

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN
AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED
***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

OPERATIONS PERMIT

PERMIT # WRP-029493-2019 **APPLICATION DATE:** 11/26/2019 **BLDG. PERMIT#:** RBPR-029489-2019
PIN: 1822962149 **RECORDED:** Yes
TOWNSHIP: 14 - New Light **JURISDICTION:** Wake County **ZONING:** R-40W
APPLICANT: Terramor Homes
Tracey Davis
7208 Falls of Neuse RD St. 201
BUSINESS PHONE: (919) 497-2163
HOME PHONE:
MOBILE PHONE: (919) 497-2163
HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE **EXISTING USE:**
SITE ADDRESS: 2404 GEORGIANNA DR
SUBDIVISION: KANATA MILLS **LOT:** 43 **ACRES:** 0.69
DIRECTIONS: Turn right onto Lake Wheeler Road, go 2 miles, turn right onto Penny Road, go 3 miles, turn onto Blaney
Franks road and Senter Farm is down 1.2 miles

Systems defined as either type III-b, III-g with a pump, IV, V or VI, in accordance with the North Carolina administrative code 15A NCAC 18a .1961, table V as adopted by reference in the "Regulations Governing Wastewater Treatment Dispersal Systems in Wake County", requires Wake County Environmental Services to conduct periodic inspections of the system type pursuant to 15A NCAC 18a. 1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner and/or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The environmental health specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him/her in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

OPERATION PERMIT VALID FOR: No Expiration

INSTALLED BY: BRANTLEY, CORY - 1036 - IV

PROPRIETARY SYSTEM: EZ1203HG - EZFlow EZ 1203H Geo **PRETREATMENT SYSTEM:**

SYSTEM TYPE INSTALLED: III B

OPERATION PERMIT: STATUS: Issued

ISSUED BY: Marlana Brown

ISSUED DATE: 05/12/2020

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** 10/15/2019 **FILTER:** GAG SIM/TECH - STF-101

GREASE TRAP:

DATE OF MANUFACTURE:

FILTER:

DOSING PUMP TANK: Brantley - PT-2124 - 1312

DATE OF MANUFACTURE: 11/15/2019

FILTER:

gal - 21.5 gal/in

CC1: 999,806

ETM1: 22

CC2:

ETM2:

RECIRCULATION TANK:

DATE OF MANUFACTURE:

CC1:

ETM1:

CC2:

ETM2:

SEPTIC TANK ELEVATION: 4.85

GREASE TRAP ELEVATION:

DOSING PUMP TANK ELEVATION: 5.16

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION: 6

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
24	12	135	8.41
24	12	135	8.75
24	12	135	9.25

ACTUAL PRESSURE HEAD: 3

ACTUAL FLOW RATE: 27

ACTUAL DOSE VOLUME: 194

SPECIFIC OPERATION REQUIREMENTS:

4 bedroom Single Family Dwelling, 480gpd

Pump: ASHlyn EP 30

Maintenance Agreement - Book: 017852 Page: 01308

ISSUED BY:



DATE: 05/12/2020

SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Jennifer Vega
12/03/2019 2:49:34 PM

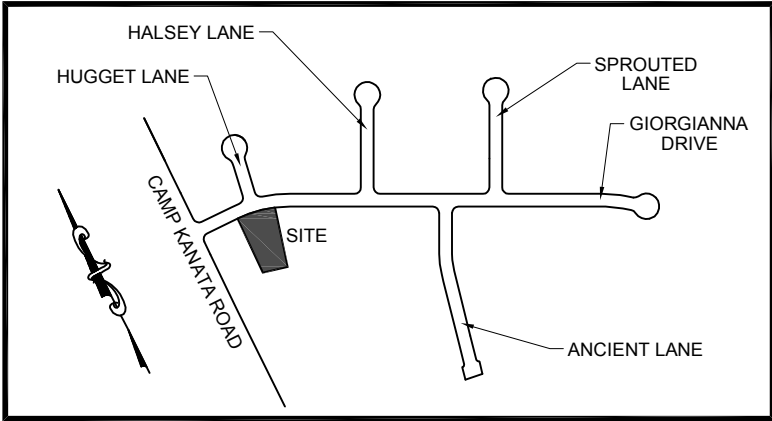
LOT INFORMATION:

PARCEL ID: 0444794
PIN: 1822962149
TOTAL LOT AREA = 0.69 AC = 30,096 SF
MAXIMUM IMPERVIOUS = 6,500 SF
PROPOSED IMPERVIOUS = 2,859 SF
HOUSE = 2,016 SF
SCREENED PORCH = 200 SF
PORCH = 22 SF
SIDEWALK = 74 SF
DRIVEWAY = 547 SF
PERCENT IMPERVIOUS = 9.50%

Bateman Civil Survey Company

Engineers • Surveyors • Planners

2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378



VICINITY MAP

(Not to Scale)

LEGEND

PO = PORCH
P = PATIO
SP = SCREENED PORCH OR PATIO
CP = COVERED PORCH OR PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY
⊙ = COMPUTED POINT
⊙ = IRON PIPE FOUND
⊙ = IRON PIPE SET
⊙ = WATER METER
⊙ = CLEANOUT
AC = AIR CONDITIONER
⊙ = ELECTRIC BOX
⊙ = CABLE BOX
⊙ = TELEPHONE PEDESTAL
⊙ = LIGHT POLE
⊙ = CURB INLET
⊙ = YARD INLET
⊙ = FIRE HYDRANT
⊙ = WATER VALVE
⊙ = SEWER MANHOLE

I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERENCED IN TITLE BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA. L-4752
DATED:

BUILDING SETBACKS:

FRONT = 15 ft
REAR = 15 ft
SIDE = 7.5 ft
CORNER = 15 ft
PERIMETER = 30 ft

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

BUILDER TO VERIFY HOUSE LOCATION,
DIMENSIONS AND REVIEW TOTAL
IMPERVIOUS NOTED ON THIS PLOT PLAN

PRELIMINARY PLOT PLAN

FOR



KANATA MILLS - LOT 43

2404 GEORGIANNA DRIVE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 11/13/19 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2017, PGS 527-530

