



PO Box 407
Moody, ME 05054

May 25, 2023

Amanda Lassard, Planning Director
Town of Windham Planning Board
8 School Road
Windham, Maine 04062

Re: Modification to Pretreatment Unit
963 Roosevelt Trail, Windham
Tax Map 21; Lot 19A

Dear Amanda and Board Members:

Please find attached updated plans which includes a revised wastewater pretreatment system (Dwgs 2 & 4) to address compliance with nitrogen loading and the groundwater protection ordinance. We are proposing to make a change to the existing wastewater pretreatment facility and use an alternative system, called FujiClean. FujiClean is an approved wastewater pretreatment technology that will provide nitrogen reduction at the discharge of the unit which would meet the required levels at the property line. We have included supporting documentation from the State of Maine DHHS regarding their approval of this wastewater pretreatment system, an updated HHE-200 form, and a waiver request form under Ordinance Sec. 120-811B(2)(c) for a groundwater impact analysis.

We would request to be put on the next available Planning Board meeting for a final vote.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Erik Heyland'.

Erik Heyland
Heyland Development, LLC

TOWN OF WINDHAM SITE PLAN APPLICATION

Performance Standards Waiver Request Form (Section 808 – Site Plan Review, Waivers)

For each waiver request from the Performance Standards detailed in Section 812 of the Town of Windham Land Use Ordinance, please submit separate completed copy of this waiver request form for all waivers requested.

Project Name: Roosevelt Apartment Homes

Tax Map: 21

Lot(s): 19A

**Waivers are requested from the following Performance and Design Standards
(Add forms as necessary):**

| Ordinance Section | Standard | Mark which waiver this form is for |
|-------------------|-----------------------------|-------------------------------------|
| 120-811B(2)(c) | Groundwater impact analysis | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> |
| | | <input type="checkbox"/> |
| | | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

- a. Describe how a waiver from the standard indicated above will improve the ability of the project to take the property's pre-development natural features into consideration. Natural features include, but are not limited to, topography, location of water bodies, location of unique or valuable natural resources, relation to abutting properties or land uses. Attach a separate sheet if necessary.

See attached supporting documentation regarding the wastewater pretreatment unit performance

(continues next page)

Ordinance Section: 120-811B(2)(c)

b. Will the waiver have an impact on any of the following criteria?

| | Yes | No |
|--|--------------------------|-------------------------------------|
| Water or air pollution | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Light pollution or glare | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Water supply | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Soil erosion | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Traffic congestion or safety | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Pedestrian safety or access | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Supply of parking | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Sewage disposal capacity | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Solid waste disposal capacity | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Scenic or natural beauty, aesthetics, historic sites, or rare or irreplaceable natural areas | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Flooding or drainage issues on abutting properties | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| The Town's ability to provide the subdivision with public safety services (if subdivision) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If granting the waiver will result in an impact on any of the criteria above, please provide more detail below.

Janet T. Mills
Governor

Jeanne M. Lambrew, Ph.D.
Commissioner



Maine Department of Health and Human Services
Maine Center for Disease Control and Prevention
11 State House Station
286 Water Street
Augusta, Maine 04333-0011
Tel; (207) 287-8016; Fax (207) 287-9058
TTY: Dial 711 (Maine Relay)

May 24, 2023

Town of Windham
Planning Department
Windham, ME
By e-mail, Care of Amanda L. Lessard, Planning Director

Subject: Heyland Apartments, 963 Roosevelt trail, Windham, ME

Dear Ms. Lessard:

The Division of Environmental Health completed its review for an engineered subsurface wastewater system to serve a 50-unit multifamily building at 963 Roosevelt trail on July 16, 2021, under a letter by Nathan Saunders, PE. This letter was updated on March 7, 2023, acknowledging that the project is in a watershed of a waterbody most at risk from development. Mr. Heyland has recently contacted the Department with a proposed design change.

This design change does not alter the amount of wastewater to be generated or the basic layout of the wastewater system. Mr. Heyland would like to substitute six CEN21 Fuji Clean units for the two 8,000-gallon SeptiTech STAAR 9.0 units. Based on my review of the two Department-approved units, the Department finds that this substitution is a permissible exchange.

Should you have any questions, please feel free to contact me at (207) 287-5695, or by e-mail at alex.l.pugh@maine.gov.

Sincerely,

A handwritten signature in cursive script that reads "Alexander L. Pugh".

