



CATAMOUNT

consulting engineers, pllc

PO Box 65067 | Burlington, VT 05406 | (802) 598-8081 | www.ccevt.com

January 27, 2025

Tyler Machia
Zoning Administrator
Town of Richmond
P.O. Box 285
Richmond, VT 05477

**Re: Infrastructure Certification
Planned Unit Development
112 East Main St.
Richmond, VT 05477**

Dear Tyler,

Please find attached the following in conjunction with the Planned Unit Development project located at 112 East Main St. in Richmond, VT –

- Related Forcemain Pressure & Leakage Test performed on 5/22/2024.
- Related Grinder Pump Station Water Test performed on 5/22/2024.
- Plan sheet C1.0 Proposed Conditions Site Plan Revised 9/3/2024.
- Installation Certification for State Permit WW-4-6009

The municipal water and sewer connections were performed in coordination with the Town of Richmond Public Works Department and their related specifications. Additionally, the municipal water and sewer service systems were constructed, tested and certified in conjunction with the current State of Vermont Wastewater System and Potable Water Supply Rules.

Based on the results of these tests, along with the site inspections performed by Catamount Consulting Engineers, PLLC (CCE) during the utility and infrastructure construction over the summer of 2024, we hereby certify that all of the proposed public and private infrastructure related to this project was constructed in general compliance with the Town of Richmond Subdivision Regulations and other standards established by the Town of Richmond. Including the Town Zoning Regulations and Public Work Standards.

If upon review of this certification and associated plans and attachments, you have any questions or concerns, please feel free to contact me.

Sincerely,

Jeff

Jeffrey Olesky, P.E.

Cc: Matt Parisi, Owner (via email)
CCE File #23037



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Pressure & Leakage Test Report

Date: 5/22/24 Project: Parisi-Richmond #23037

Contractor: Parisi Project Location: 112 E. Main St., Richmond, VT

Persons Present: Matt Parisi, Jeff Olesky (CCE)

Test Data

Section Tested: 1100 LF of 2" SCH 40 PVC Force main

Testing Equipment: water pump, pressure gauge, fittings

Test Pressure: 50 psi

Allowable Leakage/Hour, Smaller of: $L = S \cdot D \cdot (P^{0.5}) / 148,000$ or $L = N \cdot D \cdot (P^{0.5}) / 7,400$

Where: L = allowable leakage in gallons/hour
S = pipe length in feet
N = number of pipe joints
D = nominal pipe diameter in inches
P = average test pressure in PSI

$$L = \frac{100(2)\sqrt{50}}{148,000} = 0.01 \text{ gal}$$

Calculated Allowable Leakage (gallons/hour): 0.01

Time	Initial Pressure (psi)	New Pressure (psi)	Water Added (Oz.)
1:15 pm	50	—	—
2:20 pm	—	50	—
3:15 pm	—	50	—

Leakage Rate Over Test Period (gallons/hour): ∅

Result: pass or fail

Engineer's Acceptance:



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Concrete Structure Test Report

Date: 5/21/24 + 5/22/24 Project: Parisi- Richmond #23037
Contractor: Parisi Project Location: 112 E. Main St., Richmond, VT
Persons Present: Matt Parisi, Jeff Olesky (CCE)

Structure Type: Conc. Grinder Pump Station Structure #: 1

Station/Street/Location: On Lot Structure Size: 1,000 gal.

	<u>Start</u>	<u>Stop</u>	<u>Change</u>
Time:	<u>0:00</u>	<u>24:00</u>	<u>24 hr.</u>

Allowable Loss: ∅ Result: Pass or Fail

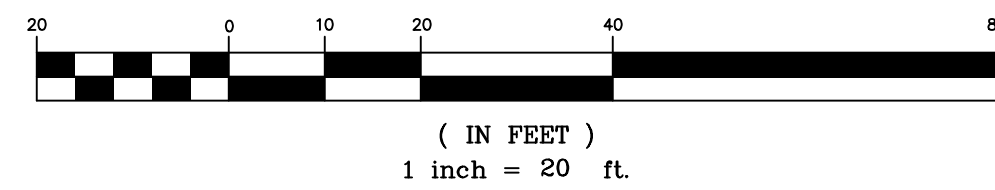
Engineer's Acceptance: 

