Appendix K – Phase 1A Cultural Resource Assessment and Survey & SHPO Review Letter



February 23, 2024

Dr. Gregory F. Walwer Archaeological Consulting Services 118 Whitfield Street Guilford, CT 06437 (sent only via email to acsinfo@yahoo.com)

> Subject: Cultural Resources Assessment Survey of a Proposed Solar Development 931 Windham Road (Route 32) Franklin, Connecticut

Dear Dr. Walwer:

The State Historic Preservation Office (SHPO) received the technical report prepared by Archaeological Consulting Services (ACS) titled *Phase Ia Archaeological Assessment Survey: Proposed Solar Photovoltaic Array, 931 Route 32, Town of Franklin, Connecticut* dated October 2023. Based on the information submitted to our office, the completed investigation meets the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*. SHPO understands that the proposed project will entail the construction of a new solar facility including associated infrastructure and an access road at the referenced address. Because the project will require approval from the Connecticut Siting Council, it is subject to review by this office pursuant to the Connecticut Environmental Policy Act.

The archaeological assessment survey consisted of comprehensive background research that examined historic maps and aerial imagery as well as previously identified cultural resources in proximity to the Area of Potential Effect (APE) for the project. The assessment survey failed to identify any properties listed on the National Register of Historic Places (NRHP) in the APE. A single previously recorded archaeological site (Site 56-1) was identified immediately to the north of the APE. However, ACS determined that Site 56-1 will not be impacted by the proposed actions. Pedestrian survey of the project parcel determined that the entirety of the APE has been previously disturbed by past gravel operations and access road construction. As a result, ACS determined that the APE retained no/low archaeological sensitivity and recommended no further investigation. Based on the information provided to our office, it is the opinion of SHPO that <u>no historic properties will be affected</u> by the proposed solar project and no additional archeological investigations are warranted. If project plans change to include additional disturbances beyond the project APE, SHPO requests additional consultation prior to construction.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Cory Atkinson, Staff Archaeologist and Environmental Reviewer, at (860) 500-2458 or cory.atkinson@ct.gov.

Sincerely,

than henney

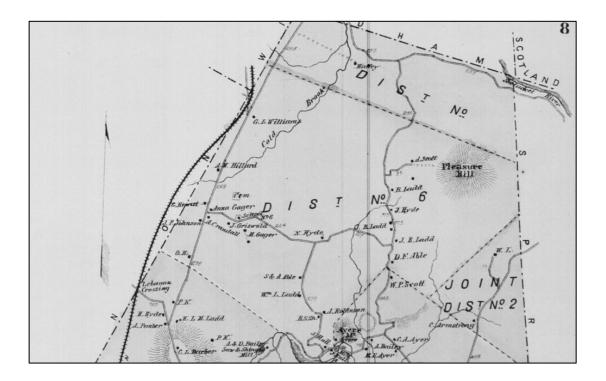
Jonathan Kinney State Historic Preservation Officer

450 Columbus Boulevard, Suite 5 Hartford, CT 06103 860-500-2300

CTMakeItHere.com

Phase Ia Archaeological Assessment Survey Proposed Solar Photovoltaic Array 931 Route 32 Town of Franklin, Connecticut

October, 2023





Phase Ia Archaeological Assessment Survey Proposed Solar Photovoltaic Array 931 Route 32 Town of Franklin, Connecticut

by

Gregory F. Walwer, Ph.D. and Dorothy N. Walwer, M.A.

of

ACS

for

Solli Engineering 501 Main Street, Suite 2A Monroe, CT 06468 (203) 880-5455

October, 2023

ACS

Abstract

This report contains the results of a Phase Ia archaeological assessment survey conducted by ACS (Archaeological Consulting Services) during the month of October, 2023. The project calls for an evaluation of potential cultural resources to be affected by the construction of a solar farm on a property that measures 188.18 acres in Franklin, Connecticut. The project property consists of one lot at 931 Route 32 on the east side of the road in the northwest section of Franklin, although the project impact area will be limited to about one-fourth of the acreage in the northeast section of the property. The project is being coordinated by Solli Engineering, a civil engineering firm based in Monroe, Connecticut. Solli supplied site plans which show the proposed development and existing conditions. The project is subject to review by the Connecticut Siting Council and the Connecticut State Historic Preservation Office (SHPO).

Background research indicates a moderate statistical sensitivity for potential prehistoric cultural resources, with a prehistoric landscape sensitivity model developed and utilized by ACS indicating a high score of 48.5 out of a possible 100.0, and therefore within the moderate sensitivity range (20-75). The moderate scores in general can be attributed to excessively drained soils on stacked coarse glacial meltwater sediments in close proximity to Cold Brook, a perennial tributary of the Shetucket River. However, the entire project area has been severely disturbed by recent gravel quarrying activity, and any existing prehistoric sites within the project area would have been eradicated. Previously documented prehistoric archaeological sites of the region tend to be concentrated along the Shetucket River to the north.

Land records and historic maps do not reveal any prior historic developments within the project area, which was historically part of the Edgarton land holdings in the 18th century, and then the Williams family of the 19th century. Historic homes of the area were were located to the south along Pleasure Hill Road and to the west at Williams Crossing. The late 18th century Barber / Downer Fishing Community site is located just north of the project area, representing a small village setting abandoned due to an epidemic, and has remaining foundations and family cemetery plot. The project area itself remained wooded throughout its history, until timbered in 1983 about the time the mushroom farm warehouse was built. Gravel quarrying occurred starting in 2015, and recently the land was used for farming corn following extensive manure spraying across the open field. Because of a lack of evidence for direct historic occupation of the site and intensive and extensive disturbance of subsurface contexts, ACS recommends no further archaeological conservation efforts for the project area, although should site plans change to include impacts to the east side of the access road to the quarry or any areas north of the quarry, further archaeological investigations should be conducted prior to project development.

Project Summary

Project Name: Proposed Solar Photovoltaic Array.

Project Purpose: To investigate possible cultural resources which may be impacted by the construction of a solar farm in Franklin, Connecticut, in compliance with requirements of the Connecticut Siting Council and the Connecticut State Historic Preservation Office.

Project Funding: Verogy, 150 Trumbull Street, 4th Floor, Hartford, Connecticut 06103.

Project Location: 931 Route 32, Franklin, Connecticut.

Project Size: 188.18 acres (project property).

Investigation Type: Phase Ia archaeological assessment survey.

Investigation Methods: Background research, pedestrian surface survey.

Dates of Investigation: October, 2023.

Performed by: ACS (Archaeological Consulting Services), 118 Whitfield Street, Guilford, Connecticut 06437, (203) 458-0550 (telephone), (203) 672-2442 (fax), acsinfo@yahoo.com.

Principal Investigators: Gregory F. Walwer, Ph.D. and Dorothy N. Walwer, M.A.

Submitted to:

Solli Engineering (Eric Labatte, Director of Operations), 501 Main Street, Suite 2A, Monroe, CT 06468, (203) 880-5455.

Connecticut Office of State Archaeology (Dr. Sarah Sportman, State Archaeologist), University of Connecticut, 354 Mansfield Road, Storrs, Connecticut 06269-1176, (860) 486-5248.

Reviewing Agency:

Connecticut State Historic Preservation Office (Catherine Labadia, Staff Archaeologist), 450 Columbus Boulevard, Hartford, Connecticut 06103, (860) 500-2329.

Recommendations: No further archaeological conservation efforts.

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CHAPTER 1: INTRODUCTION

Project Description

This report provides the results of a Phase Ia archaeological assessment survey conducted by ACS for the planned development of a solar voltaic array, or solar farm, in Franklin, New London County, Connecticut. The owner of the project is Verogy of Hartford, Connecticut. The project is contained within a lot owned by K Best USA Trading, Inc. of Corona, New York, and measures 188.18 acres. The address for the parcel is 931 Route 32, and is recorded with the Franklin Town Assessor on Tax Map 53, Block 3, Lot 7. The project area is in northwest Franklin at an area known as Williams Crossing, referring to the crossing of Route 32 across the adjacent railroad line. The large parcel contains a large warehouse owned by Windham Materials, which also owns land formerly used as a gravel quarry and recently farmed. The parcel is on the east side of Route 32, about half way in between Route 6 to the north and Route 2 to the south, each about five miles distant. There are no existing structures within the project impact area.

ACS was contacted by Solli Engineering, a civil engineering firm based in Monroe, Connecticut, to conduct the archaeological assessment survey for the project. Solli supplied ACS with a survey map, indicating that the survey was likely required for review by the Connecticut State Historic Preservation Office (SHPO) and Connecticut Siting Council. The survey map shows the proposed development and existing conditions, including topography and wetlands. The bulk of the proposed development would be in about one-fourth the total acreage in the northeast part of the property where the former gravel quarry is located, as well as an alignment of electric linkage to the utility lines located south along the west side of the access road.