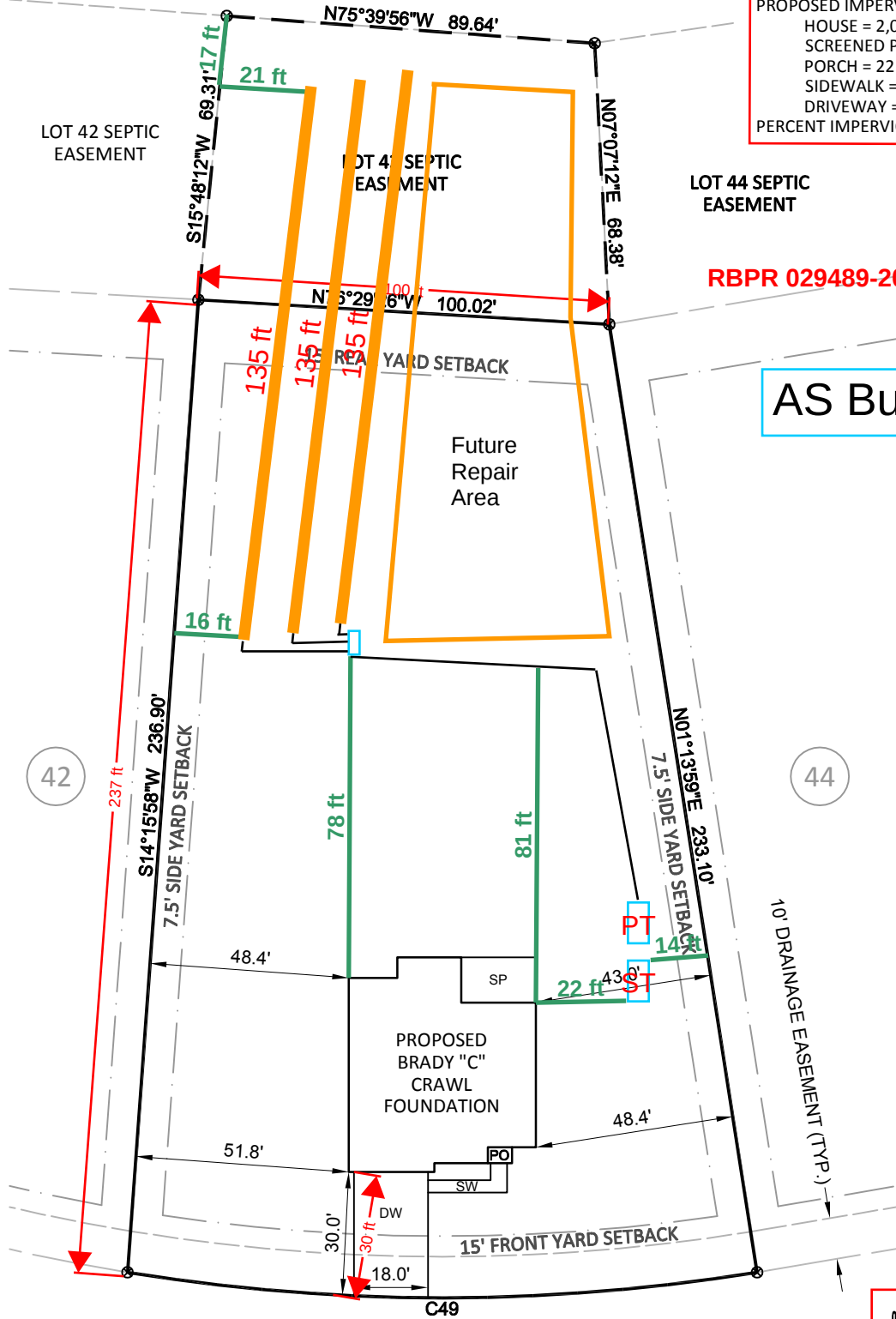
PROJECT# 170220

SCALE: 1"=40'

NOTES:

- THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
- THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
- PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
- THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
- THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
- NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3720182200J, DATED APRIL 16, 2007.
- ZONING IS R-40W
- PROPERTY OWNER: TERRAMOR HOMES, LLC.
7208 FALLS OF NEUSE RD, STE 201
RALEIGH, NORTH CAROLINA 27615

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C49	475.00'	153.65'	S79°54'17"E	152.98'



2404 GEORGIANNA DRIVE
PUBLIC 50' R/W

SCALE:
1" = 40 ft.

Return to:
Karl Beyer (V.P.)
DR Horton - Terramor LLC
7208 Falls of New River Rd Ste 201
Raleigh NC 27615

10m 43

WAKE COUNTY, NC 20
CHARLES P. GILLIAM
REGISTER OF DEEDS
PRESENTED & RECORDED ON
05/04/2020 10:03:30

BOOK:017852 PAGE:01308 - 01309

OFF-SITE EASEMENT SEWAGE DISPOSAL SYSTEM MAINTENANCE SCHEDULE

To Be Recorded In The Register Of Deed's Office In Wake County.

Owner/Grantor DR Horton - Terramor LLC Deedbook and Page Bm 2017-527-530
PIN No. 1822962149 Date Installed 3/01/2020
Subdivision Name Kanata Mills Lot No. 43
System Designed by Central Carolina Sil Consultants Installer David Brantley & Sons

AN ALTERNATIVE OR NON-TRADITIONAL SEWAGE DISPOSAL SYSTEM HAS BEEN INSTALLED ON THIS PROPERTY.

The design specifications and locations for alternative sewage disposal systems are specified or authorized in Regulations Governing Wastewater Treatment and Dispersal Systems in Wake County effective November 21, 1988, amended effective October 27, 2011.

