AREA (AC) / IMPERVIOUS PORTION OF DA (AC.)

RV = 0.05 + .009 \* (I)= 0.05 + .009 \* (66.8)= 0.651 IN/IN

REQ. VOL. FROM 1" OF RUNOFF= (DESIGN RAINFALL) \* (RV) \* (DRAINAGE AREA) = (1")\*(0.651 IN/IN)\*(5.104 AC)\*(43,560 SF/AC)\*(1FT/12IN) = 12,067 CF

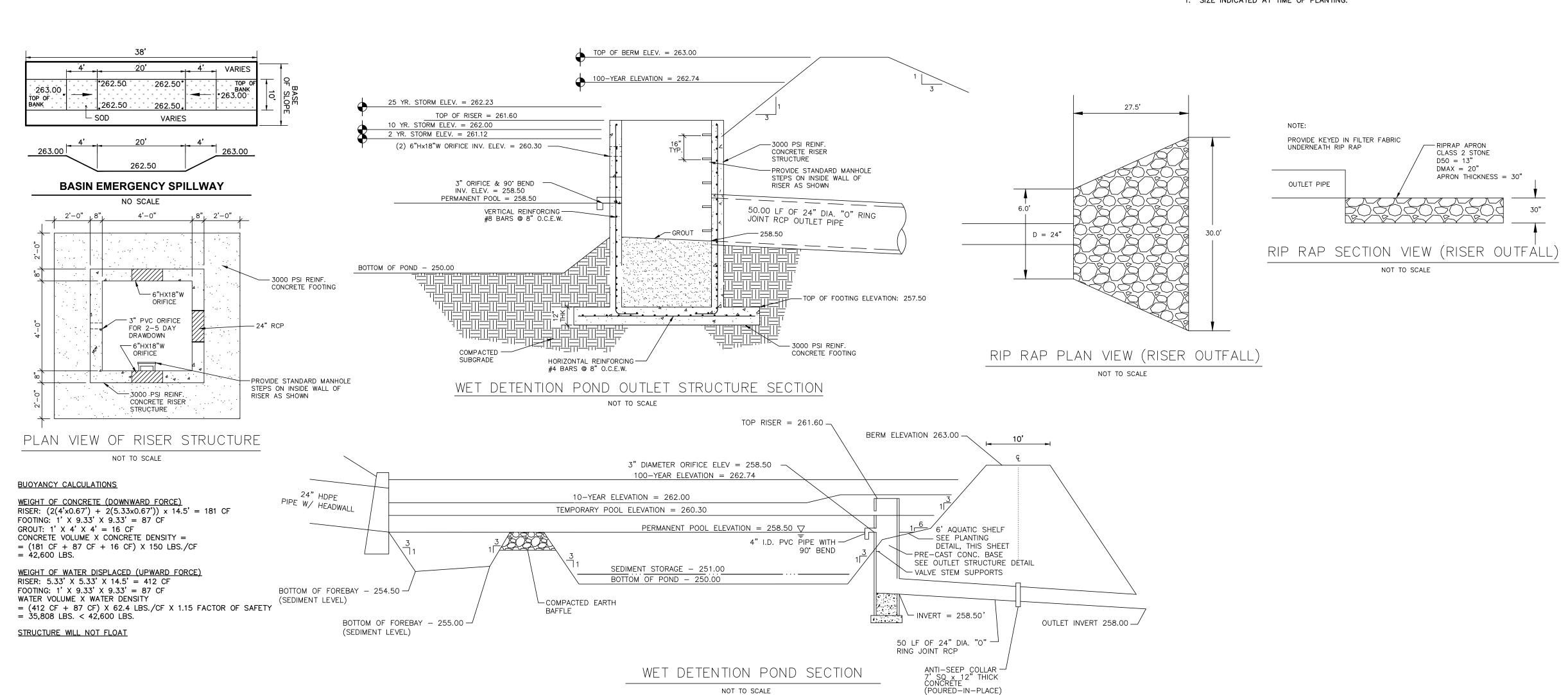
\* VOLUME FROM 1-INCH PROVIDED BETWEEN ELEVATIONS 258.5 AND 260.3

PROVIDED VOLUME FROM 1" OF RUNOFF = 12,328 CF

VOLUME PROVIDED > VOLUME REQUIRED 12,328 CF > 12,067 CF

# CITY OF RALEIGH SCM REQUIREMENTS

REQUIREMENT: THE POST-DEVELOPMENT PEAK RUNOFF RATE SHALL BE LIMITED TO THE PRE-DEVELOPMENT PEAK RUNOFF RATE FOR THE 1-YEAR, 24-HOUR AND THE 10-YEAR, 24-HOUR STORMS. SCMS SHALL STORE RUNOFF FROM A ONE-(1) INCH RAINFALL FROM THE SITE ABOVE THE PERMANENT POOL. THE DISCHARGE RATE FROM THE SCM SYSTEM FOLLOWING THE ONE- (1) INCH RAINFALL DESIGN STORM SHALL BE SUCH THAT THE RUNOFF DOES NOT DRAW DOWN TO THE PERMANENT POOL LEVEL IN LESS THAN TWO (2) DAYS AND THAT THE POND IS DRAWN DOWN TO THE PERMANENT POOL LEVEL WITHIN AT LEAST FIVE (5) DAYS.



# PROJECT SUMMARY

## CALCULATION DETAILS

- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 285 LF

## STORAGE SUMMARY

- STORAGE VOLUME REQUIRED = 14,300 CF
- PIPE STORAGE VOLUME = 14,326 CF
- BACKFILL STORAGE VOLUME = 0 CF • TOTAL STORAGE PROVIDED = 14,363 CF

# PIPE DETAILS

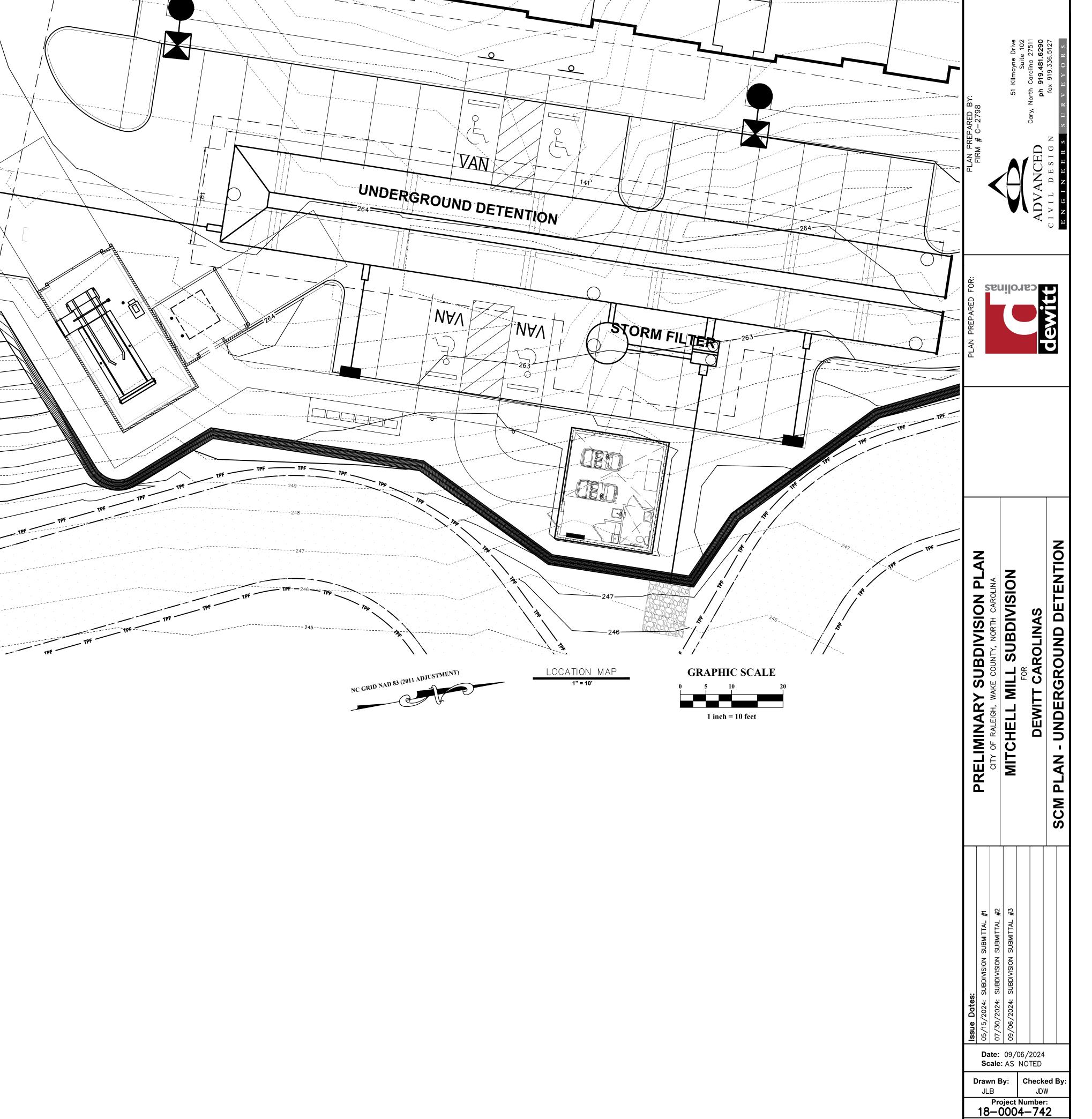
- DIAMETER = 96"
- CORRUGATION = 5x1
- GAGE = 14
- COATING = ALT2
- WALL TYPE = SOLID
- BARREL SPACING = 36"

# BACKFILL DETAILS

- WIDTH AT ENDS = 12"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 0"

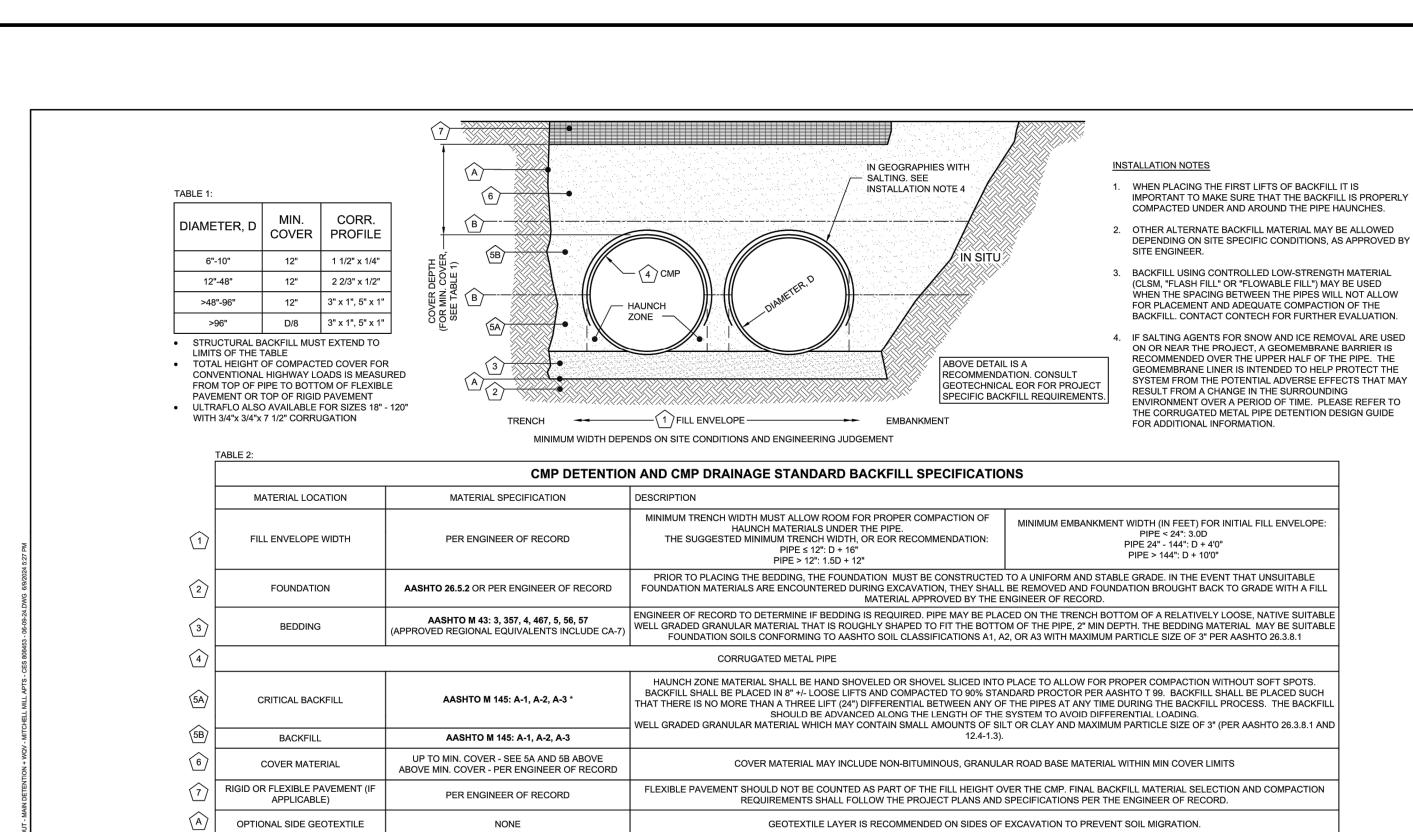
# **NOTES**

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2\%" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.