ACS conducted the assessment survey in conformance with the *Environmental Review Primer for Connecticut Archaeological Resources* issued by SHPO. The assessment survey evaluated the potential need, if any, for a Phase Ib archaeological reconnaissance survey. The archaeological assessment survey consisted of a thorough background research effort and pedestrian surface survey to evaluate the potential sensitivity of the project area for any prehistoric and/or historic cultural resources, with SHPO to serve as review agency for the final report.

CHAPTER 2: BACKGROUND

Environmental Setting

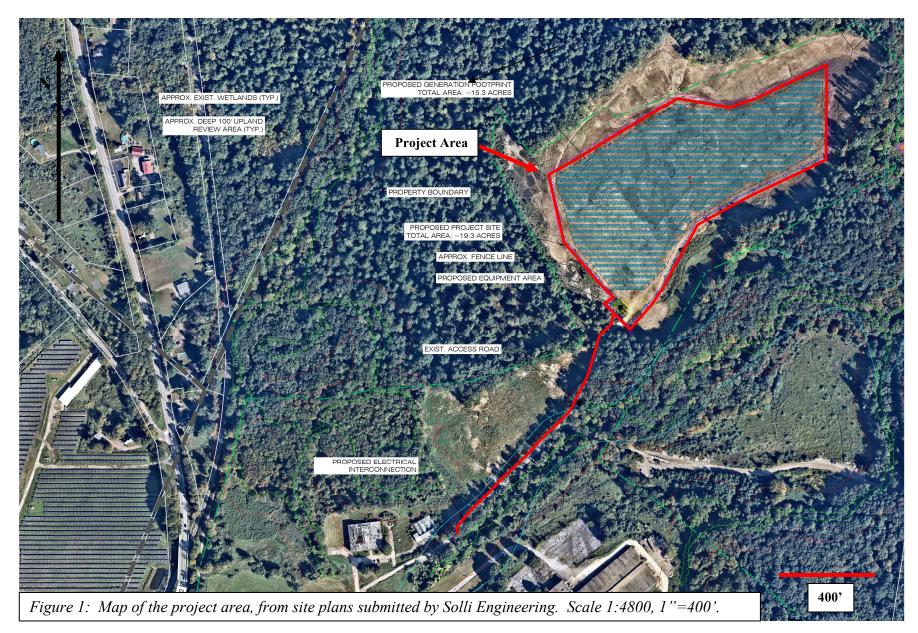
The project area is located in the Town of Franklin, New London County, Connecticut. The project setting is in the Southeast Hills (IV-C) ecoregion of Connecticut. The project area lies in the northwest section of Franklin, at an area known as Williams Crossing. The property lies on the east side of Route 32. There is a large warehouse on the property, with the project impact area located within a former gravel quarry area that has been recently farmed, as well as along an alignment for electric linkage with existing utility lines. The lot measures 188.18 acres, although the project impact area is about one-fourth of the land in the northeast section of the parcel (Figure 1).

Underlying bedrock for the property is dominated by Hebron Gneiss (SOh), a Silurian metamorphic formation on the order of 440 to 410 million years old (Rodgers 1985). Bedrock exposures in the area reveal bedding dips about 10 degrees to the south. The area containing the property is dominated by glacial outwash sediments of sand and gravel over sand (sg/s), making it the recent target of gravel quarrying (Stone et al. 1992). The course of Cold Brook along the southeast side of the project area contains post-Quarternary alluvial sediments. The resulting landscape is level to gently sloping, with elevations varying between just below 200 feet above mean sea level in areas closest to Cold Brook and along the proposed electric linkage route, to just above 250 feet above mean sea level in areas directly surrounding the former gravel quarry area (Figure 2). The farm field that occupies the former gravel quarry is recent, with a layer of manure sprayed across the field that is now occupied by harvested corn stalk stubs.

The project area is within the Shetucket River drainage basin (#3800) that flows east in southern Windham about one-half mile to the north of the project area (McElroy 1991). Cold Brook is a tributary of the Shetucket River and flows north just east of the project area, coming closest along the east side of the access drive that runs northeast past the existing warehouse, and then veering east somewhat past the quarry area. There is a small man-made detention basin in the northern part of the quarry area that retains some water, otherwise there are no wetlands or water bodies within the project area.

Recent gravel quarrying has changed the soil conditions of the project area, although late 20th century soil maps and recent websoil survey mapping reveals the entire project area to be dominated by Hinckley gravelly sandy loams (HkC - 38C, HkD - 38E), varying by degree of slope (Figure 3) (Crouch 1983; USDA NRCS websoil survey 2023). In less steep areas, the excessively drained Hinckley soils typically have a surface layer of dark brown gravelly sandy loam seven inches deep, followed by a subsoil of yellowish brown gravelly sandy loam to 22 inches deep, and a substratum of brownish yellow very gravelly coarse sand to five feet deep or more. In steeper areas, the substratum is revealed at about the same depth, although the surface layer tends to be only two inches thick and is subject to erosion. Because of excessive drainage and erosion, the soil requires irrigation and erosion control measures to be agriculturally productive.

Figure 1: Map of the Project Area



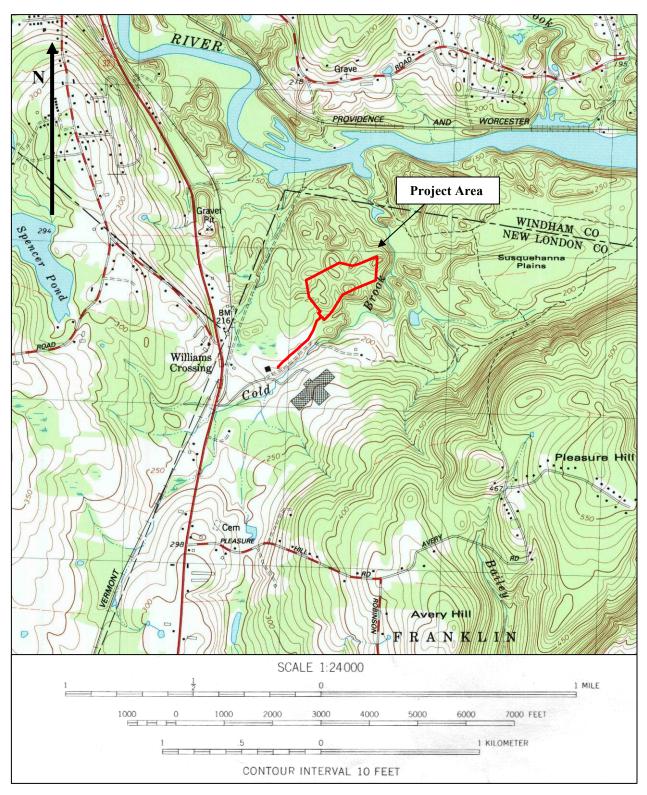


Figure 2: USGS 7.5' Topographic Map, Willimantic Quadrangle

Figure 2: From USGS 1984.

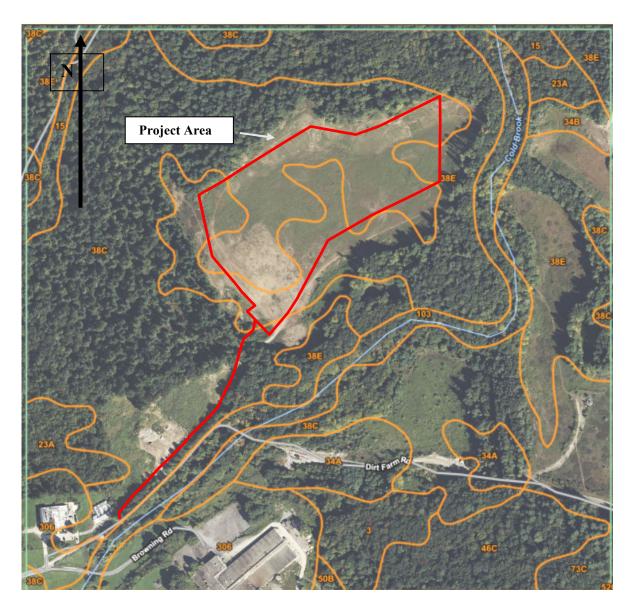


Figure 3: USDA Websoil Survey Map

Figure 3: From USDA NRCS websoil survey.

Cultural Setting

Regional Prehistory

The prehistory of the project region and New England in general can be broadly divided into periods reflecting changes in environment, Native American subsistence and settlement patterns, and the material culture which is preserved in the archaeological record. Although it remains controversial today, the conservative estimates for the first occupations of North America are about 18,000 to 15,000 years ago, just after the maximum extent of the last glaciation and the broadest extent of the Bering land bridge (Kehoe 1981:7; Parker 1987:4; Jennings 1989:52). Southern Connecticut itself remained glaciated until about 15,200 B.P. (Snow 1980:103; Gordon 1983:71; Parker 1987:5; McWeeney 1994:181, 1999:6).

