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Land Use Department

February 20, 2025

Ledyard Land Use Department
Ledyard Inland Wetlands and Watercourses Commission (IWWC)
ATTN: Elizabeth Burdick

RE: Ledyard Multi-Use Development, Updated Calculation Basis

Dear Ms. Burdick,

We are writing to provide information relating to the updated site plan for the proposed development at 19, 29, and 39 Military Highway, Gales Ferry, CT. The project previously submitted a Permit Application for Wastewater Discharges from Subsurface Sewer Treatment and Disposal Systems to the Connecticut Department of Energy & Environmental Protection (DEEP). As of now, we are still awaiting official comments from DEEP on that permit application.

Based on comments received during the previous IWWC hearing, the unit count, site plan, and calculation basis for treated wastewater discharges have all been updated. The following provides a brief overview of the updated calculations for treated wastewater discharges.

- Updated Unit Count: 278
- Updated Bedroom Count: 460
- Flow Basis: *150-gallons per day (GPD) per proposed bedroom*
- Application Rate (per Table 8 of the Connecticut Public Health Code (PHC) Technical Standards for Subsurface Sewage Disposal Systems): *1.2 GPD/SF*

Peak Design Flow Basis:

$$150 \text{ GPD/BR} * 460 \text{ BR} = 69,000 \text{ GPD}$$

Required Primary Dispersal Area:

$$69,000 \text{ GPD} / 1.2 = 57,500 \text{ square feet}$$

Required Reserve Dispersal Area:

$$69,000 \text{ GPD} / 1.2 = 57,500 \text{ square feet}$$

Total Dispersal Area (Primary + Reserve):

$$57,500 + 57,500 = \mathbf{115,000 \text{ square feet}}$$

The updated site plan includes the required total of 115,000 square feet of subsurface drip dispersal area, which is based on a conservative flow basis of 150 gallons per day per proposed bedroom. Should DEEP approve modification of an alternate flow basis and/or application rate, the total dispersal area may be reduced. We believe the above calculations represent a conservative approach and thus the dispersal area requirements should not be a limiting factor for the proposed site development.

Best regards,

A handwritten signature in blue ink, appearing to read 'Richard Ross'.

Richard Ross
Vice President of Engineering