



# Administrative Approval Action

Case File / Name: SUB-0051-2022  
DSLC - Poole Townhomes

City of Raleigh  
Development Services Department  
One Exchange Plaza  
Raleigh, NC 27602  
(919) 996-2492  
currentplanning@raleighnc.gov  
www.raleighnc.gov

**LOCATION:** This development consists of four parcels to be recombined located on the southeastern corner of the intersection of Sunnybrook and Poole Roads at 3302-3306 Poole Road and 637 Sunnybrook Road.

**REQUEST:** This townhouse subdivision zoned NX-3 CU (Z-33-21) consists of four tracts to be recombined and will create 35 residential lots and one HOA/community lot (36 lots total).

**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 May 24, 2023 by Finch & Associates.

## **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:*

☒ **SITE PERMITTING REVIEW** - 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:***

### **General**

1. Lighting fixtures must be located at least 20 feet from a tree, measured from the pole of the lighting fixture to the trunk of the tree. (7.1.7 G1)
2. For clarification, please label required wall within transitional yard (sheet L-5) and wall detail (sheet L-6)
3. The site plan shall be revised to verify conformance with UDO Section 7.1.7 D requiring interior parking lot landscape islands to be a minimum of 8 feet in width and be a minimum of 300 square feet in area.

### **Engineering**

4. 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**

5. 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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6. A nitrogen offset payment must be made to a qualifying mitigation bank (UDO 9.2.2.B).
7. A stormwater control plan with a stormwater operations and maintenance manual and budget shall be approved (UDO 9.2).

## Urban Forestry

8. A tree impact permit must be obtained for the removal of existing trees in the existing street rights-of-way along Poole Road and Sunnybrook Road prior to issuance of a demolition permit or grading permit, whichever comes first.

☒ **LEGAL DOCUMENTS** - 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.

<input checked="" type="checkbox"/>	Cross Access Agreements Required
<input checked="" type="checkbox"/>	Stormwater Maintenance Covenant Required

<input checked="" type="checkbox"/>	Right of Way Deed of Easement Required
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☒ **RECORDED MAP(S)** - 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:***

## General

1. A demolition permit shall be issued and this building permit number shown on all maps for recording.
2. A recombination map shall be recorded prior to or in conjunction with the recording of lots, recombining the existing lots as shown on the preliminary subdivision plan.

## Engineering

3. A cross access agreement between this development connecting the proposed common area and the adjacent parcel identified by PIN 1723450025 shall be approved by the Development Services Department for recording in the Wake County Registry, and a copy of the recorded cross access easement shall be returned to the Development Services Department within one day of plat recordation. If a recorded copy of the document is not provided within this time, further recordings and building permit issuance will be withheld.
4. 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.



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5. A sight distance easement shall be approved by the Transportation Department for recording in the Wake County Registry and shown on a plat approved for recordation.
6. 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)

## Public Utilities

7. Infrastructure Construction Plans (concurrent submittal) must be approved by the City of Raleigh Public Utilities Department for all public water, public sewer and/or private sewer extensions.

## Stormwater

8. A payment equal to twenty-four percent (24%) of the estimated cost of constructing all stormwater control facilities shown on the development plans shall be paid by the developer to the City stormwater facility replacement fund (UDO 9.2.2.G.3).
9. 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).
10. The maximum allocated impervious area for all applicable lots in the subdivision should be identified on all maps for recording.
11. 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).
12. 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).

## Urban Forestry

13. A public infrastructure surety for 33 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.

☒ **BUILDING PERMITS** - 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.



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

## **General**

1. A demolition permit shall be obtained.

## **Public Utilities**

2. Initiation of the easement exchange process is required (via dedication of new easement on record plat, ending with abandonment of old easement on subsequent deed).
3. A plat must be recorded at the Wake County Register of Deeds office for all utility easement dedications.
4. Utility re-alignment construction shall be substantially complete (to eliminate conflict with new building).

## **Stormwater**

5. 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).
6. Impervious restrictions for each lot must be recorded on a plat prior to building permit issuance.

## **Urban Forestry**

7. Tree impact permits must be obtained for the approved streetscape tree installations in the rights-of-way. This development proposes 11 street trees along Poole Road and 22 street trees along Sunnybrook Road for a total of 33 street trees.

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

## **General**

1. Final inspections of right-of-way street trees by Urban Forestry Staff.

## **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**





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following must take place by the following dates:

**3-Year Sunset Date: June 28, 2026**  
**Record at least ½ of the land area approved.**

**5-Year Sunset Date: June 28, 2028**  
**Record entire subdivision.**

I hereby certify this administrative decision.

Signed: *Daniel L. Stegall* Date: 06/28/2023  
Development Services Dir./Designee  
Staff Coordinator: Michael Walters

# POOLE TOWNHOMES

3302, 3304, 3306 POOLE RD & 637 SUNNYBROOK RD  
RALEIGH, NORTH CAROLINA  
PROJECT #: SUB-0051-2022

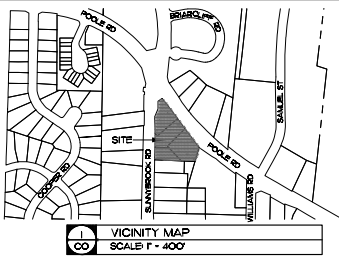
OWNER / DEVELOPER:  
Dukes Properties and Construction

3803 JUNCTION BLVD, RALEIGH, NC 27603  
NASIR DUKES  
TEL: (919) 637-7776  
www.dukesproperties.com

## SITE / CIVIL

FINCH & ASSOCIATES, PLLC

309 NORTH BOYLAN AVENUE, RALEIGH, NC 27603-1402  
GEORGE M. FINCH, JR., RLA - LICENSE # NC 375  
JOHN F. WATSON, PE - LICENSE # NC 039760  
TEL: (919) 833-1212



REVISIONS	DATE	BY	REASON
1	1/6/2023	FW	1ST REVIEW COMMENTS
2	3/14/2023	FW	2ND REVIEW COMMENTS
3	5/24/2023	FW	3RD REVIEW COMMENTS

FINCH & ASSOCIATES, PLLC  
309 NORTH BOYLAN AVENUE  
RALEIGH, NC 27603-1402  
T 919 833-1212  
F 919 834-1003  
WWW.FINCH-NC.COM  
NCEM LICENSE # NC-375  
NCEM LICENSE # NC-039760

**FINCH**  
FINCH & ASSOCIATES  
engineering • landscape architecture • land surveying

INDEX OF DRAWINGS	
C0	COVER SHEET
C0.1	PROJECT NOTES AND FORMS
L1	EXISTING CONDITIONS AND DEMOLITIONS
L2	SITE RECOMBINATION PLAN
L2.1	SITE PLAN
L3.0	GRADING PLAN
L3.1	STORM DRAINAGE PLAN
L4	WATER AND SEWER PLAN
L4.1	SEWER EXTENSION PLAN AND PROFILE
L5	LANDSCAPE PLAN
L6	DETAILS
22-0286A	SITE LIGHTING PLAN

THESE PLANS ARE PREPARED FOR REVIEW AND PERMITTING BY THE LOCAL  
AUTHORITIES HAVING JURISDICTION OVER APPLICABLE PORTIONS OF THE WORK,  
AND AS SUCH ARE NOT RELEASED FOR CONSTRUCTION UNTIL SO NOTED.