Paleo-Indian

The Paleo-Indian period is documented in Connecticut after 13,000 years ago and extends to roughly 9,500 B.P. (Swigart 1974; Snow 1980:101; Lavin 1984:7; Moeller 1984, 1999). The earliest radiocarbon date in Connecticut was secured recently at the Brian D. Jones site, at about 12,500 B.P. (Leslie and Sportman 2020). An unpublished date of 12,600 B.P. was also obtained from the site (Sportman pers. comm. 2022). This was a period of climatic amelioration from full glacial conditions, and a rise in sea levels which fell short of inundating the continental shelf. It was during this time that tundra vegetation was replaced by patches of boreal forests dominated by spruce trees (Snow 1980:114; Parker 1987:5-6), and eventually white pine and several pioneering deciduous genera (McWeeney 1994:182, 1999:7). Early in the period, the environment was conducive to the existence of large herbivores and a low population density of humans who procured these animals as a major subsistence resource, although warming temperatures and denser forests contributed to the extinction of certain species. The projected human social and settlement patterns are those of small bands of semi-nomadic or restricted wandering people who hunted mammoth, mastodon, bison, elk, caribou, musk ox, and several smaller mammals especially after the extinction of megafauna (Ritchie 1969:10-11; Snow 1980:117-120; Jones and Forrest 2003). Episodes of sparse vegetation during this period encouraged the use of high lookout points over hollows and larger valleys by people in pursuit of large game. The southern part of New England had an earlier recovery from glacial conditions when compared to areas to the north, however, with a higher density of vegetation that might have precluded Paleo-Indians of Connecticut from focussing heavily on the larger mammals (McWeeney 1994:182).

The cultural material associated with this period includes large to medium-sized, fluted projectile points (cf. Clovis), in addition to knives, drills, pieces esquillees and gravers, scrapers, perforators, awls, abraders, spokeshaves, retouched pieces, utilized flakes, and hammerstones (Wilbur 1978:5; Snow 1980:122-127; Moeller 1980). Although numerous finds from this period have been found in Connecticut, only a few, small *in situ* sites exist throughout the state. Finds tend to be located near very large streams in the lower Connecticut River Valley, and in rockshelters of other regions (McBride 1981). A survey performed by the Connecticut Office of State Archaeology and the Archaeological Society of Connecticut resulted in the documentation of 53 Paleo-Indian "find spots" in Connecticut (Bellantoni and Jordan 1995), while a more updated research survey indicates up to 72 locations and sites (Bouchard 2014). Many more sites have likely been eradicated by rising sea levels since the Paleoindian period (Anderson 2001).

Early Archaic

The Early Archaic period lasted from approximately 9,500 B.P. to 7,500 B.P. (Snow 1980:159; Lavin 1984:9; Moeller 1984). Sea levels and temperatures continued to rise during this period as denser stands of forests dominated by pine and various deciduous species replaced the vegetation of the former period (Davis 1969:418-419; Snow 1980:114; Parker 1987:9; McWeeney 1994:184-185, 1999:8-9). This environmental change was rapid and caused a major shift in the animals it supported, including deer, moose, other small to medium-sized mammals, migratory birds, fish, and shellfish. The material culture changed along with the environmental conditions to include the atlatl and smaller stemmed and bifurcated projectile points (Stanly, cf. Kanawha and Lecroy) for procuring smaller, faster game in more closed settings (Wilbur 1978:6-7). The expanded tool set included choppers and anvil stones. Fish weirs and nets with stone weights could have been used as early as the Early Archaic in Connecticut (Wegner 2018). Settlement patterns were probably becoming more territorialized towards a central-based wandering character (Snow 1980:171; see also Forrest 1999), and possibly a greater focus on wetlands (Jones and Forrest 2003). Some semi-subterranean habitation structural features are evident in the region at this time, and may be part of a Gulf of Maine Archaic tradition in which there was a focus on quartz as a lithic resource without a high emphasis on projectile points (Robinson et al. 1992; Forrest 1999) and instead more of a focus on more expedient tool forms than the more formalized Paleoindian toolkit (Anderson 2001). The Early Archaic period is poorly represented in Connecticut and the lower coastal river valleys, probably resulting from a combined effect of low population densities in response to rapidly changing environmental conditions, as well as site location and preservation factors (Snow 1980:168; McBride 1981; McBride and Dewar 1981:45; Lavin 1984:9; McWeeney 1986; see also Forrest 1999).

Middle Archaic

The Middle Archaic period extended from approximately 7,500 B.P. to 6,000 B.P. (Snow 1980:173; Lavin 1984:9; McBride 1984; Jones 1999). It was by the end of this period of increased warming that sea levels and coastal configurations had stabilized and approached their present conditions (Kehoe 1981:211; Gordon 1983:82; Parker 1987:9). The period is marked by the establishment of forests with increasing proportions of deciduous hardwoods in relation to the pine predecessors in Connecticut (Davis 1969; Snow 1980:114; McWeeney 1999:10). The material culture included square or contracting-stemmed points (Neville, Stark, and Merrimac), semi-lunar groundstone knives, ground and winged banner stones for atlatls, plummets for nets, gouges, denticulates, perforators, percussed celts and adzes and grooved axes for woodworking (Snow 1980:183-184), as well as tools used in previous periods and rare triangular projectile points that may be precursors of Squibnocket points of the Late Archaic (Forrest 2010). This more extensive range of material culture indicates a broader subsistence base than in previous periods, including greater fish and shellfish procurement (Wilbur 1978:8; Snow 1980:178-182; Anderson 2001) which was associated with the stabilization of sea levels towards the end of the period. The increased breadth of subsistence resources had the effect of increasing scheduling efforts and may have caused settlement patterns to take on more of a central-based or seasonally circulating pattern with bands joining and dispersing on a seasonal basis (Snow 1980:183). Sites found in the lower Connecticut River Valley region suggest that a wider range of environments and associated site types were exploited, including both large and special task sites in upland areas (McBride 1981, 1984:56). This regional pattern may confirm the suggested settlement

pattern of central-based, seasonally circulating or restricted circulating groups of people supported by logistical procurement sites throughout the state. Middle Archaic sites are fairly rare in Connecticut, again a combined product of rising sea levels and poor site preservation (see Forrest 1999).

Late Archaic

The Late Archaic period ranged from approximately 6,000 B.P. to 3,700 B.P. (Snow 1980:187; Lavin 1984:11; McBride 1984; Pfeiffer 1984; Cassedy 1999). This period is marked by a warm-dry maximum evident from pollen cores in the region (Davis 1969:414; Ogden 1977; Anderson 2001). Hardwood, oak-dominated forests very similar in character to ones established today covered most of Connecticut by the Late Archaic (Parker 1987:10). The Late Archaic in Connecticut has been divided into two traditions: the Laurentian and the Narrow Point (Lavin 1984:11), with the former perhaps being distributed more in the interior. The Laurentian tradition is defined by wider-bladed, notched and eared triangular points, and ground slate points and ulus, while the Narrow Point tradition includes smaller, thicker, and narrower points, which as a succinct tradition may have survived well into the Woodland era (Millis and Millis 2007). The tool kit and general material culture became even more expanded during this period, with the advent of ground stone manos, nut mortars, pestles, and bowls, as well as stone pipes, bone tools, corner-notched (Vosburg, Brewerton, and Vestal), side-notched (Otter Creek, Brewerton, Normanskill), smaller narrow-stemmed (Dustin, Lamoka, Squibnocket, and Wading River), and triangular points (Squibnocket, Brewerton, and Beekman), grooved and perforated weights, fish weirs and harpoons, and decorative gorgets (Wilbur 1978:15-24; Snow 1980:228-231). The groundstone material has been inferred as being associated with an increased vegetable diet that consisted of berries, nuts, and seeds (Snow 1980:231; Lavin 1984:13), including acorn, butternut, chestnut, walnut, hickory, bayberry, blackberry, goose foot, cranberry, partridge berry, service berry, strawberry, and swamp current (Cruson 1991:29). Deer continued to be the predominant meat source, although animal remains recovered from archaeological sites in the region include black bear, raccoon, woodchuck, rabbit, otter, gray squirrel, red fox, gray fox, wolf, wild turkey, grouse, pigeon, migratory fowl, and anadromous and freshwater fish and shellfish (Cruson 1991:28-29). Various sea mammals and fish were procured along the coast.

The increasing breadth of the subsistence base and material culture was in turn associated with a central-based settlement pattern in which a restricted range of seasonally scheduled and used areas were exploited in a more semi-sedentary fashion than previously (Lavin 1984:13; Dincauze 1990:25). Sites in the lower Connecticut River Valley suggest that the larger rivers served more as long-term bases within a central-based circulating system than in the Middle Archaic (McBride 1981; McBride and Dewar 1981:48). The interior uplands of Connecticut may have supported a relatively independent set of seasonally circulating groups which used larger wetlands as long-term bases (Wadleigh 1981). Mortuary practices of the time suggest some sedentism for certain groups of people who were buried in specialized secondary cremation cemeteries and who may have had some control over restricted resources (e.g. riparian transportation routes) (Walwer 1996). Although the cremation sites largely include utilitarian funerary objects, some contain non-local materials which suggest trade association with cultures to the west of Connecticut (Walwer 1996).

