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-054568-2021 **APPLICATION DATE:** 02/26/2021 **BLDG. PERMIT#: RBPR-054563-2021**

PIN: 1822758758 **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: 8909 HARDIE FARM CIR

SUBDIVISION: Kanata Mills PH 3 **LOT:** 93 **ACRES:** 0.70

DIRECTIONS: Take 98 North towards Durham Take right on Camp Kanata Road go 5-6 miles and take left into Groves at Kanata

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: II C
OPERATION PERMIT: STATUS: Issued **ISSUED BY:** Marlena Brown **ISSUED DATE:** 08/12/2021

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** 01/22/2021 **FILTER:** GAG SIM/TECH - STF-110
GREASE TRAP: **DATE OF MANUFACTURE:** **FILTER:**
DOSING PUMP TANK: **DATE OF MANUFACTURE:** **FILTER:**
CC1: **ETM1:** **CC2:** **ETM2:**
RECIRCULATION TANK: **DATE OF MANUFACTURE:**
CC1: **ETM1:** **CC2:** **ETM2:**

SEPTIC TANK ELEVATION: 3.50 **GREASE TRAP ELEVATION:** **DOSING PUMP TANK ELEVATION:**

RECIRCULATION TANK ELEVATION: **DISTRIBUTION DEVICE ELEVATION:** 5

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
18	12	150	6.66
18	12	150	7.91

ACTUAL PRESSURE HEAD: **ACTUAL FLOW RATE:** **ACTUAL DOSE VOLUME:** 0

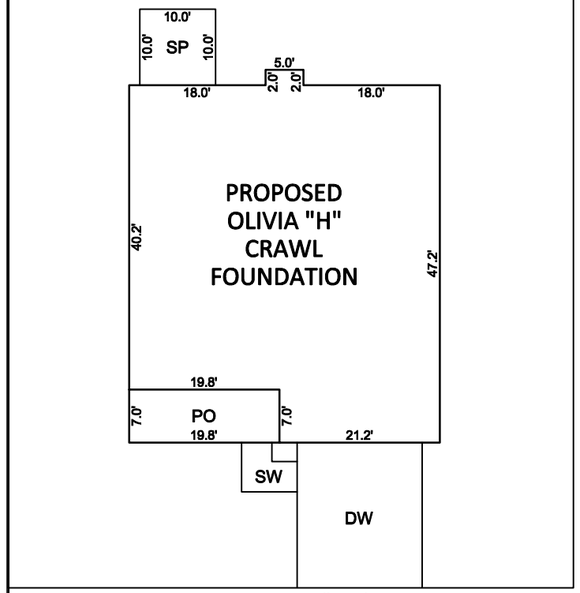
SPECIFIC OPERATION REQUIREMENTS:
-4 bedroom, 360gpd using Flow Reduction
-ASDMS: Book - 018621 , Page - 01967-01968

ISSUED BY:  **DATE:** 08/12/2021

CA PART A

RBPR-054563-2021

SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Dawn Tripp
02/26/2021 2:58:11 PM

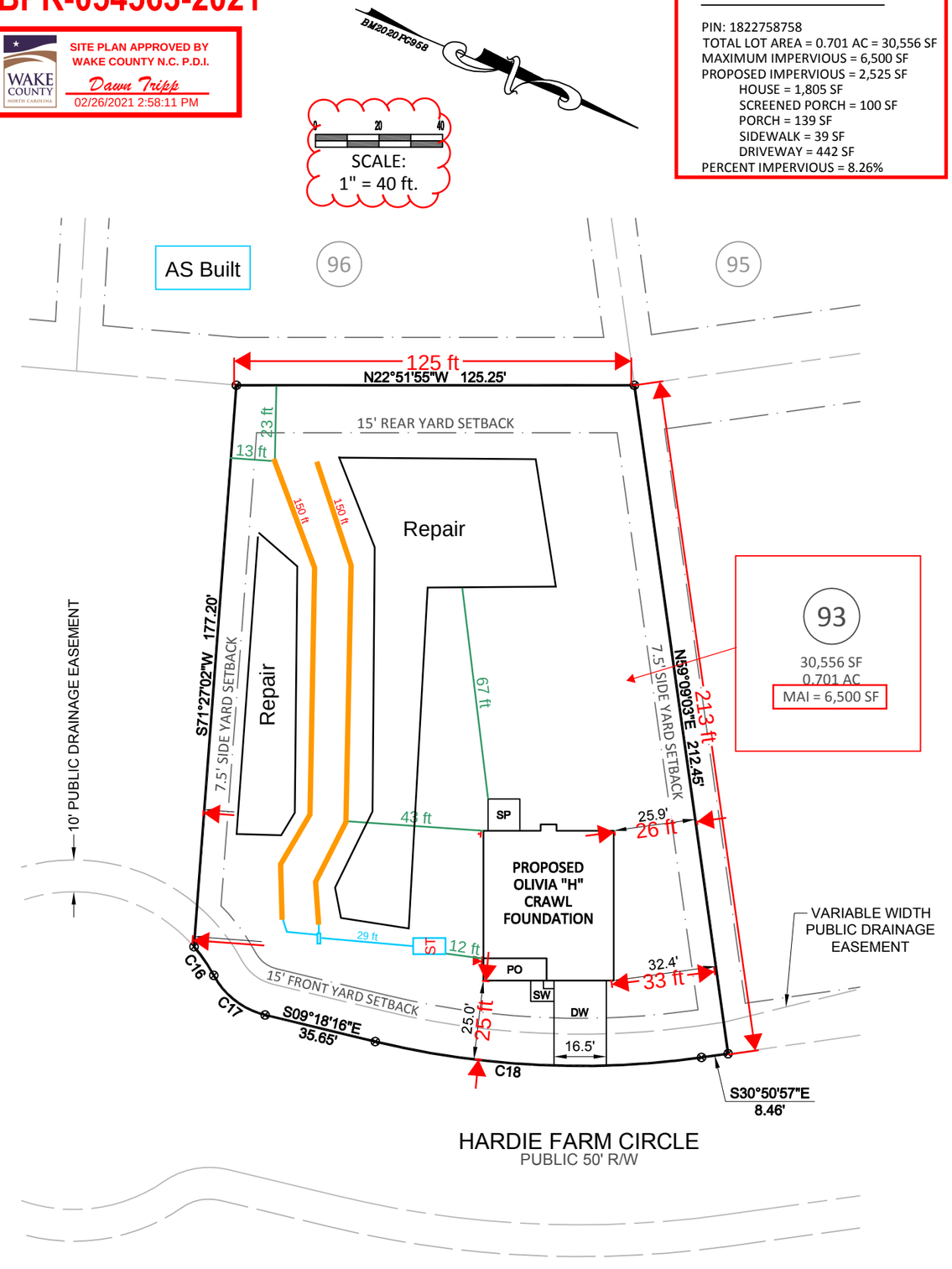


INSET SCALE: 1"=20'

NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. 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.
4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
5. THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
6. THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
7. NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
8. 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.
9. THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3720182200K, DATED DECEMBER 6, 2019.
10. ZONING IS R-40W.
11. PROPERTY OWNER: TERRAMOR HOMES, LLC.
    7208 FALLS OF NEUSE RD, STE 201
    RALEIGH, NORTH CAROLINA 27615

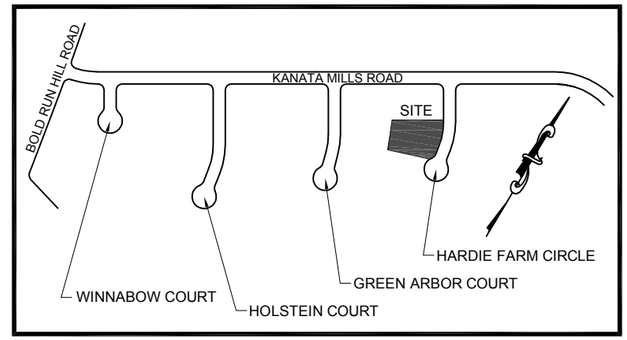
CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C16	50.00'	10.99'	S32°35'18"W	10.97'
C17	25.00'	21.03'	S14°47'26"W	20.41'
C18	275.00'	103.41'	S20°04'36"E	102.80'



LOT INFORMATION:

PIN: 1822758758
TOTAL LOT AREA = 0.701 AC = 30,556 SF
MAXIMUM IMPERVIOUS = 6,500 SF
PROPOSED IMPERVIOUS = 2,525 SF
HOUSE = 1,805 SF
SCREENED PORCH = 100 SF
PORCH = 139 SF
SIDEWALK = 39 SF
DRIVEWAY = 442 SF
PERCENT IMPERVIOUS = 8.26%

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
O = IRON PIPE FOUND
◉ = IRON PIPE SET
WM = WATER METER
CO = CLEANOUT
AC = AIR CONDITIONER
EB = ELECTRIC BOX
C = CABLE BOX
T = TELEPHONE PEDESTAL
☼ = LIGHT POLE
CI = CURB INLET
YI = YARD INLET
FH = FIRE HYDRANT
WV = WATER VALVE
S = SEWER MANHOLE

BUILDING SETBACKS:
FRONT = 15 ft
REAR = 15 ft
SIDE = 7.5 ft
CORNER = 15 ft
PERIMETER = 30 ft

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:

PRELIMINARY

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

Terramor HOMES
Homes with a Touch

KANATA MILLS - PHASE 3 - LOT 93
8909 HARDIE FARM CIRCLE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 2/12/21 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2020, PGS 957-959 PROJECT# 190435 SCALE: 1"=40'

P:\2019 Projects\190435 The Grove at Kanata Mills - Terramor Homes\dwg\190435 - The Grove at Kanata Mills - TH.dwg 2/12/2021 11:11:57 AM, afidelino

BK018621PG01967

Return to: Karl Beyer
DR Horton - Terramor LLC
7208 Falls of Neuse Ste 201
Raleigh, NC 27615

WAKE COUNTY, NC 91
TAMMY L. BRUNNER
REGISTER OF DEEDS
PRESENTED & RECORDED ON
07/29/2021 12:53:37

BOOK:018621 PAGE:01967 - 01968

ALTERNATIVE 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** BM2020 pgs 957-959
PIN No. 1822758758 **Date Installed** 6/01/2021
Subdivision Name Groves at Kanata **Lot No.** 93
System Designed by Central Carolina Soils **Installer** David Brantley & Sons

AN ALTERNATIVE OR NON-TRADITIONAL SEWAGE DISPOSAL SYSTEM USING AN ENGINEER DESIGNED FLOW RATE MODIFICATION PURSUANT TO SESSION LAW 2014-120 SECTION 53 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 in Wake County effective November 21, 1988, amended effective May 23, 2002, amended 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.
This permit requires the use of **pressure manifold distribution to a mode of subsurface wastewater dispersal**. Experience and study have shown that pressure manifold systems 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 all pressure manifold 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.

System Component	Frequency	Maintenance
1. Septic Tank	6-12 months	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation.
	1-3 years	Pump septage.
2. Pump/Dosing Tank	6-12 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	6-12 months	Check for settling, pipe exposure and leakage. Includes Manifold(s).
4. Drain Field(s)	1-4 weeks	Maintain vegetative cover (mow grass and remove weeds and brush).
	6-12 months	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	6-12 months	Check and reset pressure head, flush sludge from pressure manifold (any discharge sludge and effluent is to be treated with a chlorine solution).
6. Sampling	12 Months	Influent and Effluent sampling may be requried once per year to ensure adhearance to domestic strength wastewater standards.
7. 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 or grease and non-domestic waste to system. Use of a garbage disposal is prohibited. Addition of chemical or biological additives has not 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. **Adherance to permitted flow rate.**

This system is permitted under S.L. 2014-120 for engineer flow reduction untilizing low flow fixtures and technologies, all of which must remain in use for the life of the applicable system. Neither the State nor any local government shall be liable for any damages by a system approved or permitted pursuant to this section.

MELISSA WICKSTROM
Notary Public, North Carolina
Wake County
My Commission Expires
10-4-2021

, Asst Vice President
Signature of Property Owner
7/27/21
Date

NORTH CAROLINA Wake County. I, a Notary Public of the County and State aforesaid, certify that Karl Beyer, Asst VP 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 July 20 21.