LEGEND

- 985 --- EXISTING CONTOUR
- 985 — PROPOSED CONTOUR
- — — APPROXIMATE PROPERTY LINE
- — — APPROXIMATE SETBACK LINE
- — — APPROXIMATE EASEMENT LINE
- SS — APPROXIMATE GRAVITY SEWER LINE
- FM — APPROXIMATE SEWER FORCE MAIN
- ST — APPROXIMATE STORM DRAINAGE LINE
- W — APPROXIMATE WATER LINE
- OETC — APPROXIMATE OVERHEAD ELEC./TEL./COM. LINE
- UETC — APPROXIMATE UNDERGROUND ELEC./TEL./COM. LINE
- G — APPROXIMATE GAS LINE
- □ □ WOODEN FENCE
- — — DRAINAGE SWALE/DITCH
- — — APPROXIMATE 100 YEAR FLOODPLAIN
- — — APPROXIMATE EDGE OF WOODS
- ⊙ DECIDUOUS TREE
- ⊙ CONIFEROUS TREE
- ⊙ SHRUB/PLANTING
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ DRAINAGE CATCH BASIN
- ⊙ HYDRANT
- ⊙ WATER VALVE
- ⊙ DRILLED WELL
- ⊙ POWER POLE
- ⊙ GUY WIRE
- ⊙ LIGHT POLE
- ⊙ SIGN POST
- ⊙ TEST PIT
- ⊙ PERCOLATION TEST
- ⊙ IRON PIPE/ROD FOUND/SET
- ⊙ CONCRETE MONUMENT FOUND/SET
- ⊙ PROJECT BENCHMARK



GRAPHIC SCALE



GENERAL NOTES

- 1) UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SITE SHOWN. EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONTACT DIGSAFE (888-344-7233) PRIOR TO CONSTRUCTION, FIELD VERIFY ALL UTILITY CONFLICTS AND REPORT THEM TO THE DESIGNER. ANY EXISTING UTILITIES NOT INCORPORATED INTO THE FINAL DESIGN SHALL BE REMOVED OR ABANDONED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 2) THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK AND SHALL COORDINATE ALL REQUIRED INSPECTIONS.
- 3) THE CONTRACTOR IS RESPONSIBLE FOR SAFE CONSTRUCTION OPERATIONS AND SHALL CONFORM TO ALL APPLICABLE REGULATIONS FOR SITE SAFETY.
- 4) THE CONTRACTOR SHALL NOTIFY THE DESIGNER OF ANY SITE CONDITIONS NOT REPRESENTED ON THE PLANS THAT INFLUENCE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- 6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY FOR COMPLETE AND OPERABLE FACILITIES AND UTILITIES.
- 7) COORDINATES SHOWN ARE BASED UPON AN ASSUMED DATUM. ORIENTATION IS BASED UPON THE SURVEY PLAT REFERENCED IN NOTE 8 BELOW.
- 8) PROPERTY LINE INFORMATION BASED UPON A PLAT ENTITLED "PROPOSED P.U.D. OF LANDS OF KNOWLES & PARISI - 112 EAST MAIN STREET - RICHMOND, VERMONT", DATED AUGUST, 2024, PREPARED BY VERMONT MAPPING & SURVEY CO., LLC. AND RECORDED IN MAPSLIDE _____ OF THE TOWN OF RICHMOND LAND RECORDS. MONUMENTATION FOUND WAS CONSISTENT WITH THE RECORDED PLAT. THE PROPERTY LINES, EASEMENTS, AND OTHER REAL PROPERTY DESCRIPTIONS PROVIDED IN THIS PERMIT APPLICATION ARE FOR PERMITTING PURPOSES ONLY. THEY DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS DESCRIBED IN 26 V.S.A. & 2502(4), AND SHALL NOT BE USED IN LIEU OF A SURVEY AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHTS. THIS IS NOT A BOUNDARY SURVEY AND IS NOT INTENDED TO BE USED AS ONE.