Terminal Archaic

The Terminal Archaic period extended from approximately 3,700 B.P. to 2,700 B.P., as defined by the Susquehanna and Small-Stemmed traditions (Swigart 1974; Snow 1980:235; Lavin 1984:14; Pfeiffer 1984; Pagoulatos 1988; Cruson 1991; Cassedy 1999). Steatite, or soapstone, was a frequently used material by this time, and could be fashioned into bowls and other objects. The mass, permanency, and labor intensiveness of creating these heavy items have led to the inference of more sedentary base camps, especially on large rivers where the development of a canoe technology had become fully established and increased the effective catchment area within which groups of people were gathering resources on a continuous basis. The material culture of the period was very similar to the Late Archaic, with a proliferation of stemmed projectile point types including Snook Kill, Bare Island and Poplar Island stemmed points, Orient Fishtail points, Sylvan and Vestal side-notched points, and Susquehanna cornernotched points. The resource base continued to consist of deer and small mammals, nuts, shellfish, turtles, and birds (Snow 1980:249). The first signs of ceramics (Vinette I pottery) tempered with steatite fragments appeared during this period (Lavin 1984:15; Lavin and Kra 1994:37; see also Cassedy 1999:131), and archaeological evidence of trade with other regions becomes more substantial for this time (Pfeiffer 1984:84).

The distribution of sites and site types in the lower Connecticut River Valley during this period suggests that there was a change in settlement to one with fewer, yet larger sites in riverine settings, and associated satellite task-specific sites in the uplands (McBride 1981; McBride and Dewar 1981:49). The implications are less foraging-strategy residential movement and more task-oriented collection activities within a radiating settlement pattern, but probably one in which some degree of seasonal circulation of settlement took place. Pagoulatos (1988) has shown that while sites associated with the Small-Stemmed tradition tend to suggest a more mobile settlement pattern in the interior uplands, sites of the Susquehanna tradition indicate a semi-sedentary collector strategy in major riverine and estuarine environments. At least certain groups exhibited semi-sedentism and some control over restricted resources, as indicated by the elaborate burials of the Terminal Archaic (Walwer 1996). Mortuary practices from the period include secondary cremation interments in formalized cemetery areas, with individual pits containing fragmented utilitarian material from communal cremation areas, as well as highly stylized funerary objects from non-local material (Walwer 1996). The lack of other, less formalized burial types evident in the archaeological record may be a matter of poor preservation, in which case it has been proposed that the cremation cemeteries are representative of a stratified society in which a portion of the people (of the Susquehanna "tradition") were able to generate a surplus economy that supported a semi-sedentary settlement pattern. This surplus may have been generated by the procurement and control over the transportation of steatite from various areas in Connecticut and surrounding territory.

Early Woodland

The Early Woodland period in Connecticut extended from about 2,700 B.P. to 2,000 B.P. (Lavin 1984:17; Juli and McBride 1984; Cruson 1991; Juli 1999). A cooling trend during the Early Woodland (Davis 1969:414; Parker 1987:10; McWeeney 1999:11; Fiedel 2001) is thought to have reduced population sizes and regional ethnic distinction as the hickory nut portion of the

resource base was significantly decreased, although the apparent decline in populations may possibly be related to other factors such as the inability to confidently distinguish Early Woodland sites from those of other periods (Filios 1989; Concannon 1993). Climatic deterioration and depopulation are in turn thought to have inhibited the progression towards, and association with, more complex social structures and networks that were developing further to the west and south (Kehoe 1981:215). A proliferation of tobacco pipes may indicate the beginnings of agricultural efforts in the northeast. The Early Woodland of this region, however, exhibits no direct traces of subsistence crop remains, indicating continuity with previous periods in terms of subsistence practices (Lavin 1984:18).

Materially, the period is marked by a substantial development of a ceramic technology, with the Early Windsor tradition of pottery being dominant in the Early Woodland of Connecticut (Rouse 1980:68; Lavin 1984:17, 1987). Both Early Windsor cord-marked and Linear Dentate ceramic forms were being produced at this time. Diagnostic projectile points can be developmentally traced to indigenous points of previous periods, consisting of many stemmed forms in addition to Meadowood and Fulton side-notched points, Steubenville points, and Adena-Rossville types, but now may have been used in conjunction with the bow and arrow (Lavin 1984:18). Adena-like boatstones are also found in this period. Although rare contact with the Adena culture is evident throughout assemblages of the period, the Early Woodland in southern New England remained a very gradual transitional period (Snow 1980:279,287; Lavin 1984:19).

A heightened use of ceramics has been erroneously promoted as an automatic indication of increased sedentism in many areas. Instead, central-based camps with restricted seasonal encampments appear to be the dominant settlement pattern (Snow 1980:287). Minimal archaeological evidence from the lower Connecticut River Valley appears to suggest a similar settlement pattern to the Terminal Archaic in which large riverine sites served as central bases with upland seasonal dispersal or specific task sites (McBride 1981; McBride and Dewar 1981:49), but with a lesser degree of sedentism. Interior uplands populations also decreased during the Woodland era, perhaps related to the intensification of agricultural resources along major riverine and coastal areas (Wadleigh 1981:83). The trend towards greater mobility may in part be attributed to the decline in the use of steatite that no longer gave certain groups control over critical and restricted resources, as indicated by the declining ceremonialism of burial sites at the time which were more often located in habitation sites and exhibited combinations of secondary cremation features and primary inhumations (Walwer 1996). This transition in the socio-economics of the region was brought about by the decrease in importance of steatite as ceramics obscured its value for producing durable containers. Partially preserved primary inhumations appear for the first time in the region based on preservation considerations.

Middle Woodland

The Middle Woodland period lasted from about 2,000 B.P. to 1,000 B.P. (Lavin 1984:19; Juli and McBride 1984; Cruson 1991; Juli 1999). The climate was returning to the conditions basically witnessed today (Davis 1969:420; McWeeney 1999:11). It is a period which exhibited considerable continuity with previous periods in terms of both subsistence and material culture. Cylindrical pestles and groundstone hoes are tools diagnostic of the period and reflect developing agricultural efforts, including the cultivation of squash, corn, and beans on a seasonally tended basis (Snow 1980:279). Direct evidence for agriculture in the form of preserved vegetal remains,

however, does not generally appear until the early Late Woodland (Lavin 1984:21) when corn is thought to have been introduced into the Connecticut River Valley from the upper Susquehanna and Delaware River Valleys (Bendremer and Dewar 1993:386). Projectile point forms from the period include Snyders corner-notched, LongBay and Port Maitland side-notched, Rossville stemmed, and Greene lanceolate types. A proliferation of ceramic styles was witnessed during the Middle Woodland (Rouse 1980; Lavin 1984:19-20, 1987; Lavin and Kra 1984:37), including Rocker Dentate, Windsor Brushed, Sebonac Stamped, Hollister Stamped, Selden Island, and Windsor Plain types that were all also produced in the Late Woodland, with the exception of the Rocker Dentate. Net and fabric-marked ceramics are key indicators of the shift into the Windsor tradition that would follow into the Late Woodland (Wink and Leslie 2021), although ceramic forms from the Early Woodland were still being produced as well. Minor traces of the Hopewell cultures to the west are also present in the archaeological record of this period. Site types and distributions in the lower Connecticut River Valley imply that a moderate increase of sedentism with aspects of a radiating settlement pattern took place on large rivers, supported by differentiated upland task sites (McBride 1981; McBride and Dewar 1981:49). This trend may have been supported by the expansion of tidal marshes up larger rivers (McBride 1992:14).

Late Woodland

The Late Woodland period extended from approximately 1,000 B.P. to 1600 A.D., the time of widespread European contact in the broader region (Snow 1980:307; Kehoe 1981:231; Lavin 1984:21; Feder 1984, 1999). A warmer climate and increased employment of large scale agriculture for subsistence in New England were associated with increased population densities, more sedentary settlements, and more permanent living structures and facilities in larger villages. Settlements in Connecticut, however, tended to remain smaller with only small scale agricultural efforts, and as part of a seasonal round in which smaller post-harvest hunting and task-specific settlements were established in fall, and protected settlements occupied in winter (Guillette 1979:CI5-6; McBride and Bellantoni 1982; Lavin 1984:23; Starna 1990:36-37). Instead of maintaining permanent villages near agricultural plots, aboriginal populations engaged in the slashing and burning new plots and let old plots lie fallow periodically (Salwen 1983:89). In this area, domestic resources included corn, beans, squash, Jerusalem artichoke, and tobacco (Guillette 1979:CI5; Starna 1990:35). Agriculture was largely maintained by women, with the exception of tobacco (Salwen 1983:89; Starna 1990:36). Deer, small mammals, fish and shellfish, migratory birds, nuts and berries, and other wild foods continued to contribute significantly to the diet (Waters 1965:10-11; Russell 1980). Many of the foods produced were dried and/or smoked and stored in baskets and subterranean holes or trenches.