My commission expires 10-4-2021 Notary Public Melissa Wickstrom

WWDS 02/17

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, NC 27587
919-569-6704/fax 919-569-6703

July 13, 2021

Wake County Staff
Wake County Environmental Health Department
336 Fayetteville Street
Raleigh, North Carolina

RE: Flow Reduction Certification and As-built
The Grove at Kanata Mills Lot 93
8903 Hardie Farm Ct., Wake Forest, Wake County, NC
Job #1330

Dear Wake County Staff:

Central Carolina Soil Consulting, PLLC (CCSC) employees in conjunction with Bateman Civil Survey Company, reviewed fixture receipts from Hajoca Plumbing that were installed in the house The Grove at Kanata Mills Lot 93. Several of the fixture selections were changed during construction of the house. The original proposed flow reduction had an overall reduction of 35% for a 4-bedroom house with a 25% requested reduction in flow, reducing the flow from 480 gallons per day to 360 gallons per day. The attached flow reduction as-built has been updated to include the fixtures that were installed in the house including fixture specification sheets. The as-built overall flow reduction is 38%, slightly higher than the original proposal.

These fixtures or equivalent flow fixtures are required for the life of the home. Any change in fixtures that results in a change of the flow rates must be approved by an Engineer and Wake County Environmental Health Services.

If you need further information or have any questions please contact Matt Burdette at (919) 422-2827 or Tom Speight at 919-577-1080 2524 Reliance Ave, Apex NC 27539

Sincerely,

Central Carolina Soil Consulting, PLLC

Matt Burdette
Environmental Specialist

Bateman Civil Survey Company
NCBELS# C-2378.

Thomas Speight, P.E.
(seal)

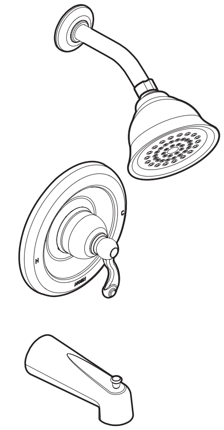
Groves at Katana Lot 93 AS BUILT						
	Item		**Gal/min. or flush**	**Number of Fixures**	**Base Flow From 1982**	**Percent Water Savings**
Master	Shower Head	Moen T2122	2.5 gal/minute	1	5.5 gal/minute	55%
	Lavatory Faucet	Moen WS84003	1.2 gal/minute	2	3.0 gal/minute	60%
	Tub Trim	Fill & Release	Fill & Release	1	Fill & Release	0%
Kitchen	Kitchen Sink Faucet	Moen 5923	1.5 gal/minute	1	3.0 gal/minute	50%
Guest Bath	Lavatory Faucet	Moen WS84003	1.2 gal/minute	1	3.0 gal/minute	60%
	Shower Head	Moen T2122	2.5 gal/minute	1	5.5 gal/minute	55%
Upstairs Hall Bath	Lavatory Faucet	Moen WS84003	1.2 gal/minute	2	3.0 gal/minute	60%
	Shower Head	Moen T2123	2.5 gal/minute	1	5.5 gal/minute	55%
Toilets	Master, Guest, Upstairs	Maxwell 28-990	1.3 gal /flush	3	3.5 gal/minute	63%

FIXTURES	**TOILET**	**FAUCET**	**SHOWER**	**LEAK**	**BATH**	**OTHER**	**DISHWASHER**	**CLOTHES WASHER**	**TOTALS**
PERCENT OF HOUSE HOLD WATER USE	24%	20%	20%	12%	3%	3%	2%	16%	**100%**
GALLONS PER DAY (480 BASE)	115	96	96	58	14	14	10	77	**480**
PERCENT OF SAVINGS FROM WATER SAVING FIXURES	63%	58% avg	55%	0%	0%	0%	0%	0%	**38%**
ADJUSTED FLOW (GALLONS)	43	40	43	58	14	14	10	77	**299**

MOEN

Buy it for looks. Buy it for life.®

Specifications



DESCRIPTION
- Metal construction with various finishes identified by suffix
- Includes showerhead, arm, flange and tub spout

OPERATION
- Lever style handle
- Handle operates counterclockwise through a 270˚arc with off at 6 o'clock and maximum hot at the 9 o'clock position. Shut off in clockwise direction
- Adjustable temperature limit stop to control maximum hot water temperature
- Pressure balancing mechanism maintains selected discharge temperature to ± 2°

FLOW
- Showerhead is limited to 2.5 gpm (9.5 L/min) at 80 psi
- EP suffix models are limited to 2.0 gpm (7.6 L/min) max for products manufactured prior to June 30, 2018. EP suffix models manufactured after June 30, 2018 are limited to 1.75 gpm (6.7 L/min) max.
- NH suffix models contain no showerhead

CARTRIDGE
- 1222 cartridge design
- Nonmetallic/nonferrous and stainless steel materials
- Accommodates back to back installations

STANDARDS
- Third party certified to meet ASME A112.18.1/CSA B-125.1 and all applicable requirements referenced therein
- EP suffix models are third party certified to Watersense®
- **ADA** for lever handles

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
- 10 year limited warranty when used in a multifamily installation
- 5 year limited warranty when used in a commercial installation

Visit www.moen.com/support for complete details and limitations

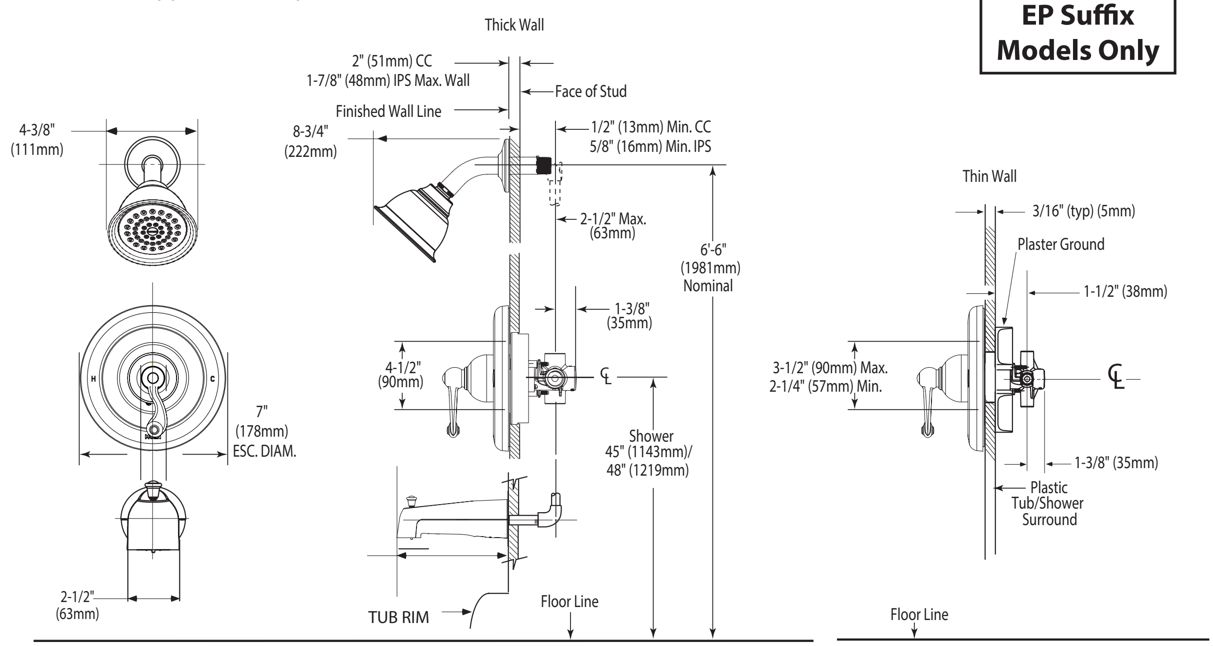
Traditional® POSI-TEMP®
Single-Handle Tub/Shower Trim

Models: T2121 series - valve trim only
T2122 series - shower trim only
T2123 series - tub/shower trim

Valves: 62300 series
2500 series

WaterSense
Meets EPA Criteria
Certified by IAPMO R&T

EP Suffix Models Only



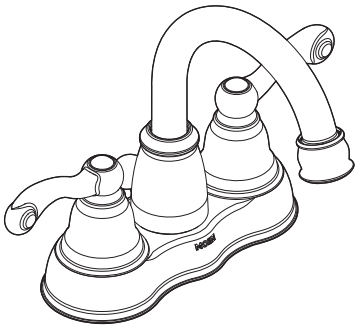
M•pact System

CRITICAL DIMENSIONS
(DO NOT SCALE)

07/12/2018 SPC14993 500000237448
Released 00

MOEN®

Specifications



TRADITIONAL®

Two-Handle 4" Centerset Lavatory Faucet

Models:
WS84003 series includes 50/50 waste

DESCRIPTION
- Metal construction with finished identified by suffix
- ½" IPS connections will accept standard ball nose connection for 3/8" tubing
- Installation through 3 holes, 1-1/8" min. diameter, and 4" on center
- Includes pop-up waste assembly

OPERATION
- Lever handles
- Maximum handle rotation angle is 90° to full on
- Hot side counterclockwise to open (clockwise to close)
- Cold side clockwise to open (counterclockwise to close)
- Rotating spout

FLOW
- Water usage is limited to the maximum flow rates as indicated by the corresponding product markings
  - 1.2 gpm max (4.5 L/min) at 60 psi

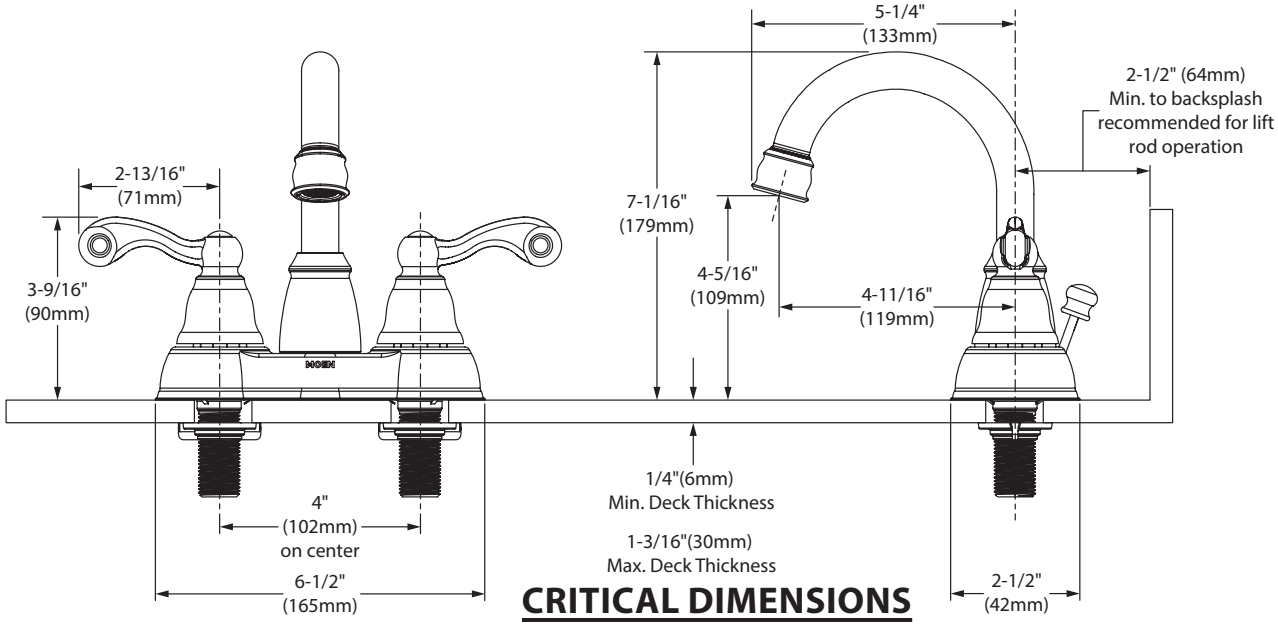
CARTRIDGE
- 1224 cartridge
- Nonmetallic and stainless steel material