As A Condition Of Issuance Of This Improvements/Operation Permit, The Property Owner Hereby Grants The Wake County Department Of Environmental Services A Right Of Access To The System During Regular Working Hours For Purposes Of Monitoring Compliance With State And Local Regulations, Recorded Maintenance Agreements And Certified Operator Compliance.

Experience and study have shown that sewage disposal systems located in **adjacent offsite easement areas** require routine maintenance in order to function satisfactorily. In as much as each system must be individually designed and sited, special maintenance requirements may apply to a specific installation; however, the following maintenance schedule is applicable to most systems. For additional information, technical assistance or if a malfunction of the system occurs, contact the Wake County Department of Environmental Services, Telephone: 919-856-7400.

<u>System Component</u>	<u>Frequency</u>	<u>Maintenance</u>
1. Septic Tank	12 months 1-3 years	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Pump septage.
2. Pump/Dosing Tank	12 months	Check riser conditions (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Pump sludge accumulation as required and when septic tank is pumped. Check pump(s), controls, floats, electrical connections, and alarm for proper operation. Wash (hose) sludge accumulation from pump housing.
3. Supply lines	12 months	Check for settling, pipe exposure, and leakage.
4. Drain Field(s)	1-4 weeks 12 months	Maintain vegetative cover (mow grass and remove weeds and brush). Check for settling, erosion and surfacing of effluent. Check site drainage, eliminate low or settled areas and divert surface or shallow groundwater movement around fields.
5. Pressure Manifold/ Distribution Box	12 months	Check and reset pressure head, flush sludge from pressure manifold (any discharge sludge and effluent is to be treated with a chlorine solution or lime). Check D-Box level.
6. General	At all times	Prohibit vehicular or equipment traffic on ground absorption field. Prohibit tillage (gardening) or other soil disturbance over ground absorption field. Practice water conservation to reduce waste water load on system. Do not permit entry of grease and non-domestic waste to system. Use of a garbage disposal is <u>prohibited</u> . Addition of chemical or biological additives has <u>not</u> been demonstrated to be necessary to maintain proper system function. Prevention of root intervention on lateral lines and trenches may be necessary on certain sites. Surface and groundwater diversion structures must be maintained.

A certified operator is recommended for the life of the system but is not required.

MICHAEL L. JONES
Notary Public
Wake County
North Carolina

[Signature] Asst Vice President
Signature of Property Owner

Date 9/27/20

NORTH CAROLINA Wake County, I, a Notary Public of the County and State aforesaid, certify that
Karl Beyer Owner, Personally appeared before me this day and acknowledged the execution
of the foregoing instrument. Witness my hand and official stamp or seal, this 27 day of April 2020.

My commission expires 7-20-2024 Notary Public Michael L Jones
WWDS 7/6/16

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

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***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

CONSTRUCTION AUTHORIZATION PERMIT**PERMIT # WRP-029493-2019****APPLICATION DATE:** 11/26/2019**BLDG. PERMIT#: RBPR-029489-2019****PIN:** 1822962149**RECORDED:** Yes**TOWNSHIP:** 14 - New Light**JURISDICTION:** Wake County**ZONING:** R-40W**APPLICANT:** Terramor Homes7208 Falls of Neuse RD St. 201
Raleigh, NC 27615**BUSINESS PHONE:** (919) 497-2163**HOME PHONE:****MOBILE PHONE:** (919) 497-2163**HD USE:** 101A CONVENTIONAL ONE-FAMILY HOUSE**EXISTING USE:****SITE ADDRESS:** 2404 GEORGIANNA DR**SUBDIVISION:** KANATA MILLS**LOT:** 43**ACRES:** 0.69**DIRECTIONS:** Turn right onto Lake Wheeler Road, go 2 miles, turn right onto Penny Road, go 3 miles, turn onto Blaney Franks road and Senter Farm is down 1.2 miles

Contractors shall install system on contour. See attached SITE PLAN for wastewater system design and well location. No underground utilities, water lines or sprinklers systems may be located in the original system, or permit areas. A septic tank filter with two risers for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and Operations Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrifications line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation. Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

CONSTRUCTION AUTHORIZATION PERMIT VALID FOR: Five Years**CONSTRUCTION AUTHORIZATION PERMIT: CA STATUS:** Issued**BY:** Michael Seewald**DATE:** 12/17/2019**CA VALID FOR:** Five Years**DESIGN FLOW:** 480 GALLONS**BASEMENT:** No**BASEMENT FIXTURES:** No**SEPTIC TANK:** 1200 GALLONS**SEPTIC TANK FILTER:** Yes**DOSING PUMP TANK:** 1200 GALLONS**DOSING PUMP TANK FILTER:****GREASE TRAP:****GREASE TRAP FILTER:****RECIRCULATION PUMP TANK:****RECIRCULATION PUMP TANK FILTER:****PROPOSED SYSTEM:** 0.25 - 25% Reduction (Innovative or Accepted)**EXISTING SYSTEM:****DRAINFIELD SQ. FT:** 1,215**AGGREGATE DEPTH:** 12**MAX. TRENCH DEPTH:** 24 INCHES**DISTRIBUTION DEVICE:** PM - Pressure Manifold**TRENCH #:** 3**TRENCH LENGTH:** 135 FEET**TRENCH WIDTH:** 36 INCHES**TOTAL TRENCH LENGTH:** 405 FEET**CENTER SPACING:** 9 FEET**MINIMUM SOIL COVER:** 6 INCHES

PRETREATMENT:
SUBFIELDS #: 1
PUMP TDH: 10.72 FEET

APPROVAL #:
PUMP DESIGN FLOW: 26.13
ZONE VALVE:

ASDMS REQUIRED: Yes

LINE OF CREDIT REQUIRED:

OPERATOR REQUIRED: No

P.E. SIGN OFF/ASBUILT REQUIRED:

TRIPARTY AGREEMENT REQUIRED:

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

- System designed for 4 bedroom home, having 480 gals per day.
- Future Repair is a type III b system With a Max Trench depth of 24" and a 0.3 LTAR.
- Site serviced by Community Well water.
- Any deviation from accepted design must be approved by CCSC Wake County ES prior to system installation.
- If drain line flags removed contact your consultant to reflag.
- Maintenance Agreement (ASDMS), or any other required documents are/is needed before Operations Permit can be issued for the home.
- Maintain all required setbacks.
- All property lines must be fully marked at time of install or reinspection required.
- Please contact Michael Seewald 9-9-710-5389 with any questions prior or during install.

