

MEMORANDUM

TO: Donna Jerry, Senior Health Policy Analyst, Green Mountain Care Board

FROM: Mourning Fox, Deputy Commissioner, Department of Mental Health

DATE: June 25, 2021

RE: Docket No. GMCB-002-21con, Construction of Secure Residential Treatment Program for Individuals Requiring Residential Treatment Program Services for Mental Health Conditions.

Project Cost: \$21,900,521.

Thank you for your questions dated June 23, 2021. Below please find our responses.

Facility Design(s)

1. **In the DMH June 4 response to Architectural Question 3 (PDF p. 23) it is stated that: “The central heating and cooling plants shall consist of closed-loop geothermal system interconnected with (2) 40-ton water to water heat pumps. The water to water heat pump system would be located on site and would be capable of providing 100% of the chilled and heating hot water to the space all through an electric based source. The natural gas boiler would be located in the mechanical room and would be utilized for snowmelt operation only.” (emphasis added). However, under Plumbing (PDF pg. 25), the response states that the domestic hot water system shall be supported from 120-gallon gas fired water heaters, equivalent to the AO Smith BTH-300.”**
 - a. **Please clarify the respective functions of the closed loop geothermal system and the gas fired water heaters.**

The heating, cooling, and ventilation systems will be supported via a closed loop geothermal system. The domestic hot water heating and snowmelt will utilize gas fired appliances, as it was not economically feasible to utilize electric based system for these items.

2. **Regarding the comment that the building will have a gas-fired boiler for snow melting.**



- a. **Please confirm whether or not the gas-fired boiler for snow melting mentioned on page 23 will be tied into the DHW gas-fired heating or the central heating in any way.**

The intent is to have a gas fired boiler dedicated to the snowmelt system and separate domestic water heaters dedicated to the domestic hot water production. Provisions will be provided to allow for the preheating of domestic hot water through the geothermal systems when there is excess geothermal capacity.

- b. **Please confirm that the snow melt system meets the building energy code requirements as reflected below:**

- **C403.12.2 Snow- and ice-melt system controls. Snow and ice-melting systems shall include automatic controls configured to shut off the system when the outdoor temperature is above 40°F (4°C) and the slab temperature as measured not less than 2 inches below the surface is 50°F (10°C).**

The snow melt system will meet the energy code requirements including automatic outdoor temperature controls.

3. **EVT's letter on June 4 PDF pg. 57 says: "This all electric system aligns with the State's Comprehensive Energy Plan's goal of reducing dependence in fossil fuels and a move to building electrification."**

- a. **Please explain the characterization of the "all electric system" given the incorporation of gas fueled boilers and hot water heaters.**

EVT's Letter states "This all electric system" referencing the subject from the previous sentence, the heat pump system. The heating and cooling systems will be fully electrified. The gas boiler for snowmelt was provided due to liability and maintenance requirements with the various site paths and recreation areas. It was not economically feasible to utilize an electric based system for snow melting due to area of snow melting required.

- b. **What kind of appliances will be installed in the kitchen? Are electric induction stoves currently specified? If not, what measures are being taken regarding energy recovery and ventilation.**

The kitchen equipment utilizes a gas fired range and combi oven. The hood utilizes variable volume control to reduce airflow based on cooking intensity.



Mourning Fox

Mourning Fox, Deputy Commissioner, Department of Mental Health

On 6/28/2021, Mourning Fox appeared before me and swore the truth, accuracy, and completeness of the foregoing.

[Signature]

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Notary Public

My commission expires 1/31/2023