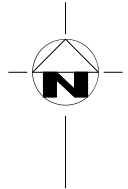
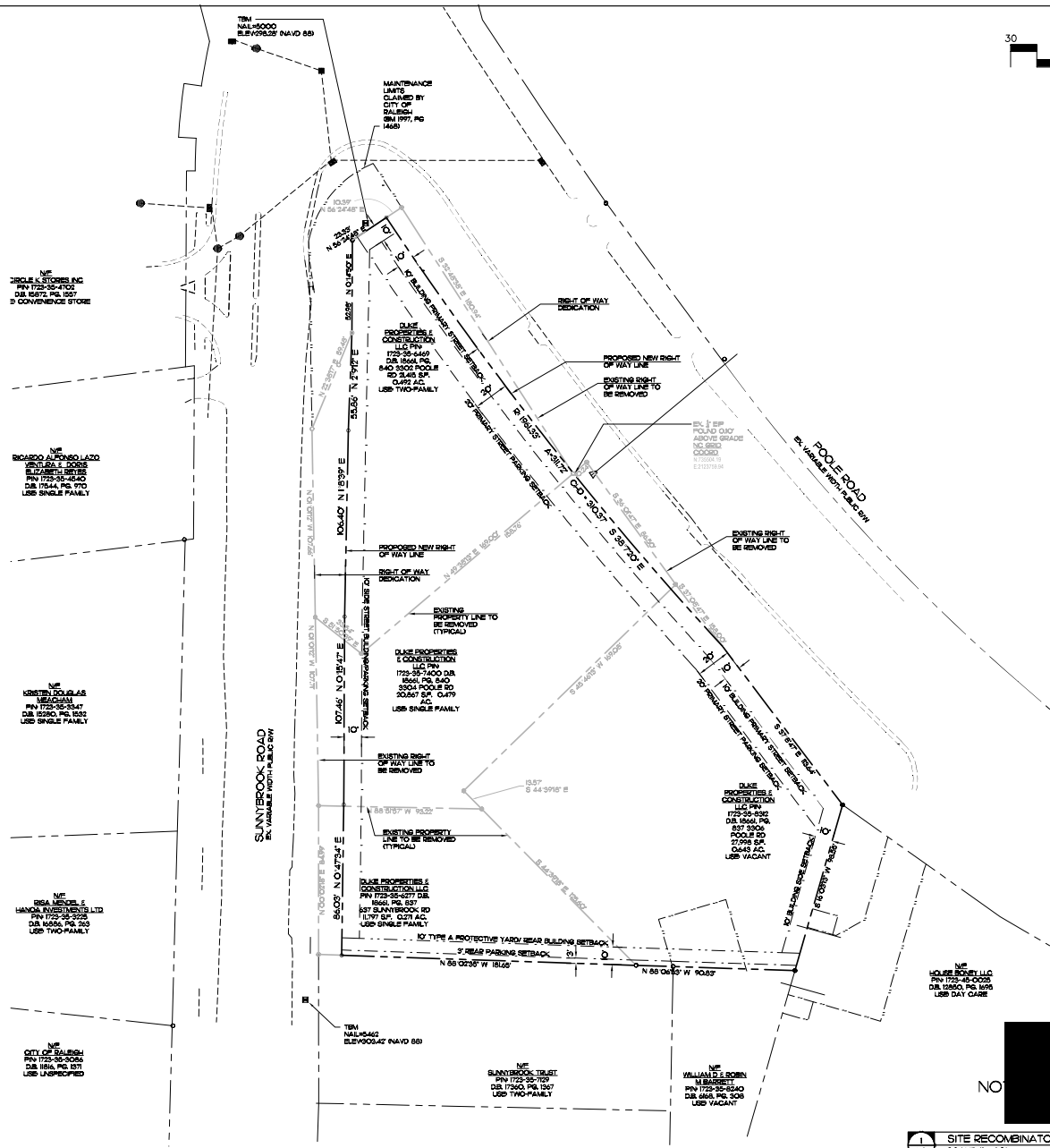
CITY OF RALEIGH PROJECT #: SUB-0051-2022

DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302, 3304, 3306 POOLE RD & 637 SUNNYBROOK RD,  
RALEIGH, NORTH CAROLINA

DRAWN BY	FW
CHECKED BY	FW
PROJ. NO.	22018
DATE	7/20/2022
SHEET	OF







REVISIONS	DATE	BY	REASON
1	1/16/2023	IST	REVIEW COMMENTS
2	3/14/2023	2ND	REVIEW COMMENTS
3	5/24/2023	3RD	REVIEW COMMENTS

Finch & Associates  
P.L.L.C.  
Raleigh, NC 27603-1402  
T 919 833-3232  
F 919 834-3003  
NCEM, L.L.C. No. C-549

**FINCH**  
FINCH & ASSOCIATES  
engineering • landscape architecture • land surveying

CITY OF RALEIGH PROJECT #: SUB-0051-2022  
DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302.3304.3306 POOLE RD & 637 SUNNIBROOK RD.  
RALEIGH, NORTH CAROLINA

DRAWN BY	MWB
CHECKED BY	JFW
PROJ. NO.	22019
DATE	7/20/2022
SHEET	OF

1 SITE RECOMBINATION PLAN  
SCALE 1" = 30'

## SITE INFORMATION

ADDRESS: 3302, 3304, 3306 POOLE RD & 637 SUNNYBROOK RD  
ZONING: NX-3-CU  
ZONING OVERLAY: NONE

DEVELOPMENT INFORMATION:

TOTAL AREA: 74,817 SF, 1.718 AC  
EXISTING USE: SINGLE UNIT LIVING, TWO UNIT LIVING, VACANT  
EXISTING FLOOR AREA: 5407 SF  
PROPOSED USE: MULTI-UNIT LIVING  
PROPOSED DEVELOPMENT TYPE: TOWNHOUSE

OUTDOOR AMENITY AREA REQUIRED ( 10% ): 7482 SF, 0.172 AC  
OUTDOOR AMENITY AREA PROVIDED: 7500 SF,  
3760 SF ADA ACCESSIBLE ( 50% )