Issued By:



Date: 12/17/2019



CA PART A-B

LOT INFORMATION:

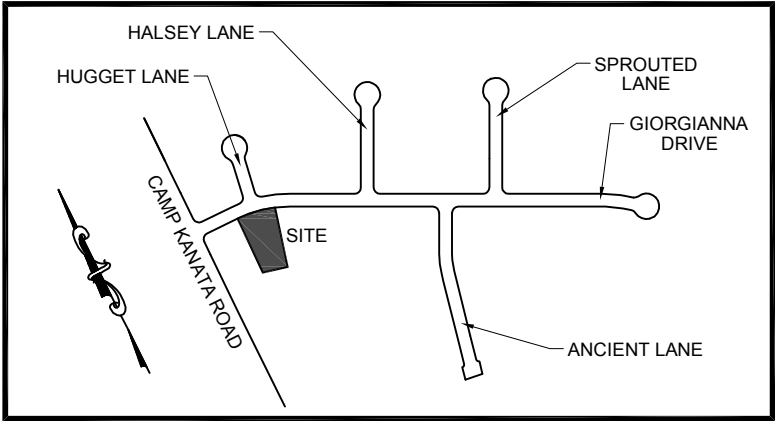
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Engineers • Surveyors • Planners

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VICINITY MAP

(Not to Scale)

LEGEND

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PRELIMINARY PLOT PLAN

FOR



KANATA MILLS - LOT 43

2404 GEORGIANNA DRIVE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 11/13/19 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2017, PGS 527-530

PROJECT# 170220

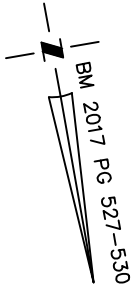
SCALE: 1"=40'

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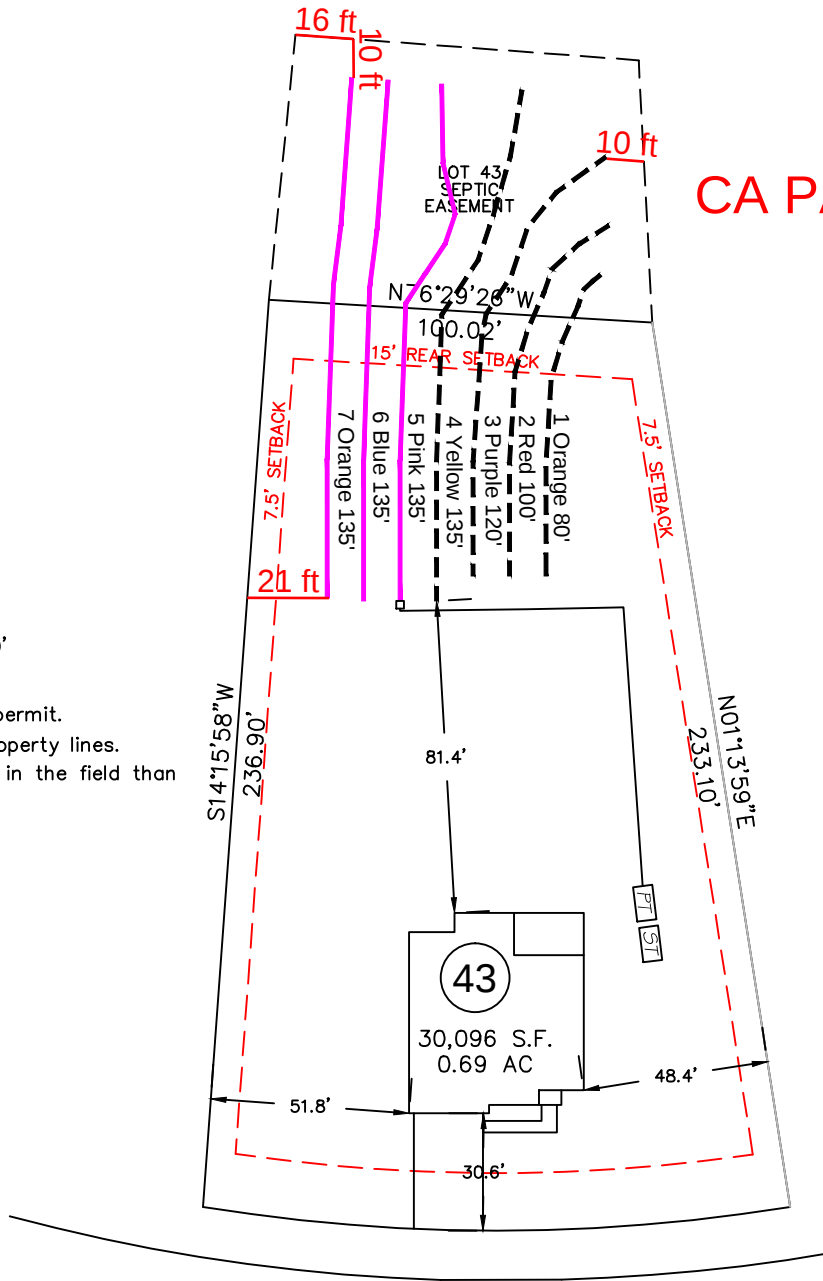
CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C49	475.00'	153.65'	S79°54'17"E	152.98'

Kanata Mills, Lot 43
4-Bedroom Septic System Layout



CA PART B

- *Keep Tanks and Drain lines 10' from property lines.
- *Not a Survey
- *Not a guarantee of a septic permit.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicated above.