Alexander L. Pugh
Senior Environmental Hydrogeologist
Division of Environmental and Community Health
Drinking Water Program

Electronic Copy To:

Dr. John Hopeck, ME DEP
Jon G. Rioux, Town of Windham
Erik Heyland, Heyland Development, LLC



Paul R. LePage, Governor
Tel. (207) 287-2070

Mary C. Mayhew, Commissioner

Department of Health and Human Services
Maine Center for Disease Control and Prevention
286 Water Street
11 State House Station
Augusta, Maine 04333-0011
Tel. (207) 287-8016
Fax (207) 287-9058; TTY (800) 606-0215
Fax (207) 287-4172

October 12, 2016

Fuji Clean, LLC
Attn.: Bennette D. Burkes, P.E.
1518 Willow Lawn Drive, Suite 300
Hnerico, VA 23230

Subject: Modified Approval for General Use, Fuji Clean System, CE and CEN Series

Dear Mr. Burkes:

The Division of Environmental and Community Health has reviewed your proposal for reductions in disposal field sizing and reduced separation form limiting factors for systems which incorporate the Fuji Clean System, CE and CEN Series (Fuji Clean) wastewater treatment systems. This request is predicated upon the ability of the Fuji Clean system to produce BOD5 and TSS levels below 10 mg/l, each.

The Division approves the request for reduced disposal field area and reduced separation distances as follows:

1. A minimum separation distance of 12 inches shall be maintained between the seasonal high groundwater table and the lowest elevation of the system's disposal field;
2. A minimum separation distance of 12 inches shall be maintained between bedrock and the lowest elevation of the system's disposal field;
3. Stone beds and trenches are allowed a 75 percent reduction in size, based upon the standard sizing requirements of the Rules;
4. Proprietary devices such as but not limited to plastic chambers and gravel-less pipe trenches are allowed a 50 percent reduction in size based upon the standard sizing requirements of the Rules, absent prohibitions by manufacturers;
5. Eljen GSF units may be used with Fuji Clean systems, but with no reduction in size; and
6. Maintenance agreement contracts must be included with all system installations. Terms and duration of the contracts shall be in accordance with Fuji Clean's company policies.

Because installation and maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of this system. Further, the Division strongly recommends that property owners enter into long term maintenance contracts with Fuji Clean, in accordance with Fuji Clean's company policies.

Page 2, Letter to Bennette D. Burkes, P. E.

Should you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "James A. Jacobsen". The signature is written in dark ink and is positioned above the typed name and contact information.

James A. Jacobsen
Project Manager, Webmaster
Division of Environmental Health
Drinking Water Program
Engineering Review Team
e-mail: james.jacobsen@maine.gov

/jaj

xc: File

Janet T. Mills
Governor

Jeanne M. Lambrew, Ph.D.
Commissioner



Maine Department of Health and Human Services
Maine Center for Disease Control and Prevention
11 State House Station
286 Water Street
Augusta, Maine 04333-0011
Tel; (207) 287-8016; Fax (207) 287-9058
TTY: Dial 711 (Maine Relay)

June 15, 2020

FujiClean USA, LLC
Attn.: Scott Samuelson, Managing Director
41-2 Greenwood Road
Brunswick, ME 04011

Subject: Approval, FujiClean CEN Series, Tertiary Treatment

Dear Mr. Samuelson:

The Division of Environmental Health has completed a review of a registration application for CEN-Series, which includes the FujiClean CEN5, CEN7, CEN10, and CEN21. You have requested that the CEN Series receive product registration as an advanced tertiary treatment device. This request was submitted pursuant to Section 6.HH of the Subsurface Wastewater Disposal Rules for registration for use in Maine.

The Division defines "advanced tertiary treatment" in its *Policy Regarding the Department's Review of Variance Requests and the use of Advanced Treatment or Advanced Tertiary Treatment on Marginal or Failing Sites, Policy SSW-002-2017* as an advanced wastewater treatment system which will reliably and consistently discharge wastewater that is sufficiently treated to require no further treatment in either a septic tank or disposal field. In practical terms, the Division construes this as a combined BOD5 and TSS of 10 mg/l or less.

In support of this request you submitted a copy of an ANSI/NSF Standard 245 certification and a report from Virginia Department of Health. Both concluded that the CEN Series produce effluent with combined BOD5 and TSS levels of 10 mg/l or less. The Division acknowledges but does not regulate the concurrent nitrogen reduction.