TOTAL LOTS PROPOSED: 35  
TOTAL DWELLING UNITS PROPOSED: 35  
TOTAL BEDROOMS ( 3/UNIT ): 105

VEHICLE PARKING MAXIMUM ( 3/ UNIT ) : 35 X 3 = 105  
VEHICLE PARKING PROVIDED: 58 SPACES  
SHORT-TERM BICYCLE SPACES REQUIRED ( 4 MIN ) : 4  
SHORT-TERM BICYCLE SPACES PROVIDED: 4  
LONG-TERM BICYCLE SPACES REQUIRED ( 1 / 7 BR ) : 105 / 7 = 15  
LONG-TERM BICYCLE SPACES PROVIDED: 16

MINIMUM REQUIRED LOT DIMENSIONS  
WIDTH: 16'  
AREA: NA

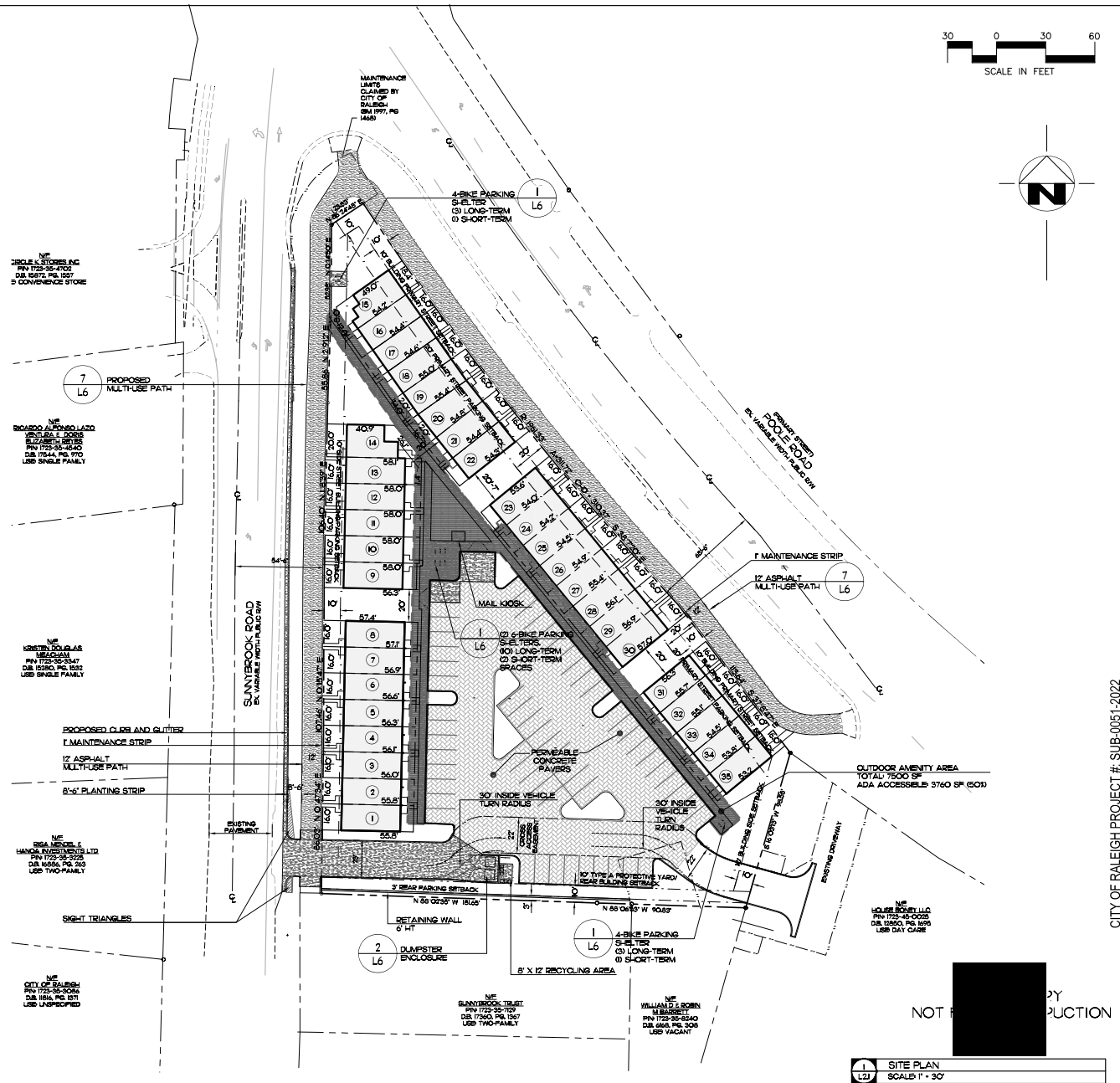
**REQUIRED BUILDING SETBACKS:**  
**PRIMARY STREET: 10'**  
**SIDE STREET: 10'**  
**SIDE: 10'**  
**REAR: 20'**  
**INTERNAL BUILDING SEPARATION: 10'**

**REQUIRED PARKING SETBACKS:**  
**PRIMARY STREET: 20'**  
**SIDE STREET: 10'**  
**REAR: 3'**  
**SIDE: 0'**

MAX BUILDING HEIGHT ALLOWED: 50' / 3 STORIES

RESIDENTIAL INFILL RULES DO NOT APPLY PURSUANT TO UDO  
SECTION 3.2.3.

FRONTAGE REQUIREMENT: NONE  
MAXIMUM BLOCK PERIMETER: NONE. PROPERTY AREA IS BELOW  
THE MINIMUM APPLICABLE AREA FOR ZONE NX.



REVISIONS  
1 1/16/2023  
1ST REVIEW  
COMMENTS  
2 3/14/2023  
2ND REVIEW  
COMMENTS  
3 5/24/2023  
3RD REVIEW  
COMMENTS

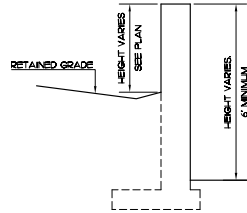
Finch & Associates  
309 North Boylan Avenue  
Raleigh, NC 27603-1402  
T 919 | 833-1212  
F 919 | 834-3203  
NCBELS Lic. No. P-1845  
NCBOLA Lic. No. C-656