GEORGIANNA DRIVE

System: Pressure Mani-Tee
Lines: 5-7, (405')
0.3 Soil LTAR

Accepted Status System

Repair: Pressure Manifold
Lines: 1-4, (435')
0.3 Soil LTAR

Accepted Status System

System: ++++++
Repair: - - - -

GRAPHIC SCALE
1" = 50'



Central Carolina
Soil Consulting
919-569-6704
Project # 1330

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

3 TAP PRESSURE MANI-TEE DESIGN

Name: Terramor Homes P.I.N. #: 1822962149 D#: RP-029493-2019

Address: 2404 Gergianna Drive Subdiv: Kanata Mills Lot#: 43

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.30 gal/day/sq.ft

Septic Tank: 1200 gals Pump Tank: 1200 gals Sq. Foot: 1215 Stone Depth: as

Number of Taps: 3 Length of Trenches: 405 ft(See Tap Chart for Details)

Depth of Trenches: 24 in Manifold Length: 36 in

Manifold Diameter: 2in sch 40pvc Mani-Tee Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 135 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 3.32 ft(supply line length + 70' for fittings in pump tank)

Design Head: 3 ft Elevation Head: 4.40 ft

Total Head: 10.72 ft Pump to Deliver: 26.13 gals/min at 10.72 ft head

Dosing Volume: 197 gals,

Drawdown: 197 gals divided by 20 gals/in = 9.9 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required, see permit details for specifics.

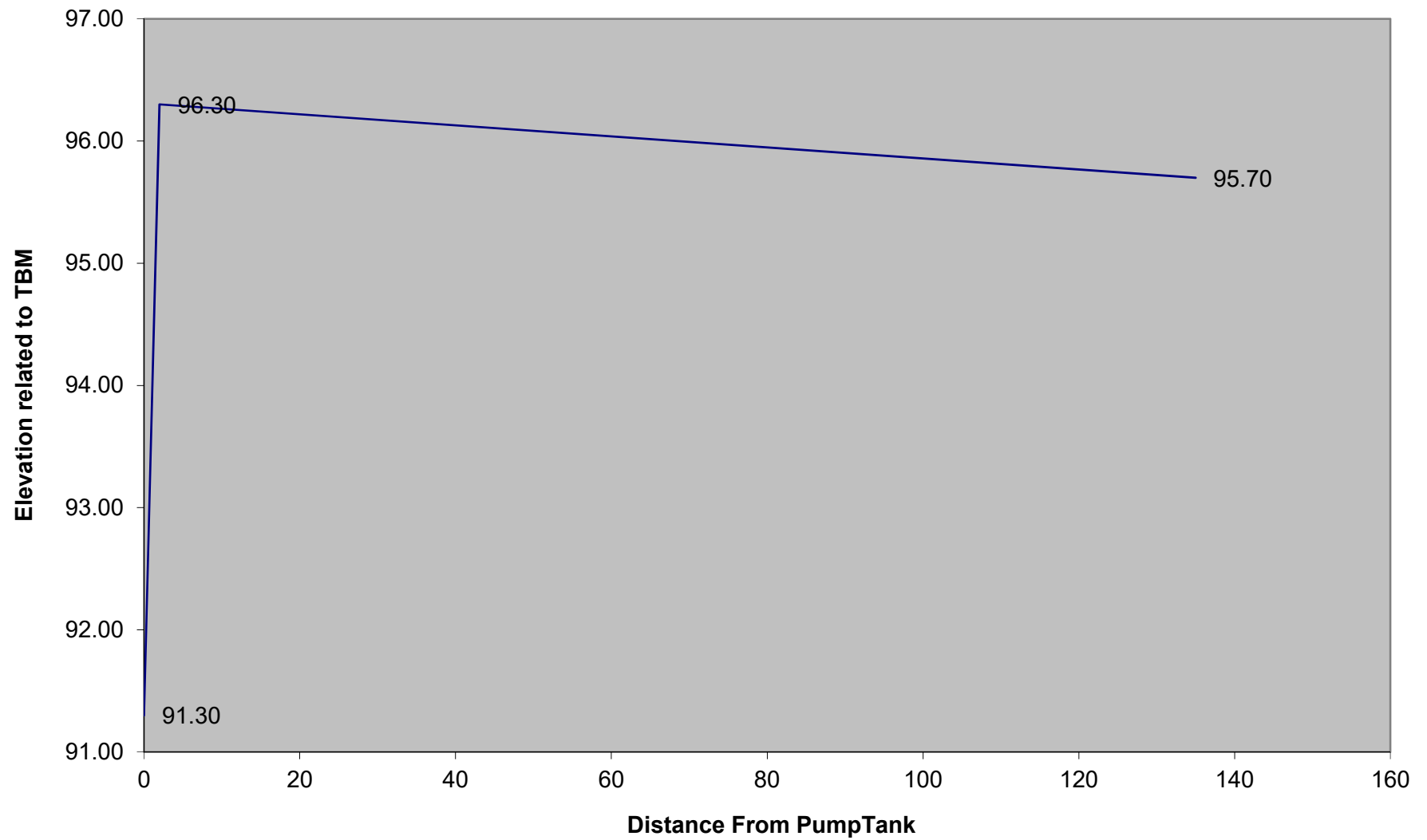
TAP CHART

Bench Mark		is = 100.00	set at				Design Head:	3	
Pump tank elev.		<u>3.7</u>	96.30	Pump elev.	91.30		Manifold elev.	95.70	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Pink	5.3	94.70	<u>135</u>	1/2in SCH 40	8.71	160.00	405	0.395
2	Blue	5.4	94.60	<u>135</u>	1/2in SCH 40	8.71	160.00	405	0.395
3	Orange	5.8	94.20	<u>135</u>	1/2in SCH 40	8.71	160.00	405	0.395
		total	feet =	<u>405</u>	gal/min =	<u>26.13</u>		<u>LTAR =</u>	<u>0.30</u>
% of Dose Vol.		<u>75</u>		<u>Des. Flow</u>	480			(ltar + 5%)	0.32
Dose Volume		197		Pump Run=	18.37			(ltar W/ INOV)	0.40
Dose Pump Time		7.56		Tank Gal/IN	20			(ltar + 5%)	0.42
Drawdown in Inches		9.9		Elev. Head	4.40				
Supply Line Length		135							
Comments:									

