

Report On Phase 1b Archaeological Reconnaissance Survey
For Proposed Subdivision at
49 Brainerd Rd, East Lyme, CT.

DRAFT

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Report prepared for:
Gary Goeschel
Director of Planning
108 Pennsylvania Ave
Niantic, CT 06357-1510

Report prepared by:
Sarah Holmes, PhD
Archaeology Consultant
860 501-1446, slh@att.net

Abstract

The Phase 1b Archaeology Reconnaissance Survey was conducted for the area of potential effect (APE) for the proposed lot #2 subdivision at 49 Brainerd Rd. Lot #2 contains 1.6 acres and is being portioned off from the original 52.8 acre parcel that includes an existing single family dwelling in addition to a leased access road and cell tower that was archaeologically surveyed in 2009 (CHPC #1803). Subsurface testing for the proposed house lot #2 focused on the driveway and footprint for the dwelling, garage and septic. A total of 8 subsurface test pits (STPs) were tested with no artifacts identified other than a modern clay pigeon fragment at 0-5 centimeters below surface (cmbs) in STP T2-60. The APE did not merit additional testing due to the lack of cultural artifacts or cultural features observed above or below ground. Therefore, it was concluded, the proposed house construction, septic and driveway will not have an adverse effect on archaeological resources in East Lyme and it was determined the project did not meet the criteria for National Register eligibility.

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Project Description

The proposed subdivision at 49 Brainerd Rd is located in the Niantic section of East Lyme. According to the letter dated September 16, 2025, State Archaeologist Dr. Sarah Sportman, from the Office of State Archaeology (OSA), requested a Phase 1b Archaeology Reconnaissance Survey be conducted within the Area of Potential Effect (APE). Over 17 archaeological sites have been identified within a one mile radius of the Brainerd Rd subdivision. The property borders on the west with the Niles Creek (Red River) on the east with the railroad tracks and the Pattagansett River (Mamacock River). As the APE contains Agawam fine, well-drained sandy loams and is within close proximity to fresh water, these environmental characteristics indicate a high degree of archaeological sensitivity for this area. Therefore, OSA recommended a limited Phase 1b Archaeological Survey be conducted focusing on the footprint of the proposed house, garage, septic and driveway. As mentioned above, the current 52.8 acre property includes an existing dwelling and a leased access road with cell tower. The proposed subdivided lot #2 is 1.6 acres located on a northern edge of property on the west side of Brainerd Rd just south of the entrance to the Ravenwood Trail.

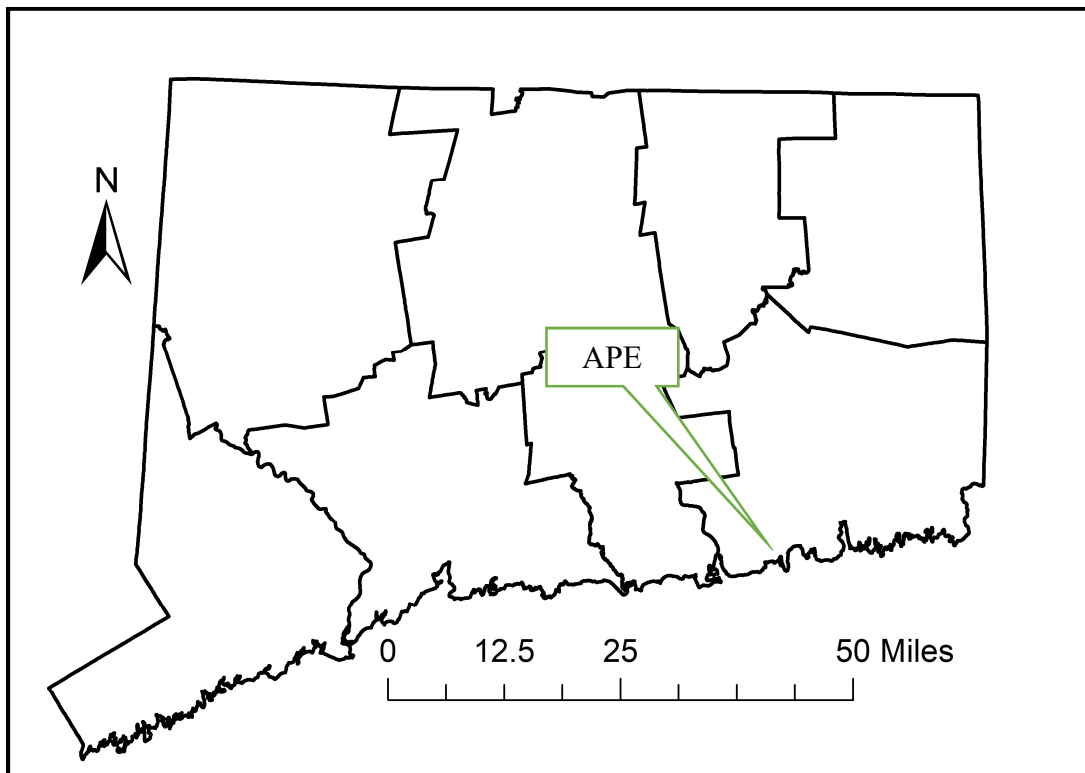


Fig. 1: Connecticut county map on APE in New London County (magic.lib.uconn.edu)

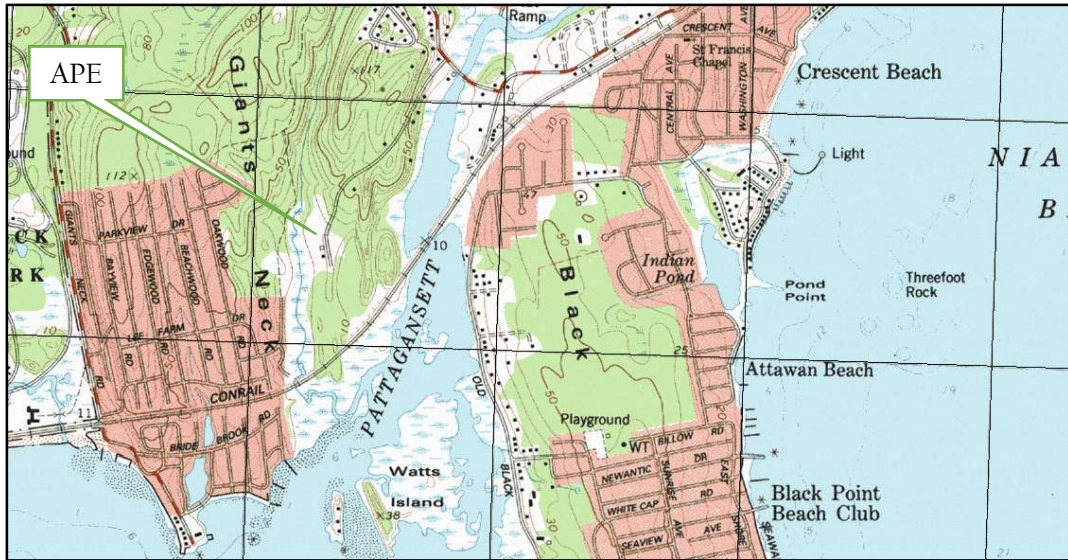


Fig. 2 1997 USGS topographic map of APE location with existing dwelling present (magic.lib.uconn.edu)

Background Research

The background research for the proposed subdivision consists of a review of the following sources:

- Archaeological site files and reports archived for the Connecticut State Historic Preservation Office (SHPO) and the Office of the State Archaeologist (OSA).
- Local town histories, state documents, maps identifying historic period Indigenous and Euro-American sites and structures within or immediately adjacent to the project area.