**FINCH**  
**FINCH & ASSOCIATES**  
engineering • landscape architecture • land use planning

CITY OF RALEIGH PROJECT #: SUB-0051-2022

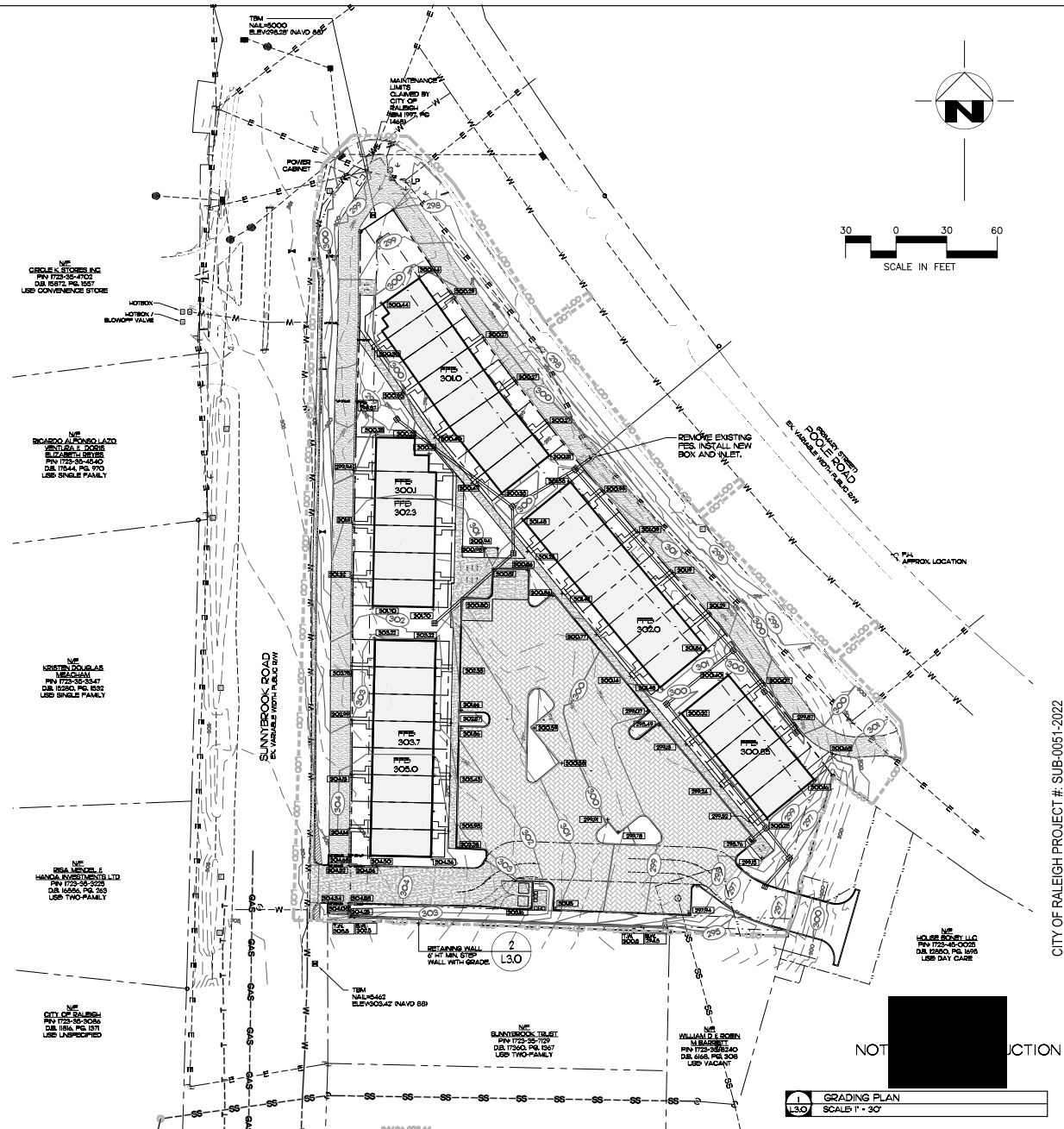
DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302,3304,3306 POOLE RD & 637 SUNNYBROOK RD.  
RALEIGH, NORTH CAROLINA

DRAWN BY **MVE**  
CHECKED BY **JFW**  
PROJ. NO. **22018**  
DATE **7/20/2022**  
**2.1**  
SHEET OF



WALLS, INCLUDING ANY ASSOCIATED PROTECTIVE FENCING OR GUARDRAILS, WILL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA, AND HAVING A MINIMUM OF FIVE (5) YEARS OF EXPERIENCE IN THE DESIGN OF RETAINING WALL SYSTEMS OF THE TYPE PROPOSED.

2 SCREENING RETAINING WALL  
SCALE 1/2" = 1'-0"



1 GRADING PLAN  
SCALE 1" = 30'

REVISIONS	1/16/2023
1ST REVIEW	COMMENTS
2ND REVIEW	COMMENTS
3RD REVIEW	COMMENTS

Finch & Associates  
Raleigh, NC 27603-1402  
T 919 833-222  
F 919 834-3003  
NCEES Lic. No. C-549

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DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302.3304.3306 POOLE RD & 637 SUNNIBROOK RD.  
RALEIGH, NORTH CAROLINA

DRAWN BY: MVB  
CHECKED BY: JFW  
PROJ. NO.: 22018  
DATE: 7/20/2022  
SHEET 1 OF 1



PRELIMINARY GRADING AND STORM WATER INFORMATION

TOTAL SITE AREA 74,817 SF, 1.716 AC  
TOTAL DRAINAGE AREA 103,815 SF, 2.363 AC  
AREA OF DISTURBANCES 103,815 SF, 2.482 AC

IMPERVIOUS AREA:  
EXISTING IMPERVIOUS AREA 15,140 SF, 0.416 AC  
EXISTING IMPERVIOUS TO BE REMOVED 15,140 SF, 0.416 AC  
EXISTING IMPERVIOUS REMAINING 0 SF, 0 AC

PROPOSED NEW ON-SITE IMPERVIOUS AREA LIMIT 58,320 SF, 1.331 AC  
MAX IMPERVIOUS PER LOT 782 SF (1 X 35 LOTS + 27,570 SF, 0.628 ACRES)  
MAX COMMON AREA IMPERVIOUS 30,950 SF, 0.711 AC  
ON-SITE IMPERVIOUS RATIO 58,320 SF / 74,817 SF = 78%

OFF-SITE IMPERVIOUS AREA PROPOSED 13,900 SF, 0.319 AC

TOTAL IMPERVIOUS POST-CONSTRUCTION 72,220 SF, 1.658 AC  
TOTAL DRAINAGE AREA IMPERVIOUS RATIO 72,220 SF / 103,815 SF = 70%

PERMEABLE PAVERS WITH INFILTRATION  
PAVER AREA 20,140 SF, 0.462 AC  
SCREEDED ROOF AREA DIRECTED TO PAVER SYSTEM 22,200 SF, 0.510 AC  
ADJ. IMPERVIOUS DIRECTED TO PAVES 8700 SF, 0.200 AC