Hydraulic Profile

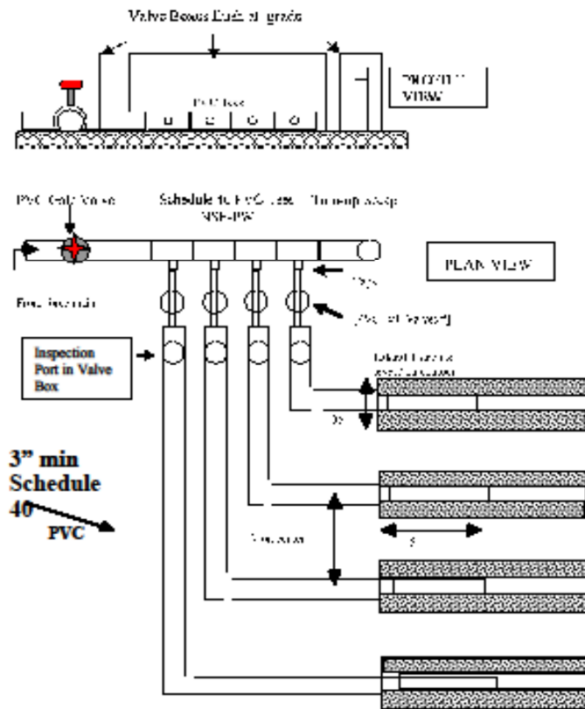
Manifold Elevation	95.70	135
Pump tank elev.	96.30	2
Pump elev.	91.30	0

Hydraulic Profile



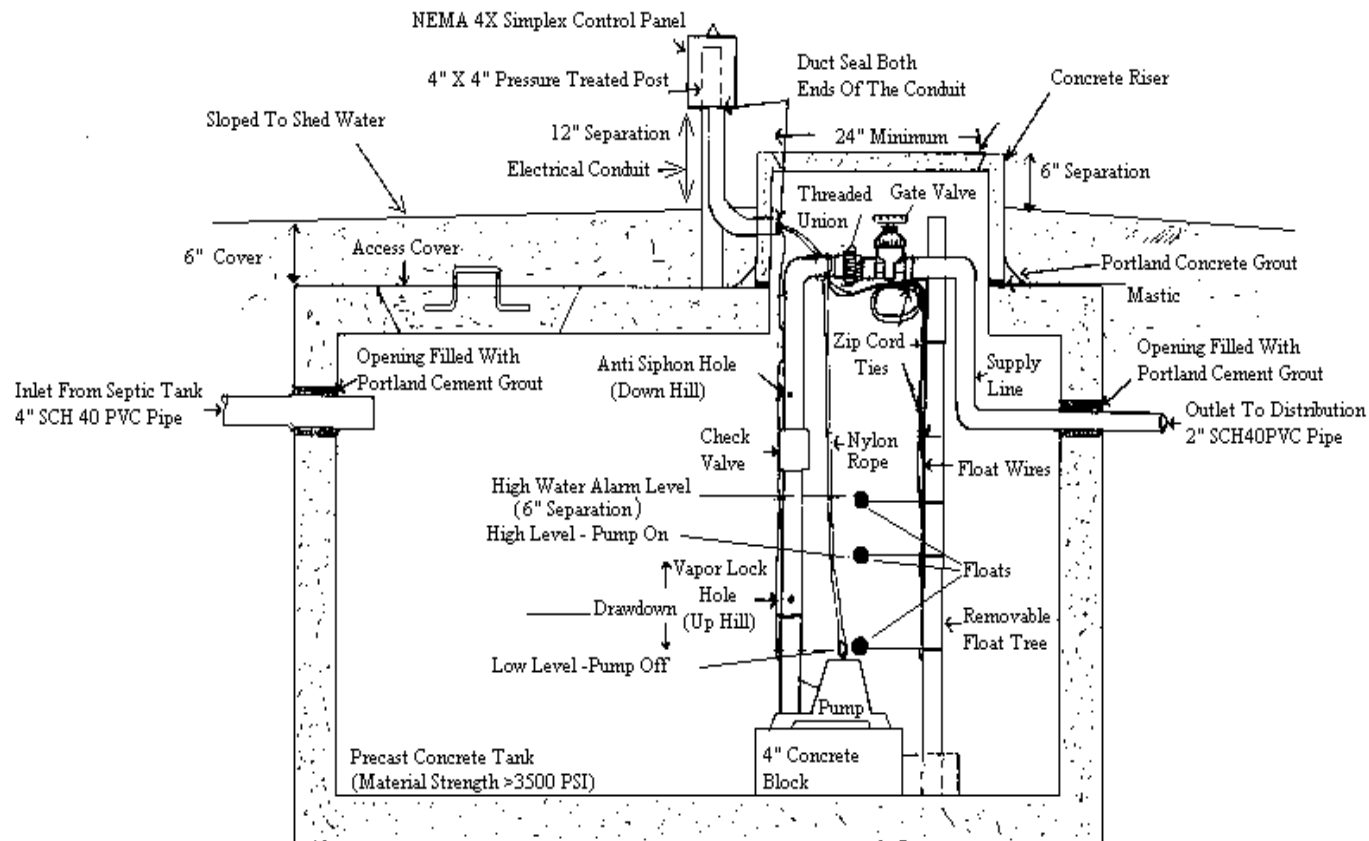
	Line 1	Line 2	Line 3
Taps	1/2in SCH 40	1/2in SCH 40	1/2in SCH 40
Flow	8.71	8.71	8.71