On the basis of the information submitted, the Division has determined that the FujiClean CEN Series is acceptable for use in the State of Maine as an advanced tertiary treatment system, provided that it is installed, operated, and maintained in conformance with the manufacturer's directions.

Because installation and owner maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation (product). Further, registration of this product for use in the State of Maine does not represent Division preference or recommendation for this product over similar or competing products.

If you have any questions, please feel free to contact me at (207) 287-5695.

Sincerely,

A handwritten signature in black ink that reads "James A. Jacobsen". The signature is written in a cursive style with a large, stylized "J" and "A".

James A. Jacobsen
Water Operator Licensing Coordinator
Division of Environmental Health
Drinking Water Program
Engineering Review Team
e-mail: james.jacobsen@maine.gov

/jaj

xc: File

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div. Environmental Health, 11SHS
(207) 287-2070 Fax: (207) 287-4172

6171

PROPERTY LOCATION

City, Town, or Plantation **Windham**
Street or Road **965 Roosevelt Trail**
Subdivision, Lot #

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued: ____/____/____ Fee: \$ _____ Double Fee Charged ☐

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **Heyland Development** Owner ☒
Applicant ☒
Mailing Address of Owner/Applicant **P.O. Box 407**
Moody, ME 04054
Daytime Tel. # **451-8288**

Local Plumbing Inspector Signature _____ L.P.I. # _____
Fee: \$ _____ state min fee \$ _____ Locally adopted fee
Copy: ☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # _____ Lot # _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) date approved _____

Signature of Owner or Applicant _____ Date _____

Local Plumbing Inspector Signature _____ (2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

1. First Time System
2. Replacement System
Type replaced: _____
Year installed: _____
3. Expanded System
a. <25% Expansion
b. >25% Expansion
4. Experimental System
5. Seasonal Conversion

THIS APPLICATION REQUIRES

1. No Rule Variance
2. First Time System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
3. Replacement System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
4. Minimum Lot Size Variance
5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

1. Complete Non-engineered System
2. Primitive System (graywater & alt. toilet)
3. Alternative Toilet, specify: _____
4. Non-engineered Treatment Tank (only)
5. Holding Tank, _____ gallons
6. Non-engineered Disposal Field (only)
7. Separated Laundry System
8. Complete Engineered System (2000 gpd or more)
9. Engineered Treatment Tank (only)
10. Engineered Disposal Field (only)
11. Pre-treatment, specify: **Fluoridation**
12. Miscellaneous Components

SIZE OF PROPERTY

6.91 SQ. FT. ACRES

DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: 27-1 Bedroom
2. Multiple Family Dwelling, No. of Units: 23-2 Bedroom
3. Other: _____ (specify)

TYPE OF WATER SUPPLY

1. Drilled Well
2. Dug Well
3. Private
4. Public
5. Other

SHORELAND ZONING

Yes ☐ No ☒

Current Use Seasonal Year Round Undeveloped

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

1. Concrete **N/A**
 - a. Regular
 - b. Low Profile
 2. Plastic
 3. Other: _____
- CAPACITY: _____ GAL.

DISPOSAL FIELD TYPE & SIZE

1. Stone Bed
 2. Stone Trench
 3. Proprietary Device
a. cluster array Linear
b. regular load d. H-20 load
 4. Other: _____
- SIZE: 9728 sq. ft. in. ft.

GARBAGE DISPOSAL UNIT

1. No 2. Yes 3. Maybe
- If Yes or Maybe, specify one below:
- a. multi-compartment tank
 - b. _____ tanks in series
 - c. increase in tank capacity
 - d. Filter on Tank Outlet

DESIGN FLOW

7380 gallons per day

BASED ON:

1. Table 4A (dwelling unit(s))
 2. Table 4C (other facilities)
- SHOW CALCULATIONS for other facilities

SOIL DATA & DESIGN CLASS

PROFILE CONDITION **5 / B**
at Observation Hole # **TP1**
Depth **>48"**
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

1. Medium--2.6 sq. ft. / gpd
2. Medium--Large 3.3 sq. ft. / gpd
3. Large--4.1 sq. ft. / gpd
4. Extra Large--5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

1. Not Required
2. May Be Required
3. Required

Specify only for engineered systems:
DOSE: _____ gallons

3. Section 4G (meter readings)
- ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. 43 d 51 m 24 s
Lon. 70 d 27 m 03 s
if g.p.s., state margin of error: 15