PERMEABLE PAVER SYSTEM DESIGN AND INSTALLATION NOTES

- THE PERMEABLE PAVER SYSTEM HAS BEEN DESIGNED TO INCORPORATE ALL MAJOR DESIGN ELEMENTS AS LISTED IN CHAPTER 15 OF THE 2006-2026 NC BMP MANUAL.
- TESTING OF IN-SITU SITE SOILS WAS CONDUCTED BY SOIL AND ENVIRONMENTAL CONSULTANTS. PA INFILTRATION RATE AND SEASONAL HIGH WATER TABLE HAVE BEEN DETERMINED TO BE SUITABLE FOR PERMEABLE PAVERS WITH INFILTRATION.
  - NO TOXIC POLLUTANTS SHALL BE STORED OR HANDLED IN PERMEABLE PAVER AREA.
  - SOIL TESTING DID NOT IDENTIFY ANY SEASONAL HIGH WATER TABLE WITHIN 105' OF THE SURFACE, OR WITHIN 2' OF THE PROPOSED BASE OF THE AGGREGATE STORAGE LAYER.
  - ALL MANUFACTURER REQUIREMENTS, PRODUCT STANDARDS, AND INDUSTRY GUIDELINES SHALL BE FOLLOWED IN THE INSTALLATION OF THE PAVER SYSTEM.
  - THE PAVER SURFACE SHALL NOT EXCEED 4% SLOPE. THE PAVER SYSTEM SUBGRADE SHALL NOT EXCEED 0.5% SLOPE.
  - WASHED AGGREGATE BASE MATERIALS SHALL BE USED.
  - THE SURFACE OF THE SOIL SUBGRADE SHALL BE SCARIFIED, RIPPED, OR TRENCHED IMMEDIATELY PRIOR TO AGGREGATE BASE PLACEMENT TO MAINTAIN PRE-CONSTRUCTION SUBGRADE INFILTRATION RATE.
  - THE PERMEABLE PAVER SYSTEM HAS BEEN DESIGNED TO PROVIDE TREATMENT OF THE WATER QUALITY STORM AND TO SAFELY CONVEY THE 10-YR, 24-HOUR STORM EVENT.
  - THE PERMEABLE PAVER SYSTEM HAS BEEN DESIGNED TO PROVIDE STORAGE AND TREATMENT OF RUNOFF FROM ADJOINING IMPERVIOUS SURFACES.
  - RUNOFF FROM ADJOINING PAVEMENT AREAS SHALL BE DIRECTED AWAY FROM THE PERMEABLE PAVER SYSTEM.
  - THE PERMEABLE PAVER SYSTEM SHALL NOT BE INSTALLED UNTIL THE UPSLOPE AND ADJOINING AREAS ARE STABILIZED. AFTER INSTALLATION, BARRIERS SHALL BE INSTALLED TO PREVENT CONSTRUCTION TRAFFIC FROM DRIVING ON THE PAVEMENT.
  - THE SOIL SUBGRADE FOR THE PERMEABLE PAVER SHALL BE GRADED WHEN DRY. THE AGGREGATE BASE AND PERMEABLE SURFACE COURSE SHOULD BE COMPLETED AS QUICKLY AS POSSIBLE TO REDUCE RISK OF SOIL SUBGRADE COMPACTION.
  - FOLLOWING PLACEMENT, ANY FILL MATERIAL PLACED IN THE PERMEABLE PAVER ARE SHALL BE AT LEAST AS PERMEABLE AS THE IN-SITU SOIL.
  - THE PERMEABLE PAVER SYSTEM OUTLET STRUCTURE MAY BE USED FOR OBSERVATION.
  - EDGE RESTRAINTS SHALL BE PROVIDED AROUND THE PERIMETER OF PERMEABLE PAVER SYSTEM AS WELL AS ANYWHERE PERMEABLE PAVER IS ADJACENT TO CONVENTIONAL ASPHALT.
  - PERMEABLE PAVER SHALL BE MAINTAINED IN ACCORDANCE WITH THE OPERATIONS AND MAINTENANCE AGREEMENT.
  - PERMEABLE PAVER SIGNAGE SHALL BE CLEARLY AND PERMANENTLY POSTED TO PREVENT USE BY INAPPROPRIATE VEHICLES, AND THE DEPOSITION AND STORAGE OF PARTICULATE MATTER.

PERFORATED PIPE UNDERDRAIN SYSTEM NOTES

- PROVIDE MINIMUM 4 ROWS OF PERFORATIONS AROUND PIPE CIRCUMFERENCE MAX. 6" BETWEEN ROWS OF PERFORATIONS.
- PERFORATIONS TO BE PROVIDED AT 6" MAXIMUM ALONG ENTIRE PIPE LENGTH.
- PERFORATIONS TO BE 3/8-INCH IN DIAMETER.
- MINIMUM 3 INCHES OF WASHED CRUSHED STONE ABOVE AND ON EACH SIDE OF THE PIPE.

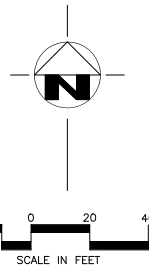
STORM DRAINAGE SCHEDULE

Key	Inlet	Invert In	Invert Out	Pipe Out	Pipe Out	Pipe Out
	Elevation			Length	Slope	Station
302	255.94	259.32	259.22	30.78	2.11%	-5 RCP
303	300.08	259.32	259.42	30.43	3.36%	-5 RCP
300	252.78		259.02	11.73	5.87%	-5 RCP
301	254.94		259.69	21.45	0.51%	-5 RCP
302	254.90	259.58	259.45	22.51	0.48%	-5 RCP
303	255.60	259.37	259.27	54.17	0.51%	-5 RCP
304	255.90	259.72	259.60	30.64	0.49%	-5 RCP
304	255.90	259.44	259.25	142.46	0.50%	-5 RCP
301	256.00		259.45	55.51	3.53%	-5 RCP
310	301.00		259.48	51.52	1.17%	-5 RCP
311	301.10	259.75	259.65	21.77	0.79%	-5 RCP
302	255.00	259.43	259.33	41.23	4.16%	-5 RCP
305	301.00	259.33	259.30	11.23	0.01%	-5 RCP
306	255.64	259.55		143.42	0.02%	-5 RCP

REVISIONS  
1. 11/6/2023  
2. 11/6/2023  
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PRIOR TO ANY CONSTRUCTION ACTIVITY,  
UNDERGROUND UTILITY LOCATIONS SHOULD BE  
REQUESTED BY CALLING THE NORTH CAROLINA  
ONE CALL CENTER, INC. 1-800-632-4949.