**Subdivision Number:** SUB-0027-2024

Drawing Number: C.5.1



APPROVED REGIONAL EQUIVALENTS FOR SECTION 5A INCLUDE CA-7, CODOT #67, MIDOT 2G, 34G, OR 21AA STONE OR GRAVEL: #8: #57: MIDOT 6A. 2G. 3G. 34G MANUFACTURER RECOMMENDED BACKFILL

• FOR MULTIPLE BARREL INSTALLATIONS, THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE THE PIPE DIAMETER /2 BUT NO LESS THAN 12" FOR DIAMETERS <72". FOR 72" AND LARGER DIAMETERS, THE MINIMUM

OPTIONAL GEOTEXTILE BETWEEN

NONE

SPACING IS 36". CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.

IF SOIL TYPES DIFFER AT ANY POINT ABOVE PIPE INVERT, A GEOTEXTILE LAYER IS RECOMMENDED TO BE PLACED BETWEEN THE LAYERS TO PREVENT SOIL

CMP DETENTION SYSTEM INSPECTION AND

MAINTENANCE

INSPECTION

MAINTENANCE

DYO53416 Mitchell Mill Apts

Main Detention + WQV

**DETENTION SYSTEM** 

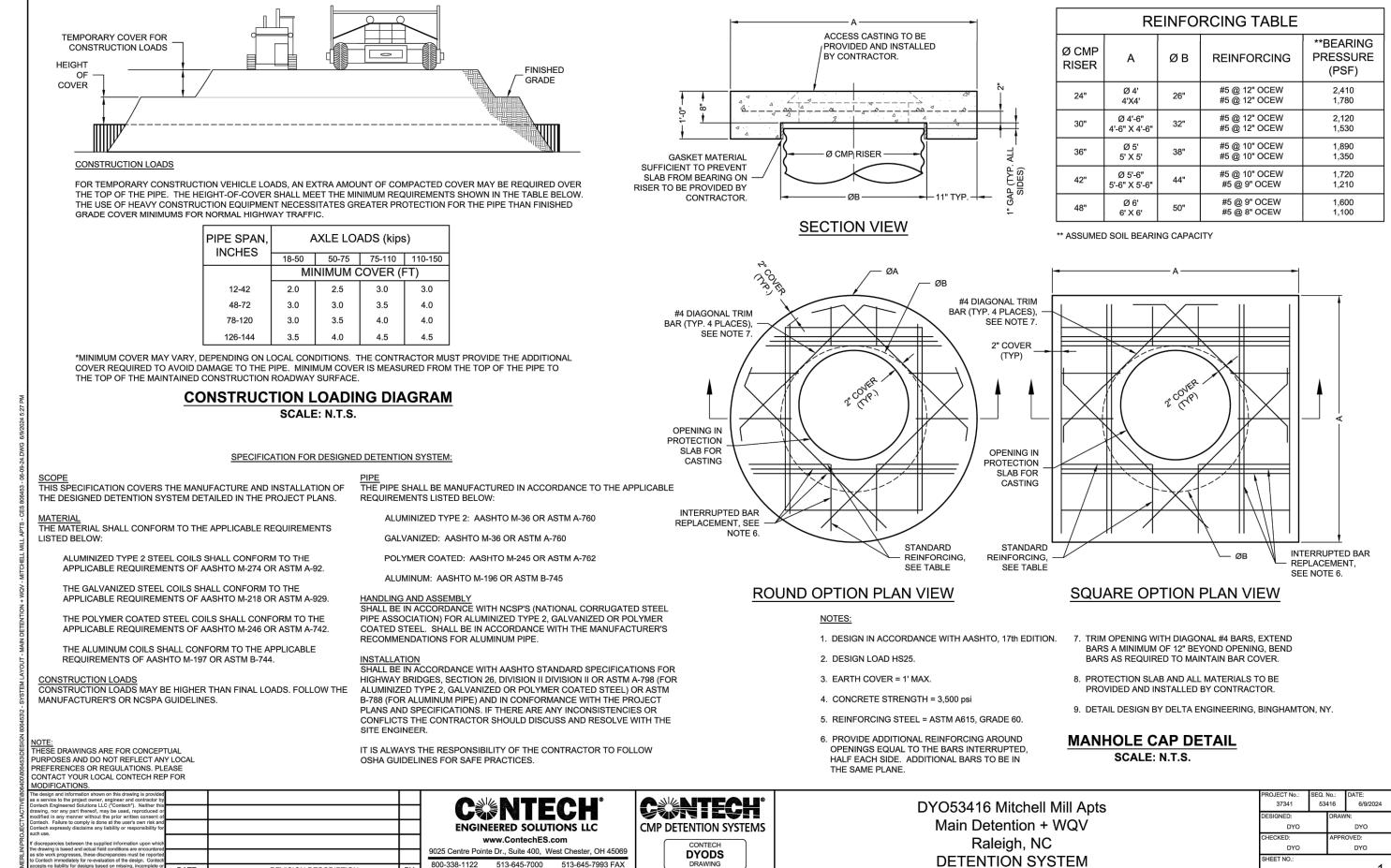
Raleigh, NC

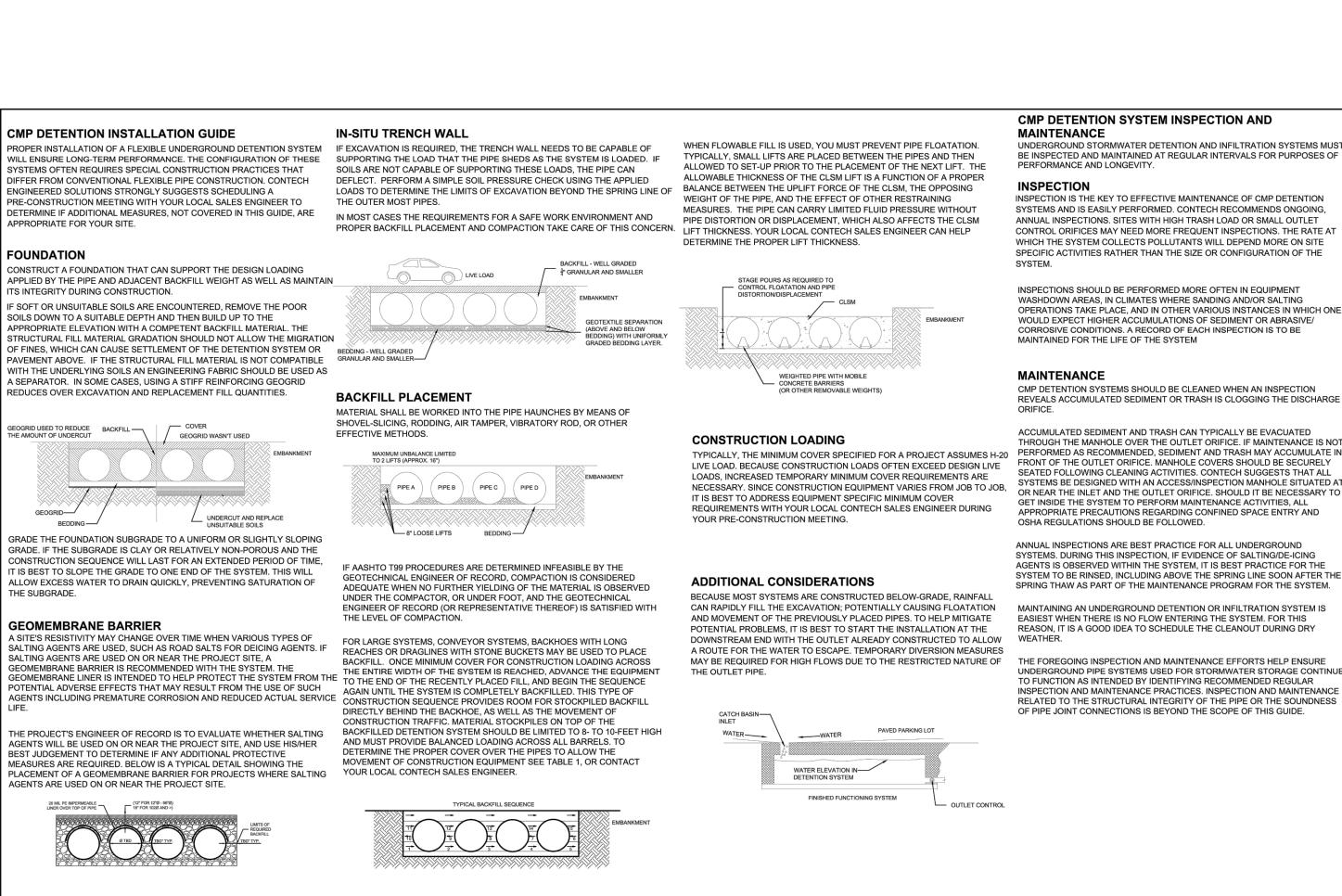
PERFORMANCE AND LONGEVITY.

MAINTAINED FOR THE LIFE OF THE SYSTEM

OSHA REGULATIONS SHOULD BE FOLLOWED.

Southern Engineered Solutions Ltd (Context), Neither the seed, agreed out of the seed out of the seed, agreed out of the seed,	37341	53416 6/9/2024	
as a service to the project owner, engineer and contractor by Contech Engineer and Souther Life (*Contech Engineer and Souther Life (*Cont	DESIGNED: DYO	DRAWN: DYO	
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountared   Section 1.5	CHECKED: DYO	APPROVED: DYO	
s at late work progresses, these discreparaties must be reported by concept and a set law work progresses, these discreparaties must be reported by concept and a set law work progresses, the discreparaties must be reported by concept and in the set of the design. Concept and inhall be	SHEET NO.:	,	٦