The increasing diversity of wild estuary resources may have served to increase sedentism in the coastal ecoregions of Connecticut (Lavin 1988:110; Bragdon 1996:67), while agriculture and sedentism may have been even more prominent along the larger river bottoms as floodplains stabilized and experienced less flooding (Bragdon 1996:71; Forrest et al. 2008:11). Late Woodland settlement patterns of groups in the uplands interior ecozones of Connecticut may have included the highest degree of mobility, while many sites from the central lowlands represent task-specific sites associated with larger settlements along the Connecticut River (McBride 1992:16). House structures consisted of wigwams or dome-shaped wooden pole frameworks lashed and covered with hides or woven mats, and clothing was made from animal hides (Guillette 1979:CI7-8; Starna 1990:37-38). Pottery for the period is defined as the Late Windsor tradition in Connecticut (Rouse 1980:68; Lavin 1984:22, 1987). Most of the ceramic forms of the Middle Woodland were still being produced, in addition to the newer Niantic Stamped and Hackney Pond forms. Ceramics of the East River tradition also appear in the area during the Late Woodland, having originated and been concentrated in the New York area (Rouse 1980; Wiegand 1987; Lavin 1987). The period exhibits some continuity in terms of projectile point forms, although the Jack's Reef, Madison triangular, and Levanna points are considered diagnostic for the period. As likely with earlier periods, the material culture included various textile products such as baskets and mats, and wooden utensils such as bowls, cups, and spoons (Willoughby 1935; Russell 1980:56).

Unlike groups of the Mississippi valley, the overall cultural pattern for the entire Connecticut Woodland era exhibits considerable continuity. Interregional contact increased during this period, however, with non-local lithic materials increasing from as low as 10% to as high as 90% from the early Middle Woodland to the Late Woodland (McBride and Bellantoni 1982:54; Feder 1984:105), although most trade appears to have been done between neighboring groups rather than initiated through long-distance forays (Salwen 1983:94). The lack of enormous agricultural surpluses for the time is indicated by the low density of small storage features in habitation sites, as well as the ubiquitous primary inhumation of people without a select portion of graves exhibiting special treatment that would require high energy expenditure (Walwer 1996). As confirmed by early ethnohistoric accounts, this suggests a largely egalitarian and relatively mobile society for the Late Woodland despite the fact that this period marks the highest development of food production (i.e. agriculture) during the course of prehistory in the region. Corn was undoubtedly important, however, as a disproportionate amount of the simple, flexed burials were oriented towards the southwest which was the aboriginally acknowledged direction for the origins of corn and the Spirit Land.

Local Sites and Surveys

According to site files of the Connecticut Office of State Archaeology (CT OSA 2023) and Connecticut State Historic Preservation Office (CT SHPO 2023), there are no previously recorded prehistoric archaeological sites in close proximity to the project area, and just a couple one-half mile to the north on the other side of the Shetucket River (Figure 4). Sites T3 (163-008) and T5 (163-026) were identified by ACS during a survey of the Scotland Hydroelectric Project in Windham (Walwer and Walwer 2009). At T3, recovered artifacts include chert and rhyolite debitage and some charcoal fragments, while at T5, there were chert and quartzite debitage recorded, as well as a quartz core, quartzite knife, and charcoal fragments.

Summary

A low density of prehistoric archaeological sites has been recorded in the region surrounding the project area. This is likely attributable to the low density of professional surveys. More sites are likely yet to be discovered in the area, and probably located according to well established settlement models with a focus on proximity to fresh water sources and well drained soils, with sites more abundantly located on the larger streams further along the drainages, in this case the Shetucket River drainage basin. The glacial outwash sediments of the project area and proximity to the Cold Brook tributary of the project area would have made it attractive as a prehistoric settlement area.



Figure 4: Prehistoric Sites of the Region

Figure 4: From CT SHPO 2023. Yellow dots are previously identified archaeological site locations. 163-008 and 163-026 are prehistoric, others are historic. Blue shaded area one-mile radius of project area.

Local History

Contact Period

The Contact period is designated here as the time ranging from the first substantial contact between European explorers and Native American inhabitants of Connecticut to the time of intensive occupation by European settlers, roughly 1600 to 1700. Initial contact in the broader region occurred in 1524 when Verrazano reached the coast of New England (Terry 1917:16). Others followed in the first decade of the 1600s (Salwen 1983), and in 1614 Dutch explorers reached the Connecticut River (DeForest 1852:70; DeLaet 1909 [1625-1640]). The Dutch were met by the Quinnipiacs at New Haven Harbor in 1625 (Brusic 1986:9) when they initiated fur trading relationships with several local tribes. The trade relationship between local tribes and the Dutch was short-lived, however, coming to an abrupt end by the mid 1630s (Guillette 1979:WP2) when substantial English settlements were being established in the area. DeForest (1852:48) estimates about 6,000 to 7,000 Native Americans in pre-epidemic Connecticut (early 1630s), while others consider the aboriginal population to have been as high as 16,000 to 20,000 or more (Trumbull 1818:40; Gookin 1970 [1674]; Cook 1976; Snow 1980:35; Bragdon 1996:25).

The spatial configuration of tribal territories at the time of initial contact is fairly well known, although boundaries are also known to have fluctuated significantly, as did the political alliances by which the tribes could be defined (Thomas 1985:138). Three major divisions of Algonkian speaking groups can be delineated in eastern Connecticut, and their original territories conform well to present ecozone distributions (see Dowhan and Craig 1976:26 and Speck 1928:Plate 20). Centralized in East Windsor and South Windsor (Trumbull 1818:40; DeForest 1852:54-55; Spiess 1933), the Podunks occupied that part of the Connecticut River drainage basin which constitutes the North-Central Lowlands east of the river. Linguistically, the Podunks were part of the Wappinger or Mattabesec Confederacy of tribes that extended west of the Connecticut River and onto Long Island (Speck 1928). The validity of the Wappinger-Mattabesec Confederacy as a cultural entity has been challenged (Salwen 1983:108-109), however, with many smaller and somewhat independent tribes known to occupy much of the western half of the state. In the northeast part of the state, the Nipmucs occupied areas covering the Northeast Uplands and Northeast Hills ecoregions, but were centrally based in Massachusetts (Gookin 1970 [1674]; Van Dusen 1975:21; DeForest 1852:57). Blanketing the Southeast Hills and Eastern Coastal regions east of the Connecticut River, the territory of the Pequots lay adjacent to the Narragansetts of Rhode Island to the east (Speck 1928).

Several cultural distinctions can be made at a higher level of resolution within these three broad divisions. For instance, the Western Nehantics were concentrated just east of the Connecticut River on the coast, while the Eastern Nehantics occupied the southeast corner of the state and part of Rhode Island (Speck 1928: Plate 20; Swanton 1952:31 and map insert). Although considered to be two separate cultural groups, the Nehantics may have been historically divided by an incursion of the Mohegan-Pequots. The Western Nehantics are frequently cited as confederates of the Pequots (Guillette 1979:WP2), while the Eastern Nehantics may have been more aligned with the Narragansetts of Rhode Island (Caulkins 1895:20).

There is considerable debate as to the origins of the Pequots, or Mohegan-Pequots who would eventually split into two distinct tribes. Many authors believe that they originated in the Hudson Valley or upstate New York (Caulkins 1895:21; Learned 1903:52; Speck 1909:184; Tantaquidgeon 1972:65; Fawcett 1995:10), with cultural and traditional knowledge links to the Lenni Lenape (Delaware) of the Pennsylvania region who have stories of their wolf clan having moved to the northeast, later migrating to southeastern Connecticut during the late 16th to early 17th Century. Others cite archaeological and linguistic evidence to support the idea that they developed *in situ* (Salwen 1969, 1983:107; Rouse 1980). The Pequots may have received their name from an Algonkian word for "destroyers" (Salwen 1969:81; Guillette 1979:WP1) or "powerful ones" (Avery 1901:254) or "invaders" (Fawcett 1995:10). Alternatively, it may have derived from the informal name of several Pequot Sachems shortly before the arrival of Europeans, including Wopiguand (Wo-pequoit or Wo-pequand or Pekoath) (Caulkins 1895:21) or Tamaquashad (Pekoath or Pequot) (Guillette 1979:WP1).

Most early historic accounts describe the Pequots as an invading tribe which had forcibly entered southeast Connecticut, although it is not clear what their motivation for migration might have been. While the Pequots were concentrated near the southern coast between the Thames River and the Pawcatuck or Wecapaug River (Guillette 1979:WP2), Pequot political control was more extensive, in the form of tributes exacted on aboriginal populations on parts of Long Island and some of the "river" tribes to the west. Narragansetts were principal rivals of the Pequots, for they were most able to resist Pequot aggression (Guillette 1979:WP2). Tribes who were subject to Pequot power approached Dutch traders and English colonists in Massachusetts with offers of attractive settlement areas in order to help defend against Pequot domination (DeForest 1852).