Criteria for Determining Archaeological Potential

Pre-contact, contact and historic period sites are rarely visible on the surface and are typically located through subsurface testing. The presence of Native American sites and some early colonial sites is predicted by implementing models based on known site locations in Connecticut and throughout southern New England. These sites correlate with environmental criteria based on geology, soils, and topography as listed below. The criteria include:

- 1) Known archaeological sites within or immediately adjacent to the project area.
- 2) National Register properties within or adjacent to the project area.
- 3) Distance from a fresh water source
- 4) Soil characteristics such as slope, drainage, texture and suitability for cultivation.
- 5) Topographic features such as degree of slope, aspect and elevation.
- 6) Proximity to raw material sources such as a lithic quarry, pond or wetland.

- 7) Proximity to areas of historic and modern development
- 8) Degree of disturbance from plowing, gravel mining, and modern construction.

Criteria for Stratification

The Phase 1b survey entails a walkover of the project area to identify visible cultural or natural features on the landscape. Cultural features include stonewalls, stone piles, and house foundations. Natural (geological) features include bodies of water, streams, swampland and rock shelters that represent a landscape conducive to human site selection.

To locate archaeological sites, project areas are typically stratified (divided) into sections with low, moderate and high sensitivity. Topographic and surficial geology maps compiled by the United States Geological Survey and soil data compiled by the United States Department of Agriculture are used to delineate areas of well-drained soils and minimal slope. Areas with less than a 5% slope, with moderate to well-drained soils within 150 meters of a wetland or stream are considered to be of high potential. Areas further from a water source with poorly drained soils or excessive slope are considered less sensitive. These levels of sensitivity are categorized as follows:

High. Undisturbed areas less than 150 meters (450ft) from a water source, on moderate to well-drained soils and slopes less than 5% are subjected to a more intensive program of systematic subsurface testing including additional judgment test pits when considered necessary.

Moderate. Areas greater than 150 meters (450ft) from a water source on moderate to well-drained soils on slopes between 5-8% are subjected to systematic subsurface testing.

Low. Areas that are poorly drained, in excess of 8% slope or have been disturbed are not subsurface tested.

The preliminary walkover determines the testing strategy when required and placement of the subsurface test pits when warranted.

Pre-Contact Overview

Paleoindian Period (12,500-9,500 BP)

In the Northeast, the Paleoindian Period dates from 12,500 to 9,500 BP, during the final glacial period known as the Younger Dryas. This was a time marked by a return to severe glacial conditions (McWeeney 1999). The earliest archaeological evidence for human occupation in the New England region dates to approximately 12,500 BP (Singer 2017). Sites from this period are characterized by distinctive fluted points and flaked stone assemblages dominated by unifacial tools.

The archaeological record reflects a settlement system based primarily on small, highly mobile social groups seasonally dispersed in search of resources. Their diet consisted of a wide range of food sources, including small and large game, fish, wild plant foods, and perhaps currently extinct megafauna (Meltzer 1988; Jones 1998). Caribou likely played a significant, if seasonal, role in subsistence. However, small game, fish, fowl, reptiles and wetland tubers were also important components of the diet at this time.

Data reflecting Paleoindian Period land use patterns and subsistence activities in the Northeast is relatively scarce (Spiess, Wilson and Bradley 1998). Few intact Paleoindian sites have been found in Connecticut. To date, five sites have been investigated and published in detail: the Templeton Site in Washington (Moeller 1980, 1984), three on the Mashantucket Pequot Reservation: the Hidden Creek Site (Jones 1997), the Ohomowauke Site and another within 100 meters of the Ohomowauke Site (Singer). The fifth, the Dr. Brian D. Jones site, was identified in Avon in 2019. A small number of additional sites have received more cursory attention. Upwards of 50 fluted points have been recovered as isolated finds across Connecticut. The scarcity of identified sites in the region indicates that population density was likely very low at this time. The small size of sites dating to this period, and the high degree of landscape disturbance over the past 12,500 years, contributes to poor site visibility overall.

Archaic Period (9,500-2,700 BP)

The Archaic Period dating from 9,500 to 2,700 BP in the Northeast is characterized by generalist hunter-gatherer populations utilizing a variety of seasonally available resources. The period is subdivided into the Early, Middle, Late and Terminal Archaic Periods on the basis of associated changes in environment, projectile point styles and inferred adaptations (Snow 1980; McBride 1984). Each sub-period is discussed below.

The Early Archaic Period (9,500-8,000 BP)

Pollen evidence indicates a gradual trend toward a warmer climate beginning around 10,000 BP (McWeeney 1999). By this time Pleistocene megafauna had disappeared and given way to modern game species such as moose, muskrat and beaver. It is feasible deer was not abundant until the end of this period when oak began to dominate upland forests. Plant and animal resources became more predictable and abundant as the climate stabilized, permitting Early Archaic populations to utilize a wider range of seasonal resources. Population density remained low during this period as reflected in the sparse representation of Early Archaic sites in the regional archeological record. This

low representation could be due to changing environmental conditions deeply burying, inundating or destroying many early sites through erosion, or due to the difficulty of recognizing Early Archaic assemblages (Funk 1997, Jones 1998).

Stone tool assemblages dating to the Early Archaic period have been recovered from several sites in the Northeast and indicate this period can be characterized by a number of distinct episodes. The most poorly understood period between 9,500 and 9,000 BP reflects the local Late Paleoindian and intrusive southern Piedmont Tradition Early Archaic influences. A quartz lithic industry in which projectile points are extremely rare occurs locally between roughly 9,000 and 8,500 BP as demonstrated at the Sandy Hill Site on the Mashantucket Pequot Reservation (Forrest 1999). The period concludes with the appearance of a temperate forest-adapted culture utilizing bifurcate-based projectile points typically manufactured from non-regional materials (Jones 1998, 1999). The Dill Farm Site in East Haddam is one of the best-documented bifurcate sites in Connecticut (Pfeiffer 1986). Archaeological investigations at this site identified cooking and refuse features, quartz flakes, retouched tools, bifurcate-based projectile points, and subsistence remains including charred nuts and mammal bone associated with a radiocarbon date of 8560 +/- 270 BP.

The Middle Archaic Period (8,000-6,000 BP)

Pollen evidence indicates a trend toward a warmer, drier climate during the Middle Archaic Period, as well as the development of alluvial terraces along Connecticut's major river systems (Jones 1999). Most modern nut tree species established themselves during this period providing a new food resource for human foragers and many game animals including deer, turkey and bear. Evidence of Middle Archaic Period occupation in Connecticut is more widely documented than for the preceding periods and indicates specialized seasonal activity in different resource zones during a period of population increase (McBride 1984; Jones 1999). The development of grooved axes suggests the increased importance of wood being used as a raw material, while the presence of pebble net sinkers on some regional sites implies a growing reliance on marine and riverine resources (Dincauze 1976; Snow 1980).