ZONING REQUIREMENTS

ZONING DISTRICT - VILLAGE RESIDENTIAL/COMMERCIAL (V R/C)
 OVERLAY DISTRICTS - NONE

DIMENSIONAL REQUIREMENTS -

	REQUIRED	PROPOSED
LOT SIZE (SF) -	10,000	±15,697
MIN. LOT FRONTAGE (FT.) -	75	±72.6 ¹
MAX. LOT COVERAGE (%) -	60	±47.5
MAX. BUILDING HEIGHT (FT.) -	35	<35
FRONT YARD SETBACK (FT.) -	10	±5.5 ¹
SIDE YARD SETBACK (FT.) -	10	±11.0
REAR YARD SETBACK (FT.) -	15	±16.0

NOTES:

1. REPRESENTS EXISTING, NON-CONFORMING DIMENSION THIS APPLICATION SEEKS TO RETAIN.

DESIGN FLOWS

WATER SUPPLY -

EXISTING WATER DEMAND -
 2 UNITS @ 280 GPD/UNIT (MUNICIPAL CONNECTION) = 560 GPD
 1 UNIT @ 360 GPD/UNIT (MUNICIPAL CONNECTION) = 360 GPD
 TOTAL EXISTING WATER DEMAND = 920 GPD

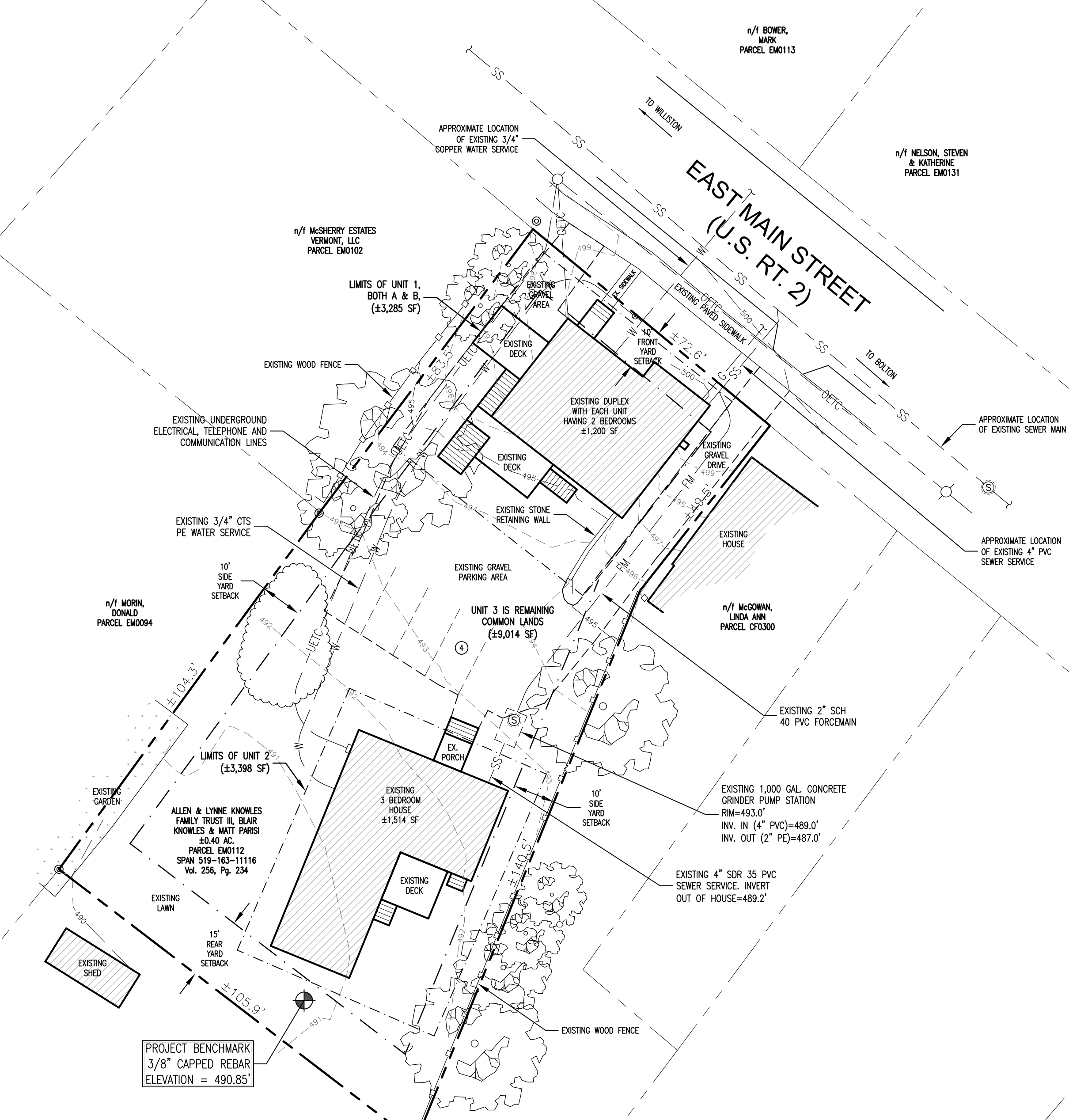
WASTEWATER FLOW -

EXISTING SEWER FLOW -
 3 UNITS @ 210 GPD/UNIT (MUNICIPAL CONNECTION) = 630 GPD
 TOTAL PROPOSED SEWER FLOW = 630 GPD

PARKING REQUIREMENTS

REQUIRED - 1.5 SPACES/UNIT @ 2 UNITS = 3 SPACES
 1 SPACE/HOUSE = 1 SPACE

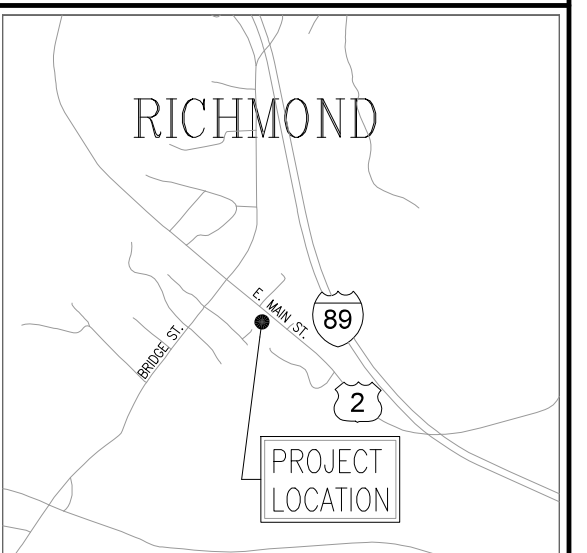
PROPOSED -
 3 ALONG BACK OF EXISTING DUPLEX = 3 SPACES
 1 IN FRONT OF NEW HOUSE = 1 SPACE
 TOTAL PROPOSED PARKING SPACES = 4 SPACES



OWNER:
 Allen & Lynne Knowles Family Trust III, Blair Knowles and Matt Parisi
 112 E. Main St.
 Richmond, VT 05477

PROJECT:
 Proposed Planned Unit Development
 112 E. Main St.
 Richmond, VT 05477

SHEET TITLE:
 Proposed Conditions Site Plan



LOCATION MAP 1" = ±2,000'

<input type="checkbox"/>	PRELIMINARY
<input checked="" type="checkbox"/>	FINAL
<input type="checkbox"/>	NOT FOR CONSTRUCTION