STANDARDS
- Third party certified at WaterSense®, ASME A112.18.1/CSA B125.1, and all applicable requirements referenced therein including NSF 61/9 & 372
- Products marked with 1.2 gpm are compliant with California water efficiency regulations
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- ADA for lever handles

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
- 10 year limited warranty when used in a multifamily installation
- 5 year limited warranty when used in a commercial installation

Visit www.moen.com/support for complete details and limitations

OPTIONS *(See Illustrated Parts page)*
- Thin and thick deck mounting hardware kits available



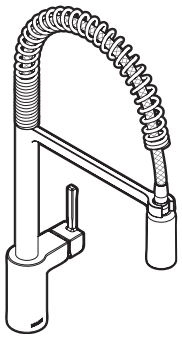
CRITICAL DIMENSIONS

(DO NOT SCALE)

FOR MORE INFORMATION CALL: 1-800-BUY-MOEN
www.moen.com

MOEN®

Specifications



Align™
Single Handle Pre-Rinse Spring Pulldown Kitchen Faucet

Models: 5923 series

NOTE: this faucet is designed to be installed through 1 hole, 1-1/2" (38mm) min. dia. (optional 3-hole escutcheon 141002 available)

GREEN UPC®

FAUCET DESCRIPTION
- Pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Quick connect installation - Duralock™
- PowerBoost™ spray technology
- Pulldown spray with 68" braided hose
- Flexible supply lines with 3/8" compression fittings
- High arc spout provides height and reach to fill or clean large pots while pulldown wand provides the maneuverability for cleaning or rinsing
- Faucet designed for handle to be mounted on right side

OPERATION
- Lever style handle
- Temperature controlled by 100˚ arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position

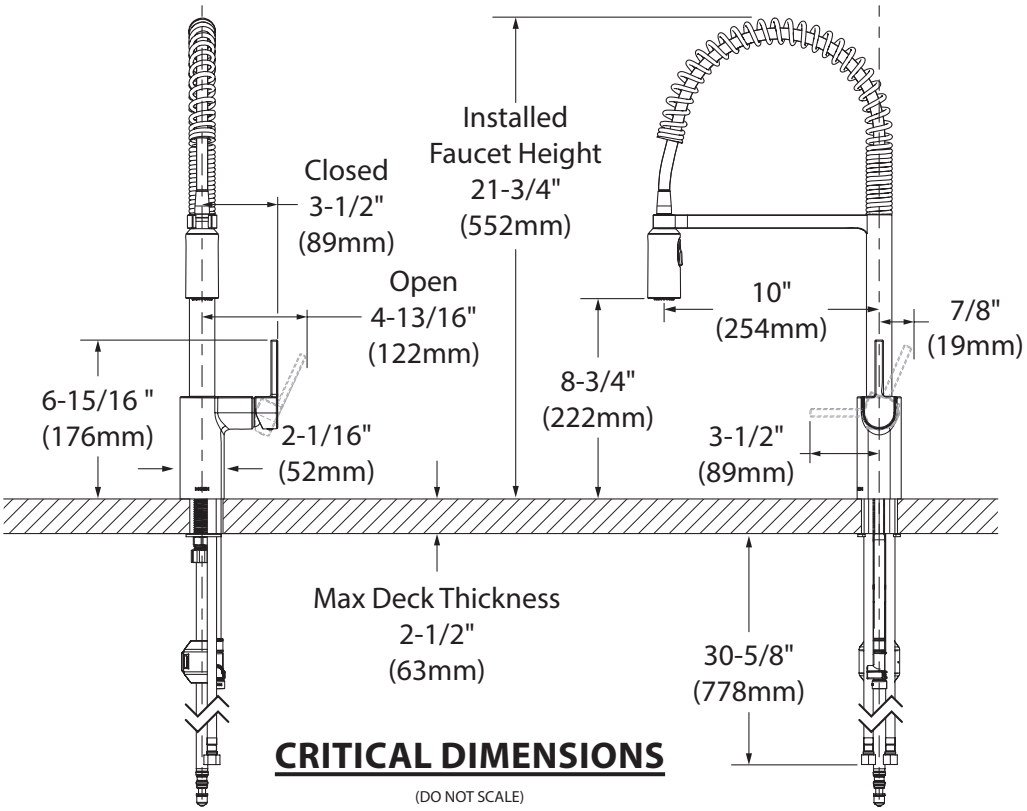
FLOW
- Flow is limited to 1.5 gpm (5.7 L/min) max at 60 psi

CARTRIDGE
- 1255™ Duralast™ cartridge for single handle faucets

STANDARDS
- Third party certified to IAPMO Green, ASME A112.18.1/CSA B125.1 and all applicable requirements therein including NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- ADA for lever handle

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
- 10 year limited warranty when used in a multifamily installation
- 5 year limited warranty when used in a commercial installation

Visit www.moen.com/support for complete details and limitations



CRITICAL DIMENSIONS

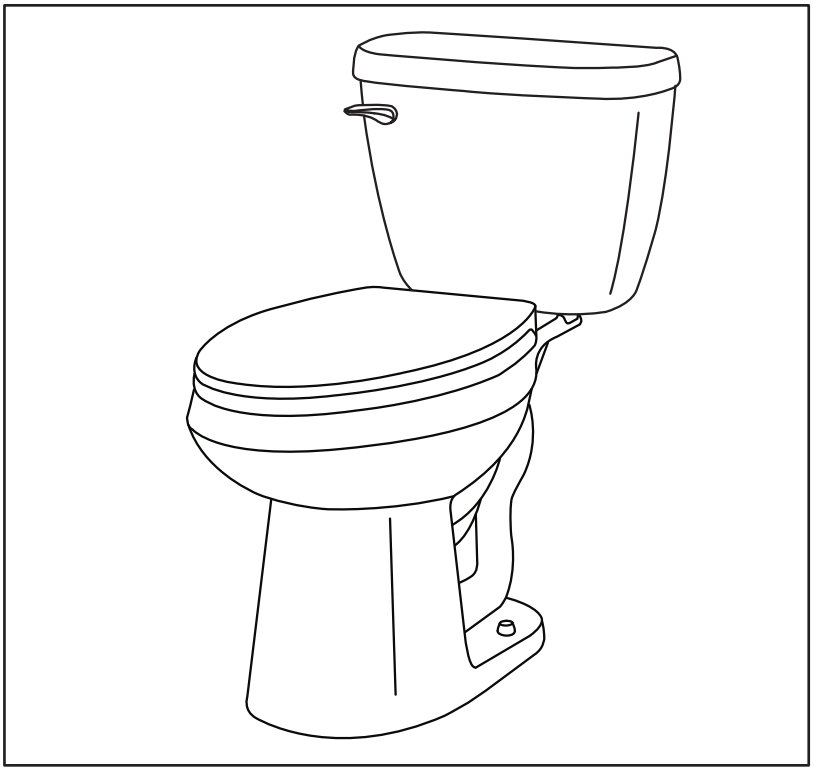
(DO NOT SCALE)

MAXWELL® 1.28 ErgoHeight™ 17" High Elongated Toilet

12" Rough-in

Features:

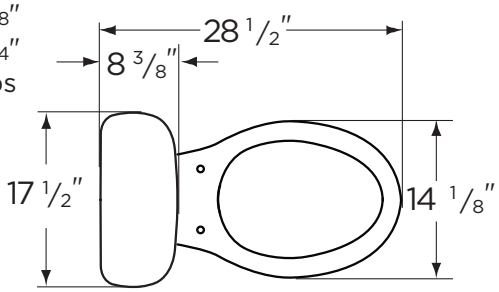
- 1.28 gpf/4.8 Lpf high efficiency two-piece toilet
- Elongated ErgoHeight™ bowl
- Dual-fed siphon jet
- Pilot fill valve
- 3" flush valve
- 2" glazed trapway
- Color matched front tank lever (white only)
- Optional insulated non-sweating tank
- Optional right-handed trip lever
- Available in White, Bone and Biscuit
- 2 bolt caps
- ADA Compliant

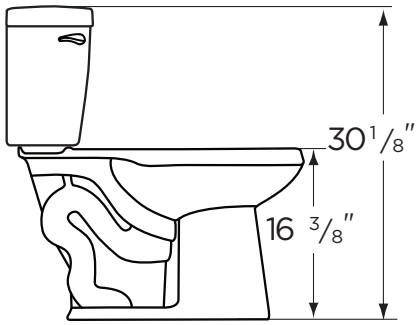


Specifications: *Bowl*—#21-928 Front Bowl *Tank*—#28-990
Seat not included

Dimensions:

Height	30 1/8"
Width	17 1/2"
Depth	28 1/2"
Rough-in	12"
Water Surface from Rim	6 1/2"
Trapway	2"
Water Surface	8 7/8" x 7 3/8"
Water Seal	2 1/4"
Shipping Weight	85.5 lbs





THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.28 gpf (4.8 Lpf) OR LESS.

HIGH EFFICIENCY TOILET HET

www.gerberonline.com

Job Name	
Date	
Model Specified	
Quantity	
Customer	
Contractor	
Architect/engineer	

WAKE COUNTY
NORTH CAROLINA

TEL 919 856 7400
FAX 919 856 7407

Environmental Services

Water Quality Division
336 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602

3/23/2021

REQUIREMENTS TO COMPLETE YOUR ENGINEERED FLOW REDUCTION SYSTEM

NAME:	Terramor Homes
ADDRESS:	7208 Falls of Neuse RD St. 201, Raleigh, NC 27615
Re:	Application for Engineered Flow Reduction System
SEPTIC PERMIT:	WRP-054568-2021
PIN:	1822 75 8758
Building Permit:	RBPR-054563-2021
Property Info:	Kanata Mills PH 3 LOT: 93 ACRES: 0.70

Dear Sir/Madam:

Enclosed is your approved Engineer Flow Reduction plan as permitted under Session Law 2014-120 Section 53, and the "Engineer Flow Reduction Sewage Disposal System Maintenance Information Sheet". **"Neither the State nor local health department shall be liable for any damages caused by an engineered system approved or permitted pursuant to Session Law 2014-120 Section 53."**

To complete your permit:

- **System Installation** - A contractor **CERTIFIED** by the State of North Carolina and **REGISTERED** in Wake County, must be used to install your system, if applicable.
- **System Components** - All portions of the engineered design plans shall be completed using only materials specified in the engineered design plans.
- **Engineer Certification** - The engineer must certify that the design plans have been completed to the specifications in the approved design and provide an engineer certification letter to Wake County that is SEALED, SIGNED, AND DATED stating as much.
- **Alternative Sewage Disposal System Maintenance Schedule** - this document must be signed, notarized and recorded at the Wake County Register of Deeds Office. A copy of the recorded document must be submitted to Wake County before your permit can be finalized.

A copy of the "Wake County Well and Septic System Owner's Guide", which contain information essential to the long-term performance of this wastewater disposal system, must be forwarded to the owner or user of the system, if other than yourself.

ANY PROPOSED MODIFICATION TO THE APPROVED PLANS MUST BE COORDINATED WITH YOUR DESIGN ENGINEER.

Please call (919) 480-9998 or email at CORY.LARSEN@wakegov.com if you have any questions.