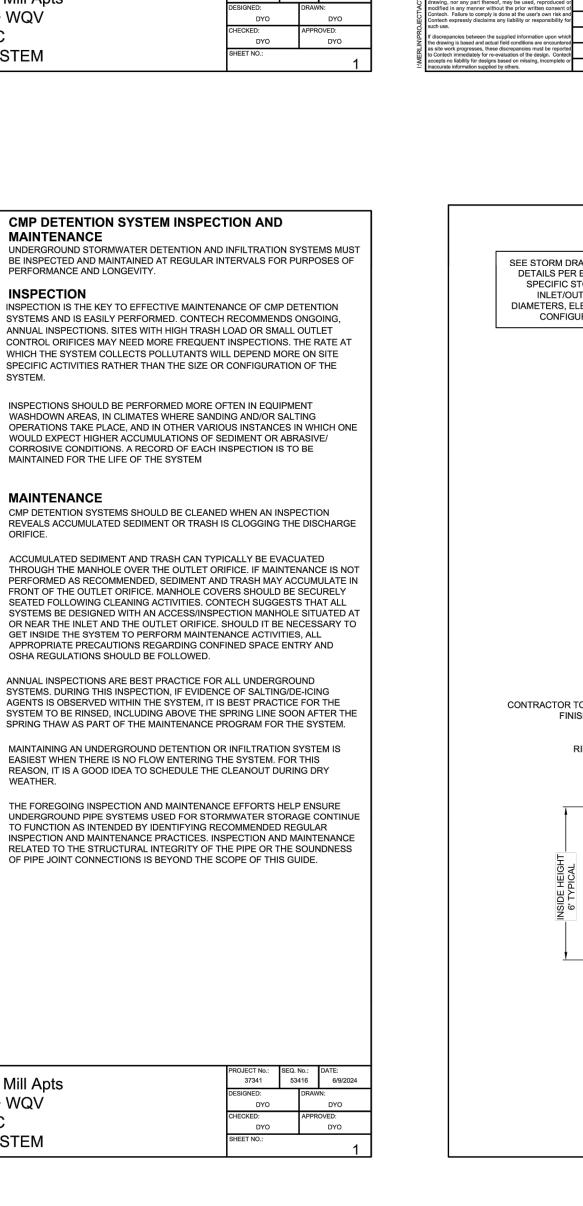


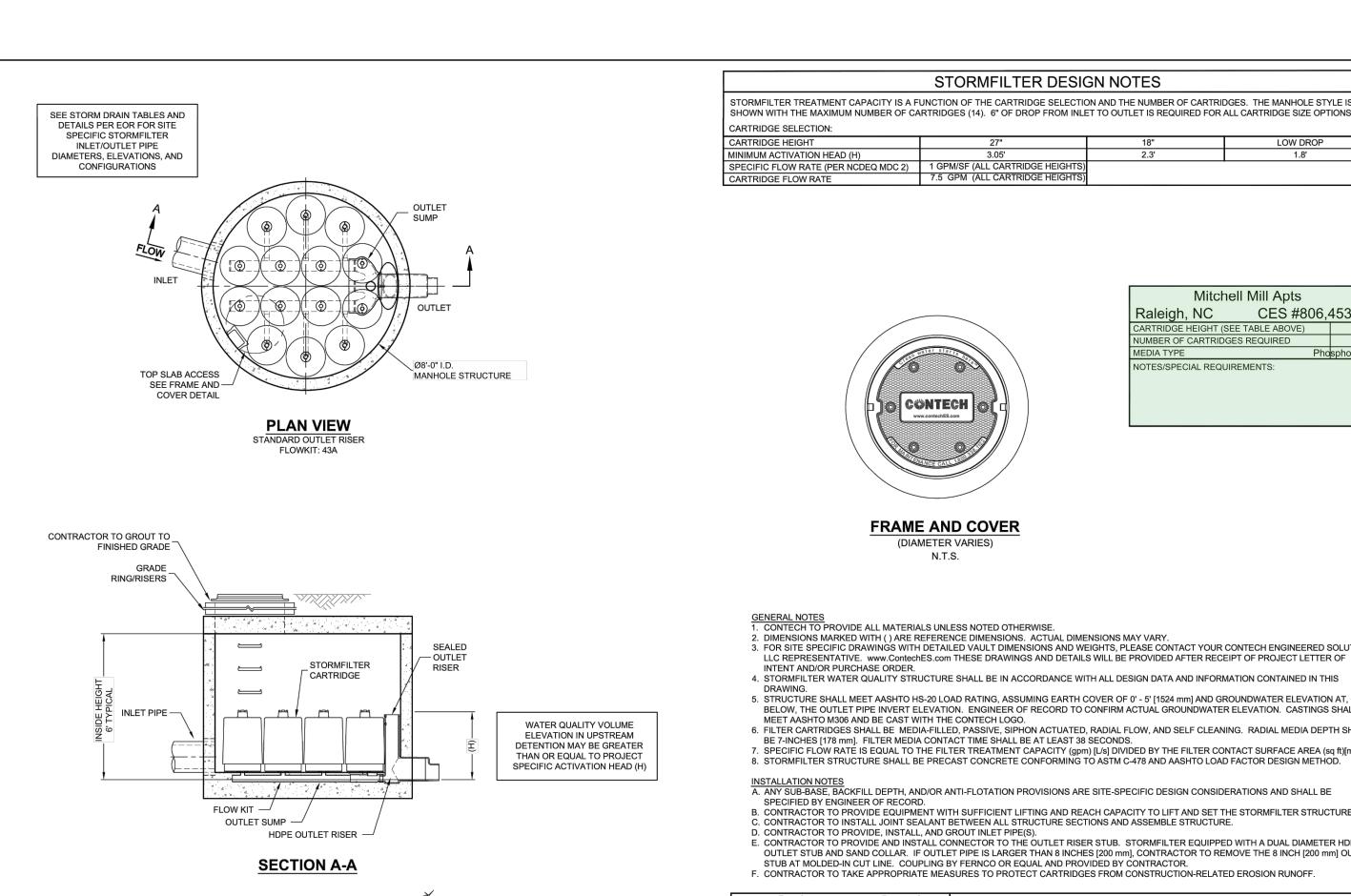
www.ContechES.com

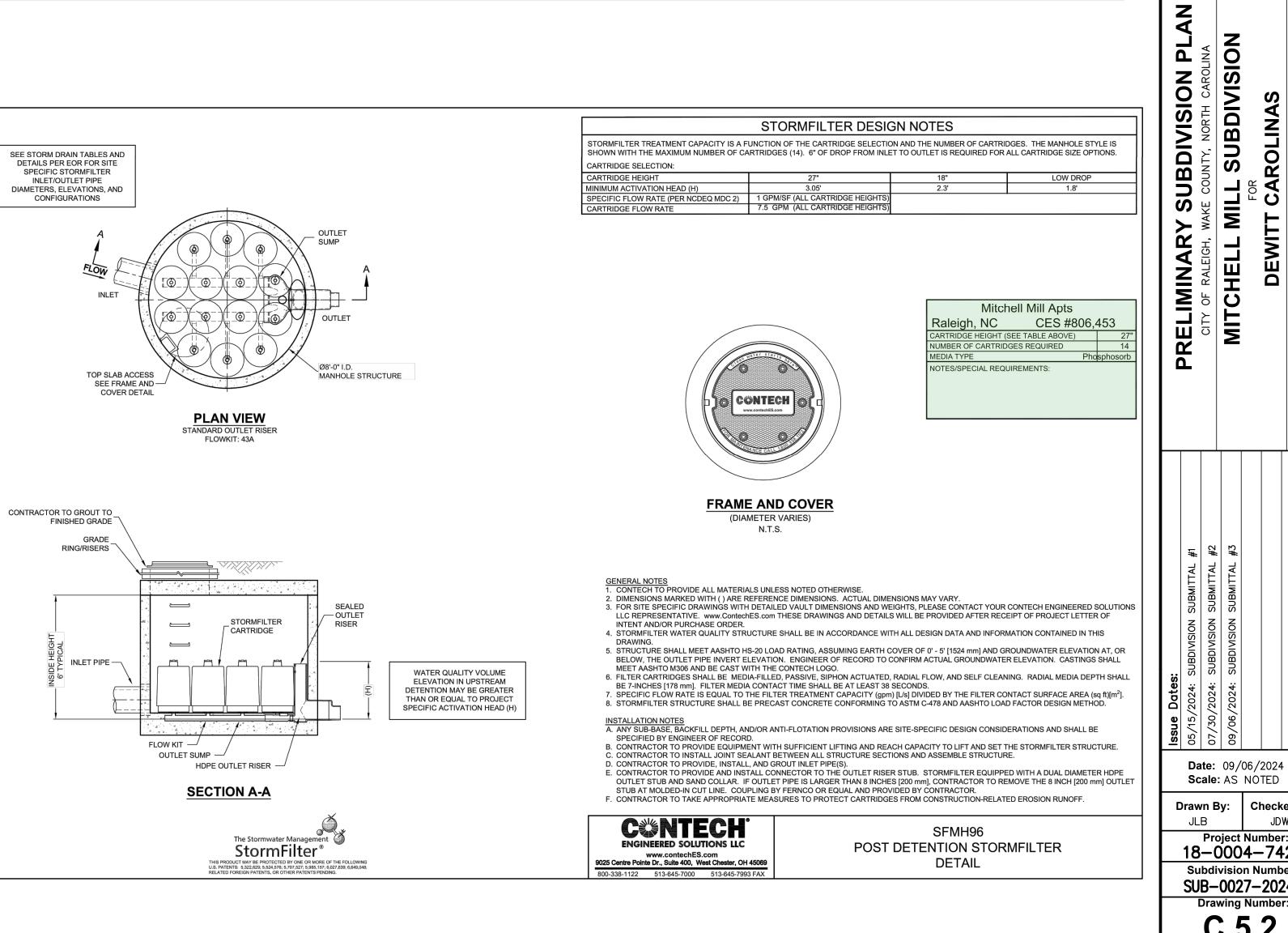
25 Centre Pointe Dr., Suite 400, West Chester, OH 4506

300-338-1122 513-645-7000 513-645-7993 FAX

DYODS







APPROPRIATE FOR YOUR SITE.

TS INTEGRITY DURING CONSTRUCTION.

**FOUNDATION** 

EOGRID USED TO REDUCE HE AMOUNT OF UNDERCUT

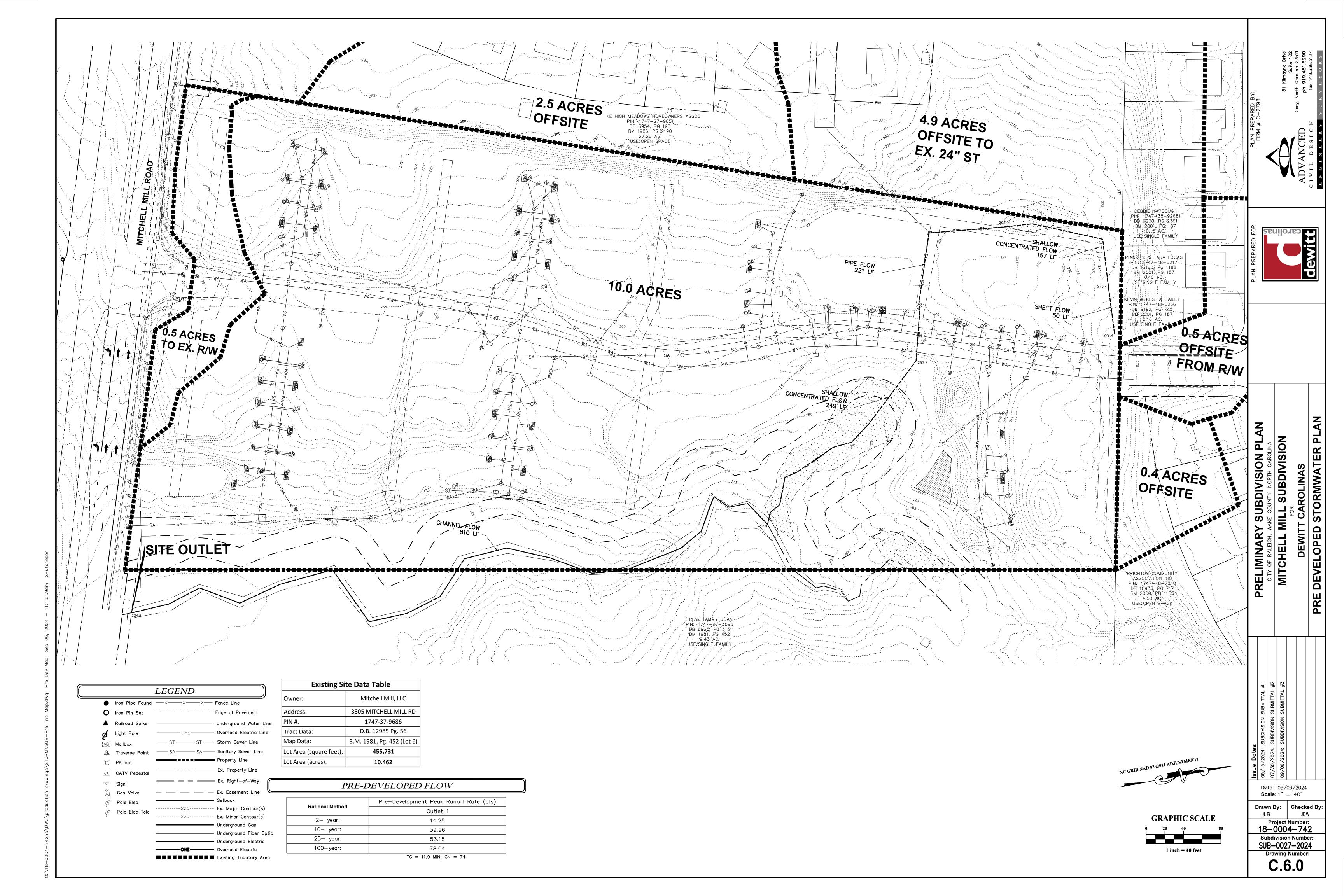
THE SUBGRADE.

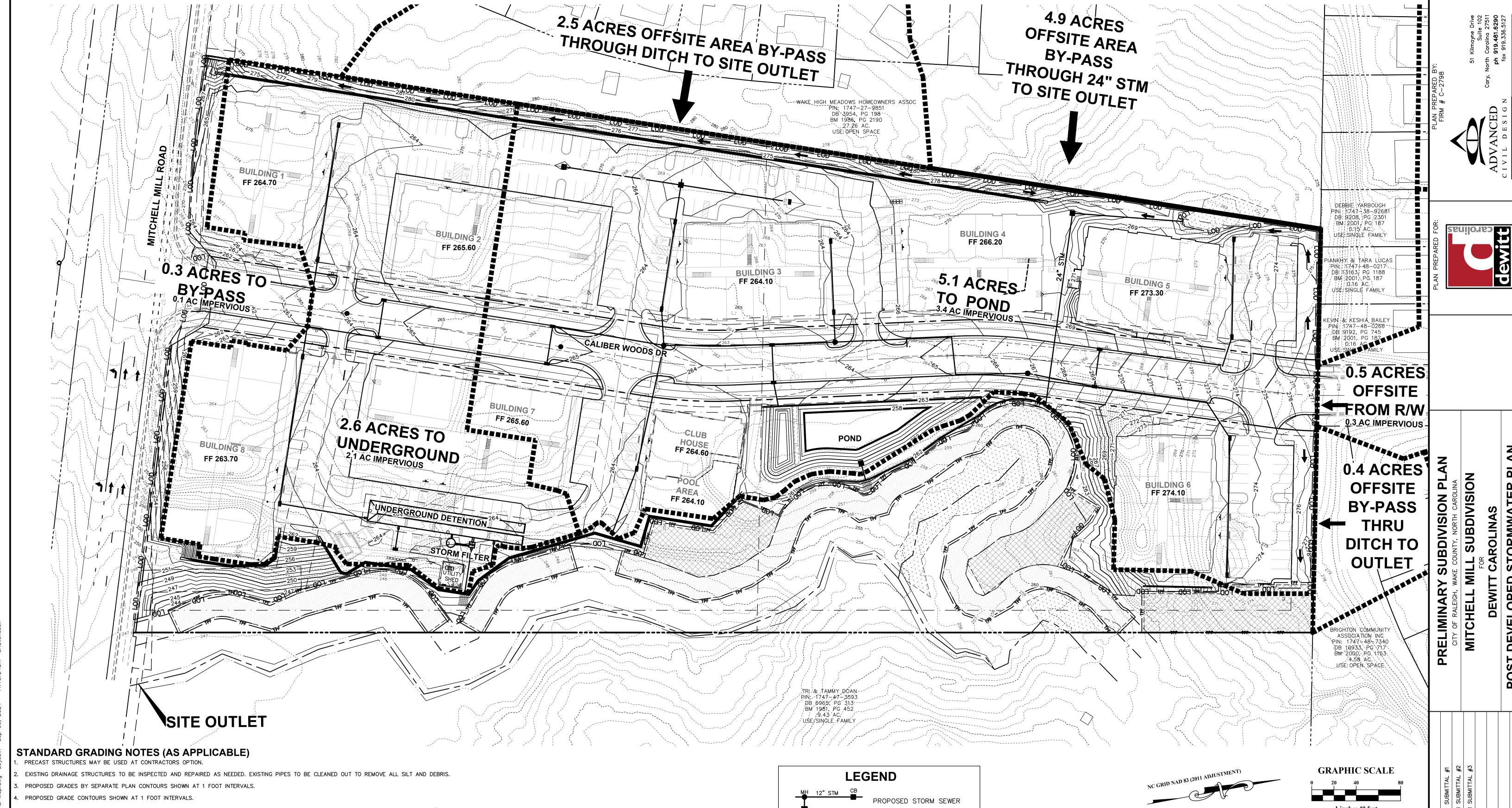
GEOMEMBRANE BARRIER

AGENTS ARE USED ON OR NEAR THE PROJECT SITE.