### CITY OF RALEIGH STANDARD UTILITY NOTES

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS REFERENCE CORPUS 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 IMPROVED RESERVOIR USED AS A SOURCE OF DRINKING WATER. ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, PRESSURE SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS, HOWEVER, THE MINIMAL SEPARATION SHALL NOT BE LESS THAN 25 FROM A PRIVATE WELL OR 10 FROM A PUBLIC WELL
  - WHEN INSTALLING WATER & 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 WATERMAIN, 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 & ROP STORM DRAIN CROSSINGS, MAINTAIN 24" MIN VERTICAL SEPARATION AT ALL SANITARY SEWER & ROP STORM DRAIN CROSSINGS, WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (SEE CORPUS 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 FORCE MAINS, 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 CORPUS HANDBOOK, PROCEEDURE
- INSTALL W. COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE BASEMENT 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 & 10' 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 10' ABOVE THE NEXT UPSTREAM MANHOLE
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDAQ, 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 CORPUS FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2534 OR TIMOTHY BEASLEY@RALEIGH-NCGOV 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 & TESTED BOTH INITIAL AND PERIODIC TESTING THEREAFTER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM. WHOEVER IS MORE STRINGENT, CONTACT JOANNE HARTLEY AT (919) 996-5923 OR JOANNE.HARTLEY@RALEIGH-NCGOV FOR MORE INFORMATION

REVISIONS	11/6/2023
1ST REVIEW	
COMMENTS	
2ND REVIEW	5/14/2023
COMMENTS	
3RD REVIEW	5/14/2023
COMMENTS	

Finch & Associates  
Raleigh, NC 27603-1402  
P 919 833-2212  
F 919 834-3303  
NCEM No. 11, C-549

**FINCH & ASSOCIATES**  
ENGINEERING • ARCHITECTURE • LAND SURVEYING

DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302.3304.3306 POOLE RD & 637 SUNNIBROOK RD.  
RALEIGH, NORTH CAROLINA

CITY OF RALEIGH PROJECT # SUB-0051-2022

### ATTENTION CONTRACTORS

THE CONSTRUCTION CONTRACTOR RESPONSIBLE FOR THE EXTENSION OF WATER, SEWER, AND/OR REUSE, AS APPROVED IN THESE PLANS, IS RESPONSIBLE FOR CONTACTING THE PUBLIC WORKS DEPARTMENT AT (919) 996-2405, AND THE PUBLIC UTILITIES DEPARTMENT AT (919) 996-4540 AT LEAST TWENTY FOUR HOURS PRIOR TO BEGINNING ANY OF THEIR CONSTRUCTION.

FAILURE TO NOTIFY BOTH CITY DEPARTMENTS IN ADVANCE OF BEGINNING CONSTRUCTION WILL RESULT IN THE ISSUANCE OF MONETARY FINES, AND REQUIRE REINSTALLATION OF ANY WATER OR SEWER FACILITIES NOT INSPECTED AS A RESULT OF THIS NOTIFICATION FAILURE.

FAILURE TO CALL FOR INSPECTION, INSTALL A DOWNSTREAM PLUS, HAVE PERMITTED PLANS, ON THE JOBSITE, OR ANY OTHER VIOLATION OF CITY OF RALEIGH STANDARDS WILL RESULT IN A FINE AND POSSIBLE EXCLUSION FROM FUTURE WORK IN THE CITY OF RALEIGH.

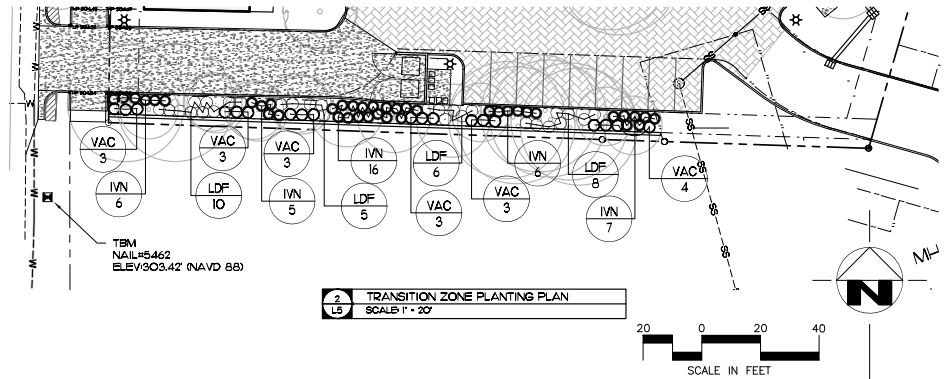
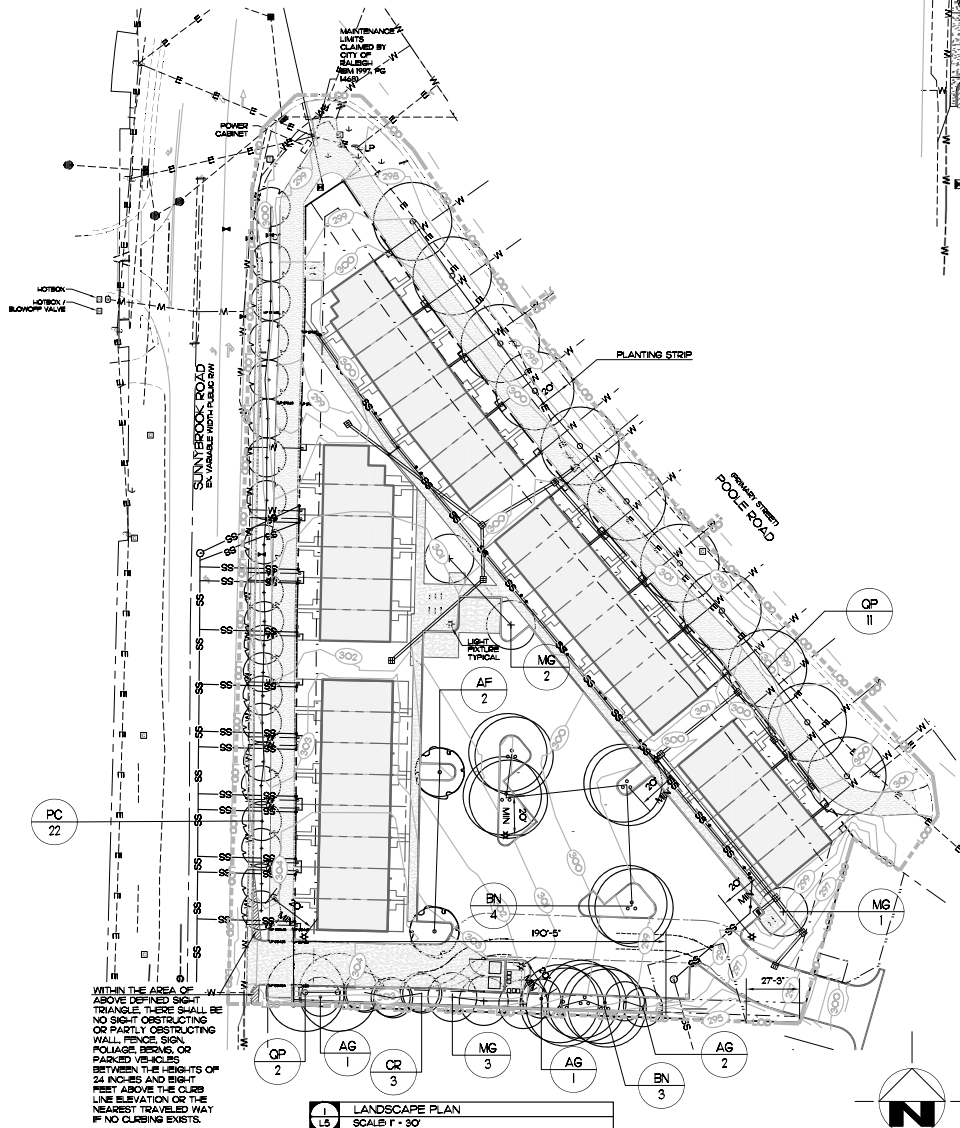
1 WATER AND SEWER PLAN  
SCALE 1" = 20'