Sincerely,

CORY LARSEN, PE
Environmental Consultant

*** CA PART A - E ***

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

CONSTRUCTION AUTHORIZATION PERMIT

PERMIT # **WRP-054568-2021** **APPLICATION DATE:** 02/26/2021 **BLDG. PERMIT#:** **RBPR-054563-2021**

PIN: 1822758758 **RECORDED:** Yes

TOWNSHIP: 14 - New Light **JURISDICTION:** Wake County **ZONING:** R-40W

APPLICANT: Terramor Homes
7208 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: 8909 HARDIE FARM CIR

SUBDIVISION: Kanata Mills PH 3 **LOT:** 93 **ACRES:** 0.70

DIRECTIONS: Take 98 North towards Durham Take right on Camp Kanata Road go 5-6 miles and take left into Groves at Kanata

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:** Cory Larsen **DATE:** 03/23/2021

CA VALID FOR: Five Years **DESIGN FLOW:** 360 GALLONS **BASEMENT:** No **BASEMENT FIXTURES:** No

SEPTIC TANK: 1200 GALLONS
DOSING PUMP TANK:
GREASE TRAP:
RECIRCULATION PUMP TANK:

SEPTIC TANK FILTER: Yes
DOSING PUMP TANK FILTER:
GREASE TRAP FILTER:
RECIRCULATION PUMP TANK FILTER:

PROPOSED SYSTEM: 0.25 - 25% Reduction (Innovative or Accepted) **EXISTING SYSTEM:** No
DRAINFIELD SQ. FT: 900 **AGGREGATE DEPTH:** 12 **MAX. TRENCH DEPTH:** 18 INCHES
DISTRIBUTION DEVICE: GP - Gravity Parallel
TRENCH #: 2 **TRENCH LENGTH:** 150 150 FEET **TRENCH WIDTH:** 36 INCHES **TOTAL TRENCH LENGTH:** 300 FEET

CENTER SPACING: 9 FEET **MINIMUM SOIL COVER:** 6 INCHES

PRETREATMENT:
SUBFIELDS #:
PUMP TDH:

APPROVAL #:
PUMP DESIGN FLOW:
ZONE VALVE: No

ASDMS REQUIRED: Yes
LINE OF CREDIT REQUIRED: No
OPERATOR REQUIRED: No
P.E. SIGN OFF/ASBUILT REQUIRED: Yes
TRIPARTY AGREEMENT REQUIRED: No

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:
THIS PERMIT IS FOR FOUR (4) BEDROOM DWELLING WITH 360 GALLONS DAILY FLOW USING ENGINEERED FLOW REDUCTION. INITIAL SYSTEM IS AN EQUAL LINE GRAVITY SYSTEM TO 2 DRAINLINES WITH 18" TRENCH BOTTOM. REPAIR SYSTEM IS AN UNEQUAL LINE LENGTH PRESSURE MANIFOLD WITH 18" TRENCH BOTTOM. 1200 GALLON SEPTIC TANK FOR INITIAL SYSTEM AND 1200 GALLON PUMP TANK REQUIRED FOR REPAIR. PARTIAL FOUNDATION DRAIN ALLOWED. WHEN INSTALLING SYSTEM, MAINTAIN ALL REQUIRED SETBACKS. DO NOT DISTURB OR REMOVE ANY SOIL IN INITIAL OR REPAIR AREAS. MUST MAINTAIN REQUIRED EMERGENCY STORAGE IN PUMP TANK. A NEMA 4X CONTROL PANEL WITH TWO BREAKERS, TWO POWER SUPPLIES, ELAPSED TIME METER AND CYCLE COUNTER IS REQUIRED. IF FLAGS ARE MISSING, CALL DESIGNER TO RE-FLAG. THIS SYSTEM IS DESIGNED BY A CONSULTANT AND MUST BE INSTALLED PER THE DESIGN, INCLUDING THE USE OF THE MATERIALS SPECIFIED IN THE DESIGN. ANY DEVIATION MUST BE APPROVED BY THE DESIGNER OR WAKE COUNTY ENVIRONMENTAL SERVICES PRIOR TO SYSTEM INSTALLATION.
NEITHER THE STATE NOR LOCAL HEALTH DEPARTMENT SHALL BE LIABLE FOR ANY DAMAGES CAUSED BY AN ENGINEERED SYSTEM APPROVED OR PERMITTED PURSUANT TO SESSION LAW 2014-120 SECTION 53. ALTERNATIVE SEWAGE DISPOSAL SYSTEM MAINTENANCE SCHEDULE MUST BE SIGNED, NOTARIZED AND RECORDED AT THE WAKE COUNTY REGISTER OF DEEDS OFFICE. ENGINEER CERTIFICATION OF REQUIRED FIXTURE INSTALLATION ARE REQUIRED PRIOR TO ISSUANCE OF 4 BEDROOM OPERATION PERMIT. PLEASE CONTACT ENVIRONMENTAL SERVICES IF ANY QUESTIONS OR PROBLEMS ARISE PRIOR TO INSTALLATION.

Issued By: 

Date: 03/23/2021

HOMEOWNER GUIDE FOR UTILIZATION AND MAINTENANCE OF ON-SITE WASTEWATER DISPOSAL SYSTEMS

What is an On-site Wastewater Disposal System?

There are a number of different types of on-site wastewater disposal systems each designed for a specific set of site conditions. However, there are several system components that are common to most systems. These include the following:

1. A septic tank - a concrete tank that is designed to receive wastewater from the house and to provide a degree of pretreatment for the waste, chiefly through removal of some of the solids in the waste. Note that these solids accumulate over time and necessitate periodic pumping of the septic tank. Currently septic tanks are equipped with two access risers (normally constructed of concrete), which are designed to be at least 6 inches above the ground surface to prevent surface and shallow groundwater from entering the septic tank and to provide access for maintenance. **Care must be taken not to damage or cover these risers so that water inflow / infiltration can be prevented and the tank can be accessed for maintenance.**
2. In some installations, a pump tank - a concrete tank, very similar to the septic tank, which contains a pump along with the associated controls / componentry. The pump tank and pump is designed to receive effluent from the septic tank, and pump the effluent to a disposal field located at a higher elevation and/or to a pressurized distribution network in the disposal field. **The pump tank also has an access riser which must be protected in a similar manner to that indicated for the septic tank.** Servicing of the pump tank components often necessitates the assistance of a professional such as a septic tank installer or Certified Subsurface System Operator. The latter is required for operation and maintenance of certain types of systems.
3. A disposal field - a series of subsurface trenches and lines that are designed to distribute the effluent into the soil and provide for the ultimate treatment and disposal of the effluent. There are numerous variations on the design of the disposal field, related chiefly to the type of system chosen, site constraints, etc. Dependent on the type of disposal system, you may have to maintain a contract with a Certified Subsurface System Operator for operation and maintenance of your wastewater disposal system.

Utilization of Your Wastewater Disposal System

In order to obtain the maximum efficiency and life expectancy from your system, the following simple procedures must be adhered to:

1. **Practice water conservation.** This can include many practical considerations such as not leaving the water running while you brush your teeth, not overfilling the tub, limiting time in the shower, not replacing low flow fixtures with those of higher flows, over rinsing dishes (allow the dishwasher to do its job), immediate repair of any leaking fixtures, running washing machines and dishwashers only when full, etc.

NOTE: Washing machines generate significant volumes of wastewater. As a result, laundry activities should be spread over the week as opposed to accumulating all of laundry until the weekend.

2. **Do not utilize your wastewater disposal system as a trash can by dumping nondegradables down your drains or toilet.** These include cigarette butts, sanitary products, grease, plastics, disposable diapers, etc. Avoid use of garbage disposals. Do not retrofit garbage disposals unless the system is specifically permitted for their use. Also, do not dump harmful chemicals down the drain. These include petroleum products, paint, paint thinner, pesticides, antifreeze, etc.

Maintenance of Your Wastewater Disposal System

Every wastewater disposal system requires maintenance in order to function properly. The specific maintenance required is related to the type of system. The following are general considerations that apply to all systems.

1. **Protect your wastewater disposal system components including the tanks, access risers, disposal field and associated components.** Do not drive or park on any portion of the system. The area over the disposal field should be left undisturbed with the grass cover being maintained as you would your lawn. Location of trees and shrubs on or in close proximity to the disposal field is not recommended since roots may clog or damage your drain lines. Additionally, great care must be exercised when considering the addition of any structure(s) to the site. The location of any appurtenances cannot encroach on the installation or repair areas for your system. It is not recommended that irrigation systems be located in proximity to the disposal system since their construction can cause system damage and/or result in additional hydraulic load on the disposal field.
2. **Protect the system from excess surface and shallow groundwater.** The land surface on and around the wastewater disposal system should be landscaped to shed rainfall and runoff and prevent ponding. Be sure that foundation drains, runoff from roofs and drives, etc. are diverted away from the disposal system.
3. **Regularly have the septic tank / pump tank pumped and cleaned by a permitted septage hauler.** Although the necessary frequency of pumping varies with the household and system, most tanks need **pumping at a frequency of 3-5 years** and at any time solids occupy one-fourth to one-third of the septic tank liquid depth.

Note that all septic tanks being currently installed incorporate an effluent filter within the outlet compartment of the septic tank. This filter is to be cleaned anytime the septic tank is pumped. If plumbing becomes sluggish, this filter should be checked. If filter service is found to be necessary, the tank is to pumped, the filter cleaned and the filter reinstalled.

4. **Be alert to warning signs that your system may not be functioning properly.** These include sewage surfacing over the disposal system, sewage backups / slow draining in the house, lush growth over the disposal system, sewage odors, etc.
5. **Do not make or allow repairs to your system unless all necessary permits are obtained from Wake County Department of Environmental Services.**
6. **Commercial additives for septic tank systems -** It has generally not been demonstrated that these additives enhance the function of septic systems or reduce the need for tank pumping and other necessary maintenance.
7. **Special maintenance considerations -** As already alluded to, some of the more complex wastewater disposal systems require that you retain / maintain the services of a Certified Wastewater System Operator in order to comply with Laws and Rules and maintain a valid operation permit for your system. In Wake County this maintenance requirement should be recorded with Register of Deeds if applicable.

Where Do I Obtain Information and Assistance?

If you are purchasing a new home, you should request a copy of your wastewater system permit from the builder / seller along with information regarding any special maintenance requirements. You may also obtain information and assistance from the **Wake County Department of Environmental Services,** 336 Fayetteville Street Mall, Raleigh, NC, Telephone (919) 856-7400. Additional information is also available on Wake County's Septic and Wastewater Management webpage.

BSM 3/9/21

ALTERNATIVE 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 USING AN ENGINEER DESIGNED FLOW RATE MODIFICATION PURSUANT TO SESSION LAW 2014-120 SECTION 53 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 in Wake County effective November 21, 1988, amended effective May 23, 2002, amended 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.
This permit requires the use of **pressure manifold distribution to a mode of subsurface wastewater dispersal**. Experience and study have shown that pressure manifold systems 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 all pressure manifold 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.

System Component	Frequency	Maintenance
1. Septic Tank	6-12 months	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation.
	1-3 years	Pump septage.
2. Pump/Dosing Tank	6-12 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	6-12 months	Check for settling, pipe exposure and leakage. Includes Manifold(s).
4. Drain Field(s)	1-4 weeks	Maintain vegetative cover (mow grass and remove weeds and brush).
	6-12 months	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	6-12 months	Check and reset pressure head, flush sludge from pressure manifold (any discharge sludge and effluent is to be treated with a chlorine solution).
6. Sampling	12 Months	Influent and Effluent sampling may be requried once per year to ensure adhearance to domestic strength wastewater standards.
7. 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 or grease and non-domestic waste to system. Use of a garbage disposal is prohibited. Addition of chemical or biological additives has not 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. **Adherance to permitted flow rate.**

This system is permitted under S.L. 2014-120 for engineer flow reduction untilizing low flow fixtures and technologies, all of which must remain in use for the life of the applicable system. Neither the State nor any local government shall be liable for any damages by a system approved or permitted pursuant to this section.

