Mayflower Wind, a joint venture of Shell New Energies LLC (Shell New Energies) and OW North America LLC (Ocean Winds), proposes to construct and operate the Mayflower Wind Project. The Project includes the offshore Mayflower Wind turbine array in federal waters on the Atlantic Outer Continental Shelf (OCS) within the Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area OCS-A 0521 (Lease Area) approximately 20 miles (32 kilometers) south of Nantucket Island; inter-array cables, offshore substation platforms, and export cables that traverse federal and state waters with landfalls at Falmouth and Somerset, Massachusetts; and onshore HVDC converter stations, points of interconnection, and onshore, underground transmission delivery systems. Mayflower Wind is considering several cable duct bank route segment options and HDD sites in Portsmouth, Newport County, Rhode Island as a part of the onshore component of the Project.

Mayflower Wind contracted with The Public Archaeology Laboratory, Inc. (PAL) to conduct an archaeological reconnaissance, assessment, and Phase I site identification archaeological testing for the onshore components of the Aquidneck Island Landfall that include alternate transmission cable routes, horizontal directional drill sites (HDDs), and staging and work areas (Figure 1). The results of PAL’s archaeological investigations were presented in a detailed technical report entitled Technical Report: Terrestrial Archaeological Resources Assessment Mayflower Wind Project – Aquidneck Island (Portsmouth) Landfall (Waller and Flynn 2022), which was prepared and submitted to BOEM for the Mayflower Wind Project. The methods and results detailed in PAL’s Terrestrial Archaeological Resources Assessment archaeological report for the Project are summarized below.

**Purpose, Methods, and Consultation**

The purpose of the archaeological assessment and Phase I site identification surveys was to determine if areas of anticipated ground disturbance contain recorded archaeological sites, evaluate the potential for undiscovered archaeological sites to be present in areas of proposed ground disturbance, and to conduct archaeological testing in archaeologically sensitive areas to determine the presence or absence of archaeological deposits. The archaeological investigations included archival research, the development of Project-specific environmental and cultural contexts, examination of previous land uses that may have affected archaeological resources that may once have been present, and Phase I
site identification archaeological hand testing. PAL consulted with the Rhode Island Historical Preservation and Heritage Commission (RIHPHC), and Mayflower Wind consulted with the Tribal Historic Preservation Offices (THPOs) for the Narragansett Indian, Wampanoag Tribe of Gay Head/Aquinnah, and Mashpee Wampanoag Indian tribes.

**Reconnaissance Survey and Sensitivity Assessment: Onshore Export Cable Routes and HDDs**

Project construction has the potential to affect archaeological properties and other cultural resources within the Project’s Area of Potential Effects (APE). The archaeological reconnaissance identified previously reported archaeological sites within or near the Project study area and evaluated the potential for undiscovered sites along several of the proposed onshore export cable route segments and HDDs. Information collected during the archival research combined with a site walkover provided the information necessary to assess the archaeological sensitivity, defined as the likelihood for below ground cultural resources to be present within proposed Project impact areas.

Most of northern Portsmouth prior to the mid-twentieth century was primarily agricultural with large fields delineated by fieldstone walls along Boyds Lane and south of Anthony Road. Much of the area
surrounding Portsmouth’s “The Cove” was undeveloped until just before World War II and after construction of the Mount Hope Bridge. Construction of Route 24 highway from Aquidneck Island to Fall River further spurred development with many of Portsmouth’s agricultural lands being abandoned and developed.

The 1777 Blaskowitz map of Narragansett Bay depicts the farmhouse of Mr. Isaac Lawton on the south side of Boyds Lane at its intersection with Anthony Road. This same farmhouse was that of Jas Chace on the 1855 and 1870 plans of Portsmouth and L.P. Chase on the 1895 Everts and Richards map of the town. Several other farm and schoolhouses were along Boyds Lane and Anthony Road in the nineteenth-century, but most of them were set off the road beyond proposed construction impact areas. An exception is the home of W. Chace on the 1855 Walling map of Rhode Island, which is on or near the proposed Roger Williams University Baypoint Residence Hall and Conference Center parking lot. The Mount Hope Bridge, listed in the National Register in 1976, is at the north end of cable duct Route Segment F. Designed in 1927, it was the largest suspension bridge in New England when it was completed on October 24, 1929. The Aquidneck Island Landfall is on northern Aquidneck Island near Fort Butts at the northern line of Rhode Island’s defense works during the August 29, 1778, Battle of Rhode Island. During the Rhode Island campaign, Provincial and Continental forces were ferried across the Sakonnet River from Tiverton to Portsmouth where they likely would have followed the southern road crossing a bridge in proximity to the Sakonnet River HDD at Island Park.