NOT FOR CONSTRUCTION

DRAWN BY: MWS  
CHECKED BY: JFW  
PROJ. NO.: 220208  
DATE: 7/30/2022  
SHEET 14 OF







#### PLANT LIST

KEY	QUAN	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
<b>SHADE TREES</b>					
AF	2	Acer floridanum	Southern sugar maple	3" Cal, 10' Ht Min	
BN	7	Betula nigra	River birch	3" Cal, 10' Ht Min	
MG	5	Metasequoia glyptostroboides	Dawn redwood	3" Cal, 10' Ht Min	
QP	13	Quercus phellos	Willow Oak	3" Cal, 10' Ht Min	
<b>UNDERSTORY TREES</b>					
AG	4	Amelanchier grandiflora	Serviceberry	1.5" Cal, 6' Ht Min	
CR	3	Cercis reniformis	Oklahoma redbud	1.5" Cal, 6' Ht Min	
PC	22	Pistacia chinensis	Chinese pistache	1.5" Cal, 6' Ht Min	
<b>SHRUBS</b>					
IVN	40	Ilex vomitoria 'Nana'	Dwarf yaupon holly	18" Ht Min, #10 container	evergreen
LDF	25	Loropetalum chinensis var rubrum 'Dark Fire'	Dark Fire Loropetalum	18" Ht Min, #10 container	evergreen
VAC	15	Viburnum awabuki 'Chindo'	Chindo viburnum	18" Ht Min, #10 container	evergreen

**STREET TREE PLANTINGS:**  
SUNNYSIDE ROAD, 4 LANE DIVIDED  
REQUIRED: 1 SMALL TREE PER 20 LF ( 408.75 LF / 20 ) = 20 TREES  
PROVIDED: 22 TREES

POOLE ROAD, 6 LANE DIVIDED  
REQUIRED: 1 TREE PER 40 LF ( 425.36 LF / 40 ) = 11 TREES  
PROVIDED: 11 TREES

**PARKING LOT PLANTINGS:**  
REQUIRED: 1 TREE PER 2000 SF ( 3,260 SF / 2000 ) = 11 TREES  
PROVIDED: 17 TREES

**TRANSITION ZONE A PLANTINGS**  
REQUIRED:  
• FOUR SHADE TREES PER 100 LINEAL FEET ( 4 X ( 190'-27' ) LF / 100 ) = 6 TREES  
• THREE UNDERSTORY TREES PER 100 LINEAL FEET ( 3 X ( 190'-27' ) / 100 ) = 6 TREES  
• 40 SHRUBS PER 100 LINEAL FEET ( 40 X ( 190'-27' ) / 100 ) = 86 SHRUBS

PROVIDED:  
8 SHADE TREES  
7 UNDERSTORY TREES  
86 SHRUBS

REVISIONS  
1/16/2023  
1ST REVIEW  
COMMENTS  
2/14/2023  
2ND REVIEW  
COMMENTS  
5/24/2023  
3RD REVIEW  
COMMENTS

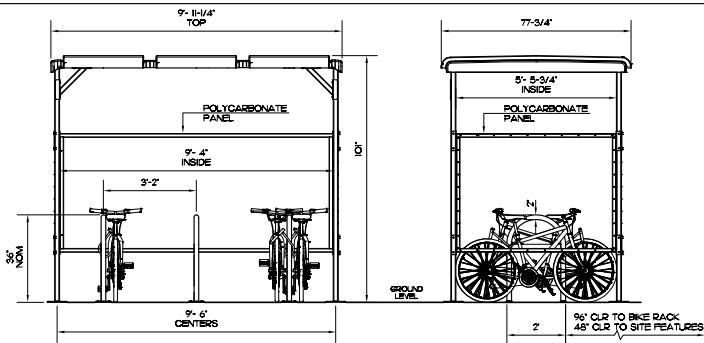
Finch & Associates  
Raleigh, NC 27603-1402  
T 919 833-3232  
F 919 834-3003  
NCSLS, LLC, NC C-450

**FINCH & ASSOCIATES**  
PLANNING & ASSOCIATES  
engineering • landscape architecture • land surveying

CITY OF RALEIGH PROJECT #: SUB-0051-2022

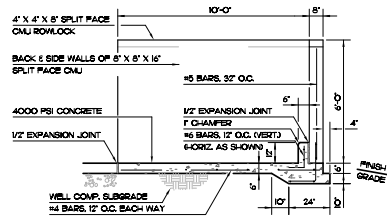
DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302.3304.3306 POOLE RD & 637 SUNNYSIDE RD.  
RALEIGH, NORTH CAROLINA

DRAWN BY: MWS  
CHECKED BY: JFW  
PROJ. NO.: 22018  
DATE: 7/30/2022  
SHEET: 0F

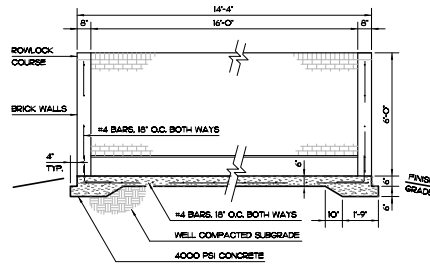


- NOTES:  
1. BIKE SHELTER AVAILABLE FROM CYCLESAFE.  
2. CYCLESAFE 6-BIKE SHELTER SHOWN. OTHER CONFIGURATIONS AVAILABLE.