The fluctuating nature of tribal territory boundaries can be partly attributed to aspects of mobility and subsistence. Ethnohistoric sources offer descriptions of terminal Woodland and early Contact subsistence-settlement strategies of the area (McBride and Bellantoni 1982; Starna 1990:36-37). Spring settlements were located to take advantage of anadromous fish runs in larger drainages and along the coast. By late spring, attention was focussed on tending corn fields on alluvial terraces and glacial meltwater features along perennial streams and rivers. Semi-sedentary settlements near these fields were supported by task-specific hunting and gathering sites. Dispersal in the late fall and winter brought smaller groups into protected, upland or interior valleys where hunting and gathering continued. This model is confirmed by an archaeological survey of the lower Connecticut River Valley (McBride and Dewar 1981:49-50) in which large, early Contact period villages were found to be a part of a central-based circulating settlement pattern. Family units were clustered in major villages on a seasonal basis. The dispersal phase had a longer duration in the Contact period than the Late Woodland, and consisted of smaller subsistence units (single families).

The fortification of some larger villages in the early Contact period was likely a response to intertribal and intercultural political conflicts resulting from increased economic pressures induced by Euroamerican trade relationships (Salwen 1983:94; McBride 1990:101; but see Thomas 1985:136). The fortified villages are representative of the trend towards increasing sedentism and territoriality during the Contact period. Eventually, Native American populations became dispersed and afflicted by disease, warfare, and intertribal conflict to the point that small, scattered reservations served as the final restricted territories for some indigenous populations.

The economic base for Native Americans in eastern Connecticut continued to consist of hunting deer and small mammals, gathering berries, nuts, and roots, and procuring shellfish and fish on larger drainages and along the coast (Waters 1965:7; Salwen 1970:5). This basic subsistence strategy was supported by various horticultural products, including corn as a staple, squash, beans, Jerusalem artichoke, and tobacco (Guillette 1979:CI5; Starna 1990:35). The importance of corn is evident in historic descriptions of ritual activities, including variations of the Green Corn Festival that extended with various groups, including the Mohegans, into the present day (Speck 1909:194; Speck 1928:255; Tantaquidgeon 1972:81; Fawcett 1995:54-57). Elderly women possessed extensive knowledge of wild plants which provided a host of medicines and treatments (Russell 1980:35-37).

The material culture included a mix of aboriginal forms and European goods such as metal kettles and implements (e.g. knives and projectile points), cloth, glass beads, and kaolin pipes (Salwen 1966, 1983:94-96). Wigwams continued to serve as the principal form of housing, in some cases well into the 18th Century (Sturtevant 1975). Unlike the Late Woodland, Contact aboriginal lithic products were predominantly manufactured from local quartz sources (McBride and Bellantoni 1982:54). Dugout canoes may have continued to provide a major form of transportation in larger drainages (Salwen 1983:91). Late Contact period Euroamerican trade goods included various metal tools, glass bottles, ceramic vessels, kaolin clay pipes, and nails (McBride and Grumet 1992).

Wampum (shell beads) served as an important item for exchange by Native Americans with European traders, but their original use was in the form of belts as symbolic signs of allegiance or reciprocity between tribes, and as sacred markers or tokens of honor for individuals (Guillette 1979:CI8; Ceci 1990:58-59; Salisbury 1990:87; Fawcett 1995:59). With European metal drill bits, tribes along the coast were now mass producing wampum for trade with the Dutch and English, who in turn used the shell beads to trade with other tribes farther inland (Salwen 1983:96; Ceci 1990:58). Control of wampum production along the eastern Connecticut coast may have contributed to Pequot dominance over other tribes at this time. Although wampum was initially traded for Euroamerican goods, it was eventually used to pay fines imposed by colony governments on the tribes for "illegal" acts. While colonization brought new material goods to Native Americans in the area in exchange for fur, land, and services, the indigenous inhabitants became increasingly subject to legislative economic restrictions by the colonists (Salisbury 1990:83).

Sachems and councils of leading males formed the basic political unit for groups of villages (Gookin 1970 [1674]; Simmons 1986:12). The authoritative roles of clan mothers had diminished as a result of a strong European leadership bias towards males in trade relationships (Fawcett pers. comm. 1996). Tributes paid to sachems were generally used as reserves for the tribe at large. Although sachems were generally assigned by hereditary lineage, this was not always the case (Bragdon 1996:140-141). Additionally, authority was usually enforced by persuasion of a council. Shamans were "magico-religious" specialists of the tribes who also had a considerable role in leadership and decision-making (Speck 1909:195-196; Simmons 1986:43; Starna 1990:42-43). Other special status roles included warriors and persons who had visions, thus social status was largely based on achievement and recognition. Rules of obligation and reciprocity operated on all levels of tribal-wide decision-making (Bragdon 1996:131-134),

serving to diffuse centralized authority. While the assignment of lineality (i.e. matrilineal vs. patrilineal) for the area tribes is still debated (Bragdon 1996:157), the well established practice of bride-pricing and traditional accounts support the contention of a patrilineal social organization (Speck 1909:193; Salwen 1983:97). Post-marital residence appears to have been ambilocal.

On a larger scale, more powerful tribes demanded tributes from smaller ones, often resulting in loose alliances between the latter. This process created a dynamic political environment that prompted intertribal conflict, especially after contact with Euroamericans (Guillette 1979; Bragdon 1996). The European settlers of the Contact period used this embedded rivalry system to their advantage in trade relationships and the procurement of land. The colonists were placed at a further political advantage because of the severe reduction in aboriginal populations as a result of disease (Starna 1992). Major epidemics occurred between 1616 and 1619, and more severely around 1633 (Snow and Lanphear 1988; Starna 1990:45; Snow and Starna 1989). Diseases introduced into the Americas included chicken pox, cholera, diphtheria, malaria, measles, oncercerosis, poliomyelitis, scarlet fever, smallpox, tapeworms, trachoma, trichinosis, typhoid fever, whooping cough, and yellow fever (Newman 1976:671).

The Pequot Sachem Wopiguand was killed in the early 1630s by the Dutch over trade disagreements (DeForest 1852:73), essentially ending the Dutch-Pequot trade relationship and initiating a pattern of increased hostilities between Euroamericans and Native Americans of the region (Hauptman 1990). Political turmoil ensued within the Pequot tribe as to who should succeed Wopiguand and how best to engage the Europeans. The choice of Sassacus to lead the tribe and subsequent disputes as to tribal policy with respect to the Europeans prompted Uncas and his supporters to defect as the Mohegan tribe (DeForest 1852:84; Fawcett 1995:11). The Mohegan base of settlement was situated at the confluences of the Shetucket, Quinebaug, and Yantic Rivers, and along the Thames River in Montville (Baker 1896:10; Speck 1909:185). The Mohegans were, however, still largely under the control of the Pequots, as were the southern groups of Nipmucs (i.e. Quinebaugs) who occupied northeast Connecticut (Gookin 1970 [1674]:7).

When the Plymouth Colony began to make plans for settlement in Connecticut in the early 1630s, the Dutch resisted the idea because of their perceived proprietorship over the area by "right of discovery" (Guillette 1979:WP3). The Dutch responded by creating a trading post in Hartford, while the English followed with a fortified post in Windsor. In 1635, English colonists of the Massachusetts Bay Colony established other settlements on the Connecticut River (Hauptman 1990:71). Isolation of the Dutch was completed that year when Winthrop built a settlement at the mouth of the river in Saybrook (Guillette 1979:WP4). Conflicts in the trade relationship between the Pequots, neighboring tribes, Dutch traders, and English colonists heightened in the mid 1630s. In response to these tensions, the Pequots maintained fortified villages at Pequot Hill in Groton, and later Fort Hill near Noank. Further conflicts resulted in several skirmishes between the Pequots and English colonists, culminating in the "Pequot War" (DeForest 1852:96).

In 1637, a contingent of soldiers from the Connecticut colonies was joined by the Mohegan sachem Uncas, who led his newly divergent tribe and some Narragansetts on a campaign against the Pequots (Hauptman 1990:73). Most of the latter were massacred at Mystic Fort, the survivors of which were forced to scatter widely. The Mohegan acceptance of some of the conquered Pequots into its tribe caused hostilities to emerge between the Narragansett sachem Miantonomo and Uncas. The defeat of the Pequots and the emergent hostilities between the Mohegans and Narragansetts led to the Tripartite Treaty of 1638, which in theory allied the Mohegans and Narragansetts, forbade any reorganizing attempts by the Pequots, redistributed Pequot prisoners between the Mohegans and Narragansetts, and provided ownership of Pequot territory to the Connecticut colonists (DeForest 1852:159,181). Some young male Pequots were sold into slavery in the West Indies (Salwen 1983:108; Campisi 1990:118), while many of the Pequots held by the Narragansetts left to be with or near the Mohegans, causing further hostilities between the latter two tribes. The English colonists granted Uncas territory that had not been part of the Tripartite Treaty, heightening the antagonism between the Narragansetts and Mohegans which would continue into the 1640s (Fawcett 1995:14-15). Speck (1909:186) cites several Mohegan forts which were built partly in response to heightened intertribal warfare, including the one on Fort Hill, one on Uncas Hill, and the nationally registered Fort Shantok.

