

Project: DEACON HAYES

Date:

Sheet: ____ of _

ENGINEERING BACKUP SHEET



SJR ENGINEERING

16 Thurston Drive Monmouth, Maine 04259 Tel: (207) 242-6248

Subject. O'L'	Subject:	OPEN	5 PACE	CALC'S
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Job #: _____

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	GUIDEL OF TOPAL	NES! AVER	PACE LOT LESS	THAN 10,000 OF REQUES 13:	%
	97	74715F x 0.	13 = 12,671	SF OR MORE TO BE RESERVED	
		(55%	SUBDIVISION	PLAN FOR AREA)	
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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)

November 29, 2022

527 LLC 865 Oak Hill Road North Yarmouth, ME 04097 Care of Laurie Bachelder

Subject: Approval, Minimum Lot Size Waiver, Deacon Hayes Commons

521 Walnut Hill Rd., No. Yarmouth

Dear Ms. Bachelder:

The Division has reviewed a minimum lot size waiver application for the subject property. The proposal is to install a subsurface wastewater disposal system to serve 12 residential units. This application was submitted in accordance with Title 12 MRSA §4807-B. The lot has approximately 2.24 acres (97,471 square feet) of land, whereas 6.61 acres (287,971 square feet) are required. The lot would be served by a municipal water and onsite sewage disposal.

Pursuant to the language provided in 12 MRSA §4807-B, which is the sole basis for our review, we find that the subsurface wastewater disposal system design prepared by Steve Roberge, P.E. on September 29, 2022, and submitted with the application is not considered to be likely to lower the water quality of, or otherwise pose a threat to, any lake, pond, stream, river or tidal waters, any underground water supply, or to the public health, safety and general welfare.

This approval is based only on the rules administered by this Department. The approval of the septic system for this proposal does not relieve the property owner from compliance with all other state and local requirements for licensing, permitting, system installation and/or use.

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 of the system.

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

Sincerely,

Alexander Pugh

Alexander L. Pugh

Sr. Environmental Hydrogeologist Subsurface Wastewater Unit Drinking Water Program

286 Water Street, Augusta, ME 04333

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November 29, 2022

527 LLC 865 Oak Hill Road North Yarmouth, ME 04097

Subject: Approval, Deacon Hayes Commons Engineered SSWW system

Dear Ms. Laurie Bachelder:

The Division of Environmental and Community Health DECH has completed an after-the fact review of an existing engineered subsurface sewage disposal system to serve a 12-unit housing project. The HHE-200 Form dated September 20, 2022, was prepared by Mark Cenci, L.S.E. The system was designed by SJR Engineering, Inc., with plans signed and stamped by Steve Roberge, P.E.

Hereinafter, the term "design engineer" shall refer collectively to SJR Engineering, Inc., its staff, and its representatives unless otherwise specified; and the term "owner" shall refer collectively to 527 LLC, its staff, and its representatives unless otherwise specified.

Design Flow

The design flow is 3240 gallons per day (gpd), based upon Table 4C of the Maine State Plumbing Code, Subsurface Wastewater Disposal Rules (Rules). The design flow of 3240 gpd is approved with the notation that the suitability of the design flow is the responsibility of the design engineer.

<u>Treatment Tank(s)</u>

According to the design, the sewer connection from each of six units will flow by gravity to a 2000-gallon septic tank then a 3,000-gallon septic tanks. The flows of all twelve units, leaving their respective septic tanks, are distributed into three CEN21 Fuji Clean ATUs.

Disposal Areas

The proposed disposal field is comprised of a single 24-foot by 88-foot cluster of 4-foot by 8-foot concrete chambers. The three ATUs feed the field from three locations on the northeast edge.

<u>Soils</u>

The soils have been identified as 5 B per the Rules by Mark Cenci, S.E. The Maine Geological Survey has mapped the soils as marine regressive deposits (open file# 99-105)

Well Setback

There are no potable water supply wells reported within 300 feet of the proposal. The project is proposed to be supplied with town water.