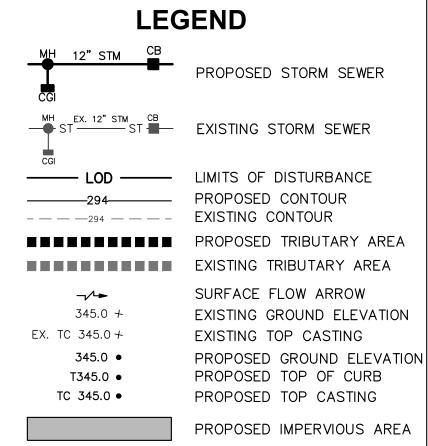
Scale: AS NOTED Drawn By: Checked By **Project Number:** 18-0004-742 Subdivision Number SUB-0027-2024

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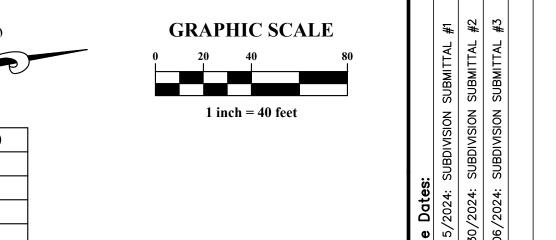


- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM SEWER PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- . ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS, LIDS SHALL BE LABELED "STORM SEWER". 8. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 9. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 10. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- . CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- 12. ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
- 13. ALL SPOT ELEVATIONS SHOWN ARE FINISHED GRADE/TOP OF PAVEMENT UNLESS OTHERWISE NOTED. TOP OF CURB ELEVATIONS DENOTED AS TXXX.XX. TOP OF CASTING ELEVATIONS DENOTED AS TC XXX.XX.
- 14. IN CASE ON AN EMERGENCY OR MAINTENANCE RELATED ISSUES WITH THE POND, THE HAND WHEEL AND PLUG VALVE IS TO BE USED TO DRAW DOWN THE POND AS MUCH AS POSSIBLE. IF POND IS TO BE DRAWN DOWN COMPLETELY, OWNER IS TO COORDINATE  $\mid$  WITH CONTRACTOR TO BRING IN PUMP TO PUMP OUT REMAINING WATER.
- 15. NO INFRASTRUCTURE TO BE CONSTRUCTED PRIOR TO CONSTRUCTION PLAN APPROVAL AND UTILITY PERMIT ISSUANCE BY THE CITY OF RALEIGH ENGINEERING DEPARTMENT.
- 16. LOCATIONS AND SIZES SHOWN FOR STORMWATER DEVICES ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL LAYOUT AND DESIGN.
- 18. PROPOSED GRADES SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL LAYOUT AND FINAL DESIGN.
- 19. THESE PLANS AND ALL CALCULATIONS HEREIN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL CONSTRUCTION PLAN DESIGN.
- 20. NO TEMPORARY OR PERMANENT ENCROACHMENTS (INCLUDING BUT NOT LIMITED TO CLEARING, GRADING, FENCING, AND THE INSTALLATION OF RETAINING WALLS OR OTHER STRUCTURES) ARE PERMITTED WITHIN THE GREENWAY EASEMENT AREA WITHOUT PRIOR APPROVAL BY THE CITY OF RALEIGH.



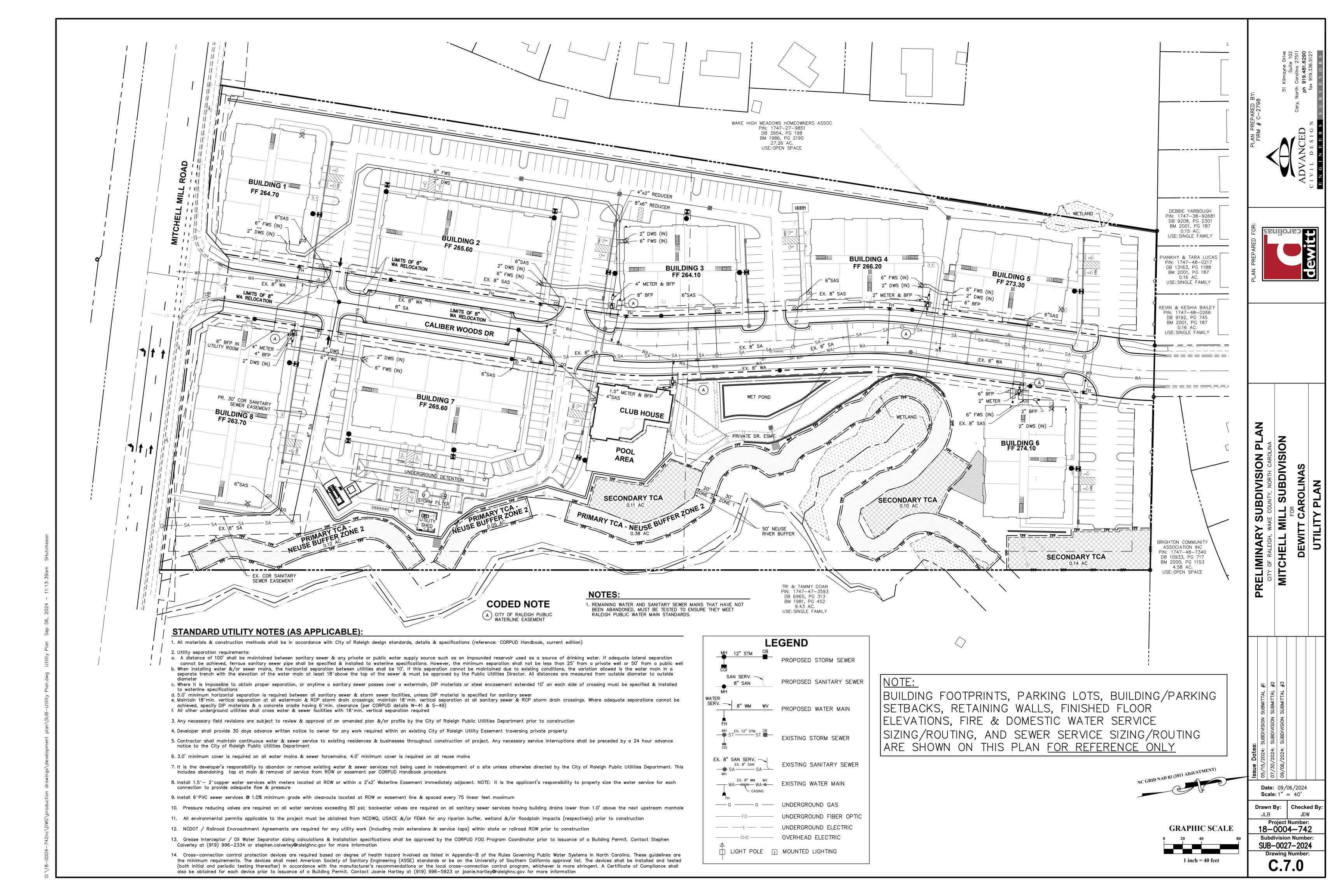
Rational Method	Pre-Development Peak Runoff Rate (cfs)
	Outlet 1
2- year:	14.25
10- year:	39.96
25- year:	53.15
100-year:	78.04
	TC = 11.9 MIN, CN = 74

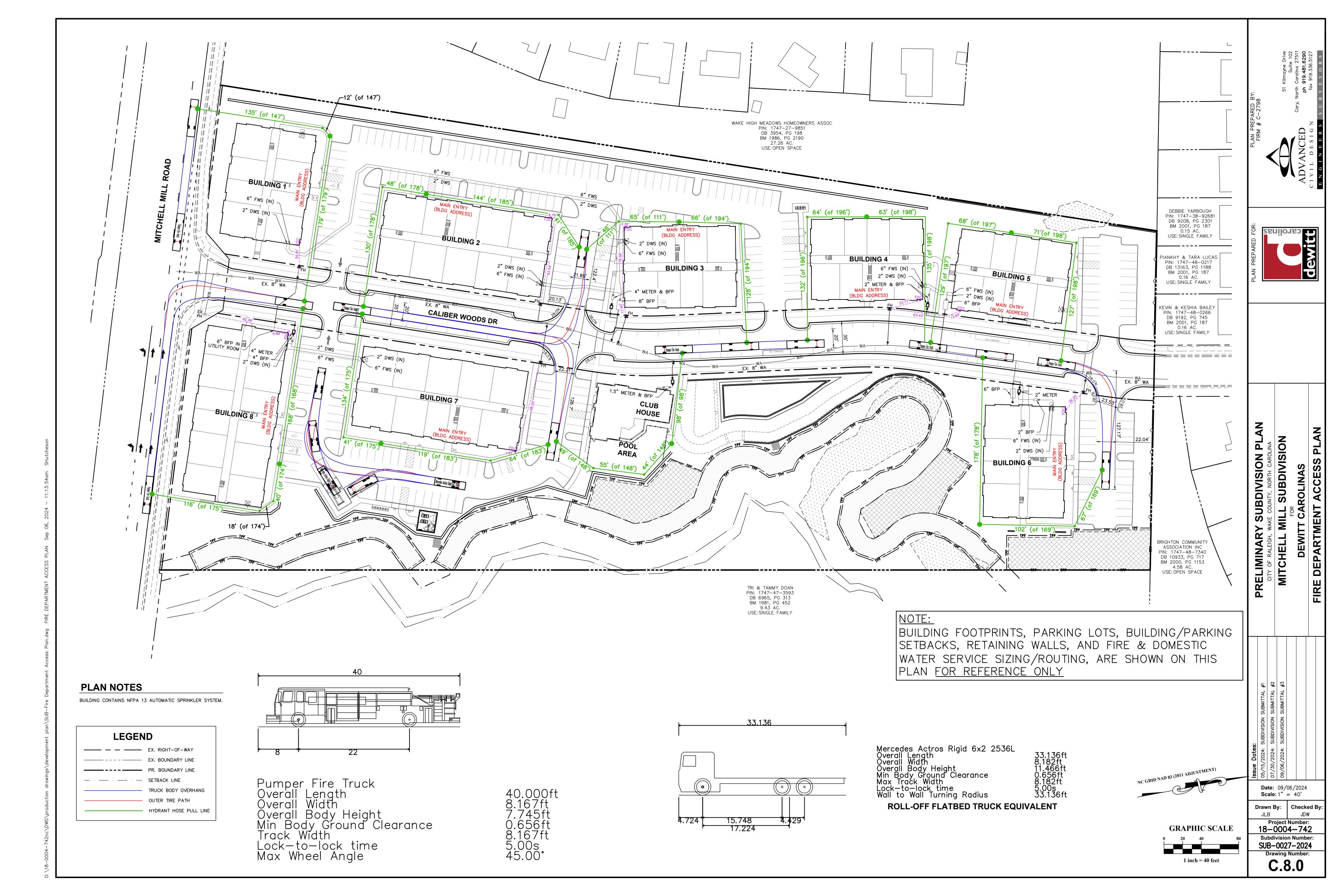
Rational Method	Basin Post-Dev Peak Runoff Rate (cfs)	Total Post-Dev Peak Runoff Rate (cfs)		
	Outlet 1	Outlet 1		
2- year:	5.80	13.43		
10- year:	22.15	39.64		
25- year:	25.00	50.98		
100-year:	33.31	63.93		
	TC = 15.0 MIN	TC = 15.0 MIN		