The proposed underground transmission cable duct route segments follow roadways that traverse cleared uplands, coastal marshlands, residential neighborhoods, manicured lawns, commercial districts, and a concrete manufactory on Boyds Lane opposite Viking Drive. Following a site walkover that included a visual reconnaissance of existing conditions and the background research, PAL identified archaeologically sensitive areas and areas without archaeological sensitivity. Non-sensitive areas are those that have been clearly disturbed by previous construction, gravel mining, or cutting and filling and have no potential for intact natural soils and/or are on steep slopes or in wetlands. Archaeologically sensitive areas are those in ecological settings where archaeological sites have been documented elsewhere, areas next to standing historical structures, or previously recorded archaeological sites with little to no disturbance. The HDD options are proposed in existing parking lots (Roger Williams University Property HDD Option 1 and Montaup Country Club HDD Option 3), filled coastal wetlands (TNEC/PPL ROW HDD Option 2), and a cut, disturbed, and filled coastal margin (Sakonnet River HDD). These HDD options are not sensitive for intact archaeological deposits. The Reuben Greene burial lot (Portsmouth Historical Cemetery PO001) is north of the Montaup Country Club parking lot west-southwest of proposed Montaup Country Club HDD Option 3. The closest HDD trajectory will be more than 100 yards (91 m) from the cemetery wall at a depth of approximately 28 ft (8.5 m) below ground surface and will not impact the burial ground.

Phase I Site Identification Archaeological Testing

Mayflower Wind is committed to avoiding or minimizing impacts to significant archaeological sites and resources of cultural importance to the Native American tribes. They requested that PAL conduct a Phase I site identification archaeological survey of archaeologically sensitive areas of preferred cable Route Segment options A, B, and E and the Sakonnet River HDD to identify archaeological resources potentially eligible for listing in the State/National Registers and to provide recommendations about the need for additional archaeological survey, as necessary. PAL consulted with the RIHPHC and conducted the Phase I archaeological survey in the late fall of 2021 under
RIHPHC archaeological permit No. 21-32. Mayflower Wind does not currently consider cable duct route Segment F on Boyds Lane from Anthony Road north to the Mount Hope Bridge a practical option, therefore no subsurface archaeological hand testing was conducted along this segment of the cable duct corridor as part of this TARA.

PAL excavated 91, 1.6-x-1.6-ft (50-x-50-cm) shovel test pits within archaeologically sensitive areas. Test pits were excavated along linear transects every 10 m (33 ft) within the grassy road shoulder minimally disturbed by road construction. Test pit arrays AR-01 and AR-02 and seven judgmentally placed test pits supplemented transect testing. Test pit arrays involved the excavation of test pits either side of transect test pits that contained cultural materials. Judgmental test pits were excavated along roadsides to confirm disturbance. PAL archaeologists excavated test pits by hand using shovels in 10-cm (3.9 in) increments to 2.8–42 in (7–107 cm) below ground surface. Excavated soils were sieved through ¼-inch hardware cloth with cultural materials remaining in the screen bagged and tagged by level. The locations of all excavated test pits were recorded by a submeter Trimble GeoXH 6000 series Global Positioning System (GPS) handheld receiver. Soil profiles, including depths of soil horizons, colors, and textures, and the counts and types of recovered cultural materials were noted on standardized test pit profile forms.

Phase I Site Identification Survey Results and Recommendations

Phase I archaeological testing identified two previously unrecorded archaeological sites and confirmed that archaeological materials associated with two other previously recorded sites do not extend into the proposed work areas. Identified sites are significant and important additions to the inventory of known archaeological sites in the near-coastal lands surrounding Portsmouth’s “The Cove.” If the final construction design plans will result in any impact to either of the sites, then PAL recommended implementing a Phase III archaeological data recovery treatment plan to include additional archaeology to mitigate adverse effects that construction will have on the significant sites. Details of the mitigation plan were outlined in the TARA and will be implemented prior to construction.

No archaeological testing has been conducted along Route Segment F and Mount Hope Bridge HDD Option 4, and the Mount Hope Bridge is listed in the National Register. PAL recommended Phase I site identification archaeological testing of Route Segment F and Mount Hope Bridge HDD Option 4 if Segment F and the Mount Hope BDD are ultimately selected as the preferred construction alternatives.

The Terrestrial Archaeological Resources Assessment archaeological report also noted that HDD Options 1 and 3 are in the Roger Williams University Baypoint Residence Hall and Conference Center and Montaup County Club parking lots. The Roger Williams University Property HDD Option 1 is near the former nineteenth century W. Chace home and farm, and the Montaup Country Club HDD Option 3 is near an archaeological site and historical cemetery. While both HDD options appear to be disturbed, PAL recommended archaeological monitoring at either or both HDD Options 1 and 3 to document any archaeological features or deposits that may be encountered during boring for the HDDs.
Reference

Waller, Jr., Joseph N. and Erin Flynn
2022  *Terrestrial Archaeological Resources Assessment Mayflower Wind Project Aquidneck Island (Portsmouth) Landfall, Portsmouth, Rhode Island.* PAL Report No. 4256, Submitted to Mayflower Wind Energy, LLC., Boston MA.