Despite their relative abundance, sites in Connecticut yield limited information on Middle Archaic subsistence and land use patterns (Jones 1999). Archaeological assemblages are characterized by the presence of Neville and Stark projectile points and large flake tools. The settlement patterns are oriented, at least seasonally, toward large upland interior wetlands (McBride 1984; Jones 1999). The data suggest seasonal re-use of such locales over a long period of time. This pattern is evident at the Dill Farm Site and those around the Great Cedar Swamp on the Mashantucket Pequot Reservation (Jones 1999). Coastal and riverine sites may be poorly documented because of rising sea levels that resulted in deep alluvial burial.

Late Archaic Period (6,000-3,700 BP)

The Late Archaic Period in the Northeast is characterized by an essentially modern distribution of plant and animal populations. This period is considered a time of cultural florescence reflected in evidence of burial ritual, population increase, and long-distance exchange networks (Ritchie 1994; Dincauze 1975; Snow 1980; Cassedy 1999). The Late

Archaic Period is one of the best-known temporal sequences in southern New England. During most of this period, large revisited seasonal settlements are located in riverine areas and along large wetland terraces, while smaller more temporary and special-purpose sites are situated in the interior and uplands (Ritchie 1969a and b, McBride 1984; Cassedy 1997, 1999). The nature and distribution of sites suggest aggregation during summer months, with seasonal dispersal into smaller groups during the cold weather (McBride and Dewar 1981).

Terminal Archaic Period (3,700-2,700 BP)

A transition in settlement and subsistence patterning began to occur with the onset of the Susquehanna Tradition, also referred to as the Terminal Archaic Period (Dincauze 1975). A number of technological innovations appear as well. These include the use of steatite bowls and the rare manufacture of cord-marked and grit-tempered ceramics. Lithic assemblages contain high proportions of chert and other non-local lithics such as argillite, rhyolite and felsite. Regionally available quartzite was commonly used but the use of local quartz became uncommon at this time. Settlement focused on upper river terraces rather than floodplains as well as expansive lacustrine and wetland settings (McBride and Dewar 1981). The interior and uplands were used less extensively (McBride 1984). Human cremation burials were common at this time (Dincauze 1968; Robinson 1996; Leveillee 1999). These changes in technology, lithic material preference and settlement organization may represent the arrival of non-regional peoples or ideas rather than in situ developments, though the debate over the possibility of migration remains active (Robinson 1996: 38-39).

The Woodland Period (2,700-450 BP)

The Woodland Period is characterized by the increased use of clay pottery, celts and non-local raw materials as well as the introduction of bow and arrow technology, smoking pipes and horticulture (Lavin 1984, Feder 1984, 1999). An increase in site size and complexity along with greater sedentism and social complexity was likely the result of an increase in population, particularly at the end of this period (McBride and Dewar 1987; Lavin 1988). The Woodland Period is traditionally subdivided into Early, Middle, and Late periods based on ceramic styles, settlement and subsistence patterns, as well as political and social developments (Ritchie 1969a and b; Snow 1980; Lavin 1984). Despite these changes, most recent scholars see the Woodland Period as a continuation of the traditions and lifeways of the preceding Archaic Period (Feder 1984, 1999).

The Early Woodland Period (2,700-2,000 BP)

Early Woodland regional complexes are generally characterized by stemmed, tapered and rare side-notched point forms; thick, grit-tempered, cord-marked ceramics; tubular pipe-stones; burial ritual; and suggestions of long-distance trade and exchange networks (Lavin 1984; Juli 1999). The Early Woodland Period remains poorly understood and is represented less in the archaeological record than the preceding phases of the Late Archaic. This may be the result of shifts in settlement that promoted the formation of larger, but fewer seasonal aggregation camps. It is possible that incipient horticulture

focused on native plant species (George 1997). The existence of stone pipes suggests the trade of tobacco into the region by this time.

The Middle Woodland Period (2,000-1,200 BP)

The Middle Woodland Period is characterized by increased ceramic diversity in both style and form, continued examples of long-distance exchange, and at its end the introduction of tropical cultigens (Dragoo 1976; Snow 1980; Juli 1999). Much of our current knowledge of the Middle Woodland Period in southern New England is from work done by Ritchie (1994) in New York State. Ritchie noted an increased use of plant foods such as goosefoot (*Chenopodium sp.*), which he suggested had a substantial impact upon social and settlement patterns. Ritchie further noted an increased frequency and size of storage facilities during the Middle Woodland Period, which may reflect a growing trend toward sedentism (Ritchie 1994; Snow 1980). At this time jasper tool preforms imported from eastern Pennsylvania are entering the region through broad exchange networks (Luedtke 1987).

Settlement patterns in Connecticut indicate an increased frequency of large sites adjacent to tidal marshes and wetlands along the Connecticut River, a decrease in large upland occupations and a corresponding increase in upland temporary camps (McBride 1984). This may indicate reduced residential mobility from earlier time periods and is likely due to the development of modern tidal marshes in low-lying riverine areas by 2,000 BP. The tidal marshes supported a wide variety of terrestrial and aquatic animal and plant resources, allowing for longer residential stays (McBride 1984).

Late Woodland Period (1,200-450 BP)

The Late Woodland Period is characterized by the increasing and intensive use of maize, beans, and squash and changes in ceramic technology, form, style, and function. Settlement patterns reflect population aggregation in villages along coastal and riverine locales and the eventual establishment of year-round villages. However, the use of the upland-interior areas by small, domestic units or organized task groups on a temporary and short-term basis remains apparent as does this trend toward fewer and larger villages near coasts and rivers. It has been hypothesized that these changes can be attributed to the introduction of maize, beans, and squash, but it is unclear how important cultigens were to the aboriginal diet of southern New England groups, especially those with access to coastal resources (Ritchie 1994; Ceci 1980; McBride 1984; McBride and Dewar 1987; Bendremer and Dewar 1993; Chilton 1999). Although sites clearly demonstrate the use of tropical cultigens in the Connecticut River Valley, wild plant and animal resources were still a primary component of the aboriginal diet. The use of imported chert increases over time in the Connecticut River Valley implying social, economic, and/or political ties to the Hudson Valley region. Ceramic style affinities also suggest western ties at the end of this period (Feder 1999).

Activities associated with a more sedentary subsistence pattern, such as the cultivation of maize, beans, and squash, resulted in the development of a more complex social organization. Regional variation between various tribal entities is reflected in stylistic design elements found on pottery in particular. Prior to this time, the populations were

fairly mobile, loosely based kin-groups that required little, if any, form of centralized authoritative power. Leadership roles were determined on a case-by-case basis and often shifted according to circumstance. This began to change with increasing sedentism.

Contact Period Overview

The Seasonal Round

Although the European trading networks impacted the daily lives of many Indigenous communities throughout southern New England, they continued to practice many of their traditional subsistence strategies. Archaeological sites in the area of coastal New England, as well as locations throughout Connecticut, reflect a series of occupations taking place within specific resource areas on an annual and seasonal basis. As with other coastal groups, the Nehantic, Mohegan, Pequot, and Narragansett settled closer to the coastline and riverbanks to fish and gather mollusks in the spring, summer, and autumn months. Large amounts of shell found along the coastline of Connecticut attest to these activities taking place. The coastal marshlands provided rushes and cattails, the necessary raw materials for making basketry and matting. By mid-April many groups cultivated maize, beans, squash, and tobacco in the fields adjacent to their settlements. Indigenous plants were collected, such as nuts, berries, herbs, and tubers. Fishing was also an integral part of the seasonal round where stone and wooden weirs were built to divert fish into enclosures. In the colder months, foodstuffs cached away from summer habitations were utilized. As winter months approached, family groups or bands removed from the immediate coast further inland to wooded areas where archaeological sites reflect the presence of smaller temporary hunting camps.

