



September 1, 2020

Sustainability Department
The Town of Concord
Concord, MA 01742

Re: Sustainability Memo – Proposed Design
Chase Bank
1134 Main Street
Concord, MA 01742

Dear Ms. Hanley:

This letter is in regards to the sustainability memo received for the proposed Chase Bank. The HVAC system for the project will be modified to utilize high efficiency electric Variable Refrigerant Flow (VRF) heat pumps to align with the township's sustainability program. The specified mechanical units shall utilize only electric heating and cooling to satisfy the space conditions. The variable speed compressors within the VRF system also have the capacity to ramp up/down the speed to match the interior conditions which results in minimizing energy use when not needed. The VRF system shall also be specified as Heat Recovery, which further increases the equipment efficiency as it captures waste energy from other zones and transfers it where required.

The Mechanical, Electrical, and Plumbing systems proposed within this project contain other sustainable energy provisions. The plumbing fixtures are low-flow fixtures and meet the prerequisite requirements in the latest LEED standards. The toilets are only 1.0 gpf and the faucets utilize metered sensor faucet technology for water conservation. The water heater is electrical and abides with the local sustainable energy requirements. Finally, the electrical system utilized LED lighting all throughout the building, including the site lighting.

In conclusion, the proposed Chase Bank is utilizing sustainable design approaches and green measures. The mechanical system will not use any gas-fired equipment and will solely consist of electric VRF heat pumps. Other design parameters include low-flow plumbing fixtures, LED building and site lighting, and low-emitting materials within the Architectural design.

Respectfully,
Steven Vaz, P.E.
Project Engineer
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