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The proposed system will not result in groundwater mounding sufficient to intrude into separation distance required by Table 4F of the rules, according to the report dated September 19, 2022 by Steve Marcotte, LG.

Site Transmission Analysis

The proposed system design demonstrates that there are sufficient soils down-gradient to prevent the effluent from surfacing within 50 feet of the disposal field, according to the report dated September 19, 2022 by Steve Marcotte, LG.

Interagency Review

This project was reviewed by The Maine Department of Environmental Protection (MDEP) pursuant to the Site Memorandum of Agreement between DHHS and DEP, dated in June 1998. Review of the proposed on-site engineered subsurface wastewater disposal system included: (1) the geology of the project area and vicinity, (2) effects of the project on groundwater and surface water quality, and (3) public and private uses of groundwater and surface water resources in the project area and vicinity. The review found no reason to believe that normal operation of the proposed engineered subsurface wastewater disposal system will result in unreasonable adverse impact on the natural environment or other uses of groundwater and surface water, and provided that the system is properly constructed and maintained.

Miscellaneous

No variance to the Subsurface Wastewater Rules is required.

The design engineer and the Division met and discussed the proposal on August 30, 2022 pursuant to Section 10.2.a of the Rules.

Findings

The system meets the Rules, unless otherwise noted. Therefore, the design is approved with the following conditions and comments:

- 1. The owner must retain the design engineer to oversee construction. The constructed system may not be used unless all pertinent requirements of the Rules have been met.
- 2. Construction must not commence until the owner has obtained the necessary plumbing permit from the Local Plumbing Inspector (LPI).
- 3. The design engineer must provide sufficient supervision to assure that the system is constructed as designed and in accordance with the code and other regulations. Attention must be given to site preparation, fill selection and placement, installation of pipes, mechanical and electrical systems.
- 4. The design engineer must provide the owner and this office with a brief report on the construction including any unexpected conditions encountered and any changes made from the approved drawings. The LPI must not issue the Certificate of Approval until the LPI has received the aforementioned report from the design engineer.
- 5. The design engineer must test all systems prior to acceptance by the owner. The testing must determine whether the components were correctly installed and whether they function as designed. This includes confirmation that flow dividing devices or configurations function as intended.
- 6. The design engineer, with the concurrence of the LPI must determine when the site conditions are suitable for construction.

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7. Construction must cease whenever the design engineer determines that the site conditions, or workmanship, or materials are unacceptable.

8. The owner and design engineer must inform the LPI of the proposed construction schedule and must also inform the LPI of the progress of construction. They must cooperate fully with the LPI in scheduling any

inspections and providing any equipment necessary for the inspection.

9. The design engineer must provide the owner with an Operations and Maintenance Manual containing written recommendations for the operation and maintenance of the system including inspection and

pumping schedules and record keeping procedures.

10. The owner must operate the system within the requirements of Rules and the limitations of this design.

11. The owner must inform the LPI and the design engineer of any operational problem and/or malfunction.

12. The Local Plumbing Inspector must inspect the engineered disposal system in accordance with Section 11 Letter I of the Rules. In addition, the property owner must retain the design engineer to inspect the

construction of the system. The inspection must be sufficient for the design engineer to determine that the

system was installed as designed.

13. The property owner and Fuji Clean must agree on a proper maintenance schedule and an operational

monitoring schedule. The Department recommends that this includes laboratory testing for TSS, BOD5 and

Total Nitrogen every other year.

14. This approval is only for the rules administered by this office, and it does not consider other federal, state, or

local regulations. The owner is responsible for compliance with any other pertinent regulations.

15. By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the

conditions of approval and the Subsurface Wastewater Disposal Rules.

Based upon this approval of the design, the LPI may issue the permit required for an engineered system.

Because installation and owner maintenance have 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 the system.

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.

Alexander L. Pugh

Senior Environmental Hydrogeologist

Division of Environmental and Community Health

Drinking Water Program

Wexander L. Rugh

ec:

Ben Scipioni, L.P.I. via e-mail Steve Roberge, P.E. via e-mail William Noble, MDEP