In contrast to the end of the Late Woodland, after European contact, cultural rather than environmental factors influenced the subsistence patterns of local Indigenous peoples (Ceci 1979). The impact from European trading networks, Native wampum production and the fur trade disrupted the balance of power in the years just prior to the Pequot War in 1637 (McBride 1994:44). After contact, European trade affected Indigenous populations who opted to shift their settlements to one geographical area to intercept and negotiate with their trading partners. This was certainly the case for inland groups along the Connecticut River and its tributaries. The same applied to coastal dwelling peoples such as the Nehantic, Mohegan, and Pequot who constructed fortified villages for protection while vying for trade (Ceci 1979). Fortifications were often occupied on a continual basis for at least a segment of the population, possibly housing the sachem's family. However, other horticultural activities took place within close proximity of these structures.

The socio/political organization of groups such as the Nehantic, Mohegan, Pequot and Narragansett were becoming more highly stratified during the Contact Period. Larger village sites were made up of several lineages whose sachem was a close family relation. The Nehantic, Mohegan, and Pequot leaders served as hereditary chief sachems with several sachems under their jurisdiction. Although the title of sachem was routinely passed down to the male heirs, women did acquire this elevated status. It is important to

note infectious disease introduced by European voyagers decimated local Indigenous communities and disrupted traditional leadership roles observed just after contact. Women's authority was reflected in their land rights to horticultural fields, therefore an indication of matrilineal social organization.

Early Historic Period in East Lyme

East Lyme's original bounds were once within the Town of Saybrook. Referred to as Saybrook's lands on the east side of the Connecticut River, this territory was eventually set off to establish the towns of Lyme and subsequently East Lyme. Several boundary disputes occurred during these early years of settlement. In 1671, Lyme landholders were in conflict over their eastern bound with the inhabitants of New London. The General Court intervened in 1672 to resolve the issue and in the same year, the Court established the Nehantic reservation at Black Point (Stark 1976). In the 17th century, the Nehantic settlements included a fort at Black Point and another at the head of the Niantic River. After the Pequot War in 1637, the Nehantic sachem Sassyouss granted John Winthrop, Jr. permission to settle along the west bank of the Thames River where he founded Pequot Plantation, known today as New London.

Town proprietors were granted the authority by the General Court to oversee and divide the common lands. From 1660 to 1702, Lyme underwent four land divisions. At this time, the settlement patterns in Lyme/East Lyme were a collection of dispersed homestead farms. The first highways in Lyme included the road that crossed over the river to Giants Neck dating to 1687 and the Old Post Rd that ran from New London to Lyme. Descriptions of the natural environment and of land-use in the land records indicate the local economy of East Lyme focused on farming, raising livestock, dairying, logging and the cultivation orchards. By the 1750's wharves were built along the Lieutenant River to accommodate the West Indian trade industry. (ibid.)

East Lyme, and the villages of Flanders and Niantic, were eventually incorporated in 1839. Early 18th and 19th century maps note several active mill sites in existence such as cider, grist and sawmills throughout East Lyme and along the Pattagansett River. Flanders, in particular was a center for woolen production. In the northern reaches of East Lyme, the economy focused on logging, tanning and charcoal production. Other nineteenth century industries in the area included quarrying, commercial fishing, shipbuilding and ice production. The seashore communities along the coast in Niantic became popular summer resort destinations for urban dwellers with the expansion of the railroads that not only moved goods to market but supported regional tourism.

Table 1: List of National Register Properties in East Lyme

National Register Properties and Districts in East Lyme, Ct			
Property	Address	Date	Comments
Thomas Avery House	33 Society Rd	1845-1846	aka Smith-Harris House, Greek revival farmhouse
William Gorton Farm	14 West Lane	18-19th century	farm buildings, farm dates to 17th century
Thomas Lee House	156 Giant's Neck Rd	1660-1664	
Morton Freeman Plant Hunting Lodge	56 Stone Ranch Rd	1908	
Rocky Neck Pavilion	Lands End Rocky Neck State Park	1930s	Depression era
Samuel Smith House	82 Plants Dam Rd	1700-1730s	Cape style dwelling

Historic Maps

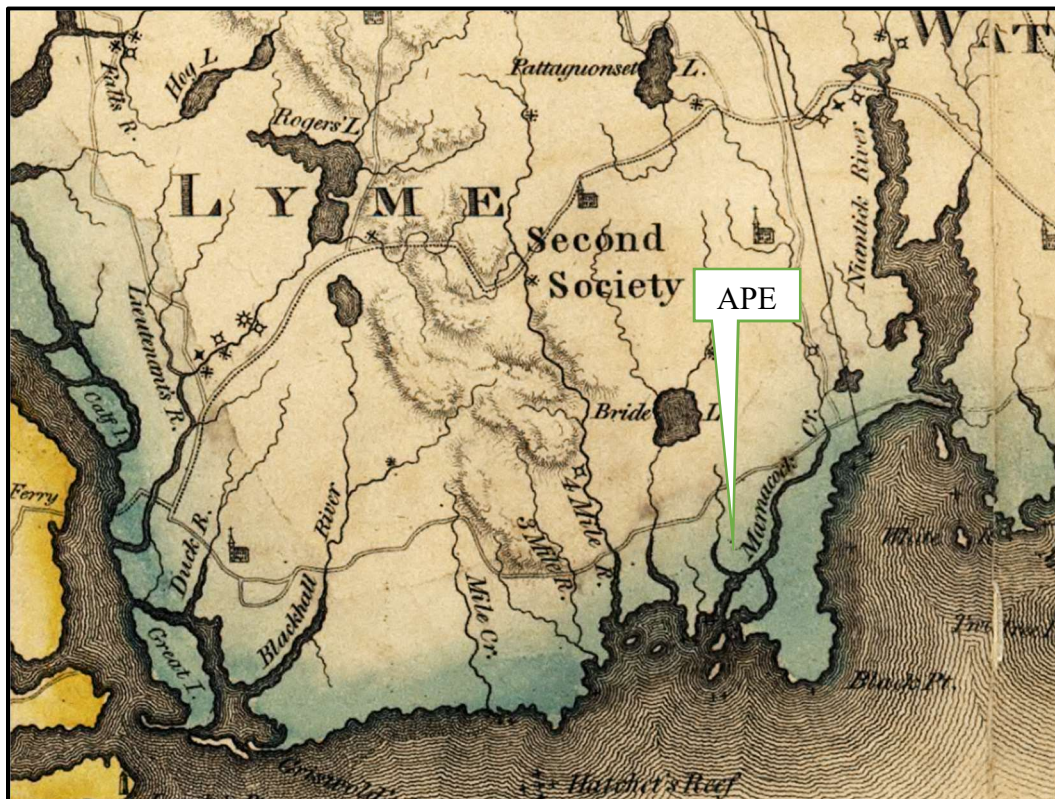


Fig. 3 1811 Warren & Gillet map identifies gristmills and sawmills present in 19th century East Lyme (magic.lib.uconn.edu)