The Connecticut English favored alliances with the Mohegans because of proximity and a greater role in the subjugation of the Pequots (Guillette 1979:M6). After numerous skirmishes between the two sachems, the Connecticut government effectively sanctioned the execution of Miantonomo by Uncas (DeForest 1852:195). The Mohegans and the Connecticut colonists continued to exhibit mutual support in King Philip's War of 1675, when they defeated attempts of the Wampanoags of Massachusetts, the Nipmucs, and some Podunks, to thwart the expansion of Euroamerican settlement (Gookin 1836 [1677]; Barber 1838:20-21; DeForest 1852:288). This war effectively ended any military threat or potential resistance to full fledged settlement of southern New England by the Europeans (Fawcett 1995:16).

The Pequot War set a trend of English control over, and arbitration between, native groups (Twitchell 1899; Hauptman 1990:69). Most of the tribes looked favorably on this situation at first, for it had relieved them of control by the Pequots. This control, however, was merely shifted to the English colonists who demanded shell bead payments in return for protection and as penalties for "crimes" (Ceci 1990:61). Eventually, demand for wampum decreased as the fur trade was diminished following the widespread depletion of commercially targeted animals (Salisbury 1990:90). The colonists then turned to land as the principal aboriginal resource to be tapped through "fines." Native American subsistence patterns were becoming increasingly hindered by English settlement, and closure of the surrounding land further prevented adequate use of hunting ranges. Colonist encroachments on "unused" portions of reservations occurred without reasonable chance of recourse by legal means (McBride 1990:107; Campisi 1990).

Pequot populations were reduced from at least several thousand to less than a thousand towards the end of the 17th Century (Cook 1976:52), while almost all land had been lost following the war. Uncas and the Mohegans fared better at first, gaining territory in various areas of Connecticut through marriages and alliances with tribes such as the Podunks. But Mohegan territories also dwindled through ambiguous land transactions with the Euroamerican colonists (DeForest 1852:292). Various tracts sold by Uncas and his son Owaneco, for example, had overlapping boundaries (Guillette 1979:M13). By the time Uncas died in 1682, Mohegan land was reduced to tracts on the west side of the Thames between New London and Norwich as the main focus of Mohegan populations, an area just north of Lyme, and the "Mohegan Hunting"

Grounds" which included an area between Norwich, Lebanon, Lyme, Haddam, Middletown, and Colchester (DeForest 1852:297,311; Guillette 1979:M14,16). The trend of land divestiture witnessed by the Pequots and the Mohegans similarly affected the Quinebaug (southern Nipmucs) and Western Nehantics (DeForest 1852:376,385).

By 1659, Uncas had deeded Major Mason of the Connecticut Colony nine square miles of the Norwich area which included Franklin, while 300 acres were deeded back to Uncas' son Owaneco near the confluence of the Shetucket and Quinebaug Rivers (Woodward 1868:45-46; Caulkins 1878:57-59). New London County was organized in 1666, with the New London area having been settled by Europeans as early as 1646 (Caulkins 1878:87; Baker 1896:71). Euroamerican settlement spread from there up the Thames River and along the coast. In 1663, 300 acres of land in Franklin was purchased by John Ayer of Haverhill, Massachusetts from Indians of the area, and he settled a part of Franklin to become known as Ayer's Gap (Woodward 1868:15-16; Robbins 1986).

18th Century

Estimates for the Mohegan population in the region are as low as 750 for the beginning of the 18th Century (Speck 1909:185), while Pequot reservation populations dropped from approximately 1,500 to less than 200 between 1674 and 1731 (Speck 1928:213). Early attempts to convert aboriginal populations to Christianity met with little success (Gookin 1836 [1677]:435; DeForest 1852:179,252). Because it tended to cause rifts in the tribes, Uncas and other sachems came to oppose what they initially thought were harmless teachings (Guillette 1979:M11). Efforts to convert and assimilate local aboriginal populations gained momentum during the 18th Century, however. A schoolhouse for educational and "moral" instruction was ordered to be built in 1726 for the Mohegans (Guillette 1979:M18). By the 1740s, the Great Awakening period of increased Christianity among Euroamericans also started to gain support among the Mohegans, Pequots, and Quinebaugs (DeForest 1852:380,430; Simmons 1990:148). The movement was incorporated by many Mohegans with the conversion of Samson Occum, a highly visible and active member of the tribe who was a founder of Moore's Indian Charity School in Lebanon (Guillette 1979:M21). Christianity among Native Americans was on the decline by the end of the century, however, as Occum and many others left the region.

Euroamerican efforts to assimilate Native American populations included attempts to create privately owned land within tribal territories that could then be sold. Encroachment by Euroamerican settlers on Pequot and Mohegan lands continued through various other means during the 18th Century (DeForest 1852; Campisi 1990). Intratribal political strife developed as different factions encouraged opposing approaches to land transactions with Euroamerican settlers. In 1769, the Mohegan Sachemship and its political structure was effectively outlawed by the Connecticut Colony as a result of the failure of the tribe to support a colony-endorsed sachem (Fawcett 1995:17-18). Such tribal rifts were perpetuated as a result of excessive land sales by English-backed sachems (Simmons 1986:32). Ironically, many Mohegans and Pequots served on the side of the English in the French and Indian War of the 1750s, as well as the Revolutionary War in the late 1770s and others to follow.

By 1716, there were about 40 or more families living in what is now Franklin (Woodward 1868:23; Robbins 1986; Stanley 2005:102). Franklin, then known as "West Farms," became its

own ecclesiastical society of Norwich at that time, and a meetinghouse was built within two years (Caulkins 1878:430; Robbins 1986). The Congregational Church also served as the seat of town government, as it did throughout the state. The first church was replaced by a second at the same site in 1745 (Caulkins 1878:432).

In 1774, a census of the population of Norwich revealed that in its West section (Franklin), there were 875 people in 133 families and 111 individual houses (Caulkins 1878:356). In 1786, the town of Franklin was incorporated, likely named after Benjamin Franklin (Woodward 1868:25; Caulkins 1878:428-429; Robbins 1986). The town had a selectmen form of government, and officers of the town included town clerk, tax collectors, constables, surveyors, fence viewers, leather sealers, grand jurors, tithing men, and pound keeper. Soon after the incorporation of the town, bridges were built across the Shetucket River. An 18th century reconstruction map of greater Norwich shows that the project area was likely owned by David Edgarton, who was born in 1718 and founder of the Edgarton School Fund. He was the sixth son of Samuel Edgarton, who was in turn the third son of Richard Edgarton, one of 35 original proprietors of Norwich. The Edgarton house was likely located at or near Williams Crossing to the south or southwest of the project area.

19th Century

In 1801, a turnpike road was laid out along what is now Route 32 (Stanley 2005:107). In 1826, the town funded the construction of a poor house (Robbins 1986). Four years later in 1830, a town pound was formed for managing stray farm animals. By 1837, there were 11 school districts in Franklin, each receiving an equal share from the state to help fund the schools. Franklin remained an agricultural town throughout the 19th Century, with only a single woolen mill operating on Beaver Brook (Caulkins 1878:433). Common domestic animals included horse, sheep, goat, mules, donkeys, and geese (Robbins 1986). The population of Franklin declined during much of the 19th Century, with 1,161 residents in 1810, and just 895 by 1850 (Caulkins 1878:433-434). The population rose from 1850 to 1860 because of the rise of the village of Baltic, although it dropped back to just 763 when Baltic and surrounding territory split off to become the town of Sprague. Railroad lines were built in the greater Norwich area from the 1830s into the 1850s (Caulkins 1878:531). In 1863, a town hall was constructed (Robbins 1986).

Historic maps of the area (Figures 5a and 5b) show that the Williams family owned the project area during the mid to late 19th century. Lathrop Williams accumulated many parcels of land in the area during the early 19th century, while his son George L. Williams accumulated more land parcels in the mid-19th century. In 1858, Lathrop Williams transferred the property to George L. Williams, with a life estate that allowed him to continue living at the property (Franklin Land Records, volume 7, page 605). In 1864, George L. Williams sold the land with dwelling house and three barns to Mary Mason (FLR, 9/181). This was followed by the sale of land with structures by Jane B. Mason to Byron A. Watson in 1887 (FLR, 9-568).

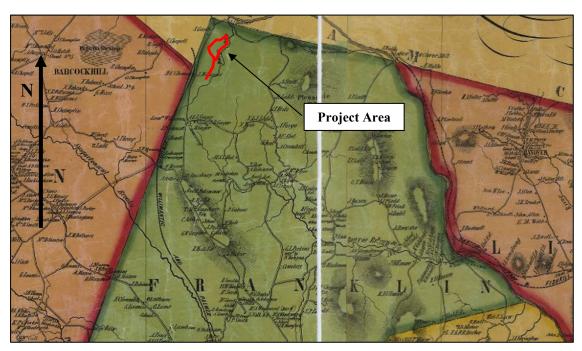


Figure 5a: Historic Sites of the Area (1854 Map)

Figure 5a: From Walling:1854.