_____
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_____.

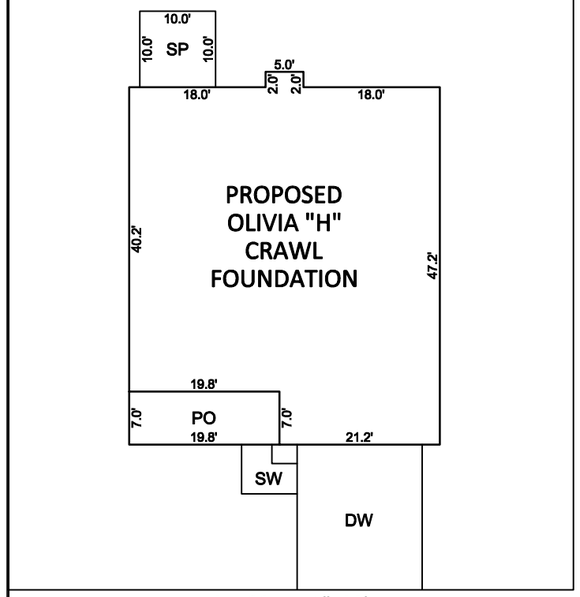
My commission expires _____ Notary Public _____

WWDS 02/17

CA PART A

RBPR-054563-2021

SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Dawn Tripp
02/26/2021 2:58:11 PM

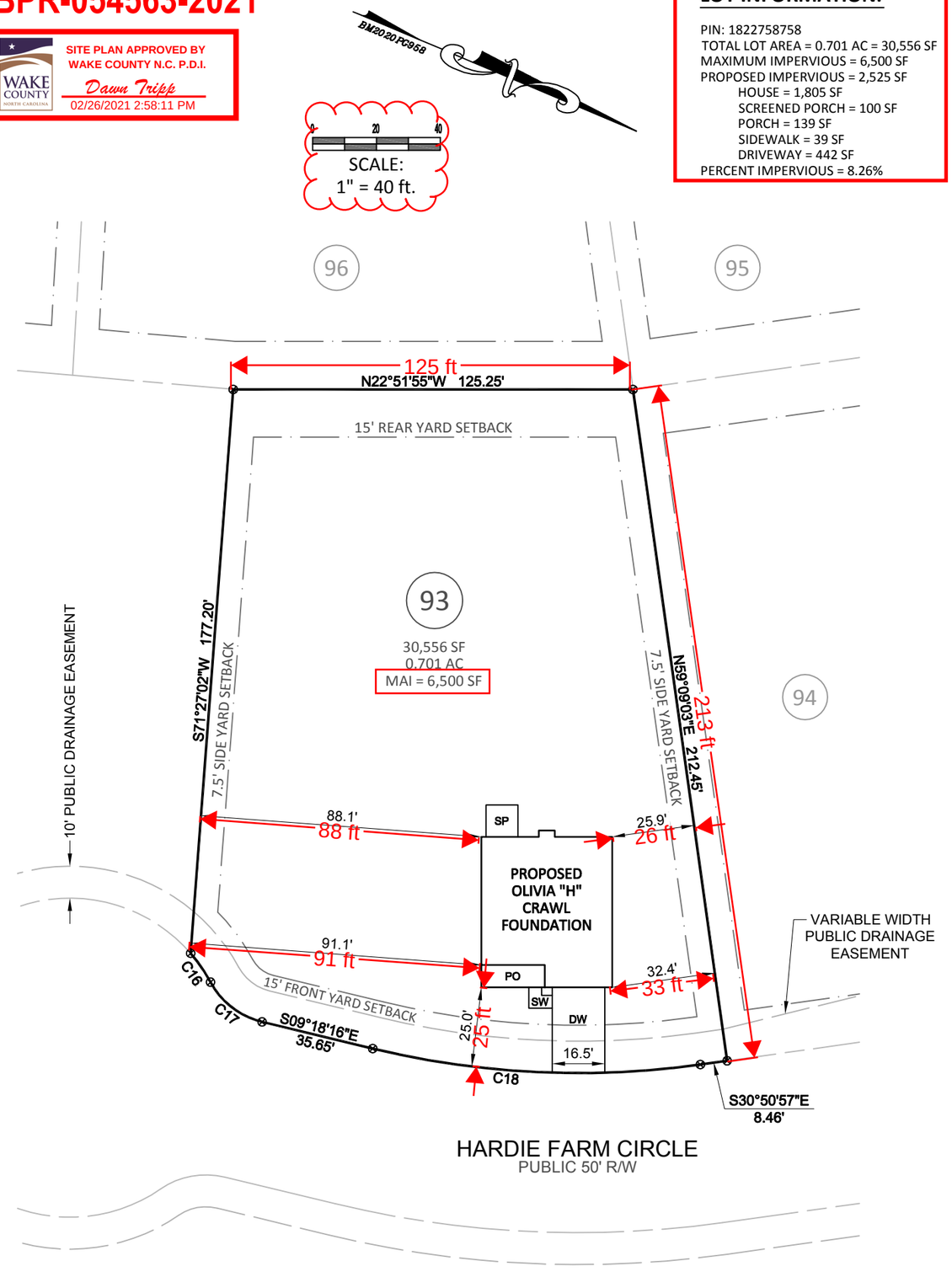


INSET SCALE: 1"=20'

NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. 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.
4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
5. THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
6. THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
7. NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
8. 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.
9. THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3720182200K, DATED DECEMBER 6, 2019.
10. ZONING IS R-40W.
11. PROPERTY OWNER: TERRAMOR HOMES, LLC.
    7208 FALLS OF NEUSE RD, STE 201
    RALEIGH, NORTH CAROLINA 27615

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C16	50.00'	10.99'	S32°35'18"W	10.97'
C17	25.00'	21.03'	S14°47'26"W	20.41'
C18	275.00'	103.41'	S20°04'36"E	102.80'

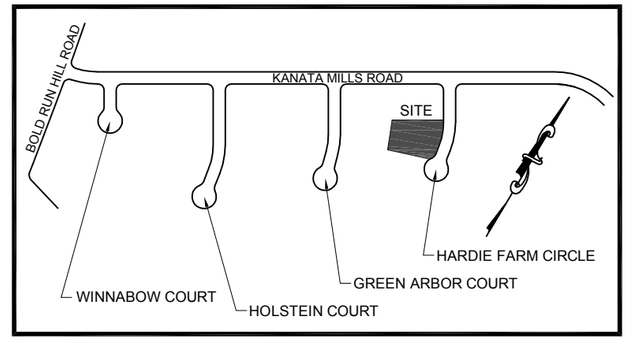


LOT INFORMATION:

PIN: 1822758758
TOTAL LOT AREA = 0.701 AC = 30,556 SF
MAXIMUM IMPERVIOUS = 6,500 SF
PROPOSED IMPERVIOUS = 2,525 SF
- HOUSE = 1,805 SF
- SCREENED PORCH = 100 SF
- PORCH = 139 SF
- SIDEWALK = 39 SF
- DRIVEWAY = 442 SF

PERCENT IMPERVIOUS = 8.26%

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
O = IRON PIPE FOUND
◉ = IRON PIPE SET
WM = WATER METER
CO = CLEANOUT
AC = AIR CONDITIONER
EB = ELECTRIC BOX
© = CABLE BOX
T = TELEPHONE PEDESTAL
☼ = LIGHT POLE
CI = CURB INLET
YI = YARD INLET
FH = FIRE HYDRANT
WV = WATER VALVE
Ⓢ = SEWER MANHOLE

BUILDING SETBACKS:

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

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:

PRELIMINARY

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

Terramor HOMES
Homes with a Touch

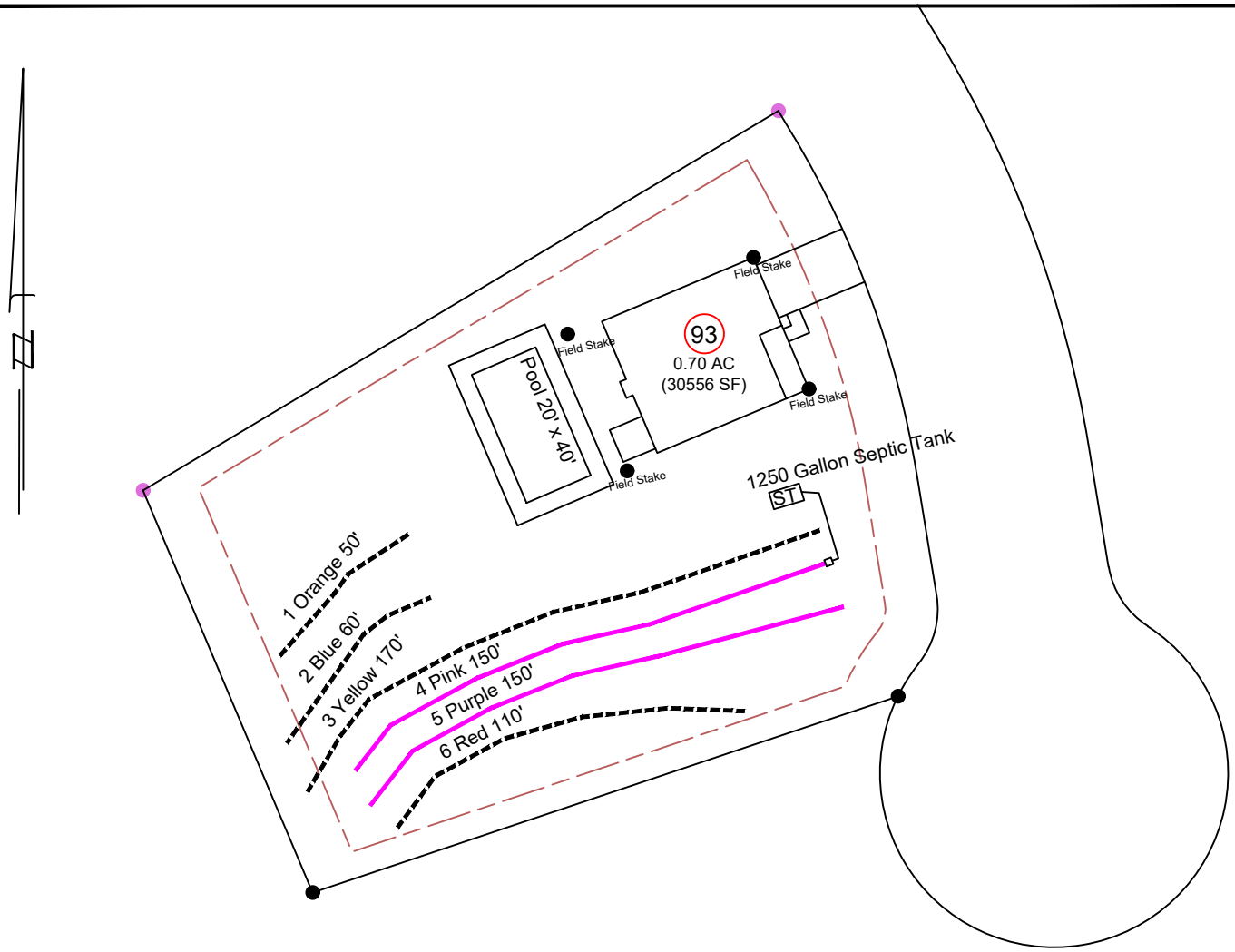
KANATA MILLS - PHASE 3 - LOT 93
8909 HARDIE FARM CIRCLE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 2/12/21 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2020, PGS 957-959 PROJECT# 190435 SCALE: 1"=40'

P:\2019 Projects\190435 The Grove at Kanata Mills - Terramor Homes\dwg\190435 - The Grove at Kanata Mills - TH.dwg 2/12/2021 11:11:57 AM, afidelino

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 indicate.
*No grading septic area.

System: ——
Repair: - - - - - -

GRAPHIC SCALE
1" = 50'

50 0 50 100

System: Gravity to D-Box
Lines: 4-5, (300')
Accepted Status System
0.3 Soil LTAR

Repair: Pressure Manifold
Lines: 1-3,6, (390')
Accepted Status System
0.3 Soil LTAR

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

4-Bedroom Septic Layout
90 Gallons per day per flow reduction
Lot 93, Kanata Mills Subdivision
Wake County, North Carolina

Job#	: 1330
Drawn By	: AH
Date	: 03/19/2021
Revision:	

CA PART C

WAKE COUNTY NORTH CAROLINA

Environmental Services

TEL 919 856 7400
FAX 919 856 7407

Water Quality Division
336 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602
www.wakegov.com/water/

Foundation Drain Request Form

Wastewater Permit: WRP-054568-2021 Building Permit: RBPR-054563-2021

Parcel PIN: 1822758758

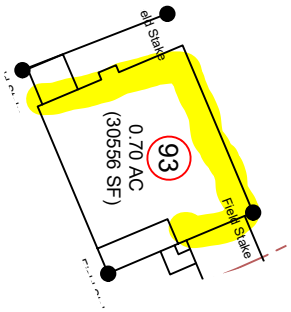
Project (Site) Address: 8909 HARDIE FARM

PLEASE CIRCLE:

Foundation Drain? YES NO **PARTIAL (demonstrate below)**

If PARTIAL FOUNDATION DRAIN is circled, please demonstrate w**here the foundations drain will be located** on the diagram below, (add decks, patios, etc. as needed)

Rear



Front

Applicant Signature: Tracy M Davis Date: 3/12/2021

CA PART D

Sheet1

Department of Environmental Services
Wake County

Approved by

Date : 03232021

Review of this document has been made only for conformance with the design concept of the project and approval shall not relieve the designer and/or contractor from responsibility for any errors therein or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristic to meet the requirements and intent of the contract documents.

