

A. INTRODUCTION

Archaeological resources are the remains of historic or prehistoric human activity and are afforded protection under state laws. The New York State Environmental Quality Review Act (SEQRA) and the New York State Historic Preservation Act (SHPA) essentially require that state agencies or other entities operating under state oversight or permits take into consideration the effect of their actions on archaeological resources meeting the eligibility requirements of the State and National Register of Historic Places (S/NR). The New York Archaeological Council (NYAC) and the New York Office of Parks, Recreation and Historic Preservation (OPRHP) have published guidance to aid in compliance with state laws (1995) and reporting standards (2005). This chapter provides prehistoric and historic contexts against which to assess the sensitivity of resources that may be present in the study area and summarizes the results of studies undertaken by the Institute for Long Island Archaeology for this project to identify archaeological resources that may be affected by the Direct Route Alternative. This chapter also describes additional analyses that may be required once a preferred alternative has been selected.

The archaeological analysis that follows conservatively assumes that the proposed transmission line could be underground at any location along the Direct Route Alternative.

B. STUDY AREA DEFINITION

The study area for archaeological resources includes all areas that could experience ground disturbance under the Direct Route Alternative. The width of the study area varies depending on a number of factors as follows:

- Where the transmission line runs along roadways, the study area extends about 10 feet from the edge of pavement on either side;
- Where the transmission line runs along the LIRR right-of-way, the study area is an average of 30 feet wide centered on the centerline of the railroad tracks; and
- Where the transmission line runs along the existing transmission line route, the study area includes the easements, which average about 100 feet wide.

C. PREHISTORIC AND HISTORIC CONTEXT

Due to an extended glacial period that left the Northeast blanketed in thick ice sheets for thousands of years, the area was not inhabited by humans until around 11,000 years ago. The environmental setting of the northeastern United States continued to change throughout the prehistoric period, forcing the Native populations to continually adapt. Archaeologists have divided the time between the arrival of the first humans in northeastern North America and the arrival of Europeans more than 10,000 years later into three prehistoric periods: Paleo-Indian (11,000 to 10,000 before present [BP]), Archaic (10,000 to 2,700 BP), and Woodland (2,700 BP

Southampton to Bridgehampton Transmission Line and Expansion of Bridgehampton Substation Project

to AD 1500). These divisions are based on certain changes in environmental conditions, technological advancements, and cultural adaptations, which are observable in the archaeological record.

In general, Native American habitation sites are most often located in coastal areas with access to marine resources. These sites are often near fresh water sources and areas of high elevation. While many archaeological sites have been identified along Long Island's coastline—including the Sugar Loaf Hill, Sebonac, Southampton sites in Shinnecock Hills near the project site—few have been identified in the island's interior (Ritchie 1980, Smith 1950). It is therefore believed that coastal areas were used as habitation locations while interior locations were used for hunting, gathering, and other types of resource exploitation (Ibid). Long Island's coastal prehistoric sites are typified by “thin deposits of refuse composed of marine shells mixed with stained earth, charcoal, animal bones, and artifacts...[with]...bowl-shaped pits filled with refuse” (Ibid: 101). Interior sites, however, often yield more uniform artifact assemblages with little variation in artifact types (Institute for Long Island Archaeology [ILIA] 2007a: 12).

At the time of European contact, Southampton was occupied by the Shinnecock, Weekatuck, and Noyack Indians, who referred to the area as *Agawam* (Halsey 1935, Thompson 1839, Armbruster 1914). Native American Villages were located on Shinnecock Neck, a small peninsula jutting out into the Shinnecock Bay, and near the modern towns of North Sea and Sag Harbor (GAI 2000).

New York was “discovered” by Giovanni de Verrazano in 1524 and explored by Henry Hudson in 1609, thus marking the beginning of European occupation in the area. The Dutch established their first settlements in New York in the 1620s, European settlements along the eastern end of Long Island were not established until decades later.

The first settlers on Long Island included approximately 40 English families under the leadership of Captain Daniel Howe who left Lynn, Massachusetts seeking to create a new settlement. The group first attempted to establish a settlement near modern Oyster Bay but was forced out by the Dutch government, who had previously claimed the territory. The group then moved to the east and in 1640 settled near North Sea, by the Peconic Bay (Prime 1845) creating the first English settlement in New York State (Halsey 1935). The original settlement was bounded on the east by the modern village of Sagaponack, on the north by the Peconic Bay, on the south by the Atlantic Ocean, and on the west by the Shinnecock Canal (GAI 2000). Eight years later, the settlement was shifted to the south in the area of modern Southampton village (Armbruster 1914).

