Project Description (Narrative)

The project site is located on a portion of municipal-owned land currently in use for public water supply located at 1650 Iyannough Road/Route 132 Barnstable, Massachusetts, parcel number 254-018, as seen in Attachment B of the EENF and Appendix B of the PEIR. This land consists of a paved access road, a pump house for the Barnstable Fire District's groundwater supply Well 3, and a pump and treatment building located at Well 4. The property is located in the Residential RG and RF-1 zoning districts, as well as the Wellhead Protection Overlay District, as seen in the Zoning Map shown in Attachment B of the EENF and Appendix B of the PEIR. Existing utilities include transmission and distribution water mains for Well 3 and Well 4, overhead electrical lines to transmit power to the pumping and treatment facilities, and underground fiberoptic lines to transmit SCADA information between the well stations and treatment facility as seen in the Design Plans provided in Attachment B of the EENF and Appendix B of the PEIR.

Currently, water from Well 3 is pumped to the Well 4 Pump and Treatment Facility, where it is treated with potassium hydroxide for pH adjustment and sodium hypochlorite for disinfection before being pumped into the distribution system. The current system has a combined capacity of 1,500 gallons per minute.

The project site includes a portion of the existing paved access road, a vegetated area to the south of the existing paved access road, and a small vegetated area to the south of the Well 4 Pump and Treatment Building. Refer to the Site Locus Map and the Design Plans provided in Attachment B of the EENF and Appendix B of the PEIR for the location and extent of the project.

The proposed project involves the construction of a new water treatment plant for the treatment of water from Well 3 and Well 4. The 4,040 square foot building will be equipped with three (3) 10.5-foot diameter GreensandPlus^{TM} media filters; six (6) 10-foot diameter GAC pressure vessels; associated process mechanical valves and piping; KOH storage, feed, and handling facilities; and NaOCl storage, feed, and handling facilities. Along with the building, the project involves the construction of two (2) sand filters and two (2) infiltration basins for the processing of water treatment residuals; a septic system for the facility bathroom; best management practices (BMPs) for the treatment and infiltration of stormwater; new yard piping and hydrants for water transmission and distribution; new underground electrical lines to deliver power to the building; new underground fiberoptic lines to transmit Supervisory Control and Data Acquisition (SCADA) information; two (2) new generators to supply emergency power, three (3) new propane tanks to supply the fuel supply for heating and the generators; yard fencing for site security; and a paved driveway and parking area for facility access.

There will be no changes to the existing easements, zoning, or land use at the site, nor will there be changes to the capacity of the system. The project site is not within the FEMA 100-year floodplain, as seen in the FEMA FIRMette Map provided in Attachment B of the EENF and Appendix B of the PEIR. The site is not within an area of critical environmental concern, as seen in the MassGIS Environmental Concerns Map provided in Attachment B of the EENF and

Appendix B of the PEIR, and the site is not within the limits of mapped priority habitats of rare species or estimated habitats of rare wildlife, or an area that is likely to affect significant historic or archaeological resources. Please refer to Attachment I of the EENF and Appendix C of the PEIR for Correspondence with the National Heritage and Endangered Species Program (NHESP) and the Massachusetts Historical Commission (MHC).