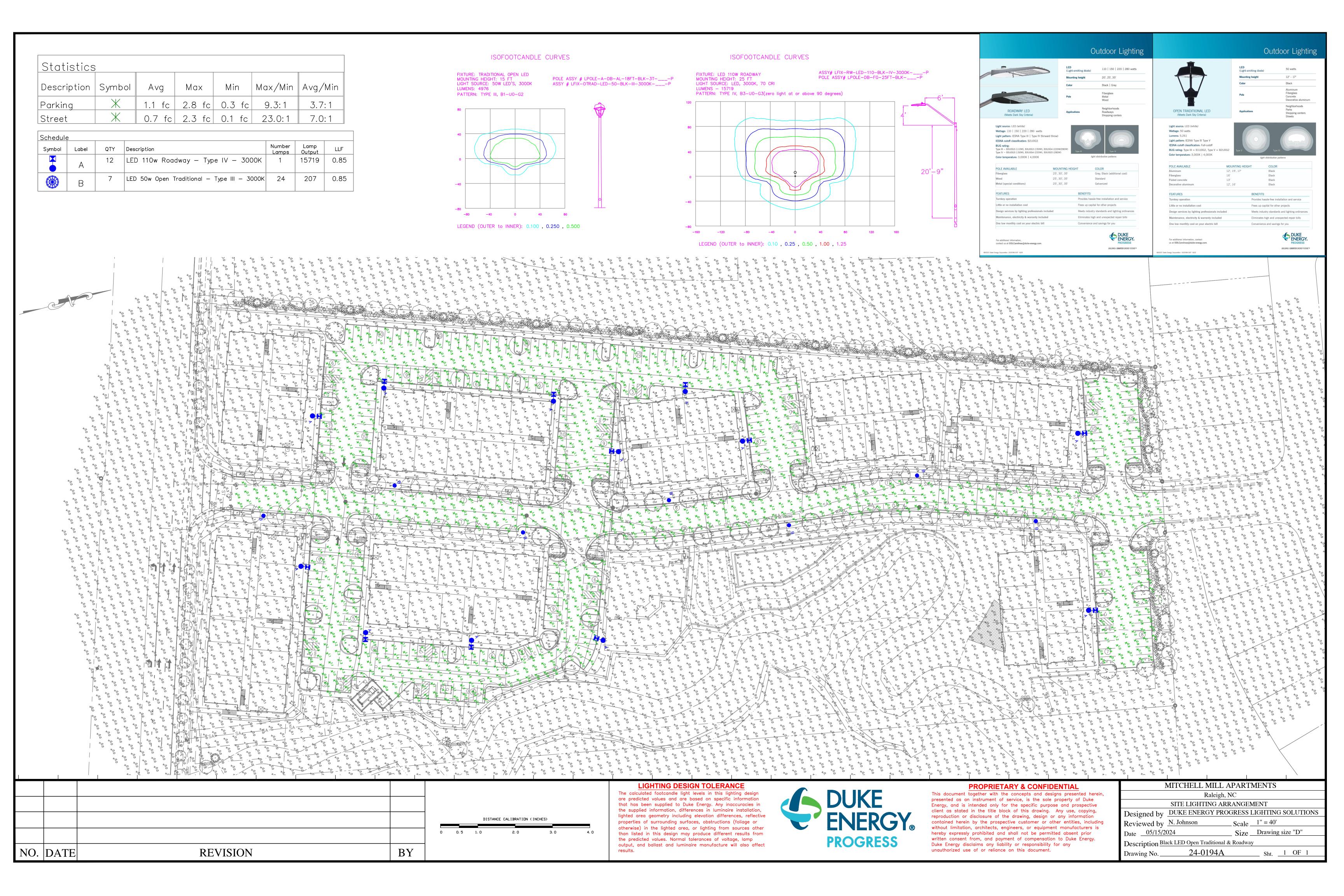


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C.6.1







THE PARKS, RECREATION AND CULTURAL RESOURCES DEPARTMENT IS RESPONSIBLE FOR PLAN REVIEW, INSPECTION, MONITORING AND ENFORCEMENT ASSOCIATED WITH TREE PLANTING AND MAINTENANCE ON PROPERTY OWNED OR

- CONTROLLED BY THE CITY 1. DEVELOPMENT, PRIVATE CITIZEN OR CONTRACT PLANTING ON CITY OWNED OR CONTROLLED PROPERTY BY
- ANY INDIVIDUAL OR ORGANIZATION OTHER THAN THE CITY. THESE PROJECTS ARE AT THE EXPENSE OF THE REQUESTOR AND REQUIRE A TREE IMPACT PERMIT.
- PARTNERSHIP PLANTING UNDERTAKEN BY NON-PROFIT ORGANIZATIONS, PUBLIC-PRIVATE PARTNERSHIPS, AND CIVIC GROUPS. UNLESS WORK IS DONE UNDER STRICT GUIDANCE AND OVERSIGHT BY THE URBAN FORESTER.

THESE PROJECTS ARE AT THE EXPENSE OF THE REQUESTOR AND REQUIRE A TREE IMPACT PERMIT.

### C. REQUESTS FOR TREE PLANTING

B. TREE PLANTING ON CITY PROPERTY

1. REQUESTS FOR TREE PLANTING AND TREE IMPACT PERMITS ARE EVALUATED IN THE ORDER IN WHICH THEY ARE

2. TREE PLANTING IS CONTINGENT ON THE PLANTING SEASON, AVAILABILITY OF PLANT MATERIAL, SITE

3. THE URBAN FORESTER OR DESIGNEE WILL PRIORITIZE TREE PLANTING REQUESTS ACCORDING TO THE

- SUITABILITY, STAFFING, AND FUNDING
- FOLLOWING CRITERIA:
- A. NEEDS BASED: AREAS IDENTIFIED WITH THE GREATEST TREE CANOPY DEFICITS B. PRE-IDENTIFIED LOCATIONS: AREAS EARMARKED FOR BEAUTIFICATION IMPROVEMENTS
- C. ON DEMAND: CITY DEPARTMENTS, VOLUNTEER GROUPS, NEIGHBORHOODS, CITIZENS, AND

#### D. TREE QUALITY STANDARDS

1. GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED ON DRAWINGS AND COMPLYING WITH ANSI Z60.1, WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING AND A VISIBLE ROOT FLARE. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND

IN DIAMETER THAT ARE NOT COMPLETELY CLOSED, OR ROOT FLARE MORE THAN 2" BELOW SURFACE OF ROOT

DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT TREES WITH MULTIPLE LEADERS, UNLESS SPECIFIED, WILL BE REJECTED. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFIGURING KNOTS, INSECT DAMAGE, OR CUTS ON LIMBS OVER 1/2 IN.

### SPECIES SELECTION

BALL WILL BE REJECTED

- A. SELECTED TREE SPECIES SHALL BE OF A CULTIVAR THAT IS SUPERIOR IN FORM AND DISEASE RESISTANCE. PREFERENCE WILL BE GIVEN TO STREET TREES GROWN SPECIFICALLY FOR URBAN CONDITIONS.
- B. EXOTIC INVASIVE SPECIES ARE NOT PERMITTED.
- C. TREES TO BE INSTALLED UNDER OVERHEAD POWERLINES SHALL HAVE A MATURE HEIGHT OF NO
- D. ALL SPECIES SELECTIONS SHALL BE REVIEWED BY THE URBAN FORESTER OR DESIGNEE.
- E. SPECIES DIVERSITY IS ENCOURAGED TO IMPROVE OVERALL URBAN FOREST HEALTH.
- F. ALL PLANT MATERIAL AND INSTALLATION WORK SHALL CONFORM TO THE STANDARDS DETAILED IN THIS MANUAL, THE AMERICAN NATIONAL STANDARDS FOR TREE CARE OPERATIONS, ANSI A300 AND NURSERY STOCK, ANSI Z60.1 AND APPROVED CITY STANDARD DETAILS.
- 4. ALL PLANT MATERIAL SHALL BE FREE OF ALL PESTS, DISEASES, AND CANKERS, IN HEALTHY CONDITION, AND FREE OF MECHANICAL DAMAGE AT THE TIME OF PLANTING AS DETERMINED BY URBAN FORESTRY STAFF.
- PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF LARGER SIZE MAY BE USED IF ACCEPTABLE TO URBAN FORESTER, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.
- 6. LABEL EACH PLANT OF EACH VARIETY AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAME. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR
- WHEN MORE THAN ONE PLANT OF ANY SPECIES IS PLANTED, ALL PLANT MATERIAL SHALL BE UNIFORM IN SIZE AND SHAPE WHEN POSSIBLE, ALL PLANT MATERIAL SHALL HAVE FULL FORM WITH EVEN-SPACED BRANCHING. ONE-SIDED PLANTS OR TIGHT ROW PLANTS ARE NOT ACCEPTABLE IF THE GROWTH HABIT IS ADVERSELY

### 8. TREE AND SHRUB MEASUREMENTS

- A. MEASURE ACCORDING TO ANSI Z60.1 WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.
- B. INSTALLATION SIZE FOR RIGHT OF WAY TREES.
- SHADE TREES SHALL BE A MINIMUM OF 3" CALIPER AND 10' TALL.
- UNDERSTORY TREES SHALL BE A MINIMUM OF 1.5" CALIPER FOR SINGLE STEM AND 6' TALL FOR BOTH SINGLE AND MULTI-STEMMED TREES.

# 9. BALLED AND BURLAP (B&B). CONTAINER AND BARE ROOT PLANT MATERIALS

- A. TREES DESIGNATED B&B SHALL BE PROPERLY DUG WITH FIRM, NATURAL BALLS OF SOIL WITH BALL SIZE NOT LESS THAN DIAMETER AND DEPTH RECOMMENDED BY ANSI Z60.1 FOR TYPE AND SIZE OF TREE, RETAINING AS MANY FIBROUS ROOTS AS POSSIBLE. BALLS SHALL BE FIRMLY WRAPPED WITH BIODEGRADABLE BURLAP AND SECURED WITH NAILS AS RECOMMENDED BY ANSI Z60.1.
- B. THE ROOT FLARE SHALL BE APPARENT AT THE SURFACE OF THE ROOT BALL. OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOT BALL IN ORDER TO ESTABLISH THE CORRECT GRADE. TREES SHALL BE REJECTED IF THE ROOT FLARE HAS BEEN BURIED LONG ENOUGH FOR THE STEM TO SPROUT ADVENTITIOUS ROOTS. TREES WITH LOOSE, BROKEN, PROCESSED, OR MANUFACTURED ROOT BALLS WILL NOT BE ACCEPTED.
- C. CONTAINER-GROWN STOCK SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED EXTERIOR PLANTS GROWN IN A CONTAINER WITH WELL-ESTABLISHED ROOT SYSTEM REACHING SIDES OF CONTAINER AND MAINTAINING A FIRM BALL WHEN REMOVED FROM CONTAINER. THE ROOT FLARE SHALL BE APPARENT AT SURFACE OF BALL. OR THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING EXCESS SOIL FROM THE TOP OF THE ROOT BALL IN ORDER TO ESTABLISH THE CORRECT GRADE. CONTAINER SHALL BE RIGID ENOUGH TO HOLD BALL SHAPE AND PROTECT ROOT MASS DURING SHIPPING AND BE SIZED ACCORDING TO ANSI Z60.1 FOR KIND, TYPE, AND SIZE OF EXTERIOR PLANT REQUIRED.
- D. BARE ROOT MATERIAL SHALL BE GROWN IN THE GROUND IN THE NURSERY WITHOUT ARTIFICIAL ROOT RESTRICTION DEVICES, SUCH AS CONTAINERS OR FABRIC BAGS, UNDER FAVORABLE GROWING CONDITIONS AND WHICH HAVE RECEIVED THE PROPER CULTURAL TREATMENT TO DEVELOP A WELL-BRANCHED ROOT SYSTEM. AFTER HARVEST, THE SOIL IS REMOVED FROM THE ROOTS.

# 10. DELIVERY, STORAGE AND HANDLING

- A. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK. BRANCHES. AND ROOT SYSTEMS FROM SUN SCALD. DRYING. SWEATING. WHIPPING. AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF EXTERIOR PLANTS DURING DELIVERY. DO NOT DROP EXTERIOR PLANTS DURING DELIVERY.
- B. HANDLE PLANTING STOCK BY ROOT BALL. HEAVIER MATERIAL SHALL BE HANDLED WITH STRAPS ON THE ROOT BALL AND APPROPRIATE EQUIPMENT SUCH AS A SMALL SKID STEER LOADER.
- C. DELIVER BARE-ROOT STOCK PLANTS FRESHLY DUG. IMMEDIATELY AFTER DIGGING UP BARE-ROOT STOCK, PACK ROOT SYSTEM IN WET STRAW, HAY, OR OTHER SUITABLE MATERIAL TO KEEP ROOT SYSTEM MOIST UNTIL PLANTING.
- D. DELIVER EXTERIOR PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET EXTERIOR PLANTS IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
- SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.
- DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE TIME OF PLANTING. WATER ROOT SYSTEMS OF EXTERIOR PLANTS STORED ON-SITE WITH A FINE-MIST SPRAY.
- WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY-WET CONDITION
- HEEL-IN BARE-ROOT STOCK. SOAK ROOTS THAT ARE IN DRY CONDITION IN WATER FOR TWO HOURS. REJECT DRIED-OUT PLANTS

# NURSERY

- A. PLANTS SHALL BE GROWN WITHIN ONE COLD HARDINESS ZONE OF THE PROJECT SITE.
- B. PROVIDE DIGITAL PHOTOS FROM THE NURSERY WITH HEIGHT IDENTIFIED FOR REVIEW BY THE URBAN FORESTER OR DESIGNEE PRIOR TO DIGGING OR SHIPPING. ALL TREES SHALL ALSO BE REVIEWED AND APPROVED PRIOR TO INSTALLATION EITHER AT PLACE OF PURCHASE, NURSERY, HOLDING YARD OR WORK SITE BY THE URBAN FORESTER OR DESIGNEE

### 12. OBSERVATION AND REJECTION

A. URBAN FORESTER OR DESIGNEE MAY OBSERVE TREES AT PLACE OF PURCHASE, NURSERY HOLDING YARD, OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. URBAN FORESTER RETAINS RIGHT TO OBSERVE TREES FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES, AND LATENT DEFECTS AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REMOVE REJECTED TREES IMMEDIATELY FROM PROJECT SITE.