<input type="checkbox"/>	FOR CONSTRUCTION

PROJECT NO.: 23037
DATE: SEPTEMBER 28, 2023
SCALE: 1" = 20'

REV. NO.	DESCRIPTION	DATE
1	UPDATED SITE PLAN	9/3/24
2		
3		
4		
5		
6		
7		
8		
9		
10		

SHEET NUMBER:
 C1.0



State of Vermont
Department of Environmental Conservation

Agency of Natural Resources
Drinking Water and Groundwater Protection Division

WASTEWATER SYSTEM AND POTABLE WATER SUPPLY INSTALLATION CERTIFICATION

LAWS/REGULATIONS INVOLVED

10 V.S.A. Chapter 64, Potable Water Supply and Wastewater System Permit
Wastewater System and Potable Water Supply Rules, Effective November 06, 2023

System Identification

Permit Number: WW-4-6009 Lot Number: 1

Certification

I hereby certify that, in the exercise of my reasonable professional judgement, the installation-related information submitted is true and correct and that the potable water supply and wastewater system were installed in accordance with the permitted design and all the permit conditions, were inspected, were properly tested, and have successfully met those performance tests.

This document was digitally signed by Jeffrey Olesky, Designer, on 6/12/2024 3:07:19 PM through the submission of ANROnline Installation Certification Form.

This certification is based on an inspection of the related systems on 05/22/2024.

Required Information for Town Records

Place Town Recording Stamp Here

Parcel ID: EM0112

SPAN: 519-163-11116

Town: Richmond

Landowner's Name(s): Matthew Parisi &
Blair Knowles

911 Address: 112 E. Main St., Richmond, VT
05477