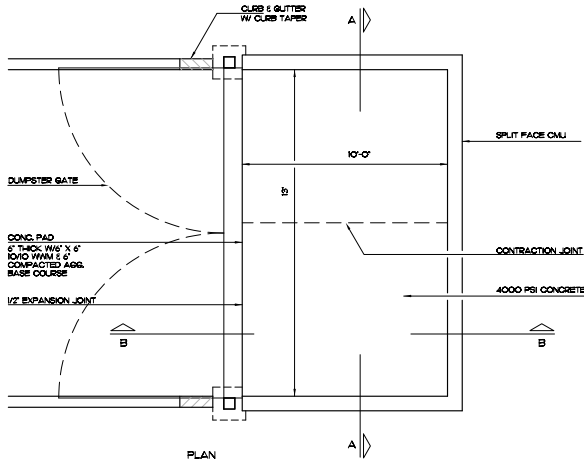
1 BICYCLE SHELTER  
SCALE 1/2" = 1'-0"



SECTION B-B

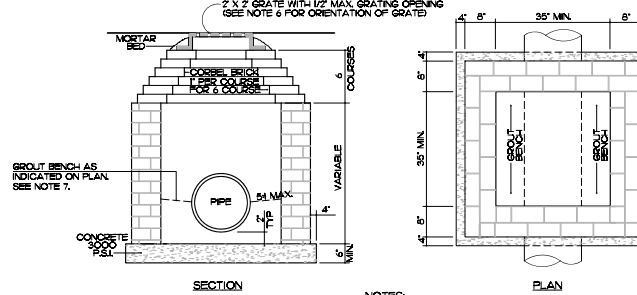


SECTION A-A



PLAN

2 DUMPSTER ENCLOSURE  
NOT TO SCALE

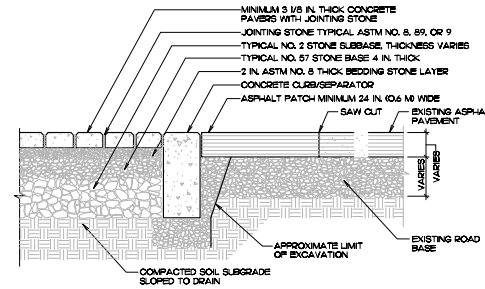


SECTION

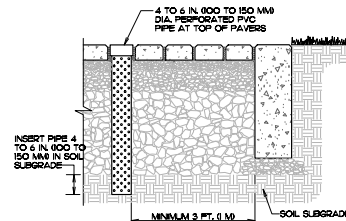
PLAN

- NOTES:  
1. EITHER SOLID BRICK OR SOLID BLOCK MAY BE USED.  
2. FOR 24\"/>

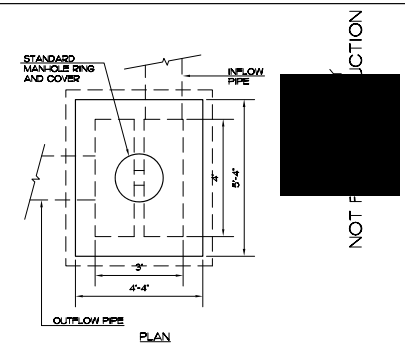
3 BRICK INLET  
SCALE NOT TO SCALE



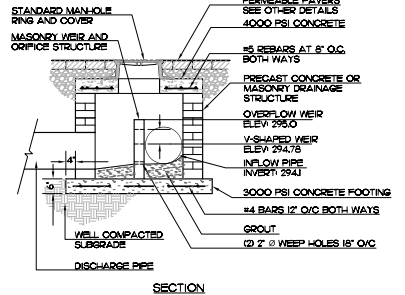
4 FLEXIBLE PAVEMENT TRANSITION DETAIL  
SCALE NOT TO SCALE



5 OBSERVATION WELL  
SCALE NOT TO SCALE

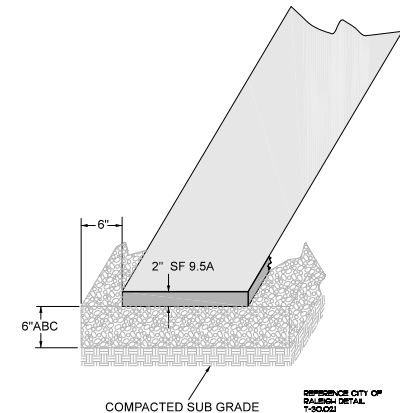


PLAN



SECTION

6 OUTLET CONTROL STRUCTURE  
SCALE 1/2" = 1'-0"



COMPACTED SUB GRADE

7 ASPHALT MULTI-USE PATH  
SCALE NOT TO SCALE


REVISIONS  
1/16/2023  
1ST REVIEW  
COMMENTS  
3/14/2023  
2ND REVIEW  
COMMENTS  
5/24/2023  
3RD REVIEW  
COMMENTS

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**FINCH**  
FINCH & ASSOCIATES  
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CITY OF RALEIGH PROJECT #: SUB-0051-2022  
DUKES PROPERTIES AND CONSTRUCTION  
POOLE TOWNHOMES  
3302.3304.3306 POOLE RD & 637 SUNNIBROOK RD.  
RALEIGH, NORTH CAROLINA

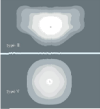
DRAWN BY: MWS  
CHECKED BY: JFW  
PROJ. NO.: 22018  
DATE: 7/30/2022  
SHEET 16 OF 16



## Open Traditional LED - Sygne M

Light Source (LED) Wavelength

Wavelength	Watt	Wavelength	Watt	Color Temp.
405-410 nm	15	450-460 nm	4978	
460-470 nm	85-140-220	470-480 nm	4165	3000K



**Polys available**

Size	Shooting height	Color
Roundly available	15', 18'	Black
Practical available	15'	Black
Prismatic	15'	Black
Decorative structure	15', 18'	Black

**Features**



- ✓ Ultra or low beam fixtures used
- ✓ Energy savings by lighting products indicated
- ✓ Maintenance indicated
- ✓ Electricity indicated
- ✓ No need to install
- ✓ One low mounting cost on power electric led
- ✓ Turnkey application
- ✓ Expected to save 40% of purchase

**Benefits**

- ✓ Points to explain the other options
- ✓ Heavy, usually placed on top of lighting and access
- ✓ Increases high and unattended repair calls
- ✓ Reduce loss
- ✓ Convenience and low savings for the price
- ✓ Protection: tough, fire, vandal, theft and anti-graffiti
- ✓ 2 year, 5 year, 10 year warranty and 100,000 hours

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	✖	0.6 fc	2.2 fc	0.1 fc	22.0:1	6.0:1

Schedule						
Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
	A	5	LED 50w Open Traditional - Type III - 3000K	24	207	0.85
	B	1	LED 50w Open Traditional - Type V - 3000K	24	216	0.85

[illegible]

## LIGHTING DESIGN TOLERANCE

The calculated footcandle light levels in the lighting design are predicted values and are based on specific information that has been supplied to "take design." Any uncertainties in the supplied information, differences in luminaires installation, lighted area geometry including layout differences, reflective properties of surrounding surfaces, obstructions (furniture or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect



**PROPRIETARY & CONFIDENTIAL**

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POOLE ROAD TOWNHOMES		
RALEIGH, NC		
SITE LIGHTING PLAN		
Designed by	DEP LIGHTING SOLUTIONS	
Reviewed by	N. Johnson	
Date	07/18/2022	Scale 1" = 30'
		Size "Arch D"
Description	Open Traditional	
Drawing No.	22-0286A	Sht. 1 OF 1