In 1641, the settlement was subdivided and each family received a plot of land on which to build a home and grow crops, while public grazing areas were also set aside for the town's residents (ILIA 2007a). Southampton was governed by Connecticut between 1644 and 1664, and again briefly in 1673 after the Dutch recaptured the colony (Armbruster 1914). Relations between the settlers and the Shinnecock were generally good throughout the 1640s and 1650s, and many agreements were signed between the two groups including one in which the European settlers agreed to protect the Shinnecock from other unfriendly Native American groups (ILIA 2007a).

The area grew as a cluster of smaller independent hamlets which represent the unincorporated communities and incorporated villages now included within the modern Town of Southampton (GAI 2000). These include North Sea, settled as early as 1650; Sagaponack, dating to 1653; Water Mill, where the first of a series of mills was constructed in 1644; and Sag Harbor, an

important seaport that was the center of the area's whaling industry as early as the 1640s (Ibid). Bridgehampton is another of the key hamlets in an area first settled by Thomas Topping in the early 1640s (Armbruster 1914). The town ultimately developed around a bridge constructed across the Sagg Pond in 1686 and was originally known as Bull Head (GAI 2000). The Montauk Highway, established in the area in 1653, provided Southampton access to trade with settlements to the west (ILIA 2007a).

By 1698, more than 800 individuals, including Native Americans and slaves of African descent, were residing in Southampton, which was becoming a thriving agricultural community (GAI 2000). Throughout the early to mid-18th century, the area's growth continued and Sag Harbor especially became a key port of trade. The port was used by the British as a provisioning station during the Revolutionary War (ILIA 2007a).

Like most of Long Island, Southampton suffered only from the socio-cultural and economic side effects of the Revolutionary War. The economy improved as the war drew to a close, and by 1783 "limited but prosperous trade, both foreign and domestic" had resumed (Thompson 1839: 219) though the region remained a rural agricultural community. As the 19th century progressed, successful industries in the area included: "agriculture, stock raising,...whaling, ship building, fisheries, cabinet work, flouring mills, cotton and stocking factories, leather and morocco tanneries, watchcases, clock making, engraving machinery, brick-making, cranberry culture, and poultry" (Halsey 1935: 15).

Throughout the 19th century, the villages of Southampton and Sag Harbor were the major centers of economic activity for the area (GAI 2000). The arrival of the Long Island Railroad in Sag Harbor in 1870 only increased its economic importance while at the same time marking the beginning of the decline of Southampton's agricultural importance. While the railroad allowed local farmers to transport produce to the city, it also opened up Eastern Long Island to summer tourism, which would characterize it in the 20th century. Beginning in the late-19th century, Southampton became a resort location for the wealthy individuals residing in New York City and other areas to the west. Surges in the construction of summer homes occurred in the years immediately following World Wars I and II and by the mid-20th century, much of the region's farmland had been divided and sold for development (Ibid).

D. EXISTING CONDITIONS

The Institute for Long Island Archaeology (ILIA) has been contracted by KeySpan to conduct archaeological surveys within the project corridor. ILIA has completed three archaeological surveys in this area: *A Stage 1 Archaeological Survey for the KeySpan Substation in Bridgehampton, Town of Southampton, Suffolk County, New York* (Bernstein and Manfra 2007a), *A Stage 1A Archaeological Survey for the Proposed LIPA Southampton to Bridgehampton Transmission Line Upgrade, Town of Southampton, Suffolk County, New York* (ILIA 2007b), and *A Stage 1B Archaeological Survey for the Proposed LIPA Southampton to Bridgehampton Electrical Transmission Line Direct Route Alternative* (ILIA 2007c). The first of these three surveys examined the impacts of the proposed expansion of the LIPA substation in a seven-acre parcel in Bridgehampton and consisted of both documentary research and subsurface testing (see Appendix E). Though documentary research suggested the area had moderate to high sensitivity for the presence of prehistoric sites and a low sensitivity for the presence of historic sites (Bernstein and Manfra: May 2007a), subsurface testing only recovered a light density of late 19th and early 20th century domestic artifacts, believed to be the result of sporadic dumping. These remains were determined to possess no research value and no further

Southampton to Bridgehampton Transmission Line and Expansion of Bridgehampton Substation Project

archaeological investigations were recommended for the Bridgehampton Substation expansion location. In a letter dated January 18, 2007, OPRHP concurred with the findings of this Stage 1 report (see Appendix D).

The second of these surveys examined the archaeological sensitivity of the four alternative routes under consideration for the proposed transmission line between the Bridgehampton and Southampton substations (see Appendix E). This survey consisted solely of a review of documentary materials and concluded that each of the four alternative routes for the proposed transmission line possess potential for archaeological resources relating to both the precontact and historic periods (the periods before and after initial European settlement, respectively). Levels of sensitivity range from low to high depending on the segment of each alternative route. A Phase 1B archaeological testing program was recommended for each route. The present section provides a summary of the results of the Stage 1A survey, which is included in this report in Appendix E. In a letter dated January 18, 2007, OPRHP concurred with the findings of this Stage 1A report (see Appendix D).