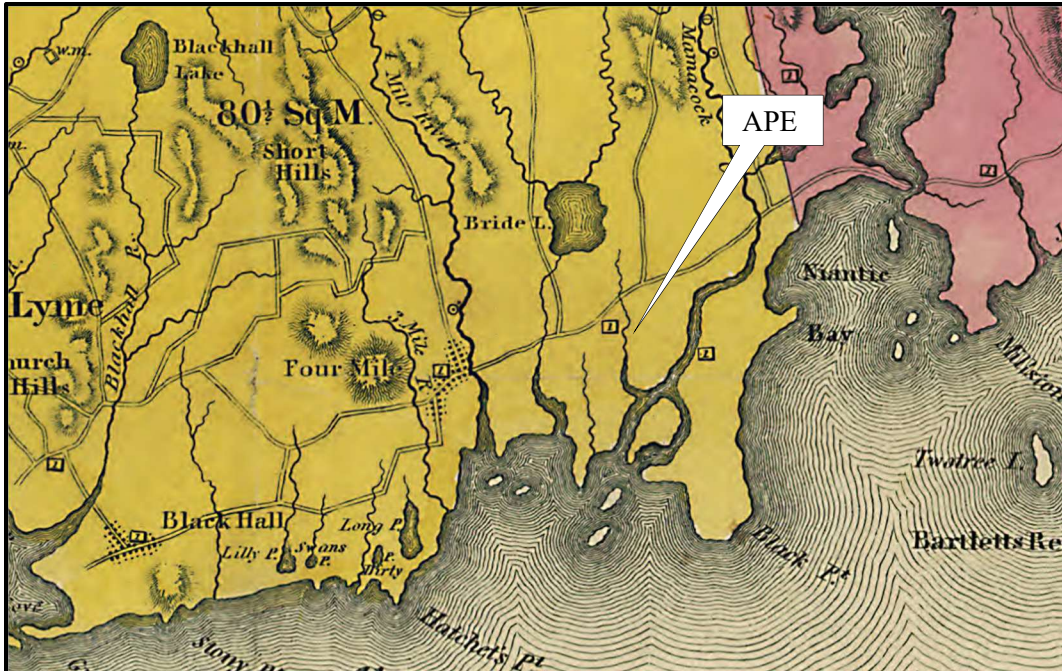


Fig 4 1833 Lester map (magic.lib.uconn.edu)

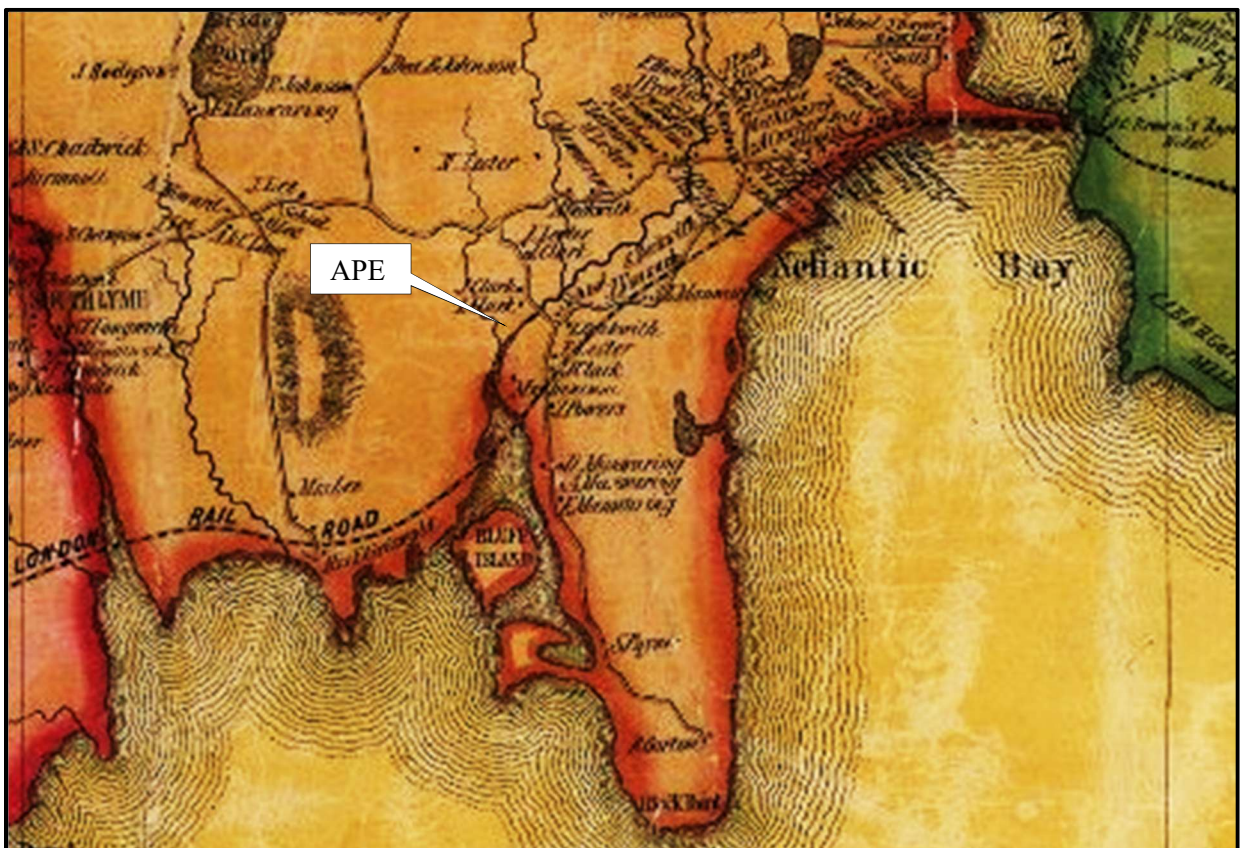


Fig. 5 1854 Baker map identifies Clark residences to the northeast of current APE. (magic.lib.uconn.edu)

