

Construction of a Field Research Facility Annex, Dare County, North Carolina Impacts Analysis pursuant to Section 106 NHPA

Description of the Undertaking

The U.S. Army Corps of Engineers maintains a Field Research Facility (FRF) located in Duck, NC which supports the Corps' coast engineering mission. The facility was established in 1977 and central to that facility is a 560 m long steel and concrete research pier that extends to the -7m water depth contour. Instruments at the internationally-recognized facility record the changing waves, winds, tides and currents. Additional facilities include a building with conference room, observation tower and specialized vehicles to assist with coastal field studies.

The Corps is proposing an undertaking that consists of construction of a 4,008 square foot annex within the 9-acre existing site that is enclosed by an eight foot fence. Supporting facilities would include site development, pavement removal, utilities and connections, lighting, lightning protection system, walks, curbs, fire access lanes, information systems, and signage.

Site work for the project includes the following items: A reconfigured parking lot to accommodate additional parking for new staff, a fire truck access road to provide fast access to the new building in the event of a fire, two new handicapped access parking spaces close to the new ADA compliant access ramp structure, a new larger septic tank to accommodate both buildings and a larger drain field to provide easy access for maintenance, and an expanded fenced yard on the south side to allow for the large research vehicle to access the south portion of the site without having to travel through the parking lot.

Location

The area is located approximately 72 miles south of Norfolk, Virginia, on the Outer Banks approximately one-half mile north of the town of Duck in Dare County, North Carolina. It is composed of 397 land acres along with 2,718 tidal water acres. The Duck Target Facility Formerly Used Defense Site (FUDS) is located within the Duck Bombing and Rocket Range Munitions Response Site (MRS) and encompasses 176 of the 397 MRS land acres. The Department of the Navy used the MRS as a bombing and rocket target range between 1941 and 1965. Numerous types of rockets and practice bombs were used.

The General Service Administration transferred 176 land acres within MRS to the Department of the Army (Civil Works) on April 23, 1973. The Army has used this acreage as a research facility, known as the Engineer Research Development Center (ERDC) FRF, since the 1973 transfer.

Efforts to Identify Historic Properties/Previous Work

In 1971 the Government conducted ordnance removal activities in the area that had been used for the bombing range. According to the 1973 Environmental Impact Statement that was prepared for the construction of the FRF, the heavy equipment that was used caused damage to the vegetation and modified the internal topography of the area. In 1972 vegetation was planted to stabilize the soils. No archaeological investigations were conducted prior to construction of the current facility due to the low potential of encountering intact archaeological deposits. A database search of the National Register and North Carolina's Department of Archives and History databases in 1972 also indicated low potential for archaeological sites because there were none recorded in the vicinity of the project area.

The U.S. Army Corps of Engineers, Baltimore District conducted a focused feasibility study to develop, evaluate and perform a detailed analysis of potential remedial alternatives for the MRS in 2017 (USACE 2017). The report used historical data regarding the types of munitions that had been used at the former Duck Target Facility to determine the likelihood of encountering munitions on the surface and subsoil. Historical documents recorded the use of a variety of rockets as well as large bombs (50 lb., 100 lb., and 250 lb.) at the target facility, and it was noted during remediation activities in the 1970s items had been recovered as deep as 5 ft. below ground surface. Based on the types of munitions used, the majority of items would have been located between 1 and 3 ft. below ground surface.

Impacts to Historic Properties

All proposed construction activities and ground disturbance related to this undertaking will be performed within areas that have been previously disturbed by construction of the FRF and amenities, as well as from the previous land use and removal of ordnance. Previous ground disturbance has adversely affected the soil stratigraphy. No archaeological investigations are necessary due to the low potential for encountering intact archaeological deposits.

A review of the National Register of Historic Places database and the North Carolina State Historic Preservation Office's HPOWEB in 2020 show no recorded resources within the project area or the immediate vicinity (1 km). The facility, constructed in the mid-1970s, has not been evaluated for the National Register and is not considered a cultural resource due to its age. The construction of the annex and supporting amenities will have no effects directly or indirectly on historic properties as there are none located within project area.

No further investigations are needed for this undertaking.

Cited report:

U.S. Army Corps of Engineers USACE, 2017. Military Munitions Response Program Formerly Used Defense Sites Program, Focused Feasibility Study, Former Duck Target Area, FUDS Property No. 104N098401. Prepared by USACE Baltimore District for USACE Savannah District.