Wake County Mani-Tee Design



Manifold sizing may need to be altered after installer layout. The installer must layout the system prior to the pre-construction conference

Wake County Department Of Environmental Services



Gals Pump Tank

Minimum Panel Requirements

The following items will be considered the minimum for all pump systems:

1. It must be a NEMA 4X Box.
2. It must use a HOA (Hand, Off, Auto) switch to control the pump. No more use of piggyback plugs!
3. It must have a motor contactor to prevent high voltage electricity in the water at all times.
4. It must have an audible and visual alarm.
5. **All Pressure Manifold and LPP Systems must have an elapsed time meter and cycle counter installed in the panel.**
6. It must have 2 separate power supplies, wired from the fuse panel at the house.
7. All panels must have 2 circuit breakers installed in the panel to allow for disconnecting of power, so that the pump or switches maybe serviced.
8. Panels and pumps are to be wired at the time of our inspection. Power must be supplied by use of generators or from the house temporary meter, if the builder applied for it and has had all required inspections and the temporary meter has been set. **We will no longer inspect any system that has been hot wired from the temporary power pole or jumped through the house wiring without a meter being set.**

Pressure Manifolds

1. A float tree or hanging floats must be used.
2. A Simplex Control Panel with a Hand - Off - Auto switch and alarm in a NEMA - 4X box is required. See the plans or CA comments for further details on the panel.
3. 2 separate power supplies are needed. Try to look and make sure they have not used a 120V only panel with a 240V pump.
4. The taps and pipes for the taps must be of the same material! If it is a sch80 tap (usually gray plastic) then the tap, pipe and valve (the valve can be sch40pvc if there is an adequate amount of sch80 pipe used) must be constructed of sch80pvc. The same goes for sch40 taps, you cannot use sch80 pieces with the sch40.
5. The taps must go directly to the 3" pipe; no elbows can be used in the tap connections.
6. All of the tap must be the same size or larger. 3/4" pipe cannot have a 1/2" valve, but a 1/2" pipe could have a 3/4" valve, if at there is at least 6" total 1/2" pipe used.
7. Should the wrong size or material be used in the tap itself, the flow to the line can be corrected by using an adequate amount of the proper pipe material and size. The amount of pipe needed to control the flow is dependent on the size pipe/tap. If 1/2" pipe is needed, then at least 6" of total pipe is needed. A 3/4" size requires at least 9" of pipe to be used. A 1" size needs 12" of total pipe length to control the flow.

OFF-SITE EASEMENT SEWAGE DISPOSAL SYSTEM MAINTENANCE SCHEDULE
To Be Recorded In The Register Of Deed’s Office In Wake County.

Owner/Grantor _____ Deedbook and Page _____
PIN No. _____ Date Installed _____
Subdivision Name _____ Lot No. _____
System Designed by _____ Installer _____

AN ALTERNATIVE OR NON-TRADITIONAL SEWAGE DISPOSAL SYSTEM HAS BEEN INSTALLED ON THIS PROPERTY. The design specifications and locations for alternative sewage disposal systems are specified or authorized in Regulations Governing Wastewater Treatment and Dispersal Systems in Wake County effective November 21, 1988, amended effective October 27, 2011. As A Condition Of Issuance Of This Improvements/Operation Permit, The Property Owner Hereby Grants The Wake County Department Of Environmental Services A Right Of Access To The System During Regular Working Hours For Purposes Of Monitoring Compliance With State And Local Regulations, Recorded Maintenance Agreements And Certified Operator Compliance. Experience and study have shown that sewage disposal systems located in **adjacent offsite easement areas** require routine maintenance in order to function satisfactorily. In as much as each system must be individually designed and sited, special maintenance requirements may apply to a specific installation; however, the following maintenance schedule is applicable to most systems. For additional information, technical assistance or if a malfunction of the system occurs, contact the Wake County Department of Environmental Services, Telephone: 919-856-7400.

<u>System Component</u>	<u>Frequency</u>	<u>Maintenance</u>
1. Septic Tank	12 months 1-3 years	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Pump septage.
2. Pump/Dosing Tank	12 months	Check riser conditions (must be accessible from ground surface),excess in/exfiltration, entry of water at riser, and solids accumulation. Pump sludge accumulation as required and when septic tank is pumped. Check pump(s), controls, floats, electrical connections, and alarm for proper operation. Wash (hose) sludge accumulation from pump housing.
3. Supply lines	12 months	Check for settling, pipe exposure, and leakage.
4. Drain Field(s)	1-4 weeks 12 months	Maintain vegetative cover (mow grass and remove weeds and brush). Check for settling, erosion and surfacing of effluent. Check site drainage, eliminate low or settled areas and divert surface or shallow groundwater movement around fields.
5. Pressure Manifold/ Distribution Box	12 months	Check and reset pressure head, flush sludge from pressure manifold (any discharg sludge and effluent is to be treated with a chlorine solution or lime). Check D-Box level.
6. General	At all times	Prohibit vehicular or equipment traffic on ground absorption field. Prohibit tillage(gardening) or other soil disturbance over ground absorption field. Practice water conservation to reduce waste water load on system. Do no permit entry of grease and non-domestic waste to system. Use of a garbage disposal is <u>prohibited</u> . Addition of chemical or biological additives has <u>not</u> been demonstrated to be necessary to maintain proper system function. Prevention of root intervention on lateral lines and trenches may be necessary on certain sites. Surface and groundwater diversion structures must be maintained.

A certified operator is recommended for the life of the system but is not required.

Signature of Property Owner

Date

NORTH CAROLINA _____ County. I, a Notary Public of the County and State aforesaid, certify that _____ Owner, Personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this ____ day of _____ 20____.

