Field borings concluded at Gay Head Lighthouse site



PHOTO BY LEN BUTLER

Byron Stone (left) and GEI field engineer Steve Dube gathered soil borings at the lighthouse.

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Geologic Earth Exploration, Inc. of Norfolk completed field borings last week at the Gay Head Lighthouse site. The effort, under the direction and supervision of GEI Consultants of Woburn, is a critical part of a study to determine the composition of the soils underlying the lighthouse and below the potential relocation sites, according to a press release.



Engineers and geologists review data.

Engineers and geologists will review the data and samples collected to determine the suitability of the locations to support the lighthouse as well as the geological sustainability of each site over a long period of time.

The fieldwork consisted of boring 22 individual holes 20 to 40 feet deep and collecting soil samples at 5-foot intervals. While the GEI field engineer collected samples and recorded drilling data, a research geologist, Byron Stone from the U.S. Geological Survey, examined the core samples to determine their composition at different depths.

In addition, Mr. Stone, a consultant to The Save the Gay Head Lighthouse Committee, will assess the relocation sites to help determine the best site in terms of resistance to future erosion. By analyzing the depths and thicknesses of silt, sand and clay layers and the evidence of groundwater, Mr. Stone will render an opinion on the long-term sustainability of the sites.

GEI will conduct a series of lab tests on collected samples and make recommendations for a type of foundation specific to existing soil properties. A new foundation will have to be constructed for the Lighthouse once it is moved. The final report is expected in the next few weeks.

The Save the Gay Head Lighthouse Committee is working to save the iconic structure, a working navigational beacon that has stood at the picturesque cliffs of the western tip of the

Island since 1799 and was replaced with the current brick lighthouse in 1854. The committee's objective is to move and restore the Gay Head Lighthouse to a location that will sustain it for many generations. The fundraising goal to cover these costs is $3 million.