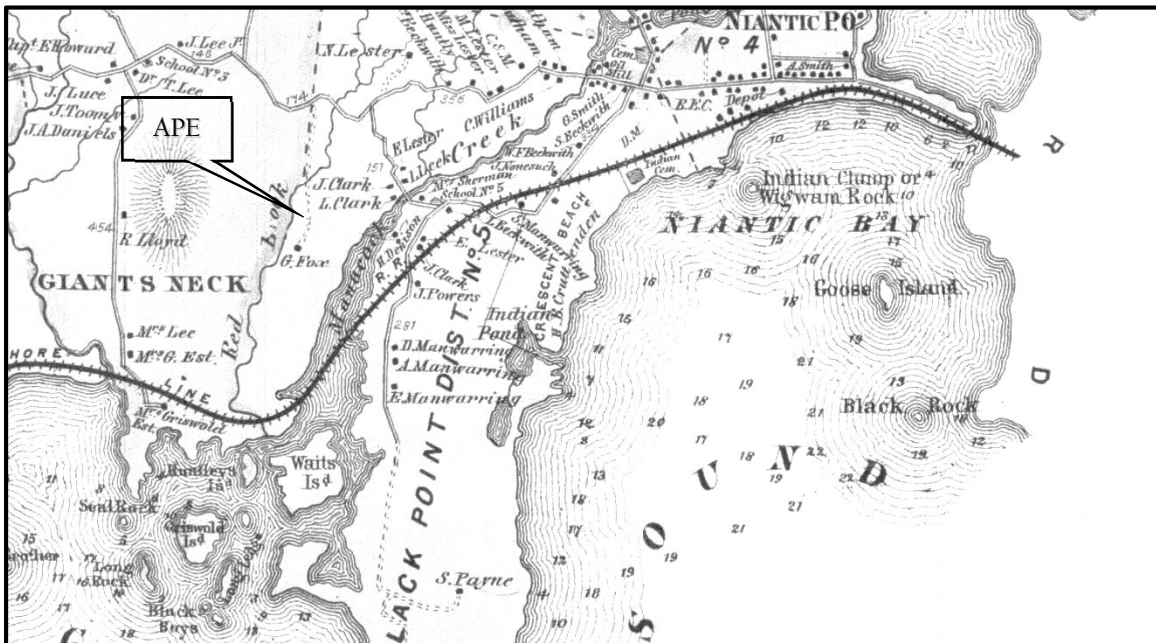


Fig. 6 1868 Beers, Ellis, Soule map identifies dwelling on or near current APE as G. Fox on east side of Red Brook. (Peterson 1868 - magic.lib.uconn.edu)

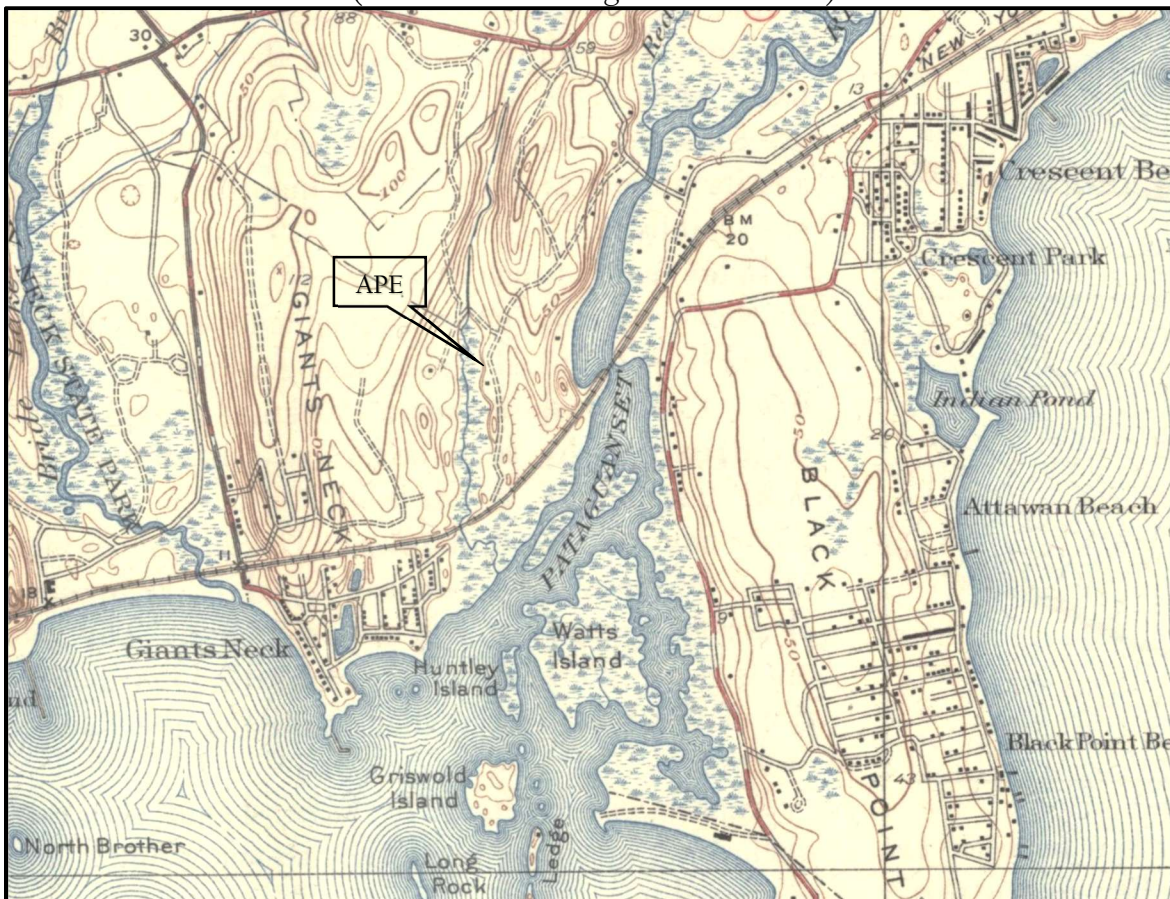


Fig. 7 1938 USGS topographic map of current APE identifies existing dwelling and current driveway extending farther to the south (magic.uconn.edu).



Fig. 8 1934 aerial indicates APE was undeveloped farmland with existing the existing dwelling present. Aerial also depicts driveway/dirt road extends further south to the shoreline. Northern property bound of lot #2 is also quite distinct where the current head of the Ravenwood Trail begins off Brainerd Rd. (magic.lib.uconn.edu)