- A. REQUESTS FOR SUBSTITUTION FOR THE LISTED PLANT MATERIAL MUST BE MADE TO THE URBAN FORESTER IN WRITING. THE REQUEST SHALL INCLUDE A MINIMUM OF 5 NURSERIES ATTEMPTED FOR LOCATION AND CONTACT INFORMATION. SUBSTITUTIONS WILL BE CONSIDERED IF THE LISTED MATERIAL CANNOT BE LOCATED OR CONFIRMED BY KNOWN SUPPLIERS. PLANT SUPPLIERS MUST BE RESEARCHED AND LOCATED PRIOR TO SUBMITTAL. IF PLANT MATERIAL SUBSTITUTIONS ARE TO BE MADE AFTER AWARD OF THE CONTRACT OR PERMIT, THE SUBSTITUTION MUST BE OF SIMILAR GROWTH HABIT, FORM, AND CHARACTERISTICS; SIMILAR IN SPECIFIED SIZE; AND EQUAL IN PRICE AND SUBJECT TO APPROVAL OR REJECTION BY THE URBAN FORESTER.
- B. IF FOR ANY REASON TREES CANNOT BE INSTALLED ACCORDING TO THE PLANS A REQUEST SHALL BE MADE TO THE URBAN FORESTER IN WRITING. THE CONTRACTOR SHALL INFORM THE CITY AND ALTERNATE PLANTING LOCATIONS SHALL BE SELECTED FOR APPROVAL BY THE URBAN FORESTER.

- 1. PLEASE REFER TO CITY OF RALEIGH STANDARD DETAILS LOCATED AT RALEIGHNC.GOV
- 2. LINEAR SPACING AND LOCATION
  - A. TREES WILL BE PLANTED IN ACCORDANCE WITH SPACING REQUIREMENTS DETAILED IN THE UNIFIED DEVELOPMENT ORDINANCE UNLESS OTHERWISE DIRECTED BY THE URBAN FORESTER OR DESIGNEE
  - B. TREES TO BE INSTALLED UNDER OVERHEAD UTILITY LINES SHALL HAVE A MATURE HEIGHT OF NO GREATER THAN 30FT.

#### C. GROUPED PLANTINGS

 GROUPING TREES WHEREVER POSSIBLE AND DESIGNING TREE PITS OR MULCH AREAS THAT ALLOW SHARED ROOT SPACE PROVIDES A NUMBER OF BENEFITS TO THE HEALTH AND LONGEVITY OF URBAN TREES. DESIGNS THAT GROUP TREES ARE FAVORED OVER INDIVIDUAL PLANTINGS

### A. TREE AND SHRUB EXCAVATION

- PLANTING HOLE: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE. DO NOT FURTHER DISTURB BASE. SCARIFY SIDES OF PLANT PIT SMEARED OR SMOOTHED DURING
- EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR ALL PLANT
- PLANTING HOLES SHALL BE NO DEEPER THAN THE ROOT FLARE OF THE TREE OR PLANT WHICH SHALL BE INSTALLED AT GRADE, A MAXIMUM OF 2 INCHES ABOVE GRADE, AND NEVER BELOW
- SOIL REMOVED FROM EXCAVATIONS MAY BE USED AS BACKFILL PROVIDED IT MEETS THE SPECIFIED PLANTING SOIL MIX REQUIREMENTS.
- OBSTRUCTIONS: NOTIFY URBAN FORESTER IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS.
- DRAINAGE: PLANTING HOLES NOT ASSOCIATED WITH A DRAIN SYSTEM SHALL DRAIN FULLY WITHIN A 12-HOURPERIOD. NOTIFY URBAN FORESTER IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PITS.

### B. TREE AND SHRUB PLANTING

- a. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PIT OR TRENCH WITH ROOT FLARE AT GRADE. A MAXIMUM OF 2 INCHES ABOVE ADJACENT FINISH GRADES. AND NEVER BELOW GRADE. DO NOT MANEUVER BY TRUNK. HANDLE BY ROOT BALL
- b. REMOVE BURLAP AND WIRE BASKETS FROM THE TOP ½ OF ROOT BALL, CUT OFF AND DISCARD FROM HOLE, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION
- c. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS, TAMPING GENTLY TO SETTLE MIX AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PIT IS APPROXIMATELY ONE-HALF BACKFILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. PLACING AND TAMPING FINAL LAYER OF PLANTING SOIL MIX.

# CONTAINER

- a. SET CONTAINER-GROWN STOCK PLUMB AND IN CENTER OF PIT OR TRENCH WITH ROOT FLARE AT GRADE, A MAXIMUM OF 2 INCHES ABOVE ADJACENT FINISH GRADES, AND NEVER BELOW GRADE. DO NOT MANEUVER BY TRUNK. HANDLE BY ROOT BALL ONLY.
- b. CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT. GENTLY LOOSEN THE ROOTS AND CUT ANY GIRDLING ROOTS IN AT LEAST TWO
- c. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE MIX AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PIT IS APPROXIMATELY ONE-HALF BACKFILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF PLANTING SOIL MIX.

# BARE ROOT

a. FOLLOW THE METHOD FOR CONTAINER PLANTING. STAKING REQUIRED.

# C. TREES IN SIDEWALKS, PITS, GRATES AND TREE LAWNS

- TREE GRATES
- a. 4' X 6' GRAY IRON, ADA COMPLIANT b. TREE GRATES SHALL HAVE A PROVISION FOR TRUNK EXPANSION OF THE TREE. SUCH
- AS POP OUT CONCENTRIC RINGS IN THE GRATE AROUND THE TRUNK. c. NO UTILITIES OR ELECTRICAL CONDUITS ARE PERMITTED WITHIN THE TREE PIT OR GRATE. UTILITIES MAY RUN BELOW AND THROUGH THE SUBSURFACE ROOT EXPANSION
- TREES SHALL BE CENTERED IN THE PIT
- TREE PITS SHALL ACCOMMODATE A DEPTH OF 3' OF PLANTING SOIL.
- HIGH QUALITY PLANTING SOIL SHALL BE USED IN THE PIT DIRECTLY BELOW THE GRATE
- DRAINAGE SHALL BE PROVIDED.

# D. TREE LAWN

- MINIMUM 6 FEET WIDE TREE LAWN.
- TREE CENTERED IN AREA.
- 600 CUBIC FEET OF HIGH-QUALITY PLANTING SOIL IN THE IMMEDIATE AREA WHERE TREE IS TO BE PLACED.

# E. REQUIRED SUBSURFACE ROOT EXPANSION

- HIGH-QUALITY PLANTING SOIL OR STRUCTURAL SOIL SHALL BE USED TO ACCOMPLISH THE
- 600 CUBIC FEET OF SUBSURFACE ROOT EXPANSION AREA REQUIRED PER TREE.
- b. SUBSURFACE SOIL CONTAINMENT STRUCTURE

a. STRUCTURAL SOIL

- c. ROOT PATHWAYS
- MAY ONLY BE USED IN COMBINATION WITH OTHER OPTIONS OR IN CASES WHERE CONNECTIONS TO AVAILABLE SOIL SPACE ACHIEVES THE 600 CUBIC FEET REQUIREMENT
- 20-FOOT MINIMUM EXTENSION FOR EACH PATH. CONNECT TO ADJACENT ROOT PATHS WHEN POSSIBLE. WHEN ROOT EXPANSION PATHS EXTEND UNDER THE SIDEWALK ENSURE
- MINIMUM DENSITY REQUIREMENTS ARE MET.
- d. SUSPENDED PAVEMENT

#### e. EXCEPTIONS AND DESIGN ALTERNATIVES ARE ENCOURAGED TO ACHIEVE SOIL VOLUME: G. TREE PROTECTION URBAN FORESTER REVIEW REQUIRED.DESIGNS THAT GROUP TREES AND CONNECT ROOT SPACES WILL BE FAVORED AS WELL AS THE INTRODUCTION OF LID MATERIALS

AND TECHNOLOGY.

- APPLY 3 INCH AVERAGE THICKNESS OF ORGANIC MULCH EXTENDING 12 INCHES BEYOND EDGE OF PLANTING PIT OR TRENCH. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS. ROOT FLARE SHALL BE VISIBLE AT BASE OF ALL PLANT MATERIAL.
- MULCH SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER TO REFRESH AS NEEDED AND KEEP FREE OF DEBRIS AND TRASH.

- BACKFILL DIRECTLY IN TREE PIT OR PLANTING AREA SHALL BE HIGH-QUALITY PLANTING SOIL SUITABLE FOR SUCCESSFUL GROWTH.
- IF SOIL ON SITE IS SUITABLE IT MAY BE MIXED AT A RATE OF 50% WITH HIGH-QUALITY PLANTING
- SOIL MUST BE FREE OF SUBSOIL, HARD CLODS, STONE, RESIDUES OR UNDESIRABLE MATERIALS, STICKS, WEED SEED AND UNIFORM IN QUALITY.

### THE URBAN FORESTER OR DESIGNEE MAY REJECT UNSUITABLE SOIL.

- H. GUYING AND STAKING DO NOT STAKE UNLESS THE TREE BECOMES UNSTABLE OR IT IS A HIGH WIND AREA.
  - REMOVE ALL STAKING MATERIAL AFTER 1 YEAR.
  - LEAVE SLIGHT SLACK IN TIE TO PROMOTE TRUNK TAPER.
- UPRIGHT STAKING AND TYING: WHEN REQUIRED USE A MINIMUM OF 3 STAKES. SET VERTICAL STAKES AND SPACE TO AVOID PENETRATING ROOT BALLS OR ROOT MASSES. SUPPORT TREES WITH TWO STRANDS OF TIE WIRE ENCASED IN HOSE SECTIONS OR ARBORIST TAPE AT CONTACT POINTS WITH TREE TRUNK. ALLOW ENOUGH SLACK TO AVOID RIGID RESTRAINT OF TREE. SPACE STAKES EQUALLY AROUND TREES AND ATTACH FLAGS TO EACH GUY WIRE FOR

#### F. MAINTENANCE AND WARRANTY STANDARDS

A TREE IMPACT PERMIT IS REQUIRED FOR MAINTENANCE ACTIVITIES

IT IS THE ADJACENT PROPERTY OWNER'S RESPONSIBILITY TO MAINTAIN THE MULCH RING OR TREE GRATE AROUND TREES IN THE RIGHT OF WAY AND PREVENT STRING TRIMMER OR MOWER DAMAGE.

A 2-YEAR WARRANTY AND MAINTENANCE PERIOD IS REQUIRED AFTER THE FINAL INSPECTION OF PERMITTED PLANTING.

#### TREE AND PLANT MAINTENANCE A. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, ADJUSTING AND REPAIRING TREE-STABILIZATION DEVICES, RESETTING TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS. SPRAY OR TREAT AS REQUIRED TO KEEP PLANTS FREE OF INSECTS AND DISEASE.

- B. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING, RUTTING OR DAMAGE BY EQUIPMENT OR OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN
- APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS. TREATMENTS INCLUDE PHYSICAL CONTROLS SUCH AS HOSING OFF FOLIAGE, MECHANICAL CONTROLS SUCH AS TRAPS, AND BIOLOGICAL CONTROL AGENTS.

# 2. WATERING INSTRUCTIONS

- A. PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND WATERING EQUIPMENT TO CONVEY WATER
- B. SCHEDULE WATERING TO COMPLY WITH THE CITY OF RALEIGH WATER CONSERVATION ORDINANCE. WATERING VOLUMES SHOULD BE BASED UPON DELIVERY OF INCH OF MOISTURE PER WEEK TO THE
- PLANT IF PRECIPITATION DOES NOT MEET THAT AMOUNT DURING THE ACTIVE GROWING SEASON DEFINED AS APRIL 1 THROUGH NOVEMBER 1 D. SUPPLEMENTAL WATER SHALL BE APPLIED DURING THE ESTABLISHMENT PERIOD AS FREQUENTLY AS 3

TIMES PER WEEK AND DURING PERIODS OF DROUGHT OR EXCESSIVE HEAT.

FROM TREES STARTING NOVEMBER 1 UNTIL APRIL 1 OF FOLLOWING YEAR.

E. USE A SLOW FLOW HOSE END DEVICE AND WATER EACH TREE AT THE BASE FOR SEVERAL MINUTES. COMMERCIALLY AVAILABLE WATER BAGS ARE ACCEPTABLE. AT EACH VISIT MAKE SURE THE BAG IS EMPTY, THOROUGHLY SOAK THE ROOT BALL, THEN REFILL THE BAG CHECKING THE EMITTERS ALLOW FREE FLOW OF WATER TO ENSURE THE BAG WILL DRAIN. ALL WATERING BAGS SHALL BE REMOVED

- MAINTAIN A 3-INCH AVERAGE THICKNESS OF ORGANIC MULCH EXTENDING 12 INCHES BEYOND EDGE OF PLANTING PIT OR TRENCH. TYPICAL MATERIAL IS SHREDDED HARDWOOD, PINE BARK, WOOD CHIPS OR PINE STRAW (NOT PERMITTED WITHIN 10' OF STRUCTURES).
- B. MULCH TO THE DRIP LINE OF MATURE TREES.