My commission expires _____ Notary Public _____
WWDS 7/6/16

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN
AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

IMPROVEMENT PERMIT

PERMIT #: WRP-029493-2019

APPLICATION DATE: 11/26/2019

BLDG. PERMIT #: RBPR-029489-2019

PIN: 1822962149

RECORDED: Yes

TOWNSHIP: 14 - New Light

JURISDICTION: Wake County

ZONING: R-40W

APPLICANT: Terramor Homes

7208 Falls of Neuse RD St. 201

BUSINESS PHONE: (919) 497-2163

HOME PHONE:

MOBILE PHONE: (919) 497-2163

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE

EXISTING USE:

SITE ADDRESS: 2404 GEORGIANNA DR

SUBDIVISION: KANATA MILLS

LOT: 43

ACRES: 0.69

DIRECTIONS: Turn right onto Lake Wheeler Road, go 2 miles, turn right onto Penny Road, go 3 miles, turn onto Blaney
Franks road and Senter Farm is down 1.2 miles

Permit is subject to revocation if the Site Plan or Plat changes or the intended use changes.

*Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

IP VALID FOR: Five Years AS PER GS 130A-335 (f)

DESIGNED BY: CCSC

SYSTEM LAYOUT: Private Sector

SITE CLASSIFICATION: Provisionally Suitable

IP STATUS: Issued

BY: Michael Seewald

DATE: 12/17/2019

NUMBER OF BEDROOMS: 4

OR TOTAL NUMBER OF OCCUPANTS: 8

PERMITTED DESIGN FLOW: 480 GPD

BASEMENT: No

BASEMENT PLUMBING: No

WASTEWATER STRENGTH: Domestic

SYSTEM TYPE: III B

LTAR: 0.300

EXISTING SYSTEM UTILIZED:

PRETREATMENT STRENGTH REQUIRED:

EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL: Adjacent

MAXIMUM TRENCH DEPTH: 24 INCHES

PUMP REQUIRED: Yes

SPECIFIC SYSTEM REQUIREMENTS: - System designed for 4 bedroom home, having 480 gals per day.

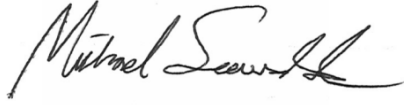
- Future Repair is a type III b system With a Max Trench depth of 24" and a 0.3 LTAR.

- Site serviced by Community Well water.

- No cutting, grading, alterations, or utilities in septic area.

- Maintain all required setbacks.

ISSUED BY:

A handwritten signature in black ink, appearing to read "Michael S. Smith". The signature is fluid and cursive, with the first name "Michael" and last name "Smith" clearly distinguishable.

DATE: 12/17/2019



LOT INFORMATION:

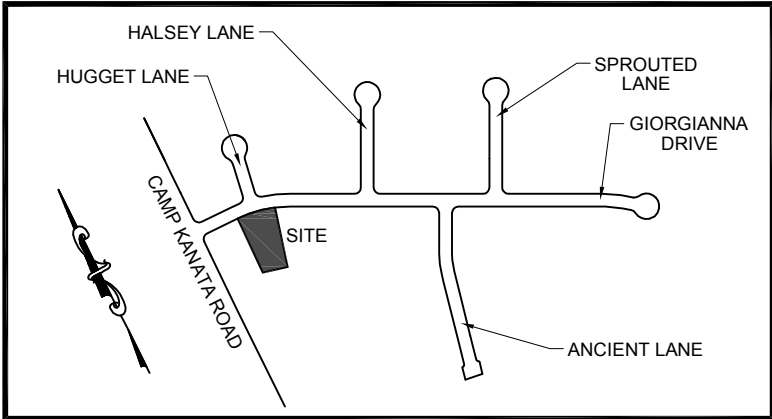
PARCEL ID: 0444794
PIN: 1822962149
TOTAL LOT AREA = 0.69 AC = 30,096 SF
MAXIMUM IMPERVIOUS = 6,500 SF
PROPOSED IMPERVIOUS = 2,859 SF
HOUSE = 2,016 SF
SCREENED PORCH = 200 SF
PORCH = 22 SF
SIDEWALK = 74 SF
DRIVEWAY = 547 SF
PERCENT IMPERVIOUS = 9.50%



Bateman Civil Survey Company

Engineers • Surveyors • Planners

2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378



VICINITY MAP

(Not to Scale)

LEGEND

PO = PORCH
P = PATIO
SP = SCREENED PORCH OR PATIO
CP = COVERED PORCH OR PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY
⊗ = COMPUTED POINT
⊙ = IRON PIPE FOUND
⊙ = IRON PIPE SET
⊙ = WATER METER
⊙ = CLEANOUT
AC = AIR CONDITIONER
⊙ = ELECTRIC BOX
⊙ = CABLE BOX
⊙ = TELEPHONE PEDESTAL
⊙ = LIGHT POLE
⊙ = CURB INLET
⊙ = YARD INLET
FH = FIRE HYDRANT
WV = WATER VALVE
⊙ = SEWER MANHOLE

I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERENCED IN TITLE BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA. L-4752
DATED:

BUILDING SETBACKS:

FRONT = 15 ft
REAR = 15 ft
SIDE = 7.5 ft
CORNER = 15 ft
PERIMETER = 30 ft

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

BUILDER TO VERIFY HOUSE LOCATION, DIMENSIONS AND REVIEW TOTAL IMPERVIOUS NOTED ON THIS PLOT PLAN

PRELIMINARY PLOT PLAN

FOR



KANATA MILLS - LOT 43

2404 GEORGIANNA DRIVE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 11/13/19 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2017, PGS 527-530

PROJECT# 170220

SCALE: 1"=40'

NOTES:

- THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
- THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
- PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
- THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
- THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
- NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3720182200J, DATED APRIL 16, 2007.
- ZONING IS R-40W
- PROPERTY OWNER: TERRAMOR HOMES, LLC.
7208 FALLS OF NEUSE RD, STE 201
RALEIGH, NORTH CAROLINA 27615

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C49	475.00'	153.65'	S79°54'17"E	152.98'