Kanata Mills, Lot 93
System Tap Chart

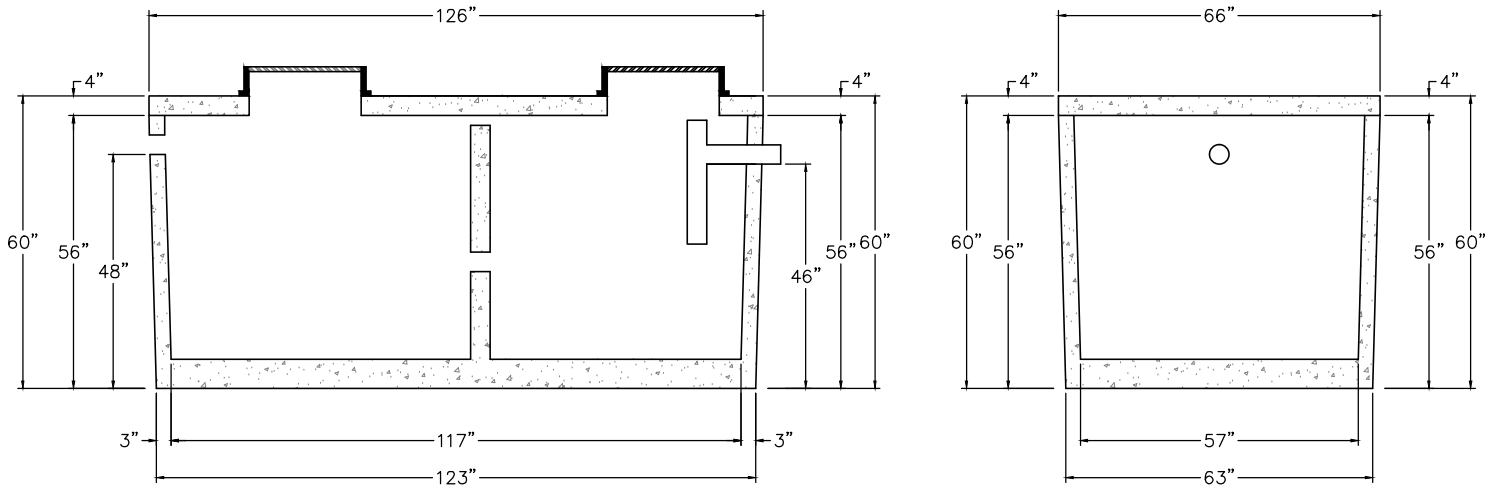
Bench Mark		is = 100.00	Location of BM					**Elevation Head**	-94.00
Pump tank elev.			100.00	**Pump elev.**	95.00		**Manifold elev.**		1.00
line	**color**	**rod read**	**Elevation**	**length**	**hole size**	**flow/tap**	**gal/day**	**trench area**	**LINE LTAR**

	total	**feet =**	**0**	**gal/min =**	**0**	**LTAR =**	**0.3000**
						LTAR + %5	**0.3150**
% of Dose Vol.	75		**Des. Flow**	**360**		**(ltar W/ INOV)**	0.4000
Dose Volume	0.00		**Pump Run=**	#DIV/0!		**(ltar W/ INOV + 5%**	0.4200
Dose Pump Time	#DIV/0!		**Tank Gal/IN**	19.65			
Drawdown in Inches	0.00						

Kanata Mills, Lot 93
Repair Tap Chart

Bench Mark								**Elevation Head**	9.70
Pump tank elev.		5.8	94.20	**Pump elev.**	89.20		**Manifold elev.**		98.50
line	**color**	**rod read**	**Elevation**	**length**	**hole size**	**flow/tap**	**gal/day**	**trench area**	**LINE LTAR**
1	Orange	2.50	97.50	50	1/2in SCH 80	5.48	52.11	150	0.3474
2	Blue	3.10	96.90	60	1/2in SCH 80	5.48	52.11	180	0.2895
3	Yellow	6.90	93.10	170	1in SCH 80	16.8	159.75	510	0.3132
6	Red	8.00	92.00	110	3/4in SCH 80	10.1	96.04	330	0.2910

	total	**feet =**	**390**	**gal/min =**	**37.86**	**LTAR =**	**0.3000**
						LTAR + %5	**0.3150**
% of Dose Vol.	75		**Des. Flow**	**360**		**(ltar W/ INOV)**	0.4000
Dose Volume	190.13		**Pump Run=**	9.51		**(ltar W/ INOV + 5%**	0.4200
Dose Pump Time	5.02		**Tank Gal/IN**	19.65			
Drawdown in Inches	9.68						



1,250 ST 323

NTS

NON TRAFFIC BEARING

DAVID BRANTLEY & SONS
37 Pine Ridge Rd.
Zebulon, NC 27597
Office 252-478-3721
Fax 919-573-0443
installer@gmail.com

PREPARED FOR : David Brantley & Sons
37 Pine Ridge Rd.
Zebulon, NC 27597

DATE : April 11, 2014

CONTACT: CORY BRANTLEY

REVISION NO.	DATE
Original Submittal	April 11, 2014
Revision 1	
Revision 2	
Revision 3	
Master Set	------

BRANTLEY TANK MODEL
1,250 ST 323

SHEET NUMBER
1 of 1

CA PART E

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, NC 27587
919-569-6704/fax 919-569-6703

Department of Environmental Services
Wake County
Approved by
Date : 03232021
Review of this document has been made only for conformance with the design concept of the project and approval shall not relieve the designer and/or contractor from responsibility for any errors therein or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristic to meet the requirements and intent of the contract documents.

March 4, 2021

Wake County Staff
Wake County Environmental Health Department
336 Fayetteville Street
Raleigh, North Carolina 27601

RE: Wastewater Daily Flow Calculations
The Grove at Kanata Mills Lot 93
8903 Hardie Farm Ct., Wake Forest, Wake County, NC
Job #1330

Dear Wake County Staff:

Central Carolina Soil Consulting (CCSC) in conjunction with Bateman Civil Survey Company are proposing wastewater daily flow calculations for a single-family home located at The Grove at Kanata Mills Lot 93 pursuant to session law 2014-120 and 2013-413. The proposed home will have **4** bedrooms and under the current flow calculations provided in the state rules would have a daily flow of **480** gallons per day. That would be based on 120 gallons per bedroom.

Household flow rates from the 15 NCAC 18A section of the state rules relied on fixture flow rates from 1982, and calculated the flows for common fixtures to established average flows for the purpose of calculating household daily flows and septic system based on those flows. The data for the historic fixture flows was taken from the EPA 2002 Onsite Wastewater Treatment Systems Manual.

The attached spreadsheet contains the flow reducing fixtures that are proposed for this home. The table includes flow rates for the flow reducing fixtures as well as flow rates from the state rules and the percentage of water savings. On average the proposed fixtures provide a 35% savings.

We are requesting a reduction of 25% for the use of low flow fixtures. This will provide an adjusted daily flow of 90 gallons per bedroom per day and a total flow of **360** gallons per day for the proposed 4-bedroom house.

Should you have any questions or comments please contact Matt Burdette at 919-422-2827.

Sincerely,

CENTRAL CAROLINA SOIL CONSULTING PLLC

Matt Burdette
Environmental Specialist

BATEMAN CIVIL SURVEY COMPANY
NCBELS# C-2378.

Tom Speight, P.E.
(seal)

Attachments

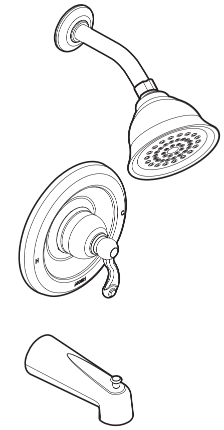
Groves at Katana Lot 93						
	Item		**Gal/min. or flush**	**Number of Fixures**	**Base Flow From 1982**	**Percent Water Savings**
Master	Shower Head	Moen T2122	2.5 gal/minute	1	5.5 gal/minute	55%
	Lavatory Faucet	Moen WS84003	1.2 gal/minute	2	3.0 gal/minute	60%
	Tub Trim	Fill & Release	Fill & Release	1	Fill & Release	0%
Kitchen	Kitchen Sink Faucet	Moen 67315	2.2 gal/minute	1	3.0 gal/minute	27%
Guest Bath	Lavatory Faucet	Moen WS84003	1.2 gal/minute	1	3.0 gal/minute	60%
	Shower Head	Moen T2122	2.5 gal/minute	1	5.5 gal/minute	55%
Upstairs Hall Bath	Lavatory Faucet	Moen WS84003	1.2 gal/minute	2	3.0 gal/minute	60%
	Shower Head	Moen T2123	2.5 gal/minute	1	5.5 gal/minute	55%
Toilets	Master, Guest, Upstairs	Maxwell 21-102	1.6 gal /flush	3	3.5 gal/minute	54%

FIXTURES	**TOILET**	**FAUCET**	**SHOWER**	**LEAK**	**BATH**	**OTHER**	**DISHWASHER**	**CLOTHES WASHER**	**TOTALS**
PERCENT OF HOUSE HOLD WATER USE	24%	20%	20%	12%	3%	3%	2%	16%	**100%**
GALLONS PER DAY (480 BASE)	115	96	96	58	14	14	10	77	**480**
PERCENT OF SAVINGS FROM WATER SAVING FIXURES	54%	55% avg	55%	0%	0%	0%	0%	0%	**35%**
ADJUSTED FLOW (GALLONS)	53	43	43	58	14	14	10	77	**312**

MOEN

Buy it for looks. Buy it for life.®

Specifications



Traditional® POSI-TEMP®
Single-Handle Tub/Shower Trim

Models: T2121 series - valve trim only
T2122 series - shower trim only
T2123 series - tub/shower trim

Valves: 62300 series
2500 series

WaterSense Meets EPA Criteria
Certified by IAPMO R&T

EP Suffix Models Only

DESCRIPTION
- Metal construction with various finishes identified by suffix
- Includes showerhead, arm, flange and tub spout

OPERATION
- Lever style handle
- Handle operates counterclockwise through a 270˚arc with off at 6 o'clock and maximum hot at the 9 o'clock position. Shut off in clockwise direction
- Adjustable temperature limit stop to control maximum hot water temperature
- Pressure balancing mechanism maintains selected discharge temperature to ± 2°

