Janet T. Mills
Governor

Jeanne M. Lambrew, Ph.D.
Commissioner

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July 16, 2021

Heyland Development, LLC
Erik Heyland
965 Roosevelt Trail
Windham, ME 04062

Subject: Approval, Roosevelt Apartment Homes

Dear Mr. Heyland:

The Division of Environmental Health has completed a review of a design for an engineered subsurface sewage disposal system design, to serve Roosevelt Apartment Homes. The HHE-200 Form dated 09/15/2020 was prepared by Mark J Hampton, S.E. The system was designed by Engineering Alliance, Inc., with plans signed and stamped by Erik Heyland, P.E.

Hereafter, the term "design engineer" shall refer collectively to Engineering Alliance, Inc., its staff, and its representatives unless otherwise specified; and the term "owner" shall refer collectively to Heyland Development, LLC, its staff, and its representatives unless otherwise specified.

Design Flow

The design flow is 7380 gallons per day (gpd), based upon Table 4C of the Maine State Plumbing Code, Subsurface Wastewater Disposal Rules (Rules). The design flow of 7380 gpd is approved with the notation that the suitability of the design flow is the responsibility of the design engineer.

Treatment Tank(s)

The design includes qty=2 8000 gallon SeptiTech STAAR 9.0 processor tanks in series and qty=3 4000 gallon septic tanks in series.

Disposal Areas

The proposed disposal field is comprised of 304 Infiltrator Quick 4 plastic chambers in four rows of 38 chambers. The design flow with 2.6 sf/gal of wastewater requires a disposal field area of 19,188 SF. The use of SeptiTech STAAR 9.0 proprietary treatment, approved by the Department, provides an adjustment factor of 0.5, allowing a 50% reduction of the disposal field area to 9,594 SF.

Soils

The soils have been identified as 5B per the Rules by Mark J Hampton, S.E.

Well Setback

There are no potable water supply wells reported within 300 feet of the proposal.

Mounding Analysis

The proposed system will not result in groundwater mounding sufficient to intrude into the disposal area, according to the report dated September 11, 2020 by David V. Chapman, C.G.

Site Transmission Analysis

The proposed system design demonstrates a fill extension will not be necessary, according to the report dated September 11, 2020 by David V. Chapman, C.G.

Interagency Review

The Maine Department of Environmental Protection (MDEP) has reviewed the application and stated that no reason was found to believe the proposal would cause unreasonable adverse impact on resources and uses in the area likely to be affected; the project site is not located on a mapped sand and gravel aquifer; the project site is not located in the watershed of a waterbody most at risk from development, and no wetlands as mapped by the National Wetlands Inventory will be adversely affected.

Miscellaneous

The design engineer and the Division met and discussed the proposal on April 29, 2021 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.

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. 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.

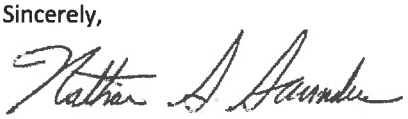
14. By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the conditions of approval and the Subsurface Wastewater Disposal Rules.

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

Because installation and owner maintenance 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.

Should you have any questions, please feel free to contact me at (207) 287-5685.

Sincerely,



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