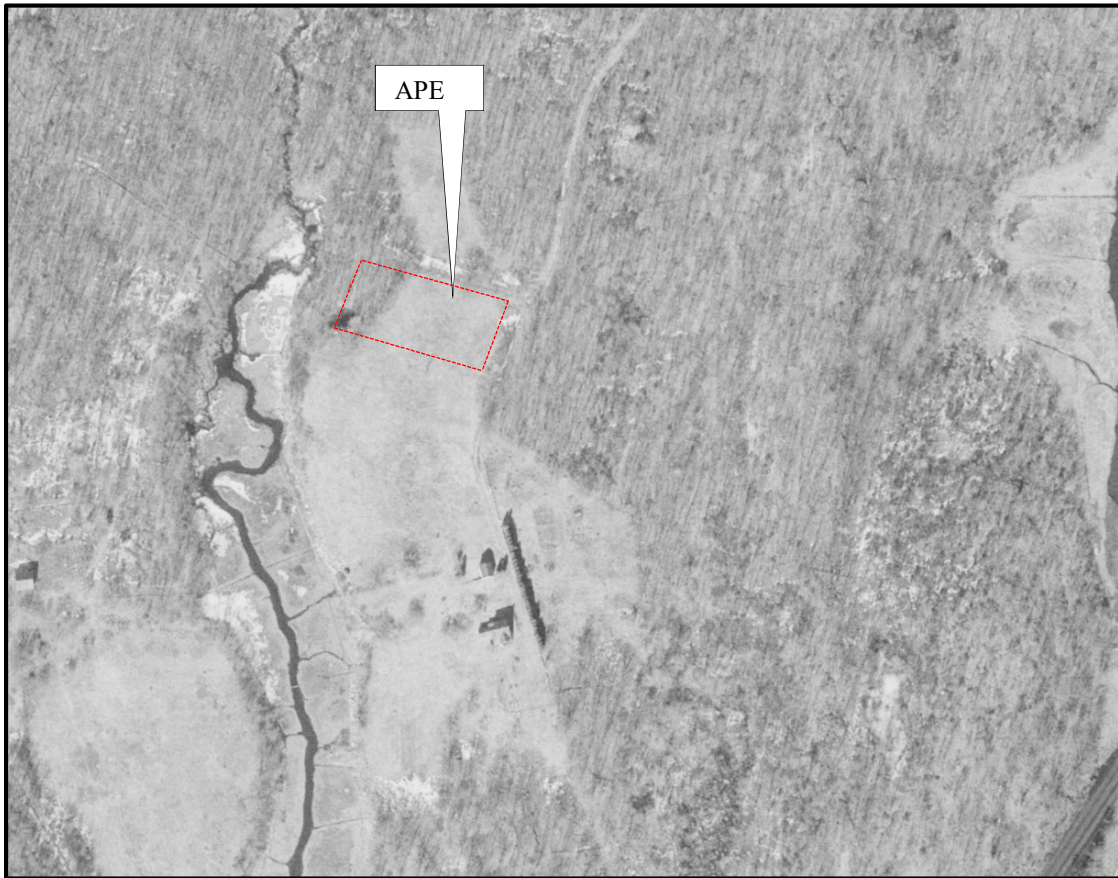


Fig. 9 1965 aerial indicates the APE was an agricultural field with the adjacent dwelling to the south (<https://libguides.ctstatelibrary.org/hg/aerialphotos>)

Environmental setting

The topography of the Brainerd Rd APE is relatively flat terrain that slopes slightly downhill to the west toward the wetland on the westernmost edge of lot #2. The predominate deciduous flora include fir (Balsam), gray birch, oak and maple with minimal green briar undergrowth. The NRCS web soil survey map and soil chart for the APE identified one soil type throughout the 1.6 acre lot as Agawam fine sandy loam with 3 to 8% slopes. The Munsell color chart designations noted for soils during testing were within a 10yr hue for the topsoil/AP which ranged from dark brown to medium brown sandy loam. The B1/B2 horizon ranged from yellow brown to light yellow brown sandy loams with and without rock. The C horizon contained grey coarse sand.

Table 2: NRCS soil designations (<http://websoilsurvey.usda.gov>)

Soil ID	Soil
29B	Agawam fine sandy loam. 3 to 8% slopes

Previous Archaeological Research and Historical Review

Archaeological records archived at the Office of State Archaeology note over 17 archaeological sites identified within a mile of the current APE, several adjacent to coastal inlets and streams with several along Niantic Bay and the coastline. Many of these sites were small camps dating to the Late Woodland (2,700 to 450 BP) and later Archaic Period (6,000 to 2,700 BP). Many of the artifacts identified included lithic cores and flakes that are evidence of stone tool knapping, many from quartz and quartzite. Recognizable lithic tools include Levanna, Squibnocket, Jack's Reef and Wading River projectile points along with quartz, quartzite and chert knives and drills. This area was also within the aboriginal territories of the Western Nehantic where the headwaters of the Niantic River provided shelter, abundant wildlife and other natural resources for their subsistence. Historic Period artifacts include window glass, bottle glass, nails and kaolin pipe stems. One archaeological survey was conducted along the existing Amtrak Railroad tracks where the 19th century railroad bed and bridge supports were recorded.

Survey and Assessment Strategy for the Phase 1b

The subsurface testing focused on areas directly impacted by the proposed construction focusing on the footprint for the proposed dwelling, garage, septic and driveway. Two transects (T1 & T2) were placed on a 15 meter grid beginning at the east side of the property at Brainerd Rd and running west. Transect 1 was numbered STP T1-0, T1-30, T1-45, T1-60 and transect 2 numbered STP T2-30, T2-45 and T2-60. All STPs terminated at glacial till (C horizon) when possible. All STPs were sterile with the exception of T2-60 that contained a fragment of a clay pigeon in topsoil at 0-20 cmbs. The soils on the APE were quite shallow terminating at roughly 50-55 cmbs at glacial till/sands with the exception of STP T1-0 that terminated at 70 cmbs. During testing, no features such as storage pits or hearths were identified above or below ground in any of the STPs.

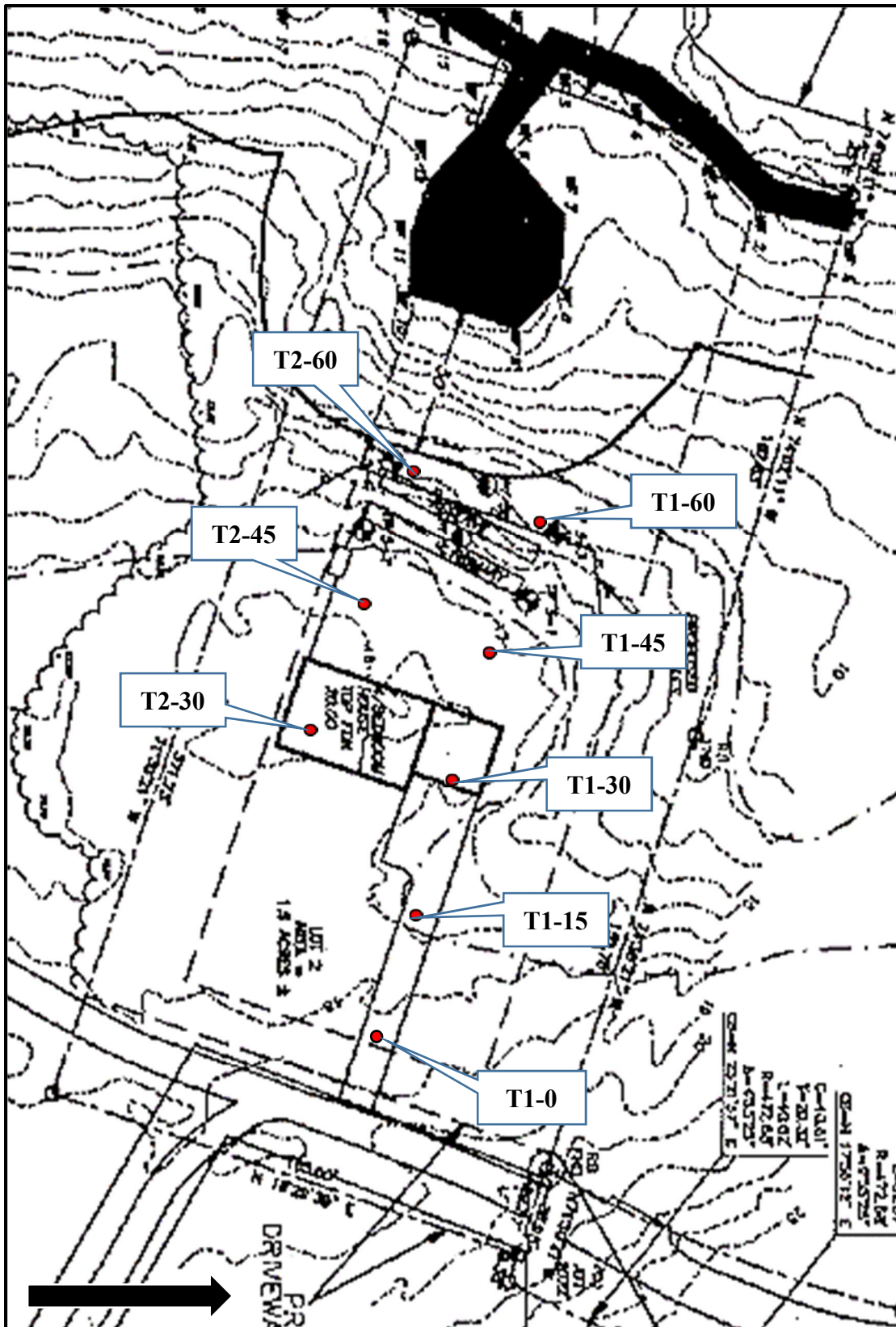


Fig. 10 Placement of subsurface test pits on 15 meter grid running east to west. (Gerwick-Mereen, LLC base map)