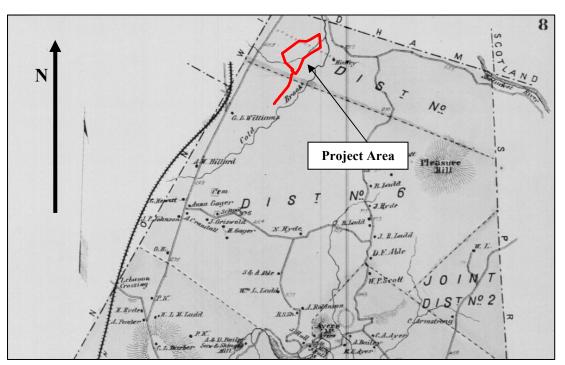


Figure 5b: Historic Sites of the Area (1868 Map)

Figure 5b: From Beers: 1868.

20th Century+

Various social clubs established early in the century continued to grow in popularity. In 1932, a road program by the state led to the improvement of various roads in the area (Robbins 1986). In 1949, the schools of Franklin started to become consolidated, a process which continued until a single school was built in 1957. Franklin witnessed other aspects of suburbanization following World War II, with more schools and town civic buildings constructed, a recreation department and site established, and a fire company formed. While historically a traditional agricultural town, recent industries of the town include Agway, Kahn Tractor & Equipment, Uncas Bottled Gas, the Franklin Mushroom Farm, Anderson Supply Company, and gas stations and restaurants.

According to land records, the Browning family owned the larger property that included the project area and parcel with original dwelling house until 1960 (FLR 18/576), when the deed included cattle and machinery. Ralston Purina Company bought the property in 1977 (FLR 26/673), which in turn sold it to Franklin Farms in 1983 (30/267), followed by Franklin Organic Mushroom, Inc. Historic maps of the early to mid-20th century confirm no structural developments on the current project property (Figures 5c and 5d). The property remained wooded through most of the 20th century, until the late 20th century when the large warehouse operated by the mushroom company was built. According to property owner, Michael Tules, the project area was timber harvested starting around 1983 before the warehouse was built. Gravel mining did not occur until 2015, and only in the last year or so the land of the proposed solar field was turned to an agricultural use, with sprayed manure and a corn crop recently harvested.

Local Sites and Surveys

The Barber / Downer Fishing Community Site (53-006) is located in northern Franklin and southern Windham near Cold Brook and the Shetucket River, and is named for two families who occupied the site during the 18th and 19th centuries (see Walwer and Walwer 2009:43). Both lumber milling and anadromous fishing occurred at the site, which was reportedly vacated following a typhoid or diphtheria epidemic that caused the abandonment of the entire community. Archaeological remains of the community include stone house foundations, stone walls, wells, the remains of the mill, and a family cemetery plot. The S. Gault site lies within a quarter mile to the west on a smaller tributary of the Shetucket, where another 18th Century foundation and well feature were recorded at a site that corresponds with the location of the Gault house as it appears on 19th Century maps (Walwer and Walwer 2009:63). The survey of the Scotland Dam Hydroelectric project recorded Manning's Bridge remains (163-027), consisting of stone abutments on the bank of the Shetucket River where a bridge was located from the 1720s and into the 19th century (see Larned 2000b:112-114). Site T4-East (163-029) is about a quarter mile east on the Shetucket River, where a concentration of 19th century artifacts without evidence of a foundation was recorded, including kaolin clay pipe fragment, whiteware ceramic, brick, coal, and heavily oxidized metal (Walwer and Walwer 2009).

There are no properties registered with the National Register of Historic Places within a mile of the project property. The closest State Register site is the Reverend Samuel Nott House, built in 1782 and located on Pleasure Hill Road nearly a mile to the south of the project area. Other historic homes are located along Pleasure Hill Road, and also along Willimantic Road to the west.

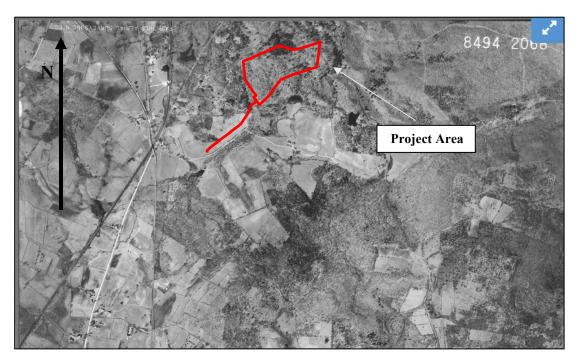


Figure 5c: Historic Sites of the Area (1934 Map)

Figure 5c: From Fairchild 1934.

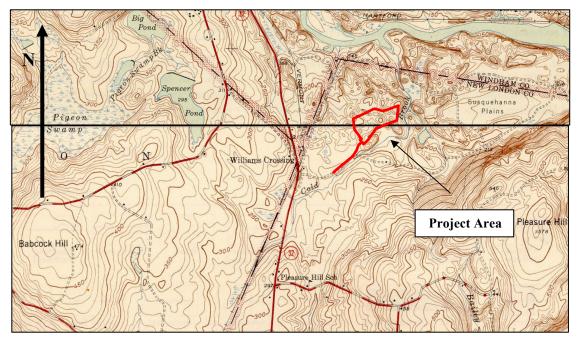


Figure 5d: Historic Sites of the Area (1944 Map)

Figure 5d: From USGS 1944.

Summary

There is a low density of previously recorded historic archaeological sites in the Franklin area. The most prominent historic archaeological site of the area is the 18th century Barber / Downer Fishing Community site in northern Franklin just north of the project area. The site was abandoned following a major disease epidemic, and its abandonment in a remote setting provides for a preservation state unaffected by modern occupations or developments. The project property was probably part of the David Edgarton land holdings of the 18th century, then owned by the Williams family in the 19th century when they had a homestead at Williams Crossing to the west where there was a dwelling house and three barns. The project property remained undeveloped until a mushroom farm built a warehouse around 1983, when the project area was timber harvested. Gravel quarrying followed in 2015, and recently the quarry was farmed for corn following substantial manure applications.

CHAPTER 3: CONCLUSION

Prehistoric Sensitivity

Background research and the pedestrian surface survey indicate a current low sensitivity for potential prehistoric cultural resources in the project area. ACS conducted a pedestrian surface survey of the project property that did not reveal any prehistoric artifacts or feature contexts. The surface survey included regularly spaced pedestrian traverses throughout the existing corn field / former gravel quarry area in approximate 100-foot intervals along the lengths of the corn rows, and along the proposed route of the electric linkage along the access road. The surface survey revealed highly disturbed subsurface contexts throughout the project area, as evidenced by the reduction in grade within the gravel quarry area, and exposed substratum soils along the disturbed route of the access road. A statistical prehistoric landscape sensitivity model developed and employed by ACS utilizes eight environmental variables to rank sections of project properties relative to a scale of 100.0 (www.acsarcheaology.com/sensitivity-model.html). In this case, the project area has a high score of 48.5 out of a possible 100.0, and therefore solidly within the moderate (20-75) sensitivity range. The project area benefits from its setting within stacked glacial meltwater deposits and an excessively drained soil in close proximity to a perennial stream that would have afforded advantageous habitation conditions, although Cold Spring as the nearest water source is a relatively small perennial stream. Much higher sensitivity scores would be attainable on the same landform type along the Shetucket River, along which some prehistoric archaeological sites have been documented in the past. The moderate sensitivity rating for the entire project area, however, is greatly diminished due to late historic to recent disturbance, particularly from gravel quarrying, which would have eradicated any existing sites. ACS therefore recommends no further archaeological conservation efforts for potential prehistoric archaeological resources, although should site plans change to include electric linkage or other substantial disturbance on the east side of the proposed assess road, in between the existing road and Cold Brook where there appear to be in tact soils along a section of the access road, further archaeological evaluation should be considered.

Historic Sensitivity

The project area has a low sensitivity for historic cultural resources. The pedestrian surface survey revealed no traces of historic structures or artifacts, and lack of integrity of subsurface conditions due to gravel quarrying and associated activities prohibits any potential historic resources from being in tact. The project area comes close to the Barber / Downer Fishing Community Site (53-006) lying directly to the north, thus if site plans change to include substantial impacts north of the impact area shown in current plans, further archaeological evaluation may be necessary. Historic maps and land records suggest no other substantial historic developments in the vicinity, with the nearest occupations to the southwest at Williams Crossing and to the south along Pleasure Hill Road and Willimantic Road. Given current proposed project plans, no further archaeological conservation efforts are recommended for potential historic cultural resources within the project area.

Figure 6: West Side of Access Road



Figure 6: Northeast view of access road leading to quarry, scrub growth on west side of road obscures highly disturbed context from road construction and excavations.





Figure 7: Southwest view of the staging area on the west side of the road, quarried out, leveled, and used for temporary storage of materials. Southwest of larger quarry area.

Figure 8: East Side of Access Road



Figure 8: Southwest view of access road leading to quarry, area to the east of the road may have intact soils. Current plans have electric linkage on west side of access road.



Figure 9: Open Field / Former Quarry Area

Figure 9: Northeast view of the former gravel quarry area that is recently converted to a farm field with extensive manure application. Grade cut visible at west side of quarry area.

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