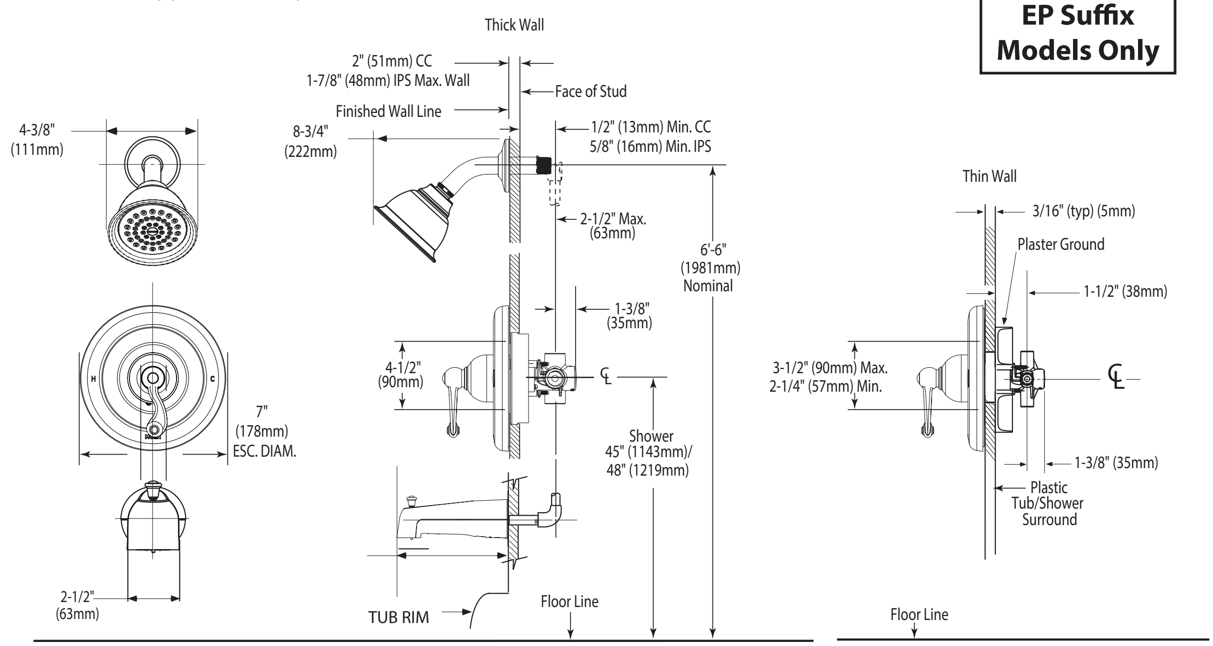
FLOW
- Showerhead is limited to 2.5 gpm (9.5 L/min) at 80 psi
- EP suffix models are limited to 2.0 gpm (7.6 L/min) max for products manufactured prior to June 30, 2018. EP suffix models manufactured after June 30, 2018 are limited to 1.75 gpm (6.7 L/min) max.
- NH suffix models contain no showerhead

CARTRIDGE
- 1222 cartridge design
- Nonmetallic/nonferrous and stainless steel materials
- Accommodates back to back installations

STANDARDS
- Third party certified to meet ASME A112.18.1/CSA B-125.1 and all applicable requirements referenced therein
- EP suffix models are third party certified to Watersense®
- **ADA** ♿ for lever handles

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
- 10 year limited warranty when used in a multifamily installation
- 5 year limited warranty when used in a commercial installation

Visit www.moen.com/support for complete details and limitations



M•pact System

CRITICAL DIMENSIONS

(DO NOT SCALE)

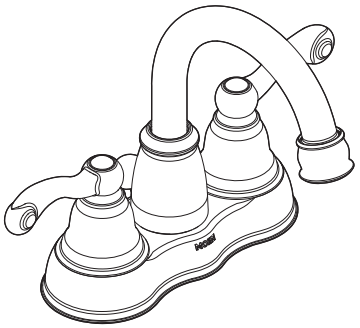
Rev. 12/17

FOR MORE INFORMATION CALL: 1-800-BUY-MOEN
www.moen.com

07/12/2018 SPC14993 50000023744S
Released 00

MOEN®

Specifications



TRADITIONAL®

Two-Handle 4" Centerset Lavatory Faucet

Models:
WS84003 series includes 50/50 waste

DESCRIPTION
- Metal construction with finished identified by suffix
- ½" IPS connections will accept standard ball nose connection for 3/8" tubing
- Installation through 3 holes, 1-1/8" min. diameter, and 4" on center
- Includes pop-up waste assembly

OPERATION
- Lever handles
- Maximum handle rotation angle is 90° to full on
- Hot side counterclockwise to open (clockwise to close)
- Cold side clockwise to open (counterclockwise to close)
- Rotating spout

FLOW
- Water usage is limited to the maximum flow rates as indicated by the corresponding product markings
  - 1.2 gpm max (4.5 L/min) at 60 psi

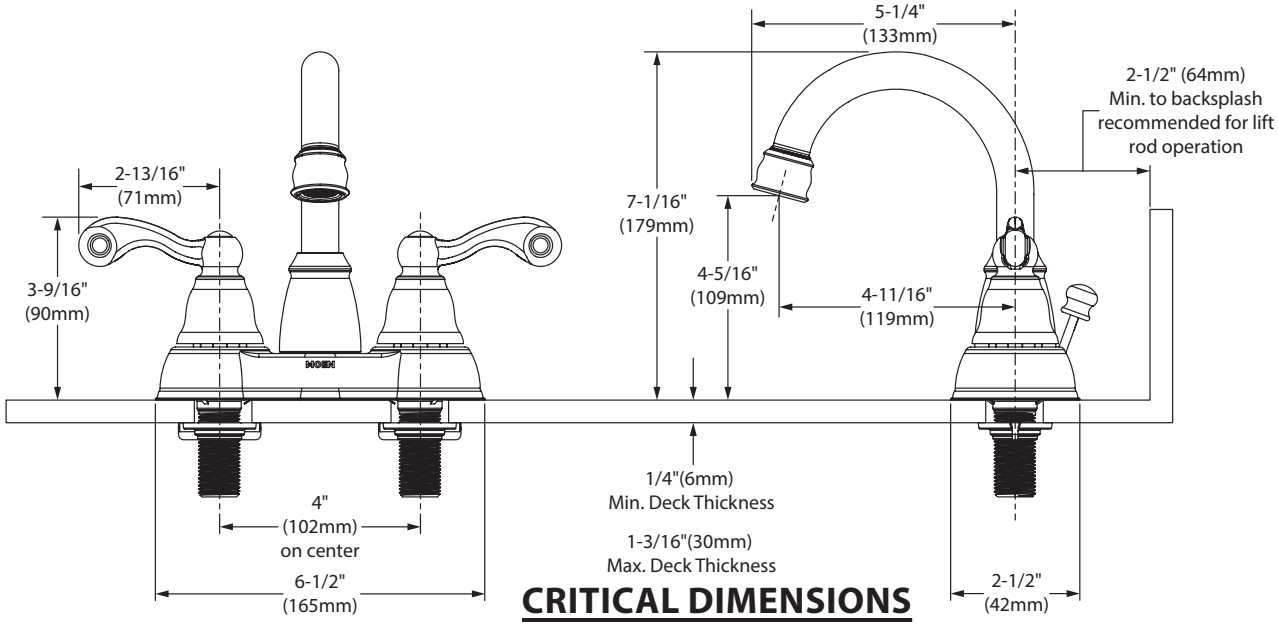
CARTRIDGE
- 1224 cartridge
- Nonmetallic and stainless steel material

STANDARDS
- Third party certified at WaterSense®, ASME A112.18.1/CSA B125.1, and all applicable requirements referenced therein including NSF 61/9 & 372
- Products marked with 1.2 gpm are compliant with California water efficiency regulations
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- ADA for lever handles

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
- 10 year limited warranty when used in a multifamily installation
- 5 year limited warranty when used in a commercial installation

Visit www.moen.com/support for complete details and limitations

OPTIONS *(See Illustrated Parts page)*
- Thin and thick deck mounting hardware kits available



CRITICAL DIMENSIONS

(DO NOT SCALE)

FOR MORE INFORMATION CALL: 1-800-BUY-MOEN
www.moen.com

MOEN

Buy it for looks. Buy it for life.®

Specifications

FAUCET DESCRIPTION
- Metal construction with chrome plated or brushed chrome finish
- Hydrolock™ quick connect installation
- Pullout spray with 68" braided hose)
- 1/2" IPS connections will accept standard ball nose connection for 3/8" tubing

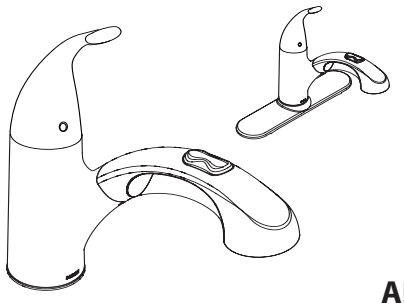
OPERATION
- Lever style handle
- Temperature controlled by 180˚ arc of handle travel
- Spout rotation is 120˚
- Operates with less than 5lbs. of force
- Operates in stream or spray mode in the pullout or retracted position

FLOW
- Aerator is limited to 2.2 gpm (8.3 L/min) at 60 psi

CARTRIDGE
- 1225 cartridge design
- Engineered polymers, nonferrous and stainless steel materials

STANDARDS
- Third party certified to CSA B-125, ASME A112.18.1M, NSF 61 Section 9, California Proposition 65, ANSI A117.1 and all applicable requirements referenced therein
- The backflow protection system in this device consists of two independently operating check valves, a primary and a secondary which prevent backflow.

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations

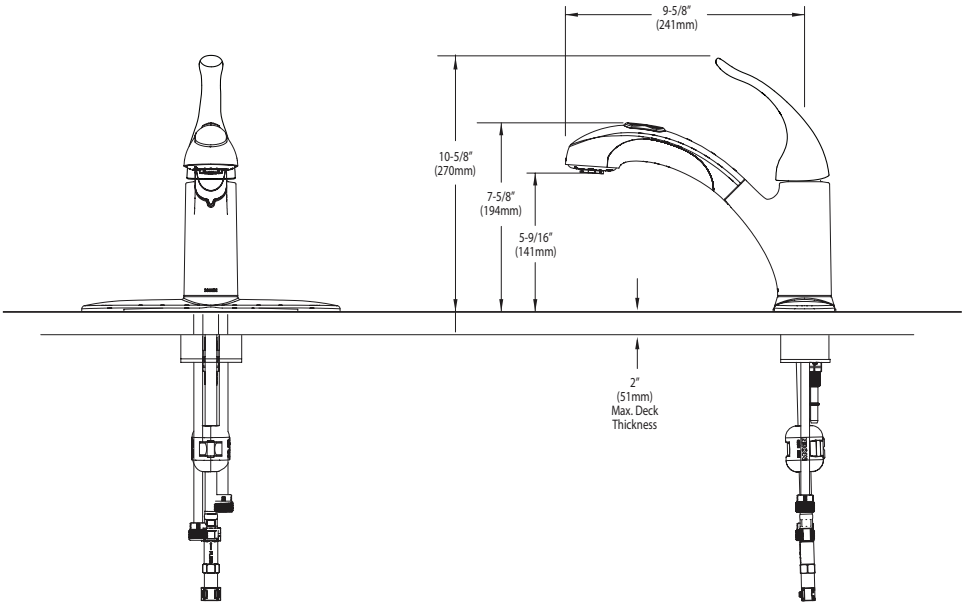


ADA

Single Control Kitchen Faucet Models:

Models: 67315C, 67315SL

NOTE: DESIGNED TO INSTALL
THRU 1 OR 3 HOLES 1-1/4" (32mm) MIN. DIA.