D. KEEP MULCH FREE OF WEEDS, TRASH AND DEBRIS

- C. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS. ROOT FLARE SHALL BE VISIBLE AT BASE OF ALL PLANT MATERIAL.
- THE MULCH RING PREVENTS STRING TRIMMER, MOWER AND OTHER MECHANICAL DAMAGE. IT ALSO
- IMPROVES SOIL QUALITY, MOISTURE AND TEMPERATURE EXCHANGE, AESTHETICS AND OVERALL HEALTH AND LONGEVITY OF THE URBAN TREE

- A. TREE GRATE MAINTENANCE IS THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER. MAINTAIN GRATES FREE OF WEEDS TRASH AND DEBRIS
- B. REPLENISH GRAVEL AS NEEDED TO MAINTAIN AN EVEN SURFACE. GRAVEL SHALL MATCH EXISTING MATERIAL; TYPICALLY GRAY PEA GRAVEL/#67 WASHED STONE GRAVEL.
- C. NOTIFY URBAN FORESTER IF THE TREE GRATE IS GIRDLING TREE OR CAUSING DAMAGE TO TREE. PESTICIDE AND HERBICIDE APPLICATION

#### APPLY PESTICIDES AND OTHER CHEMICALS AND BIOLOGICAL CONTROL AGENTS IN ACCORDANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH CITY OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK, NOTIFY URBAN FORESTER BEFORE EACH APPLICATION IS PERFORMED OR AS SPECIFIED

- B. PRE-EMERGENT HERBICIDE: APPLY TO TREE, SHRUB AND GROUND-COVER AREAS IN ACCORDANCE
- WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. DO NOT APPLY TO SEEDED AREAS. POST-EMERGENT HERBICIDE: APPLY ONLY AS NECESSARY TO TREAT ALREADY-GERMINATED WEEDS AND IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

- A. ALL TREE PRUNING SHALL BE DONE BY OR UNDER THE SUPERVISION OF AN ISA CERTIFIED ARBORIST
- B. ANSI A-300 PRUNING STANDARDS SHALL APPLY (CHAPTER 6)

- A. AREA FOR ROOT PRUNING MUST BE APPROVED BY AN ISA CERTIFIED ARBORIST TO PREVENT A
- HAZARDOUS TREE CONDITION (CHAPTER 6) B. ACCEPTABLE METHODS OF CUTTING ARE BY SHARP HAND PRUNERS, LOPPERS, HAND SAW OR
- HYDRAULIC TOOLS. IMPLEMENT MUST LEAVE A CLEAN CUT. C. IF EXCAVATION CAUSES PRUNED ROOTS OVER 1.5" IN DIAMETER TO REMAIN EXPOSED FOR MORE THAN 24 HOURS, ROOTS ON TREE SIDE SHALL BE KEPT MOIST. BACKFILL WITH TOPSOIL, MOIST MULCH, OR DRAPE WITH WET BURLAP
- D. WHERE CONCRETE IS POURED ADJACENT TO PRUNED ROOTS HEAVY DUTY PLASTIC SHALL BE INSTALLED AGAINST THE TREE SIDE OF THE PRUNED ROOTS TO PREVENT UPTAKE (TOXIC TO TREE)

# 8. TREE REPLACEMENT OF WARRANTIED TREES

A. TREES SHALL BE REPLACED IN THE NEXT PLANTING SEASON IF THEY ARE MORE THAN 25% DEAD, IN RAPID DECLINE, ARE INFESTED BY INSECTS OR DISEASE, HAVE LOST THE NATURAL SHAPE DUE TO DEAD BRANCHES. EXCESSIVE PRUNING INCLUDING VANDALISM. INADEQUATE OR IMPROPER MAINTENANCE, OR ARE FAILING DUE TO OTHER CAUSES.

B. REPLACEMENT TREES INSTALLED AFTER THE 1ST YEAR OF A 2-YEAR WARRANTY/MAINTENANCE PERIOD

C. DEAD, DYING, DISEASED OR VANDALIZED TREES THAT ARE DESTROYED SHALL BE REMOVED WITHIN 15

D. REPLACEMENT TREE SPECIES MAY BE CHANGED WITH APPROVAL FROM URBAN FORESTER OR DESIGNEE

SHALL GET A FULL 1 YEAR OF WARRANTY/MAINTENANCE FROM THE TIME OF PLANTING.

A TREE PROTECTION PLAN IS REQUIRED FOR ANY ACTIVITY IMPACTING CITY TREES INTENDED TO REMAIN.

### TREE PROTECTION PLAN

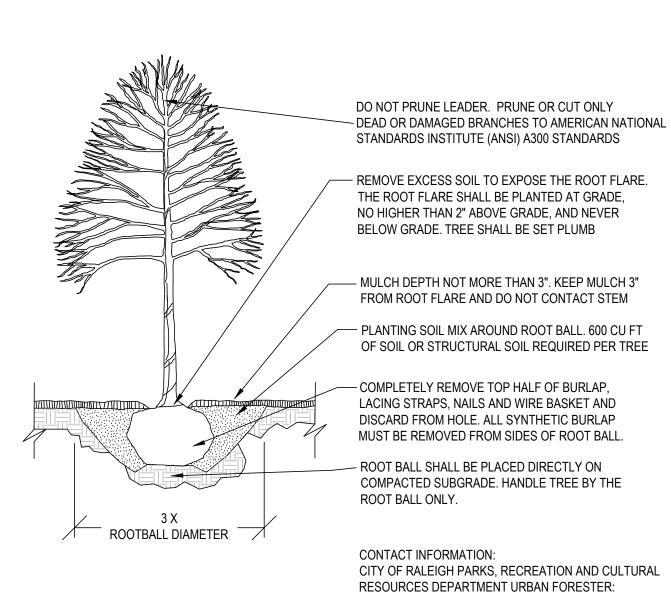
- A. SUBMIT PROJECT PLANS SHOWING TREE PROTECTION WITH THE TREE IMPACT PERMIT REQUEST.
- B. TREE PROTECTION PLAN SHALL INCLUDE ALL THAT APPLY

REMEDIATION

- EXISTING TREES ON SITE CRITICAL ROOT ZONES OF PROTECTED TREES
- TREE PROTECTION FENCING DELINEATION AND SPECIFICATION
- OTHER PRODUCTS FOR PROTECTION (MULCH/MATTING/ETC.)
- 2. TREE PROTECTION FENCING SHALL BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE (CRZ) OF
- TREES (CRZ DEFINED AS RADIUS 1.25' FEET PER CALIPER INCH AT DBH FROM TRUNK OF TREE).
- 3. TREE PROTECTION SIGNAGE REQUIRED EVERY 50 FEET.

4. IF CONSTRUCTION OCCURS WITHIN THE CRZ AT LEAST 12" OF MULCH SHALL BE PLACED AND/OR LOGGING MATS

- WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE AND IDENTIFY ON PLAN. 5. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
- 6. THERE WILL BE ZERO TOLERANCE FOR STORING OR PARKING VEHICLES, SUPPLIES, OR EQUIPMENT UNDER
- 7. REMEDIATION INCLUDES BUT IS NOT LIMITED TO REPLACEMENT, PRUNING, SUPPLEMENTAL WATER, MULCH, NUTRITION (FERTILIZER, ORGANIC MATTER, ETC.), INSECT/DISEASE CONTROL, STAKING AND COMPACTION
- 8. AFTER CONSTRUCTION OR IMPACT PROTECTION DEVICES SHALL BE REMOVED. MULCH OR OTHER MATERIALS USED FOR A ROOT BUFFER SHALL BE REMOVED BY HAND WITHIN THE CRITICAL ROOT ZONE. IT MAY BE REMOVED MECHANICALLY BEYOND THIS ZONE. THERE SHALL BE 3" OF MULCH LEFT ON SITE AS DESCRIBED IN SECTION F.3 OF THIS CHAPTER.



- TREES MUST MEET THE TREE QUALITY STANDARDS IN CH. 2 OF THE CITY TREE MANUAL.
- 2. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE DRAINAGE OF ALL PLANTING PITS. (POSITIVE DRAINAGE AWAY FROM PIT)
- 3. TREES SHALL BE PLANTED BETWEEN OCTOBER 1ST AND APRIL 30TH. 4. A TREE IMPACT PERMIT IS REQUIRED.
- 5. ELECTRICAL OUTLETS AND OTHER UTILITIES ARE PROHIBITED IN THE PLANTING AREA IMMEDIATELY SURROUNDING THE TREE.
- TREE MANUAL, THE STAKING MUST BE REMOVED WITHIN ONE YEAR. 7. TREES WILL HAVE A MINIMUM 1 YEAR WARRANTY

AFTER THE INITIAL PLANTING IS APPROVED BY THE CITY.

CITY OF RALEIGH STANDARD DETAIL			
EVISIONS	DATE: 8/2020	NOT TO SCALE	
10/2019			
	TREE PLA	ANTING DETAIL	
	TF	P-03	

TREES@RALEIGHNC.GOV

WWW.RALEIGHNC.GOV

NOTE: DETAIL TPP-03 IS FOR STREET TREE PLANTINGS.

6. IF STAKING IN ACCORDANCE WITH THE CITY

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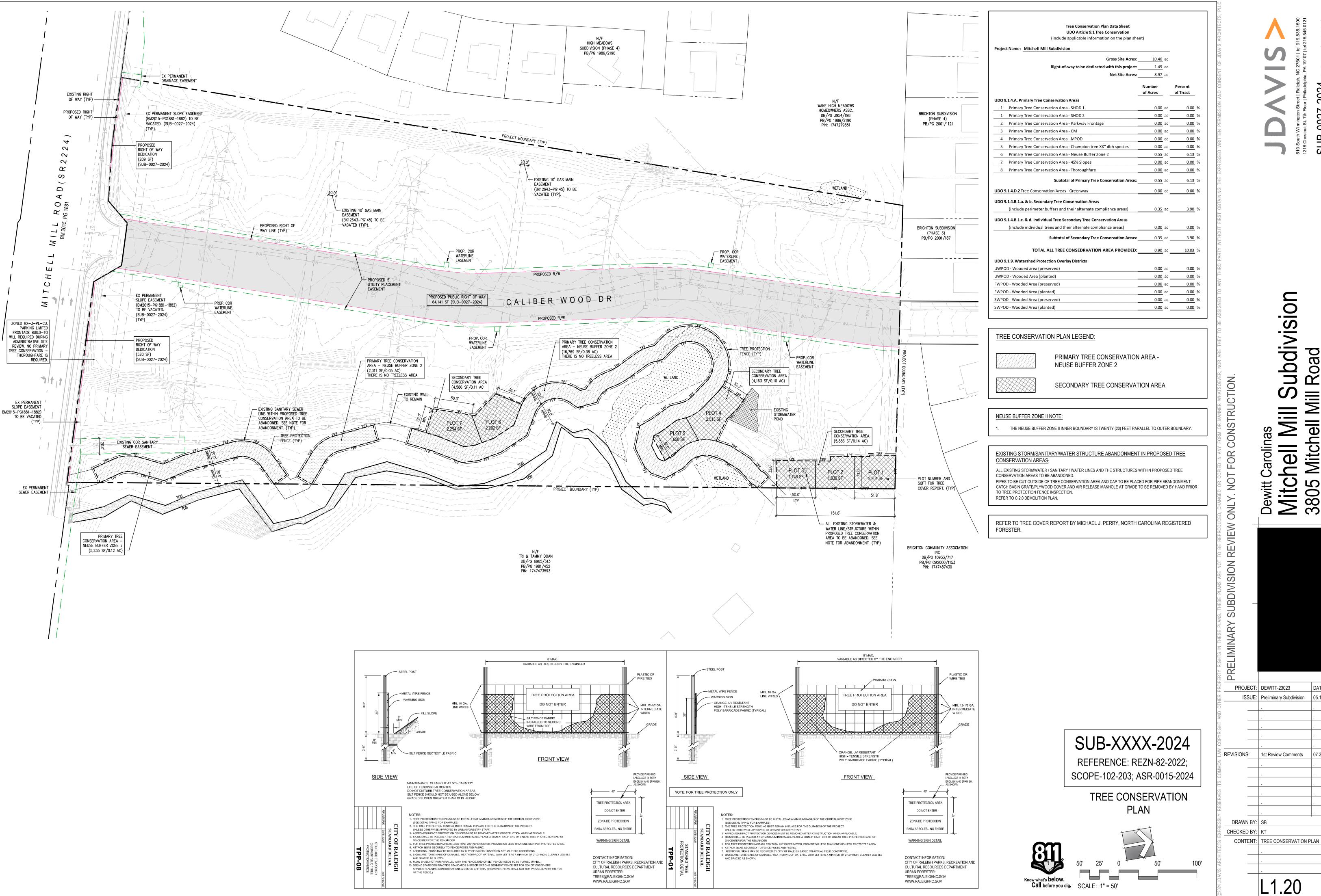
PROJECT: DEWITT-23023 ISSUE: Preliminary Subdivision 05.15.2024 1st Review Comments