SITE EVALUATOR STATEMENT

I certify that on 09/15/2020 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature

Mark J. Hampton

Site Evaluator Name Printed

263

SE #

207-756-2900

Telephone Number

09/15/2020

Date

E-mail Address

Note: Changes to or deviations from the _____ should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Windham

965 Roosevelt Trail

Owner's Name

Heyland Development

SITE PLAN

Scale 1" = _____ ft. or as shown

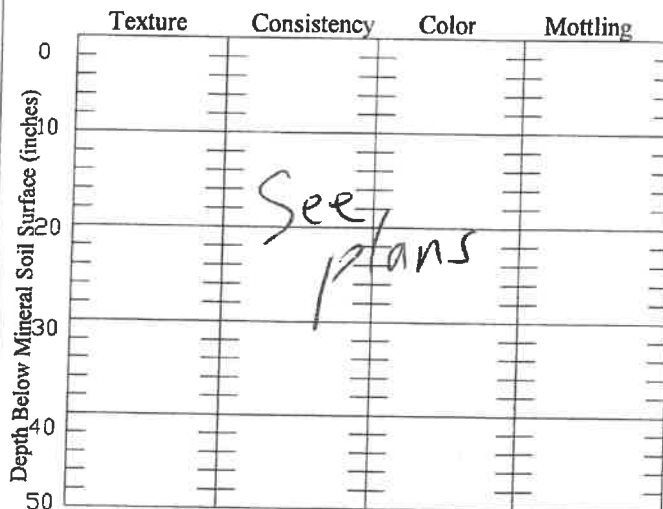
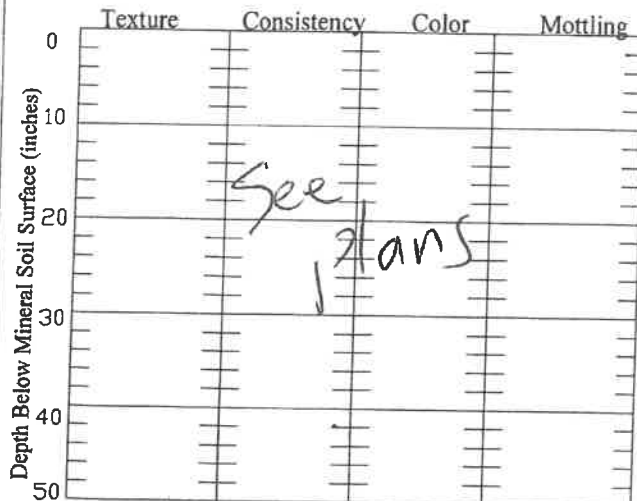
SITE LOCATION PLAN
(map from Maine Atlas
recommended)

See
Plans

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

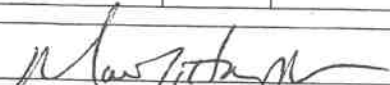
Observation Hole _____ ☐ Test Pit ☐ Boring
_____ " Depth of Organic Horizon Above Mineral Soil

Observation Hole _____ ☐ Test Pit ☐ Boring
_____ " Depth of Organic Horizon Above Mineral Soil



Soil Classification _____ Slope _____ %
Limiting Factor _____
[] Ground Water
[] Restrictive Layer
[] Bedrock
[] Pit Depth

Soil Classification _____ Slope _____ %
Limiting Factor _____
[] Ground Water
[] Restrictive Layer
[] Bedrock
[] Pit Depth


Site Evaluator Signature

263

SE #

09/15/2020

Date

Rev 5/17/23
11/17

6171

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Windham

965 Roosevelt Trail

Owner's Name

Heyland Development LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

0

SCALE: 1" = _____ FT.

see plans

FILL REQUIREMENTS

Depth of Fill (Upslope) _____

Depth of Fill (Downslope) _____

CONSTRUCTION ELEVATIONS

Finished Grade Elevation _____

Top of Distribution Pipe or Proprietary Device _____

Bottom of Disposal Area _____

ELEVATION REFERENCE POINT

Location & Description: _____

Reference Elevation: _____

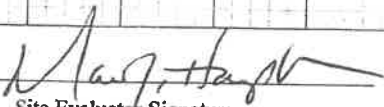
DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = _____ ft.

Vertical 1" = _____ ft.

see plans


Site Evaluator Signature

263

SE #

9/15/2020

Date

Rev 5/17/23
msh