CRITICAL DIMENSIONS

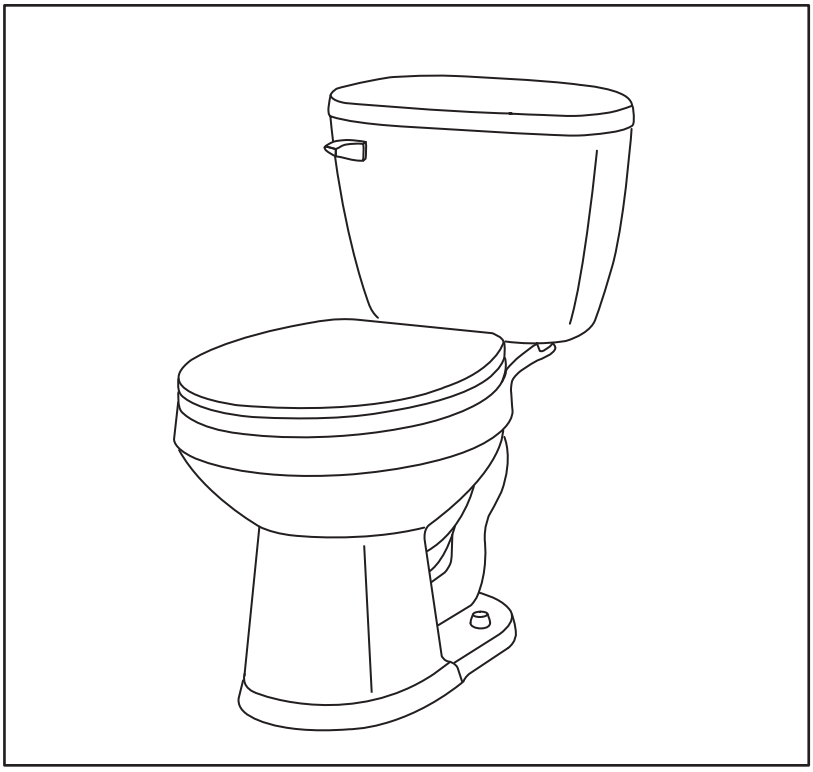
(DO NOT SCALE)

MAXWELL® SE
Round Front Toilet

12″ Rough-in

Features:

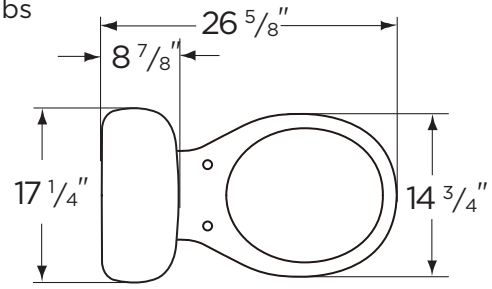
- 1.6 gpf/6 Lpf two-piece toilet
- Round Front bowl
- Dual-fed siphon jet
- 2″ flush valve
- Glazed trapway
- Color matched front tank lever (white only)
- Optional insulated non-sweating tank
- Optional right-handed trip lever
- Available in White, Bone and Biscuit
- 2 bolt caps

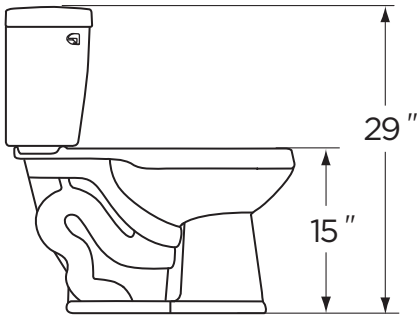


Specifications: *Bowl*—#21-152 Round Front Bowl *Tank*—#28-170
Seat not included

Dimensions:

Height	29″
Width	17 1/4″
Depth	26 5/8″
Rough-in	12″
Water Surface from Rim	5″
Trapway	1 3/4″
Water Surface	9 5/8″ x 7 5/8″
Water Seal	2 1/4″
Shipping Weight	74 lbs





THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY TOILET (HET) WITH AN AVERAGE CONSUMPTION OF 1.1 GPF OR LESS.

THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A LOW CONSUMPTION WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.6 gpf (6Lpf) OR LESS.

Job Name	
Date	
Model Specified	
Quantity	
Customer	
Contractor	
Architect/engineer	

www.gerberonline.com

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-054568-2021** **APPLICATION DATE:** 02/26/2021 **BLDG. PERMIT #: RBPR-054563-2021**

PIN: 1822758758 **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: 8909 HARDIE FARM CIR

SUBDIVISION: Kanata Mills PH 3 **LOT:** 93 **ACRES:** 0.70

DIRECTIONS: Take 98 North towards Durham Take right on Camp Kanata Road go 5-6 miles and take left into Groves at Kanata

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:** Bobby Weaver **DATE:** 03/16/2021

NUMBER OF BEDROOMS: 4 **OR TOTAL NUMBER OF OCCUPANTS:** 8
PERMITTED DESIGN FLOW: 360 GPD
BASEMENT: No **BASEMENT PLUMBING:** No
WASTEWATER STRENGTH: Domestic
SYSTEM TYPE: II C
LTAR: 0.300
EXISTING SYSTEM UTILIZED:
PRETREATMENT STRENGTH REQUIRED: None
EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL: No

MAXIMUM TRENCH DEPTH: 18 INCHES
PUMP REQUIRED: No

SPECIFIC SYSTEM REQUIREMENTS: -System designed for 4 bedroom home, having 360gpd using Flow Reduction.
-Future Repair is a IIIB type system. With a Max Trench depth of 18" and a .3 LTAR.
-Site serviced by community water.
-No cutting, grading, alterations, or utilities in septic area.
-Maintain all required setbacks.

ISSUED BY:  **DATE:** 03/16/2021

RBPR-054563-2021

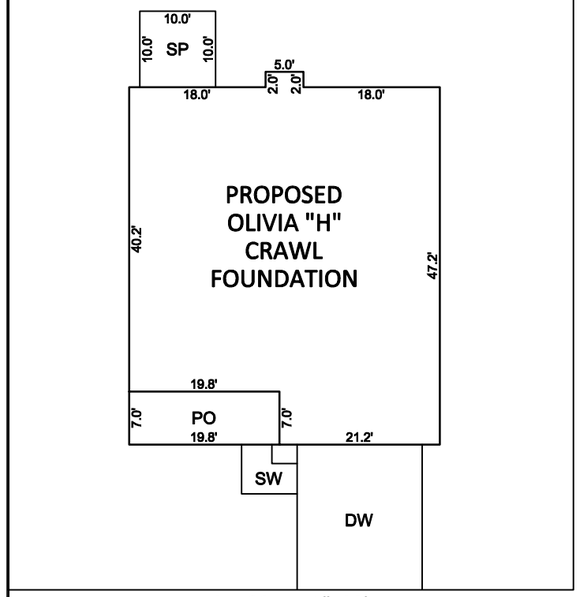
SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Dawn Tripp
02/26/2021 2:58:11 PM

BM2020,PG958

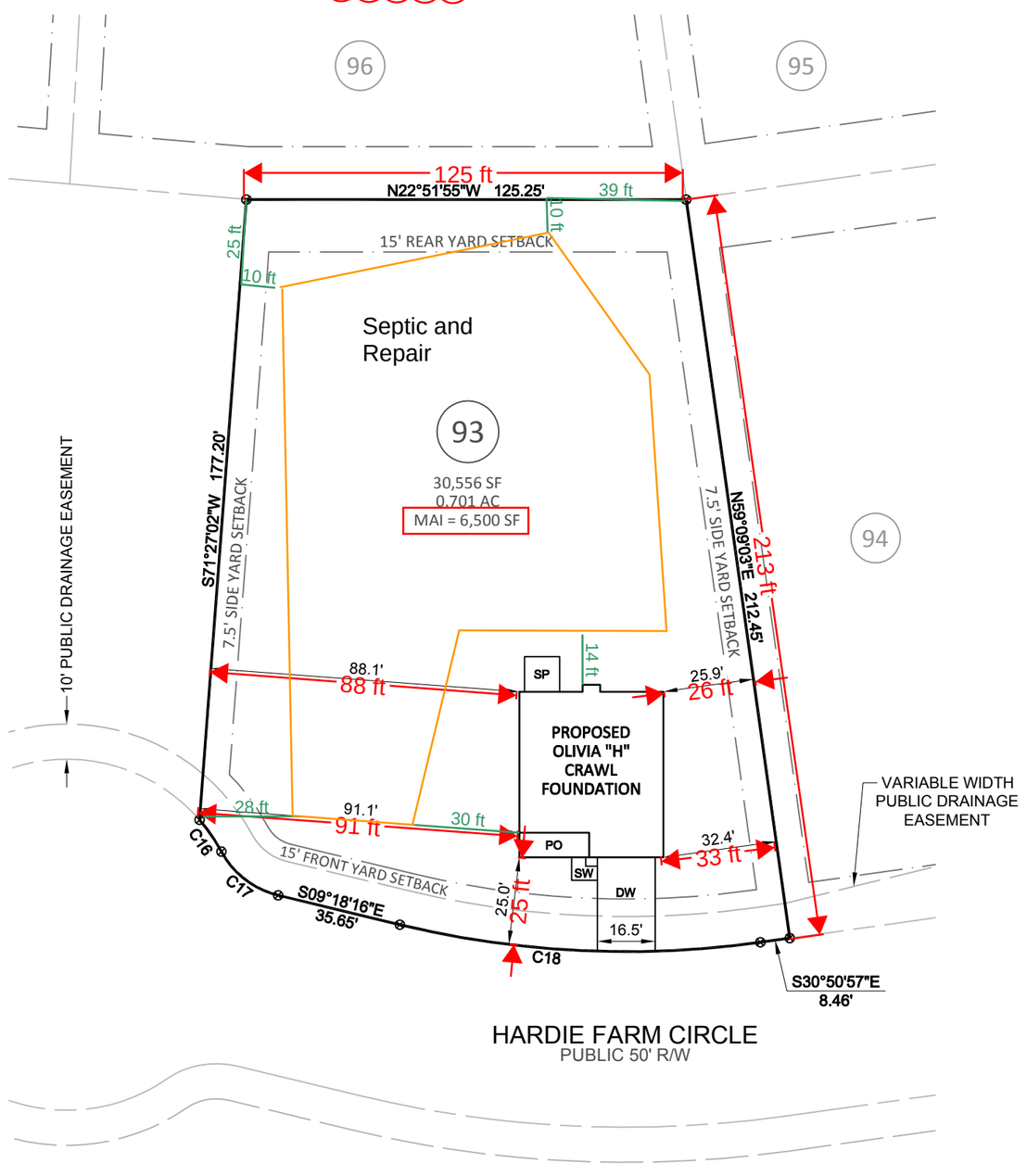
SCALE:
1" = 40 ft.

LOT INFORMATION:

PIN: 1822758758
TOTAL LOT AREA = 0.701 AC = 30,556 SF
MAXIMUM IMPERVIOUS = 6,500 SF
PROPOSED IMPERVIOUS = 2,525 SF
HOUSE = 1,805 SF
SCREENED PORCH = 100 SF
PORCH = 139 SF
SIDEWALK = 39 SF
DRIVEWAY = 442 SF
PERCENT IMPERVIOUS = 8.26%



INSET SCALE: 1"=20'

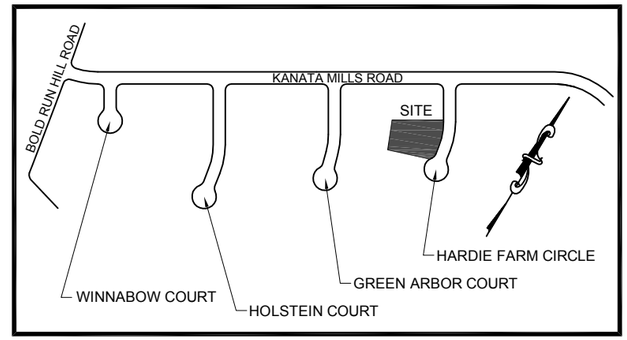


NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. 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.
4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
5. THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
6. THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
7. NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
8. 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.
9. THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3720182200K, DATED DECEMBER 6, 2019.
10. ZONING IS R-40W.
11. PROPERTY OWNER: TERRAMOR HOMES, LLC.
7208 FALLS OF NEUSE RD, STE 201
RALEIGH, NORTH CAROLINA 27615

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD DIRECTION	CHORD
C16	50.00'	10.99'	S32°35'18"W	10.97'
C17	25.00'	21.03'	S14°47'26"W	20.41'
C18	275.00'	103.41'	S20°04'36"E	102.80'

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
O = IRON PIPE FOUND
◉ = IRON PIPE SET
WM = WATER METER
CO = CLEANOUT
AC = AIR CONDITIONER
EB = ELECTRIC BOX
© = CABLE BOX
T = TELEPHONE PEDESTAL
☼ = LIGHT POLE
CI = CURB INLET
YI = YARD INLET
FH = FIRE HYDRANT
WV = WATER VALVE
Ⓢ = SEWER MANHOLE

BUILDING SETBACKS:
FRONT = 15 ft
REAR = 15 ft
SIDE = 7.5 ft
CORNER = 15 ft
PERIMETER = 30 ft

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:

PRELIMINARY

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

Terramor HOMES
Homes with a Touch

KANATA MILLS - PHASE 3 - LOT 93
8909 HARDIE FARM CIRCLE, WAKE FOREST, NC
NEW LIGHT TOWNSHIP, WAKE COUNTY

DATE: 2/12/21 DRAWN BY: ASF CHECKED BY: SPC

REFERENCE: BM 2020, PGS 957-959 PROJECT# 190435 SCALE: 1"=40'

P:\2019 Projects\190435 The Grove at Kanata Mills - Terramor Homes\dwg\190435 - The Grove at Kanata Mills - TH.dwg 2/12/2021 11:11:57 AM, afidelino