REVISIONS: DRAWN BY: SB

CONTENT: CITY OF RALEIGH STANDARD

DETAILS AND NOTES FOR CITY TREE

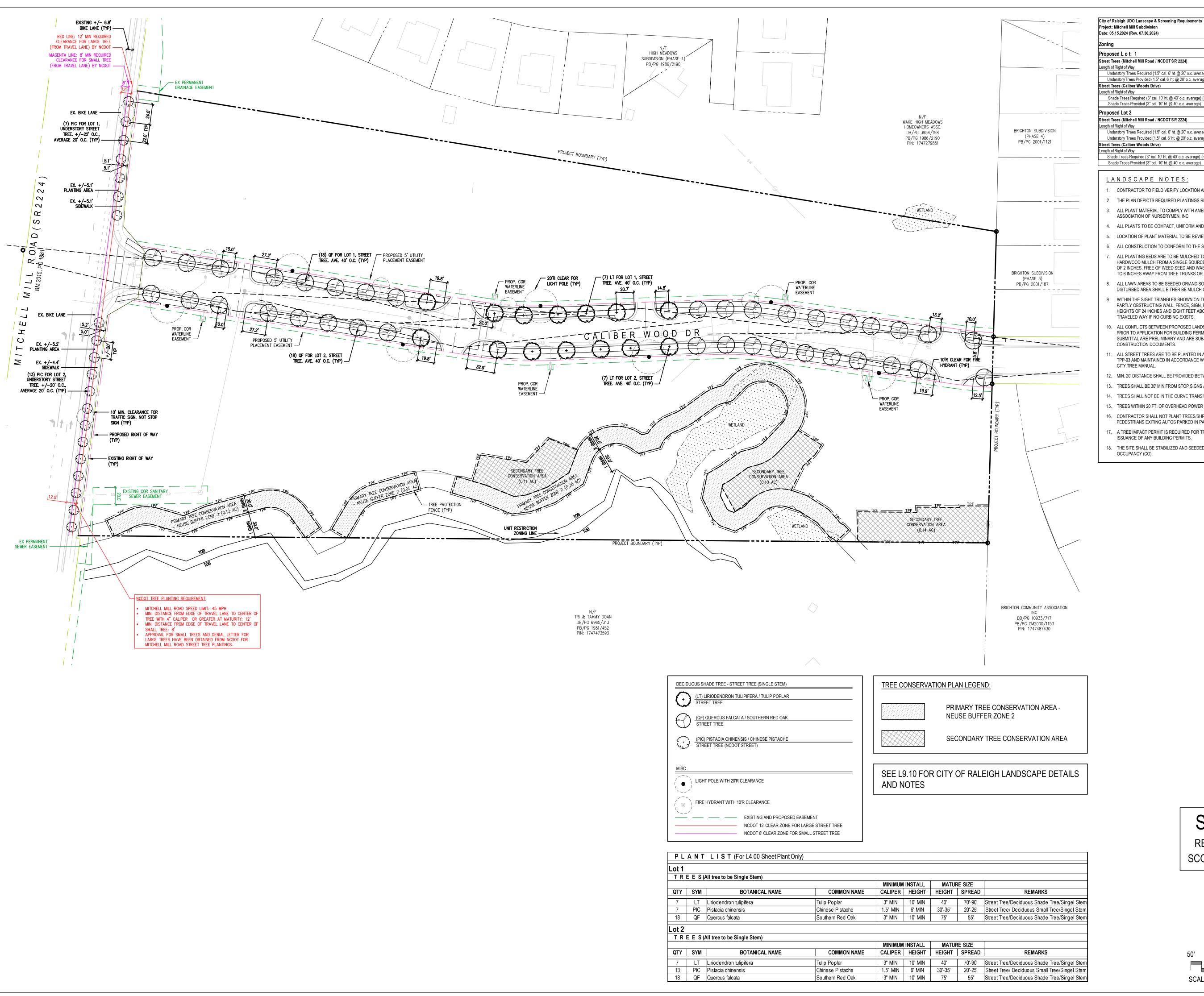
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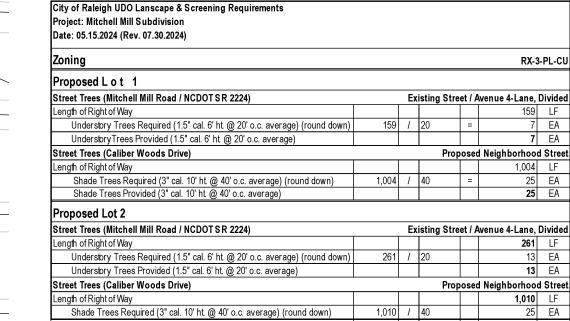


ubdivision Road 27616 <u>Ф</u> 3805 **№** Raleigh,

ISSUE: | Preliminary Subdivision | 05.15.2024

07.30.2024 1st Review Comments





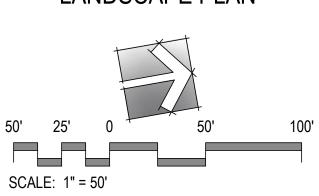
#### LANDSCAPE NOTES:

- 1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO INSTALLATION
- 2. THE PLAN DEPICTS REQUIRED PLANTINGS REQUIRED BY THE CITY OF RALEIGH.
- 3. ALL PLANT MATERIAL TO COMPLY WITH AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- 4. ALL PLANTS TO BE COMPACT, UNIFORM AND WELL GROWN.
- 5. LOCATION OF PLANT MATERIAL TO BE REVIEWED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 6. ALL CONSTRUCTION TO CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF RALEIGH. ALL PLANTING BEDS ARE TO BE MULCHED TO A DEPTH OF 3 INCHES, WITH AGED TRIPLE SHREDDED
- HARDWOOD MULCH FROM A SINGLE SOURCE COMMERCIAL VENDOR WITH A MAXIMUM PARTICLE SIZE OF 2 INCHES, FREE OF WEED SEED AND WASTE MATERIALS. NO PINE STRAW PERMITTED. KEEP MULCH 4 TO 6 INCHES AWAY FROM TREE TRUNKS OR STEMS.
- ALL LAWN AREAS TO BE SEEDED OR/AND SODDED AS PER MANUFACTURE'S SPECIFICATIONS. ALL DISTURBED AREA SHALL EITHER BE MULCH OR LAWN.
- WITHIN THE SIGHT TRIANGLES SHOWN ON THIS PLAN, THERE SHALL BE NO SIGHT OBSTRUCTING OR PARTLY OBSTRUCTING WALL, FENCE, SIGN, FOLIAGE, BERMS, OR PARKED VEHICLES BETWEEN THE HEIGHTS OF 24 INCHES AND EIGHT FEET ABOVE THE CURB LINE ELEVATION OR THE NEAREST TRAVELED WAY IF NO CURBING EXISTS
- ALL CONFLICTS BETWEEN PROPOSED LANDSCAPE, UTILITIES AND STORMWATER WILL BE RESOLVED PRIOR TO APPLICATION FOR BUILDING PERMITS. UTILITY AND STORMWATER PLANS DEPICTED IN THIS SUBMITTAL ARE PRELIMINARY AND ARE SUBJECT TO CHANGE WITH THE DEVELOPMENT OF
- CONSTRUCTION DOCUMENTS. ALL STREET TREES ARE TO BE PLANTED IN ACCORDANCE WITH CITY OF RALEIGH STANDARD DETAIL, TPP-03 AND MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 2 OF THE RALEIGH
- 12. MIN. 20' DISTANCE SHALL BE PROVIDED BETWEEN LIGHT POLES AND TREE TRUNKS.
- 13. TREES SHALL BE 30' MIN FROM STOP SIGNS AND 10' MIN FROM DRIVEWAYS AND UTILITY POLES.
- 14. TREES SHALL NOT BE IN THE CURVE TRANSITIONING FROM ONE STREET TO ANOTHER.
- 15. TREES WITHIN 20 FT. OF OVERHEAD POWER LINE(S) SHOULD BE UNDERSTORY TREES. 16. CONTRACTOR SHALL NOT PLANT TREES/SHRUBS AT ANY LOCATION WHERE THEY WILL INTERFERE WITH
- PEDESTRIANS EXITING AUTOS PARKED IN PARALLEL SPACES. 17. A TREE IMPACT PERMIT IS REQUIRED FOR TREES INSTALLED IN THE PUBLIC RIGHT-OF-WAY PRIOR TO
- ISSUANCE OF ANY BUILDING PERMITS. 18. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF

SUB-0027-2024

REFERENCE: REZN-82-2022; SCOPE-102-203; ASR-0015-2024

> CODE COMPLIANCE LANDSCAPE PLAN



ubdivision **Road** 27616 Φ 3805 **№** Raleigh, Dewitt Committed Mitch PROJECT: DEWITT-23023 ISSUE: Preliminary Subdivision 05.15.2024

ONLY.

**SUBDIVISION REVIEW** 

**PRELIMINARY** 

REVISIONS:

DRAWN BY: SB

CHECKED BY: KT

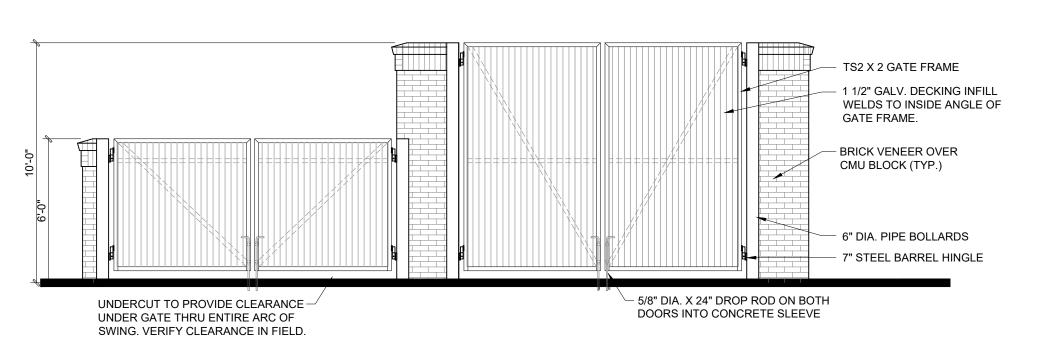
CONTENT: CODE COMPLIANCE

LANDSCAPE PLAN

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1st Review Comments

07.30.2024



ARCHITECTURAL PLANS
EXTERIOR MATERIALS

= ASPHALT SHINGLE ROOF

= STANDING SEAM METAL ROOF

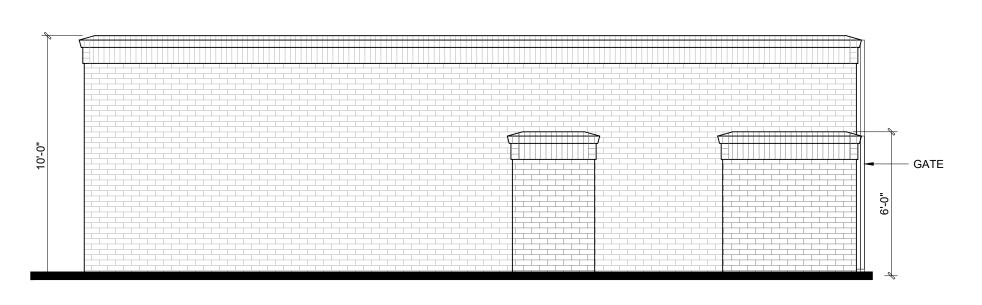
= FIBER CEMENT SIDING

= FIBER CEMENT PANEL BD.
W/ 2" BATTENS @ 24" O.C.

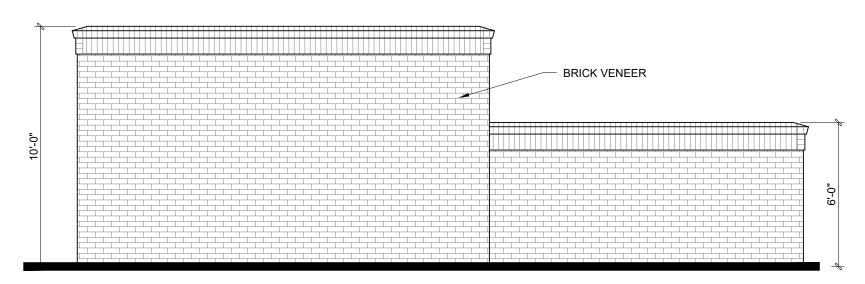
= BRICK VENEER

= ROWLOCK/SOLDIER

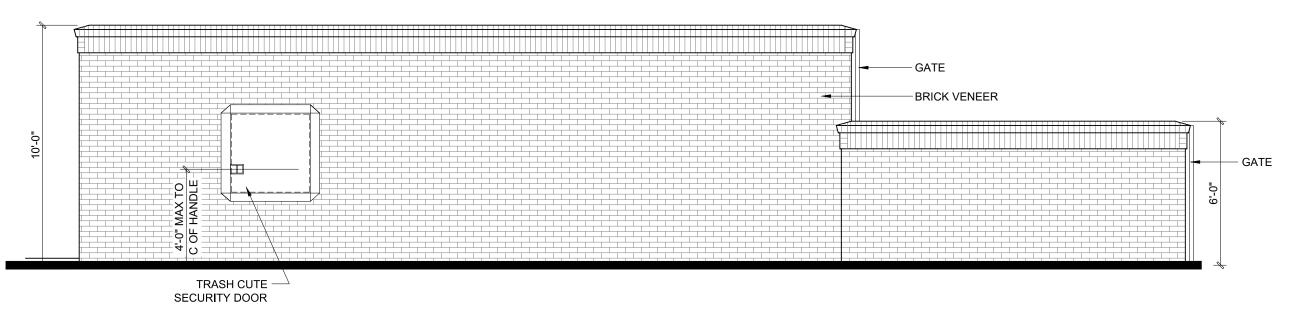
FRONT ELEVATION



LEFT ELEVATION



**REAR ELEVATION** 



RIGHT ELEVATION