Table 3: Excavation Summary

Excavation Summary								
STP#	Ba gs	AP soils	Depth	Bl soils	Depth Bl	B2-C soils	Depth B2/C	Comments
T1-0	0	bn sd lm 10yr 4/3	0-11 cmbs	yw bn sd 10yr 4/6	11-52 cmbs	lt yw sd 10yr 6/4 - gy sd 10yr 6/1	52-60 cmbs/60 -70 cmbs	@7 meters west of Brainerd Rd ncm
T1-15	0	bn sd lm 10yr 4/3	0-20 cmbs					disturbed soils - tree stump - ncm
T1-30	0	bn sd lm 10yr 4/3	0-25 cmbs	yw bn sd 10yr 4/6	25-55 cmbs			rock - ncm
T1-45	0	bn sd lm 10yr 4/3	0-16 cmbs	yw bn sd 10yr 4/6	16-38 cmbs	lt yw sd 10yr 6/4 - gy sd 10yr 6/1	38-53 cmbs - 53-54 cmbs	ncm
T1-60	0	bn sd lm 10yr 4/3	0-10 cmbs	yw bn sd 10yr 4/6	10-37 cmbs	lt yw sd 10yr 6/4 w/rock	37-65 cmbs	rock - ncm
T2-30	0	bn sd lm 10yr 4/3	0-10 cmbs	yw bn 10yr 4/6	10-38 cmbs	lt yw sd 10yr 6/4 - gy sd 10yr 6/1	38-59 cmbs - 59-60 cmbs	at clearing - ncm
T2-45	0	bn sd lm 10yr 4/3	0-18 cmbs	bn sd lm 10yr 4/3	18-43 cmbs	gy sd 10yr 6/1	43-44 cmbs	shallow C horizon - ncm
T2-60	0	bn sd lm 10yr 4/3	0-22 cmbs	bn sd lm 10yr 4/3	22-40 cmbs	lt yw sd 10yr 6/4	40-50 cmbs	rock - one clay pigeon frag. - not saved

Conclusions and Recommendations

Typically the environmental conditions present on the Brainerd Rd APE situated adjacent to a wetland and containing Agawam fine sandy loams would be conducive to identifying archaeological sites. However, no artifacts were identified during the Phase Ib testing. Although wooded today, aerial photographs from 1965 and 1938 reflect the land was once an open field in the not so distant past. Due to the eight STPS being sterile and did not contain artifacts or features, no additional testing is recommended for this APE. Therefore, to conclude, the Phase Ib Archaeology Reconnaissance survey determined the one lot subdivision proposed for 49 Brainerd Rd should not have an adverse effect on archaeological resources within East Lyme nor did testing provide additional information to meet the criteria to be considered for the National Register eligibility.

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Appendix A: Site photographs



Fig. 11 Facing west over T1 transect line along driveway and north side of garage.



Fig. 12 Facing south on westernmost edge of proposed septic and T1 transect.



Fig. 13 Facing west toward T2 transect.



Fig. 14 Facing southwest on the property bound of lot #2



Fig. 15 Facing north over Brainerd Rd.

Appendix B Letters from OSA



September 16, 2025

Mr. Gary Goeschel
Director of Planning
108 Pennsylvania Ave
Niantic, CT 06357-1510

Re: Proposed Subdivision, 49 Brainerd Road, East Lyme

Dear Mr. Goeschel:

The Office of State Archaeology (OSA) reviewed the project plans for the proposed subdivision at 49 Brainerd Rd in the town of East Lyme. The planned project includes subdivision of a single 1.6-acre building lot on this 52.8-acre property. There is also an existing single-family dwelling on the property at 49 Brainerd Road, as well as a leased area with an access road and cell tower that was surveyed for archaeological resources in 2009 (CHPC #1803).

OSA examined state archaeological site files and reports, USDA soil maps, historic maps, LiDAR imagery, and aerial photographs to assess the archaeological sensitivity of the project area. The property is bordered to the west by Niles Creek and to the east by a railroad line and the Patagansett River. Soils on the property consist of a mix of Agawam fine sandy loam and stony Charlton-Chatfield complex soils. Aerial photos show the part of the property that is slated for subdivision was cleared through much of the 20th century; much of the remaining acreage is wooded.

The archaeological survey of the cell tower and access road project area did not encounter any historic-period or pre-contact Native American artifacts or cultural features. However, given the topography, presence of well-drained soils, and location between the brook and the river, the overall property is considered potentially sensitive for archaeological resources. OSA recommends that a limited Phase IB archaeological reconnaissance survey of any areas slated for ground disturbance be completed prior to the start of development activities. The survey should be conducted in accordance with State Historic Preservation Office standards summarized in the state's *Environmental Review Primer for Connecticut Archaeological Resources*, (<https://portal.ct.gov/-/media/DECD/Historic-Preservation/Environmental-Review-Primer-for-CTs-Archaeological-Resources.pdf?la=en>). A list of Cultural Resource Management firms trained to undertake such a survey is included with this letter. This survey would consist of an historical and environmental background review of the property to better document its past use and soil conditions, and a visual inspection of the property to assess the potential for intact soils and archaeological deposits, and the excavation of a limited number of archaeological shovel test pits to establish the presence or absence of archaeological remains within the project area. If artifacts or cultural features suggesting the potential presence of a significant archaeological resource are encountered, some additional testing may be required to establish the site's National Register eligibility. Should the finds be determined to be insignificant, no further work would be required. The results of the survey can be presented to my office as a condensed memorandum report for review.

Should you have any questions, feel free to contact me at sarah.sportman@uconn.edu or (860) 617-6884.

OFFICE OF STATE ARCHAEOLOGY
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY & DEPARTMENT OF ANTHROPOLOGY
UConn, 354 MANSFIELD ROAD
STORRS, CONNECTICUT 06269-1176
Sarah.Sportman@uconn.edu PHONE 860.617.6884
osa@uconn.edu

An Equal Opportunity Employer

Sincerely,

A handwritten signature in blue ink, appearing to read "Sarah P. Sportman", with a long horizontal flourish extending to the right.

Sarah P. Sportman, Ph.D.
Office of State Archaeology

Cc: John Paul Mereen, LLS; Cory Atkinson, CTSHPO

OFFICE OF STATE ARCHAEOLOGY
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY & DEPARTMENT OF ANTHROPOLOGY
UConn, 354 MANSFIELD ROAD
STORRS, CONNECTICUT 06269-1176
Sarah.Sportman@uconn.edu PHONE 860.617.6864
Osa.uconn.edu