The third archaeological study reported the results of Stage 1B field testing of the Direct Route alternative study area (including the Village Underground Option) (see Appendix E) conducted to determine the presence or absence of archaeological sites in the study area. The testing resulted in the identification of three archaeological sites, including one prehistoric site and two historic period sites. The Stage 1B report recommended that unless the three sites could be avoided by the proposed project, Stage 2 archaeological testing should be conducted to evaluate their eligibility for the State/National Register of Historic Places. The report was submitted to OPRHP for review and comment on January 8, 2008.

ENVIRONMENTAL CONDITIONS

The dominant topographical features of the project area are the terminal moraine and adjacent outwash plain, geological features formed over 18,000 years ago as the Wisconsin glacier stopped advancing and began to recede. Elevations in the project area range from 30 to 250 feet (9 to 76 meters) above sea level and slopes are generally slight but range to over 20 percent in some areas.

Ground cover ranges from forested woodland, to brush, to agricultural fields and lawns, to paved or developed areas. The most significant ground surface disturbance in the project area is the Long Island Railroad's corridor, which has been extensively modified through both cutting and grading. A variety of fresh water sources are present in the project area vicinity and a chain of several ponds is located adjacent to the town of Water Mill. The Atlantic Ocean and a diversity of coastal environments bound the project area vicinity to the south. Appendix E provides a number of photographs of the environmental conditions across the project area.

PREVIOUSLY IDENTIFIED ARCHAEOLOGICAL SITES

A review of the site files of the New York State Museum (NYSM), OPRHP, and the Suffolk County Archaeological Association (SCAA), as well as site information maintained by ILIA, document 16 prehistoric sites, one site with prehistoric and historic (Native American and European) components, one historic Native American site, and three historic period archaeological sites within a one-mile radius of the project area. Prehistoric sites in the vicinity range from very small temporary occupations to large camps or villages. Summary information concerning these sites is provided in Appendix E.

ARCHAEOLOGICAL POTENTIAL OF THE STUDY AREA

Research conducted by ILIA led to a determination that while sensitivity varies by location along the route, overall, the study area possesses moderate sensitivity for both prehistoric and historic-period archaeological resources. The level of prehistoric sensitivity in any particular location within the study area is primarily based upon its proximity to previously identified prehistoric sites, its proximity to a source of fresh water, and whether or not the area has been previously disturbed, with undisturbed areas located near fresh water and previously identified resources being considered most sensitive. ILIA generally found sensitivity for historic-period resources in the vicinity of buildings constructed before 1957, which would have a moderate to high sensitivity, and recommended subsurface testing, typically referred to as a Phase 1B Survey, as a means of determining the presence or absence of archaeological resources in those portions of the project area that may be impacted by the Direct Route Alternative (Appendix E). Phase 1B surveys are sampling strategies designed to document the types and density of archaeological resources in a project area.

As discussed above, ILIA conducted Stage 1B field testing of the Direct Route alternative study area (including the Village Underground Option) in fall of 2007. This testing consisted of the hand-excavation of 812 shovel test pits to determine the presence or absence of archaeological sites in the study area. The testing resulted in the identification of three sites: the Mill Pond prehistoric site, the Halsey shell deposit (historic period), and the A. Edwards historic site. Eight other locations in the study area containing very light density artifact deposits were identified. It was determined that these eight locations lacked research potential. New York State archaeological site inventory forms were prepared for the three sites and the eight historic period deposits. The Stage 1B report recommended that unless the sites could be avoided by the proposed project, Stage 2 archaeological testing should be conducted to evaluate the sites' eligibility for the State/National Register of Historic Places. No further investigation was recommended for the eight historic period deposit locations. The Stage 1B report was submitted to OPRHP for review and comment on January 8, 2008.

E. POTENTIAL IMPACTS OF THE PROPOSED PROJECT

As discussed above, the *Stage 1 Archaeological Survey for the KeySpan Substation in Bridgehampton (ILIA 2007a)* concluded that no further archaeological investigations are necessary for the Bridgehampton Substation expansion location. Therefore, no additional archaeological studies would be necessary for this component of the Direct Route Alternative.

In accordance with the recommendations of the *Stage 1A Archaeological Survey for the Proposed LIPA Southampton to Bridgehampton Transmission Line Upgrade (ILIA 2007b)*, a Stage 1B Archaeological Survey was completed by ILIA (*ILIA 2007c*) to determine if archaeological resources are present in remaining portions of the study area. As discussed above, three archaeological sites (one prehistoric and two historic period sites) were identified and further study was recommended in the form of a Stage 2 archaeological survey to determine the State/National Register eligibility of the sites. Adverse effects, which generally occur where eligible resources are located in areas that will be affected by project actions, such as excavation, construction, or the storage of heavy machinery or supplies, would be mitigated either through avoidance, project redesign, or completion of a data recovery designed in consultation with the OPRHP. *